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Opportunities and challenges facing Africa in the development of key export sectors under the WTO Agreement - A focus on mining, manufacturing and services

by

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1. Introduction

Escalating economic growth and development form part of the anticipated African renaissance. Many analysts see a greater integration of African economies into the global economy through export-oriented growth as a prerequisite for this development. Will the agreements of the World Trade Organization (WTO) play an important or even decisive role in African's renaissance? This paper—with its focus on the economies of sub-Saharan Africa (SSA), the least developed ones in particular—addresses this question. The conclusion is that the primarily demand-oriented WTO agreements will have little direct impact on countries that face severe supply constraints.

In contrast to the seven earlier rounds of the General Agreement on Tariffs and Trade (GATT) negotiations, developing countries actively participated in the Uruguay Round. For these economies the round represented an important and necessary episode in the development of their trade policies. In the course of the 1980s a large number of developing countries liberalized trade in the process of adopting outward-looking development policies. This change in strategy was accompanied by the growth of developed economies' defensive protection through non-tariff measures in particular. Having been converted to outward-looking growth policies, in many cases somewhat forcefully through structural adjustment programmes, developing countries became active participants in the Uruguay Round to enhance their integration into the world economy. They made significant concessions "in the hope of obtaining improved access to international markets and greater disciplines on unilateral measures against their exports" (Agosin, Tussie and Crespi, 1995: 2).

The Uruguay Round agreements are of special interest to developing countries since they not only extended the conventional scope of GATT beyond the border protection of goods, but in this category also placed greater emphasis on agricultural products. The extension of trade liberalization was effected by the adoption of the General Agreement on Trade in Services (GATS). This acknowledged the fact that the service sector is now the largest sector in most developed and developing economies and one of the fastest growing components of world trade. Developing countries are also strongly affected by the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which covers substantive intellectual property rights and their protection, as well as measures for enforcement. Since developing countries are more likely to include interventionist support measures in their trade and industrial policies, they also have a potentially stronger exposure to the tighter disciplines of the Uruguay Round agreement on the direct and indirect subsidies governments provide to assist agricultural and industrial producers. The same applies to the Agreement on Trade-Related Investment Measures (TRIMS), which explicitly acknowledges that certain investment support measures have restrictive and distortive effects on trade; TRIMS, therefore, set out to govern these measures.

The updated GATT 1994 and a further 12 side agreements such as the agreements on subsidies and countervailing measures (together these make up the Multilateral Agreement on Trade in Goods), the General Agreement on Trade in Services, and the Agreement on Trade-Related Aspects of Intellectual Property Rights,[1] represent the core of the WTO. They are of special significance for

[1]In addition to the three core trade agreements, the Final act of the Uruguay Round also provided the WTO with a dispute settlement mechanism, embodied in the Understanding on Rules and Procedures Governing the

developing countries since the Final Act represents a "single undertaking". This means that all countries, including developing countries, that join the WTO sign up to all three agreements. Under the regime created by the Tokyo Round, countries could be selective about the codes they acceded to. This ability to pick and choose agreements has now been denied developing country governments, since the only agreements members of the WTO can now decline to accede to are the plurilateral trade agreements (see note 1).

In addition to the removal of agreement on code selectivity, the special and differential treatment (SDT) in favour of developing countries has also been changed drastically. The SDT dispensation of the earlier regime survives in principle, with the only asymmetry being that the developing countries are allowed longer phase-in periods. However, real exemptions with a SDT for the least developed countries still exist. For other developing countries a major outcome of the application of the subsidies agreement, for example, is that they do not have the option of replicating the export promotion policies used by the Republic of Korea and Taiwan during the 1960s and 1970s (Rodrik, 1995b).

On balance, the outcome of the Uruguay Round does not represent much for developing countries (Agosin et al., 1995). Market access is a key issue, but while tariffs on products of special interest to developing countries have been cut, they remain at higher levels than those on goods mainly traded among developed countries. The textile industry is of special importance to the industrial development of the developing world, and the integration of these sectors into the WTO, with the staged phasing out of the Multi-Fibre Agreement (MFA) over a period of ten years, is important. However, as will be argued later on, the phasing out of the MFA will not unambiguously favour SSA economies. Tariff escalation, although reduced, also remains in place, thus inhibiting the competitive processing of primary commodities in developing countries. Furthermore, food importers will lose because of the price increases that are likely to result from the elimination of agricultural subsidies for developed country food producers. However, in considering the net impact on developing countries, it is worth noting Rodrik's (1995b: 46) view: that "The more important and potentially highly significant gains will come indirectly, from the strengthening of multilateral discipline in the areas of safeguards, anti-dumping and, above all, dispute settlement". Simultaneously, it needs to be considered that the Uruguay Round agreements have created a force of discipline over national policy with the curtailment of the room for discretionary changes in national industrial and trade policies. This discipline forms the basis for Rodrik's (1995b) contention that WTO membership and its commensurate commitments can play an important role in improving economic policy.

But, as will be argued below, neither the curtailment of special and different treatment nor the relatively weak improvement in market access and other benefits are as serious for SSA as for the developing world in general. In both respects, least developed countries are mainly excluded. Most SSA countries fall in this category. Other SSA countries that are excluded are Cameroon, Congo, Côte d'Ivoire, Ghana, Kenya, Nigeria, Senegal and Zimbabwe.

Settlement of Disputes. The fifth element of the WTO framework is the plurilateral trade agreements, namely the Agreement on Trade in Civil Aircraft, the Agreement on Government Procurement, the International Dairy Agreement and the International Bovine Meat Agreement.

Clearly, international obligations and opportunities have changed under the new WTO disciplines and commitments. While the implications of the new dispensation for African development have been fairly adequately researched and commented on, little attention has been given to the proactive measures that can be taken under the new circumstances to encourage diversified growth on the basis of manufactured exports, foreign direct investment and technology development. Against this background, this paper considers the position in Africa of the mining, manufacturing and services sectors, specifically:

- Their performance and growth potential.
- The constraints to market access that confront them when output and exports are expanded
- The key elements of the WTO agreements that inhibit the development of these sectors in African economies, specifically the constraints placed on the ability of governments to implement policy measures in support of national development strategies.

A major theme of the paper is that the access to markets, which is what the WTO agreements are primarily about, is not the major constraint on the diversified and sustainable growth of the typical or "average" African economy. One observer concluded that "... the problem of African producers is not the lack of market access but excessive production costs, inadequate knowledge of markets, poorly developed product ranges and the obstacles placed in the way of export oriented manufacturing industry by states incapable of reform" (Kappel, 1996: 38). This is a harsh judgement, but one that deserves consideration.

Since the focus of the paper is sectoral, the conceptual framework that will be used is the division of economic activity into tradeable and non-tradeable production, with the tradeable component further divided into exportables and importables. The primary focus of the paper is the tradeable goods sector, exportables in particular, and the implications of the WTO agreements for the development of this sector. Primary sector production, both agriculture and mining, and manufacturing are the main tradeable components. However, services are increasingly brought into the tradeable sphere, hence the importance attached to services in the Uruguay Round negotiations and in the subsequent WTO agreements. This paper excludes agriculture; a complementary paper is being prepared on the agricultural sector.

2. Marginalization and the development challenge

Anne Krueger (1977: 1). introduced her Presidential Address at the 1997 meeting of the American Economic Association with the following observation: "The improvement in living standards, life expectancy, and economic growth prospects in developing countries ranks among the most important economic success stories since the Second World War". This improvement in living standards has been firmly based in the benefits developing countries have derived from the growth in world trade and capital flows in recent years. Developing countries increased their share of world trade from 23% in 1985 to 29% in 1995; at the same time their trade linkages deepened and diversified. The share of inter-developing country trade in total developing country trade increased from 31% in 1985 to 37% in 1995. During the same period the share of manufactured products in their exports increased from 47% to 83% (IMF, 1997).

These encouraging developments unfortunately do not reveal the wide disparities among developing countries and developing regions. Virtually a whole continent, Africa, by and large missed out on the advances made by the developing world. For many developing countries, especially in Latin America and Africa, the 1980s proved to be a poor decade for economic growth and development. These regions, and Africa in particular, were hard hit by the deterioration in terms of trade of the 1980s. During 1980–1991 the annual average terms of trade loss was equivalent to nearly 25% of the value of commodity exports in 1980. According to Maizels (1994: 1686–7) this loss was "significantly greater than the equivalent experience during the Great Depression of the 1930s when the annual average terms of trade loss of the present group of developing countries over 1930-38 amounted to some 16-17% of the pre-recession (1929) level of their commodity exports". Because the commodity sector is relatively more important for African economies, the terms of trade loss, in relation to GDP, was much greater for African countries than for the other developing regions. The loss for Africa (excluding Nigeria and other oil exporters) was, on a cumulative basis, as much as 25% of GDP. This was much more of a severe drain on resources than the 12% for Asia and 14% for Latin America (Maizels, 1994).

In most SSA countries the poor growth performance continued into the 1990s (see Table 4.1), despite the numerous structural adjustment programmes implemented to bring about a turnaround in the economic welfare of the continent. But economic recovery began in 1994, with growth accelerating to 3.9% in 1996. UNCTAD (1997a/b) has noted as important contributing factors to this improvement: favourable commodity prices, improved weather conditions, reductions in political instability and civil unrest, and the continued and deepened implementation of economic reform programmes. But UNCTAD (1997a/b) also cautions that many of these factors are of a once-off nature and, therefore, cannot be expected to increase output indefinitely.

Table 4.1: World output growth (%) 1980–1997

	1980–90[a]		**1991**	**1992**	**1993**	**1994**	**1995**	**1996**[b]	**1997**[c]
World	2.9	0.6	1.4	1.4	2.8	2.4	2.8	3.8	
Developed market economies	1.8	0.9	1.6	1.0	2.9	2.0	2.3	2.3	
Developing countries	2.8	2.9	3.6	5.0	4.8	4.8	5.6	5.6	
Africa	1.6	1.9	0.7	-0.6	1.4	2.8	3.9	3.9	

Notes:
a. Annual average.
b. UNCTAD estimate.
c. UNCTAD forecast.

Source: UNCTAD (1997a).

The declining growth performance of SSA (always bearing in mind that there are some important exceptions, which, however, should be regarded as outliers) has led to the apocalyptic emphasis on the marginalization of SSA in the global economy. There is no paucity of information to illustrate

Africa's marginalization. A few examples will suffice to make the point.

In 1973, SSA contributed 1.7% to the world GNP. This share increased to 2.3% in 1983 but then declined sharply to 1.1% in 1994. In 1973 the GNP per capita of SSA came to 21% of world GNP per capita. This increased to 25.4% in 1983 but then more than halved to 10.9% in 1994. During the 1970s, SSA's real GDP average annual growth of 3.8% was lower than that for developing countries as a whole (5.2%), but marginally higher than for the world (3.6%). During 1980–1993, SSA's average growth dropped to 1,6%, which was significantly lower than the 2.9% of developing economies and the world (Africa Institute, 1997). The share of SSA in world manufacturing output decreased from 0.6% in 1970 to 0.5% in 1980 and 0.3% in 1990 and 1995 (UNCTAD, 1997a).

During 1992–1994, Africa's exports on average represented only 2.4% of the world total (see Table 4.2). Although agriculture, as will be shown below, dominates most African economies, this dominance does not find expression in a large share of world agricultural trade; during 1992–1994 this share came to only 3.7%. A characteristic of SSA's export trade is its high level of country concentration. As shown in the Appendix South Africa contributed 40.1% to SSA's exports in 1995 and oil-producing Nigeria contributed 16.4%. No other country accounted for more than 5% of the region's exports. During 1980–1990, SSA's exports shrank by an annual average of 1.4%, improving to growth of 1.5% during 1990–1996. During 1990–1993 exports declined by 3.4% annually. Imports declined by 1.3% per year during the 1980s, but increased by 1.6% during 1990–1993 (WTO, 1995, 1997a).[2] In 1994, SSA's exports grew by 3.1%. However, if South Africa's export growth of 4.4% is excluded, the growth for the remainder becomes negligible. Africa's intra-regional trade is also very low. In 1994 it was 9.1%, compared with the 20.2% of Latin America, although this ratio does represent an increase of 8.0% in 1992. But again, if South Africa's substantial contribution and very rapid growth of exports to African countries were to be excluded, the picture would be even less rosy.

Table 4.2: Africa's share in world merchandise trade 1992–1994

Agricultural products	3.7%
Mining products	1.6%
Manufactures	2.4%
Total merchandise exports	2.4%

Note: Merchandise exports to unspecified destinations are excluded.
Source: WTO (1995).

Production in Africa is supported (constrained) by a notoriously weak infrastructure. Africa's electricity generating capacity is 0.14 MW per 1,000 population, compared with the world total of 0.55 MW per 1,000 persons. Electricity output per capita is 503 kWh in Africa compared with

[2]Note that the shares in world exports and imports are those for Africa as a whole. For SSA, these figures would be less than 2%. In 1993 SSA was responsible for 67% of Africa's exports and 64% of the continent's imports

2,692 kWh in the world. Only 20% of the African road network was paved in 1990. Some 19 telephones existed per 1,000 population, compared with 130 per 1,000 persons for the world (Africa Institute, 1997). In studies on the impact of the Uruguay Round outcomes on the economies of Ghana, Malawi and Namibia, UNCTAD encountered a common complaint from the private sector about the constraints that infrastructural deficiencies—covering services such as finance, transport, telecommunications, electricity, water supply and road maintenance—placed on export growth (UNCTAD, 1997d). These constraints apply in other SSA countries as well, with the possible exception of South Africa. An aggravating factor is that 14 of SSA's 42 continental states are landlocked, which introduces further problems as far as transport and communications are concerned. Being landlocked creates extra costs and administrative hassle, and could make an economy dependent on the poorer infrastructure of a neighbour. With trade mostly concentrated in low value, high bulk commodities and products, airfreight cannot be an affordable substitute for surface transport.

In 1990–1992, Africa received one-thirtieth of the net inflows of FDI to developing economies and 0.6% of portfolio equity inflows. Malaysia, alone, received three time as much FDI and five times as much portfolio capital (Easterly, 1996).

While one cannot ignore marginalization, especially if SSA's declining share in world trade is taken as a criterion, it should be borne in mind that the post-apartheid inclusion of South Africa in SSA renders marginalization less emphatic. The South African economy—though not booming, but with stable and positive real growth and significant growth in manufactured exports—can hardly be described as a marginalized entity. If one also includes in the group of non-marginalized SSA economies the consistent outliers (Botswana, Lesotho, Swaziland, Namibia and Mauritius) as well as those African economies that during recent years have been bucking the marginalization trend (e.g., Uganda, Ghana, Ethiopia), it would appear that the largest component of SSA's gross production is not generated in marginalized circumstances. Of course, should population and not output be taken as the relevant criterion, the spectre of marginalization remains firmly in place for SSA, with very little relief from poverty in sight for the vast majority of Africa's population.

A turnaround in Africa's economic decline in the post-Uruguay era will requires some appreciation of the causes of the decline. An important starting point is to understand that the decline was neither predictable nor inevitable, but rather contingent. The point is often made that at independence in the 1960s Africa was in better economic shape than the less developed Asian economies (Ndlovu, 1996).[3]

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[3]Although a single example cannot tell us much about the general situation, a comparison of Ghana and Korea is revealing in illustrating the impacts of different growth strategies. In 1960 the following applied (World Bank, 1980): (a) gross domestic investment was 24% of GDP in Ghana, compared with 11% in Korea; (b) Ghana's exports were 28% of GDP and Korea only 3%; in Ghana manufactured exports other than textiles, clothing, machinery and transport equipment contributed 10% to total exports, compared with 6% in Korea; and (c) manufacturing contributed 10% to Ghana's GDP and 12% to Korea's GDP. But the situation soon changed, with investment in Korea growing at an average annual rate of 23.6% during 1960—1970, compared with -3.2% in Ghana. Korea's exports grew at an average annual rate of 35.2% during 1960s while Ghana's exports stagnated at an annual growth rate of only 0.1%. In Ghana the contribution of the component of manufactured exports referred to above decreased to 6%; in Korea its share grew to 36%. GDP increased at

A number of studies that used a dummy variable to account for differences in economic growth performance among different geographic groups established that a dummy variable for Africa consistently yielded a significant and negative coefficient.[4] From a historical perspective, being an African economy introduces the likelihood of poorer economic performance, much of which can be ascribed to misguided policies. Easterly (1996) found that three policy variables—financial depth, the black market premium over the official exchange rate and government surplus (manifesting as, respectively, financial repression, over-valued exchange rates and excessive budget deficits)—explained a loss of aggregate income for 1989 equal to about US$800 billion. This was approximately four times the total external debt in Africa. It is also generally accepted that weak policies for the provision of infrastructure and education contributed to Africa's malaise. However, having accounted for policy as contributing factor, a large part of Africa's poorer growth (compared with that of Southeast Asia) remains unexplained. Ethnic diversity fills part of the gap and so does contagion, that is, the impact of neighbours' policies and growth performance on your own. Easterly (1996) found a remarkably strong relationship, with slower growth by 1.0 percentage point in the neighbours reducing the home country's growth by 0.34 to 0.55 percentage points.

Contagion is important for development. One can theorize about the explanation of the contagion effect but if accepted at face value it can provide valuable pointers to development strategies that could be adopted in Africa. Two immediate elements come to mind. The first is that regional cooperation takes on a new meaning. Regional integration does not have a good track record in Africa and the large number of failures could lead to integration agnostic ism. However, the potential for negative or positive contagion should strengthen the argument for regional cooperation. Over-optimistic plans for integration need not be the focus of the exercise; regional cooperation and institution building that would enhance the development of a regional identity and cohesion, as well as policy coordination, can provide an important framework for the transmission of positive signals. The second element, which can be linked to the first, is the positive impact on neighbours of continental success stories. In East Asia, Taiwan was the first to abandon inward-looking policies in favour of development through exports. Korea adopted a similar strategy in 1960 and, according to Krueger (1997: 17), "the favourable experience of Taiwan undoubtedly facilitated the willingness of decision makers to try the new approach". Focusing on continental success stories and their contagious impact re-affirms the importance of good policy. In this respect the study by Savvides (1995: 454) of the economic factors that contribute to the diverse performance across African economies confirmed "that the policies promoted in other parts of the globe, namely macroeconomic stability and outward orientation, are conducive to economic growth in Africa....the factors making for greater economic growth in Africa are no different from those elsewhere". It may be emphasized that Savvides's research results indicate “African nations that have experienced greater political freedom appear to have grown faster in comparison to other African nations". It is not unrealistic to envisage a general improvement in Africa's economic performance if a number of countries could

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an annual rate of 8.5% in Korea during the 1960s while Ghana produced a growth rate of only 2.1%. During the 1970s and 1980s the comparative position of Ghana worsened even further, leaving the country far behind the economy of Korea, which grew to achieve the status of a newly industrialized country.

[4]For a list of relevant references to these studies see Andreas Savvides (1995).

implement policies that would serve as role models for neighbouring states.

3. Development strategies – An overview

The situation that faces SSA requires rapid economic growth, since growth, although not a sufficient condition for the amelioration of poverty, is a necessary one. The main objective of this paper is to briefly review export-oriented growth policies from a sectoral perspective and to do so within the context of the WTO multilateral trading system. The sectoral focus of the paper requires some comment to explain the underlying theme of the story I tell, namely the need to expand tradeable production across all economic sectors.

The information summarized in the Appendix allows the identification of certain characteristics of the typical SSA economy.

The great majority of SSA countries are poverty-stricken and have economies that are small, in terms of both population and GDP. Only six countries in SSA have a GNP per capita in excess of US$1, 000. The aggregate of the GDPs listed in the Appendix is US$276,427 million, which is roughly the size of Belgium's GDP in 1995. If South Africa, which contributes approximately 49% to the GDP of SSA, is excluded, a GDP of US$140,035 million is obtained, which in size approximates that of Norway or Hong Kong. The largest concentration of least developed economies (LDCs) is found in SSA; of the 48 countries listed by UNCTAD as least developed, no fewer than 33 are in SSA, which means that 69% of SSA falls in the category of least developed economies. Domestic commercial markets in SSA, therefore, tend to be relatively small.

In general, the economies of SSA are primary-producing, mostly in agriculture, with only ten of the economies' agricultural sectors contributing less than 20% to GDP (Appendix). For most of the countries in SSA, manufacturing contributes less than the 13% weighted average share of this sector in the GDP of low-income economies (China and India excluded) as classified by the World Bank (World Bank, 1997b). If the share of the labour force in agriculture is taken as indicator, the dominance of this sector is even more pronounced, even in those countries where agriculture is not the most prominent contributor to GDP. For example, in oil and diamond-producing Angola, agriculture contributes 12% to GDP, but 74% of the labour force is active in this sector. In mineral-rich Botswana the respective shares are 5% and 46% and in Zimbabwe 15% and 71%. The large overall discrepancy between the contribution of agriculture to the GDP and the share of the sector in the labour force reflects the low productivity of agricultural production in SSA.

A number of SSA countries can also be classified as mineral-rich economies. On the basis of minerals' contribution to merchandise exports and the GDP in 1991 and a mineral dependence index, Davis (1995) identified 33 developing countries as mineral-based economies, of which 14 were SSA countries.[5] In 1970 only six SSA countries fitted this description. There are six countries

[5]The 14 countries are Nigeria, Botswana, Gabon, Zambia, Congo, Angola, Guinea, Namibia, Niger, Democratic Republic of Congo (Zaire), South Africa, Mauritania, Cameroon and Togo. The sequence here is in terms of the level of mineral dependence index, which is the mean percentage contribution of minerals to GDP, Merchandise exports and government revenues

that largely depend on oil exports: Nigeria, Angola, Congo, Gabon, Cameroon and Equatorial Guinea.

In view of these characteristics the first inference would be that the development of the agricultural sector must be a first priority. The majority of economically active people depend, at low levels of productivity, on agriculture for their livelihood and, hence, growth in agricultural productivity will be the most direct way of raising standards of living. Where exploitable mineral resources exist, it can be assumed that these are the surest means of attracting foreign direct investment; creating employment and cash income; providing government with a significant source of revenue; and earning foreign exchange. From a development point of view the mining sector introduces a number of important issues. The first is that in SSA, South Africa excluded, the exploitation of mineral resources has mostly been undertaken by foreign mining companies. Experience, supported by theory, shows that FDI in the minerals sector, compared with manufacturing, is influenced by a different set of factors. The reason for this is that mining is resource—and therefore location—bound, while manufacturing, by comparison, is footloose. Since mineral deposits are exhaustible the distribution and use of encashed mineral rents will determine the impact of mining on economic development. This issue will be discussed in Section 4.

If export orientation is introduced as an element of development, most SSA economies face a predicament that has been summarized in a succinct description by the WTO secretariat: "The dependence of least-developed countries on exports of a narrow range of largely unprocessed primary commodities and raw materials, which are susceptible to price volatility on world markets, whose price and income elasticity of demand is low, and whose growth has been far more sluggish than world trade overall, is one of the main factors hindering their export performance. It also limits severely the stimulus that the export sector can provide to the domestic economy through backward linkage activities" (WTO, 1997b: 5). It is widely believed that the only solution to these problems is the diversification of economic activity and exports into manufactures. However, this does not mean that room does not exist in many instances for export diversification into non-manufactured tradeables in primary commodities and services, tourism in particular.

There are SSA economies (for example, South Africa, Zimbabwe and Côte d'Ivoire) that already have significant manufacturing sectors and they, as well as the African LDCs who would be making progress on the basis of their primary sectors, will have to either increase the extent and rate of industrial development, or, in the case of the LDCs with the smallest presence of industrial activity (for example, Ethiopia, Uganda and Guinea), encourage manufacturing growth. For many of the latter economies, the processing of primary commodities may represent the most viable first steps in industrial development. Since mineral beneficiation, in general, depends on the existence of exploitable resources and also tends to be highly capital intensive, it may be expected that the processing of agricultural products (mainly foodstuffs for which a domestic market will exist) will provide the most likely means of increasing domestic value added.

Manufacturing is generally regarded as the engine of economic growth, and industrialization the appropriate road to sustainable diversification, but this sector is too capital intensive to provide the growth in jobs that SSA economies require. For many SSA economies, services may be the sector

that will enhance income and employment creation. The potential for tourism-related growth in services (transport, accommodation, promotion and commerce) specifically should not be underestimated.

Special consideration should also be given to the development of the financial services sector in view of its contribution to economic development. Through its role in mobilizing savings and channelling these to investors, a good financial system allocates these savings to high-return investments In addition, it manages the payments mechanism of the economy and plays an important part in risk assessment. Although some progress has been made, financial systems, as will be argued in Section 6, remain weak in most SSA countries.

4. Mining industry

One of the major constraints to economic growth and development in SSA is that saving and investment rates, particularly those of the private sector, are significantly lower than those of other developing countries. During 1986–1994, gross investment in SSA on average constituted 17% of GDP and the average private savings rate 13%. This investment rate is significantly below the 25% investment–GDP ratio that is the estimated ratio required to sustain real GDP growth at about 6% (IMF, 1995). Mineral resources have the potential to close this gap, as well as the foreign exchange gap that arises because of the importation of capital and other goods required for investment and growth. Closing the gap is achieved by the export-oriented nature of mining and by the fact that in SSA, South Africa excluded, mining activity is usually the outcome of foreign direct investment (FDI). This means that both the current and the capital account of the balance of payments benefit.

As shown in Table 4.2, SSA's mining industry contributed 1.6% to world merchandise trade during 1992–1994. Since mining products during this period represented 11.4% of world trade, SSA's share is quite significant. Two observations about trade in mining products are in order: first, in certain important products SSA has experienced a decline in its share of world production, and second, mining production tends to be concentrated in a few countries in the region.

Table 4.3 summarizes the share of SSA in the world output of gold and silver, the base metals copper, lead, zinc and tin, as well as uranium and platinum and uranium platinum metals. With the exception of the latter metal group, SSA's share in the world output of these metals has significantly declined since 1988. In all these cases the decline in relative contribution has been accompanied by a fall in the volume of production. The second characteristic of SSA's mining activity is the high country concentration of output: 87.6% of SSA gold output in 1996 was produced in South Africa, 71.4% of silver in South Africa, 56.5% of copper in Zambia and 55.1% of uranium in Namibia. The same of course applies for oil, with its concentration in countries like Nigeria and Gabon. Nevertheless, mineral production is an important factor in many SSA economies. Some 14 SSA countries were included in a group of 33 countries identified as mineral dependent economies, defined as such on the basis of the contribution of minerals to GDP, merchandise exports and government revenues (Davis, 1995). Cognizance must also be taken of the fact that SSA has substantial mineral reserves, which will lead to growth in mineral output as the current pace of exploration increases.

Table 4.3: The contribution of SSA to the volume of selected world mining production, 1988-96 (%)

	1988	1990	1992	1994	1996
Gold	44.5	34.7	31.2	30.3	26.9
Silver	3.4	3.1	2.4	2.2	1.6
Copper	17.7	15.5	8.9	7.0	5.8
Lead	6.4	4.5	3.4	4.4	3.8
Zinc	5.3	4.4	2.3	1.7	2.2
Tin	3.8	3.8	2.7	-	-
Platinum & uranium platinum metals	66.9	69.2	74.7	78.1	79.8
Uranium	23.5	21.8	18.9	12.7	12.6

Source: *Financial Times Energy Yearbooks*, Mining, 1994 and 1998, London.

Mining development can have a beneficial impact on income creation and foreign exchange earnings. But mining has other characteristics that are not so favourable from a development point of view (Lewis, 1984). Mining projects tend to be capital intensive and generally very "lumpy". They often involve capital investment over a long gestation period, with capacity output for the mine reached in a short period, thus resulting in rapid growth of physical output and jumps in export earnings and measured GDP. The high capital intensity is reflected in high capital/output and capital/labour ratios. South African data for 1990, for example, reveal a real capital/output ratio in mining of 2.89 compared with 1.54 in manufacturing; that is, the ratio for mining is 88% higher than for manufacturing. The fixed capital stock per worker was 45% larger in mining than in manufacturing (South African Reserve Bank, 1997). Even if allowance is made for the capital intensity of deep-level goldmining, which, in any case, is somewhat neutralized by the capital intensive nature of the South African manufacturing industry, these figures confirm the general impression of mining as a capital intensive activity. Therefore, the share of labour in value added is typically low, with a large fraction of value added going either to the government or to multinational corporations responsible for the investment. Mineral markets also tend to be unstable internationally and, given the export-oriented nature of mineral production, substantial instability of export earnings and government revenue may be expected.

These characteristics would seem to justify the argument that mineral wealth can be more of a liability than an asset in the process of economic development. Intuitively it is difficult to accept that a developing country with rich mineral resources will be better off without these resources or that the discovery of mineral resources must be regarded as a blow to the development prospects of a poor economy. Questions about the real benefit derived from mineral wealth arise from the use made of "encashed" mineral rents and the impact of this on economic development policy. Assuming that a fair agreement is reached between the government of the host country and the multinational corporation about the distribution of ensuing mineral rents, the key questions concerning the exploitation of the mineral resource are how fast to utilize the resource and how to divide mineral rents between current consumption and investment in income-producing assets, that is, future

consumption (Lewis, 1984).

The thesis that mineral resources might rather be a curse than a blessing derives from the observed tendency of mineral-rich countries to make poor decisions about them. Often mineral rents are consumed through the growth in public sector employment and salary bills. But perhaps the greatest damage is done by inappropriate policy decisions related to the channelling of part of mineral revenues into other economic sectors. This is an important issue since mineral resources are finite and once they are exhausted other economic activities must be in place to generate output that can serve as a substitute for the exhausted minerals. This process of channeling revenues into other sectors may take on different forms, but the primary aim should be to invest a substantial share of mining rents in the productive non-mining sectors of the economy, that is, outside general government (Lewis, 1984). A number of options exist:

- The constraint of a weak infrastructure on growth and development was emphasized earlier. In most mineral-rich SSA economies it should be an imperative to allocate a part of encashed mineral rents to investment in infrastructure that will support the agricultural and manufacturing sectors in particular.

- For most developing countries, and for those in SSA in particular, a lack of human capital is a binding constraint to development. Using mineral rents to alleviate this problem through investment in education, training and health services would be a wise investment in favour of diversified economic growth in the long run.

- Mineral rents can also be absorbed into the development of the tradeable sector in an effort to diversify the economy. This can be achieved through the protection of either import-competing or export-oriented industries through tariff and non-tariff protection, which can include direct subsidization, especially in the case of infant exporters. Funds could also be allocated to a development bank for the financing of investment in productive private enterprises.

- It can also be negotiated that the mining company use part of its mineral rents to enhance the links between the mining operation and the domestic economy. In order to prevent an enclave-type development, mine operators can be expected to recruit local workers as far as possible, thus restricting expatriate workers to a minimum, purchase production inputs of domestic origin wherever feasible, and invest in social and physical (long-term) infrastructure (housing, health services, education and training, road systems, airports, and harbour facilities).

Unfortunately, elements of the use of mineral rents are taken to extremes and beyond a reasonable duration as far as protection of domestic industries is concerned. Rich natural resource endowments have been associated with lax macroeconomic policies, over-valued exchange rates, the protection of industries (often of a highly capital intensive nature) without maturation within a reasonable period, and the development and toleration of rent-seeking groups (Auty, 1994). These experiences should not be interpreted as economic law. Auty (1994: 24) has described them "as merely a strong tendency" that can be avoided through prudent policies.

The experiences of many developing countries testify to the positive impact of the exploitation of an economy's mineral wealth. Davis (1995), in his analysis of the impact of mineral resources, refers to the experience of Chile, one of a number of mineral-based economies, where the mineral industry developed the first railways and modernized agriculture through direct investment linkages, and where the investment of the mining elite contributed to urban development, banking and wine-making. There can also be little doubt that SSA's largest and most sophisticated economy, South Africa, owes much of its development to the mining industry. The mining revolution, which started in the late nineteenth century in South Africa, not only directly created thousands of jobs, income, foreign exchange earnings and government revenue, but also encouraged the development of the transport and communications infrastructure. For example, in 1861 there was only a single railway line of 3 kilometres in South Africa (on the Cape Peninsula); in 1891, 24 years after the discovery of diamonds in 1867 and 5 years after the proclamation of the Witwatersrand as a gold-producing area in 1886, the railway system covered 4,067 kilometres. Mining purchases of inputs like mineworker uniforms, wooden sleepers and explosives also encouraged domestic industrial development. To these backward linkages can be added the indirect encouragement of manufacturing and agriculture through the production of import-competing products that, in meeting a growing domestic demand, enjoyed the natural protection afforded by the long distance of South Africa's mining areas from the coast.

The contention that mining is beneficial for economic development also finds support in the comparative analysis of the experience of mineral-rich economies. In a comparison of 22 economies (which he classified as "persistent mineral economies") with the performance of a comparison group of 57 developing economies, Davis (1995) found that over the period 1970 to 1991 the mineral economies significantly outperformed the non-mineral economies in terms of growth in GNP per capita. The same appears to be the case if outcome-based indicators of development are taken as indicators. Davis (1995: 1773) concluded that "the mineral rents appear to have been used for substantial health and educational development, even in severe Dutch disease economies such as Nigeria". In the evaluation of the long-run performance of the two groups of economies, Davis also found no evidence that the mineral economies consistently suffered from the mismanagement of mineral rents and that the non-mineral economies therefore failed to catch up. For a number of development indicators such as life expectancy at birth, infant mortality and adult literacy, Davis (1995: 1773) found that "the percentage change in the performance of the mineral economies is comparable to or exceeds the comparison group in nearly all cases". Recalling Auty's conclusion, referred to earlier, that the resource curse is not a law but a tendency that can be avoided through prudent policy, Davis' (1995: 1777) empirical observation needs to be noted: “Mineral economies as a group are not cursed, have not performed poorly in the long run, and have not been decimated by the Dutch disease that may or may not in practice accompany mineral booms".

As far as the WTO agreements are concerned, mining products that are exported in unprocessed form do not present any problem. The absence of an entrepreneurial cadre with the expertise and capital required to extract the resources also does not present an economy with insurmountable obstacles since multinational mining corporations are prepared to invest if profitable opportunities exist. If the natural resource is rich enough these corporations will not be prevented from investing by constraints like weak infrastructure. A part of the mineral rent will be used to create the required

infrastructure. However, it follows as a matter of course that the more favourable the investment environment is—for example, with infrastructure in place, skilled workers readily available and public services of relatively high quality provided—the more inclined foreign investors will be to invest in the extraction of lower grade resources.

The WTO agreements do become relevant if economies move toward the adding of value to mining output through further processing and manufacturing of downstream products. Adding value takes the analysis into the sphere of economic activity where the conventional distinction between primary and secondary activity can be somewhat vague. For the purposes of this paper it is useful to discuss processing as part of the manufacturing process because of, among other reasons, the phenomenon of tariff escalation, which has survived the Uruguay Round negotiations.

5. Manufacturing development in the growth of SSA

The Appendix shows that manufacturing does not make a substantial contribution to the GDP of most SSA economies. Bearing in mind that the weighted average of manufacturing's contribution to the GDP of the World Bank's category of low-income developing economies (China and India excluded) was 13% in 1995, the (unweighted) average of 11.5% for the economies listed in the Appendix is quite low. With the exception of economies such as Mauritius, South Africa, Swaziland, Zambia and Zimbabwe, the contribution of most SSA economies' manufacturing sectors to GDP is in the low teens or below 10%. No fewer than 16 economies had a manufacturing GDP lower than 6%. The lack of diversification of SSA economies is also reflected in the composition of exports. In other developing regions the share of manufacturered goods in total exports has grown since 1980; in SSA, however, it shrank in 12 out of the 30 SSA countries for which data are available (UNCTAD, 1997b).

It should also be borne in mind that for most of SSA economies, manufacturing activity is restricted to relatively unsophisticated processing activities demanding few skills and with low levels of value added to primary products or intermediate inputs.[6] Section 3 emphasized the role that agriculture can play to improve the living standards of the population. This is true, but it is also true that the economic emancipation of SSA countries to high levels of economic development and welfare will require industrialization. Africa, of course, has experienced its share of serious efforts to industrialize. This is briefly reviewed in the next section, after which the discussion shifts to manufacturing growth on the basis of primary processing (vertical diversification), horizontal diversification into manufacturing and the likely impact of the WTO agreements on the prospects for manufacturing growth in SSA.

[6]Another way of looking at this issue is in terms of the distinction of standardized categories. The ISIC is much broader in its definition of manufactured goods through its inclusion of processed primary products. The SITC is narrower, excluding processed goods and only including SITC 5-8 (minus 68). SSA economies, to the extent that they have developed an industrial base, have done so mostly in the primary processing components of the ISIC.

Early policies of import-substituting industrial development

Reference has already been made to the contribution of inappropriate domestic policies to economic failure in Africa. When African countries gained their independence, a major aim was to catch up with the developed world. To achieve this, the focus fell on industrialization as the engine of economic development. In line with structuralist thinking, the governments of African countries, as primary-producing economies, believed that they would face severe development problems if they depended on primary commodity exports as their source of growth. Locked into a pattern of primary product exports and manufactured imports, African economies faced declining terms of trade and hence the prospect of immiserizing growth.

Economic diversification through industrialization held out the solution to this problem. The obvious target, when viewed from the demand side of the growth process, was to produce for the ready market identified by imports, which means that import-substituting industrialization suggested itself as the logical route to follow. Exports could also provide the opportunity for manufacturing growth, but structuralist thinking was firm in the contention that the markets of the developed economies would not be accessible to developing countries' manufactured exports and also that the manufacturers of the developing world would not be able to compete against the established producers of the developed countries— hence, the need to protect developing country industries during their initial phase of production for the domestic market. In adopting this approach, African economies were not out of line with the general thinking of economists. As Krueger (1993: 43) summarized it: "Seizing upon the desire for industrialization, and supported in part by the suspicion of the international economy, most development economists endorsed & import substitution' as a means for developing domestic industry". Between the early 1960s and the early 1980s many African countries established highly protectionist trade regimes noted for restrictive import licensing systems, high tariffs, escalated or cascading tariff structures consisting of several layers, import prohibitions, and tight foreign exchange controls (Oyejide, 1997).

The infant industry argument can be used to justify protection. With lower-cost producers established abroad, protection for domestic industries with the potential to develop seems reasonable. Given the existence of dynamic externalities, a private producer would not find it profitable to produce under free trade circumstances. Protection would allow establishment subject to the condition, in theory at least, that the industry have the potential to develop to a competitive level and that the cost of the import-competing domestic product would fall below the cost of the import to such an extent that it would provide a return on the cost of protection.

Although the infant industry argument featured prominently in the approach of the Lagos Plan of Action, with its emphasis on trade integration as the means to enhance opportunities for import-substituting industrialization, it is doubtful whether African countries explicitly grounded their infant industry trade and industrial policies on the proactive identification and subsequent protection of industries with the potential to benefit from temporary protection. During the first decades of the post-colonial era, protectionism was rather based on a general preference for interventionism and protectionism, with an added dose of pragmatism to be found in the use of tariffs as an important source of government revenue. Because of this general policy attitude interventionism was also

extended to the export side of trade policy with explicit and implicit taxes on exports. The result was, in the words of Ademola Oyejide (1997: 24), "the rather haphazard, incoherent and internally inconsistent nature of the trade regimes".

Many African governments also did not favour the development of private industry and hence sought import substituting industrial development through the establishment of state-owned enterprises.[7] The dominance of inefficient parastatals and the absence of a dynamic private sector became the hallmark of African efforts to industrialize. As Douglas Rimmer (1989:182) put it: "Economic diversification seems often to have been attempted with scant regard for economic gain or loss, or on the basis of extravagant implicit valuations of externalities". In the world of African development policy, no real efforts were made to identify the dynamic externalities that were supposed to be associated with the infant industry argument. Also, protection became a permanent feature of infants that never grew up. A preference for large-scale heavy industries further indicated that the question of a potential to develop to maturity was never an important consideration.

A general lack of concern for the theoretical niceties of the infant industry argument does not mean that no notice was taken of the need to consider economies of scale in production. In fact, the small size of the typical African economy prompted African states and African development agencies to adopt another element of Latin American structuralism, namely the argument that regional integration could provide the means to create larger markets within which import-substituting industrialization could derive scale economies. Lower unit costs to improve the opportunities for the growth of large-scale manufacturing industries were more achievable in the protected market of a customs union than in the domestic market of the typically small African economy. This rationale and the vision of an African common market led to the adoption of regional integration as the cornerstone on which industrial development, envisaged in the Lagos Plan of Action, was built.

The broad inward-looking development strategies adopted in SSA have produced an outcome that cannot be regarded as conducive to outward-looking development in the globalized economic setting:

- SSA has not been successful in diversifying its tradeable goods production. The Appendix shows that the concentration of these goods is still strongly in primary commodities. To the extent that manufacturing development has taken place the adopted route of import substitution has not led to the creation of a viable and competitive industry in importable goods production and it has also not, as noted earlier, led to growth in Africa's share in world manufactured

[7] When Ghana gained its independence in 1957 the first independent government adopted a policy of direct government intervention in the productive sectors of the economy. Not only were many state enterprises set up in manufacturing, but state farms featured prominently in agriculture, a state fishing corporation was established and, in the services industry, the national trading corporation, a state shipping line, the Ghana Airways Corporation and the state transport corporation. Allocation of resources was primarily undertaken through controls and licensing and the economy took on all the structures of a "command economy". (See UNCTAD, 1996a.) This experience would fit into Ann Krueger's (1993:51) observation that "many African leaders were explicitly 'socialist' and focused upon industrialization through public sector activity as a means for achieving development".

output.

- In many instances the production of importables was placed in the hands of parastatals. Consequently, a private sector in manufacturing was not nurtured and developed. Those of a structuralist persuasion may see in this an important inflexibility built into the economies that would constrain adjustment to the signals of a market-oriented society in the post-Uruguay environment. Had import substitution taken the route mainly of facilitating the development of private enterprise in the importable goods sector, the argument would be that a corps of entrepreneurs would now at least exist that could react to the challenges of participation in the global economy.

- It stands to reason that protectionist strategies have created uncompetitive structures that are biased against export production The issue will be to assess the ability of SSA economies to meet the demands of the new global trading environment, making full use of available measures to counter this bias.

If the excessive protection of domestic industry in SSA is taken as the main issue, the questions that need to be addressed are: What can be done to change the situation around to greater international competitiveness and export orientation? More specifically, what is the role of the WTO agreements?

Export-oriented development and the capacity to produce

The forces of structural adjustment and globalization have contributed to the realization that policies of protectionism and inappropriate import substitution do not contribute to the creation of competitive economies. Greater export orientation requires a reasonable degree of neutrality in the markets facing export and import-competing producers. This means that a producer should not face a set of relative prices and incentives that create a bias in favour of the domestic market, as is the outcome of protectionist strategies. Two broad approaches can be taken to remove the bias caused by protectionism: the one would be to liberalize the trade regime and the other would be to neutralize through input subsidies and other mechanisms, such as duty drawback, the higher domestic cost facing export producers because of protection. In SSA there has been little effort to use such schemes; subsidies create a drain on constrained treasuries and complicated mechanisms like duty drawbacks require an administrative capacity within governments that does not exist in most SSA countries. Many SSA countries have consequently chosen the route of trade liberalization, in many instances geographically confined to export processing zones. The general provision that applied in the Uruguay Round was that LDCs were to liberalize their trade regimes more slowly than other WTO members.

Recent years have seen a marked change in SSA's trade and industrial policies and in sketching the history of the inward-looking strategies one is drawing only half the picture. Many African states have been compelled to liberalize trade unilaterally as part of structural adjustment programmes (SAPs). Between 1980 and 1992 a total of 35 SSA countries were subjected to IMF and/or World Bank-sponsored adjustment programmes, which produced 162 high conditionality, policy-based

programmes (UNCTAD, 1993). No other region in the world has had SAPs applied more intensely and frequently than SSA. Eighteen SSA countries have virtually eliminated their non-tariff barriers, a further nine have substantially reduced them and many have reduced their tariff rates.

The underlying contention of trade liberalization is that it reduces to world market levels the cost of imports for export producers, which allows exporters to become competitive on world markets. The economy is then expected to grow on the basis of investment and production growth in the export-producing sectors. This is also the only viable option for small economies, of which there are many in SSA, since a small domestic market does not allow significant inward-looking opportunities for growth.

Should SSA be successful in converting to a route of export-oriented economic diversification, the impact on growth and development could be dramatic. If, using 1995 data as a benchmark, SSA could over a period of time increase its share of world exports from 1.5% to 2.5% (that is, a single percentage point) the value of exports would be US$47.6 billion higher, which amounts to 16.5% of SSA's GDP.[8] Such a quantum change in gross output could have a substantial impact on economic growth.

Interpretations of Africa's experience with SAPs vary widely in their conclusions on the process and outcome of adjustment. That many African countries had raised their protection to excessive levels without much impact on the development of infant industries is widely accepted. The removal of this protection, however, has not, by and large, led to growth in export production that could produce substantial growth and compensate for the disruption caused by the removal of protection. In its 1993 Trade and Development Report, UNCTAD (1993: 109) had no hesitation in identifying its view on the cause of this failure: "The reason for the failure in SSA was structural. The region's industrial basis is weak and the scope for switching to exports limited". The WTO secretariat, on the other hand, is quite confident "that those African countries that have undertaken substantial liberalization of their trade policies are seeing their efforts repaid in higher growth" (WTO, 1998: 4).

Comparative studies on industrialization and economic growth tend to confirm the stylized view of a threshold of development that developing countries have to reach if they wish to catch up on development. It is widely acknowledged that technological spillover gives developing countries the opportunity to raise productivity quickly and to grow faster than developed economies. However, for the least developed economies there appears to be a threshold created by poor infrastructural development, insufficient physical and human capital, and too little domestic demand for the areas of production where technological advance is concentrated, to bridge the gap to accelerated economic growth. These economies are consequently left in a state of malaise below high-and middle-productivity countries. In a comparative study that included, as a third group, 29 very poor economies (almost all African), Dowrick and Gemmell (1991: 274) identified the inability of the poorest economies to catch up in industrial technology and a threshold of structural poverty in world development: "Once over this threshold countries are able to follow the route of modernization and

[8]These rough estimates are based on a GDP of US$276.4 billion for SSA, world merchandise exports of US$4,404.6 billion and SSA exports of US$64.4 billion.

catch-up through industrialization. Below this threshold it is extremely difficult to sustain sufficient growth in per capita income to generate the savings and investment, and perhaps to moderate population growth, which might allow further economic development".

Elements of the threshold argument also feature in the work of Owens and Wood (1997) on export-oriented industrialization through primary processing. Following Owens and Wood, it is useful to divide tradeable products into three categories: primary products, processed primary products and narrow manufactures. In terms of the standard international product classifications, processed primary products represent the middle ground that is included in conventions that define the Standard International Trade Classification's (SITC) primary products as SITC 1-4 plus 68, with SITC 5-8 minus 68 being defined as manufactures. The International Standard Industrial Classification (ISIC), however, includes processed products in its definition of manufactured goods (ISIC3).

Using the three-category classification as a point of departure the main issue is to determine where the emphasis of SSA economies should fall with respect to export-oriented growth. The point was made earlier that mineral production in SSA is export oriented; the issue at stake is whether export orientation should be driven through primary processing (adding value to the primary commodity), which can be described as vertical diversification, or through the production for export of narrow manufactures, which represents horizontal diversification. This question concerns the comparative advantage in international trade of the typical SSA economy and to address the issue it is useful to identify the principal features of these categories of products and to link these to alternative development approaches. The following production characteristics are relevant:

- Processed primary products:
  - capital intensive, or not particularly labour-intensive
  - resource intensive and resource bound in terms of locality
  - skill intensive
  - optimum levels of production at high levels of output (economies of scale)

- Narrow manufactured goods:
  - skill intensive
  - labour intensive (potential to be)
  - footloose in location (not resource bound)

Linking these characteristics to the fact that SSA is capital and skill poor but relatively well endowed with natural resources, leads to the conclusion that SSA does not have a comparative advantage in either narrow manufactured goods or in the processing of primary products. Owens and Wood (1997) recently extended the research by Wood and Berge (1997) who tested the hypothesis that countries with high skill/land ratios tend to export manufactured goods (defined in the narrow sense as explained above), while those with low skill/land ratios tend to export primary products (defined to include processed primary products). Using the three categories of narrow manufactured goods, processed primary goods and narrow primary commodities, their econometric work on cross-sectional data led Owens and Wood (1997: 1467) to the conclusion that "the combination, as in

Africa, of low skill per worker and moderate or high land per worker causes a comparative disadvantage in broad manufacturing or, in other words, a comparative advantage in narrow primary production". The absence of skills is regarded as the major constraint on industrial development. This applies not only to industrial growth paths that focus on the narrow definition of manufacturing, but also to the processing of primary commodities.

According to Owens and Wood (1997: 1467): " ...our results suggest that whether a country with extensive natural resources can produce and export processed primary products depends on the skills of its workforce. If the level of skill per worker is high, the country will have a comparative advantage in primary processing; if the level of skill is low, its exports will be concentrated on narrowly defined (unprocessed or less processed) primary products". Consequently, they concluded that the future:

> ...for countries with low skill/land ratios, but moderate levels of skill per worker, epitomized by much of Latin America, is a positive one. Although they lack a comparative advantage in the sorts of manufactures in which East Asia specialises, these countries can, through primary processing, produce and export other sorts of manufactures. For countries which have both low skill/land ratios and low levels of skill per worker, *epitomized by much of sub-Saharan Africa*, the message ...is a more negative one. Countries in this situation have no stronger a comparative advantage in primary processing than in narrowly defined manufacturing. They thus have little chance of exporting large amounts of any sort of manufactures, unless or until they can raise the skill level of their workers (not just absolutely, but relative to the rest of the world), which will require, first and foremost, large increases in the coverage and quality of basic education, and is bound to be a slow process. (Emphasis added.)

According to this analysis countries with an abundance of land (representing natural resources) and low levels of education and skills should seek their growth opportunities within the category of narrow primary commodities.

The lack of skills ties in with all the other constraints such as poor infrastructure and governmental support systems to create a threshold to export manufacturing that many SSA countries find difficult to cross. Malawi is such a case. After having analysed the impact of the Uruguay Round on Malawi, an UNCTAD (1996b:) report had the following to say:

> A more serious concern for Malawi would seem to be the structural and socio-economic deficiencies that impede growth in the economy and the extent of export opportunities. A perception exists among the commercial community that there are already trade opportunities in Malawi's main markets (the EU and the United States) that domestic producers cannot realize. The claim is made that factors such as the high cost of materials, finance, transport and the uncertain supply of water and electricity are limiting the expansion of exports....These comments indicate that the major challenge facing Malawi is to overcome the deficiencies

> within the domestic economy, in order to take advantage of the trade opportunities resulting from the Uruguay Round. Indeed, domestic policies to combat institutional and infrastructural weakness may be more decisive than externally induced changes, in influencing future growth... .

On the view that SSA's problem is structural and the industrial basis too weak to provide the basis for diversifying export-led growth, the question remains whether trade liberalization on its own will succeed in pushing the economy over the threshold into export-oriented economic diversification. One does not have to subscribe to the view that industrial targeting is an appropriate strategy to appreciate that a significant degree of government intervention will be required to facilitate the establishment of an industrial base that can react positively to liberalization measures. The experience of East Asia has shown, and intuition-driven logic would support the contention, that in general only firms that are established in the domestic market can become competitive exporters.

It is also clear that a quantum increase in investment will be required to lift SSA economies over the threshold. This is in line with Rodrik's (1995b) conclusions on the Korean and Taiwanese experience. These economies, he argued, managed a sharp economic take-off because their governments in the early 1960s and thereafter "managed to engineer a significant increase in the private return to capital", and that the importance of the export-oriented policies derived from the fact that "they enabled a steady rise in imported capital goods" (Rodrik, 1995b: 57, 97). Growth in investment rates is an important prerequisite for accelerated economic growth. In his study of long-term growth Angus Madison (1989: 23) observed that "none of the countries which had accelerated post-war growth has done so without an increase in investment rates, and the highest rates are generally found in the countries which have had the fastest growth". Investment in these countries provided the "big push", the "critical minimum effort" or the "take-off" of the development literature, or in the context of this paper on African economies, the "shove over the threshold".

In Africa, the investment in physical capital will also have to be complemented with a substantial increase in investment in human capital through education, training and investment in productivity-enhancing social infrastructure. Economic diversification through industrialization, whether it happens to be through import substitution—that is, competing with importables—or export production, will require a broader skill base in the labour supply.

The WTO agreements and export-oriented diversification

In SSA the challenge is to identify the impediments to private investment, the development of skills and provision of adequate infrastructure, and then to put policies in place that will address these obstacles. Since these impediments are mainly on the supply side of production, the required policy framework will not be as demand-side oriented as one would expect it to be if the WTO agreements are taken as primary focus. Of course, the WTO agreements remain crucial. In the first place, supply-side measures and the growth in the capacity to produce tradeable goods cannot be separated from the market absorption of the larger output, and second, there are WTO agreements that have a direct bearing on the measures that are available to encourage investment and productivity growth. This means that the WTO agreements have an impact on both the demand and

supply side of industrial development and economic growth, but less so on the latter.

The supply side of industrial and economic growth refers to the capacity to produce tradeable goods. The argument thus far has been that with the exception of economies like South Africa, Kenya, Mauritius, Botswana and Zimbabwe, the economies of SSA have a particular constraint in this respect: Most SSA countries are trapped behind the threshold of development discussed earlier and to escape the process of marginalization will require a quantum change in investment in human and physical capital, thereby establishing a capacity for the competitive production of tradeables for the domestic and foreign market.

It is difficult to conceive of any element of the WTO agreements that may prove to be a supply-side constraint to the establishment of this capacity. Since government subsidies could be used to encourage the required capacity creating investment, it may at first glance appear that the Agreement on Subsidies and Countervailing Measures could serve as a constraint. However, supply-oriented direct and indirect subsidies (such as fiscal measures designed to encourage research, the training of labour and management, technological development and adaptation, productivity improvements, and privatization) and other measures to increase the productive capacity of the economy have no direct bearing on export prices and are therefore regarded as non-actionable subsidies.

In an indirect way the WTO agreements and the new regime that applies in international trade and in the global economy can also have an impact on the supply-side of growth through the policy environment that is created. The realization is taking place "that special preferences for developing countries have largely not worked in the past, and are even less likely to be put to a good test in the future" (Rodrik, 1995a: 49). Even for the LDCs the message should be clear: growth will require participation in the global economy and this will demand an improvement in the quality of governance. Accountability and transparency in the formulation and implementation of economic policy have become deciding, albeit subtle, factors in the establishment of a competitive productive capacity.

The demand side of export-oriented growth is obviously more susceptible to the impact of the WTO agreements. Market access is a major consideration and heret two dimensions can be distinguished: the first is intervention by trading partners, which could have an influence on market access, and the second is the measures implemented by the exporting country to provide its exportables with a price advantage.

In the first category, considering the raison d'etre of the Uruguay Round negotiations and the greater participation of developing countries, the general impression is that developing countries would have less restricted access to the major markets of the world. The situation has improved, and will be improving even more as time proceeds. However, while the reduction in tariffs on industrial products will be significant, the reductions will on balance be less favourable to developing countries since goods that they, in particular, export will experience lower reductions than other goods.[9]

[9]Products in this category include textiles and clothing, leather, rubber and footwear, fish products, and transport equipment. Should one look outside processed and manufactured goods, tropical agricultural products are also important in the category of lower tariff cuts (Agosin et al., 1995).

Primary-producing developing economies that can adopt the processing route to industrialization will also face the constraint of the continued existence of tariff escalation (Agosin et al., 1995). However, tariff de-escalation has occurred over a wide range of commodities with the exception of jute and cocoa, where tariffs on intermediate products were reduced more than those on the final stages of the production chain (Safadi and Laird, 1996).

For most developing countries, the least developed economies of Africa included, textiles and clothing represent the most viable entry point into export manufacturing. This is illustrated by the experience of many developing countries that have achieved substantial industrial growth through the establishment of export production capacity in the clothing and textile industry. Some 22% of all developing country industrial exports (more than 20% for as many as 30 developing countries) consist of clothing and textile exports (Weston, 1995). In view of this the phasing out of the quantitative restrictions embodied in the MFA would at first glance appear to be a major change in favour of the prospects for developing countries to diversify their export production. However, as noted earlier, the tariff substitutes agreed on are relatively high, and even less favourable is the way in which the quantitative restrictions will be phased out: the integration into GATT will take place over a ten-year period in a back-loaded process that will allow nearly half of the liberalization to be delayed until the last day of the ten-year period.

But for African economies that have duty-free access to the European market in terms of the Lomé Convention, the phasing out of the MFA could be bad news because it will introduce competition from other non-ACP developing country producers with more developed and more competitive industrial sectors. These latter producers will now have a competitive edge that did not exist previously. In a textile and clothing market that is only constrained by MFN tariffs, a major change in the distribution of export production in favour of low-cost producers, such as China and others from Asia, can be expected (Safadi and Laird, 1996).

Although it is uncertain what will replace the current Lomé Agreement in 2000, there can be little doubt that the deterioration of the special preferences African countries now enjoy will have a detrimental impact on the room for export-oriented growth. Skeptics, however, can point out that with the exception of economies like Mauritius and, to a lesser extent, Lesotho, African countries have in the past not made good use of the competitive room Lomé created and that its loss is only of academic importance. However, for some countries like Lesotho the loss will not be academic. This small country, totally landlocked within South Africa, has been very successful in raising its manufacturing production through the attraction of export-oriented foreign investment. Closer analysis, however, shows that this investment has mostly been in clothing and textiles,[10] and furthermore that it has been dominated by Taiwanese firms who use Lesotho as a production base to circumvent the quotas on Taiwanese clothing and textile exports, with the added benefit of exporting from a Lomé Convention country. With the constraint of quantitative restrictions removed, it is likely that the efforts to attract new investment may suffer and that footloose clothing manufacturers may leave Lesotho.

[10]In 1994, Lesotho exported 17.7 million square metres of clothing and textiles to the United States, which was slightly more than Kenya's 17.1 million square metres. Clothing and footwear contribute more than 80% of Lesotho's manufacturing exports (World Bank, 1995).

In addition to the MFA, export restraint arrangements on industrial goods (voluntary export restraints, for example) are to be phased out in four years in a way that allows each country to maintain one restraint until 2000. While this achievement of the Uruguay Round will, according to Safadi and Laird (1996: 1229), "go a long way towards levelling the playing field in sectors where developing countries enjoy a major comparative advantage", it is unlikely, within the time frame that applies, to be of benefit to any African economy, South Africa included. Only a small number of the more advanced developing country and some developed country exporters of footwear, travel goods, electronics and steel will benefit (Weston, 1995).

As far as the ability of African economies to intervene and provide their export producers with a price advantage is concerned, export subsidization and the Agreement on Subsidies and Countervailing Measures immediately come to mind. Interventions that can be classified as "prohibited" or those that could be termed "actionable" in terms of the agreement will not be available as elements of export-oriented industrial development strategies. As noted earlier, the restrictions placed on the ability to subsidize export industries are interpreted as an effective constraint on the part of developing countries to adopt the strategies used by the East Asian economies in their export-oriented growth. For the more developed African economies this is true. South Africa, for example, was forced by its WTO commitments to terminate its export subsidy scheme. Consequently, a WTO friendly supply-side development approach to encourage the export-oriented growth in manufacturing production has been adopted (McCarthy, 1998). But by far the largest number of SSA economies will not be affected by the prohibition of trade-related subsidies since countries with a per capita income of less than US$1,000, the so-called Annex VII countries, are allowed to maintain export subsidies. The exemption does not apply to any product in which the Annex VII country has achieved a situation of "export competitiveness", which is defined as a share for two consecutive years of 3.25% or more in the world trade of the product concerned. Once a developing country graduates to an income level above US$1,000 it has eight years in which to phase out export subsidies.

As is clear from the Appendix many SSA economies, such as Zimbabwe, Nigeria and Kenya, which have a fairly substantial industrial capacity, have considerable room to use export subsidies should they wish to do so. The following points are worth considering:

- Countries with low per capita incomes hardly have the revenue to afford subsidies. However, subsidies may be indirect and implicit when they are designed as tax incentives, artificially low rates of interest, or differentiated and discriminating pricing policies in the provision of services by public utilities. The last two lay claim to scarce resources and need to be considered carefully. Tax incentives in favour of export production, however, can be designed in a way that will not cause government revenue to be sacrificed; revenue forgone of course represents a claim on scarce resources. If the tax incentive is structured in a way that will encourage the growth of production and profits the revenue forgone argument does not apply since, without the incentive, the revenue would not have existed. Nevertheless, if considered in a general equilibrium framework, export-oriented incentives will affect the allocation of resources of which the final outcome cannot be foreseen clearly.

- The second point to consider is the comparative benefit of export subsidies. Considering the line of argument that the capacity to produce tradeable goods is the real stumbling block it would seem to be more sensible to target policy measures, including incentive systems and public expenditure, on the supply side of diversifying output growth.

To conclude: the WTO agreements, by and large, can in the long run only benefit African economies in their efforts to encourage export-oriented industrial growth. Comparing pre- and post-Uruguay world trade environments, the fact is that world market for industrial goods are more accessible, bearing in mind, however, that in some selected but important sectors, such as clothing and textiles, the impact of the phasing-in of trade into the WTO system may be negative. But the WTO agreements are in a direct sense not really the issue when it comes to the export-oriented industrialization of African economies. The WTO—and what it embodies—has created an environment of trade liberalization that is focused on trade as a source of growth for economies participating in the global economy. To escape poverty and marginalization, SSA economies will have to trade more, but the major constraint in this respect is found on the supply side of output growth. Since the WTO agreements are primarily concerned with demand-side influences, these agreements are of lesser importance in most African economies.

6. Services as a source of export-oriented growth

The importance of services in economic activity was alluded to earlier. Services have become a major contributor to income and job creation in national economies, and in some developed economies the cause of or counter to de-industrialization. They are also a growing component of international trade, a factor that has forced analysts to change the conventional practice of regarding them as non-tradeable.

Services are not only important because of their direct contribution to economic activity and trade, but also in the indirect sense of facilitating growth and development. Earlier, the importance of investment as a source of capacity-creating growth was highlighted. An analysis of the impediments to investment will identify limited entrepreneurship (as an outcome of past, and in some cases present, tendencies of governments to favour public at the cost of private enterprise) and constraints on private capital accumulation as major stumbling blocks. It is in the latter respect that one service industry, the financial sector, comes into its own as a facilitator of growth.

Investment is strongly influenced by the efficiency of the financial system in accumulating private domestic and foreign savings and in converting these into productive investment. The perception of the role of the financial sector in development has undergone substantial change and it is now understood that an economy's financial sector is a significant indicator and facilitator of development. Although there are important exceptions (notably in southern Africa), SSA's financial system is too poorly developed to provide the essential services demanded by investment growth and the development of a modern and productive economy. This lack of development is reflected in the financial deepening ratios for the selected countries (listed in Table 4.4). It is highly unlikely that the current providers of financial services in SSA have the skills, expertise and entrepreneurial talent to

transform the financial sector to the required levels of competence.

At this point one could argue the case for a market failure and therefore the need for the government to intervene, as happens in many African countries, to provide development and commercial finance services. This is not the place to argue the merit of such intervention. What is important within the context of this paper is to make the case for the opening the financial service sectors to foreign service providers.

Table 4.4: Financial deepening (money plus quasi-money/GDP) in selected SSA and other countries, 1993–1994(%)

Botswana	29.1
Cameroon	18.7
Chad	14.2
Côte d'Ivoire*	28.4
Ethiopia	44.6
Ghana*	17.2
Kenya	40.0
Lesotho	42.4
Malawi	22.7
Mauritius	72.3
Namibia	36.3
Nigeria*	23.7
Senegal	21.5
South Africa	53.4
Uganda	10.1
Zimbabwe*	31.7
Canada	59.2
Belgium*	48.3
Portugal	81.5
Korea	42.8
Australia	61.3

Notes: *The ratio applies to the most recent two years prior to 1993/94.

In broad terms, developing countries, and African economies in particular, could derive several advantages from this opening up to foreign financial service providers (Agosin et.al., 1995):

- Most African economies are characterized by a dearth of the financial services that any export-oriented economy will require. Foreign trade financing, insurance and sophisticated merchant banking services are not available from domestic financial institutions. Expanding the range of available services will allow goods producers to be more competitive in foreign markets.

- The introduction of these services and the accompanying technologies and skills will spill over to domestic financial institutions.

- Finally, the participation of foreign financial institutions in the domestic market will also increase

the potential for the host economy to have access to new sources of foreign finance. Access to the use of foreign savings to finance production for export could allow the host economy to escape the constraint introduced by its inability to generate sufficient savings.

Significant participation by foreign financial service suppliers can make any developing country, especially the least developed ones, susceptible to the vagaries of foreign capital flows. Although the annex on financial services in the General Agreement on Trade and Services (GATS) provides for host countries to protect themselves against some of the negative impacts, it is open to question whether a small developing economy will be able to take a stand against large multinational financial institutions. On balance though, the need for access to financial services, in the absence of adequate domestic suppliers, will outweigh the possible negative outcomes.

Financial services were specifically considered in the GATS, as were telecommunications, transport, professional services, labour mobility, construction and engineering, transport, audio-visual services, and tourism. Within the ambit of the broader services industry there is clearly a potential to assist development in agriculture, mining and manufacturing through the provision of supporting infrastructure and business services. Tourism, however, provides an independent source of employment-creating growth, that in its own right can contribute significantly to economic growth. The commercial, transport and accommodation services that are required for tourist-led growth are in turn impeded by the lack of entrepreneurship, private investment and infrastructure. Because of these constraints tourism is virtually absent in many SSA countries or regionally confined, that is, limited to a specific region or place in the country. Most African countries, however, have a comparative advantage in tourism, especially with the increasing focus on eco-tourism. Without the supporting infrastructure this potential for the development of an autonomous source of export-oriented growth will not be realized.

7. Concluding remarks

An African renaissance will remain a dream unless the continent improves its economic growth record and its share in the economic activity of a global economy that is becoming increasingly integrated. One does not have to subscribe to the view that export growth drives economic growth to appreciate that nations wishing to import can only do so by exporting. Creating the capacity to produce tradeable goods will require a sharp increase in investment in physical and human capital, which in turn will require a substantial expansion of imports. Export growth, therefore, becomes essential to improved growth performance, either as the engine that drives economic growth, or as the facilitator of growth in avoiding the balance of payments constraint.

The theme of this paper is that Africa's economic revival must in the first place be sought in the capacity to produce tradeable goods. The WTO agreements, by and large, are relevant to the demand side of economic growth since they are mainly concerned with access to markets and the effective price at which goods trade internationally. One could therefore argue that for Africa's low-income economies the WTO has comparatively little direct relevance. Even those agreements that could affect supply-side policies, for example, the prohibition on subsidies, do not apply to most of the countries of SSA. This does not mean that the WTO agreements are unimportant. In a

perverse way they could even have a detrimental impact as a demand constraint on Africa's ability to create capacity in important industries, specifically clothing and textiles. However, the WTO agreements have created an international trade regime that ensures improvement in market access and dispute settlement and is more transparent in its operation and in the rules that apply.

Contemplating the full range of policy measures that could be used to create a productive capacity takes one beyond what was intended with this paper. Export growth in non-traditional sectors is an essential objective in the overall aim to improve the economic position of African economies. Diversifying export growth will require the creation of a capacity to produce tradeable goods competitively. Greater competitiveness will require a stable macroeconomic environment and an improvement in productivity, which can be brought about by higher investment in infrastructure, production structures and human capital in order to deepen and broaden the skills base of the economy. Countries that are fortunate enough to be wellendowed with mineral resources must avoid the policy temptations that could convert the blessing of mineral wealth into a curse, for example, by channelling a significant part of encashed mineral rents into investment in infrastructure, training and education as well as in primary health care. Mineral-generated resources can also serve as a source of funding for development banks, which can supply fixed investment finance in economies where venture capital markets do not exist or are poorly developed.

There exists no quick fix that can provide the competitive production capacity needed in SSA economies. It can also be envisaged that finding the appropriate mix of policy measures will be controversial. But, to conclude with a point made earlier in the paper: The factors that will contribute to Africa's economic growth are not different from those that applied elsewhere.

Appendix

Sub-Saharan Africa: Selected economic indicators, 1995

	Population (mil.)	GND per capita US $	GDP mill.US $ 1995	Man. GDP/ GDP (%)	Share in SSA exports (%) (1993)	Agric GDP/ GDP (%)	Share of labour force in agric (%)	Service /GDP (%)
Angola	10.8	410	3,722	3	4.7	12	74	28
Benin	5.5	370	1,522*	8*	0.2	34*	60	53*
Botswana	1.5	3,020	4,318	4	2.8	5	46*	48
Burkina Faso	10.4	230	2,325	21	0.2	34*	92	39*
Brundi	6.3	160	1,062	12	0.1	56	91	26
Cameroon	13.3	650	7,931	10	2.5	39	79*	38
Cape Verde	0.4	960	108	–	-	--	27	–
Central African Rep.	3.3	340	1,128	–	0.2	44*	78	43*
Chad	6.4	180	1,138	16*	0.2	44*	81	35*
Comoros	0.5	470	174	5	-	39	75	–
Congo Dem Rep.	43.5	120	--	11*	0.6	30*	66	–
Congo Rep.	2.6	680	2,163	6	1.9	10	62*	51
Côte d'Ivoire	14.0	660	10,069	18	4.4	31	65*	50
Dijibouti	0.6	- -	--	5	-	3	--	–
Equatorial Guinea	0.4	380	168	14*	0.1	50	73	–
Eritrea	3.6	700	--	11	-	11	79	–
Ethiopia	56.4	100	5,287	3*	0.3	57*	85	33*
Gabon	1.1	3,490	4,691	5	3.2	--	75*	–
Gambia	1.1	320	384	7*	0.1	28*	80	58*
Ghana	17.1	390	6,315	6	1.7	46	59*	38
Guinea	6.6	550	3,686	5	1.0	24	85	45
Guinea-Bissau	1.1	250	257	7	-	46	84	30
Kenya	26.7	280	9,095	11	2.2	29	81*	54
Lesotho	2.0	770	1,029	18	0.1	10	39	34
Liberia	2.7	-	--	–	0.3	--	70	
Madagascar	13.7	230	3,198	13	0.4	34	70	53
Malawi	9.8	170	1,465	18	0.5	42	86	31
Mali	9.8	250	2,205	6	0.6	46	84	37
Mauritania	2.3	460	1,068	13*	0.8	27*	49	43
Mauritius	1.1	3,380	3,919	23	2.1	9	16*	58
Mozambique	16.2	80	1,469	–	0.2	33*	81	55*
Namibia	1.5	2,000	3,033	9	2.2	14*	43*	56*
Niger	9.0	220	1,860	7*	0.5	39*	89	44*
Nigeria	111.3	260	26,817	5	16.4	28	48*	18
Rwanda	6.4	180	1,128	3*	0.1	37	91	46
Sao Tome & Principe	0.13	350	59	7*	-	23*	--	–
Senegal	8.5	600	4,867	12	1.0	20	81*	62
Seychelles	0.07	6,620	--	--	0.1	--	--	–
Sierra Leone	4.2	180	824	6	0.2	42	67	31
Somalia	9.5	-	--	5*	0.1	65*	94	26*
South Africa	41.5	3,160	136,035	24	40.1	5	13*	64
Sudan	26.7	-	--	9*	0.8	--	68	–
Swaziland	0.9	1,170	1,075	46*	1.1	13*	74*	38*
Tanzania	29.6	120	3,602	8	0.7	68	83	24
Togo	4.1	310	981*	9	0.4	38*	62	41*

Uganda	19.2	240	56,655	6	0.3	50	83	36
Zambia	9.0	400	4,073	30	1.7	22	74	37
Zimbabwe	11.0	540	6,522	30	2.6	15*	71*	48*

Notes: Most recent year before 1995 for which data are available.
Sources:World Bank (1997b); UNCTAD (1997c); Africa Institute (1997); WTO (1995**).**

Notes:

1. In addition to the three core trade agreements, the Final Act of the Uruguay Round also provided the WTO with a dispute settlement mechanism, embodied in the Understanding on Rules and Procedures Governing the Settlement of Disputes. The fifth element of the WTO framework is the plurilateral trade agreements, namely the Agreement on Trade in Civil Aircraft, the Agreement on Government Procurement, the International Dairy Agreement and the International Bovine Meat Agreement.

2. Note that the shares in world exports and imports are those for Africa as a whole. For SSA, these figures would be less than 2%. In 1993 SSA was responsible for 67% of Africans exports and 64% of the continents imports.

3. Although a single example cannot tell us much about the general situation, a comparison of Ghana and Korea is revealing in illustrating the impacts of different growth strategies. In 1960 the following applied (World Bank, 1980): (a) gross domestic investment was 24% of GDP in Ghana, compared with 11% in Korea; (b) Ghana's exports were 28% of GDP and Korea's only 3%; in Ghana manufactured exports other than textiles, clothing, machinery and transport equipment contributed 10% to total exports, compared with 6% in Korea; and (c) manufacturing contributed 10% to Ghana's GDP and 12% to Korea's GDP. But the situation soon changed, with investment in Korea growing at an average annual rate of 23.6% during 1960–1970, compared with -3.2% in Ghana. Korea's exports grew at an average annual rate of 35.2% during the 1960s while Ghana's exports stagnated at an annual growth rate of only 0.1%. In Ghana the contribution of the component of manufactured exports referred to above decreased to 6%; in Korea its share grew to 36%. GDP increased at an annual rate of 8.5% in Korea during the 1960s while Ghana produced a growth rate of only 2.1%. During the 1970s and 1980s the comparative position of Ghana worsened even further, leaving the country far behind Korea, which grew to achieve the status of a newly industrialized country.

4. For a list of relevant references to these studies see Andreas Savvides (1995).

5. The 14 countries are Nigeria, Botswana,, Gabon, Zambia, Congo, Angola, Guinea, Namibia, Niger, Democratic Republic of Congo (Zaire), South Africa, Mauritiana, Cameroon and Togo. The sequence here is in terms of the level of the mineral dependence index, which is the mean percentage contribution of minerals to GDP, merchandise exports and government revenues.

6. Another way of looking at this issue is in terms of the distinction of standardized product categories. The ISIC is much broader in its definition of manufactured goods through its inclusion of processed primary products. The SITC is narrower, excluding processed goods and only including SITC 5-8 (minus 68). SSA economies, to the extent that they have developed an industrial base, have done so mostly in the primary processing components of the ISIC (see p. 22).

7. When Ghana gained its independence in 1957 the first independent government adopted a

policy of direct government intervention in the productive sectors of the economy. Not only were many state enterprises set up in manufacturing, but state farms featured prominently in agriculture, a state fishing corporation was established and, in the services industry, the National Trading Corporation, a state shipping line, the Ghana Airways Corporation and the state transport corporation. Allocation of resources was primarily undertaken through controls and licensing and the economy took on all the structures of a 'command economy'. (See UNCTAD, 1996a). This experience would fit into Anne Krueger's observation that many African leaders were explicitly 'socialist' and focused upon industrialization through public sector activity as a means for achieving development" (1993: 51).

8. These rough estimates are based on a GDP of US$276.4 billion for SSA, world merchandise exports of US$4,404.6 billion and SSA exports of US$64.4 billion.

9. Products in this category include textiles and clothing, leather, rubber and footwear, fish products, and transport equipment. Should one look outside processed and manufactured goods, tropical agricultural products are also important in the category of lower tariff cuts (Agosin, et. al., 1995).

10. In 1994, Lesotho exported 17.7 million square metres of clothing and textiles to the USA, which was slightly more than Kenya's 17.1 million square metres. Clothing and footwear contribute more than 80 % of Lesotho's manufacturing exports (World Bank, 1995).

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