

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

ECONOMIC DEVELOPMENT IN AFRICA

2008

Export Performance Following Trade Liberalization: Some Patterns and Policy Perspectives



UNITED NATIONS

EMBARGO
The contents of this Report
must not be quoted or
summarized in the print, broadcast
or electronic media before
15 September 2008, 17:00 hours GMT



UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT
Geneva

ECONOMIC DEVELOPMENT IN AFRICA 2008

EXPORT PERFORMANCE FOLLOWING TRADE LIBERALIZATION: Some Patterns and Policy Perspectives



UNITED NATIONS
New York and Geneva, 2008

NOTE

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Material in this publication may be freely quoted or reprinted, but acknowledgement is requested, together with a reference to the document number. A copy of the publication containing the quotation or reprint should be sent to the UNCTAD secretariat.

UNCTAD/ALDC/AFRICA/2008

UNITED NATIONS PUBLICATION

Sales No. E.08.II.D.22

ISBN 978-92-1-112754-6

ISSN 1990-5114

ACKNOWLEDGEMENTS

This year's *Economic Development in Africa* report was prepared by a research team consisting of Samuel Gayi (team leader), Janvier Nkurunziza, Martin Halle and Shigehisa Kasahara. Comments were received from Charles Gore on all chapters and from Harmon Thomas on agricultural performance.

Statistical assistance was provided by a team from the Central Statistics and Information Retrieval Branch of the Division on Globalization and Development Strategies, UNCTAD, led by Flavine Creppy under the overall supervision of Henri Laurencin.

The work was completed under the overall supervision of Habib Ouane, Director of the Division for Africa, Least Developed Countries and Special Programmes.

Heather Wicks provided secretarial support. The cover is based on a design by Diego Oyarzun-Reyes, and the overall layout, graphics and desktop publishing were done by Madasamyraja Rajalingam.

CONTENTS

Explanatory notes..... vii

Abbreviations viii

INTRODUCTION 1

CHAPTER 1

TRADE LIBERALIZATION AND EXPORT PERFORMANCE TRENDS IN AFRICA 3

-
- A. Historical timeline 3
 - B. Why trade liberalization?..... 5
 - C. Trade liberalization in Africa 7
 - D. Export performance following trade liberalization 12
 - E. Conclusion 27

CHAPTER 2

AFRICA'S EXPORT PERFORMANCE FOLLOWING TRADE LIBERALIZATION: AGRICULTURE 29

-
- A. Agricultural production and exports 29
 - B. Explaining agricultural export performance 35
 - C. Conclusion 51

CHAPTER 3

AFRICA'S EXPORT PERFORMANCE THROUGH MANUFACTURING EXPORTS 53

-
- A. Trends in manufacturing exports 53
 - B. Is Africa's failure to export manufactured products due to comparative advantage? 62
 - C. Trade liberalization and manufactured exports: lessons from the microeconomic empirical literature..... 66
 - D. Conclusion..... 75

CHAPTER 4**STRENGTHENING AFRICA'S EXPORT PERFORMANCE: SOME POLICY PERSPECTIVES..... 77**

A. Agricultural exports.....	77
B. Exports of manufactures	85
C. Conclusion	91

NOTES 93**REFERENCES 98****LIST OF BOXES**

1. Measuring trade liberalization	14
2. Food price increases and low-income net food-deficit countries.....	38

LIST OF FIGURES

1. GDP growth rate for sub-Saharan Africa, 1961–2005	4
2. Unweighted average tariffs in 1995 and 2006	7
3. Parallel exchange rate premiums in Africa, 1978–1998.....	11
4. Composition of merchandise exports in developing regions, 1995–2006 averages	20
5. African countries' export structure, 1995–2006 averages,	20
6. African exports by type, as a percentage of GDP, 1995–2006	21
7. Export concentration index, 2006	21
8. African export destinations	24
9. US oil imports from the top three African exporters, 1995–2007	25
10. Shares of African exports to top three destinations.....	25
11. Share of African exports going to Africa, 1966–2006	26
12. Agriculture as a proportion of GDP.....	31
13. Agricultural exports by value, sub-Saharan Africa and other developing regions	32
14. Proportion of agricultural output exported.....	34

15. DAC ODA to agriculture, fisheries and forest as proportion of total DAC ODA, 1967–2006	43
16. Cereal yields, sub-Saharan Africa and other developing regions	45
17. Cocoa beans yield (kg/ha) in Africa and Asia, 1961–2006	46
18. Coffee (green) yield (kg/ha) in Africa and Asia, 1961–2006	46
19. Tea yield (kg/ha) in Africa and Asia, 1961–2006.....	47
20. Developing regions' shares of manufacturing exports to total merchandise exports, 2000–2006.....	56
21. Manufacturing value-added to GDP	57
22. Africa's terms of trade for the period 1965–2004.....	63

LIST OF TABLES

1. Unweighted average tariff changes in African countries	9
2. Year of trade liberalization of a sample of African countries.....	13
3. Trade performance before and after liberalization.....	15
4. Average yearly increases in merchandise export values, volumes, and prices, 1995–2006	17
5. Export concentration index in African countries, 1995 and 2006.....	23
6. Sub-Saharan Africa: Top four African exports, 2000 and 2005.....	33
7. African countries' average manufacturing exports	55
8. Africa's manufactured export shares, 1999–2006	58
9. Developing regions: shares in global manufactured exports, 1999–2006..	60
10. Trade liberalization and investment in Africa.....	70

BOX TABLE

Cereal import bills in low-income food-deficit countries by region and type .	38
---	----

APPENDIX TABLE

Trade liberalization and trade performance: Generalized Method of Moments econometric results	92
--	----

EXPLANATORY NOTES

The \$ sign refers to the United States dollar.

Sub-Saharan Africa: Except where otherwise stated, this includes South Africa.

North Africa: In this publication, Sudan is classified as part of sub-Saharan Africa, not North Africa.

Tables: Two dots (..) indicate that data are not available or are not reported separately.

ABBREVIATIONS

ACP	African, Caribbean and Pacific (group of States)
AMS	Aggregate measure of support
CFA	Communauté financière africaine
DAC	Development Assistance Committee (OECD)
ECA	Economic Commission for Africa
ERP	Economic Recovery Programme
FAO	Food and Agriculture Organization of the United Nations
FDI	foreign direct investment
GATS	General Agreement on Trade in Services
GDP	gross domestic product
ICT	information and communication technology
IMF	International Monetary Fund
ITC	International Trade Centre
IDA	International Development Association (World Bank)
IEG	Independent Evaluation Group (World Bank)
LDC	least developed country
LIFDC	low-income food-deficit country
MFN	most favoured nation
NAFTA	North American Free Trade Agreement
NEPAD	New Partnership for Africa's Development
n.e.s.	not elsewhere specified
NTM	non-tariff measure
ODA	official development assistance
OECD	Organization for Economic Cooperation and Development
RTA	regional trade agreement
SADC	South African Development Community
SITC	Standard International Trade Classification
WDI	World Development Indicators
WTO	World Trade Organization

INTRODUCTION

The objective of this year's report is to examine Africa's export performance after trade liberalization in order to draw lessons for use in the design of future development strategies. The main message is that the efforts made by African countries in terms of trade liberalization over the last 25 years have removed most of the policy barriers considered to be the main impediments to these countries' export performance. Though there has been some improvement in Africa's export performance after trade liberalization, the level and composition of the continent's exports have not substantially changed. The performance of the export sector after trade liberalization fell short of expectations and the improvement has been small relative to the experience of other developing regions. African countries have not diversified their exports towards more dynamic primary commodities and manufacturing goods, which are less prone to the vagaries of international markets. Africa as a whole has even lost export market share, which was down from 6 per cent of world exports in 1980 to about 3 per cent in 2007. Hence, it is clear that the recent substantial rises in African countries' export earnings have not allowed Africa to recover its lost market share. The report identifies Africa's weak supply response as the most important impediment to the continent's export performance, suggesting that future export policies should focus more on ways to increase production for export. The report proposes some policies that could help Africa to refocus its development priorities on structural transformation in order to increase the continent's supply capacity and export response.

The discussion in this report is timely for several reasons. First, it takes place at a juncture when many African countries are deriving substantial benefits from the current commodity boom. For the first time in 30 years, several countries have a good opportunity to accumulate financial resources which, if prudently used, could allow these countries to build a strong and diversified productive sector that is more responsive to export opportunities. Nevertheless, the current boom should not lure African countries into a false sense of prosperity. Commodity booms have tended to be cyclical and it is doubtful if the current one can last forever. Second, Africa, like other regions, is affected by the current severe food crisis. Over the last five years, Africa's cereal import bill has trebled, putting household and State budgets under immense stress. Given that the region was consistently a net food producer until 25 years ago, this is an opportune time to reflect on what has happened to Africa's agricultural production and on how

to reconstruct its agricultural export sector. Third, African countries have been implementing trade liberalization measures for a long period now, so it is perhaps time to take stock of trade performance after liberalization in order to propose remedial actions where needed. The report argues that improvements in trade policies have not in themselves been sufficient to increase exports from Africa. Based on the lessons learned, some policy proposals are suggested.

Trade in services is becoming important in Africa, particularly in the context of intra-African trade. However, in the context of the Uruguay Round of multilateral trade negotiations, trade liberalization in services started much later than merchandise trade liberalization, and the process is ongoing. For this reason, trade in services is not covered here and the focus of the report is on merchandise trade liberalization, which has reached a more advanced stage in Africa.

The theme of the report also presents an opportunity to continue the analysis of some of the issues raised in the 2007 *Economic Development in Africa* report, particularly the nexus between firm investment and export performance. Specifically, the report seeks to answer a number of questions, including the following: Have export volumes increased after trade liberalization? How does export performance in Africa compare to export performance in other developing regions? Why has Africa not diversified its export products, particularly in terms of increasing the share of manufactures vis-à-vis primary exports? Should Africa specialize according to its comparative advantage in the production and export of primary commodities?

Chapter 1 briefly discusses the history of trade policy in Africa and the rationale for trade liberalization and its timing. It also provides an overview of Africa's export performance to date in value, volume and composition. Chapter 2 examines Africa's export performance in agriculture while chapter 3 investigates why Africa has failed to diversify into the manufacturing sector in order to increase manufacturing exports. Both chapters attempt to identify the factors that underlie the trends in exports of agricultural and manufacturing products. The final chapter discusses some policy options for improving Africa's export performance. They revolve around the issues of productivity, competitiveness, market access and access to factors of production, both in the agricultural and manufacturing sectors.

Chapter 1

TRADE LIBERALIZATION AND EXPORT PERFORMANCE TRENDS IN AFRICA

A. Historical timeline

Seen in a historical context, Africa's trade has gone through three distinct phases. Prior to the early 1960s, when many African countries gained independence, African trade policy was defined by the colonial Powers. Trade was essentially a two-way relationship between African countries and their metropolises, whereby primary commodities were exported and manufactured products imported. The trade structure of African countries during this period was driven by the interests of the colonial Powers.

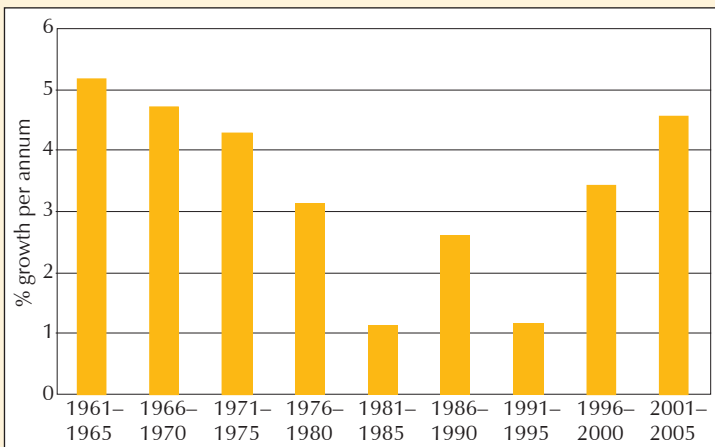
In the period from the 1960s to the 1980s, the trade policies of many countries in Africa were informed by the doctrine of import-substitution industrialization. For example, Burundi, Ethiopia, Ghana, Madagascar, Nigeria, Senegal, Sudan, the United Republic of Tanzania, and Zambia all adopted inward-oriented policies with significant trade restrictions. This strategy advocated the protection of the domestic market from foreign competition in order to promote domestic industrial production. Import-substitution industrialization was widely accepted in the 1960s and 1970s as a viable policy package to help developing countries achieve structural transformation and lessen their dependence on primary products.

As a result, trade policies in most African countries during this period were characterized by extensive State involvement in the economy, both in production and in marketing. Additionally, the domestic market in these countries was shielded from foreign competition through a number of policy measures. Non-tariff measures (NTMs) such as quantitative import restrictions and government licences were used profusely to restrict imports. Tariff structures were often highly complex, with a large number of tariff rates, and tariffs were high. Exports were often restricted by a number of export taxes and strict rules and regulations. The exchange rates of countries outside the CFA franc zone were often highly overvalued and access to foreign exchange was rationed.

In the late 1970s and early 1980s, a combination of factors created a large-scale economic crisis in sub-Saharan Africa. The external environment deteriorated as a result of the global economic crisis that followed the two oil crises of 1973 and 1979, strongly and negatively affecting the demand for African exports and resulting in falling commodity prices. Additionally, interest rate hikes dramatically increased the cost of servicing foreign debt (UNCTAD, 2004). Domestically, few countries were able to effectively use import-substitution industrialization to create an internationally competitive manufacturing sector. Instead, many countries in Africa found themselves facing difficult global conditions with economies that lacked competitiveness due to excessive State intervention in the economy and mismanagement. The gross domestic product (GDP) growth rate of the region plunged from 4.3 per cent per annum in the period 1971–1975 to 1.1 per cent in 1981–1985 (fig. 1).

In response to the economic crisis in Africa, the international financial institutions advocated a policy package of market-oriented reforms, of which trade liberalization was an integral part. Indeed, there was a noticeable shift in these institutions' approach to economic policy in Africa as of the early 1980s. This was most evident in the publication of a World Bank study in 1981 entitled *Accelerated Development in Sub-Saharan Africa* (commonly known as the “Berg

Figure 1
GDP growth rate for sub-Saharan Africa, 1961–2005



Source: World Bank, 2008a.

report”, after its main author, Elliot Berg). This report offered a diagnosis of the African crisis that focused strongly on domestic causes. Among the domestic “policy inadequacies and administrative constraints” that were singled out, overvalued exchange rates and trade regulations featured prominently, as well as excessive taxation of agricultural exports through marketing boards. Substantial currency devaluation and trade liberalization, along with the dismantlement of industrial protection measures, were advocated as policies urgently needed to halt the crisis and achieve accelerated development.

The Berg report was representative of an increasing emphasis on domestic causes and solutions to economic crisis on the part of international financial institutions. These institutions, backed by large donors and strengthened by the desperate need of African countries for convertible currency to service their external debt obligations, were able to propagate market-oriented policy packages, usually referred to as “structural adjustment programmes”, within many African countries. As of the mid-1980s, and often as part of the programmes, these countries gradually started to liberalize their trade policies. This unilateral liberalization trend is ongoing and indeed picked up speed with the establishment of the World Trade Organization (WTO) in 1995 and the multilateral trade obligations enshrined in its agreements for African countries that are members.

B. Why trade liberalization?

In view of the continued deterioration of Africa’s economic performance since the 1970s, the overarching objective of economic reforms was to achieve higher rates of economic growth by increasing the efficiency of resource allocation, in particular by aligning domestic prices more closely with international prices. African countries needed to dismantle import controls, such as foreign exchange rationing due to short-run balance-of-payment deficits, as well as long-term protection measures, including tariff and non-tariff barriers. The measures to liberalize imports revolved around three key policies: reducing the overvaluation of African currencies and eliminating foreign exchange rationing; dismantling non-tariff measures by reducing the list of products requiring import licensing; and reforming the tariff system by reducing tariff dispersion and lowering the overall level of tariffs (World Bank, 1994). Additionally, regulatory barriers such as the granting of monopoly privileges were addressed in some cases of trade liberalization.

Export liberalization was also needed to improve the balance of payments. Four instruments deemed to be the most export-distorting were targeted with the following measures: devaluation of the national currency; removal of export licensing; reduction or elimination of export taxes; and dismantling of agricultural marketing boards for export crops. A number of countries also adopted measures to encourage non-traditional exports. These included duty drawbacks, the creation of export-processing zones with better production infrastructure, the revision of foreign investment codes, and the streamlining of reporting and licensing requirements.

By the second half of the 1980s, about 60 per cent of African countries were undergoing or had gone through a structural adjustment programme designed in collaboration with the World Bank and the International Monetary Fund (IMF) (World Bank, 1994). By the mid-1990s, most African countries had undertaken such programmes.

In theory, trade liberalization was expected to have a positive influence on the long-term growth of the economy in several ways. First among these is the “substitution effect”, according to which trade liberalization should reduce the price of imported inputs and remove barriers to export, thereby shifting the incentive structure towards greater production in the tradable sector and improved export performance. This sector is expected to be more efficient than the non-tradable sector as it is more exposed to competition. As a result, total factor productivity in the economy is improved. Second, there is the expectation that greater emphasis on the production of tradables will encourage greater investment. This should expand production and confer positive externalities on the economy, particularly if the investment comes from abroad. Third, increased production for trade means that output volumes rise, allowing for greater specialization and “learning by doing”. Finally, it is expected that trade will lead to technology transfer and that with more efficient technology total factor productivity in the economy will improve.

Overall, it was projected that trade liberalization would result in increased production of tradables and that this would generate positive externalities for the economy by improving the efficiency of production. Trade liberalization was also expected to contribute to an enabling environment for structural transformation of the economy through export-oriented policies, leading to diversification (World Bank, 1981). Chapters 2 and 3 of this report examine the extent to which these expectations have been fulfilled in the agricultural and manufacturing sectors respectively.

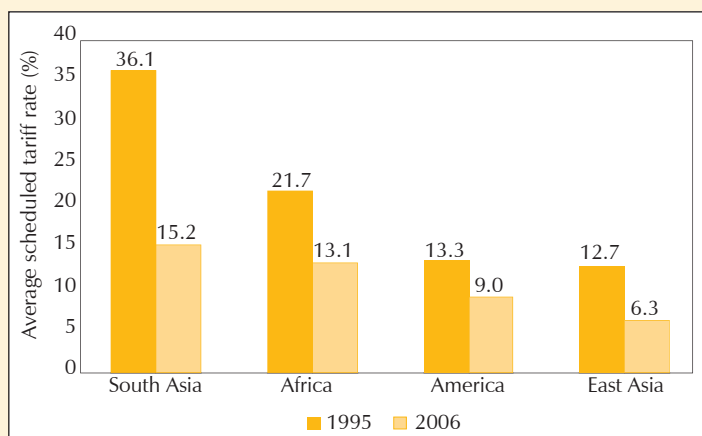
C. Trade liberalization in Africa

1. Liberalization of tariffs and non-tariff measures

Prior to trade liberalization, tariffs in Africa were high and had a very complex structure. These high and variable import barriers distorted prices and encouraged inefficiency. Tariff reforms generally occurred in three stages. The first stage was to rationalize tariffs. This involved reducing the large number of tariff rates, reducing the number of ad hoc rules and regulations, and systematizing the assignment of specific rates to product categories. The second stage was to reduce the spread of tariff rates by reducing the often symbolic maximum rates, and by raising the lowest ones. Finally, the overall level of tariffs was reduced in order to lower the effective protection of the domestic economy (World Bank, 1994).

The reduction in tariff rates was only a part, then, of tariff reform and one that came later than the other stages. The fact that tariff rates have declined significantly in Africa is therefore a testimony to the magnitude of trade liberalization in the continent. Indeed, average tariffs in sub-Saharan Africa were nearly halved between 1995 and 2006. African tariffs remain comparatively high, however, with only South Asia showing higher tariff levels in 2006 (fig. 2).

Figure 2
Unweighted average tariffs in 1995 and 2006



Source: UNCTAD, 2008c.

There is nonetheless considerable heterogeneity in the extent and even the direction of tariff changes among African countries. Indeed, while on average Africa reduced its tariffs by 40 per cent between 1995 and 2006, some countries actually increased their tariffs during this period. These countries tended to have low tariffs to start with, however, and generally did not increase their tariffs to above the regional average. Sudan is an exception, having raised its tariffs from 5 per cent in 1996 to 17 per cent in 2006. On the other hand, a number of countries reduced their tariffs at a much faster pace than the average. Mauritius, for example, reduced its average unweighted tariff by 88 per cent between 1995 and 2006, lowering it from 34.7 per cent to 4.2 per cent. From 31.2 per cent in 1994, Kenya's average unweighted tariff rate fell to 11.9 per cent in 2006. Overall, the number of African countries with average unweighted tariffs of above 15 per cent has fallen to 15 and only three countries have average unweighted tariffs above 20 per cent (table 1).

As we have seen above, high and complex tariffs were not the only impediment to trade in Africa. Indeed, prior to trade liberalization, quantitative import restrictions, administrative barriers and other non-trade measures were, along with foreign exchange controls, the binding constraints on trade in most product areas (Dean et al., 1994). Before the reforms, many African countries such as Ghana, Malawi, Nigeria and the United Republic of Tanzania had NTM coverage of 100 per cent of their tariff lines. Trade liberalization in Africa has reduced the coverage of non-tariff measures considerably. One of the main policies associated with trade liberalization has been the conversion of NTMs into tariff equivalents, in a process known as "tariffication". As a result, Africa is now one of the regions of the world where NTMs are least used. For example, in the review of its Trade Restrictiveness Index, the IMF (2005) compares NTM data on 12 major trading countries and the European Union. The data show that Africa's major trading partners had very high NTMs. In 1999, the European Union had 2,203 product lines subject to NTMs, while the United States of America had 1,692 lines. Japan had 1,111 product lines subject to NTMs in 2001. In comparison, three African countries in the IMF study, namely, Algeria, Egypt and Nigeria, had 194 lines, 398 lines and 167 lines, respectively, in 2001. While African countries have reduced their NTMs considerably, their exports are now restricted by NTMs in their partners' economies. This must be borne in mind when assessing the continent's trade performance. Indeed, in recent years, the heavy use of NTMs has mainly been the preserve of developed countries, which have often used social, environmental, sanitary and phytosanitary measures or strict rules of origin as NTMs (Bora et al., 2002).

Table 1
Unweighted average tariff changes in African countries

Country	Year	Average scheduled tariff	Year	Average scheduled tariff
Africa	1995	21.71	2006	13.06
Algeria	1993	21.44	2006	15.81
Angola	2002	8.15	2006	7.55
Benin	2001	14.03	2006	13.42
Botswana	2001	5.95	2006	8.74
Burkina Faso	1993	25.06	2006	12.20
Burundi	2002	21.90	2006	14.65
Cameroon	1995	18.10	2005	19.16
Cape Verde	2005	15.42	2005	15.42
Central African Republic	1995	17.24	2005	18.79
Chad	1995	17.08	2005	17.91
Congo	1994	20.49	2005	19.27
Côte d'Ivoire	1996	19.43	2006	13.45
Dem. Republic of the Congo	2003	13.08	2006	13.05
Djibouti	2002	30.95	2006	30.23
Egypt	1995	24.30	2005	19.09
Equatorial Guinea	1998	19.45	2005	19.00
Eritrea	2002	10.10	2006	9.56
Ethiopia	1995	29.41	2006	16.44
Gabon	1995	20.29	2005	20.05
Ghana	1993	13.64	2004	13.15
Guinea	2005	14.16	2005	14.16
Guinea-Bissau	2001	13.58	2006	12.73
Kenya	1994	31.24	2006	11.91
Lesotho	2001	10.55	2006	9.86
Libyan Arab Jamahiriya	1996	22.87	2006	0.00
Madagascar	1995	7.49	2006	13.26
Malawi	1994	31.42	2006	12.88
Mali	1995	15.98	2006	12.58
Mauritania	2001	12.83	2006	11.58
Mauritius	1995	34.70	2006	4.21
Morocco	1993	64.07	2006	15.53
Mozambique	1994	5.00	2006	12.69
Namibia	2001	5.75	2006	5.81
Niger	2001	14.38	2006	13.07
Nigeria	1995	22.07	2006	11.68
Rwanda	1993	38.69	2006	19.71
Senegal	2001	13.86	2006	13.49
Seychelles	2000	27.31	2006	6.33
South Africa	1996	15.02	2006	8.31
Sudan	1996	5.03	2006	17.14
Swaziland	2001	3.06	2006	10.33
Togo	2001	14.26	2006	14.00
Tunisia	1995	29.67	2006	22.87
Uganda	1994	16.61	2006	12.00
United Republic of Tanzania	1993	15.54	2006	12.52
Zambia	1993	25.34	2005	14.59
Zimbabwe	1996	40.64	2003	16.66

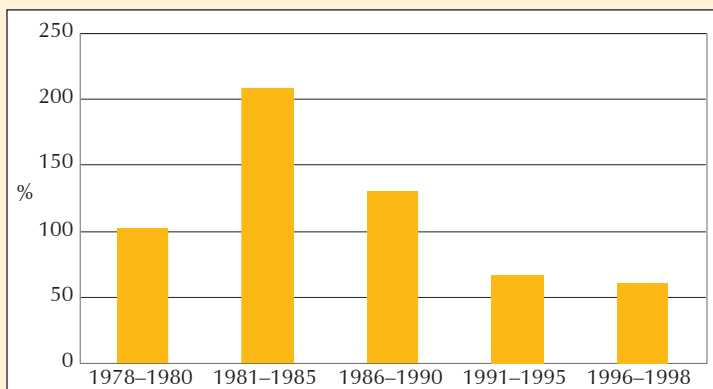
Source: UNCTAD 2008c.

2. Liberalization of exchange rates

Many African countries suffered from severe overvaluation of their currencies prior to trade liberalization. The liberalization of exchange rates was therefore a crucial policy measure as the overvalued currencies acted as a disincentive for exports. Indeed, as a significant proportion of the cost of production is paid in domestic currency, an overvalued exchange rate results in a reduction of incentives and of exporters' ability to compete in foreign markets. This obstructs the flow of foreign exchange receipts and damages a country's ability to purchase the imports needed for economic activity. In addition, an overvalued exchange rate means that import-competing industries are faced with increased pressure from imports, resulting in increased calls for protection against these from industrial and agricultural lobbies. It was therefore clear that trade liberalization through the removal of import restrictions would only be effective with a competitive exchange rate. In addition, overvaluation of the currency creates lower tradable prices, higher real wages, and lower profit margins and investment (Gala, 2008). Competitive exchange rates should therefore help the development of industries in African countries provided that productive capacities are dynamic enough to respond to these policies.

African countries have largely been successful in terms of exchange rate liberalization. In the early 1980s, many countries experienced severe overvaluation. The parallel market exchange rate premium¹ reached an average of 861 per cent in Ghana for the period 1981–1985. By comparison, the figures for the same period were 1,569 per cent in Mozambique and 259 per cent in the United Republic of Tanzania. By the early 1990s, overvaluation had been greatly reduced. In Ghana, the parallel market premium was only 3 per cent for the period 1991–1995, while the figures in Mozambique and the United Republic of Tanzania were 17 per cent and 22 per cent respectively. Figure 3 presents simple unweighted averages for a sample of countries for which there are sufficient data. The declining trend in the level of black-market premiums clearly shows the important achievements of African countries in containing overvaluation. In recent years there has generally been convergence between official and parallel market exchange rates in African countries.

Figure 3
Parallel exchange rate premiums in Africa, 1978–1998^a
(Per cent)



Source: UNCTAD calculations based on World Bank, 2008a.

- a Unweighted average of parallel exchange rate premiums for 29 African countries for which there are sufficient data.

3. Timing of trade liberalization

It is difficult to determine the exact date at which trade liberalization takes place in a country and when it can be said to have a liberalized trade regime, as liberalization is a gradual process (Borgatti, 2007). Whereas changes in tariff barriers are relatively easy to measure and monitor, many other policies that influence the protection level of a country's economy are more complex to evaluate.

One well-known measure used to date trade liberalization was developed by Sachs and Warner (1995). This measure highlights the main policy thrusts of trade liberalization. According to the authors, a country's trade regime is closed if it displays any of the following five criteria: (1) average tariff rates of 40 per cent or higher; (2) non-tariff measures covering at least 40 per cent of trade; (3) a period average parallel market exchange rate premium of 20 per cent or more; (4) the existence of a State monopoly on major exports; and (5) a socialist economic system. The authors used several sources, including historical data and secondary sources such as country case studies to collect this information. This allowed them to determine which countries were deemed "liberalized" and which ones were not.

A number of criticisms have been levelled against this measure.² The criticisms mostly reflect the difficulty of measuring liberalization. This measure does, however, have the merit of encompassing different aspects of trade liberalization beyond the traditional analysis based on tariff barriers and covers a large sample of countries. Hence, despite its limitations, the Sachs and Warner measure remains the most comprehensive and is still widely used in the literature on trade (Wacziarg and Welch, 2003).

This report recognizes the need to assess the effect of trade liberalization on some key variables, which requires dating liberalization, despite the definitional difficulties associated with the approach. This caveat should nonetheless be kept in mind when interpreting the results of the analysis based on these data. Table 2 gives the years of liberalization for 43 African countries according to two definitions (see box 1).

These dates are used in the subsequent econometric analysis of export performance before and after trade liberalization. Table 2 highlights the fact that, by the mid- to late-1990s, most African countries had liberalized their trade policies. Thus, broad comparisons will also be made between post-1990s and pre-1990s trade patterns to see how they have changed following trade liberalization.

D. Export performance following trade liberalization

1. Export ratios

It was expected that trade liberalization would have an influence on the relative importance of trade in the economy. One expected reaction is a rise in imports as a proportion of GDP. With the reduction of barriers to imports the domestic price of imported products goes down, making these products comparatively more attractive. Additionally, the removal of quantitative barriers increased the availability of these imported products in the domestic economy of African countries. A look at the trade performance of African countries before and after liberalization reveals that imports did increase as a proportion of GDP following trade liberalization. As can be seen in table 3, the median ratio of imports to GDP in Africa, which was 31 per cent preceding liberalization, increased to 34 per cent thereafter. This 10 per cent increase is considerably smaller than the increase noted in non-African developing countries following

Table 2
Year of trade liberalization of a sample of African countries

Country	Definition 1: Wacziarg-Welch	Definition 2: W-W & Wu-Zeng
Algeria	n.l.	n.l.
Angola	n.l.	n.l.
Benin	1990	1994
Botswana	1979	1979
Burkina Faso	1998	1998
Burundi	1999	1999
Cameroon	1993	1995
Cape Verde	1991	1991
Central African Republic	n.l.	n.l.
Chad	n.l.	n.l.
Congo	n.l.	n.l.
Côte d'Ivoire	1994	1994
Democratic Republic of the Congo	n.l.	n.l.
Egypt	1995	1995
Ethiopia	1996	1996
Gabon	n.l.	n.l.
Gambia	1985	1987
Ghana	1985	1993
Guinea	1986	1986
Guinea Bissau	1987	2001
Kenya	1993	n.l.
Lesotho	n.l.	n.l.
Liberia	n.l.	n.l.
Madagascar	1996	1996
Malawi	n.l.	n.l.
Mali	1988	1992
Mauritania	1995	2001
Mauritius	1969	1969
Morocco	1984	1998
Mozambique	1995	1995
Niger	1994	1994
Nigeria	n.l.	1988
Rwanda	n.l.	n.l.
Senegal	n.l.	n.l.
Sierra Leone	2001	2001
Somalia	n.l.	n.l.
South Africa	1991	1991
Swaziland	n.l.	n.l.
Togo	n.l.	n.l.
Tunisia	1989	1994
Uganda	1988	1998
United Republic of Tanzania	1995	1995
Zambia	1993	1997
Zimbabwe	n.l.	n.l.

n.l. means that the country had not liberalized by 2001, though it may have done so after 2001.

Note: Definition 2 reports the same values as definition 1 except for the 13 countries covered in the Wu-Zeng study. These are: Benin, Cameroon, Gambia, Ghana, Guinea-Bissau, Kenya, Mali, Mauritania, Morocco, Nigeria, Tunisia, Uganda and Zambia. The methodological difference in the definition of liberalization shows up in the two variables. Kenya, for example, was found by Wacziarg and Welch to have liberalized in 1993 whereas Wu and Zeng found that it had still not liberalized by 2004. Conversely, Nigeria was found by Wacziarg and Welch not to have liberalized by 2001 but Wu and Zeng found that it had liberalized as early as 1988. Apart from these extreme cases, the findings on the other countries are generally in agreement, albeit with some difference in the exact timing of liberalization.

Box 1. Measuring trade liberalization

This report uses two dummy variables of trade liberalization. The first updates (to 2006) the measurement used by Wacziarg and Welch, assuming no reversals in countries' liberalization episodes. This means that a country that was liberalized in 2001 (the latest date for the Wacziarg and Welch series) remained liberalized in 2006. Hence, the dummy takes the value 1 for the period 2002–2006. This is a reasonable assumption considering that, over time, the trend has been towards liberalization rather than the reverse. For example, by 1994, of the 111 countries covered by Sachs and Warner (1995), 78 were closed and 33 open in the period 1970–1989, but in 1990–1999 it was the other way round: 79 countries were open and 32 closed. Moreover, no country classified as open in the period 1970–1989 was closed in the period 1990–1999 (Wacziarg and Welch, 2003). Wu and Zeng (2008), in documenting liberalization episodes of 39 developing countries for the period 1970–2004^a (including 13 from Africa), found that none of these countries had changed status from “open” to “closed” after 2001. For countries that were still closed in 2001, the variable takes “missing values” for the period 2002–2006. The reason is simply that these countries could have liberalized their trade between 2001 and 2006, but this information is not known.

The alternative liberalization variable updates Wacziarg and Welch (2003) with information on the 39 countries studied in Wu and Zeng (2008). Most of the results from the two sources on dates of liberalization are very close but there are a few discrepancies. Wu and Zeng (2008) identify several liberalization episodes, including cases of reversal, that were missed by Wacziarg and Welch (2003). Wu and Zeng (2008) identify liberalization episodes using two measures: (1) a continuous and accumulated tariff reduction of at least 35 per cent; and (2) an overall tariff level of 10 per cent or less. The authors claim that they “take the reductions in non-tariff barriers into consideration when defining a liberalization episode” (p. 4), although they do not explain how. They also note that “reductions in non-tariff barriers are usually accompanied by large tariff cuts” (p. 4), implying that the focus on tariff reduction indirectly reflects the reduction in non-tariff barriers. In addition to their small sample size, Wu and Zeng's lack of clarity regarding the inclusion of non-tariff barriers in the definition of liberalization could be considered a weakness in comparison with the definition proposed by Wacziarg and Welch. For countries that experienced several liberalization episodes, the date reflected in the dummy variable is the first year following the latest episode of liberalization. Given that the study covers only 39 countries, this information is integrated into the larger study by Wacziarg and Welch. The liberalization variable for the countries not covered by Wu and Zeng remains unchanged.

This report uses the updated dataset on the specific years rather than decades of liberalization compiled by Wacziarg and Welch (2003). Although the latter use Sachs and Warner (1995) methodology as a starting point, their measure is more refined. The measure is updated to 2001 covering a larger sample. Whereas Sachs and Warner cover 118 countries, of which 111 had liberalization status, Wacziarg and Welch cover 141 countries. More interestingly, the Wacziarg and Welch measure covers 42 African countries, more than are covered in Sachs and Warner. The refinements brought to the original dataset, the wider coverage of the new dataset and the systematic use of case-study literature to confirm or refine the information on the status of trade liberalization suggest that it is more reliable than the one compiled by Sachs and Warner.

a We thank the authors for sharing their dataset. Table 1 is drawn from an updated version of this dataset.

liberalization, which could be due to the already high levels of imports as a share of GDP in African countries prior to trade liberalization. Imports in African countries were also constrained by the lacklustre export performance of the continent following trade liberalization.

The comparison of export performance prior to and following trade liberalization shows only a limited response in Africa. The importance of exports in Africa, expressed as a percentage of GDP, improved by only about 11 per cent after liberalization. This is much smaller than in the non-African developing-country sample, where the median ratio of exports to GDP responded to liberalization with an increase of 50 per cent (see table 3). It is important, however, to note the heterogeneity of trade performance among African countries. The export-to-GDP ratio of oil exporters is 46 per cent higher than that of non-oil exporting countries, irrespective of trade liberalization.

Overall, the comparison shows a slight deterioration in the trade balance following trade liberalization. In African countries, the trade balance following liberalization was equivalent to -7.7 per cent of GDP, down from -6.6 per cent prior to it. Both these values are higher than the developing-country average. This is despite the fact that import-to-GDP ratios rose by 62 per cent in non-African developing countries following trade liberalization. The main difference is that, in these countries, the increase in imports was compensated by a sharp rise in exports. In Africa, the more limited export response was responsible for the increased trade deficits.

Table 3
Trade performance before and after liberalization
(Median values as a percentage of GDP)

		Before	After	% change
All developing countries	Imports	28.1	37.0	32
	Exports	22.4	29.5	32
	Trade balance	-4.3	-5.9	-37
Africa	Imports	31.0	34.0	10
	Exports	23.2	25.7	11
	Trade balance	-6.6	-7.7	-17
Non-African developing countries	Imports	24.0	38.9	62
	Exports	21.1	31.6	50
	Trade balance	-2.7	-4.9	-81

Note: Trade liberalization is defined according to definition 1 of table 2; all other data from World Bank, 2008a.

These observations confirm the findings of earlier studies such as that by Santos-Paulino and Thirlwall (2004) that trade liberalization in developing countries tends to stimulate imports as well as exports, with the former effect dominating, thereby worsening the balance of trade.

The comparative data in table 3 show the general picture of trade performance prior to and following liberalization. The ratio of exports to GDP increased by 11 per cent and 50 per cent in Africa and non-African developing countries respectively, in the post-liberalization period. However, this increase cannot be attributed to trade liberalization alone, as these simple descriptive statistics do not imply a causal relationship between trade performance and liberalization. In order to find such causal evidence, econometric testing was undertaken (see appendix for detailed results). The ratio of exports to GDP is regressed over its expected determinants, which are the lagged value of the dependent variable, economic growth rates in African and other developing countries' trade partners, changes in terms of trade, changes in real effective exchange rates and a dummy variable representing trade liberalization. The sample is disaggregated into African and non-African sub-samples, which allows Africa's performance to be compared with that of the rest of the developing world.

The econometric results suggest that, other things being equal, trade liberalization increased the ratio of exports to GDP by 9.5 per cent in African countries. In non-African developing countries, trade liberalization increased the exports-to-GDP ratio by 6 per cent. Although the figure for Africa appears higher than the figure for other developing countries, the two are not statistically different. The implication is that the effect of trade liberalization per se on the ratio of exports to GDP does not seem to have had a differentiated impact in the two groups of countries. Rather, it appears that the main factors that have constrained the African export response to liberalization relative to other developing countries have been export momentum and the real effective exchange rate. The concept of export momentum refers to a country's capacity to maintain its level of exports over time. Out of one percentage point of GDP in exports in a given year, African countries are able to keep 0.78 of a percentage point of GDP the following year, as a result of the lower momentum effect. This is lower than in other developing countries where the ratio is 0.87, other things being equal. These two figures are statistically different, implying that non-African developing countries are more effective in maintaining export momentum. The changes in the real effective exchange rate, which is a proxy for domestic policies, have the highest negative effect on exports from African countries and the impact is almost twice as high as that found for other developing countries.³

Other variables such as economic growth rates in importing countries and the terms of trade for exports are important determinants of export performance. However, taken individually, these factors do not seem to have a differentiated effect in Africa relative to other developing countries. With regard to the effect of trade liberalization on imports, the ratio of imports to GDP in Africa is estimated to have increased by 6 per cent in the post-liberalization period — lower than in non-African developing countries, where the corresponding increase is 8 per cent. As shown in table 3, the net effect of the increases in exports and imports on the balance of trade in Africa is negative, suggesting that the effect of trade liberalization on imports prevailed.

2. Export values, volumes and prices

Export performance following trade liberalization cannot be examined by only looking at the ratio of exports to GDP. Indeed, while this measure indicates the degree of trade orientation of a country to some degree, it does not convey a complete picture of the response to trade liberalization. In order to analyse export performance in African countries following trade liberalization, it is necessary to examine the movement in export values as well as the underlying volume and price movements.

Over the period 1995–2006, export values in Africa increased considerably, by 12 per cent per annum. In fact, export values rose faster in Africa during this period than either the world or the developing-country average (see table 4). This high figure masks considerable heterogeneity among African countries. The largest increases occurred in post-conflict countries and oil-exporting countries such as Chad, Equatorial Guinea, Mozambique and Sierra Leone. However, a number of African countries saw very little growth in export values over the

Table 4
Average yearly increases in merchandise export values,
volumes, and prices ,1995–2006
(Per cent)

	Total export value	Total export volume	Export unit price
World	8.15	6.50	1.48
Developing countries	11.53	9.03	2.13
Africa	12.44	5.82	6.14
Developing Asia	11.64	9.91	1.39
Latin America	10.89	7.46	3.20

Source: UNCTAD calculations based on UNCTAD 2008a.

same period. These are mainly countries that experienced political unrest in the period, such as the Central African Republic, Eritrea and Liberia.

Export volumes increased between 1995 and 2006, which partly explains the rise in the total value of exports noted above. This increase is, however, noticeably lower than the increase in the value of exports. Indeed, at 6 per cent per annum, the increase is below the world average for the period and far below the developing-country average. There are various reasons for the increases in export volumes. Mozambique and Sierra Leone, for example, saw large increases as a result of the resumption of export production in post-conflict periods. Equatorial Guinea and Sudan had high figures thanks to large increases in oil exports. Lesotho, meanwhile, was able to exploit trade preferences to increase its production of manufactures, especially textiles, for export. The countries that experienced falls or very low increases in export volumes again include some countries that have suffered from political instability, such as Guinea and Zimbabwe. Nigeria's export volumes also stagnated over the period, due mainly to political unrest in the oil-producing Delta region.

The fact that export values increased faster than export volumes suggests that much of the increase in export values in Africa was due to rising prices rather than to increased export volumes. Indeed, the price of a unit of exports increased by a yearly average of 6 per cent for Africa over the period 1995–2006. This increase is over four times higher than the world average and nearly three times higher than the developing-country average. The largest increases were almost exclusively in oil-exporting countries such as Algeria, Angola, the Congo, Equatorial Guinea and Nigeria. The countries that experienced falls in the unit price of their exports, on the other hand, were those that are not principally exporters of minerals or fuel. They include Burkina Faso, Burundi, Lesotho, Senegal and Uganda. The effect of the recent rise in commodity prices on the export prices of African countries is striking. Indeed, while for Africa as a whole, export unit prices fell by 2 per cent per annum between 1995 and 2001, they increased at a yearly rate of 17 per cent between 2002 and 2006.

In summary, it appears that the notable increase in export values over the period 1995–2006 was driven largely by recent price increases rather than volume increases. The low volume effect indicates weak export response following trade liberalization. Instead, it is only the rise in world export prices, over which African countries have little control, that has allowed African exports to perform better than those of the rest of the world in value terms.

3. Export structure

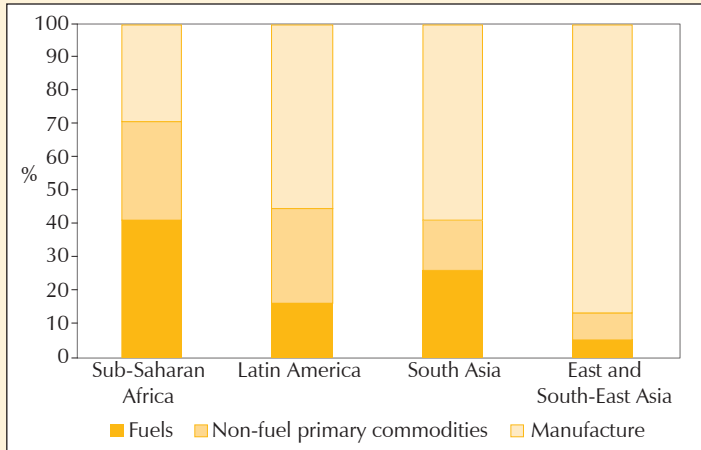
The trade structure of African countries did not change much following trade liberalization. Most countries in the region remain essentially primary product exporters, with only a handful of countries (such as Lesotho, Mauritius and Tunisia) drawing a significant part of their export revenue from manufactured products. This leaves the majority of African countries dependent on volatile global commodity prices. In comparative terms, sub-Saharan Africa is the region of the developing world with the highest dependence on primary product exports, especially fuel (fig. 4). However, a large majority of African countries are not fuel exporters. If the average African country's experience is considered, rather than Africa as an economic entity, African countries remain predominantly non-fuel primary product exporters (fig. 5).

The factors reviewed so far help to explain the evolution of the structure of trade following trade liberalization. It is apparent that there has been little response from either manufacturing exports or from primary product exports if fuels are excluded. Figure 6 shows very clearly that the rise in exports as a share of GDP that is noticeable as of the late 1990s is almost exclusively accounted for by the increase in the export of fuels. Fuels are, however, among the commodities that are least affected by trade restrictions.

This lack of diversification in terms of export sectors is mirrored by the lack of diversification in export products. African economies display very low levels of export diversification, with no discernible trend away from this situation. Most African countries have not managed the transition from traditional exports to more dynamic export sectors with higher earnings. Historically, it appears that episodes of diversification in Africa have been sporadic and short-lasting, the gains of one period often being reversed in the next (Economic Commission for Africa and African Union, 2007).

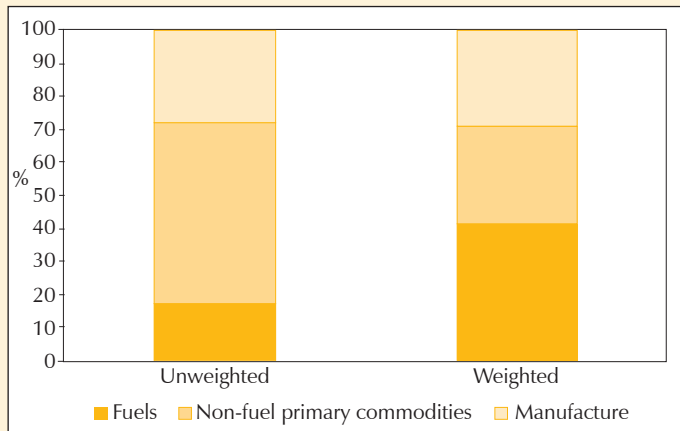
In the period following trade liberalization, the export concentration index for Africa increased by 80 per cent, from a value of 0.21 in 1995 to 0.38 in 2006. This implies that African countries have become increasingly dependent on a limited number of commodities. In comparison with other developing regions, the export concentration index in Africa is very high (fig. 7).

Figure 4
Composition of merchandise exports in developing regions,
1995–2006 averages



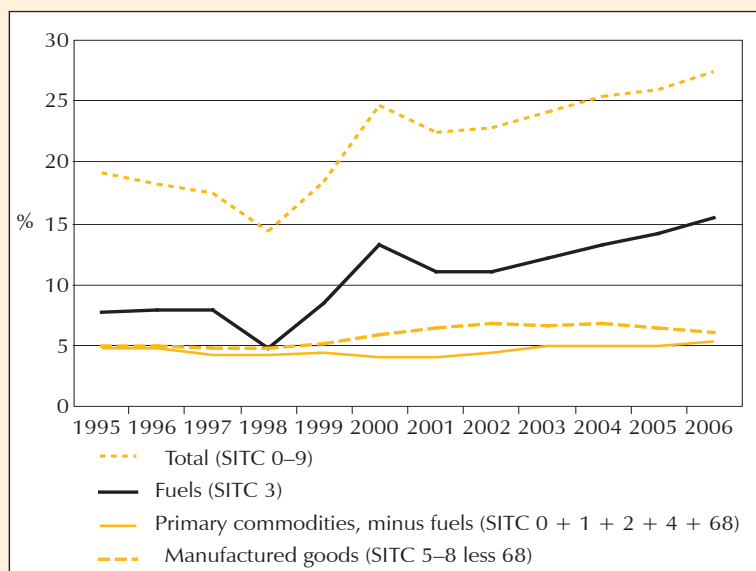
Source: UNCTAD, 2008a.

Figure 5
African countries' export structure, 1995–2006 averages



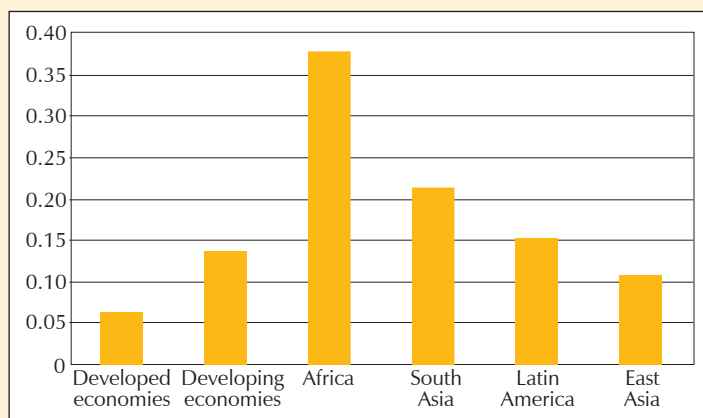
Source: UNCTAD, 2008a.

Figure 6
African exports by type, as a percentage of GDP, 1995–2006



Source: UNCTAD, 2008a.

Figure 7
Export concentration index, 2006



Source: UNCTAD, 2008a.

More worrying still is the fact that most African countries register export concentration levels that are significantly higher than the region's average (table 5). Export concentration fell in only 19 of the 50 countries covered in the table over the period considered.

4. Export destinations

We have seen above that there has been relatively little change in export-to-GDP ratios or in export volumes following trade liberalization. It appears that the geographical patterns of Africa's export destinations have not undergone any great change as a result of trade liberalization either. Figure 8 provides a snapshot of destinations in 1960 and 2006.

The principal destination for African countries' exports is Europe. Countries that are now members of the European Union account for 40 per cent of all exports from African countries and provide by far the largest export market for African products even though their importance has gradually been receding since the same European countries accounted for 66 per cent of Africa's exports in 1960. This trend reflects the gradual loosening of the economic ties that bound African countries to Europe from the time of colonization. Despite the preferential trade agreements between European countries and the African, Caribbean and Pacific (ACP) group of States, African countries have diversified their export markets away from Europe.

The second largest export market for African products is North America, especially the United States. While North America accounted for only 9 per cent of African exports in 1960, it was already then the second-largest export market for African products. This share expanded rapidly in the 1970s, reaching 27 per cent in 1982 before settling at around 15 per cent in the 1990s. The importance of North America as an export market for African countries has grown considerably since 2002, mainly as a result of increased sourcing of oil from Africa (fig. 9), and the implementation of the African Growth and Opportunity Act of 2000. The share of African exports going to North America was 24 per cent in 2006.

More significant was the rise of developing Asia as an important destination for African exports. The share of African exports going to developing countries in Asia had not exceeded 6 per cent between 1960 and 1992, but almost tripled between 1992 and 2006, to 16 per cent. This increase corresponds to the impressive growth performance of China and India and their emergence as major

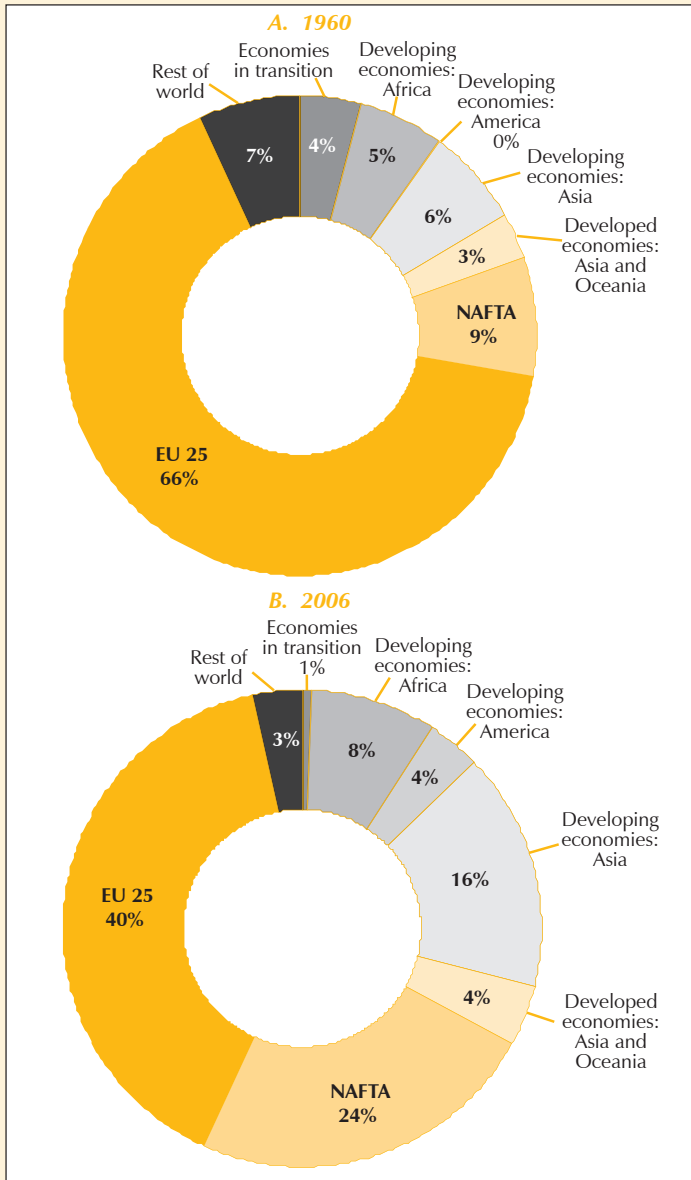
Table 5
Export concentration index in African countries, 1995 and 2006

Country	Export concentration index in 1995	Export concentration index in 2006
Angola	0.90	0.95
Equatorial Guinea	0.56	0.90
Sudan	0.35	0.87
Sao Tome and Principe	0.52	0.87
Congo	0.85	0.87
Nigeria	0.90a	0.85
Gabon	0.81	0.84
Libyan Arab Jamahiriya	0.77	0.80
Guinea-Bissau	0.54	0.75
Mauritania	0.50	0.74
Mali	0.59	0.74
Botswana	..	0.73
Zambia	0.83	0.68
Guinea	0.64	0.66
Seychelles	0.56	0.63
Benin	0.62	0.62
Burundi	0.63	0.61
Algeria	0.53	0.61
Malawi	0.66	0.60
Burkina Faso	0.57	0.58
Mozambique	0.45	0.57
Rwanda	0.46	0.54
Sierra Leone	0.55	0.54
Cameroon	0.33	0.51
Gambia	0.31	0.51
Comoros	0.77	0.48
Cape Verde	0.39	0.48
Niger	0.55	0.47
Central African Republic	0.45	0.47
Lesotho	..	0.47
Ghana	0.44	0.44
Ethiopia	0.65	0.43
Swaziland	..	0.42
Democratic Republic of the Congo	0.50	0.38
Egypt	0.21	0.38
United Republic of Tanzania	0.25	0.36
Côte d'Ivoire	0.27	0.32
Namibia	0.34	0.30
Togo	..	0.29
Mauritius	0.36	0.28
Uganda	0.65	0.25
Senegal	0.29	0.25
Zimbabwe	0.25	0.22
Madagascar	0.28	0.20
Djibouti	0.13	0.19
Kenya	0.23	0.19
Tunisia	0.22	0.19
Eritrea	0.37	0.18
Morocco	0.18	0.16
South Africa	0.27	0.16

Source: UNCTAD, 2008a.

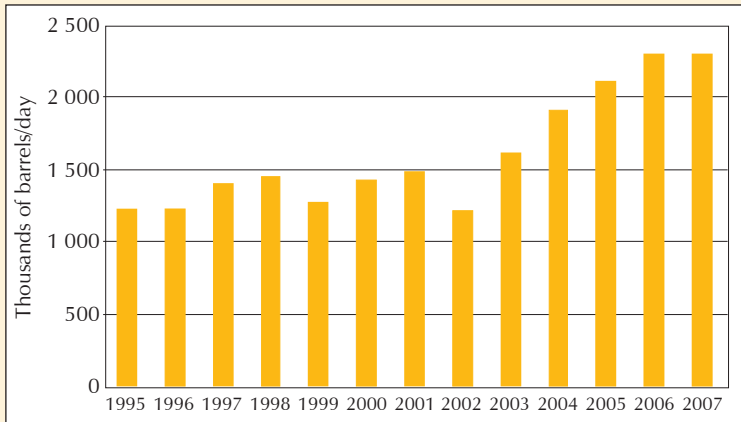
a Figure for 1996.

Figure 8
African export destinations



Source: UNCTAD, 2008a.

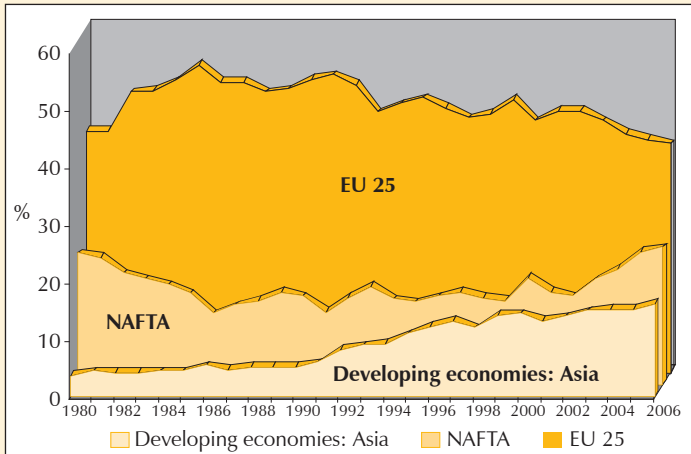
Figure 9
US oil imports from the top three African exporters, 1995–2007^a



Source: United States Energy Information Administration, 2008.

a The top three exporters to the United States in 2007 were Nigeria, Algeria and Angola.

Figure 10
Shares of African exports to top three destinations



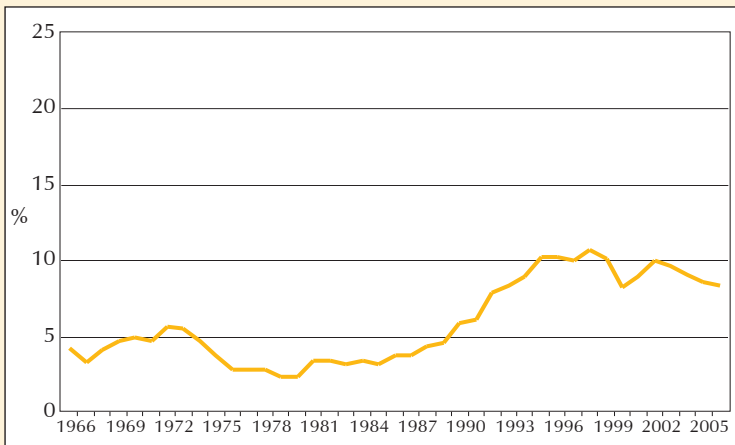
Source: UNCTAD, 2008a.

importers of raw materials. China and India together account for about one tenth of total sub-Saharan African trade and they have made substantial investments in the region. While exact figures are difficult to obtain, the Ministry of Commerce of China estimates that Chinese direct investment in Africa amounted to \$6.6 billion in the period 2000–2006. Data from other sources show a much higher figure of \$15 billion for total Chinese direct investment in Africa in 2005 (Wang, 2007: 11). China's trade with Africa amounted to \$32.1 billion in 2005. Thus, China has emerged as the region's third trading partner after the United States of America (\$60.6 billion) and the European Union (\$56.4 billion), and is forecast to become the continent's largest trading partner before 2010 (Holslag et al., 2007).

Finally, it appears that trade liberalization has had little effect on intra-African trade. Though there was a marked increase in the share of intra-African trade in the 1980s and early 1990s, it has remained essentially stable afterwards (fig. 11). Intra-regional trade accounted for only 8 per cent of total African exports in 2006 — a much lower figure than in other regions. This can be partly explained by tariff cuts, which reduce the preference margins given to other African countries and therefore reduce the incentives for intraregional trade. There are a number

Figure 11

Share of African exports going to Africa, 1966–2006



Source: UNCTAD, 2008a.

of other factors that restrain intra-African trade. First, the products that African countries export tend to be similar in nature, thereby limiting the complementarity of exports. Second, the infrastructure for intra-African trade is often poor, which leads to high transaction costs. And third, despite the many regional agreements in place, these are generally slow to be implemented and there is little private sector involvement in them as compared with their equivalents in Europe, Latin America or Asia. As a result, the share of intra-African trade remains, despite the increases of the 1980s and early 1990s, very low in comparison with intraregional trade in developed regions such as the European Union, where it accounted for 67 per cent of total exports in 2006. It also compares poorly to intraregional trade in Latin America, where it accounted for 16 per cent of exports, and in developing Asia, where it accounted for 46 per cent (UNCTAD, 2008a).

Overall, it appears that the geographical patterns of African exports have changed little following liberalization. The main trends observed, such as the lower share of European countries or the greater importance of North America and developing Asia as export markets, seem to be part of longer-term trends or related to factors other than African trade liberalization.

E. Conclusion

Most African countries now have liberalized trade regimes. The process of liberalization occurred principally in the late 1980s and in the 1990s, and involved the tariffication of non-tariff barriers, cuts in the number and value of tariffs, exchange rate liberalization and the removal of export barriers.

Overall, export performance in African countries following trade liberalization has been disappointing. Indeed, although there has been a positive effect of trade liberalization on exports expressed as a percentage of GDP, this effect is weak and the overall trade balance in African countries has deteriorated since liberalization.

Export performance following trade liberalization can be analysed in more detail by examining trends in values and volumes of exports. Such analysis reveals that, following liberalization, African exports continued to grow at a lower rate than in other regions in volume terms and it is only the rising prices of fuels, minerals and other primary commodities since 2002 that have maintained

African export value growth at a level comparable with that in other developing regions.

Export diversification is very low in Africa. African countries remain principally primary commodity exporters and the dependence of African countries on a small number of export products has increased in the period following liberalization. Many countries in the region are at present less able to withstand price shifts for a few key commodities than they were prior to liberalization.

The main trends in the destination of African exports do not appear to have been strongly affected by African countries' efforts to liberalize trade. Although there has been some diversification in the destinations of African exports, reducing the importance of European countries as export markets, this is part of a long-term trend. The greater importance of Asia as a market for African exports reflects strong growth in that region rather than changes in African countries' trade structure. Recent changes in the share of African exports going to North America, meanwhile, have been driven mainly by trends in oil exports, which are independent of the trade liberalization process.

Chapter 2

AFRICA'S EXPORT PERFORMANCE FOLLOWING TRADE LIBERALIZATION: AGRICULTURE

This chapter analyses the evolution of Africa's international trade in agriculture following the adoption of trade liberalization policies. Considering that one of the objectives of trade liberalization was to shift relative prices and resources in favour of the tradable sector, how has African agriculture — and, in particular, how have African agricultural exports — performed over the period under review?

Two main trade liberalization policies were expected to have a direct positive impact on the agricultural sector and exports. One was to cut high taxation on the sector by aligning producer prices with world prices. The second was to promote the development of private input and output markets (“getting prices right”). As part of this process, agricultural marketing boards were dismantled and subsidies on a range of inputs, such as fertilizers or insecticides, were cut off. The sector was also expected to benefit from macroeconomic policies such as reducing the overvaluation of the exchange rate and providing a more stable macroeconomic environment. Such policies were expected to enable agricultural exporters to capture a higher proportion of the world market price for their products, which would then give them a greater incentive to produce and export more.

A. Agricultural production and exports

The agricultural sector was not spared by the global economic slowdown in the late 1970s, which negatively affected sub-Saharan African economies. Against a background of improved macroeconomic conditions, the sector recovered from this downturn in the mid-1990s. Subsequently, agricultural growth accelerated from 2.3 per cent per annum in the 1980s to 3.8 per cent between 2001 and 2005 (World Bank, 2008b). However, this was hardly reflected in several indicators of the agricultural sector's performance.

The contribution of agriculture to total output in sub-Saharan Africa has generally stagnated since 1980. The sector's contribution to GDP in 2006, at

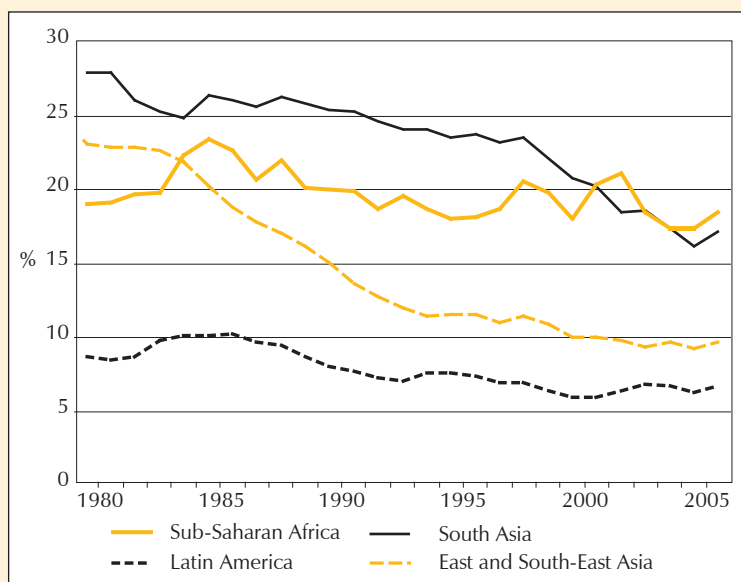
about 19 per cent, was no higher than in 1980. In contrast, the proportion of agriculture in East and South-East Asian economies fell significantly over the same period, owing to the increasing share of manufactures. Thus, sub-Saharan Africa has become the region in the developing world with the highest ratio of agriculture to GDP since 2000 (fig. 12), which reflects the lack of structural transformation.

The value of sub-Saharan African agricultural production remained stable between 1995 and 2000, while the nominal value of its agricultural exports declined slightly from about \$16.6 billion to \$14.7 billion between 1995 and 2000, before rising to \$25.3 billion in 2006 (UNCTAD, 2008b). However, as compared with the significant increases in the value of agricultural exports from Latin America and from East and South-East Asia (fig. 13), the increase in the value of sub-Saharan African agricultural exports following liberalization appears rather modest.

Two factors underpin this modest increase in value of sub-Saharan African agricultural exports. First, the recovery in agricultural production since 2000 does not appear to have been widespread. Although there has been some expansion in agricultural exports from sub-Saharan Africa, the region's share of global exports has remained fairly small, with agricultural exports becoming concentrated in a small number of countries. Over the period 2002–2005, just three countries accounted for about 56 per cent of total sub-Saharan African agricultural exports, the largest exporter being South Africa, followed by Côte d'Ivoire and Ghana. Second, sub-Saharan Africa continues to depend on traditional non-fuel primary commodity exports such as coffee, cotton, cocoa, tobacco, tea and sugar.⁴ Traditional commodities were the top exports of the region in value terms in 2000: this situation had not changed in 2005, although there were some changes in the rankings — only cotton was in the top three in both years — and, more importantly, in 2005 fewer countries exported the top four products (see table 6).

There was a steady increase in the export volumes of these traditional commodities from the mid-1990s onwards. The fact that this did not translate into a higher value of exports until after 2000 reflects the low prices of these commodities on the world market at the time. These commodities were affected by high price volatility and, until about 2002, by falling prices.⁵ During the 1970s, 1980s and 1990s, the volatility in terms of trade for sub-Saharan African exports was about twice as high as for East Asian exports and nearly four times as high as for exports from industrial countries (UNCTAD, 2003a).

Figure 12
Agriculture as a proportion of GDP

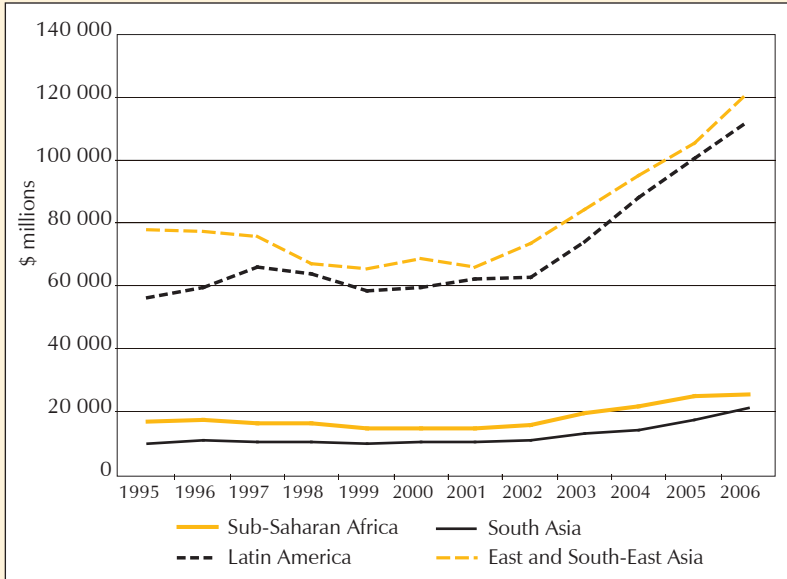


Source: UNCTAD, 2008a.

This continuing dependence on traditional commodity exports also reflects the region's inability to tap fully into the international trade in "market-dynamic" (non-traditional) commodities, such as horticulture and processed foods.⁶ These products are highly income-elastic, with lower rates of protection in industrialized and large developing countries (UNCTAD, 2003a).

In the period 2000–2005, no African country featured among the world's 20 leading exporters of processed food, although these include countries such as Argentina, Brazil, Mexico, India, Indonesia and Thailand. South Africa, the largest African exporter of these products, had a global market share of less than 1 per cent. Mauritius, the second-largest exporter of processed products in sub-Saharan Africa, came a distant 59th in the global rankings, with only a 0.2 per cent market share. In the case of semi-processed products, South Africa was the only sub-Saharan African country among the top 20 exporters in the period 2000–2005. There were no sub-Saharan African countries at all among the leading exporters of processed products in that period (OECD, 2008a).

Figure 13
Agricultural exports by value, sub-Saharan Africa
and other developing regions^a



Source: UNCTAD, 2008a.

a Total exports of primary commodities by value, excluding fuels, ores and metals.

Nevertheless, Africa has made some progress in diversifying its international agricultural trade, although progress has been slow. A few countries have made inroads into the international trade in horticultural products, but only South Africa made it to the list of the top 20 horticultural exporters in 2000–2005, with an average market share of 2.3 per cent. Morocco, which was among the top 20 exporters in 1985–1990, had dropped out of the group in 2000–2005, with its market share declining to just over 1 per cent. Two other African countries, Côte d'Ivoire and Kenya, export considerable amounts of horticultural products, but each has a share of less than 1 per cent of the global market (OECD, 2008a). In recent years, a few countries, including Ethiopia, Ghana, Uganda and Zambia, have increased their exports of these products, but the volumes are generally small (except possibly in the case of Ghana) as compared with the volumes of their traditional export commodities.

Table 6
Sub-Saharan Africa: Top four African exports, 2000 and 2005

Rank	2000				2005			
	Product	No. of countries	Value (\$ million)	Percentage of total exports	Product	No. of countries	Value (\$ million)	Percentage of total exports
1	Coffee	22	788	8.6	Cocoa	11	2 500	16.6
2	Cotton	22	688	7.8	Cotton	19	779	5.2
3	Tobacco	13	628	7.1	Sugar	17	726	..
4	Tea	22	614	7.0	Wine	18	603	..

Source: Organization for Economic Cooperation and Development (OECD, 2008a, p.31).

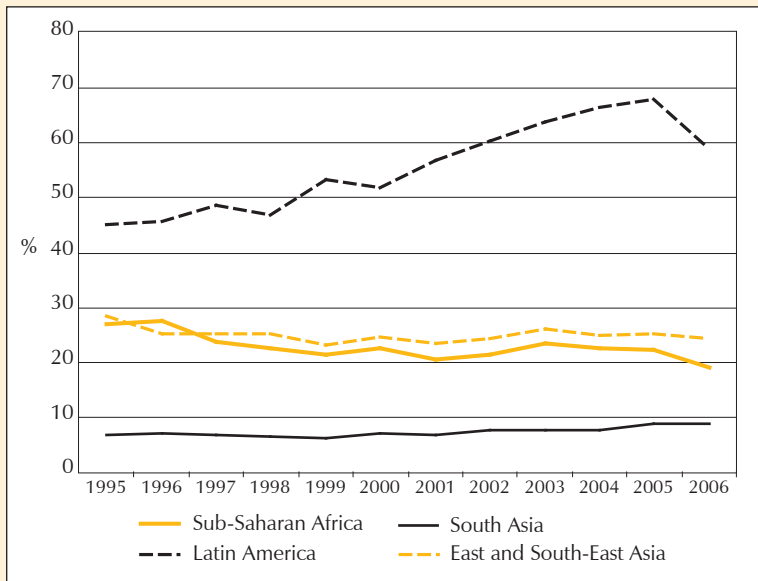
Africa's share in world agricultural imports decreased steadily from 5.4 per cent in 1985 to 3.2 per cent in 2006. This could be explained, in part, by the fact that global trade in agriculture is no longer dominated by the traditional bulk commodities. These are the least dynamic in terms of export growth, and their share in total agricultural exports has declined substantially. Most of the developing countries that remained commodity-dependent in 2003–2005 (two-thirds of which are in Africa) have thus been struggling to defend their historical positions in the international market. In the last 25 years, trade in horticulture and processed food has grown at double the rate of traditional bulk commodities. Thus, these products are now comparable to non-agricultural products in terms of export growth. Indeed, the continent's potential in commercial agriculture remains largely untapped, with only a fledgling agribusiness sector in most countries (OECD, 2008a).

The substantial increases in the value of agricultural exports from East and South-East Asia and from Latin America over the period 1995–2006 reflect a move towards high-value exports. Moreover, significant increases in export volumes have been achieved on the back of increased productivity in traditional commodity exports as a result of intensive methods of farming. The technological advances that led to improved productivity in the 1970s and 1980s by some old agricultural exporters in Latin America and East Asia, and by some new exporters in Asia, largely bypassed sub-Saharan Africa. The region has not benefited from the productivity gains achieved for a variety of crops, including corn, soya beans, sugar and rice.⁷ These gains, coupled with farm mechanization, have resulted in significant increases in production by some commodity-exporting countries, such as Brazil and Viet Nam. Some of these countries have emerged as more efficient producers than African countries in traditional agricultural commodities such as cocoa (Malaysia) or coffee (Indonesia and Viet Nam) (UNCTAD, 2003a; see also Havnevik et al., 2007).

The above factors appear to have contributed to the steady decline in the proportion of total agricultural production traded by sub-Saharan Africa from around 27 per cent of production in 1995 to just below 20 per cent a decade later. Of the other developing regions, Latin America recorded a sizeable increase in the proportion of its exported agricultural output from under half to about two thirds of its total agricultural output. However, there was no change in the proportion of agricultural output exported by the other two developing regions (fig. 14).

It is apparent from the discussion above that there have been some positive developments in Africa's international trade in agriculture following trade liberalization. First, there have been some increases in African exports, though this was not reflected in the value of the region's exports until after 2000 because of low commodity prices before then. Second, there has been some diversification towards horticultural exports in several countries. However, African countries have remained by and large very small players in this market. Africa's agricultural

Figure 14
Proportion of agricultural output exported



Source: UNCTAD, 2008a.

exports have thus remained overwhelmingly concentrated in traditional bulk commodity exports, which have also become concentrated in a smaller number of countries.

Furthermore, the contribution of agricultural exports to total output does not appear to have undergone any significant change over the period under review. Of the 38 African countries for which data are available for at least two decades, only five recorded agricultural exports in excess of one fifth of GDP (Côte d'Ivoire, Ghana, Malawi, Seychelles and Swaziland). Seychelles recorded substantial growth in its agricultural exports in the 1990s and, especially, in 2000–2006. The remaining four countries have been consistently high exporters of agricultural commodities since the 1980s. Two countries, Benin and Madagascar, have also increased their agricultural exports significantly since the 1980s, with exports exceeding 10 per cent of GDP in 2000–2006 (World Bank, 2007).

B. Explaining agricultural export performance

1. Role of trade liberalization

As mentioned earlier, because of its impact on relative factor prices, trade liberalization was expected to lead to increased production of tradables, that is, increased exports and changes in the composition of such exports. Given the relative importance of agriculture in African countries, one would therefore expect an increase in agricultural exports as well as some diversification into new agricultural exports. One would also expect some diversification into manufactures (see chap. 3 below).

Trade liberalization has created a price incentive structure which has contributed to some of the positive developments noted above. Nevertheless, a closer examination of some of the more successful agricultural exporters reveals that the main factors that underlie their performance, with the possible exception of the devaluation of the CFA franc, go beyond trade liberalization and are the result of deliberate efforts by Governments to develop the agricultural sector.

The consistently high agricultural exports of Côte d'Ivoire appear to be the result of huge investments made in the agricultural sector in the 1960s as part of the country's development strategy, which was anchored on cash crops (coffee, cocoa and timber) and later reinforced by secondary agricultural export crops

such as bananas and pineapples. Furthermore, after 1965, the Government followed a crop-diversification policy designed, inter alia, to increase total export receipts and promote a dynamic agro-industrial sector based on raw materials from local commercial crops. This policy led to the introduction of new crops such as soya beans and cashew nuts, and to the transfer of some crops from one region to another in order to improve the quality and productivity of commercial crops already in production, including pineapples and rubber (Traoré, 1990).

Ghana's performance could be explained by the somewhat ad hoc, but successful, programmes to promote non-traditional agricultural exports such as pineapples, cashew nuts, pepper and shea nuts. While there were some remarkable increases in cocoa exports in the 1990s after the steep declines experienced in the 1980s, these did not come from new planting so much as from the re-routing back into Ghana of cocoa that had previously been smuggled to Côte d'Ivoire (Herbst, 1993). Successful resistance by successive Governments to pressure from donors to fully privatize the cocoa marketing system means that the Cocoa Marketing Board still provides limited support to the cocoa sector. The increases in Ghana's cocoa exports since 2000 are due not only to some new plantings in the 1990s but also to a government programme to supply farmers with inputs (fertilizers, insecticides and spraying guns) through the Cocoa Marketing Board.

The devaluation of the CFA franc in 1994 helped to improve the competitiveness of all exports from the CFA franc zone. Some country-specific factors also helped to boost agricultural exports. For example, by the 1990s Benin had become politically stable, and by the end of the decade financial sector crises sparked by the collapse of its main commercial banks had been successfully resolved. These factors, coupled with an increased area devoted to cotton crops and the joint implementation in 2002 of the Cotton Sector Reform Project by the Government and the World Bank, have helped to sustain Benin's cotton exports in recent years.⁸

The recent improvements in maize production and output in Malawi since the drought of 2005 have been attributed mainly to the Government's fertilizer subsidy programme. According to government estimates, the 2007 maize crop harvest was about 70 per cent higher than the average for the past five years. Malawi has thus become a regional exporter of maize.⁹ However, sustained improvements in agricultural productivity and output would require a more comprehensive policy package that also addresses the various constraints on the agricultural supply response.

Overall, there have been some positive, though limited, developments in African agriculture following trade liberalization. The present state of African agriculture has come under greater scrutiny in recent months because of the food and fuel crises, which have eroded the gains accruing to exporters of traditional commodities as a result of the recent high prices for these commodities. Moreover, the large increases in food prices in recent years have led to a global food crisis of which low-income food-deficit countries (LIFDCs) are the greatest victims (see box 2). The fact that most LIFDCs are in Africa has raised serious questions about the performance of the agricultural sector in the aftermath of trade liberalization. The continuing weak performance of African agriculture and agricultural exports is investigated in the next section.

2. Weak supply response

Advocates of trade liberalization believed that agricultural exports were constrained by misguided policies, such as the high taxation of agriculture, to promote import substitution industrialization. Hence, it was assumed that simply removing these constraints, *inter alia*, by aligning producer prices with world prices while promoting the development of private input and output markets (“getting prices right”), would provide the right incentives for increased production of agricultural exports. The sector was thus expected to benefit from macroeconomic policies to reduce the overvaluation of the exchange rate, and from the dismantling of marketing boards and creation of a more stable macroeconomic environment.

This diagnosis, however, represents only a partial understanding of the problem, and takes no account of the structural problems that plague the agricultural sector in Africa. Thus, while trade liberalization addressed policy-induced barriers to trade, it was not integrated with sectoral policies that could have addressed supply-side response issues. These problems have prevented the region from attaining its full potential in agricultural exports even within the context of improved macroeconomic fundamentals.

The agricultural sector is by no means homogenous in all African countries and across different agro-ecological zones, and a myriad of agricultural production relations and institutions can be found all over sub-Saharan Africa. However, it is commonly agreed that the response of agricultural production to price incentives is determined by how structural and institutional factors influence not only productivity but also profitability. These factors include the socio-economic

Box 2. Food price increases and low-income net food-deficit countries^a

World food prices have doubled in the past three years; in the last year alone (April 2007 to April 2008) they have increased by about 85 per cent. This hike in world prices of nearly all major food and feed commodities has had a ripple effect through the food value and supply chain. This has contributed to food price inflation and increased food insecurity, especially in poor countries. In addition, the combination of higher prices for fuels and food has had a negative effect on the trade balance of poor countries. As illustrated in the table below, the food import bills of low-income food-deficit countries (LIFDCs) have increased considerably. LIFDCs in Asia and Africa have to contend with the greatest increases in cereal import bills in 2007–2008; these are forecast to increase to about three times their level in 2002–2003. The price of rice is forecast to increase more than three times over the same period, and that of wheat almost three times.

**Cereal import bills in low-income food-deficit countries
by region and type**
(\$ millions)

	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
					<i>Estimate</i>	<i>Forecast</i>
	14 025	15 792	18 825	18 028	24 749	38 696
Africa	6 501	7 088	8 372	8 369	10 297	17 892
Asia	7 014	8 050	9 767	8 900	13 498	19 277
Latin America and Caribbean	308	380	407	468	594	898
Oceania	69	76	78	82	100	164
Europe	133	198	201	209	260	464
Wheat	7 762	8 802	10 814	10 589	14 083	22 705
Coarse grains	3 281	3 300	3 395	3 099	4 522	6 097
Rice	2 982	3 689	4 616	4 340	6 144	9 894

Source: FAO, 2008b.

Many African countries have become highly dependent on cereal imports, particularly in the last two decades, to meet their consumption needs. Thus, the hikes in international prices have pushed up domestic prices of bread and other basic food items. Indeed, all over Africa, Governments have had to implement a variety of measures to ensure that the full impact of higher international prices for cereals is not transmitted to the prices of basic food items at home. These include a considerable rise in wheat flour subsidies (Egypt and Senegal), suspension of import tariffs (Côte d'Ivoire, Ethiopia, Liberia, Senegal and the United Republic of Tanzania), and export bans on domestically produced cereals such as maize (the United Republic of Tanzania and Zambia). A few countries (Malawi and Zambia) are implementing large input subsidy schemes for fertilizer and quality seeds in order to increase cereal production domestically. Clearly, in the short term, some African countries need emergency relief to enable them to cope with escalations in food prices and to meet the food security needs of their populations. In the medium to long term, addressing the structural factors that impede efficient agricultural production in those countries with the right agro-ecological conditions is a sine qua non for meeting a larger proportion of their food

Box 2 (contd.)

requirements domestically. Indeed, many African countries at the time of independence, some 50 years ago, were net food-exporting countries. Most of these countries have become net food-importers over the last two decades, partly as a result of under-investment in agriculture, including in research and development and extension services, and partly as a result of the abolition of State institutions (such as crop marketing boards) that provided support to the sector. Agricultural subsidies in developed market economies have also led to cheap imports of food in many countries, thereby undermining domestic production. African countries will need to diversify their production structure and exports as a means of reducing their vulnerability to fluctuations in commodity prices and worsening terms of trade (see chap. 5).

Source: Food and Agriculture Organization of the United Nations, *Crop prospects and food situation* (June/July 2008); and UNCTAD 2008b, “The changing face of commodities in the twenty-first century”.

- a Low-income food-deficit countries (LIFDCs) include food-deficit countries with per capita annual income below the level used by the World Bank to determine eligibility for International Development Association assistance (\$1,575 in 2004). In accordance with the guidelines and criteria agreed by the Commission for Africa, these countries should be given priority in the allocation of food aid. All African countries, except five, are LIFDCs: the exceptions are Algeria, Gabon, the Libyan Arab Jamahiriya, Namibia and South Africa.

structures and physical infrastructure that impede the efficient functioning of rural and urban markets. Other factors that determine the response of the agricultural sector to policy incentives are (a) the weak agricultural research and extension system, (b) low productivity due to reliance on rudimentary agricultural technology, (c) the paucity of credit and agricultural inputs (including land and labour), (d) the gender division of labour, (e) the limited supply of basic consumer goods, and (f) high levels of risk. Within this context, as discussed below, the elasticity of total farm output and agricultural exports to policy changes, including changes in price, could hardly be expected to be very large, particularly in the short to medium term.

Indeed, empirical evidence suggests that aggregate supply response of agricultural production to price incentives is much weaker in low-income countries because of these non-price constraints (UNCTAD, 1997a; 1998a).¹⁰ However, while there is some consensus that these non-price factors constrain agricultural production and productivity, there is no agreement on how they could be removed. Also, there is no consensus on whether there are trade-offs to be made between policies that address these and policies that support the attainment of the “right prices”.

(a) Short-run supply response¹¹

One channel for the short-run supply response of agricultural production to the price incentives created by policy reforms is the “vent for surplus” effect, which occurs as idle land is brought under cultivation, coupled with increased utilization of labour in response to price incentives, or greater availability of incentive goods.¹² This was the experience of countries such as Ghana, Madagascar, Mozambique and the United Republic of Tanzania at the beginning of their trade liberalization programmes. This, however, is essentially a one-off response as there are limits to the availability of unused resources, such as land, the use of which is governed by a traditional tenure system that may not respond immediately to the demands for more land. Also, complex gender divisions of labour in most farming communities determine how much female labour is allocated to which tasks or crops, and how income from farming activities is distributed within the household.

A second channel for short-run supply response is the reallocation of resources in order to achieve efficiency gains, which depends on three factors. The first is the level of capitalization of farm operations and the level of flexibility this grants households to reorient production. The second is the commitment of households to meet part of their subsistence needs through their own production, which in turn depends on the level of efficiency of rural food markets. And the third is the issue of gender relationships, which determine the flexibility with which households can reallocate resources.

Agricultural intensification is the third channel for a short-run positive supply response in agricultural production. This could be labour-based or a combination of additional labour and other variable inputs, such as organic and chemical fertilizer. In most African countries, however, sustainable intensification requires additional capital. As such, it depends on the assessment of risk, credit availability, skills and appropriate intensification packages. One observable trend in African countries during policy reform was the decline, for a variety of reasons, in the use of purchased inputs such as fertilizer. The removal of subsidies led to sharp price rises, and the dismantling of marketing boards resulted in a breakdown of the fertilizer distribution system and a reduction in credit availability. The marketing boards not only supplied inputs to farmers in smaller quantities and in remote areas, they also helped to provide seasonal credit to poor farmers against potential crops as collateral. The system completely broke down as the private sector was too weak in several countries to take on these functions as expected.

In addition, it is possible that the decaying state of rural infrastructure did not make these functions profitable enough to attract private actors.

In effect, policy reforms such as removing price controls, cutting or eliminating fertilizer subsidies and privatization did help to improve fiscal discipline in most African countries. However, their effect on agricultural production and exports has been far from benign.¹³

(b) Investment and productivity growth

Even if the structural constraints to short-run agricultural supply response are addressed successfully, long-run trends in productivity and output and in export performance depend on the pace of investment and technological progress. In predominantly agricultural economies, the major source of investment funding for both agriculture and other sectors is the net agricultural surplus.¹⁴ However, African agriculture is so severely undercapitalized, with many farmers trapped in a low-productivity and subsistence cycle of poverty, that the injection of external resources is a *sine qua non* for increasing agricultural productivity and growth.

Credit constraints

There is conflicting evidence on whether insecure land titles, stemming from the myriad African land-tenure systems, promote or discourage new investments to improve land.¹⁵ However, it is generally agreed that insecure titles deny farmers the right to use land as collateral to secure loans from the banking system to finance new investments. Informal money-lenders often provide seasonal loans under various arrangements, mostly tied to the purchase of crops and at usurious rates, which are not suitable for long-term agricultural investments. In the past, small farmers had access to credit provided by marketing boards or by local financial institutions under government direction, though this by no means reached all such farmers. These sources all but disappeared during the financial sector reforms implemented as part of market-oriented reform. Development banks, some of which were insolvent, were closed down. Such reforms were unable to increase the volume of savings or access to credit in rural areas, where commercial bank branches were closed down (UNCTAD, 1997b, Brownbridge and Gayi, 1999). With reduced credit from the formal system and little or no net agricultural surplus, both short- and long-term investment in agriculture appear to have suffered.

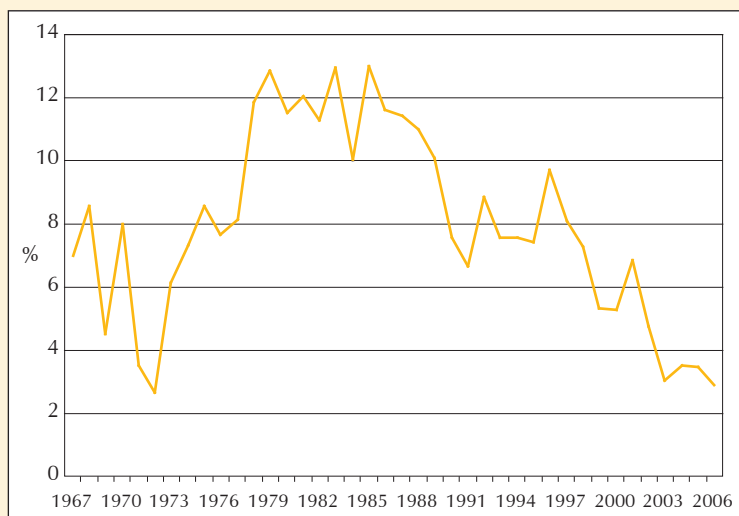
Public investment

The reforms have created opportunities for private investments in agricultural enterprises, but the profitability of these investments remains very much dependent on public investment in infrastructure. Improvements in rural transportation enhance the functioning of product and input markets and increase real returns. Investments in drinking water, electricity, health and educational facilities improve the overall quality of rural life. They also boost agricultural productivity and reduce the number of farming work days lost through ill-health. Reduced public investment during the period of reform and the resulting weak infrastructure were an obstacle to the development of more efficient markets. In addition, a general dearth of social amenities meant the agricultural sector could not benefit from the externalities accruing from the opportunities created by trade liberalization and thereby increase exports.

In sub-Saharan Africa, there are also problems with agricultural research, which determines the rate of technological change. The small size of countries and research stations, dispersion and high staff turnover have all combined to prevent the attainment of a critical mass of scientific and technical staff. This lack of a critical mass has been attributed in part to problems with the allocation of agricultural budgets, which did not reflect the right balance in the distribution of staff between scientific, technical and administrative duties. Most often the budgets of national agricultural research systems were also skewed towards personnel to the detriment of equipment and other operational costs (Diouf, 1989). The outcome is that, with the notable exception of maize (and more recently cassava), most of sub-Saharan Africa has no immediately applicable crop technology that might, with adequate price incentives, substantially increase the profitability of investments in agriculture.

A reduction in donor support for agriculture has also meant that there are fewer resources to devote to addressing the problems of the sector. Overall, donor support for agriculture has declined steadily from a peak of \$8 billion in the early 1980s to \$3.4 billion in 2004. This decline is evident in both multilateral and bilateral support, and also in relative terms. For example, the proportion of total official development assistance (ODA) going to agriculture declined from a peak of 16.9 per cent in 1982 to just 3.5 per cent in 2004. The equivalent figures for ODA from Development Assistance Committee (DAC) countries were 13 per cent and 3 per cent respectively (fig. 15). World Bank lending to agriculture in Africa fell sharply from \$419 million in 1991 to \$123

Figure 15
DAC ODA to agriculture, fisheries and forest as proportion of total DAC ODA, 1967–2006



Source: OECD, 2008b.

million in 2000, before recovering to \$295 million in 2005 and \$685 million in 2006 (World Bank, 2008b). Total ODA to African agriculture declined from \$3.2 billion in 1988 to \$1.2 billion in 2004. The sharp decline in aid to agriculture since the early 1990s reflects not only the limited success of aid to agriculture but also a shift towards adjustment lending with a greater focus on economic liberalization (OECD, 2008a).

It appears that the decline in ODA to agriculture was often translated into a decline in public investment expenditure in agriculture in sub-Saharan Africa, since in many countries in the region such expenditure was externally financed. Public investment expenditure in agriculture took the form of the integrated rural development programmes that were fashionable in the late 1960s and early 1970s, but that have since been on the decline. Evidence from 19 sub-Saharan African countries shows that while real agricultural expenditures grew rapidly in the 1960s, and moderately in the 1970s, they stagnated in the 1980s and early 1990s (UNCTAD, 1998a). Indeed, it appears that the proportion of government expenditure going to agriculture has declined in several African countries during

the period of market-oriented reforms in the past two decades (OECD, 2008a). In one of the earliest reforming countries, Ghana, for instance, the proportion of the total government budget devoted to agriculture fell from 10 per cent in 1983 to just 3.5 per cent in 1988.¹⁶ In Burundi, fiscal reforms, including the privatization of State-owned financial institutions, led to a drastic reduction in the already low level of credit to the agricultural sector in favour of commerce or trading. Agricultural credit fell from 2.5 per cent of total domestic credit to under 1 per cent between 1980–1994 and 2003–2005 (Nzobonimpa et al., 2006).

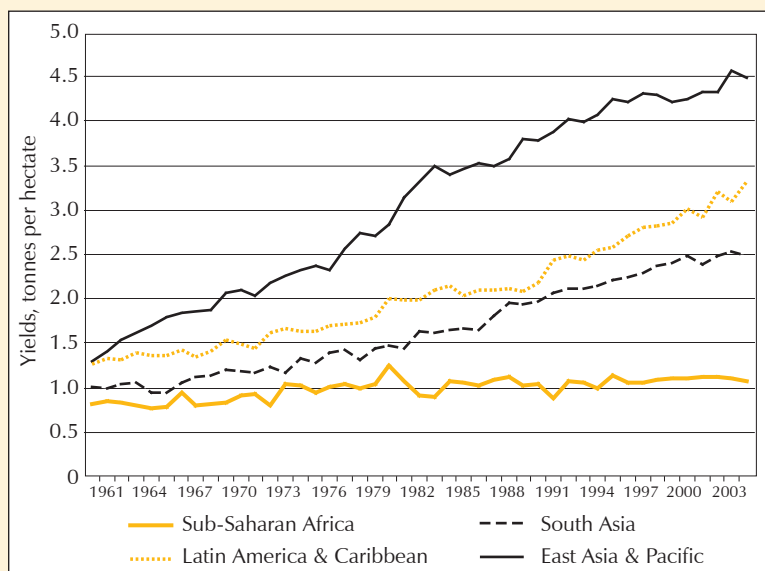
Low yields

Considering all the indicators of agricultural productivity and the use of modern inputs, it comes as no surprise that African agriculture lags behind agriculture in other developing regions. In 2004, for example, the Food and Agriculture Organization of the United Nations (FAO) reported that, although Africa had the highest agricultural area per capita in the developing world, it had, relatively speaking, the smallest irrigated area (3.7 per cent)¹⁷ and lowest fertilizer consumption (12.6 kg per hectare of arable land). These figures are well below the developing-country averages of 22.7 per cent and 109.0 kg respectively (Gayi, 2007: table 13.7).

Only a quarter of the total crop area of sub-Saharan Africa is planted with modern crop varieties. Asia adopted these varieties as far back as the 1960s, and about 80 per cent of South and East Asia's crop area is under these varieties four decades later. The use of chemical fertilizer has expanded in all regions of the developing world except sub-Saharan Africa. Considering that over the past three decades higher fertilizer use accounted for at least 20 per cent of the growth in developing country agriculture (World Bank, 2008b),¹⁸ one can understand the slow agricultural growth in sub-Saharan Africa, where since 1984 the cereal yield has stagnated at around 1,000 kg per hectare of arable land (fig. 16).

Asia's productivity in the cultivation of cocoa and coffee — two of Africa's main traditional commodity exports — was much higher than that of Africa over the period 1961–2005. The gap between yields in the two regions increased noticeably in the last decade (figs. 17 and 18). However, for reasons that are not immediately apparent, tea yields were consistently higher in Africa than in Asia over the same period (fig. 19). It would thus appear that there is no intrinsic reason why Africa should be trapped in a low productivity cycle for other agricultural exports. Africa could attain levels of productivity comparable to

Figure 16
Cereal yields, sub-Saharan Africa and other developing regions



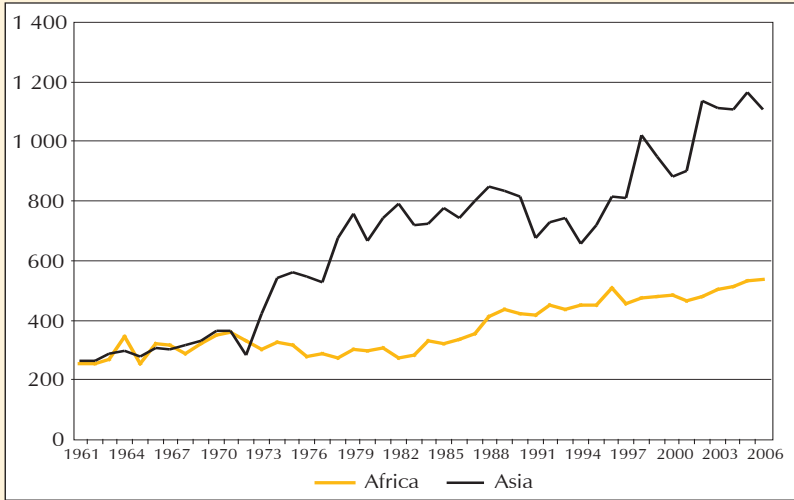
Source: FAO, 2008a.

those of other developing regions if there were the will and resources to address the problem.

It would appear that the increase in agricultural production in Africa noted earlier is due to better utilization of existing resources rather than to increases in productivity or investment. Higher agricultural production also coincided with the recovery in resource inflows and imports. Trade liberalization, and in particular the reduction in overvaluation of the exchange rate, increased incentives to produce for export and reduced the shortages of basic consumer (incentive) goods in rural areas (UNCTAD, 1998a). However, trade liberalization was not complemented by policies to address the key constraints on investment and productivity, which are crucial for the long-term performance of the agricultural sector.

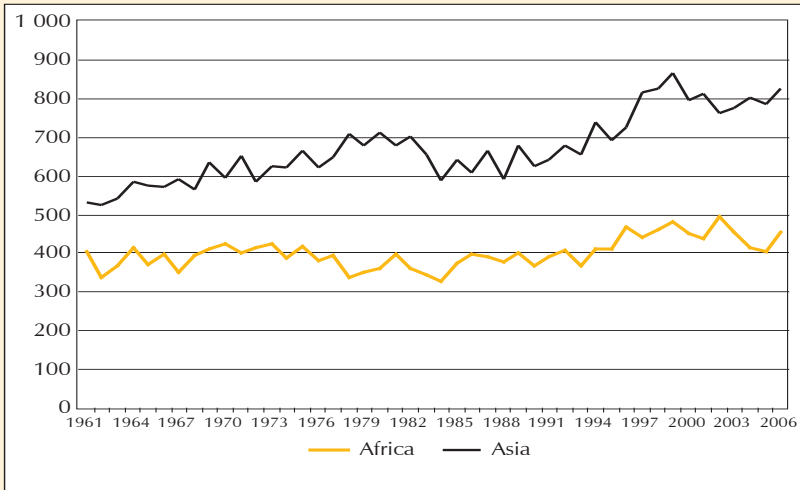
The supply response in agriculture and exports after trade liberalization would have been much higher if trade liberalization had incorporated a complementary

Figure 17
Cocoa beans yield (kg/ha) in Africa and Asia, 1961–2006



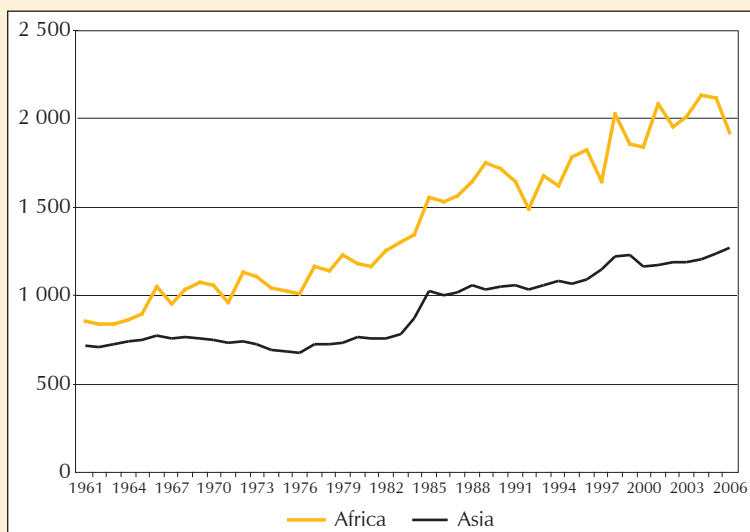
Source: FAO, 2008a.

Figure 18
Coffee (green) yield (kg/ha) in Africa and Asia, 1961–2006



Source: FAO, 2008a.

Figure 19
Tea yield (kg/ha) in Africa and Asia, 1961–2006



Source: FAO, 2008a.

policy package to address the structural constraints on agriculture. Consequently, much of African agriculture has not experienced the structural transformation that took place in other developing regions in the production of traditional bulk agricultural commodities and in international horticulture and processed food markets. Paradoxically, while developments in the global markets for the latter have opened up new business opportunities for African countries, it has also increased the competitive pressures on them in their efforts to respond to these opportunities. The next section explores some of these external constraints on the participation of African agricultural producers in the international trade in new market-dynamic agricultural products.

3. External constraints

(a) Market access¹⁹

The majority of African countries benefit from preferential market access schemes of various types. The least developed countries (LDCs) and other low-

income African countries benefit in particular from two such schemes in their main export markets: the African Growth and Opportunity Act of the United States, and the Everything But Arms initiative of the European Union. The ACP group of States also enjoys preferential market access to the European Union under the Cotonou Agreement, which is in the process of being replaced by economic partnership agreements.

However, many agricultural products face tariff peaks and tariff escalation (higher tariffs on processed products), which discourage diversification into higher value-added products (McCalla and Nash, 2007). Thus, African countries may yet encounter market access problems in trying to expand into higher value-added products. This highlights how important it is to take account of the particular circumstances in a country before generalizing about the market access conditions for African countries.

Africa faces lower (by 0.3 per cent) average duties than the rest of the world and therefore enjoys good market access.²⁰ However, this is mainly because its main exports of oil, gas and mineral products or commodities are not highly taxed around the world. Within Africa, those countries that specialize in certain agricultural exports (e.g. meat, milk, sugar or some cereals) are penalized just like those that export to highly protected markets.²¹ Average tariffs on agricultural products are much higher than those on manufactures (McCalla and Nash, 2007), and international trade in agriculture is one of the items on the WTO “built-in agenda” for which negotiations are still ongoing. Even the high level of tariffs on agricultural products understates the degree of protection in the trade regimes of developed countries, where almost 30 per cent of agricultural production is afforded high levels of support through NTMs such as export subsidies and tariff rate quotas (McCalla and Nash, 2007). Agricultural producers in the European Union and the United States, for example, continue to enjoy subsidies, which depress world prices and dampen the incentives to increase agricultural production and exports in poor African countries. This contributes to the loss of export revenue for those countries that export products such as cotton that are subsidized in those markets.

The Doha Work Programme has the long-term objective of establishing a fair and market-oriented trading system, including correcting and preventing restrictions and distortions in world agricultural markets. The comprehensive negotiations envisaged in the work programme are aimed at, inter alia, “substantial improvements in market access; reductions of, with a view to

phasing out, all forms of export subsidies; and substantial reductions in trade-distorting domestic support" (WTO, 2001). Three decisions on agriculture were taken at the Hong Kong WTO Ministerial Meeting in 2005. First, export subsidies will end by 2013. Second, developing countries can themselves designate some products as "special products" for which tariff reductions will not be very stringent. And, third, developing countries can retain their permissible *de minimis* level of domestic subsidy (WTO, 2005). These decisions undoubtedly represent progress in the agricultural negotiations, but some observers have pointed out that they amount to no more than marginal gains for developing countries, for a variety of reasons. First, the ministerial declaration does not call for the elimination of domestic subsidies in major developed countries. Nor does it envisage curbing or effectively disciplining the "green box" subsidy of major developed countries (Das, 2006; Sharma, 2006).²² And problems related to the formulas for cutting tariffs and subsidies, the so-called "core modalities", and the treatment of sensitive products were not resolved (Heydon, 2006). It should be noted, however, that the European Union recently announced plans to review its Common Agricultural Policy. It can only be hoped that this review will reduce the trade-distorting subsidies that at present tend to limit export opportunities for African countries in some temperate agricultural products.

In addition to these concerns over progress in agricultural trade liberalization, Africa still faces market access problems in the form of NTMs that are deployed as non-tariff barriers. African exports are subject to increasingly stringent standards under the Agreement on the Application of Sanitary and Phytosanitary Measures and the Agreement on Technical Barriers to Trade.²³ This has given rise to concerns about these agreements at two levels.

First, the misuse of these requirements and contingency protectionist regimes (e.g. anti-dumping) as non-tariff barriers results in losses of export revenue for some African countries. In the late 1990s, European countries banned fish from Kenya, Mozambique, Uganda and the United Republic of Tanzania because of concerns over sanitary standards and control systems. Potential revenue losses for Uganda were estimated at \$36.9 million, while fishermen in the United Republic of Tanzania dependent on European Union sales were reckoned to have lost about 80 per cent of their income (Mutume, 2006; see also UNCTAD, 1998b). The Commission for Africa has argued that if the European Union were to apply international standards on pesticides, instead of its own more restrictive standards, to bananas, annual exports of bananas from Africa could increase by \$400 million. The World Bank has estimated that the annual cost to African

exporters of cereals, fruit, vegetables and nuts of complying with stricter European Union requirements on aflatoxins rather than with those of the Joint FAO/WHO Expert Committee on Food Additives is about \$670 million (Mutume, 2006).

Second, several African countries do not have the technical capacity or resources to comply with the required standards. For example, Uganda would need to spend about \$300 million to upgrade its honey-processing plants to comply with European Union standards on honey imports, and Kenyan farmers would have to spend 10 times more than they do now to comply with European Union standards on agricultural imports (Mutume, 2006).

Building the necessary laboratory and managerial capacity to meet the standards relating to technical barriers to trade and sanitary and phytosanitary measures in export markets should therefore be a prime issue for technical assistance programmes directed at trade and trade-related infrastructure of Africa countries. Ongoing programmes in which UNCTAD is a partner should therefore be encouraged to undertake such capacity-building projects. These programmes include the Joint Integrated Technical Assistance Programme for Selected Least Developed and Other African Countries (JITAP) (International Trade Centre), and the enhanced Integrated Framework for Trade-related Technical Assistance to Least Developed Countries. Such activities should also be prioritized within the framework of Aid for Trade capacity-building programmes.

(b) Competitive pressures in the global trading system²⁴

The policy lacunae with respect to agriculture discussed above have been exacerbated by recent developments in international trade for agricultural commodities. Marketing and distribution channels are now increasingly dominated by supermarkets in the context of global consumption patterns and new demands linked to production, technology, and health and safety concerns over food. The health and safety concerns over food underscore the need for traceability, which has in turn reinforced the dominance of global commodity market chains or global value chains.²⁵

The tightening of demands associated with participation in global value chains has compounded the challenges faced by Africa in its efforts to expand new income-elastic agricultural exports. The asymmetrical nature of power in global value chains results in an unequal distribution of total incomes. The producer countries do not have much power, as farming is highly fragmented

and the abolition of marketing boards (under adjustment programmes) reduced the capacity of farmers to raise their share of value chain rents. At the other end of the chain, importers, roasters and retailers compete for a share of value rents, while ensuring that few of these rents are passed on to the farmer, producer-country intermediaries or Governments (Fitter and Kaplinsky, 2001; see also Gibbon and Ponte, 2005). Those who control critical points along the chain, own established brand names or have access to shelf space in supermarkets make most of the profits in global value chains.

Participation in networks is therefore an important requirement for accessing developed-country markets. In order to gain competitive advantage in global markets, there is now an increased premium on accurate information, timely delivery and packaging, which creates entry barriers to new suppliers such as those from Africa. Also, Africa has been slow to tap into the cheaper finance and efficient logistics which, along with increased capital resources and skills, are currently vital for effective competition and for participation in global value chains in particular and international trade in general. Considering the weaknesses of Africa's private sector, underdeveloped and unreliable transport and communication networks and weak institutions, there is little evidence that this enormous competitive disadvantage will be overcome in the foreseeable future (UNCTAD, 2003a; Havnevik et al., 2007)

C. Conclusion

This analysis of the performance of agricultural exports in Africa suggests that the positive developments following trade liberalization are limited, particularly in comparison with other developing regions. This is, in part, because trade liberalization lacked complementary policies to address the incentives and the structural and institutional constraints that are most critical for enhancing agricultural productivity, output and exports.²⁶ These constraints have persisted and limited the positive response of agricultural exports to the new incentive framework created by trade liberalization.²⁷ Production and marketing costs increased during liberalization, with the removal of subsidies and currency devaluations, while the dissolution of marketing boards added price risks to the uncertainties of rain-fed agriculture. The consequence is that much of Africa continues to be dependent on traditional bulk agricultural commodities for a major share of its export earnings. Paradoxically, African countries have been losing market share to other developing countries even in exports of these commodities.

Africa has begun to export new market-dynamic agricultural products, but in volumes that are small in relation to the continent's potential in the markets for them. The private sector and private-public partnerships are critical in exploiting the opportunities in these markets, but there are very few African countries where the private sector is sufficiently developed to be able to take the lead in gaining access to global value chains and in penetrating the markets for these products. Thus, strengthening the capacities of African States will be crucial, particularly in the long run, to any meaningful improvement of Africa's position in global value chains and hence its greater participation in the international trade in new market-dynamic products (Gibbon and Ponte, 2005). The importance of the role of the State in providing these public goods is no longer contested even by the architects of Africa's trade liberalization (see, for example, World Bank, 2008b).

It follows that policy interventions to improve export performance in agriculture should target specific socio-economic issues and institutions that have been identified as preventing Africa from reaching its true potential in international agricultural trade. The main policy objective should be to improve agricultural productivity and efficiency in agricultural trade. As such, policy should be designed, *inter alia*, to increase public investment in research and development, rural infrastructure — including roads and irrigation facilities — and health and education. Easier access to inputs, encouragement for new investment and better access to market information would also help improve overall efficiency in agricultural trade. A speedy conclusion to the agricultural negotiations in the Doha Round in a manner that responds to the development interests of African countries will also be critical for Africa's agricultural trade in general.

Chapter 3

AFRICA'S EXPORT PERFORMANCE THROUGH MANUFACTURING EXPORTS

A. Trends in manufacturing exports

This chapter analyses the trends in manufacturing production and exports after trade liberalization. It identifies the most serious remaining challenges requiring attention to increase exports of manufactured products.

According to the architects of trade liberalization policies implemented in Africa starting in the 1980s, the argument for trade liberalization as a way to revive the manufacturing sector stemmed from the existence of different forms of trade protection in the 1970s and early 1980s, which isolated an inefficient manufacturing sector from the pressure of competition. These trade protection measures included high import tariffs, quantitative restrictions on competing imports, and high levels of tariffs on inputs and capital goods. In addition, direct export taxes and exchange rate overvaluations created substantial disincentives for manufacturing exports. In essence, the structure of incentives encouraged resource flows into protected and inefficient import-competing sectors that, as a result, had little incentive to innovate (World Bank, 1981; World Bank 1994).

Any trade and development strategy should attempt to increase manufacturing exports in view of the following four factors. First, trade in manufactured products has played a key role in the successful development experience of other regions, in particular East Asia. Africa would like to emulate this positive experience. Second, given Africa's historic dependence on low-value primary commodity exports and its impact on the continent's economic growth, it is probably opportune to envisage alternative export strategies. Encouraging the export of manufactured products would be a way of achieving the much-needed diversification out of the crowded low-value primary commodity market. Exporting high-value manufactured products could help Africa to move into new market segments, as the experience of Mauritius has shown. Third, manufactured products have a diversified demand, implying that these products offer a better potential for market growth than primary commodities traditionally exported by African countries. Fourth, given the small size of the domestic markets in most

African countries, export markets represent opportunities needed to absorb the additional production that would result from the process of economic growth and structural transformation in Africa. The large size of external markets could also help Africa's firms to realize the economies of scale necessary to become internationally competitive. In a nutshell, increasing manufacturing exports is necessary to "maintain industrial growth, expand employment opportunities, and diversify exports" (World Bank, 1981: 95).

It will not be easy for Africa to increase substantially its exports of manufactured products given the continent's poor historical trend in this regard. As table 7 shows, the shares of African countries' manufacturing exports to GDP over the last 25 years have remained very small for most countries. Africa has made marginal progress in terms of increasing its exports of manufactured products, even after trade liberalization.

In the period 2000–2006, only 8 countries out of a sample of 35 (23 per cent) for which data was available had manufacturing exports representing 10 per cent or more of GDP. At the continental level, this represented manufacturing export shares averaging 26 per cent of total merchandise exports. This gives Africa the lowest share of all developing regions. Over the same period, manufacturing export shares of total merchandise exports in East Asia, South Asia and Latin America were 92 per cent, 56 per cent and 54.5 per cent, respectively (figure 20). There were, however, important variations across African countries. Middle-income countries such as Mauritius, Morocco, Namibia, South Africa and Tunisia had relatively high shares, accounting for most of Africa's manufactured exports; the rest of Africa exported negligible amounts.

The low level of manufacturing exports can be associated with low manufacturing production. From 1965 to 2005, sub-Saharan Africa's manufacturing value added did not improve from its original value of 15 per cent of GDP in the 1960s (fig. 21). This proportion has remained half the value in East Asia and Pacific since the early 1970s. Information in table 7 above shows that in Africa, only Botswana and Swaziland have reached manufacturing export to GDP rates which are equal to or higher than the average of 30 per cent of GDP observed in the East Asia and Pacific region.

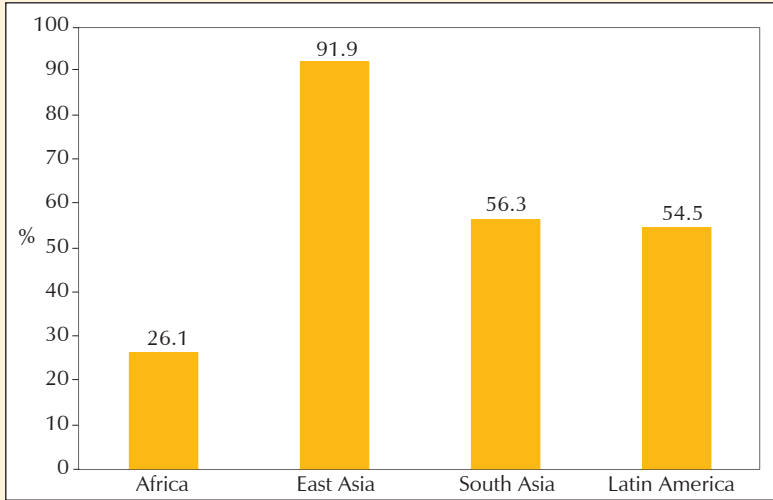
Figure 21 shows a mildly declining trend in the ratio of manufacturing value added to GDP. This is particularly the case in the period from the late 1990s onwards, when most economies in Africa were liberalized (see table 2 in chapter

Table 7
African countries' average manufacturing exports
(GDP percentages)

	1980–1989	1990–1999	2000–2006
Benin	0.5	1.5	1.3
Botswana	35.7
Burkina Faso	0.5	..	1.4
Burundi	..	0.2	0.4
Cameroon	1.3	1.5	0.9
Cape Verde	..	1.3	1.4
Côte d'Ivoire	3.4	6.3	7.8
Egypt	2.4	2.3	2.1
Ethiopia	..	0.4	0.8
Gabon	2.8	1.4	4.0
Gambia	0.4	1.4	0.6
Ghana	0.3	3.1	4.5
Guinea	..	4.5	6.3
Kenya	2.0	4.6	3.5
Madagascar	0.8	3.1	6.3
Malawi	1.6	2.5	2.6
Mali	0.1	1.4	8.8
Mauritius	25.2	28.5	26.1
Morocco	6.0	10.0	14.0
Mozambique	..	0.9	1.1
Namibia	17.2
Niger	0.4	3.5	1.8
Nigeria	0.0	0.6	0.7
Rwanda	..	0.2	0.2
Senegal	3.5	7.2	7.5
Seychelles	1.2	2.3	2.3
Sierra Leone	3.8	..	0.4
South Africa	4.4	9.1	13.2
Sudan	0.2	0.3	0.3
Swaziland	46.9
Togo	2.5	4.0	13.7
Tunisia	11.7	21.6	25.9
Uganda	..	0.7	1.0
United Republic of Tanzania	..	1.2	1.9
Zambia	..	4.4	4.4

Source: Computed from World Bank, 2008a.

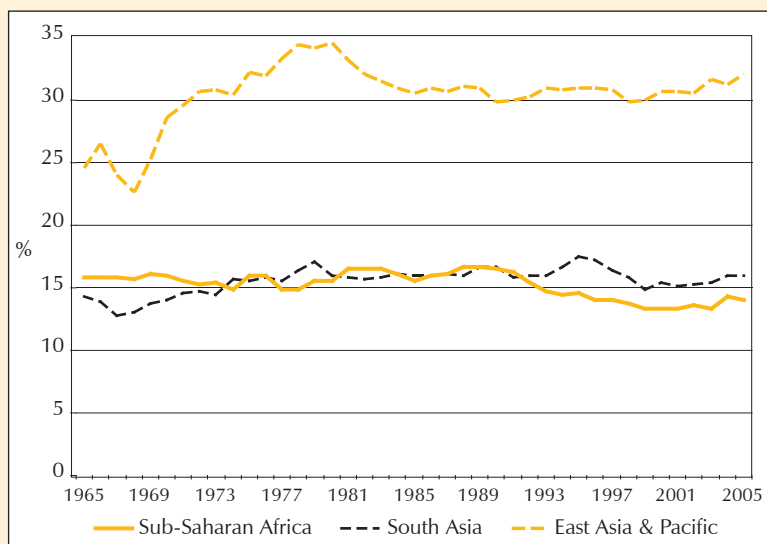
Figure 20
Developing regions' shares of manufacturing exports to total merchandise exports, 2000–2006



Source: UNCTAD, 2008a.

1). This finding could be one reason why manufacturing exports did not increase in most African countries even after trade liberalization. Disaggregating data by product groups in table 8 confirms the information in table 7 above: only a handful of countries account for most manufacturing exports from Africa. These are South Africa, Algeria, Libya, Tunisia, Morocco and Egypt. The list clearly shows that manufacturing exports are predominantly from North Africa. The case of Tunisia is interesting. The country had the highest tariff level in 2006, but the third-highest ratio of manufacturing export to GDP in the same year, illustrating that trade taxes are just one among several determinants of export performance, as discussed in chapter 1. These data also show that, in 2006, Africa continued to be a marginal player in the export of manufactured products. Despite the impressive growth in world exports of the different product groups represented in table 8, Africa's shares have remained extremely small. This is an indication of the continent's failure to take advantage of new export opportunities offered by the world economy. Making African countries more responsive to export opportunities should be one of the key priorities of the continent's future export strategies.

Figure 21
Manufacturing value-added to GDP
(Per cent)



Source: Based on World Bank, 2008a.

The next table provides more detailed data on the types and importance of Africa's manufactured exports. It considers 38 product groups and compares Africa's performance with other developing regions. The message is very clear: Africa remains an insignificant actor in world trade of manufactured products, even in the post-liberalization era. In the period 2003–2006, developing Africa accounted for less than 1 per cent of world trade in manufactured products. Sub-Saharan Africa accounted for about 0.5 per cent of world trade in manufactured products, but the share was only 0.23 per cent if South Africa was excluded.

A group-by-group analysis reveals that in sub-Saharan Africa, export market shares are higher than 2 per cent of total exports of the group in only four cases. If South Africa is excluded, there is only one group of manufactured products for which Africa exports more than 2 per cent of world trade — the group of non-metallic mineral manufactures, 3 per cent of which are exported from sub-Saharan Africa. In comparison, South-East Asia accounts for 18.5 per cent of total manufacturing exports. In contrast to Africa, this region also exports more than 10 per cent of total exports of 31 out of 38 product groups in the table.

Table 8
Africa's manufactured export shares,^a 1999–2006
(Value terms, per cent)

Product description	SITC Code	Rank	World growth in value	Africa's share of world exports	Top four exporters
Total all products	-	-	59.62	1999–2002 2.12 2003–2006 2.51	South Africa, Algeria, Nigeria, Libya
Manufactured goods	5 to 8 less 68	-	51.59	1999–2002 0.77 2003–2006 0.82	South Africa, Tunisia, Morocco, Botswana
Fertilizers other than group 272	56	20	48.90	1999–2002 6.80 2003–2006 6.09	Morocco, Tunisia, South Africa, Libya
Inorganic chemicals	52	16	52.40	1999–2002 5.42 2003–2006 5.26	South Africa, Morocco, Tunisia, Algeria
Non-metallic mineral manufactures, n.e.s.	66	17	51.70	1999–2002 5.45 2003–2006 4.70	Botswana, South Africa, Dem. Rep. of the Congo, Namibia
Articles of apparel & clothing accessories	84	27	38.29	1999–2002 3.43 2003–2006 3.18	Tunisia, Morocco, Mauritius, Lesotho
Iron and steel	67	1	108.94	1999–2002 2.31 2003–2006 2.43	South Africa, Egypt, Zimbabwe, Libya
Leather, leather manufactures and dressed fur skins	61	31	31.54	1999–2002 1.78 2003–2006 1.35	South Africa, Ethiopia, Tunisia, Nigeria
Essential oils for perfume materials and cleaning preparations	55	6	66.17	1999–2002 1.40 2003–2006 1.97	Swaziland, South Africa, Côte d'Ivoire, Egypt
Cork and wood manufactures (excluding furniture)	63	19	51.59	1999–2002 1.36 2003–2006 1.49	Ghana, South Africa, Gabon, Côte d'Ivoire
Footwear	85	28	34.20	1999–2002 1.22 2003–2006 1.39	Tunisia, Morocco, Lesotho, Côte d'Ivoire
Prefabricated buildings, sanitary, heating and lighting fixtures, n.e.s.	81	12	56.76	1999–2002 1.02 2003–2006 0.51	Egypt, South Africa, Morocco, Nigeria
Furniture and parts thereof	82	18	51.61	1999–2002 0.90 2003–2006 0.83	South Africa, Morocco, Tunisia, Egypt
Textile yarn and related products	65	33	27.96	1999–2002 0.81 2003–2006 0.73	Egypt, South Africa, Tunisia, Morocco
Paper and paper manufactures	64	32	31.51	1999–2002 0.62 2003–2006 0.66	South Africa, Tunisia, Côte d'Ivoire, Kenya
Rubber manufactures, n.e.s.	62	9	60.02	1999–2002 0.62 2003–2006 0.59	South Africa, Tunisia, Egypt, Morocco
Manufactures of metal, n.e.s.	69	11	58.22	1999–2002 0.59 2003–2006 0.68	South Africa, Zambia, Tunisia, Egypt
Other industrial machinery and parts	74	10	59.53	1999–2002 0.56 2003–2006 0.71	South Africa, Tunisia, Egypt, Nigeria
Dyeing, tanning and colouring materials	53	25	42.01	1999–2002 0.56 2003–2006 0.57	South Africa, Tunisia, Côte d'Ivoire, Egypt
Chemical materials and products, n.e.s.	59	13	53.33	1999–2002 0.55 2003–2006 0.58	South Africa, Egypt, Swaziland, Côte d'Ivoire
Organic chemicals	51	4	73.96	1999–2002 0.51 2003–2006 0.58	South Africa, Libya, Algeria, Equatorial Guinea

Source: Computed from UNCTAD 2008a.

a Product groups for which Africa exports at least 0.5 per cent of world export value in the base period, 1999–2002.

The general message from the tables and figures above is that Africa has played almost no role in the world manufacturing trade, both before and after trade liberalization. Since Africa's restrictive trade policies cannot be blamed for this, the main reason is most probably the low level of exportable manufacturing production, which leads to the failure to take advantage of available manufacturing export opportunities in the world economy. There are at least three general explanations for the low level of manufacturing production in Africa.²⁸ The first is that developing the manufacturing sector in Africa requires massive investments that are difficult to make, given the risky business environment prevailing in many African economies. This issue is discussed in the 2007 *Economic Development in Africa* report (UNCTAD, 2007). The second explanation is technological. It suggests that Africa lacks the technological capabilities needed to set in motion a successful process of industrialization. According to this view, firms in Africa fail to export manufacturing products because they do not have the technical efficiency required to innovate and create new goods that are competitive in world markets.

The third explanation — which is the most dominant and is related to the previous two — revolves around the comparative advantage argument. Africa's generous endowment in natural resources, combined with the continent's scarcity of skills, creates a comparative advantage in the production and export of primary commodities. This form of specialization, in turn, hampers the development of an export-oriented manufacturing sector. Some analysts have even gone as far as proposing that Africa is spoilt by its abundant natural resources, preventing the continent from developing more sophisticated products that could eventually be exported. Hence, observers have remarked that the continent suffers from a natural resource curse, which retards its development (Humphreys et al., 2007).

While the first two explanations are relatively straightforward, the comparative advantage argument has been misunderstood and to some extent misused when attempting to explain Africa's unenviable position in international markets. The following section discusses the comparative advantage thesis in some detail.

Table 9
Developing regions: shares in global manufactured exports, 1999–2006
 (Value terms, per cent)

	Developing economies		Developing Africa		Sub-Saharan Africa		Sub-Saharan Africa excl. South Africa		Northern Africa		East Asia		South Asia		South-East Asia		Latin America	
	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006
All products	30.93	34.71	2.12	2.51	1.39	1.62	0.96	1.18	0.76	0.93	12.16	14.48	1.47	1.77	6.46	6.31	5.24	5.08
Manufactured goods (SITC 5 to 8 less 68)	28.25	32.05	0.77	0.82	0.51	0.56	0.20	0.23	0.27	0.26	14.72	18.46	1.14	1.33	6.49	6.37	4.06	3.60
Chemicals and related products, n.e.s.	16.78	19.26	0.90	0.88	0.50	0.53	0.16	0.20	0.40	0.35	7.38	8.45	0.91	1.22	3.49	4.38	2.54	2.29
Organic chemicals	18.67	25.67	0.51	0.58	0.34	0.45	0.03	0.06	0.17	0.13	7.35	10.09	1.24	1.90	5.05	7.75	2.33	2.41
Inorganic chemicals	26.17	30.52	5.42	5.26	2.50	2.58	0.67	0.75	2.92	2.69	10.94	14.26	0.80	1.13	1.65	2.21	4.50	4.53
Dyeing, tanning and colouring materials	20.01	20.14	0.56	0.57	0.50	0.49	0.12	0.11	0.06	0.08	10.22	10.54	1.63	1.9	3.38	3.60	3.46	2.28
Medicinal and pharmaceutical products	7.06	5.81	0.18	0.12	0.11	0.08	0.04	0.03	0.06	0.04	2.47	1.92	1.11	1.10	1.12	1.11	1.82	1.22
Essential oils for perfume materials and cleaning preparations	15.32	16.20	1.40	1.97	1.15	1.74	0.85	1.42	0.25	0.23	3.36	3.63	0.75	0.78	3.79	4.31	3.84	3.37
Fertilizers other than group 272	20.42	25.32	6.80	6.09	1.43	1.29	0.51	0.56	5.37	4.80	3.15	5.81	0.44	0.40	2.50	2.26	2.43	2.59
Plastics in primary forms	26.47	30.83	0.29	0.47	0.23	0.22	0.03	0.03	0.06	0.25	14.96	16.44	0.48	1.00	5.70	6.81	2.51	2.54
Plastics in non-primary forms	15.94	18.39	0.32	0.26	0.15	0.16	0.06	0.05	0.17	0.10	9.23	10.27	0.43	0.68	2.80	3.15	2.19	2.43
Chemical materials and products, n.e.s.	14.83	17.03	0.55	0.58	0.50	0.52	0.08	0.11	0.05	0.06	6.85	8.32	0.8	1.01	3.77	4.20	2.48	2.34
Manufactured goods	30.04	33.01	1.96	2.29	1.72	2.04	0.73	0.76	0.24	0.26	14.75	16.52	2.91	3.17	3.87	3.74	4.62	4.81
Leather, leather manufactures and dressed furskins	49.68	52.35	1.78	1.35	1.28	0.98	0.56	0.55	0.57	0.37	27.00	29.07	5.18	5.40	3.13	2.80	12.00	12.83
Rubber manufactures, n.e.s.	20.79	24.63	0.62	0.59	0.46	0.46	0.07	0.07	0.16	0.13	9.41	11.72	1.15	1.49	4.28	5.60	3.80	3.57
Cork and wood manufactures (excluding furniture)	32.70	31.77	1.36	1.49	1.15	1.30	0.79	1.03	0.21	0.19	8.34	11.22	0.19	0.28	17.06	12.39	5.37	5.69
Paper and paper manufactures	14.03	14.72	0.62	0.66	0.53	0.53	0.12	0.14	0.09	0.14	5.90	6.31	0.21	0.31	3.66	3.43	2.94	3.00
Textile yarn and related products	50.54	53.49	0.81	0.73	0.41	0.36	0.27	0.21	0.40	0.37	31.94	34.63	7.20	7.73	4.74	4.39	2.56	2.20
Non metallic mineral manufactures, n.e.s.	28.08	31.93	5.45	4.70	5.25	4.38	2.98	3.00	0.20	0.32	8.26	10.81	6.36	6.74	3.21	3.21	2.90	2.60
Iron and steel	24.68	29.02	2.31	2.43	1.99	2.08	0.20	0.16	0.32	0.35	11.29	13.94	1.23	2.02	1.81	2.25	5.44	5.55
Manufactures of metal, n.e.s.	26.75	30.11	0.59	0.68	0.49	0.53	0.16	0.18	0.11	0.15	16.96	19.75	1.08	1.36	2.83	3.26	4.20	3.46

Table 9 (contd.)

	Developing economies		Developing Africa		Sub-Saharan Africa		Sub-Saharan Africa excl. South Africa		Northern Africa		East Asia		South Asia		South-East Asia		Latin America	
	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006	1999–2002	2003–2006
Machinery and transport equipment	26.70	32.31	0.30	0.40	0.22	0.30	0.04	0.06	0.08	0.1	13.16	18.98	0.16	0.29	8.04	7.86	4.53	3.96
Power generating machinery and equipment	12.98	15.26	0.18	0.30	0.16	0.28	0.04	0.04	0.02	0.02	4.78	5.93	0.21	0.38	2.40	2.86	4.95	4.95
Specialised machinery	11.70	15.58	0.30	0.32	0.26	0.29	0.07	0.08	0.04	0.04	6.77	9.01	0.28	0.46	2.47	3.06	1.43	1.98
Metal working machinery	12.13	16.95	0.14	0.14	0.13	0.11	0.02	0.03	0.01	0.03	8.94	12.09	0.33	0.52	1.66	2.87	0.71	0.81
Other industrial machinery and parts	15.51	19.32	0.56	0.71	0.52	0.67	0.04	0.05	0.04	0.04	7.94	10.9	0.25	0.46	3.03	3.53	3.16	3.03
Office machines and automatic data processing machines	45.58	55.32	0.05	0.06	0.05	0.05	0	0.01	0	0.01	23.00	35.88	0.10	0.11	18.40	15.94	3.91	3.12
Telecommunication and sound recording apparatus	40.04	51.58	0.12	0.16	0.11	0.14	0.02	0.06	0.02	0.02	22.48	36.2	0.05	0.09	9.73	8.33	6.96	5.56
Electrical machinery, apparatus and appliances, n.e.s.	39.80	46.51	0.34	0.43	0.08	0.09	0.01	0.02	0.26	0.34	19.02	25.36	0.17	0.26	15.45	16.27	4.44	3.65
Road vehicles	13.05	15.71	0.40	0.58	0.37	0.54	0.04	0.09	0.03	0.05	4.85	7.00	0.17	0.33	0.93	1.51	6.02	5.22
Other transport equipment	13.56	18.22	0.43	0.54	0.41	0.52	0.23	0.3	0.02	0.02	7.95	10.99	0.15	0.41	1.37	2.36	2.75	2.31
Miscellaneous manufactured articles	40.06	42.07	1.24	1.18	0.44	0.48	0.29	0.33	0.81	0.7	24.60	26.94	2.46	2.67	6.20	5.96	3.85	3.31
Prefabricated buildings, sanitary heating and lighting fixtures, n.e.s.	30.36	32.09	1.02	0.51	0.30	0.20	0.18	0.05	0.72	0.31	20.19	21.44	0.2	0.25	2.07	1.81	5.44	5.21
Furniture and parts thereof	27.99	33.55	0.90	0.83	0.81	0.71	0.11	0.09	0.09	0.12	12.52	18.17	0.13	0.39	7.32	6.99	6.45	6.11
Travel goods, handbags, etc.	66.62	60.36	0.36	0.36	0.11	0.12	0.07	0.08	0.25	0.24	54.92	52.36	2.78	2.45	6.40	3.86	1.63	0.79
Articles of apparel & clothing accessories	63.74	65.26	3.43	3.18	0.85	0.86	0.74	0.77	2.58	2.33	34.15	37.29	7.25	7.41	9.00	8.23	5.08	3.84
Footwear	53.98	55.01	1.22	1.39	0.22	0.32	0.19	0.29	1.00	1.07	37.00	38.14	1.76	1.99	9.04	9.04	4.39	3.74
Professional and scientific instruments, n.e.s.	15.80	26.09	0.20	0.21	0.13	0.14	0.04	0.04	0.07	0.07	8.41	18.20	0.24	0.25	3.16	3.59	3.6	3.56
Photo apparatus, optical goods, watches and clocks	30.40	29.85	0.14	0.13	0.09	0.09	0.05	0.05	0.04	0.03	21.89	21.53	0.18	0.20	6.00	6.15	1.79	1.48
Miscellaneous manufactured articles, n.e.s.	34.41	35.38	0.41	0.55	0.32	0.48	0.19	0.34	0.09	0.07	24.41	24.16	1.10	1.88	4.91	5.15	2.77	2.36

Source: Computed from UNCTAD on-line trade statistics

B. Is Africa's failure to export manufactured products due to comparative advantage?

A number of analysts consider that Africa's failure to export manufactured products is a result of the continent's comparative advantage. Wood and Mayer (2001: 369), for example, note that Africa's export dependence on primary commodities is due to the "combination of low levels of education and abundant natural resources". In the same connection, Mayer and Fajarnes (2005) write that Africa could triple its primary commodity exports given its comparative advantage. The reasoning follows the Heckscher–Ohlin theory, which asserts that a country's export composition reflects its resources. According to the theory, African countries should specialize in the production of primary commodities, given the continent's relatively generous endowment in natural resources. Africa should specialize in the export of coffee, cocoa, cotton and similar primary commodities and use its export revenue to purchase manufactured goods produced in developed economies and elsewhere.

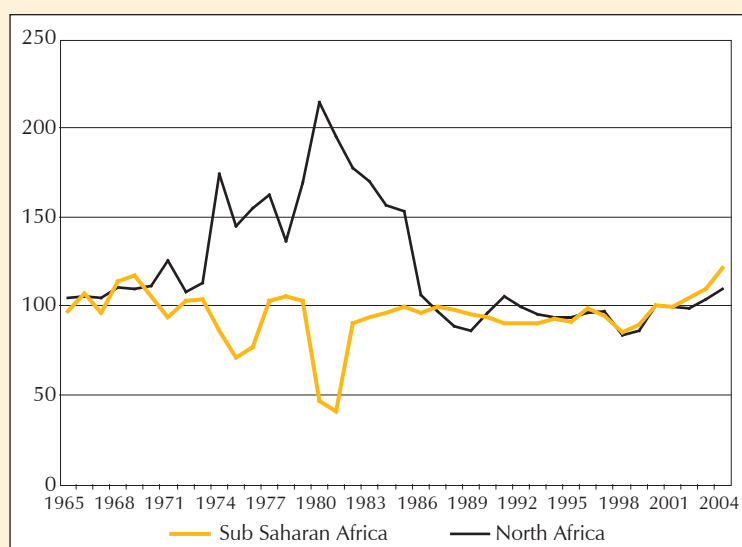
Even if this view has remained influential in many development circles, it is flawed in several respects. The assumptions underlying the comparative advantage argument are, empirically speaking, rarely met in reality. These assumptions include the following: (a) factors of production must be immobile; (b) the country must have the capacity to produce all types of goods; (c) trade must be balanced (no trade deficits); (d) perfect competition must prevail; and (e) all productive resources within the country must be fully employed. Even if some of these assumptions can be relaxed without totally invalidating the comparative advantage theory, it seems inadequate to advise African countries to specialize in the production and export of primary commodities based on the comparative advantage thesis before establishing its relevance.

Globalization and the organization of international trade in primary commodities have changed the global economic system and brought to the fore several factors that contradict most of the assumptions of the comparative advantage theory. For example, financial globalization and emigration have grown to such important proportions that it has become difficult to defend the assumption of immobility of the factors of production. Moreover, price volatility of primary commodities and the secular decline in their terms of trade have made income and growth more volatile, aggravating African countries' trade deficits, which invalidates the "balanced trade" assumption of the comparative advantage hypothesis.

Figure 22 shows that, from 1965 to 2004, sub-Saharan Africa's terms of trade did not improve. In fact, over a longer time horizon — the period 1900–2000 — calculations in Ocampo and Parra (2003) show that the prices of the 24 major non-fuel commodities — including those of special interest to Africa, such as cocoa, coffee, copper, cotton, sugar and tea — declined by an average of 1 per cent per year. African export prices in 2002 were a fraction of their 1995 level. Coffee exports lost two thirds of their value, whereas exports of copper, cotton and sugar lost roughly half of their 1995 value (Ackah and Morrissey, 2005). The recent increase in commodity prices does not fundamentally affect this secular trend. With this generally negative picture, the suggestion that Africa should continue to export its traditional primary commodities is difficult to justify.

Commodity exporters have also suffered from the ills of market concentration in importing countries, where a small number of large companies act as processors, traders and retailers. This is the case with cocoa and chocolate, for example.²⁹ In addition, advising African countries to focus on the production

Figure 22
Africa's terms of trade for the period 1965–2004
(2000 = 100)



Source: World Bank, 2006.

and export of primary commodities, which are produced more competitively in other regions, contributes to keeping commodity prices low due to oversupply. Although the prices of a number of commodities of export interest to Africa have recently increased, this does not reduce these economies' need to diversify out of commodities (see chapter 2). Also, it is untenable to assume that all factors of production within African economies are fully employed to justify the relevance of the comparative advantage argument.

There is an emerging literature arguing that the most important issue for a country's export potential is not its static comparative advantage, but its potential, determined by what the country specializes in through developing its competitive advantage (Lall et al., 2006; Hausmann et al., 2007). Economic development entails structural change, usually from primary commodity dependence to manufacturing and services. Even within manufacturing, the experience of newly industrialized countries has shown a transformation from the production of mainly low-technology goods such as textiles and garments, to more technology-intensive products, which are characterized by increasing or at least stable terms of trade. This explains the preference for exporting more sophisticated products, even in economies that may have a comparative advantage in the production of primary commodities.

If anything, justifying a country's export performance based solely on the traditional comparative advantage thesis misses the dynamic aspect of the concept. Lall et al. (2006) provide an interesting illustration of this dynamic. The authors ranked 766 export products according to their "sophistication" in 1990 and 2000 to determine which types of products moved on the sophistication ladder over time.³⁰ They found that upward mobility on the sophistication ladder was not uniform; it was much easier to add more value to relatively sophisticated products than to unsophisticated ones. This finding supports the argument that comparative advantage must be understood as a dynamic concept. Countries can acquire new comparative advantages depending on the way they use their resources to promote new competitive products. Hence, the strategy of product diversification consisting of simply adding value to originally unsophisticated products such as primary commodities has its limits.

It is also clear that not all traded goods have the same effect on economic performance. According to Hausmann et al. (2007: 2), "Countries that continue to produce 'poor-country' goods remain poor... [so] countries become what they produce". The countries that specialize in higher productivity goods record

a better economic performance than those specializing in low-productivity goods.³¹ Using an index of the productivity level associated with a country's specialization pattern, poor African countries such as Niger, Ethiopia, Burundi, Benin and Guinea display the smallest values of the index. On the other hand, rich countries such as Luxembourg, Ireland, Switzerland and Iceland have the highest values. As a result, the countries that have been able to reap the benefits offered by expanding export markets thanks to the process of globalization are those that have successfully transformed their economies from the production and export of poor-country goods to high-productivity goods.

Poor-country goods are generally primary commodities and the high concentration in the export of such primary commodities is another characteristic of poor African countries. Amurgo-Pacheco and Pierola (2008) score economies according to their export diversification and find that, relative to developed and other developing economies, sub-Saharan Africa has the lowest level of product diversification over the period 1990–2005. In fact, most African countries continue to export one or two primary commodities. East Asian economies display the highest diversification score, and this region has displayed the most spectacular economic performance over the last few decades.

Confining Africa to the production and export of low productivity goods (the so-called “poor-country” goods) based on the traditional comparative advantage argument is tantamount to condemning the continent to remain poor. There is no reason why African countries should remain commodity exporters forever. As suggested by the endogenous growth theory, countries can create new comparative advantages outside the primary commodity sector through the positive externalities created by the accumulation of human capital and increases in technological capabilities. Above all, rather than encouraging African countries to maintain their specialization in the production and export of primary commodities, in spite of the continuous deterioration in their terms of trade, these countries should be assisted to get out of the primary commodity trap by putting in place economic structures that encourage the production and export of manufacturing products. Strategies towards economic diversification into higher productivity goods would increase welfare in the future, even if they may be costly and hence not necessarily optimal in the short term.

In the light of the foregoing, the main barrier preventing African countries from exporting high-value manufactured products is not comparative advantage. Africa's failure to export manufacturing products is due to the combination of

macroeconomic and microeconomic factors that define the incentive structure for producing and exporting manufactured products. For example, the lack or weakness of an incentive system encouraging entrepreneurs to engage in the “cost discovery” process is considered a major factor explaining why Africa has been locked up in the undiversified primary commodity economy.³² Macroeconomic policies such as exchange rate and fiscal policies can affect the incentive to produce more exportable products. However, microeconomic factors — such as firm productivity, investment, firm size and firm access to factors of production — are the most direct determinants of what firms produce and how competitive they are in their ability to export them. Focusing on these factors could create a new competitive advantage in manufactured products in African economies; this is discussed in the next section.

C. Trade liberalization and manufactured exports: lessons from the microeconomic empirical literature

Differences in trade liberalization policies implemented in Africa over the last 25 years can explain only part of the difference in export performance between Africa and other developing regions. Firm-level evidence is central in explaining why some firms are successful exporters of manufactured products while others are not. Put differently, why do countries such as China export competitively the same manufactured products African countries have been unsuccessfully trying to export?

1. Firm competitiveness and manufactured exports

The small size of domestic African markets implies that African firms should target export markets in order to expand their production (Bigsten and Soderbom, 2006). The export liberalization measures discussed in chapter 1 — eliminating foreign exchange rationing, export licensing and export taxes, and dismantling marketing boards — could be considered the means, not the ends, through which African countries could increase their manufacturing exports. Studies that seek to relate trade reforms and the export performance of the manufacturing sector in Africa identify low productivity as one key factor constraining African firms’ capacity to participate in export markets (Teal, 1999b; Bigsten and Soderbom, 2006). Low productivity in Africa originated from import substitution policies pursued during the 1960s and 1970s. For example, the use of quotas rather than tariffs shielded domestic firms from the effect of external competition, which

led to their inefficiency and lack of competitiveness in international markets. In Ghana, for example, even the modest increase in manufacturing output in the first half of the 1990s (about 4 per cent per annum) following trade liberalization in the 1980s, was not due to technical progress, but to physical and human capital accumulation (Teal, 1999b).

However, technical efficiency does not seem to be the main determinant of the difference in competitiveness between Africa and other developing countries, particularly those in Asia.³³ This is illustrated in a comparison of productivity levels in the garments industries of Kenya and Bangladesh, two countries at a comparable level of income (GDP per capita was \$456 and \$454, respectively, in 2006). Bangladeshi and Kenyan garments producers use similar technologies, but Bangladesh has become one of the top garments exporters, selling all its production to the European and United States markets (Fukunishi, 2007). Kenya, on the other hand, has not been able to penetrate the export market, and even lost a big share of its domestic market due to strong pressure from cheap imports following trade liberalization in the 1980s and 1990s.

The comparison between Bangladesh and Kenya is interesting because the former is a success story of a poor country, sharing the same characteristics with many African countries, which has been able to break into the world garment market. One of the main barriers to the competitiveness of Kenya's garments relative to those from Bangladesh is the high production cost. On average, the production cost is three times higher in Kenya than in Bangladesh. Decomposing this cost, the most important determinant is the wage cost, which is 138 per cent higher in Kenya than in Bangladesh.

The difference in wage costs between firms in Africa and other developing regions appears to be an empirical regularity (Dollar and Zeufack, 1999). Allocative inefficiency, the second most important factor, is just 17 per cent higher in Kenya than in Bangladesh. Technical inefficiency, the cost of capital and firm size (scale economies) do not seem to have a significant influence on the difference in production costs of firms in the two countries.

There is no doubt that cost efficiency is important for a firm's competitiveness in global markets. The examples of Ethiopia, Ghana and Kenya show that there is a positive correlation between manufacturing firm productivity and exporting (Mengistae and Pattillo, 2004). Hence, whether or not a firm will export mainly depends on two factors — the cost of production and the level of entry barriers

in the export market. Exporting requires production costs that are below a certain threshold, while firms with costs above the threshold focus on the domestic market.³⁴

High costs in Africa's manufacturing include not just labour costs. Non-labour costs of credit and transport, as well as indirect costs, are much higher in Africa than in China. In Kenya and Madagascar, for example, export finance costs borne by clothing exporters represent 136 per cent and 227 per cent, respectively, of the cost in China. Material costs in the two African countries are twice and almost three times, respectively, the cost in China (Kaplinsky and Morris, 2007). Therefore, the high cost of Africa's manufacturing exports relative to those of its competitors appears to be a structural problem rather than a relatively limited issue of labour productivity.

Whether firms become efficient due to exporting — which is commonly referred to as the learning-by-exporting hypothesis — or whether firms export because they are efficient is a question that has interested researchers for some time. Using appropriate econometric techniques that account for the possibility of a two-way causality between productivity and exporting, empirical evidence on African manufacturing concludes that the causality runs from exporting to higher efficiency, confirming the learning-by-exporting hypothesis (Bigsten et al., 2004; Van Biesebroeck, 2005). Learning from exporting is so important that it can generate long-term productivity gains amounting to 50 per cent of total value added (Bigsten and Soderbom, 2006). This clarifies the finding in chapter 1 that the level of past exports tends to lead to higher exports in the future, a process we have termed “export momentum”.

Exporting is associated with two types of learning. The traditional aspect refers to the experience that exporting firms acquire through productivity learning, which they use to produce at lower cost. There is another type of learning, termed “market learning” (Fafchamps et al., 2008). This relates to the fact that exporting exposes firms to foreign consumers' requirements, giving the former the opportunity to learn how to design products that appeal to foreign consumers. Data on Moroccan manufacturing firms show that market learning, not productivity learning, is what enables firms to export. This finding could be explained by the high concentration of Moroccan manufactured exports in consumer items.

In view of the gains associated with exporting, the question is, “Why so few manufacturing firms in Africa export?” In particular, the question is, “Why wouldn’t firms learn to be more productive in the domestic market, improve their competitiveness and start exporting?” While this sounds like a logical question, the discussions in chapters 1 and 2 argue that export markets are still characterized by different forms of entry barriers, particularly NTMs. These pose a serious challenge to potential exporters from Africa. Moreover, Africa’s domestic market requirements in terms of product characteristics are so different from those in export markets that the former are poor indicators of the needs of export markets. Hence, exporting firms are normally those that are formed with the specific objective of producing for foreign markets. In Morocco, 75 per cent of manufacturing firms that export do so within their first three years of existence (Fafchamps et al., 2008). Old firms are unlikely to switch to exports, even as a response to changes in macroeconomic incentives.

The evidence discussed in this section suggests that, in order to increase manufacturing exports from Africa, trade liberalization policies should be accompanied by strong actions to strengthen firm productivity and market learning, in order to increase price competitiveness and produce exports that appeal to foreign consumers.

2. Trade liberalization, firm investment and export

Physical capital investment has been identified as the main channel through which trade affects the level of economic growth (see for example, Baldwin and Seghezza, 1996; Wacziarg and Welch, 2003). As discussed in chapter 1, trade openness may increase the rate of investment in three ways. First, import liberalization reduces the cost of imports in general and this can induce economies which rely on imported capital inputs to import more, increase their investments and allow the competitive production of exportable goods. Second, trade liberalization in general and import competition in repressed economies reduce entry costs, opening up investment opportunities. The widening of the production base raises pressure for efficiency, increasing competitiveness for domestic and possibly export markets. Third, export liberalization should make exporting more profitable, helping to attract more domestic and foreign investments in the production of exportable goods. However, whether productive investment has actually increased in Africa because of trade liberalization is an empirical question.

The relationship between liberalization and the rate of investment is tested using regression analysis. Over the period 1950–1998, physical capital investment in liberalized regimes was between 1.2 and 1.9 percentage points higher than in non-liberalized regimes, depending on the specification of the model considered (Wacziarg and Welch, 2003). This difference represents a small increase in investment, particularly in Africa, where very high increases in investment levels are needed to achieve socio-economic development goals. For example, it has been estimated that Africa needs to increase its investment-to-GDP ratio to about 34 per cent, which is close to the investment rate in the East Asia and Pacific region, to attain the Millennium Development Goals (UNCTAD, 2007). Table 10 shows, however, that increases in investment following trade liberalization were modest.

The data in table 10 show a relatively weak investment response after liberalization, irrespective of the region or group of countries considered. This suggests that the low levels of investment are probably due to factors other than trade controls. The factors explaining low investment in Africa include poor infrastructure, high entry costs, labour market constraints, low investor protection, difficulty of accessing credit, and high and cumbersome tax systems (UNCTAD, 2007). Although trade liberalization reduced the effect of these factors on investment, its effect was limited.

At the macroeconomic level, investment in Africa is mainly influenced by economic activity and the depth of financial development. Measures such as the amount of credit to the private sector and total liquid liabilities are good predictors of the rate of investment (Ndikumana, 2000). This is consistent with firm-level evidence in a number of African countries. It shows that the lack of financial resources is the leading constraint to investment in the continent. The sensitivity of investment to changes in profits uncovered in microeconomic

Table 10
Trade liberalization and investment in Africa
(Median ratios over GDP)

Region	Before	After	Change (%)
Overall	19.31	20.41	5.70
Africa	17.30	19.47	12.54
Sub-Saharan Africa	16.44	18.87	14.78
Non-Africa	20.42	20.83	2.01

Source: Liberalization dates are from table 1, chapter 1. The investment variable is from World Bank, 2008a.

studies of Africa's manufacturing is an indication that firms tend to rely on internal resources to finance their investments. The preference for internal resources suggests that external resources might be too costly or too difficult to access, or both.

Microeconomic studies of the determinants of firm investment in Africa's manufacturing covering Cameroon, Côte d'Ivoire, Ghana, Kenya, Uganda, Zambia and Zimbabwe have estimated that, for every \$1 earned in profits, between \$0.06 and \$0.11 is invested, with the higher limit representing the effect in small firms. Although this is a relatively modest response of investment to profit, the statistical significance of the result is an indication of financial constraints facing manufacturing firms.³⁵

The message from this discussion is that, despite the fact that African countries have made significant efforts in dismantling their trade barriers, investment in the exportable manufacturing sector has been rather limited. The reason is that, in spite of the interest they attracted from the multilateral financial institutions that spearheaded Africa's economic reforms, trade liberalization and other domestic policies are only one factor, not necessarily the most important, determining investment and export performance. The typical reform package coming from multilateral financial institutions lacked complementary investment policies to strengthen the production sector and diversify Africa's exports in order to ease African economies' overdependence on primary commodities. Moreover, Africa's geographic isolation from its export markets implies that export costs are very high. Unfortunately, the reforms undertaken did not recognize the importance of investing in physical infrastructure to reduce the cost of trading.

What Africa needs now is to make the necessary investments that will help it to build strong, diversified and competitive productive sectors, enabling the continent to penetrate different segments of the export market. Relying on primary commodity exports alone has not been a successful export strategy for Africa. It is clear, however, that the small firms dominating Africa's manufacturing sector are unlikely to make it into export markets. Exporting will require the creation of large firms comparable in size with those in competing developing countries. This leads to the discussion of the issue of firm size and export performance.

3. Firm size and export performance

The manufacturing sector in general comprises a wide spectrum of activities. At the low end are activities that process products such as textiles, garments, leather goods and some basic transformation of agricultural and food products. These are produced in large factories where returns to scale can be an important factor of productivity in a highly competitive environment. These activities are mostly located in developing economies. At the high end are high-tech activities that characterize today's knowledge economy. These activities manufacture highly sophisticated products and are mostly located in developed and newly industrialized economies. Technology and knowledge are their key inputs but large size is not necessarily relevant.

African manufacturing belongs to the first group, where successful firms in export markets are usually large. Moreover, large size is an important asset in Africa, given the challenging domestic economic environment within which firms operate. In the Kenyan manufacturing sector, for example, the probability of firm failure decreases with firm size, meaning that large size helps firms to survive (Nkurunziza, 2005a). Young small firms are particularly fragile, highlighting the importance for survival and future performance of large size at entry (Audretsch, 1991; Audretsch and Mahmood, 1995). In this light, the fact that the distribution of the size of firms in Africa's manufacturing sector is skewed towards small size of firms is a serious handicap to export performance.

The analysis of the association between firm size and exporting in African manufacturing has uncovered a strong size effect on the likelihood to export. Exporting firms in Cameroon, Ghana, Kenya and Zimbabwe are systematically larger than non-exporting firms (Bigsten et al., 2004). This result is confirmed by another study on Mauritius and Zambia. Generally, a firm in sub-Saharan Africa exports only if it reaches a minimum size of 100 workers (Teal, 1999a). Firms of this size are very few, and they belong in the upper end of the size distribution. Therefore, the particularly small size of African manufacturing firms may help to explain why so few African firms export.

The fact that exporting requires an initial large sunk cost in terms of investments in market information and product compliance with the requirements of foreign markets may also explain why small firms self-select out of the export market. This cost argument also justifies the persistence of exporting: breaking into export markets is so costly that exporting firms tend to remain active in the export markets once they have entered them. Exporting firms have every incentive to

remain exporters, given the benefits associated with exporting, including the productivity learning and market learning effects discussed earlier.

The importance of firm size for exporting, however, cannot be dissociated from efficiency requirements. Large firms in Mauritius, for example, are more able to export than are large firms in Ghana, because productivity is four times higher in Mauritius than in Ghana, even if wages are three times higher in Mauritius than in Ghana (Teal, 1999a). The same pattern is observed when comparing firms in Thailand and Kenya. Thailand's success in exporting processed foods and textiles is largely due to differences in productivity. Thai firms produce three times as much value added as Kenyan manufacturing firms in the processed foods and textiles sectors, given the same amount of labour and capital (Dollar and Zeufack, 1999).

This difference in productivity is partly attributed to differences in the business environment between the two countries. Thai firms are also much larger than Kenyan firms. In the study mentioned above, small firms represent 60 per cent of the Kenyan sample, compared with 29 per cent for Thai firms. This distribution is in accordance with the fact that African manufacturing is dominated by small firms. More precisely, the size of Kenyan firms in the food-processing subsector is one fifth the size of Thai firms in the same sector. In the textiles and garments subsector, Kenyan firms represent, on average, 64 per cent of the size of Thai firms. Given that African firms start with very small size relative to firms in other regions, one important question is whether small firms have the opportunity to grow and reach the threshold size required to participate in export markets.

4. Credit constraint and firm growth

Considering that large size is necessary for an African firm to participate in export markets, the effect of credit on firm growth becomes a crucial issue. One possible explanation for the small size of African manufacturing firms may be that firms start with very small size and do not have access to external financial resources to invest and grow, owing to the underdevelopment of the financial sector in many African countries. Survey-based evidence covering the manufacturing sector in a number of African countries in the 1990s found that 33 per cent of manufacturing firms demanded credit, but their demands were rejected. Moreover, of the 55 per cent of firms that did not apply for credit, many needed it but did not apply, because they assumed their applications would be rejected. Both the firms that applied for credit but were rejected and those that

self-excluded from the credit market because they did not believe they would be successful are credit-rationed firms (Bigsten et al., 2003).

There is a two-way causality between size and access to credit. On the one hand, credit helps small firms to invest and grow. On the other hand, large firms have a better chance to access credit than small ones. Whereas 64 per cent of micro firms (those with five workers or less) applying for credit are rejected, the rejection rate drops to only 10 per cent for large firms (having more than 100 workers). Small and medium-sized firms (10 to 25 workers and 26 to 100 workers, respectively), have rejection rates of 42 per cent and 21 per cent, respectively. To some extent, this may reflect financial institutions' greater costs in dealing with small credit applicants, but it could also be due to the underdevelopment of the financial sector.

The degree of success in loan applications and raising initial capital by Kenyan small-scale and microenterprises is also partly associated with the owners' education and training (Green et al., 2007). Given that most such firms are family owned and stay in the same hands, this could be an additional reason explaining, at least in part, why small firms remain small and unable to reach the size required to participate in export markets.

The dominance of small firms in the manufacturing sector in Africa raises the question of access to inputs and firm growth: does access to financial resources, particularly credit, help firms to grow and reach the size that is compatible with exporting? There is some evidence supporting this hypothesis. Uganda experienced bank closures in the 1990s, as a result of imprudent lending practices. In the aftermath of these closures, the firms that lost relationships with banks experienced severe setbacks. Some of them were forced to downsize in order to survive, thus experiencing negative growth, while others simply collapsed (Habyarimana, 2003). In Kenya, among the manufacturing firms that survived the economic crisis of the 1990s, those firms that used credit grew faster than those not using it, illustrating the importance of credit constraints on firm growth (Nkurunziza, 2005b).

In the light of the finding discussed earlier that exporting firms tend to do so within their first few years of existence, evidence is needed to determine whether small firms with no participation in export markets have been able to grow into large export-oriented firms due to their access to credit. We are not aware of any study documenting the link between a firm's access to credit, growth and exporting in Africa; more research is needed on this.

D. Conclusion

Africa has taken significant steps to liberalize its trade regime, but with very limited manufacturing export response. Some analysts have attributed Africa's failure to increase manufacturing exports to the continent's natural comparative advantage in the production of primary commodities. This is a simplistic and flawed argument. There are circumstances where countries have changed their comparative advantage by choosing to invest resources in the production of new high-value products with better export potential. Instead, Africa has failed to increase its exports of manufacturing goods primarily because it has not addressed the most binding constraints to exporting, namely the weak supply capacity of African economies and poor trading infrastructure. Since trade liberalization has been successful in improving the trading environment, the focus now should be on addressing the structural constraints in African economies, to make them more responsive to export opportunities. This will require massive investments in productive and trading infrastructure, with a view to increasing the continent's competitiveness in the world market of manufactured products.

African countries could create a comparative advantage in manufactured products if they address the specific problems hampering the competitive production of these products. These problems include low levels of productive investment, low productivity, small size of manufacturing firms and limited access to production factors, particularly credit. A number of African countries, particularly oil exporters, currently have the financial resources at least to start this economic transformation process using their revenue from commodity exports. Meanwhile, it is doubtful that furthering trade liberalization alone without strengthening the productive capacity of African firms will substantially increase Africa's manufacturing exports.

Chapter 4

STRENGTHENING AFRICA'S EXPORT PERFORMANCE: SOME POLICY PERSPECTIVES

This chapter discusses some specific policy proposals that could help strengthen Africa's export performance. It is not exhaustive, but rather indicates some specific policy perspectives, which follow from the analysis of the previous chapters. This analysis shows that (a) to date, the benefits of trade liberalization for the agricultural and manufacturing sectors have been limited; and, (b) this is due, in part, to a lack of complementary policies addressing structural, institutional and socio-economic constraints that restrain African economies' supply response to export opportunities.

The policy proposals presented in this chapter are founded on the view that export development requires more than trade liberalization, and that trade policy needs to be closely linked to sectoral development policies. Constraints on supply response are best addressed by specific sectoral policies, and not just macroeconomic policy reforms. Macroeconomic and political stability as well as policy predictability are necessary foundations for agricultural and industrial sectoral policies in Africa.

Each country's priorities will also have to be set in accordance with the country's specific circumstances. As a result, countries' development strategies in the two sectors will have different policy combinations. The proposals provide a menu of some indicative lines of action from which specific policies can be chosen.

A. Agricultural exports

"Agriculture... offers great promise for growth, poverty reduction and environmental services, but realizing this promise also requires the visible hand of the State – providing core public goods, improving the investment climate, regulating natural resource management and securing desirable social outcomes" (World Bank, 2008b: 2).

The benefits of trade liberalization for the agricultural sector have been limited. This is partly because of the lack of a complementary policy package to address structural, institutional and socio-economic constraints that restrain agricultural supply response and exports. These issues are best tackled by specific sectoral policies and not macroeconomic policy reforms as such. However, it is important that sectoral and macroeconomic policies are mutually reinforcing. Given that some of the problems facing Africa's agricultural exports have to do with conditions in global markets, the strategy to promote Africa's agricultural exports must be based on policies by national Governments, working in cooperation with Africa's development partners.³⁶

The overall development strategies of countries should incorporate agricultural sector development strategies, which take into account the agro-ecological conditions of each country, and go beyond strategies for developing crop agriculture. The strategies should incorporate complementary programmes to develop off-season employment activities as a means of revitalizing the rural economy and addressing food security concerns within a holistic framework. Increased opportunities for year-round employment will also help to stem the flow of rural–urban migration of able-bodied young people who could be encouraged to take to farming as a profession and replace the growing population of ageing farmers. The agricultural sector development strategies should incorporate some or all of the following issues, depending on the development priorities and agro-ecological conditions of each country.

1. Supply-side constraints

These constraints should be addressed through an integrated programme of “supply-side measures” with two main objectives of tackling supply-side constraints critical to:

- (a) Creating greater incentives to encourage investment in the agricultural sector, and to improve agricultural productivity and exports; and
- (b) Enhancing the competitiveness of African agricultural exports vis à vis those of other developing regions.

The integrated programme of “supply-side measures” should have the following components:

(a) Incentive package

A comprehensive package of fiscal and other incentives to investors in the agricultural sector should be developed. The incentive package should be compatible with the Government's macroeconomic objectives and tailored to its agricultural development priorities. For example, greater incentives and facilities could be provided to those investing in new market dynamic income-elastic products such as horticultural products and processed food. In this regard, the following steps should be taken:

- (a) Set up an input subsidies programme, carefully designed and targeted at specific groups to improve agricultural productivity;
- (b) Improve access to credit by enhancing the efficiency of the financial sector, including reducing segmentation between formal and informal sectors, and improving interactions between financial institutions and the private sector (for details see section B.3 below);
- (c) Set up special export development and investment funds to provide financial resources in support of business ventures in agriculture. This could be supported by donors and contributions from the private sector, e.g. exporters' associations and chambers of industry and commerce.

(b) Improving productivity

The State, perhaps in collaboration with private-sector agents, should increase the level of investment in technology, infrastructure (roads, irrigation facilities and post-harvest storage), extension services, supply of inputs, and research and development to improve productivity and quality of smallholder farms. It should also improve marketing systems. Considering the reduction in government expenditure allocated to agriculture in the past two decades, increased public investment in rural infrastructure, research, extension and improved marketing is critical. Governments should therefore endeavour to meet their commitment under the New Partnership for Africa's Development's (NEPAD's) Comprehensive Africa Agriculture Development Programme to increase public expenditure on agriculture as a share of total government expenditure to 10 per cent by 2008.³⁷ Specifically, increases in productivity and in agricultural supply response could be attained through doing the following:

- (a) Design and implement "green box" policies,³⁸ especially to support poor farmers in remote rural areas. These policies are classified as non-

trade distorting, and are not proscribed by the WTO Agreement on Agriculture;

- (b) Provide health, water and educational facilities as a means of improving the overall quality of rural life.

(c) Reforming socio-economic institutions

In the medium-to-long term, Governments have to deal with socio-economic institutions that inhibit the efficient deployment of various factors of production — such as land tenure systems and associated inheritance systems — and gender relations governing the division of labour and division of income accruing from farming ventures. This will necessitate specific policies for:

- (a) Land reforms; and
- (b) Improving the property rights of women. This is important in view of the fact that women account for much of the agricultural production in sub-Saharan Africa but, most often, their role is not acknowledged in the design and implementation of agricultural policy interventions.

Engineering changes in the social structure of societies would be very difficult to accomplish. It may be necessary, therefore, that proposed changes to these socio-economic institutions be derived from the results of field research, including close consultation with various communities as so as not upset the delicate balance among them.

2. Diversification and value addition

Governments have to develop programmes that promote diversification towards higher value added products. These will enable African countries to increase their gains from agricultural production and trade. It will also permit Governments to reduce their vulnerability to commodity price volatility and to boom and bust cycles. Some possibilities include the following:

- (a) Export promotion authorities in collaboration with exporters' associations should launch programmes to collate and disseminate market information to producers;
- (b) A "diversification fund" with support from development partners (i.e., within the context of the second window of the Common Fund for Commodities) should be set up.³⁹

The opportunities for such diversification are influenced by the existence of health and safety standards in international trade, and the capacity of producers in African countries (especially small farmers) to comply with them. This draws attention to the need for programmes to promote market penetration and improved market access.

3. Market access

For African countries, improving market access entails the need to adapt to increasing global integration and its associated challenges of increased competition. A major implication of these challenges for African producers is that they must increase their participation in global value chains to be able to access the markets of developed countries and emerging economies. Participation in these chains gives producers access to information about markets and enables buyers to obtain information about, and develop confidence in, the supplier. For specific products, however, the entry of producers, processors and traders into the value chain depends on product characteristics, technical requirements, market structures and the organization of trade.

The determining factor in market entry is the capacity to upgrade and produce according to specific requirements relating to quality, health and environmental standards, as well as consumer preferences and tastes. Presently, some African producers encounter difficulties in meeting these standards. This notwithstanding, standards have an important and positive role to play in the development and expansion of world trade. For example, the compliance with sanitary and phytosanitary standards enables the effective management of risks associated with the spread of plant and animal pests and disease. Compliance with these standards also helps to stimulate value addition, innovation and product differentiation. With this in mind, the following should be considered:

- (a) Governments, in collaboration with exporters' associations, should set up capacity-building programmes to assist with trade standards compliance;
- (b) Information bureaus should be set up to give information on requirements for participating in global value chains, to promote the use of opportunities in dynamic markets. Some of these programmes could be supported by donors bilaterally or within the framework of Aid for Trade (see below).

Total elimination of trade barriers in developed countries is critical for enhancing the benefits African countries derive from their participation in international trade in agriculture. Simulation exercises have shown that developing country benefits from eliminating agricultural support measures are relatively small if all trade barriers are not eliminated (Hoekman et al., 2002; Gayi, 2007). Concerning these issues:

- (a) Liberalization of international trade in agriculture should go hand in hand with policies to ensure an objective application of various sanitary and phytosanitary measures, technical barriers to trade and environmental standards, which are increasingly being deployed as non-tariff barriers, even as tariffs are being eroded; and
- (b) Ongoing agricultural negotiations in the Doha Round provide a legitimate framework within which to address the pressing market access problems of Africa's agricultural exports.⁴⁰ The speedy conclusion of the round in a manner that addresses the trade and development concerns of African countries will therefore send a strong positive signal to these countries that their priorities could be taken care of within a multilateral framework.

4. Private sector participation

A major challenge for new African entrants is how to identify market opportunities and meet the specific requirements for each market. This necessitates a constant examination of diversification opportunities, as areas of competitive advantage are dynamic and change constantly. Considering the weakness of the private sector in much of Africa, and the "public goods" nature of these services, they would have to be provided by Governments or in partnership with the private sector under public-private partnership arrangements, depending on country circumstances. In addition, the application of global value chains to agriculture means that private sector development in agriculture cuts across several policy domains, including improvements in the overall business environment and contract enforcement, and the development of business service providers. Exporters associations and producers cooperative should form partnerships with Governments to enforce contracts, including producing to meet specified standards.

5. Regional integration, South–South trade

Governments, in partnership with the private sector, need to promote regional economic cooperation, with the objective of overcoming the constraints of small domestic markets and diversifying away from traditional bulk primary commodities into market-dynamic products. Africa already has a variety of regional economic groupings at different stages of trade integration. However, a major problem for most of them is the weak implementation of trade protocols signed by members. Countries should comply with the obligations of all regional trade protocols they have entered into in order to promote intra-African trade in line with NEPAD priorities, which underscore regional economic groupings as “building blocks” for African economic integration.

The emergence of “Southern drivers” of the global economy suggests that Africa must rethink its existing trade and development strategies and reorient its external trade towards new growth poles in Asia, such as China and India, but also Brazil and the Russian Federation:

- (a) Export promotion authorities and exporters’ associations should increase their participation in various South–South arrangements (e.g., Forum on Asia–Africa Cooperation in Export Promotion) with a view to identifying export market opportunities beyond oil and minerals in Asian/emerging markets; and
- (b) Governments and the private sector should explore the increasing trade and financial links with China, India and other emerging economies by encouraging foreign direct investment (FDI) into their agricultural sectors. Oman, for example, is contemplating investing in food production in Africa, to be exported to the Middle East and Asia.

6. Aid for Trade, development partnerships

It is important to sustain the recent increases in aid to sub-Saharan African agriculture in view of the important role of ODA in funding public investments. However, greater coordination and harmonization of aid among donors and with recipient countries will be critical in ensuring its effectiveness (UNCTAD, 2006) in addressing the priorities of the agricultural sector in each country. African countries require technical assistance programmes to help them adjust to the new global environment, in particular the food and health standards enunciated in sanitary and phytosanitary and technical barriers to trade agreements, as

well as the private standards of supermarkets. These could be delivered with the framework of Aid for Trade and other trade and trade-related technical assistance, such as the Enhanced Integrated Framework.

A few such trade capacity-building programmes are already running and are excellent examples of bilateral cooperation between Africa and its trading partners in providing trade and trade-related infrastructure to facilitate market penetration. One such programme is the West Africa Trade Hub in Accra set up by the United States Agency for International Development, which provides technical assistance to investors who want to export to the United States. Second, in order to meet the sanitary requirements of developed countries, a new faculty exchange programme was instituted in August 2007 to enable African agricultural specialists to study at American universities. This United States–Africa Sanitary and Phytosanitary Capacity-Building Programme has established a partnership with African scientists and scholars to promote sound agricultural teaching and research techniques.⁴¹ These programmes could be replicated by the European Union (for African countries that benefit from the Everything But Arms initiative) and countries that have preferential trade arrangements for African countries.

During the round table discussion on commodities at UNCTAD's quadrennial ministerial conference, held in Accra, Ghana, in April 2008 (UNCTAD XII), there was a consensus that the varying interests of producers and consumers would need to be reconciled through international dialogue and consensus-building on policy actions to deal with commodity problems and related issues. A three-pronged international policy action, including through the intergovernmental framework of UNCTAD, was identified as the way forward. These include:

- (a) Integrating commodity policies into national, regional and international development and poverty reduction strategies in order to ensure the attainment of the Millennium Development Goals;
- (b) Agreeing on trade-related policies and instruments for resolving commodity problems, including through the Doha Round; and
- (c) Designing investment and financial policies for accessing financial resources for commodity-based development, including with respect to ODA, Aid for Trade and contingency financing, among others.

In conclusion, the complex characteristics of agriculture, its potential for poverty reduction and impact on the environment suggest that the sector does

not lend itself to simple policy solutions. Agricultural policies cannot realistically be formulated independent of other sectors and should therefore be an integral part of overall economic development policy. Governments have to make complex policy choices and carefully weigh the trade-offs before agreeing on any policy package to diversify and enhance agricultural exports. Such policy choices should take into account the intersectoral dimensions, bearing in mind various linkages between the agricultural, manufacturing and services sectors. In this context, it is propitious that NEPAD has identified agriculture as a priority for the continent. Its Comprehensive Africa Agriculture Development Programme⁴² launched in 2003 should provide some policy directions to Governments concerning the trade-offs entailed.

B. Exports of manufactures

In view of the disappointing experience of commodity-based exports in Africa, one of the objectives of trade liberalization was to reallocate resources towards the production of exports, including manufactured products. However, as discussed in this report, trade liberalization has had a very limited positive effect on the production and export of manufactured products; Africa's world market shares of manufacturing exports are negligible. The question now is what African countries should do to increase their participation in the international trade of manufactured products. As argued in this report, the key challenge is how to improve the microeconomic determinants of efficient manufacturing production that can compete in world markets. Three interrelated actions are proposed to strengthen the productive capacity of the manufacturing sector: increasing the competitiveness of manufacturing firms, helping the expansion of firm size and facilitating firm access to factors of production in order to invest and grow.

1. Increasing firm competitiveness

Efficiency is arguably the most important factor that determines a firm's competitiveness and participation in export markets. In Africa, the need to increase competitiveness through the overhaul of the current production and export infrastructure cannot be overemphasized (UNCTAD, 2007). Competitiveness must be built at the economy and firm level.

(a) Competitiveness at the economy level

Building competitiveness at the economy level has to deal with several issues:

- (a) Overhauling the basic productive infrastructure to make production more reliable. Power generation, water supply and telecommunications are three key areas that need special attention. In addition, building a competitive manufacturing sector will require the strengthening of the support infrastructure needed for exporting, including roads, railways and port facilities. Some countries are confronting the infrastructure challenge head-on. For example, Nigeria is taking advantage of the recent surge in its oil revenue to modernize its energy sector, expand its railways network and upgrade its telecommunications infrastructure. The Democratic Republic of the Congo has also mobilized funds, through a bilateral loan, to finance an ambitious programme to overhaul its infrastructure sector. Over the next few years, the country intends to build (a) 3,200 kilometres of railways; (b) close to 4,000 kilometres of asphalt roads; (c) a highway linking the country to Zambia in the south; and (d) 31 hospitals, 145 health centers, 2 universities and 5,000 units of social housing.⁴³ Angola is also implementing significant infrastructure projects.
- (b) Helping the countries without their own resources to mobilize external capital for infrastructure finance from three sources:
 - Allocating a bigger share of ODA to infrastructure development. For example, doubling the current share of ODA to GDP allocated to infrastructure would just bring the figure to its 1990s level. Hence, doubling the share of ODA allocated to infrastructure should be considered as a minimal objective;
 - Using new private flows for infrastructure development in Africa coming from sovereign and other investment funds, particularly those from the Middle East;
 - Capitalizing on international investors' renewed interest in Africa's economies by issuing sovereign bonds to mobilize resources for infrastructure investment. Ghana, for example, has recently mobilized \$3.2 billion through such a mechanism, an amount four times higher than what the country had expected to raise.

- (c) Encouraging cross-border trade infrastructure. It is unlikely that the manufacturing sector in Africa will grow to a competitive level if it is limited to small domestic markets. The smallness of individual African markets and the difficulty for most firms to access the markets of industrialized countries suggest that in the short and medium term, the expansion of intra-African trade could offer the opportunity to widen markets outside national boundaries. In so doing, some key infrastructure projects could be executed at the regional level, taking into account regional economic complementarities. The NEPAD initiative on regional infrastructure could provide the basis for such cooperation. The African Development Bank has been identified as the leading institution in the mobilization of resources for infrastructure development, while NEPAD's Medium- to Long-Term Strategic Framework (MLTSF) spells out the key modalities for the development of regional infrastructure in Africa.

(b) Competitiveness at the firm level

Firm competitiveness for exporting could be improved through three channels:

- (a) Increasing labour productivity by promoting vocational training, on-the-job training and the sharing of best practices in production processes;
- (b) Building firm-level technological capabilities so that they can upgrade technology to meet the standards and other norms required by the current trading system as well as export markets;
- (c) Devising appropriate incentives to orient manufacturing production towards the export market in order to benefit from the efficiency gains and other advantages accruing to exporting. This could be done through an efficient export promotion agency tasked with providing information on market opportunities, standards and other export requirements. Given its "public good" nature, the creation of this agency should be sponsored by the State but, if necessary, managed privately. In the long term, efficiency gains from exporting could compensate for the eventual short-term cost of its creation.

It should be noted that the development of a reliable production and export system has important externalities that benefit the economy at large. Learning by exporting and creating linkages between both large and small exporting and

non-exporting firms — through, for example, subcontracting arrangements — create such positive externalities.

In short, it is expected that higher labour productivity, low indirect costs and better production and support infrastructure could help to create firms that are more efficient and bring about a competitive manufacturing sector in Africa.

2. The need for large manufacturing firms

Empirical evidence suggests that only large firms export in Africa. However, the continent's size distribution in the manufacturing sector is heavily skewed towards very small firms, which raises an important policy issue: how to increase the number of large firms in Africa's manufacturing sector in order to raise exports. There are two possible ways: (a) encourage the creation of large manufacturing firms, right from the beginning. The second is to create an enabling environment that helps young small firms to grow and become large (see next section).

Encouraging the creation of large firms

There are two ways through which African countries can encourage the creation of large firms:

- (a) Encouraging FDI in the manufacturing sector: empirical evidence based on Africa's manufacturing data shows that firms with foreign ownership export more than domestic ones, and they are on average larger. In Africa, FDI has tended to flow primarily into the extractive sector, with very few linkages with the rest of the economy. This helps explain why FDI has had a limited positive effect on key development indicators such as employment creation and poverty reduction. FDI flows in Africa's manufacturing sector usually have a more positive effect on development indicators because of the labour intensity of the sector. The policies and actions needed to encourage such flows have been discussed in the 2005 *Economic Development in Africa* report (UNCTAD, 2005).
- (b) Tapping domestic resources for investment in the manufacturing sector: there are African entrepreneurs who do not invest in Africa even when they are capable of mobilizing the required resources to start large firms. A number of Africans prefer to send their money abroad because they do not find the domestic environment conducive for business (UNCTAD, 2007). Such investors stay or return to Africa only if they find that the expected

risk-adjusted return on their capital is as high as in other economies. Hence, deepening political and economic stability and providing a predictable legal and regulatory framework would probably help to bring these potential investors back and contribute to the development of a dynamic manufacturing sector.

Encouraging the creation of large firms may appear to be an obvious recommendation but it poses a policy dilemma. In Africa, many firms are so small that growth and exporting is not their objective. The main (sometimes sole) objective is to sustain the livelihoods of their owners and their families; this is a very important socio-economic role which must be acknowledged. Therefore, if a country's priority is to reduce poverty and ensure a relatively fair distribution of income, assistance should target the smallest firms. On the other hand, a viable export sector can only be created if assistance is concentrated on the needs of a relatively small number of large firms. Hence, if the policy objective is to create and sustain a vibrant export sector, the focus should be on the creation of large firms. In a world of limited resources, it is not obvious that these two objectives can be pursued simultaneously. As such, the development priorities of each country would determine the most relevant objective and the policy choices made to attain it.

3. Facilitating access to credit to invest and foster firm growth

One reason why African entrepreneurs start very small firms is their limited access to capital. Start-ups rely on the private resources of their owners since they cannot have access to credit or raise resources from the capital market in view of the weaknesses of the financial sector in Africa. Hence, the low level of income in Africa helps to explain why start-ups are generally very small. The question of start-up size would not be an issue if firms could easily access factors of production, particularly credit, in order to invest, grow and eventually reach the large size needed to be competitive in export markets. There are two key areas of focus: facilitating access to credit and fostering interactions between financial institutions and the private sector.

(a) Access to credit

Access to credit is among the most important determinants of firm performance. However, in Africa, small firms are credit-rationed, particularly because the traditional banking sector is not adapted to serving this market

segment; the transactions costs of processing such applications are simply too high. This problem can be alleviated in two ways:

- (a) Developing informal and semi-formal credit institutions more adapted to the needs of the small firms that dominate Africa's manufacturing sector. These institutions may have a role to play in the short term, but it is doubtful if they are the best long-term solution to the credit problem, given their limited resources. Therefore, modernizing the financial sector should be the long-term objective to create a deeper financial sector.
- (b) Creating credit information bureaus could narrow, at low cost, the information asymmetry between small credit applicants and financial institutions. These institutions collect information on the creditworthiness of potential applicants and share it with lenders at relatively low cost. In view of the potentially high social returns to such an initiative, Governments could help the private sector in establishing such bureaus, through public-private partnerships. For efficiency, it would be desirable that the bureaus be privately managed.

(b) Creating a framework of interaction between financial institutions and the private sector

This could help to bridge the information gap between the demand for and supply of credit. In most African countries, these two entities work in isolation. Banks wait passively for clients while the latter complain of not having information on banks' expectations and *modus operandi*. In addition, banks have credit application procedures that are sometimes so complex that potential credit applicants are discouraged from even attempting to apply.⁴⁴ In this regard:

- (a) Regular contacts should be organized between representatives of the private sector and the banking system, possibly through the chambers of commerce, to exchange ideas on issues of mutual interest.
- (b) Commercial banks could consider opening in their agencies special windows dedicated to small enterprises, as this has been successfully experimented with in some countries. These windows go beyond the traditional loan evaluation functions. They also help small enterprises prepare their loan applications and provide some training in project management;
- (c) Education programmes and outreach campaigns should be organized on a regular basis, to increase the awareness of private sector actors,

particularly small enterprises, on different business opportunities available to them. Helping small firms to invest, grow and participate in export markets would be beneficial to all.

C. Conclusion

The limited response of agricultural and manufacturing exports to the new incentive structure put in place by trade liberalization suggests that other actions beyond trade policy are needed to increase Africa's exports of agricultural and manufacturing products. The challenge is how to enable African economies to make the best use of the new environment to seize export opportunities offered by the world economy. In order to mobilize domestic resources to help finance the policies discussed above and compensate for any short-term loss in revenue due to trade liberalization — for example, the loss of traditional revenue from trade taxes — African countries should identify “new” domestic financial resources. These include migrant remittances, efficiency gains in tax collection and use, and repatriation of capital flight (UNCTAD, 2007).

Trade liberalization should not be seen as an end in itself. As implemented in Africa, it has sometimes been conflated with a development policy strategy. Trade liberalization should be one of the means within a comprehensive development strategy through which African countries can achieve higher rates of economic growth. In this regard, “an international environment that supports a gradual approach to trade liberalization in Africa would be welcome” (Economic Commission for Africa and African Union, 2008: 13). It is time to shift the focus back to the development strategies consonant with the development challenges and priorities of African countries.

Appendix table
Trade liberalization and trade performance: Generalized Method of Moments econometric results

Variable	Export equation			Import equation			Trade balance equation		
	Full sample	Africa	Non-Africa	Full sample	Africa	Non-Africa	Full sample	Africa	Non-Africa
Lagged dependent variable	0.800** [0.03]	0.785** [0.033]	0.873** [0.032]	0.743** [0.033]	0.725** [0.055]	0.777** [0.049]	0.516** [0.052]	0.451** [0.069]	0.626** [0.041]
Foreign growth	0.008** [0.002]	0.008** [0.003]	0.009** [0.003]				0.201** [0.069]	0.351** [0.112]	0.056 [0.076]
Change in terms of trade	0.002** [0.000]	0.002** [0.000]	0.002** [0.000]	0.001* [0.000]	-0.001 [0.000]	-0.001* [0.000]	0.066** [0.012]	0.064** [0.015]	0.077** [0.020]
Change in REER***	-0.221** [0.058]	-0.313** [0.066]	-0.190** [0.064]	-0.223** [0.056]	-0.335** [0.067]	-0.186** [0.071]	0.796 [1.897]	0.947 [1.185]	0.469 [2.704]
Trade liberalization dummy	0.072** [0.019]	0.091** [0.029]	0.047** [0.014]	0.075** [0.021]	0.059* [0.027]	0.075** [0.020]	-1.363 [0.779]	-1.51* [0.80]	-0.636 [0.398]
Lagged domestic growth				0.001 [0.001]	0.002* [0.001]	0.002 [0.001]	-0.063 [0.033]	-0.071* [0.030]	-0.06 [0.058]
Fiscal revenue				-0.001 [0.002]	-0.003 [0.002]	0.001 [0.001]	0.166** [0.057]	0.236** [0.058]	0.059 [0.062]
No. of countries	78	34	44	78	34	44	78	34	44
No. of observations	2137	851	1286	2106	843	1263	2108	843	1265
Test for AR(2)---probability	0.404	0.466	0.63	0.309	0.318	0.506	0.728	0.864	0.109

* Represents statistical significance at the 5% level. The numbers in brackets are robust standard errors.

** Represents statistical significance at the 1% level. The numbers in brackets are robust standard errors.

*** Real effective exchange rate.

Notes

- 1 The exchange rate premium is calculated as the parallel rate minus the official rate over the official rate.
- 2 First, the thresholds for taxes, non-tariff barriers and the premium are arbitrary. This is unavoidable because there is no known perfectly liberalized economy which could be used as a benchmark. Second, the definition of liberalization involves different types of data from different sources, some of which require some level of subjective interpretation. Moreover, relevant information was not available for each criterion and each country, so not all the countries were classified on the basis of all five criteria. This limitation is acknowledged by Sachs and Warner themselves. Third, it is clear that some criteria for trade liberalization are time-sensitive, meaning that they do not have the same relevance across time. For example, with the fall of communism in the late 1980s, criterion (v) lost its relevance in the 1990s and 2000s. The same may be said with respect to criteria (iii) and (iv): official and parallel exchange rates converged in the 1990s in most developing countries, reducing the premium to very low levels. Moreover, State monopolies on exports have largely been dismantled in most countries. Fourth, using period averages of the tariff, non-tariff barriers and parallel market premium variables, and end-of-period information on export marketing boards and socialism variables are very rough measures of the timing of liberalization. It is more interesting to determine the year, not just the decade, during which a country liberalized. Overall, it has been found that the Sachs and Warner measure has a tendency to under-predict trade openness.
- 3 The coefficient on the variable in the African sub-sample is almost twice that of the group of other developing countries and the two are statistically different.
- 4 Most of these traditional commodities suffered significant declines in trade volumes, from 18 to 11 per cent, between the period 1980–1981 and the period 2000–2001, even though the volume of international trade in fruit and vegetables increased by about 15 per cent. Internationally traded volumes in the case of rice, chickens and cut flowers increased by more than 40 per cent in each case between 1993–1995 and 2003–2005 (Havnevik et. al., 2007: 26).
- 5 Despite the strong increases in nominal export prices for a range of primary agricultural commodities in recent years, the overall trend depicts a fall in real prices between the period 1993–1995 and the period 2003–2005 (Havnevik et al., 2007: 26). For a detailed discussion of high price volatility and its impact on African economies, see UNCTAD, 2003a, in particular pp. 2–22).
- 6 Of the 48 countries for which data were presented for the period 2003–2005, primary commodities made up more than 90 per cent of the total exports of 13 countries, including 8 which are oil exporters; and more than 75 per cent of half the total number of countries. Excluding fuels, primary commodities made up at least 70 per cent of the total exports of one in three countries. Almost all the 10 countries for which primary commodities (including fuels) made up less than 50 per cent of total exports were middle-income countries.
- 7 The transforming economies in South Asia, East Asia, the Pacific, the Middle East and North Africa have accounted for about two thirds of agricultural growth in the developing world, mainly through productivity gains rather than through expansion in

the amount of land devoted to agriculture. Cereal yields in East Asia rose by 2.8 per cent a year between 1961 and 2004, far more than the 1.8 per cent recorded in the industrial countries (World Bank, 2008b).

- 8 “The reform’s main objective is to increase the productivity and efficiency of the cotton sector by successfully moving from a monopolistic structure to a system based on competition. The reform aims at expanding cotton production while spreading the productivity gains and income increases to a larger number of cotton producers and generating multiplier effects within and outside the cotton sector and the rest of the economy.” (Summary of the poverty and social impact analysis (PSIA) of the Benin Cotton Sector Reform, available on the World Bank website, at www.worldbank.org).
- 9 In 2007, farmers were able to buy a 50 kg bag of fertilizer for about \$6.50, a quarter of the price in 2004.
- 10 This is the main conclusion reached by the abundant economics literature on the elasticity of supply of agriculture to price signals, which deals with mostly methodological issues and the quality of data for evaluating supply response in different socio-economic contexts. However, this is not discussed here as it is not directly related to the analysis in this section.
- 11 Unless otherwise stated, the discussion in this section is based on UNCTAD, 1998a, chap. III.
- 12 These include consumer goods such as soap, textiles, sugar, cooking oil, tinned milk, matches, roofing sheets, radios and bicycles, which were in short supply because of the collapse experienced by many countries prior to the implementation of adjustment programmes.
- 13 This much has been acknowledged by the Independent Evaluation Group that reviewed World Bank assistance to agriculture in sub-Saharan Africa in 2007 (World Bank, 2007).
- 14 This is defined as the agricultural value added less the total consumption of agricultural producers.
- 15 It is still an open question whether tenure systems encourage or discourage investments and agricultural innovation. There is some evidence that indigenous land-tenure systems, including rules of inheritance that necessitate the division of a deceased’s farm among numerous heirs, have often reduced farms to sizes that are too small — or, where the deceased had several farms, have led to scattered plots that are too far apart — to justify any meaningful investment. On the other hand, it has also been suggested that investments to improve land are actually increased under this system because they can increase the security of user rights (UNCTAD, 1997b; 1998a).
- 16 <http://www.country-studies.com/ghana/the-economic-recovery-program.html>.
- 17 This proportion is far lower than the level attained by other developing regions, even in the early 1960s.
- 18 This excludes dry land agriculture.
- 19 For detailed discussions on market access issues and subsidies, see UNCTAD, 2003a, pp. 22–26.
- 20 Despite the fact that the true preference margin for Africa is negative (on average, African exports are given lower preference than those from the rest of the world), its market access is still good because of the preferential market access it enjoys, which

- decreases its average export tariffs (the so-called “composition effect”). This effect outweighs Africa’s negative “true preference margin” (Bora et al., 2007).
- 21 Exports from Benin, Malawi, Mauritius, Swaziland and Togo, for instance, are penalized because they are mostly highly protected products, and preferences do not fully compensate for the loss. In contrast, those of Chad, the Democratic Republic of the Congo and the Libyan Arab Jamahiriya are not, as these are mainly oil, gas and mineral products (Bora et al., 2007).
 - 22 The developed countries have been accused of “box-shifting” of domestic subsidies, whereby many of these subsidies subject to reduction commitments have been reallocated to the “green box” (Das, 2006; Sharma, 2006).
 - 23 The SPS sets out the rules on food safety and animal and plant health standards. While it allows countries to set their own standards, it also stipulates that regulations must be based on science; and should be applied only to the extent necessary to protect human, animal or plant life or health. They should not arbitrarily or unjustifiably discriminate between countries where identical or similar conditions prevail. Member countries are encouraged to use international standards, guidelines and recommendations where they exist. However, members may use measures which result in higher standards if there is scientific justification. The objective of the TBT is to ensure that regulations, standards, testing and certification procedures do not create unnecessary obstacles. However, this agreement also recognizes countries’ rights to adopt the standards they consider appropriate. The agreement says the procedures used to decide whether a product conforms with relevant standards have to be fair and equitable. It discourages any methods that would give domestically produced goods an unfair advantage. Despite all these built-in safeguards against misuse, there is some evidence that both Agreements have been to use to serve protectionist ends.
 - 24 Except where otherwise stated, the discussion in this section is based on UNCTAD, 2003a.
 - 25 The governance of these global value chains (which defines the functional division of labour along the chain) determines the chain membership and obliges other actors to perform unwanted value-added activities, or else excludes them. Redistribution takes place in the global value chains along the axes of marginalization/exclusion and inclusion/upgrading (Gibbon and Ponte, 2005).
 - 26 However, country-specific analysis would be necessary to shed more light on the nexus between Africa’s agricultural export performance and trade liberalization, as there are differences in agro-ecological conditions and in the quality of implementation of trade liberalization policies by different Governments, as well as in the initial conditions prevailing in different countries.
 - 27 It should nevertheless be pointed out that the socio-economic structures that determine access to land, the gender division of labour, the control of resources and the distribution of returns from farming do not lend themselves easily to simple policy solutions in the short to medium term.
 - 28 Specific explanations of the failure to produce large quantities of manufactured exports are provided in the section dealing with microeconomic issues.
 - 29 For more on this specific point, see “Commodity dependence and development” by Action Aid and the South Centre available at: <http://www.southcentre.org>.

- 30 The sophistication index is based on the assumption that richer countries export more sophisticated products because these products must allow their high-wage producers to compete in world markets. Such products are characterized by high technology content, low transport costs, good infrastructure, marketing, etc. The sophistication index is a combination of all these factors. For details on the computation of the sophistication index, refer to Lall et al. (2006).
- 31 The least productive goods are primary commodities exported by a number of African countries. They include vegetable products, sisal and agave, cloves, and vanilla beans. The most productive goods are not produced in Africa. They include some types of iron and steel coated with aluminium, sheet piling of iron or steel, tyre cord fabric of viscose rayon, and foil of refined copper, not backed (see table 3). Interestingly, these are products that could be produced in Africa using the continent's raw materials.
- 32 Hausmann et al. (2007) describe the concept of "cost discovery" as a process through which an entrepreneur trying to produce a product for the first time in a developing country faces a level of cost uncertainty that is much higher than the one faced by subsequent entrants. Indeed, if the first entrant is successful, he sends a signal to other potential entrepreneurs that the product can be profitably produced, reducing their search costs. In such a case, social returns are very high. On the other hand, if the first entrant fails, he bears the total cost. Therefore, in order to encourage more entrepreneurs to engage in this "cost discovery" process through which new products are "discovered", produced and eventually exported, and given the positive externalities associated with a successful search, first entrants must be properly compensated.
- 33 Technical efficiency relates a firm's actual production to the production frontier or the maximum possible production, taking technology as given and considering a set of inputs. Allocative efficiency, on the other hand, refers to the efficiency with which a firm allocates its production factors to minimize cost.
- 34 The issue of non-tax entry barriers is discussed in chapters 1 and 2.
- 35 The issue of credit rationing is discussed in detail later in this section.
- 36 For a detailed discussion of these policies, see UNCTAD, 2003a; UNCTAD, 2003b; and NEPAD's Comprehensive Africa Agriculture Development Programme at <http://www.fao.org/docrep/005/Y6831E/y6831e-01.htm#TopOfPage>.
- 37 Considering that most Governments have already fallen short of this target, the timeline for meeting it should, perhaps, be extended to 2015.
- 38 The following measures are permitted under the agreement: increasing expenditure for agricultural research, extension, training for specific food crops (including the provision of the means to facilitate the transfer of information and results of research to producers), pest and disease control and even marketing. Sub-Saharan African Governments could also provide infrastructure in support of agricultural development without falling foul of the provisions of the agreement. These include: physical infrastructure to promote agricultural activities — including roads, electricity, water, dams and drainage schemes — environmental programmes and assistance for deprived regions. The calculation and application of the aggregate measurement of support is not product-specific, and as such guarantees some flexibility in domestic support policies, as long as global commitments reflected in individual country schedules are not exceeded. Under the special and differential treatment accorded LDCs and other poor developing countries, including sub-Saharan Africa, Governments are also free

to use a special category of production support policies, which are exempt from the calculation of a country's current total aggregate measure of support. These policies encompass agricultural input subsidies to low-income or resource-poor producers, investment subsidies, and government assistance to encourage agricultural and rural development. These exemptions allow considerable leeway for sub-Saharan African Governments to support their agricultural sectors (Gayi, 2007; Hodge and Charman, 2007).

- 39 Considering the distortions that "project funds" could introduce into the budgetary process, such a fund could be disbursed through national budgets, but earmarked specifically for diversification activities.
- 40 For a discussion of some specific proposals on how the ongoing negotiations of the Doha Round could help improve the agricultural sector, enhance exports and address sub-Saharan Africa food security concerns, see Gayi, 2007: 313–316.
- 41 For some examples of United States support in the area of investment and trade in Africa, see the Statement of the United States delegate to the forty-fourth Executive Session of the UNCTAD Trade and Development Board on 9 July 2008.
- 42 The Comprehensive Africa Agriculture Development Programme is the outcome of a joint institutional effort by FAO, the World Food Programme, and the World Bank/ Forum for Agricultural Research in Africa Partnership. The programme covers three mutually-reinforcing "pillars" with the objective of addressing the crisis in Africa's agriculture expeditiously: (a) extending the area under sustainable land management and reliable water control systems; (b) improving rural infrastructure and trade-related capacities for improved market access; and (c) increasing food supply and reducing hunger. It also contains one long-term "pillar" on agricultural research, technological dissemination and adoption, and addresses other issues such as institutional reform, capacity-building and the role of women in agriculture. See <http://www.fao.org/docrep/005/Y6831E/y6831e-01.htm#TopOfPage> (assessed 12 June 2008).
- 43 See *Jeune Afrique* (2007).
- 44 This problem was highlighted during discussions in Burundi and Zambia in the context of UNCTAD workshops on "Enhancing the role of domestic financial resources in development" in April 2008. This is a project funded under the fifth tranche of the United Nations Development Account.

References

- Ackah C and Morrissey O (2005). Trade policy and performance in sub-Saharan Africa since the 1980s. Economic research working paper 78. Tunis. African Development Bank.
- Amurgo-Pacheco A and Pierola MD (2008). Patterns of export diversification in developing countries: intensive and extensive margins. Policy research working paper 4473. Washington, DC. World Bank.
- Audretsch DB (1991). New-firm survival and the technological regime. *The Review of Economics and Statistics*, 73 (3): 441–450.
- Audretsch DB and Mahmood T (1995): New firm survival: new results using a hazard function. *The Review of Economics and Statistics*, 77 (1): 97–103.
- Baldwin RE and Seghezza E (1996). Testing for trade-induced investment-led growth. *NBER Working Paper Series* 5416. Cambridge. National Bureau of Economic Research.
- Bigsten A and Soderbom M (2006). What have we learned from a decade of manufacturing enterprise surveys in Africa? *The World Bank Research Observer*, 2 (2): 241–265.
- Bigsten A, Collier P, Dercon S, Fafchamps M, Gauthier B, Gunning J, Oduro A, Oostendorp R, Pattillo C, Soderbom M, Teal F and Zeufack A (2004). Do African manufacturing firms learn from exporting? *Journal of Development Studies*, 40 (3): 115–141.
- Bigsten A, Collier P, Dercon S, Fafchamps M, Gauthier B, Gunning J, Oduro A, Oostendorp R, Pattillo C, Soderbom M, Teal F and Zeufack A (2003). Credit constraints in manufacturing enterprises in Africa. *Journal of African Economies*, 12 (1): 104–125.
- Bora B, Kuwahara A and Laird S (2002). *Quantification of Non-Tariff Measures*. UNCTAD/ITCD/TAB/19. Geneva: UNCTAD.
- Bora S, Bouet A and Roy D (2007). The marginalization of Africa in world trade. *IFPRI Research Brief* 7. Washington DC. International Food Policy Research Institute.
- Borgatti L (2007). Timing and sequencing of trade liberalization in the least developed countries: Does foreign aid play a role? *Economia Internazionale*, LX (1): 33–56.
- Brownbridge M and Gayi S (1999). Progress, constraints and limitations of financial sector reforms in the least developed countries. *Finance and Development Research Programme Paper No.7*. Manchester. Institute for Development Policy and Management.
- Das BL (2006). Imbalances in the Hong Kong (China) ministerial outcome. http://www.twinside.org.sg/title2/par/HK_outcome_SUNS_version_13feb06.doc (accessed 11 July, 2008).
- Dean JM, Desai S and Riedel J (1994). Trade policy reform in developing countries since 1985: a review of the evidence. *World Bank Discussion Paper* 267. Washington, DC. World Bank.
- Diouf J (1989). The challenge of agricultural development in Africa. Sir John Crawford memorial lecture given on 2 November. Washington, DC. The Consultative Group on International Agricultural Research.
- Dollar D and Zeufack A (1999). *Why Are Thai Firms More Productive than Kenyan Firms? Using Firm Data to Explore International Differences in Productivity and Business Environment*. Manuscript. Washington DC, World Bank.
- Economic Commission for Africa and African Union (2007). *Economic Report on Africa 2007: Accelerating Africa's Development through Diversification*. United Nations Economic Commission for Africa publication. Sales no. E.07.II.K.1. Addis Ababa.

- Economic Commission for Africa and African Union (2008). *Economic Report on Africa 2008: Africa and the Monterrey Consensus*. United Nations Economic Commission for Africa publication. Sales no. E.08.II.K.3. Addis Ababa.
- Fafchamps M, El Hamine S and Zeufack A (2008). Learning to export: evidence from Moroccan manufacturing. *Journal of African Economies*, 17 (2): 305–355.
- FAO (2008a). FAOSTAT Online statistical database.
- FAO (2008b). Low-income food-deficit countries' food situation overview. Crop Prospects and Food Situation 2.
- Fitter R and Kaplinsky R (2001). Who gains from product rents as the coffee market becomes more differentiated? A value chain analysis. *IDS Bulletin* 32 (3): 69–82.
- Fukunishi T (2007). Has low productivity constrained competitiveness of African firms? Comparison of firm performances with Asian firms. *IDE Discussion Paper 129*. Chiba, Japan: Institute of Developing Economies.
- Gala P (2008). Real exchange rate levels and economic development: theoretical analysis and econometric evidence. *Cambridge Journal of Economics* 32 (2): 273–288.
- Gayi SK (2007). Does the WTO Agreement on Agriculture endanger food security in sub-Saharan Africa? In Shabd SA, Davis B and Guha-Khasnobis B (Eds.) (2007). *Food Security: Indicators, Measurement, and the Impact of Trade*. UNU-WIDER Studies in Development Economics. Oxford University Press.
- Gibbon P and Ponte S (2005). *Trading Down: Africa, Value Chains and the Global Economy*. Philadelphia. Temple University Press.
- Green CJ, Kimuyu P, Manos R and Murinde V (2007). How do small firms in developing countries raise capital? Evidence from a large-scale Survey of Kenyan micro and small-scale enterprises. *Advances in Financial Economics*, 12: 379–404.
- Habyarimana J (2003). The benefits of banking relationships: evidence from Uganda's banking crisis. Mimeographed document. Harvard University.
- Hausmann R, Hwang J and Rodrik D (2007). What you export matters. *Journal of Economic Growth*, 12 (1): 1–25.
- Havnevik K, Bryceson D, Birgegard L, Matondi P and Beyene A (2007). *African Agriculture and the World Bank: Development of Impoverishment?* Report based on a workshop organized by the Nordic Africa Institute. Uppsala. 13–14 March. Nordiska Afrikainstitutet.
- Herbst J (1993). *The Politics of Reform in Ghana, 1982–1991*. Berkeley: University of California Press.
- Heydon K (2006). After the WTO Hong Kong (China) ministerial meeting: what is at stake? OECD Trade Policy Working Paper, No. 27. OECD. Paris.
- Hodge J and Charman A (2007). An analysis of the potential impact of the current WTO agricultural negotiations on government strategies in the SADC region. In Shabd SA, Davis B and Guha-Khasnobis B (Eds.) (2007). *Food Security: Indicators, Measurement, and the Impact of Trade*. UNU-WIDER Studies in Development Economics. Oxford University Press.
- Hoekman B, Ng F and Olareaga M (2002). Reducing agricultural tariffs versus domestic support: What's more important for developing countries? *World Bank Policy Research Working Paper 2918*. Washington, DC. World Bank.
- Holslag J, Geeraerts G, Gorus J and Smis S (2007). *China's Resources and Energy Policy in Sub-Saharan Africa*. Report for the Development Committee of the European Parliament, Vrije Universiteit. Brussels, 19 March.

- Humphreys M, Sachs JD and Stiglitz JE (2007). Introduction: What is the problem with natural resource wealth? In Humphreys M, Sachs JD and Stiglitz JE (Eds.) *Escaping the Resource Curse*. New York. Columbia University Press, 1–20.
- IMF (2005). Review of the IMF's trade restrictiveness index. Background paper to the Review of Fund Work on Trade. Washington, DC. International Monetary Fund.
- Jeune Afrique (2007). Les dessous de l'offensive chinoise en République Démocratique du Congo, 2438: 98. 30 September.
- Kaplinsky R and Morris M (2007). Do the Asian drivers undermine export-oriented industrialization in sub-Saharan Africa? *World Development* 36 (2): 254–273.
- Lall S, Weiss J and Zhang J (2006). The "sophistication" of exports: a new measure of product characteristics. *World Development* 34 (2): 222–237.
- McCalla AF and Nash J (2007). *Reforming Agricultural Trade for Developing Countries, Key Issues for a Pro-development Outcome of the Doha Round*. Volume One. The World Bank. Washington, DC.
- Mayer J and Fajarnes P (2005). Tripling Africa's primary exports: What? How? Where? UNCTAD Discussion Paper 180. Geneva. UNCTAD.
- Mengistae T and Pattillo C (2004). Export orientation and productivity in sub-Saharan Africa. *IMF Staff Papers* 51 (2): 327–53.
- Muteme G (2006). New barriers hinder African trade. *Africa Renewal*. January, 19 (4), pp. 18–19.
- Nzobonimpa O, Nkurunziza J and Ndikumana L (2006). Promoting a development-oriented financial system in Burundi. Paper prepared for the African Economic Research Consortium. June.
- Ndikumana L (2000). Financial determinants of domestic investment in sub-Saharan Africa: evidence from panel data. *World Development* 28 (2): 381–400.
- Nkurunziza JD (2005a). Credit can precipitate firm failure: evidence from Kenyan manufacturing in the 1990s. Working paper WPS 2005-04. Centre for the Study of African Economies, University of Oxford.
- Nkurunziza JD (2005b). The effect of credit on growth and convergence of firms in Kenyan manufacturing. Working Paper WPS/2005-01. Centre for the Study of African Economies, University of Oxford.
- Ocampo JA and Parra MA (2003). The terms of trade for commodities in the twentieth century. CEPAL Review 79. Santiago, Chile. United Nations Economic Commission for Latin America.
- OECD (2008a) *Business for Development 2008, Promoting Commercial Agriculture in Africa, A development Centre Perspective*. Paris. OECD.
- OECD (2008b) OECD Online Statistical Database [accessed 21 July 2008].
- Sachs JD and Warner A (1995). Economic reform and the process of global integration. *Brookings Papers on Economic Activity*. 1: 1–118.
- Santos-Paulino A and Thirlwall A (2004). The impact of trade liberalization on exports, imports and the balance of payments of developing countries. *Economic Journal* 114: 50–72.
- Sharma D (2006). WTO Hong Kong (China) ministerial: much ado about nothing. *Motion Magazine*. 21 January.
- Teal F (1999a). Why can Mauritius export manufactures and Ghana not? *The World Economy* 22 (7): 981–993.

- Teal F (1999b). The Ghanaian manufacturing sector 1991–1995: firm growth, productivity and convergence. *Journal of Development Studies* 36: 109–127.
- Traoré A (1990). Ivory Coast: agricultural and industrial development. In Hamid Ait Amara and Bernard Founou-Tchuigoua (Eds.) (1990). *African Agriculture: The Critical Choices*. Zed Books. London and New Jersey. United Nations University Press, Tokyo. In cooperation with the Third World Forum, Dakar.
- UNCTAD (1997a). *Trade and Development Report, 1997*. United Nations publication, sales no. E.97.II.D.8, New York and Geneva.
- UNCTAD (1997b). *The Least Developed Countries Report 1997*. United Nations publication, sales No.E.97.II.D6. New York and Geneva.
- UNCTAD (1998a). *African Development in a Comparative Perspective*. United Nations publication, sales No. GV.E.99.0.21. Oxford: James Curry and Trenton NJ: Africa World Press.
- UNCTAD (1998b). *The Least Developed Countries Report 1998*. United Nations publication, sales No.E.98.II.D11. New York and Geneva.
- UNCTAD (2003a). *Economic Development in Africa: Trade Performance and Commodity Dependence*. United Nations publication, sales No. E.03.II.D.34. New York and Geneva.
- UNCTAD (2003b). Report of the Meeting of Eminent Persons on Commodity Issues. Presented to the fiftieth session of the Trade and Development Board, 6–17 October. TD/B/50/11. Geneva. 30 September.
- UNCTAD (2004). *Economic Development in Africa: Debt Sustainability, Oasis or Mirage?* United Nations publication, sales No. E.04.II.D.37. New York and Geneva.
- UNCTAD (2005). *Economic Development in Africa: Rethinking the Role of Foreign Direct Investment*. United Nations publication, sales No.E.05.II.D12. New York and Geneva.
- UNCTAD (2006). *Economic Development in Africa: Doubling Aid: Making the “Big Push” Work*. United Nations publication, sales No. E.06.II.D10. New York and Geneva.
- UNCTAD (2007). *Economic Development in Africa: Reclaiming Policy Space – Domestic Resource Mobilization and Developmental States*. United Nations publication, sales No. E.07.II.D.12. New York and Geneva.
- UNCTAD (2008a). Handbook of Trade Statistics. Available Online at <http://www.unctad.org/>.
- UNCTAD (2008b). *The Changing face of commodities in the twenty-first century*. TD/428. Note prepared by the UNCTAD secretariat, UNCTAD XII, Accra, Ghana, 20–25 April.
- UNCTAD (2008c). UNCAD TRAINS database Online. Accessed on 27 May, 2008.
- United States Energy Information Administration (US EIA) (2008). *US EIA Online Statistical Database*. Available at: <http://www.eia.doe.gov> [accessed 28 May 2008].
- Van Biesebroeck J (2005). Exporting raises productivity in sub-Saharan African manufacturing firms. *Journal of International Economics* 67 (2): 373–91.
- Wacziarg R and Welch KH (2003). Trade liberalization and growth: new evidence. NBER working paper series 10152. Cambridge: National Bureau of Economic Research.
- Wang J (2007). What drives China’s growing role in Africa? IMF working paper WP/07/211. Washington, DC. IMF.
- Wood A and Mayer J (2001). Africa’s export structure in a comparative perspective. *Cambridge Journal of Economics* 25 (3): 369–394.

- World Bank (1981). *Accelerated Development in Sub-Saharan Africa: An Agenda for Action*. Washington, DC. World Bank.
- World Bank (1994). *Adjustment in Africa: Reforms, Results, and the Road Ahead*. Washington, DC. World Bank.
- World Bank (2006). Africa Database, CD-ROM.
- World Bank (2007). World Bank assistance to agriculture in sub-Saharan Africa. *AIEG Review*. Washington, DC. World Bank.
- World Bank (2008a). *World Development Indicators*. Washington, DC. The World Bank.
- World Bank (2008b). *World Development Report: Agriculture for Development*. Washington, DC. World Bank.
- WTO (2001). Doha WTO Ministerial 2001: Ministerial Declaration. WT/MIN(01)/DEC/1. 20 November.
- WTO (2005). Doha Work Programme: Ministerial declaration. WT/MIN(05)/DEC. Ministerial Conference, sixth session. Hong Kong (China). 22 December.
- Wu Y and Zeng L (2008). The impact of trade liberalization on the trade balance in developing countries. IMF working paper WP/08/14. Washington, DC. IMF.

Economic Development in Africa series:

- 2000** *Capital Flows and Growth in Africa*—TD/B/47/4—UNCTAD/GDS/MDPB/7
Contributors: Yilmaz Akyüz, Kamran Kousari (team leader), Korkut Boratav (consultant).
- 2001** *Performance, Prospects and Policy Issues*—UNCTAD/GDS/AFRICA/1
Contributors: Yilmaz Akyüz, Kamran Kousari (team leader), Korkut Boratav (consultant).
- 2002** *From Adjustment to Poverty Reduction: What is New?*—UNCTAD/GDS/AFRICA/2
Contributors: Yilmaz Akyüz, Kamran Kousari (team leader), Korkut Boratav (consultant).
- 2003** *Trade Performance and Commodity Dependence* – UNCTAD/GDS/AFRICA/2003/1
Contributors: Yilmaz Akyüz, Kamran Kousari (team leader), Samuel Gayi.
- 2004** *Debt Sustainability: Oasis or Mirage?* – UNCTAD/GDS/AFRICA/2004/1
Contributors: Kamran Kousari (team leader), Samuel Gayi, Bernhard Gunter (consultant), Phillip Cobbina (research).
- 2005** *Rethinking the Role of Foreign Direct Investment* – UNCTAD/GDS/AFRICA/2005/1
Contributors: Kamran Kousari (team leader), Samuel Gayi, Richard Kozul-Wright, Phillip Cobbina (research).
- 2006** *Doubling Aid: Making the “Big Push” Work* – UNCTAD/GDS/AFRICA/2006/1
Contributors: Kamran Kousari (team leader), Samuel Gayi, Richard Kozul-Wright, Jane Harrigan (consultant), Victoria Chisala (research).
- 2007** *Reclaiming Policy Space: Domestic Resource Mobilization and Developmental States* – UNCTAD/ALDC/AFRICA/2007
Contributors: Samuel Gayi (team leader), Janvier Nkurunziza, Martin Halle, Shigehisa Kasahara.

Copies of the series of reports on *Economic Development in Africa* may be obtained from the Division for Africa, Least Developed Countries and Special Programmes, UNCTAD, Palais des Nations, CH-1211 Geneva 10, Switzerland (fax: 022 917 0274; e-mail: africadev@unctad.org). The reports are also accessible on the UNCTAD website at www.unctad.org.

