Development Centre Studies

The Rise of China and India

WHAT'S IN IT FOR AFRICA?

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Foreword

This publication is part of the Development Centre's programme of work for the year 2005-2006, in the context of its broader mandate to facilitate informal policy dialogue between OECD members and non-member countries. It is part of the Centre's research project on *Policy Coherence and Productive Capacity Building*.

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Preface

With China and India surging ahead as world economic powers, Africa's economy stands to be impacted in various ways. Even if the recent trend of supercharged economic growth is not sustained, for a variety of reasons economic interactions between the Asian giants and Africa show promise of intensifying over time.

Policy interactions appear to be relevant in the areas of raw material price levels and volatility, exchange rate developments and resource allocation (de-industrialisation, vertical integration), low-wage competition and income distribution, industrialisation strategies, input linkages (in China and India), capital-flow effects (such as through FDI, project finance, public-private joint ventures). Last but not the least, they are relevant in the context of understanding rent-seeking behaviour and the frictions arising from the unequal distribution of income among ethnic groups. Besides, while providing examples of growth models to African economies, the Asian giants also provide potential guideposts when it comes to identifying potential markets, competitors and financiers.

The OECD Development Centre has led efforts when it comes to analysing the global implications of China's, and increasingly of India's ascendancy. In particular, H. Reisen, M. Grandes and N. Pinaud have explored new channels of global macroeconomic interdependence that arise from China's ascendancy (see "Macroeconomic Policies: New Issues of Interdependence", OECD Development Centre, *Working Paper,* No. 241). A. Goldstein investigates the strategies of large corporations in several emerging economies including China and India in *Emerging Multinationals in the Global Economy* (Palgrave 2006). The *African Economic Outlook 2005/2006* co-authored by the OECD Development Centre and the African Development Bank also documents how the rapid rise of Asian producers in the clothing sector affects individual African exporters , in particular the Maghreb countries, Mauritius and Madagascar.

As the present study documents, African economies are affected differentially by Asian economic growth. Complementary effects are possible in certain cases, as producers benefit from increased Asian demand. Further, China and other countries may want to secure more raw material, may want to improve export infrastructure in selected African countries, while offering project finance, FDI and other forms of trade-linked capital flows. In other

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cases where Asian economies indirectly divert investment resources away from African economies, interests may be competitive rather than complementary. While on balance the short-term opportunities of Asia's ascendancy and the concomitant effects on South-South trade may outweigh the economic costs for Africa (in particular for its raw material and energy exporting economies), serious long-term risks may be involved. These risks are related to inadequate institutions and governance systems which may lead to the misallocation of revenues from higher raw material prices and from disincentives for investment in tradable activities in the non-traditional sector which are required in order to distribute more equitably between sectors the benefits of global trade.

Louka T. Katseli
Director, OECD Development Centre
April 2006

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Chapter 1

Introduction: Impact Channels

With China and India – the "Asian Drivers" – integrating with increasing momentum into the world economy, it is increasingly obvious that least developed countries will be significantly affected in a variety of ways. The sheer size of the Asian Drivers, their phenomenal rates of growth, their demand for natural resources, and their growing economic and political power augur that they will re-shape the world economy and will provide both competition and opportunities across the board to major trading partners in OECD countries, to developing countries and to other emerging economies. Because the economic expansions of China and India are likely to be sustained, innovative, long-term policy strategies will need to be devised (OECD, 2005a).

Through this study, the OECD Development Centre proposes to better inform policy decisions and strategies that are aimed at maximising the net benefits accruing to African economies from the ascendancy of China and India.[1] Similar efforts have already been made elsewhere (see Table 1). Notably through work at the Inter-American Development Bank (IADB 2004), the UN Commission for Latin America and the Caribbean (ECLAC 2005) and Spain's Banco Bilbao y Viczaya Argentaria (Santiso *and al.* 2004), the impact on Latin America has received more attention. Likewise, the impact of China on its Asian neighbours has been studied by the Asian Development Bank Group (Lall and Weiss 2004). As China helps its neighbours attract more FDI, complementarities, in particular in integrated production networks that handle most technology based exports, benefit these countries (Eichengreen and Tong 2005, Zhou and Lall 2005).[2] Moreover, Unctad's annual *Trade and Development Report 2005* devotes considerable attention to the impact of China and India on primary commodity markets and on the terms of trade.

However, it is fair to say that the developmental impact of the economic expansions of India and China on Africa has been somewhat neglected. To the best of our knowledge, the only available studies are Edwards and Jenkins (2005) and Kennan and Stevens (2005).[3] The former studies trade-poverty

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linkages, while the latter estimates the magnitude of impact on the trade balances of African countries trade and makes a tentative list of those African countries which will win and lose as a result of the increasing importance of China and India in the international trade arena. Alden (2005), Marchal (2005), and Tull (2005) review the multiple dimensions of Sino-African relations and the changes they have gone through since the 1970s. This paper is different from all previous studies in that, by identifying the potential conduits through which the rise of the Asian Drivers may effect African growth prospects, it aims at a broader approach.

Table 1: **The Literature on the Effects of the Asian Drivers on Developing Regions**[4]

	Africa	Asia	Latin America
General	Alden (2005), Marchal (2005), and Tull (2005)	Agnès Bénassy-Quéré, Valérie Mignon, Alexis Penot (2005)	IADB (2004), ECLAC (2005), de Paiva Abreu (2004), Lora (2005), Peters (2005)
Trade channels	Jenkins and Edwards (2005), Kennan and Stevens (2005)	Lall and Weiss (2004), Eichengreen *and al.* (2004)	Santiso *and al.* (2004), Dussel Peters (2005), Ribeiro and Pourchet (2004), De Negri (2005)
Investment channels		Eichengreen and Tong (2005), Zhou and Lall (2005)	Garcia-Herrero and Santabárbara (2005), Gottschalk and Prates, (2005)
Governance channels		Bustelo (2005)	

The emphasis here is on global macroeconomics, raw commodity markets, trade linkages and policies, foreign direct investment (FDI) by Chinese and Indian multinationals, and governance standards. In particular, given the fact that most African economies are linked to the world economy as important suppliers of raw materials to the Asian Drivers, this paper focuses on the role of China and India in specific international commodity and energy markets. The paper adheres to the following format:

- It begins with the indirect global macroeconomic effects that stem from China's and India's growth, on raw material markets, through which Africa's economies are most prominently linked to the world economy.

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- In order to explore possible allocative consequences (the so-called Dutch Disease effects); looks at changes in the terms-of-trade that are influenced by lower prices for manufactured goods, higher raw material prices and trend exchange rate appreciation in China and India.
- It studies the redirection of African trade towards China and India and identifies the corresponding policy challenges that arise from the fact that China and India are 'swing importers' in certain raw material markets.
- It examines corporate players as conduits of FDI flows between China, India, and Africa and analyses how African multinationals (mostly from South Africa) can benefit from market opportunities in India and China.

This paper aims at contributing to a more comprehensive understanding of the implications of India and China's rise for economic growth and development in Africa. The study is a first step in a bigger project which also includes a number of country case studies and is drafted with an eye towards guiding the content of individual country studies. Ultimately, the paper aims at informing donor policy in terms of appropriate macro policies to minimise Dutch Disease effects, (should any arise), sectoral diversification strategies, trade policy recommendations (such as how to deal with preference erosion in the wake of the dismantling of the Multi-Fibre Agreement), and host-country policies best suited at maximising and sustaining the benefits from FDI.

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Notes

1. In this document, "Africa" refers to sub-Saharan Africa unless otherwise stated.
2. This may change in the future as China seeks to take larger shares of exports and high-value functions.
3. The latter also covers Latin American countries.
4. Table 1 is not intended to be a full list of papers devoted to Asian Driver's impact. Other references are available at: http://www.ids.ac.uk/ids/global/Asiandriversbackgroundpapers.html

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Chapter 2

The Asian Drivers' Global Macroeconomic Impacts

The integration of the Asian giants into the world economy has dramatically changed the nature of global macroeconomic and financial interdependence (Reisen *et al.* 2004) which in turn, shapes primary commodity markets.

- *Global output growth* is a major determinant for primary commodity prices. A recent estimate finds that world commodity prices move pro-cyclically with the growth rate of world industrial production. This is recorded around 1.5 per cent for every one per cent increase in world industrial output, with a one-quarter lag at the most (Bloch *et al.* 2004).
- If world industrial growth exceeds 4 per cent, the *barter terms of trade* of primary commodity to finished goods rise (Bloch *et al.* 2004). High global growth has recently halted and reversed the secular decline of raw commodity prices since World War II. This is hypothesised to be caused by the uneven effects of technological progress on the production of manufactured goods and raw materials (Prebisch 1950 and Singer 1950).
- Higher *US interest rates* (which closely govern variations in global key interest rates) have a generally negative impact, as reduced output prospects and higher storage costs lead to lower raw material prices.
- Likewise, a strengthening of the *US dollar* will depress raw material prices, partly for the same reasons which were evoked for US interest rates, partly as a result of the fact that most commodity markets are dollar denominated.

How do the Asian Drivers impact these macroeconomic determinants of the price of raw materials?

China's and India's *contribution to global output growth* is substantial (Table 2).[1] Since 2001, their combined contribution to global output growth has

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stayed around 30 per cent. China's contribution has been consistently higher than that of India by almost three times. Moreover, it has also helped hold global output growth above the 4 per cent threshold which is necessary for improving the terms of trade for primary commodity producers. The high levels of growth sustained in both energy and metal use since 2000 has sparked China's (and to a lesser extent, India's) demand for commodities on a global scale (see below).

Table 2: **China and India's Contribution to Global Growth, 2000-2004**
Percentage share of annual growth rate

	2000	2001	2002	2003	2004
Global growth, per cent p.a.	6.9	4.8	4.6	5.7	7.4
China	15.8	23.0	25.2	23.4	19.9
India	6.0	7.3	8.2	9.0	7.0

Source: Authors' own calculation based on IMF *World Economic Outlook Database*, September 2005
N.B: GDP based on purchasing-power-parity (PPP) valuation of country GDP.

On the financial front in particular, Asian investors have been recycling foreign exchange reserves into US securities (the *Asian bid)* which in turn has contributed to low interest rates in the U.S.. That much of Asia is explicitly or implicitly pegged to the dollar (whatever may be officially pronounced) is well known[2]. Besides, exchange rate targets have been repeatedly set based on basket pegs, reserve volatility, or interest rate volatility (Branson 2001). What is new however, is the sheer scale of official reserve accumulation. By the end of 2005, China and Hong Kong had accumulated almost one trillion dollars in foreign exchange reserves, of which 30 per cent were invested in US Treasury Bills. This in turn constituted 13.6 per cent of all outstanding US Treasury Bills

Table 3: **Foreign Exchange Reserves and US Treasury Holdings**
- end 2005 -

	FX Reserves		US Treasury Holdings	
	bn $	of which %UST	bn $	% of sum
China + Hong Kong	980	30.2	296	13.6
India	145	9.7	14	0.7

Source: US Treasury, www.treas.gov/tic; central banks of China, India and Hong Kong (Hong Kong Monetary Authority), press releases.

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(see Table 3). India's foreign exchange reserves were much lower at the end of 2005 and were more widely invested.

Deutsche Bank (2005a) has run simulations to illustrate that a potential move on China's part towards genuine currency flexibility and the ensuing real appreciation of the Renminbi might raise US interest rates for two reasons: firstly, due to an increase in US dollar prices in electronics, apparel, textile and other light manufacturing products and secondly, due to reduced intervention in the foreign-exchange market and reduced US Treasury bond purchases. The other impacts of higher US interest rates stemming from reduced Asian intervention on currency markets are hard to predict. Other things being constant, they should dampen primary commodity prices. However, the consequent weakening of the US dollar would translate into higher dollar-denominated raw material prices. To the extent that the Euro strengthens against the US dollar as a result of higher exchange-rate flexibility in Asia, Western African countries which peg to the Euro will be impacted.

Regardless of the currency regime, sustained growth differentials in China vis-à-vis its main trading partners will imply a trend appreciation in the real effective exchange rate.[3] This will raise China's purchasing power, while it will negatively affect her export competitiveness. Africa's primary commodity exporters would be likely to benefit from a (real effective) Renminbi appreciation. To be sure, such appreciation amounts to a tightening of monetary conditions in China, and therefore could initially slow down the country's economic growth and its demand for commodities. Recent CGE model simulations at Deutsche Bank (2005a) emphasize, however, the substitution effects of currency appreciation. As China's demand for commodities would shift away from domestic suppliers to cheaper foreign supplies, (including supplies from Africa), domestic prices would gradually adjust downwards and international US dollar prices upwards, depressing the profitability of China's producers and boosting that of foreign competitors. This positive effect would be reinforced by the fact that the currencies of other Asian commodity producers, such as Malaysia's, follow Renminbi appreciation[4].

Furthermore, exchange rate flexibility would allow China's macroeconomic authorities to smoothen the country's fixed investment, consumption and output profile. The reform initiated by China's authorities in July 2005 might thus help reduce uncertainty or volatility of demand growth for commodities. This point is crucial. Over the past two years, China has contributed to roughly 50 per cent of the global demand growth for major commodities. However, in some areas, China and occasionally India, are 'swing producers' (switching from net import to net export positions with consequences for world prices).

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As China and the United States do not form an optimal currency area, business cycles would not be sufficiently synchronised and the relevant policy parameters will not be flexible enough (and endogenous to the requirements of the peg) to avoid serious output volatility. Insofar as China, and increasingly India as well, are not price-takers but price-makers in raw material markets, greater exchange rate flexibility is unequivocally good news for most exporters of African commodities.

An analysis of the determinants of growth (Table 4) in China suggests that rapid growth should continue for the foreseeable future, albeit at a somewhat slower rate (OECD 2005a)[5]. Applying the standard methodology used by the OECD, the output growth potential of the Chinese economy has been increasing since 2000. Most importantly, thanks to capital accumulation (investment growth), potential growth in 2005 has reached 9.5 per cent. It is unlikely that the current savings rate (which has risen to 45 per cent of GDP) can be sustained in the long term. Moreover, as more capital is accumulated, its marginal product will fall, resulting in a smaller capital share and a smaller contribution to growth. Nonetheless, there is considerable room for further increases in efficiency through institutional and trade reforms, the second most important growth determinant in China (Francis *et al.* 2005). The continued reallocation of labour from agriculture to manufacturing is another major stimulant of productivity growth.

Table 4: **Sources of China's Income and Output Growth, 1998-2003**
Percentage points

	Average 1998-2003	2003
Employment Contribution	0.3	0.4
Capital Contribution	4.9	5.5
Residual Factors	2.8	3.1
- Sectoral change,	0.5	0.7
- Education,	1.1	0.8
- Multi factor productivity	1.3	1.6

Source: Adapted from OECD (2005a)

In a nutshell, China and India are rapidly integrating their huge labour forces into the world economy and are growing swiftly. Each year since 2001, their combined contribution to global output growth has been around 30 per cent. Moreover, this contribution has helped to hold world growth above the 4 per cent threshold which is critical for improving the terms of trade for

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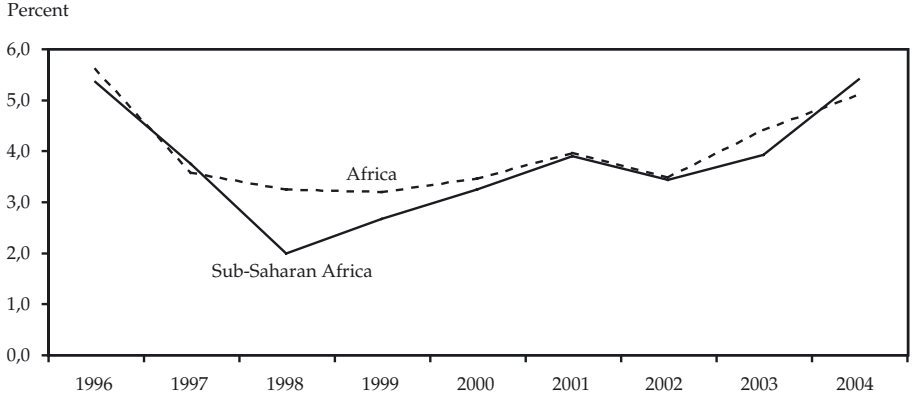
primary commodity producers. On the financial front, the recycling of foreign exchange reserves into US securities by Asian investors (the *Asian bid*) has contributed to the low level of US interest rates which have further stimulated raw material prices.

Consequently Africa – still connected to the world economy chiefly through raw material exports – is benefiting from the China-driven 'super cycle' (a decade-long rise in real commodity prices, driven by the urbanisation and industrialisation of a major country), a phenomenon which is reinforced by India's emergence.

Figure 1 shows that during 2001-2004, real GDP in Africa, grew at an average annual rate of 4.2 per cent , compared with a rate of 3.3 per cent during 1997-2000. Moreover, sub-Saharan Africa's real GDP growth rate reached 5.4 per cent in 2004, an eight-year high. The African Economic Outlook 2005

Figure 1: **Real GDP Growth in Africa, 1996-2004**



Source: AfDB/ OECD (2005), *African Economic Outlook.*

(AfDB/OECD 2005) cites the rise in commodity prices as a critical factor behind this promising momentum.

In fact, African trade with China and India has shown striking dynamism since 2000 (Figure 2a). African exports to China started accelerating around 2000, and have since risen at an annual growth rate of 56 per cent. By 2004, African exports to China stood at $11.4 billions. This was more than three times the exports in 2000, and accounted for 6 per cent of total African exports to the world (Figure 2b). Although African exports to India have remained strong, maintaining an average annual growth of 10 per cent between 2000 and 2004, China overtook India as Africa's trade partner in 2000.

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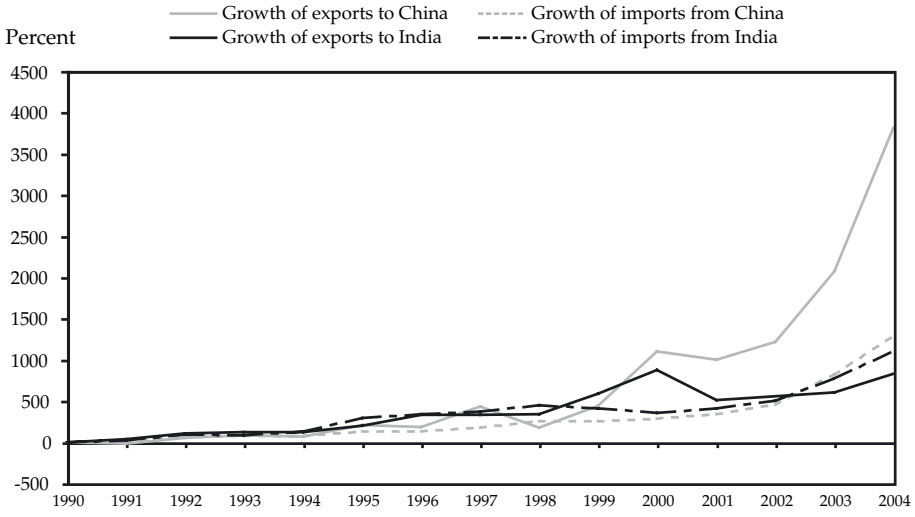
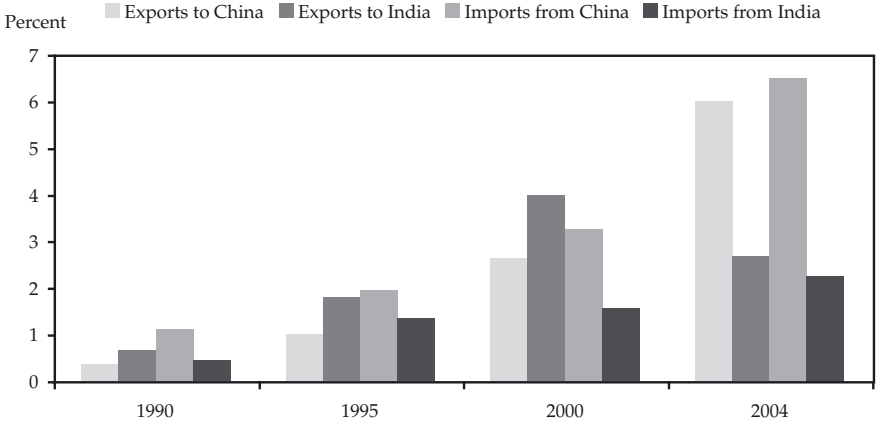
Figure 2: **Africa's Trade with China and India, 1990-2004**[6]

a) Cumulative Growth Relative to 1990



b) Share of China and India in Africa's Trade, 1990-2004



Source: IMF Direction of Trade Statistics

Since 2000, the average annual growth rates of African imports from both China and India (33 per cent and 20 per cent, respectively) have shown similar dynamism. Figure 2a shows that the growth rate of imports from India is faster than the growth of exports to India which decline first and then increase. This is also illustrated by the expansion of India's share in African imports and by the fall in India's share in African exports (Figure 2b).

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Notes

1. The contribution to world growth is calculated as

$$\frac{\gamma_c * \frac{Y_c}{Y_w}}{\gamma_c * \frac{Y_c}{Y_w} + \gamma_r * \frac{Y_r}{Y_w}}$$

   i.e. China's (India's) growth rate times China's (India's) percentage share in world output divided by the sum of China's growth rate plus the growth rate of the rest of the world, each weighted by their respective share in world output.

2. In July 2005, China announced to move from a US dollar peg to a trade-weighed basket peg, with undisclosed weights. Targets of slightly undervalued real effective exchange rates can be rationalised in the development context on the basis of the fact that they provide a bias towards exports and may thus stimulate growth in countries where the lack of sound financial institutions, and distorted local prices would otherwise provide inadequate signals for the efficient allocation of resources (McKinnon and Schnabl 2003).

3. When a country 'catches up' with countries which were richer, its goods become more expensive because productivity in the tradeable goods' sector rises more than in that in the nontradable goods sector. The prices of nontradables (e.g. housing) therefore rise faster than those of tradable goods, reflecting the increasing scarcity of the former and the fact that wage increases are higher than productivity gains in the non-tradables' sector (*Balassa-Samuelson hypothesis*). This rise amounts to real appreciation, which is achieved through nominal currency appreciation under a flexible currency regime and through higher inflation under rigid currency regimes.

4. Reisen *and al.* (2004) have argued that Asia is unlikely to drop the dollar peg – explicit or implicit - as long as China does not. Interestingly, Malaysia quit the US dollar peg the very same day China did.

5. Projecting real GDP growth rates into the future, Holtz (2005) finds the size of the Chinese economy to surpass that of the U.S. in terms of purchasing power between 2012 and 2015. By 2025, China is likely to be the world's largest economic power by almost any measure. The extrapolations are supported by two types of considerations. First, China's growth patterns during the past 25 years since the beginning of economic reforms match well those identified by standard economic development and trade theories (structural change, catching up, and factor price equalization). Secondly, decomposing China's GDP growth into its constituent factors including labour, the information available today about the supply and

quality of Chinese labourers through 2015 and possibly for several years afterward allows inferences about future GDP growth.

6. 56 African countries including Northern African countries.

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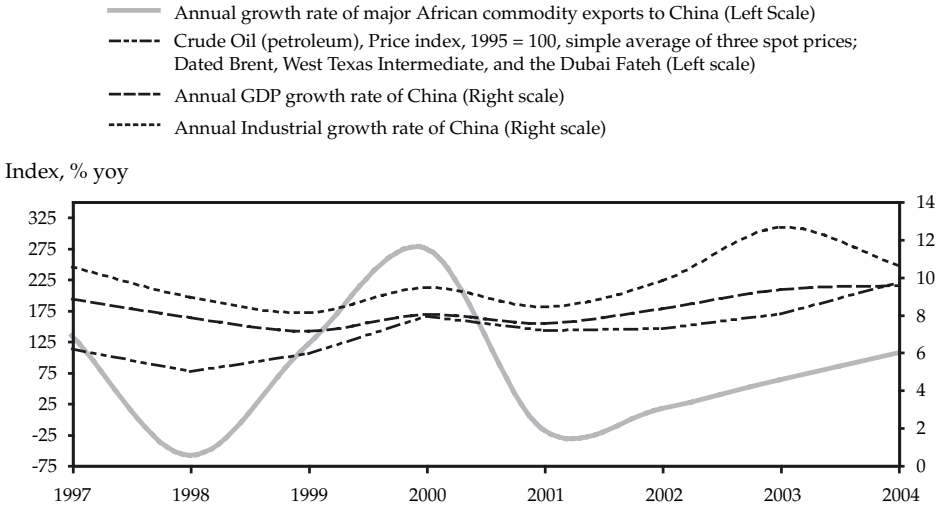
Chapter 3

Africa and Global Commodity Markets

Many African economies are prominently linked to the world economy as important producers of raw material and soft commodities (for a detailed description, see Appendix A). The emergence of India and China over the last decade as key net importers of commodities means that global commodity markets are likely to be the main channels through which the impact of China and India's ascendancy has been (and will be) felt on the African continent.

Figure 3 below shows considerable correlation between China's macroeconomic performance (GDP and industrial growth rates) and commodities relevant to Africa[1]. One possible explanation is that strong

Figure 3: **The Influence of China's Growth Performance on Commodity Prices**



Source: UN Comtrade, World Bank Commodity Price Data (Pink Sheet) and World Development Indicators

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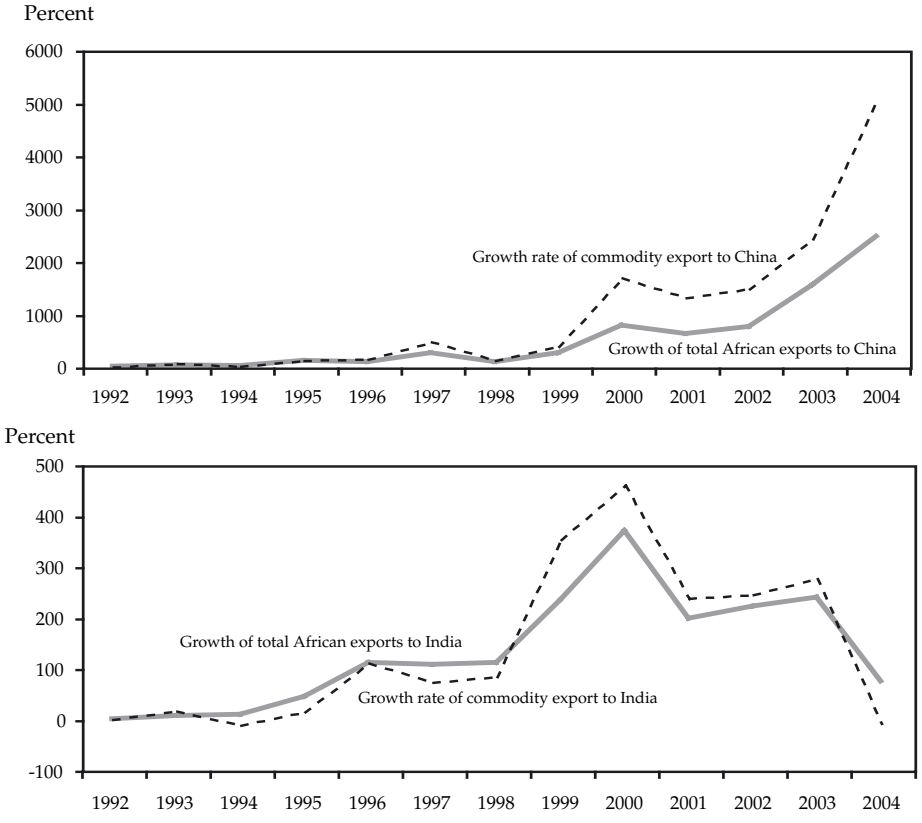
industrial growth in China drives up the country's demand for energy and metals, propels demand for African commodities, and also contributes to a partial recovery of global raw material prices.

Figure 4 shows how growth of Africa's total exports (including Northern Africa) to China and India is correlated with the growth of its major commodity exports (refer footnote 1) to these two countries.

Africa is linked to China's and India's demand for primary commodities via two channels:

- *International price of commodities.* Exchange rates, global inflation, interest rates, bond yields, house prices, wages and profits are increasingly being

Figure 4: **Africa's Commodity and Total Exports to China and India, 1992-2004**
Cumulative Growth Relative to 1992



Source: UN Comtrade and IMF Direction of Trade (DOTS)

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driven by the state of the economies in China and India. So are international raw material prices. It is useful to study how export prices of commodities, terms of trade and potential Dutch Disease effects will impact Africa. In other words, have African countries benefited from China and India's increasing demand for commodities and the resulting high commodity prices, or have they been outweighed by reallocation effects that are harmful to Africa's future growth prospects ?

- *The direct trade dependency of Africa on China and India*. Very simply, is Africa, as a commodity exporter, becoming more (perhaps too) dependent on China and India? Has Africa simply succeeded in redirecting its commodity exports towards China and India, currently the world's most dynamic markets? Or has Africa also become more dependent on the vagaries of the international markets for such commodities?

We will discuss the first channel in the following sections (3.1 and 3.2) and cover the second channel in section 4.

3.1. China and India's Commodity Demands and Their Prices

The current process of increasing capital intensity has spurred the drastic increase in both energy and metal use in China[2]. The average annual growth of energy consumption was 1.2 per cent between 1996 and 1999, before rising steadily to 14.5 per cent in 2003 with an average annual growth rate of 6.2 per cent during the period 2000-2003 (Table 5). Meanwhile, Chinese energy production also increased at an annual rate of 6.2 per cent (2000-03). Similarly, the growth rate of crude steel consumption surged to a nine year high from 1.7 per cent in 2000 to 25.2 per cent in 2003, while the growth rate of crude steel

Table 5: **China and India's Rising Energy and Steel Use**
Year-on-year growth rates (per cent)

	China		India	
Annual average:	1996-1999	2000-2003	1996-1999	2000-2003
Industrial production	9.90	10.07	4.97	5.84
Energy consumption	1.16	6.16	3.35	2.41
Energy production	0.15	6.16	1.49	2.51
Crude steel consumption	7.78	17.74	3.56	4.04
Crude steel production	6.78	15.70	2.60	7.01

Source: Authors' own calculation based on World Development Indicators (2005), International Energy Agency Data Service, Steel Statistical Yearbook (2004), International Iron and Steel Institute.

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production increased at an average annual rate of 15.7 per cent. Indian energy and steel use also accelerated, although at a more moderate pace, during 2000-2003. In general, Chinese growth rates in terms of production and consumption of energy and metals stand at more than 2.5 times than those of India, and are consistent with industrial growth rate differences between the two countries.

Although the shares of commodities (fuels and crude materials) in China's and India's overall imports are not high (see Appendix E), China and India have nonetheless become first-rank world commodity *net importers*[3] because of the rates at which economies have grown (Table 6). Between 2000 and 2003, India's

Table 6: **China and India's Global Demand and Supply for Selected Commodities**

a) China:

	2000	2001	2002	2003
Oil (000 tons):				
Production	163000	163959	167000	169600
Export	10306	7550	7665	8133
Import	70265	60260	69406	91020
Net import	80571	67810	77071	99153
Consumption (demand[4])	222959	216669	228741	252487
Import dependence (imports as % of demand)	31.5	27.8	30.3	36.0
Iron Ore (000 tons):				
Production	223950	217015	231430	261085
Export	0.6	1	1	1
Import	69971	92393	111423	148128
Net import	69970	92392	111422	148127
Consumption (demand)	293920	309407	342852	409212
Import dependence (imports as % of demand)	23.8	29.9	32.5	36.2
Copper (000 tons):				
Production	1370	1523	1632	1836
Export	40	51	77	64
Import	1814	835	1181	1357
Net import	1774	784	1104	1293
Consumption (demand)	3144	2307	2736	3084
Import dependence (imports as % of demand)	57.7	36.2	43.2	44.0
Cotton (000 tons):				
Production	4417	5324	4916	4871
Export	299	60	159	117
Import	251	197	245	1075
Net import	-48	137	86	958
Consumption (demand)	4369	5461	5002	5829
Import dependence (imports as % of demand)	5.7	3.6	4.9	18.4

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Table 6: **China and India's Global Demand and Supply for Selected Commodities** *(cont.)*

b) India:

	2000	2001	2002	2003
Oil (000 tons):				
Production	32426	32032	33042	33373
Export	0	0	0	0
Import	74097	78706	81989	90434
Net import	74097	78706	81989	90434
Consumption (demand)	106523	110738	115031	123807
Import dependence (imports as % of demand)	69.6	71.1	71.3	73.0
Iron Ore (000 tons):				
Production	75950	82000	94300	105500
Export	32910	37290	46602	55000
Import	510	300	282	457
Net import	-32400	-36990	-46320	-54543
Consumption (demand)	43550	45010	47980	50957
Import dependence (imports as % of demand)	1.2	0.7	0.6	0.9
Copper (000 tons):				
Production	3498	3418	3071	2903
Export	87.25	0.01	121.17	0.30
Import	472	828	698	488
Net import	384	828	576	488
Consumption (demand)	3883	4246	3648	3391
Import dependence (imports as % of demand)	12.1	19.5	19.1	14.4
Cotton (000 tons):				
Production	2,380	2686	2312	3,009
Export	24	8.5	10.9	119.0
Import	350	519.8	264.9	170.9
Net import	326.7	511.3	254.0	51.9
Consumption (demand)	2706.7	3197.3	2566.0	3060.9
Import dependence (imports as % of demand)	12.9	16.3	10.3	5.6

Source: Authors' own calculations based on International Energy Agency Data Service, Steel Statistical Yearbook (International Iron and Steel Institute, 2004), World Metals Statistics, USGS, ICAC.

dependence on oil imports (73 per cent in 2003) has been greater than that of China's (36 per cent in 2003). However, China's net oil imports are more than that of India inspite of the fact that its oil production was five times more than India's in 2003 alone. Moreover, India's dependence on imported iron ore has declined while its iron ore exports grew at an average rate of 12 per cent during 2000-2003. Indian's production and consumption of copper are far lower than that of China and hence India depends less on copper imports. In the case of cotton, once again as compared to India, China witnessed a combination of

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higher production and imports together with lower exports. However, this is not surprising given that China's 2000-2003 industrial growth rates has been close to twice as high as India's.

Table 7 highlights the fact that although China's contribution is generally higher, both countries have contributed tremendously to world import growth for selected commodities. Kennan and Stevens (2005) find that seven categories of Chinese imports relevant to African exporters - for the most part over the period 1998-2003, commodities - have grown 1.5 time faster than the average growth of Chinese overall imports; feed for Burkina Faso, Ethiopia, Nigeria, Sudan, Tanzania; cobalt for South Africa and the Democratic Republic of Congo; copper for Zambia and South Africa; alumina for Guinea; ferrous metals for Mauritania, South Africa and Zimbabwe; chemicals for Niger. Note that for the rest of the world the growth in commodity imports is far slower than in both China and India for the same period. For example, in the case of cotton, had it not been for China's strong demand, world demand would have practically stagnated The growth rate of cotton imports for the rest of the world (excluding China) was 0.9 per cent and China's contribution to the growth of world demand for cotton was over 100 per cent. This can also be verified by the rise

Table 7: **China and India's Contribution to Growth of World Imports of Selected Commodities, 2000 - 2004**[5]

Percentage

	China			India		
	Average annual growth for the world excluding China	Average annual growth for China	Overall contribution to global growth by China	Average annual growth for the world excluding India	Average annual growth for India	Overall contribution to global growth by India
Crude Oil	22.5	66.9	9.2	23.5	25.0	5.5
Metalliferous ores	16.0	52.4	31.4	19.7	26.9	2.5
Woods	4.0	17.7	15.6	4.6	18.6	3.5
Cotton	0.9	152.7	119.4	8.2	3.9	-0.8
Precious stones	6.9	29.9	7.5	6.7	12.8	31.5

Source: Authors' own calculations based on UN Comtrade database

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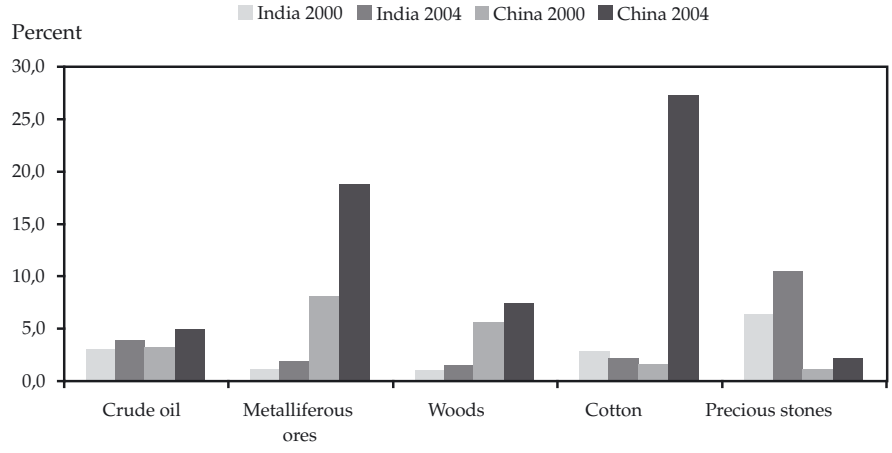
in China's share of global imports for metalliferous ores (11 per cent), and cotton (26 per cent) between 2000 and 2004 (Figure 5). It should be noted that there is also a significant increase in India's share in global imports for precious stones (4 per cent).

Figure 5: **Shares in World Imports of Selected Commodities, China and India, 2000 and 2004**



Source: UN Comtrade database

In addition, the average annual growth for oil imports by the rest of the world - excluding China - is 22.5 per cent (2000-2004). On the other hand, the average growth rate for China's oil imports during the same period was 66.9 per cent. This pushed up China's share in global oil imports to 4.9 per cent in 2004 from 3.0 per cent in 2000 and contributed to nearly 10 per cent of global growth in oil imports between 2000 and 2004. Similarly, India with an average annual oil import growth rate of 25 per cent and an import dependence of 73 per cent in 2003, accounted for 3.8 per cent of global oil imports in 2004.

The benefits of China's and India's rising global demand (net imports) for commodities relevant to Africa may, nevertheless, be attenuated by the *volatility of demand* on the part of the Asian giants. This is caused partly due to cyclical variations and also due to arbitrage between domestic production and imports. Moreover, as approximately 70-80 per cent of manufacturing exports from China is produced by multinational corporations, high demand for raw materials partially reflects relocation of raw material demand from production sites elsewhere. Such adjustments do not occur without friction, which in turn could have fuelled demand volatility. Consequently, rising raw material

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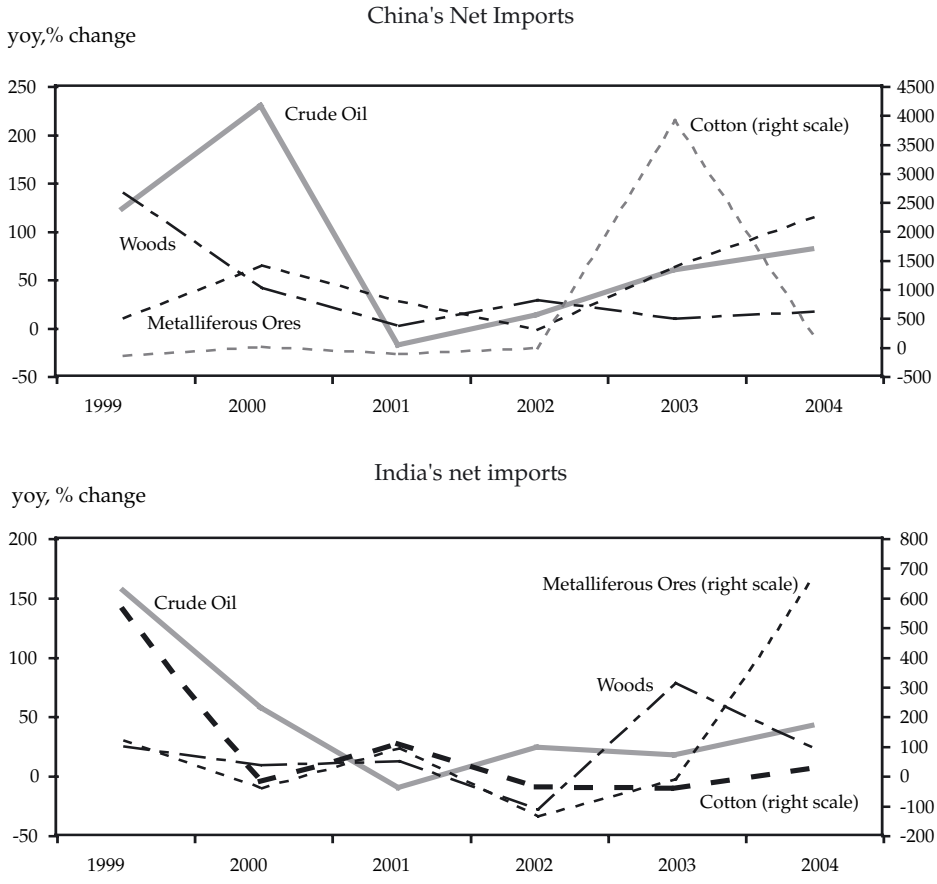
demand from China and India is not necessarily an unfettered blessing for Africa.

Figure 6 illustrates the swings in net imports of China and India between 2000 and 2004 for the most important commodities relevant to Africa's foreign exchange receipts (oil, metals, wood and cotton). All four commodities have recorded price increases since 2001, although the price of cotton registered a sharp decline in 2004 (Figure 7). The price of oil rose steadily at an average

Figure 6: **China and India as Net Importers of Commodities Relevant to Africa, 1999-2004**



Source: UN Comtrade

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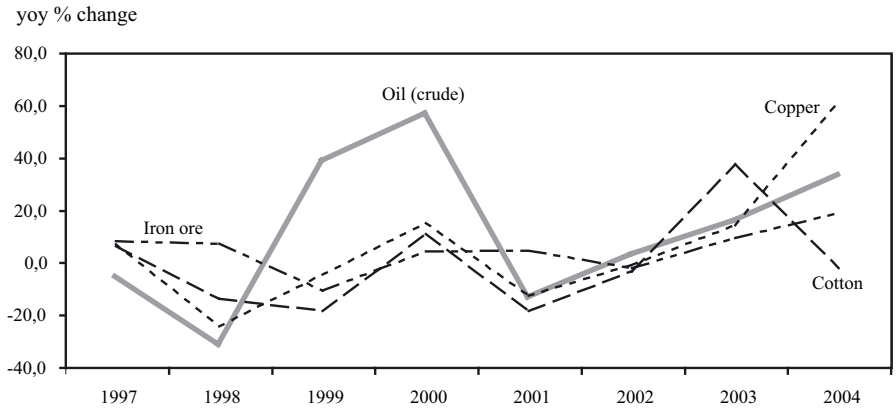
Figure 7: **Annual Percentage Change in Commodity Prices, 1997-2004**



Source: AfDB/OECD (2005), *African Economic Outlook*.

annual rate of 18.7 per cent between 2000-2004. The same pattern holds for copper (58 per cent) after strong swings in prices.

Table 8 compares the volatility (measured as standard deviation around the trend) in commodities relevant to Africa for two time periods. Volatility rose for all commodities except copper. Although it is difficult to separate the relative contribution of different factors,[6] increased volatility between 2000 and 2004 may have been *partly* due to the fact that China and India are *swing producers* – exporting when prices are high and stockpiling when (be it for cyclical or exceptional reasons) they are not as attractive. Given their large economies, any behavioural change is likely to translate into volatility in world prices.

Table 8: **Volatility in Commodity Prices Relevant to African Countries**

	Volatility in Prices*		
	1995-1999	2000-2004	Difference
Oil (crude)	7.66	8.25	+ 0.59
Iron Ores	1.90	2.76	+ 0.86
Copper	5.48	4.33	- 1.15
Cotton	4.26	5.63	+ 1.37

Note: * Standard deviation of monthly percentage changes
Source: Authors' own calculations based on World Bank data

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Where cotton is concerned, for example, China is not only an important world importer, but also a large-scale producer. China's cotton output is indeed very sensitive to price incentives (in particular to the price ratio between cotton and substitution crops such as grains). Furthermore, the bulk of Chinese cotton is produced in the Xinjiang province located in the West of the country, which enjoys low production costs and favourable natural conditions. However, this region is far away from major textile industries which are mostly located in the Eastern costal areas. As long-distance transportation continues to be a problem in China, the Chinese textile industry still relies on imported cotton. African cotton producers have faced record-low prices since mid-2004, a result of record world harvest in 2004/2005. World output increased by around 23 per cent compared to 2003/2004 and 30 per cent of this increase was accounted for by China. By contrast, it is expected that China will account for 40 per cent of the prospective fall in world production in 2005/06 (while its imports of cotton

Table 9: **China, India and the International Cotton Market**
World cotton output ('000 tons)

Harvest	2004/05	2005/06	Percentage change 2004/05 – 2003/04	Percentage change 2005/06 – 2004/05	Contribution to change (%) 2004/05 – 2003/04	Contribution to change (%) 2005/06 – 2004/05
China	**6320**	**5770**	**29.8**	**-8.7**	**30.3**	**39.5**
United States	5149	4410	29.5	-14.4	24.6	53.0
India	**3315**	**3825**	**14.7**	**15.4**	**8.9**	**-36.6**
Pakistan	2465	2210	42.2	-10.3	15.3	18.3
Brazil	1300	1250	3.6	-3.8	0.9	3.6
Uzbekistan	1056	1125	17.3	6.5	3.3	-4.9
World	**25211**	**23817**	**23.4**	**-5.5**	**-**	**-**

Source: Authors' estimates based on *Cotton Outlook* (August 2005).

should remain high in the post-MFA context), thereby contributing to the expected rebound in cotton prices (Table 9).

3.2. The Terms of Trade

The long-run tendency for prices of primary products to decline vis-à-vis those of manufactured products has resulted in a deterioration of the net barter terms of trade for many developing countries dependent on the export of raw

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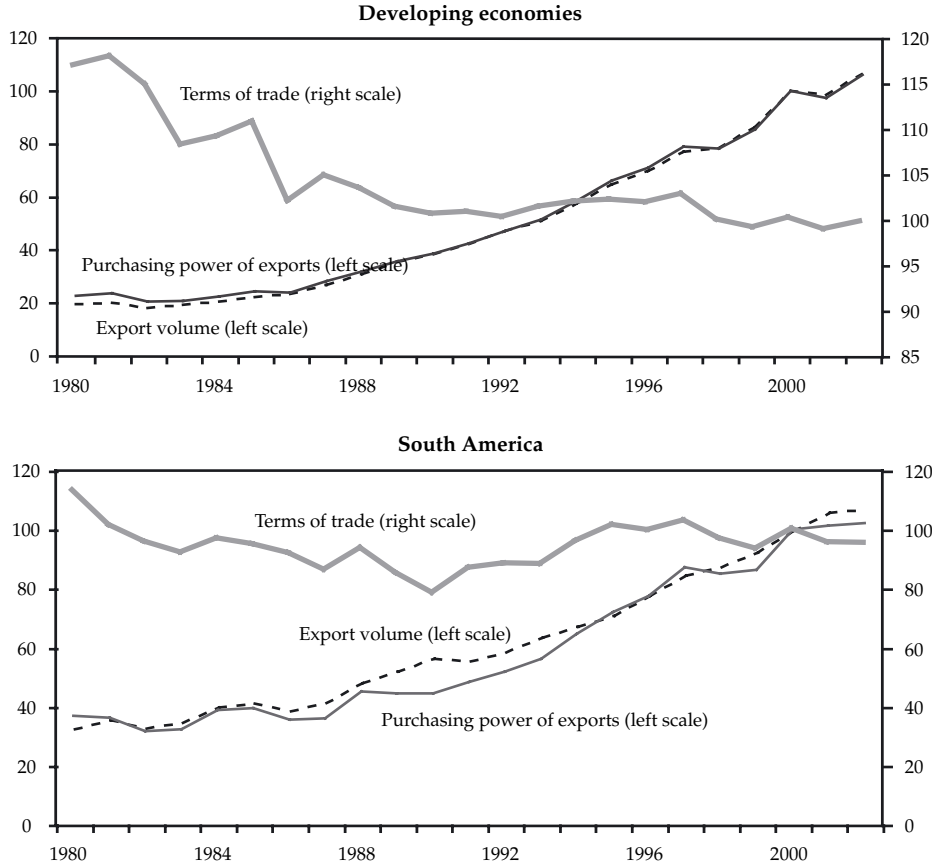
materials and imports of manufactured products[7] [8]. This led to the influential policy suggestion that developing countries industrialise and diversify their exports into manufactured goods (Prebisch 1950; Singer 1950). The performance of China and India makes it important to further investigate the following policy questions. Are the terms of trade for other developing countries improving? And is it necessary for them to adopt different policies?

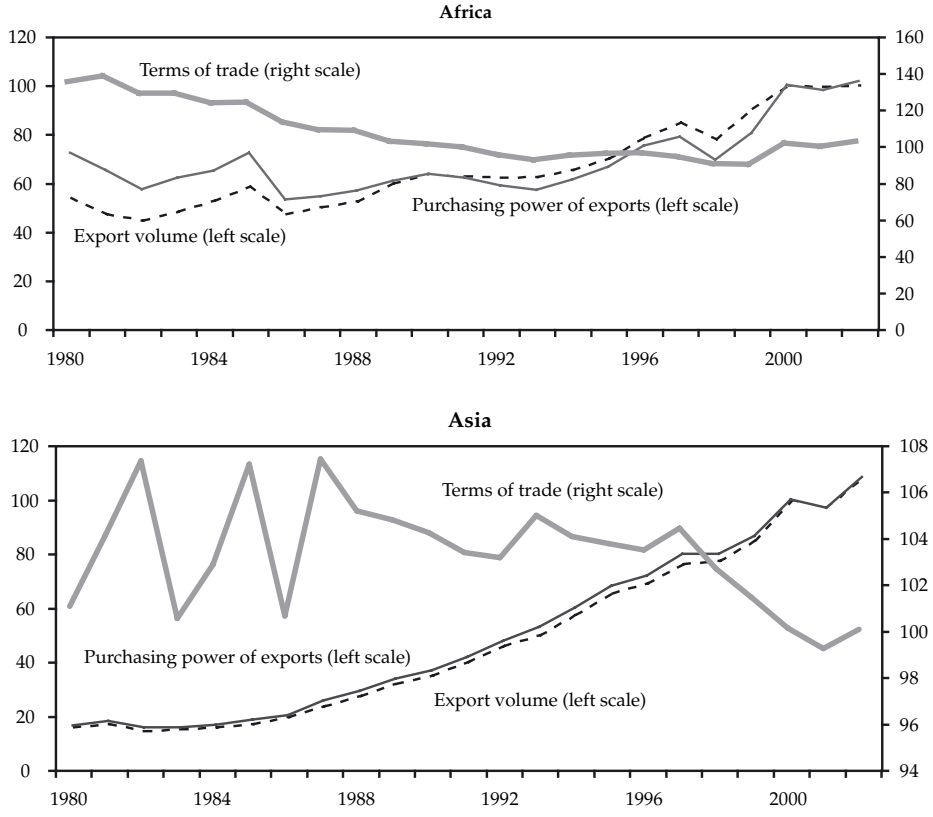
Figure 8 shows the *net barter terms of trade* and purchasing power of exports (income terms of trade) for developing countries and geographical sub-regions

Figure 8: **Terms of Trade, Export Volumes and Purchasing Power of Exports in Developing Economies, by Region, 1980-2002**
(Index numbers, 2000=100)



Source: UNCTAD Handbook of Statistics (2005)

Figure 8: **Terms of Trade, Export Volumes and Purchasing Power of Exports in Developing Economies, by Region, 1980-2002** *(cont.)*
(Index numbers, 2000=100)



Source: UNCTAD Handbook of Statistics (2005)

from 1980 to 2002. The dynamics of a country's terms of trade is determined to a great extent by the share of primary commodities in its trade basket. Insofar as the majority of African countries are still exporters of primary commodities with little diversification into manufactured exports, recent market trends have positively affected prices and improved the terms of trade. The long-term decline in commodity prices has been arrested and the worsening in African terms has been halted at least momentarily.

In the 1950s, most developing countries with huge endowments of natural resources were producing primary commodities (raw materials and food). A surplus of labour exerted a downward pressure on wages. In industrialised

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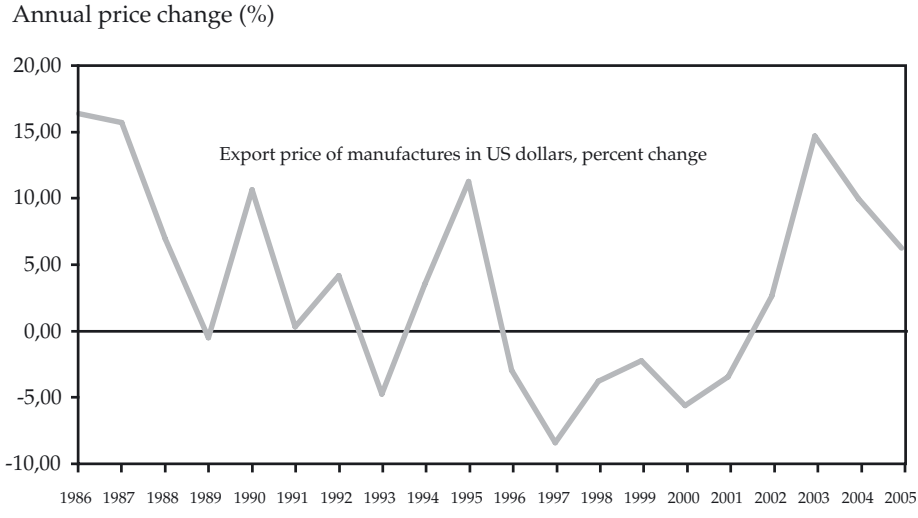
nations on the other hand, technical progress led to an increase in wages. Moreover, income elasticities of demand for primary commodities were lower than unity, and technical progress resulted in the need for fewer amounts of raw materials per unit of manufactured output. The combination of these demand and supply side factors led to the widening gap between the prices of manufactured goods and primary commodities. Since the 1960s, new countries (especially in Asia) – first Korea, Hong Kong, Singapore, and the Chinese Taipei China, then the ASEAN countries, and now China and India – have emerged as competitive exporters of manufactured goods, not only to developed countries but also to other developing countries[9]. The rapid export growth of low-skill and labour-intensive manufactured goods however, has increased the market competition for these goods and hence exerted a downward pressure

Figure 9: **Declining World Manufacturing Export Price, 1986 – 2005**



Source: : IMF World Economic Outlook Database (September 2005)

on their prices (Figure 9)[10]. Similarly, there has been a relative decline in the price of labour-intensive manufactured goods exported by developing countries vis-à-vis those exported by developed countries [11].

The main causes for the relative weak prices of manufactured goods by developing countries are to a great extent the same as those that determined, until recently, the decline in the terms of trade of commodities vis-à-vis those of manufactured goods. The existence of abundant low-skilled labour means that productivity gains are reflected in lower wages and prices which are

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further accentuated by the simultaneous exports of labour intensive products by developing countries. However, the major difference is that while the relative decline in the export prices of low-skilled manufactures has generally been associated with considerable *volume* growth, declining export prices for primary commodities are typically associated with lower volume growth, due to the considerably lower *price elasticity of demand*.

Africa's income terms of trade may well have benefited from Asia's emergence, through various channels:

- a net rise in the demand for raw commodities translating into higher export unit prices and volumes; and
- urban consumers gaining from cheaper consumer goods and investors benefiting from cheaper capital goods.

Exporters and urban consumers may indeed enjoy higher purchasing power as import prices are lower compared to prices of previous import sources or domestic producers. Note however that this is only true if lower production prices are reflected in lower selling prices, which in turn depends on the degree of competition in the market. Evidence is mixed in this respect. For instance, FIAS (2005) points to significant mark-ups and market power by traders and retailers in Burkina Faso but also emphasises the critical role of foreign competitors in making local markets more competitive. According to a study carried out in Oshikango, a booming trade centre along the Namibian-Angolan border, Chinese traders are regarded by local businessmen as strong competitors (Dobler, forthcoming). Even if comparability raises many problems, prices of imported Chinese goods are indeed very much lower than those of comparable goods from South Africa or the European Union. Moreover, workers in the domestic manufactured goods' sector that competes with Chinese and Indian imports, are themselves urban consumers. Therefore, the net welfare impact of cheaper imports sourced from the Asian drivers is ambiguous (see section 5.2 for further analysis).

Comparing changes in the terms of trade and in the purchasing power of exports allows us to discern the relative impact of the dynamics of international commodity and manufacturing prices. After 2000, African terms of trade have risen faster, illustrating the relatively more significant importance of changes in their export prices. The purchasing power of Asian countries, on the other hand, has grown sharply even if their terms-of-trade have been declining since 2000 (Figure 8). This largely reflects their rising productivity and also the gains in the world market share of manufactured goods requiring low-skilled labour. The *volume* of exports expands significantly and outweighs the decline in barter

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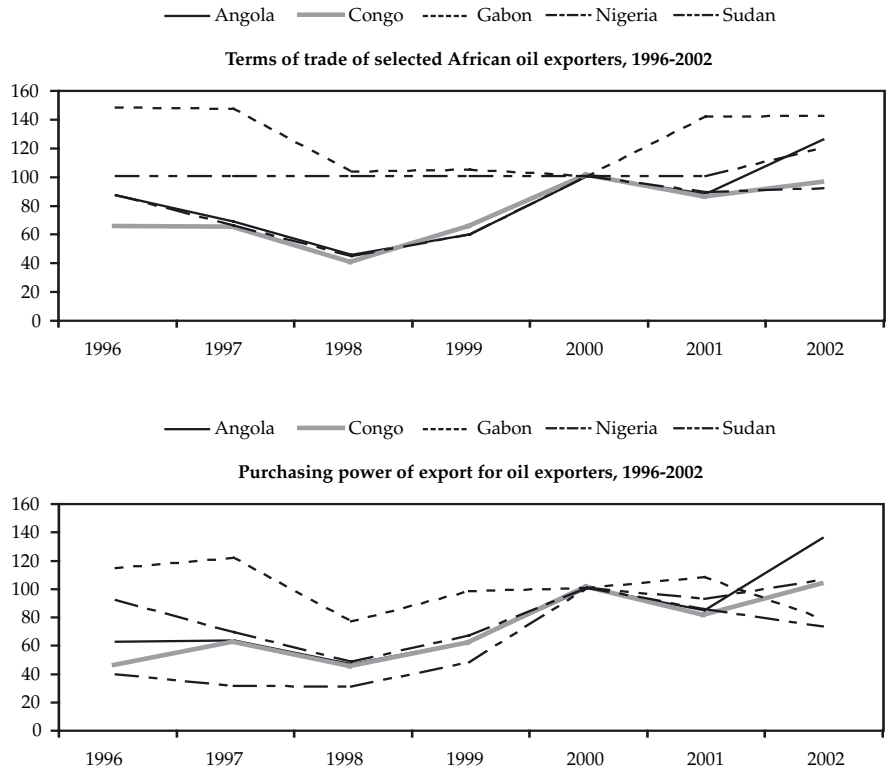
terms of trade. Hence, even if the terms of trade decline, Asian countries are able to buy more imports for the same amount of exports embodying the same quantities as far as factors of production go.

Figure 10 shows the barter terms of trade and purchasing power of exports for the twelve major African trading partners of China and India[12]. Since 2000, African economies with a large share of oil, metals and agricultural products

Figure 10: **Terms of Trade of Major African Oil, Metal and Agriculture Exporters, 1996-2002**
(Index numbers, 2000=100)



Source: UNCTAD Handbook of Statistics (2005)

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Figure 10: **Terms of Trade of Major African Oil, Metal and Agriculture Exporters, 1996-2002** *(cont.)*
(Index numbers, 2000=100)

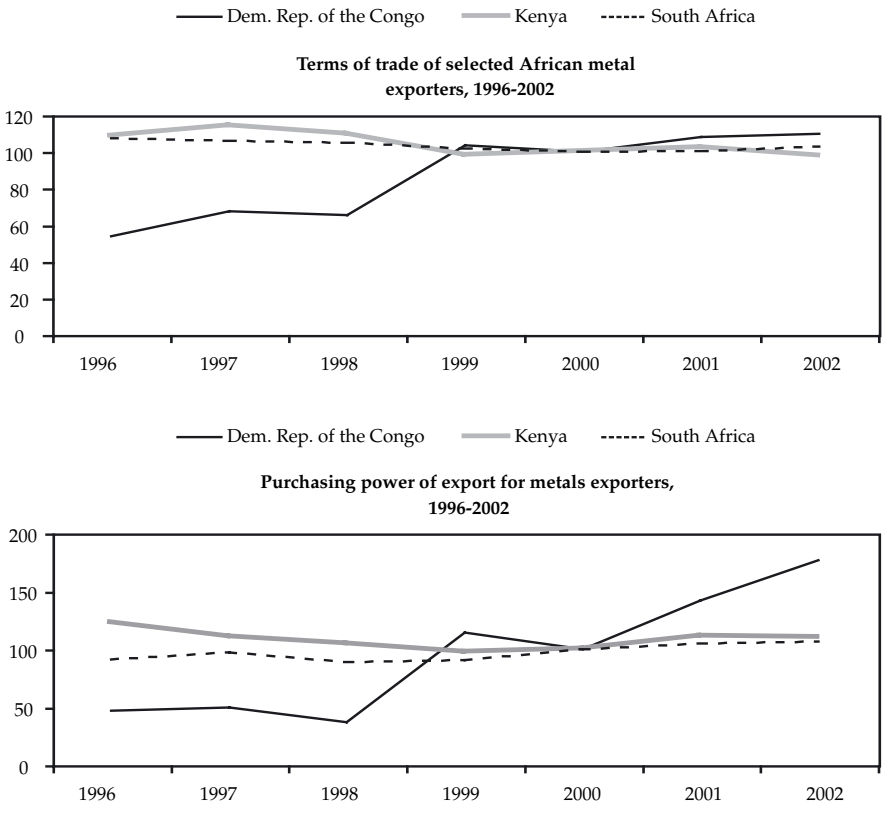

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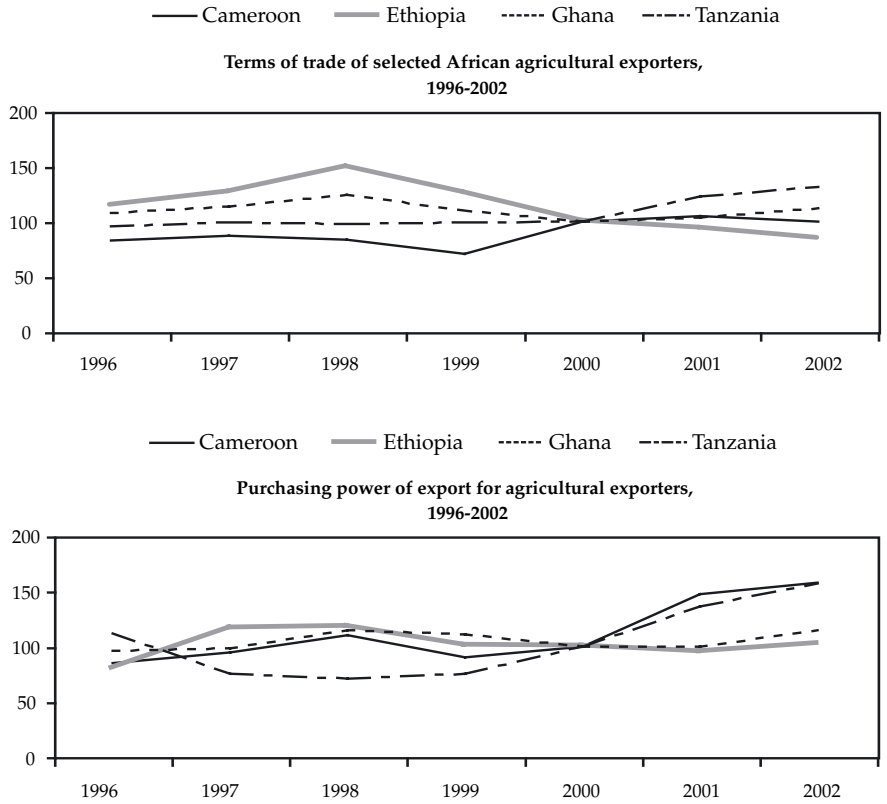
Figure 10: **Terms of Trade of Major African Oil, Metal and Agriculture Exporters, 1996-2002** *(cont.)*
(Index numbers, 2000=100)



Source: UNCTAD Handbook of Statistics (2005)

Table 10: **Terms of Trade Variability and Effects on GDI, 1997-2003**

	Terms-of-trade variability for each country*, 1997-2002	Terms-of-trade variability (average) for each group, 1997-2002	Terms-of-trade effects on GDI** for each country (per cent), 1997-2003	Terms-of-trade effects (average) on GDI for each group (per cent), 1997-2003
Oil exporters:		**30.03**		**7.48**
Angola	41.15		..	
Congo	39.92		16.80	
Gabon	22.75		4.46	
Nigeria	38.44		7.76	
Sudan	7.90		0.92	
Metals exporters:		**10.5**		**2.29**
D. R. Congo	23.72		4.22	
Kenya	5.72		2.12	
South Africa	1.90		0.54	
Agricultural exporters:		**13.21**		**2.11**
Cameroon	19.73		4.47	
Ethiopia	15.19		1.69	
Ghana	9.16		1.08	
Tanzania	8.78		1.22	
Manufacturing exporters:		**6.61**		**0.91**
China	3.51		0.77	
India	9.72		1.04	

Note: * Standard deviation of the annual rate of change of the net barter terms of trade
** UNCTAD calculates the average annual impact of terms of trade changes on GDI (Gross Domestic Income) as a percentage of GDP (Gross Domestic Product), in absolute value, 1997-2003, as the difference between the growth rates of GDI and GDP in real terms. GDI is the sum of all income earned in the domestic production of goods and services, while GDP measures the total market value of goods and services produced domestically during a given period.
Source: Authors' own computations based on UNCTAD Handbook of statistics (2005)

in their total exports have gained the most from the recent changes in the global economy. In general, both net barter and income terms of trade have improved substantially since 2000. Oil exporters experienced the biggest improvement in the terms of trade, 14.53 per cent on an average in 2000-2002. Despite a more diverse export product composition and large differences in price trends for individual commodities, agricultural exporters also improved their terms of trade by 6.91 per cent on average.

This overall improvement has however gone hand in hand with a significant variability in a country's terms of trade. Besides influencing the

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openness of a country to international trade, the terms of trade is an important factor in effecting income. The variability in turn, largely depends on the degree of export diversification. Table 10 presents estimates for the variability of terms-of-trade and for the effects of changes in the terms of trade on Gross Domestic Income (GDI) for each country and each group from 1997 to 2003. Between 1997 and 2003, the GDI effects were greatest in the oil-exporting African countries, where terms of trade variability and export concentration are the most pronounced. The average annual gain or loss of income initiated by terms of trade movements amounted to more than 7.5 per cent of GDP. Figures are positive, but much lower for the other two categories of African exporters.

This illustrates that dependence on exports of primary commodity with little diversification involves a considerable developmental risk. China has diversifies into the manufacturing sector to a greater degree. This has resulted in relatively low terms of trade variability; inspite of the fact that China is one of the most open economies in the world with a high export to GDP ratio of over 30 per cent in 2003.

Moreover, not all African countries are on an equal footing when it comes to reaping the benefits of higher commodity prices spurred by China and India's demand for commodities. Far from being homogeneously rich in natural resources, there are big differences among African trade patterns at the country level. A large number of African countries are net importers of mineral fuels, oils and distillation products and some of them (although in limited number) are net importers of crude materials (Appendix A). In this context, in their search for commodities, resource-poor African countries may regard China and India as competitors. Some African countries may even bear the brunt of rising commodity prices (oil prices in particular). In fact, gains from rising commodity prices mostly accrued to oil exporters, followed by exporters of metals ore (Nigeria, Chad, Equatorial Guinea, Gabon, Congo, Angola, Zambia, and to a lesser extent, Mauritania, Mali, Guinea, Democratic Republic of Congo and Sudan) (IMF 2004). Conversely, Guinea Bissau, Côte d'Ivoire, Swaziland, Kenya and Djibouti suffered net losses. For the remaining countries, gains from higher-priced non-fuel commodity exports have been offset by a higher oil bill. In sum, changes in commodity prices have had a roughly neutral effect on trade balances.

To summarise, the growth of Africa's exports to China and India is narrowly correlated with the growth of its major commodity exports – oil, agricultural products as well as precious metals, tropical woods, and cotton - to China and India. Africa is linked to Chinese and Indian demand for primary commodities via two channels: through raw material prices (which are increasingly governed

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by China's net import demand) and through the growing trade dependency of Africa on China and India. Africa's income terms of trade may well have benefited from Asia's emergence as an economic powerhouse, since a net rise in the demand for raw commodities has translated into higher export unit prices, as urban consumers gained from cheaper consumer goods and investors benefited from cheaper capital goods. The benefits of China's and India's rising global demand (net imports) for Africa-relevant commodities are, nevertheless, accentuated by the *volatility of demand* of the Asian giants; partly due to cyclical variations but also due to arbitrage between domestic production and imports.

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Notes

1. The major African commodity exports to China are: Crude oil (UN Comtrade SITC-Rev.3 code: 333), metalliferous ore, scrap (28), cork and wood (24), cotton (263), pearls and precious stones (667). Please refer to Table 11, 12 and Table A1 (in Appendix A) for more details on commodity selection.

2. The energy use is measured by kilotons of oil equivalent. It refers to apparent consumption, which is equal to indigenous production plus imports and stock changes, minus exports and fuels supplied to ships and aircraft engaged in international transport (International Energy Agency). The metal use is measured by apparent consumption of crude steel (thousand metric tonnes).

3. From the perspective of Africa's raw commodity exporters, it is the Asian Drivers' *net demand* that matters for prices and export volumes.

4. At this stage, we do not take into account of any domestic stock changes.

5. The chosen commodities are major commodity exports from Africa to China and India, for details please refer to Table 11, 12 and Table A1 (Appendix A).

6. The *World Energy Outlook* mentions a combination of factors that stretch the market and prompt widespread speculation by hedge funds and other investment vehicles, including increased terror attack against energy infrastructure, political uncertainty in oil producing countries, and the rise in China and India's demand (IEA 2004).

7. The net barter terms of trade are measured by the ratio between the unit value (price) index of exports and that of the imports. The formula does not take into account the possible changes in export volumes that may follow (or even cause) the observed changes in export prices. This shortcoming is somewhat compensated by another measure – income terms of trade, or the purchasing power of exports – which is defined as the value index of exports deflated by the unit value of imports.

8. The impact of relative price movements in global markets for primary commodities and manufactures on terms of trade is determined in the short run by the composition of a country's imports and exports and, in the medium run, by its flexibility in adapting the composition of trade to changing global demand and supply conditions (UNCTAD 2005).

9. Outside Asia, the increase in manufacturing exports from developing countries has been heavily concentrated in a small number of countries. In Latin America, Mexico and Brazil account for 75 per cent of the region's manufactured exports in 2003 (UNCTAD 2005).

10. Focusing on the major product-groupings (classified at the 8-digit level) imported into the EU where developing-country exporters were prominent and reporting

the proportion of the sectors for which the unit-price of imports from different income-groups fell between 1988 and 2001, Kaplinsky (2005) shows that in almost one third of these sectors the price of Chinese-origin products dropped. He concludes that the greater China's participation in global product markets, the more likely prices will fall.

11. There has been a sizeable rebound in the export price of manufacturing between 2000 and 2002. This is possibly due to the fall in the value of the US dollar in the period. The long term decline of manufacturing price is clearly visible.

12. They are classified according to their major product category in their exports: oil, metals, agricultural products, or manufactures. The classification for some exporters is not straightforward. For example, those classified as agricultural products exporters often have a more diversified export structure and majority of them also have a respectable share of metals export. This would certainly imply their terms of trade are also sensitive to changes in the prices of the remaining primary commodities in their export bundles.

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Chapter 4

The Asian Drivers as Markets for African Exports

China and India's growing demand for commodities has not only resulted in higher commodity prices and in a subsequent improvement of most African countries' terms of trade, but has brought about a significant redirection of African exports towards Asian markets and away from OECD markets[1].

4.1. Africa's Trade Reorientation Towards the Asian Drivers

While OECD countries remain by far the main destination for African exports, the share of OECD countries declined between 1995 and 2004. As shown in Figure 11, the export-share of industrialised countries when it comes to major African raw and soft commodity producers (Angola, Burkina Faso, Chad, the two Congos, Nigeria, Sudan and Zambia) has dramatically decreased over the same period, while China has emerged as a major market for these countries. As a result, China's share in African exports has risen significantly from 1.3 per cent in 1995 to 9.3 per cent in 2004. The picture for India is different. India's share in sub-Saharan Africa's exports has in general fallen, and at less than 2 per cent, remains at low levels.

Chinese imports from Africa show a very clear pattern in terms of commodity structure which is consistent with the latter's Ricardian advantage in commodity production (Table 11). Extractive mining and forestry in particular make up the bulk of African exports to China, as they do in African exports to the world: "Product A, B and C", i.e. the top three items in total exports to China/India from each African country, closely corresponds to Product I, II and III (Table A1, Appendix A), each African country's biggest exports to the world.

- Crude oil (i.e. Product I for Angola, Sudan, Nigeria, Congo and Gabon, refer to Table A1, Appendix A) also comes first as a share of their exports to China with almost 100 per cent, 98.8 per cent, 88.9 per cent, 85.9 per cent and 54.8 per cent respectively.

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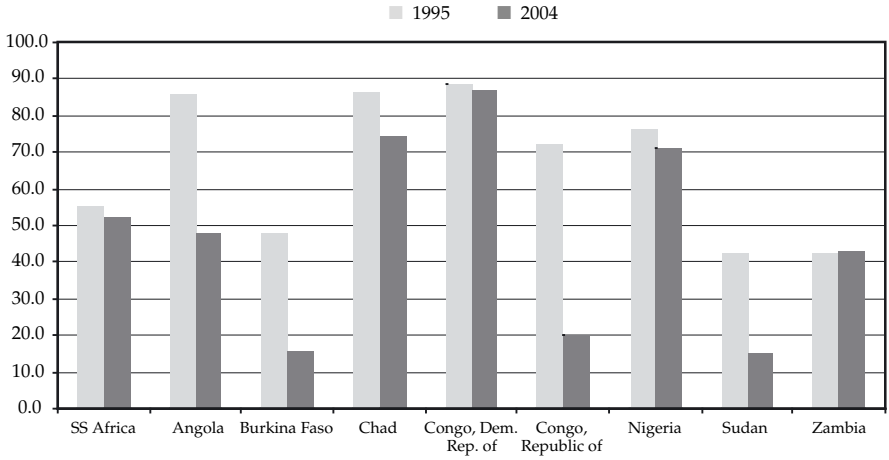
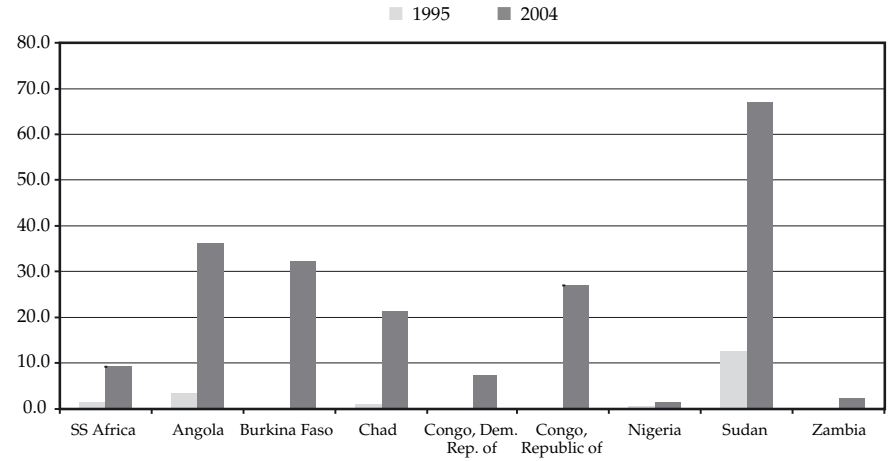
Figure 11: **The Reorientation of Africa's Exports towards the Asian Drivers**

African Exports to Industrialised Countries (% of total)[2]



African Exports to China (% of total)



- Metals rank first in exports of the Democratic Republic of Congo, Ghana and South Africa to China (with 99.6 per cent, 59.8 per cent and 45.6 per cent of their exports to China respectively), and they are key products in exports of these countries to the world.
- Woods come second in Chinese imports from Gabon and Cameroon with a share of 42.3 per cent and 39.7 per cent respectively, while they similarly

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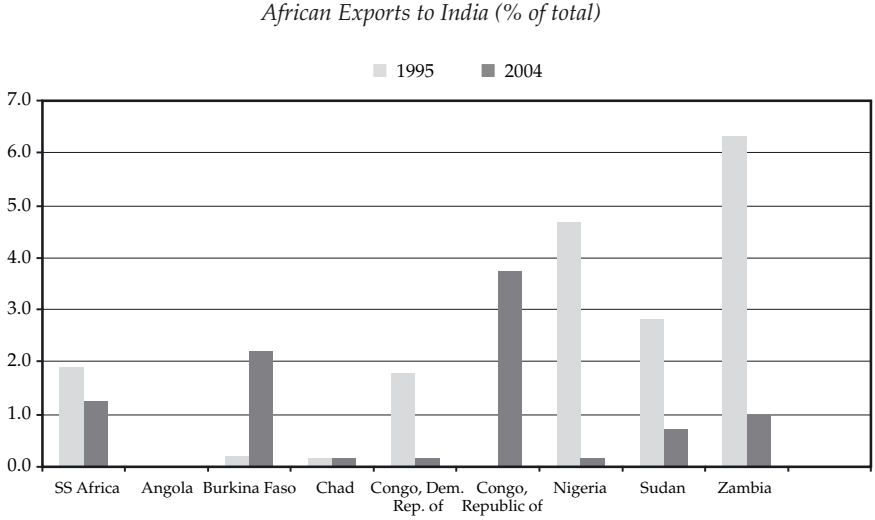
Figure 11: **The Reorientation of Africa's Exports towards the Asian Drivers** *(cont.)*



Source: IMF Direction of Trade (DOTS)

account for the lion's share of those countries' exports to the world. Overall, woods and crude oil together account for 97.1 per cent and 84 per cent of Gabon's and Cameroon's exports to China respectively.

According to Table 11, the only other products to feature significantly in China's imports from the selected African exporters are cotton from Cameroon and Tanzania and cocoa from Ghana[3]. The exports of cotton to China have been boosted by the Multi-Fibre Agreement (MFA) phasing out and the rapid build-up of the Chinese textile industry (Appendix B). Moreover, as already suggested, Chinese domestic supply of cotton remains in a state of flux and not always able to cater for domestic demand. Yet, overall, aforementioned figures suggest that labour-intensive agricultural (except cotton) and manufactured goods do not feature significantly in the exports of any African country to China.

Africa-India trade patterns are a bit different (Table 12). African exports to India are a bit more diversified and labour-intensive than those to China. Cotton accounts for a significant share of Cameroon's (76 per cent) and Sudan's (72 per cent) exports to India. Oil seeds are significant in Congo's exports to the latter, while edible vegetables and fruits account for a large share of exports from Ethiopia, Ghana and Tanzania to India. Hides feature prominently in exports from Ethiopia. Mozambique is also an important exporter of fruit and nuts to India. Nonetheless, crude oil accounts for 99 per cent and 85 per cent,

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Table 11: **China as Market for African Exports in 2003**[4]

Country	Share of China in Total Exports in 2003	Main Exports to China (in order of importance)	Crude Oil			Metals			Cotton			Woods			Oil Seed/rubber /cocoa			Textile		
			(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Angola	23.2%	Product A	25	99.9	7.5															
Cameroon	4.4%	Product A	4.4	44.2	0.2															
		Product B										8.6	39.7	1						
		Product C							17.4	15.9	0.4									
Congo	30.3%	Product A	31	85.9	2.4															
		Product B										37	9.8	1.7						
		Product C				72.5	4	0.4												
DR Congo	2.2%	Product A				41.4	99.6	0.4												
Gabon	5.5%	Product A	3.4	54.8	0.3															
		Product B										32	42.3	1.4						
Ghana	1.6%	Product A				13.2	59.8	0.12												
		Product B													1.2	33	0.2			
Kenya	0.3%	Product A																8.6	42.8	0.1
		Product B				2.48	29.1	0.01												
Nigeria	0.5%	Product A	0.5	88.9	0.4															
South Africa	4.6%	Product A				7.11	45.6	1.05												
		Product B										11	4.4	1						
Sudan	40.9%	Product A	81	98.8	5.5															
Tanzania	2.6%	Product A							4.2	53.8	0.1									
		Product B										14	23.4	0.02						

Note: (1)- Each export item to China as percentage of total exports of that item to the world. For example, China imports 25 per cent of Angolan oil exports to the world.
(2)- The percentage share of a given item in a country's total exports to China. For example, oil accounts for 99.9 per cent of Angola's exports to China.
(3)- Percentage share of export item from a given country in China's total imports for that item. For example, Angola's oil accounts for 7.5 per cent of China's total imports of oil.

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Table 12: **India as Market for African Exports in 2003**

Country	Share of India in Total Exports in 2003	Main Exports to India (in order of importance)	Crude Oil			Metals			Cotton			Woods			Oil Seed/rubber /cocoa			Vegetable/ gums & fruit, cereals			Hides		
			(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Cameroon	0.3%	Product A							7.4	76	1.6												
		Product B				47	17	0.1															
		Product C										0.1	4.3	0.1									
Congo	0.2%	Product A				4.5	46	0.1															
		Product B													32	24	2.8						
		Product C										0.1	5.7	0.04									
Ethiopia	1.2%	Product A																			9	55	1.8
		Product B																5.49	31	0.2			
Gabon	2.0%	Product A	1.9	85	0.2																		
		Product B										3.9	15	1.12									
Ghana	1.3%	Product A																21	61	4			
		Product B				4.89	23	0.3															
Nigeria	9.9%	Product A	10	99	11																		
South Africa	4.2%	Product A				1.12	20	1.9															
		Product B	1.5	12	0.2																		
Sudan	3.0%	Product A							17	72	3.8												
		Product B				42.5	15	0.1															
		Product C																			8	11	1.2
Tanzania	9.9%	Product A																68.7	71	5			
		Product B							17	12	1.9												

Note: (1)- Each export item to India as per cent of total exports of that item to the world.
(2)- The percentage share of a given item in a country's total exports to India.
(3)- Percentage share of an export item from a given country in India's total imports for that item.
Source: Authors' own calculations based on ITC Trademap (UNCTAD)

respectively, of Nigeria's and Gabon's exports to India, and metals make up 46 per cent of Congo's exports.

In line with Figure 11, Tables 11 and 12 show that African countries have not only been exporting mostly commodities to China and India over the last years, but they have also succeeded in turning China and India into significant markets for their commodities. For instance, China absorbs one quarter, one third and four fifth of Angolan, Congolese and Sudanese oil exports, respectively. It also buys 32 per cent and 37 per cent of Gabonese and Congolese exports of woods, respectively. India absorbs almost half of Sudanese and Cameroon exports of metals while being by far the biggest client of Tanzanian edible vegetables (68.7 per cent). The Senegalese production of phosphoric acid is almost fully exported to India.

Table 13: **China and India's Contribution to Growth of Commodity Demand for African Exporters in 2003**

Percentage

	China's		India's	
	Share of China in aggregate commodity export of each country in 2002	Contribution in 2003	Share of India in aggregate commodity export of each country in 2002	Contribution in 2003
Angola	14.1	73.3	..	..
Cameroon	7.9	0.1	1.2	2.0
Congo	11.7	118.7	1.1	1.5
D R Congo	9.7	178.1	..	..
Ethiopia	..	..	3.4	-12.3
Gabon	4.5	12.6	3.9	-8.7
Ghana	2.6	3.0	1.5	7.9
Kenya	0.1	0.5	3.3	3.3
Nigeria	0.4	0.7	12.3	3.9
South Africa	3.2	5.2	1.6	-0.3
Sudan	80.0	74.0	0.7	1.8
Tanzania	0.1	0.4	12.0	3.8

Source: Authors' own calculations based on ITC Trademap (UNCTAD)

Notes: Table 13 indicates China's and India's contribution to the growth of world demand directed to African countries in 2003. Contribution (ψ) in 2003 is calculated as

$$\psi = \frac{\Delta M_C^X \times \alpha_C^A}{\Delta M_W^A}$$ *where* ΔM_C^X *is the variation in Chinese imports from an African country X between 2002 and 2003;* ΔM_W^X *the change in World imports from country X over the same period;* α_C^X *the share of China in world imports from country X in 2002. For instance, China accounted for 73.3% of the rise in world demand for Angola's exports recorded in 2003.*

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As a result, China, and to a lesser extent India, have contributed significantly to the growth of world demand for commodities. African countries have satisfied a large part of this demand (Table 13). In 2003, for instance, China accounted for more than 100 per cent of the growth in the world demand for commodities exported by Congo and the Democratic Republic of Congo. In other words, world demand for Congolese exports would have decreased, had it not been fuelled by strong Chinese demand. Beside, China accounted respectively for 73.3 per cent and 74 per cent of the growth of world demand for Angolan and Sudanese commodity exports.

4.2. Trade Redirection: An Unfettered Blessing?

Africa's trade reorientation may also imply a few drawbacks.

Firstly, it may derail the endeavors by African commodity producers to diversify away from traditional exports. Diversification trends for African countries provide some interesting indications in this respect. Of the 43 African countries included in Figure 12, between 1998 and 2002, the exports of 17 countries have become more specialized (upper part of Figure 12). Many of these countries are oil and metals producers (Gabon, Angola, Ghana, São Tomé and Principe, Democratic Republic of Congo, Congo, Equatorial Guinea, Cameroon, and Sudan). Moreover, as shown in Figure 11, over the same time period, China and to a lesser extent India, have taken over from industrialized countries as major export markets for countries like Angola, Republic of Congo and Sudan. Of course, these facts do not, per se, support the existence of a *causal* link between the redirection of trade towards China and India and specialising in traditional commodities of a number of major African commodity producers. Moreover, some of these countries, even to begin with, had a very low degree of diversification. However, considering that the surge in trade between China and India and Africa has been mainly driven by commodities (esp. oil and metals), there is a case for further investigating the issue of specialising in commodity extraction by African countries; a scenario which might result from increased trade with China and India (see also section 6).

This issue is all the more central as deepening reliance on commodity industries may not be conducive to poverty reduction and economic diversification, especially in a context of strong Chinese and Indian competition in the manufacturing sector (see infra, sections 6 and 7). Using the framework developed by Winters (2002), Edwards and Jenkins (2005) point to the limited impact in terms of poverty reduction of oil and minerals industries and exports (the positive impacts consist mainly of windfall government revenues). [5] In

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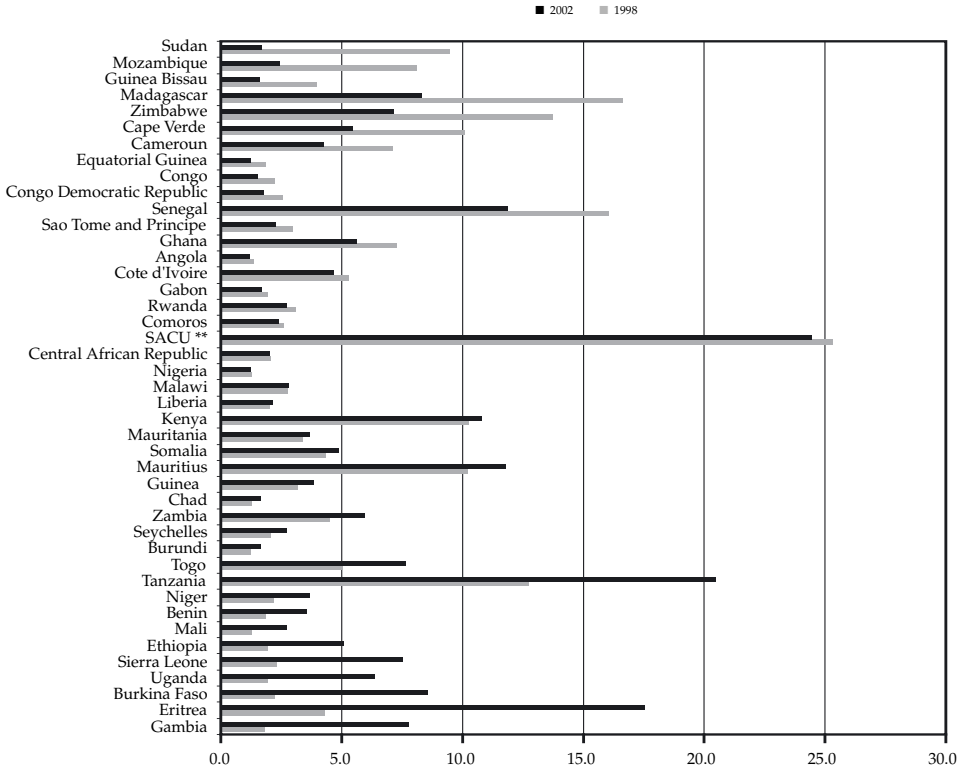
Figure 12: **Trends in Diversification of Selected African Countries**
1998 / 2002 - Herfindahl index*



Note: * The diversification indicator measures the extent to which exports are diversified. It is constructed as the inverse of a Herfindahl index, using disaggregated exports at 4 digits (following the SITC3). A higher index indicates more export diversification
** Include Botswana, Lesotho, Namibia, South Africa and Swaziland.
Sources: African Economic Outlook 2004/2005.

this respect, one must distinguish between exports to China and India. Unlike those to China, exports to India are much more diversified and also include labour-intensive agricultural products. Should African exports of labour-intensive soft commodities to India increase, the outcome in terms of poverty reduction could turn out to be positive. For example, in most African countries, cotton is grown by smallholders in poor rural areas. Beside, cotton revenues have strong spill-over effects on the whole economy.[6]

Secondly, most African countries rich in raw materials receive low scores when it comes to the perception of corruption and bribery as reported by

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Transparency International. This might suggest that an increase in the presence of Asian giants in these resource rich countries may increase the rents earned by an elite that commands access to those resources, rather than by the population at large. The exploitation of exhaustible resources might therefore not only burden current, but also future, generations if the proceeds are not invested at a social return high enough to exceed the inter-temporal shadow cost. It should be noted (see Table 14), however, that the transparency scores, although low, have *not* deteriorated during recent years when the presence of the Asian giants became more visible in Africa[7].

Table 14: **Trade Ties with China and India and Corruption in Africa**

Country	CPI TI Score* 2004	Rank/ of 145	CPI Change since 2000	Main Export Items per cent of total Exports, 2002	China's Share 2003 per cent of export receipts	India's Share 2003 per cent of export receipts
Angola	2.0	133	+0.3	Crude Petroleum (91.4)	23.2	0
Cameroon	2.1	129	-0.1	Crude Petroleum (43.9)	4.4	0.3
Congo	2.3	114	n.a.	Crude Petroleum (30.3), Wood (7.7)	30.3	0.2
Gabon	3.3	74	n.a.	Crude Petroleum (75.2), Wood(13.9)	5.5	2.0
Nigeria	1.6	144	+0.3	Crude Petroleum (88.9)	0.5	9.9
Senegal	3.0	85	+0.5	Inorganic acid, oxide, etc.(21.5)	1.4	13.0
Sierra Leone	2.3	114	n.a.	Diamonds (100)	n.a.	4.0
Somalia	n.a.			Wood & Pulp (49.2)	5.6	11.7
South Africa	4.6	44	-0.4	Precious Metals	4.6	4.2
Sudan	2.2	106	n.a.	Crude Petroleum (76.2)	40.9	3.0
Tanzania	2.8	90	+0.3	Fish (12.1)	2.6	9.9
Zambia	2.6	102	-0.8	Copper (39.2)	1.7	3.6

Note: : * Transparency International (TI) CPI (Corruption perception Index) Score relates to perceptions of the degree of corruption as seen by business people and country analysts and ranges between 10 (highly clean) and 0 (highly corrupt).
Source: Authors' own computations based on Transparency International (2004) and AfdB/OECD (2005)

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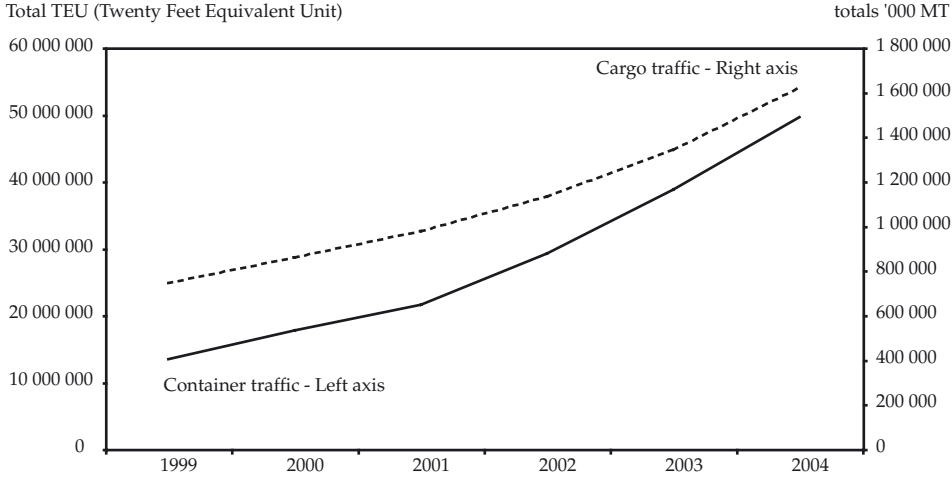
Evidence also suggests that in the absence of high environmental standards and enforcement capacities, extractive industries – whether in the form of illegal logging in tropical forests, attracting illegal slash and burn agriculture through road development to reach mining sites, overfishing in coastal waters, etc - take a heavy toll on ecosystems. Thus, potential revenues, for instance, from eco-tourism in the future may be compromised by commodity extraction for short-term commercial gains.

4.3. Asian Drivers, Global Logistics and the Direction of Commodity Trade

One result of China's and India's appetite for commodities, which has received little attention so far, is the shortage in world shipping capacities and the rise in freight rates charged to commodity exporters and importers. In brief, "China is importing substantial amounts of raw materials and exporting manufactured goods. This is firstly, drawing ships into the Pacific and secondly, driving up shipping rates" (Kerr-Dineen 2003). Container and cargo traffic through Chinese ports have grown by 270 per cent and 117 per cent respectively between 1999 and 2004 (Figure 13).

Figure 13: **Growth in Cargo and Container Traffic Through Chinese Ports***
1999 – 2004



Note: *Throughput in the ports of Dalian, Guangzhou, Ningbo, Qingdao, Quinhuangdao, Shanghai, Shenzhen, Tianjin, and Xiamen.
Source: ISL Port Data 2005

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Developments in the dry bulk segment, i.e. dry bulk carrier market for raw materials, are particularly telling. Firstly, an analysis of port traffic data (ISL 2005) points to a regional concentration of dry bulk traffic along specific sea trade routes connecting major suppliers (Australia and Brazil) and major importers (most importantly China). Where coal is concerned, for instance, four of the top five coal ports are located in the Pacific - three in Australia and one in China, Qinhuangdao which is the biggest coal importing port in the world. By the same token, the biggest iron ores exporting ports are located in Brazil and Australia while the biggest importing port for iron ores is Qingdao in China.

Furthermore, freight rates in the dry bulk segment have recorded dramatic increases. Seaborne iron trade is the main driver of the big ship, "Capesize" segment. Normally, seaborne iron trade largely moves in tandem with long term growth in steel production and therefore with changes in industrial production. In this context and before the emergence of China, demand for iron shipping was by and large predictable. But with China (almost suddenly) emerging as a major net importer of commodities, demand for dry bulk shipping has skyrocketed. This soaring Chinese demand for shipping has not been matched by an equivalent expansion of the Chinese or foreign-owned Capesize fleet: the shipping market has merely maintained its historic rate of expansion. While Chinese iron ore imports from Australia and Brazil alone represents an increase in Capesize demand of approximately 80 vessels since 2000, the world Capesize fleet has grown by merely 119 vessels over the same period (Svenning 2005).

Shortages in shipping capacities - as evidenced by flourishing order books of shipyards around the globe, (ref. Figure 14) have therefore been reported. Shipping rates have soared from 2002 onward, (see the trend in the Baltic Exchange Dry Index, Figure 15), until new shipping capacities were recently brought to the market and demand for shipping eased.

These developments may have undesirable negative effects for African countries, as shipping capacities on sea trade routes from and to Africa may become relatively scarce. Insofar as shipping costs may also rise, local exporters may see their margins squeezed. In the end Africa risks being inadequately connected, if not marginalised, to the main international sea routes.[8] Timber shipping is a revealing example. China is increasingly looking to Asian countries (Indonesia, Malaysia, Myanmar, and Papua New Guinea) for its timber imports to the detriment of less competitive African exporters of tropical logs. Not only are African log exporters undercut by their Asian competitors, they are also faced with increased difficulties in shipping their exports. The main timber carriers favour intra-Asian trade routes that are shorter and are characterised by high rotation over long distance Asia-Africa timber trade routes. The

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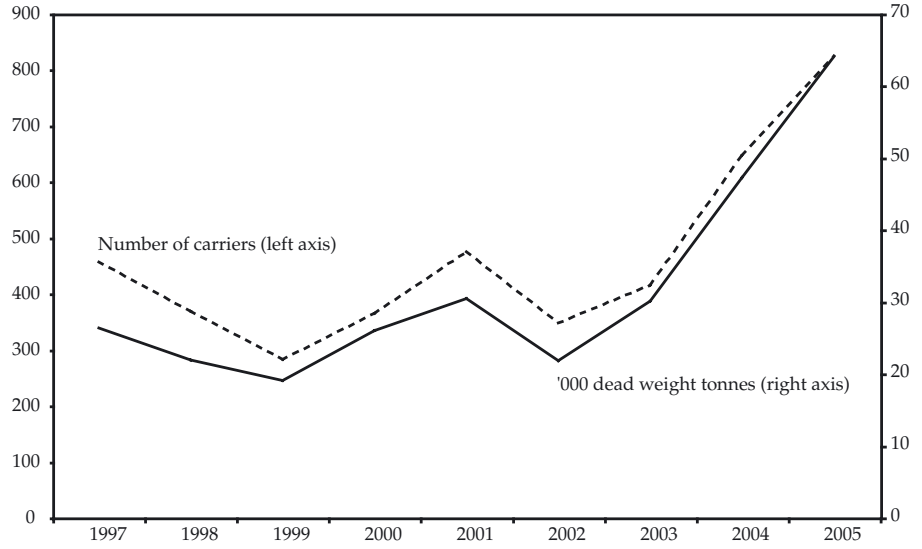
Figure 14: **Bulk Carriers on Order as of January 1st**
1997 – 2005



Source: ISL (2005)

Gabonese timber industry in particular, suffers from a scarcity of vessels designed for log shipping and rising freight rates (AfDB/OECD 2004).

To summarise, China and India's growing demand for commodities has meant a significant redirection of African exports away from OECD markets, towards Asian markets, even though Africa-China and Africa-India trade patterns are quite different. Chinese imports from Africa show a very clear pattern in terms of commodity structure which is consistent with the latter's comparative advantage in commodity production. By contrast, African exports to India are much more diversified and labour-intensive than those to China (though the export volume is not so significant). Nevertheless, Africa's trade reorientation may also imply some disadvantages. Firstly, it may derail the endeavors of African commodity producers to diversify away from traditional exports. Increasing the reliance on commodity industries may be incompatible with poverty reduction. Secondly, shortages in world shipping capacities and the rise in freight rates charged to commodity exporters and importers is drawing ships into the Pacific and may drive up shipping rates, to the detriment of African competitiveness. Thirdly, the presence of the Asian giants in resource rich African countries may increase the rents earned by an elite that commands access to these resources, while the population at large is left out in the cold. It

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is important to note, however, that transparency scores have *not* deteriorated during recent years when China and India have become more visible in Africa.

Figure 15: **Baltic Exchange Dry Index**

Source: The Baltic Exchange

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Notes

1. Though, this is also in part due to the relatively slower GDP and export growth in OECD countries in the past few years, as well as to the reduced commodities intensity of OECD economies.

2. Industrialised countries, as defined by the IMF Direction of Trade Statistics, include the United States, Canada, Australia, Japan, New Zealand, Austria, Belgium, Luxembourg, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, the Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, and the United Kingdom.

3. Second to metals, cocoa actually makes up the most of Ghana's exports to China (31.6 per cent). While cotton accounts for more than half of Tanzania's exports to China, China absorbs no more than 4.2 per cent of Tanzanian overall exports of cotton.

4. Selected countries are those for which trade with China and India represents the highest share in total export of each African country in 2003. Selected commodities are major exports of those countries to China and India as shown by the percentage share of a given item in a country's total exports to China' (these commodities are main African exports as well). Commodity code classification is based on HS-Rev. 1 (see Appendix D for details).

5. In some instances, however, the exploitation of extractive industries may lead Indian and Chinese companies to invest in infrastructures (roads, port facilities, etc.) locally so as to secure the transportation of the commodities. See the section on FDI for further elaboration.

6. Cotton has a driving role in the Malian economy for instance: it accounts for about 8 per cent of the country's GDP and close to 3.3 million people live directly from its cultivation (AfDB/OECD 2005, p. 294). However, Mali only exports unprocessed cotton with low value-added, limited developmental spill-over effect and the revenues of which are strongly susceptible to swings in (very volatile) international prices. In this context, the authorities have supported the development of a local textile industry. However, for all the availability of the raw resource, cotton, high factor costs (transport, electricity, etc.) require that the price of cotton used as input by the local nascent textile industry be subsidized by the local ginning company (AfDB/OECD 2005, p. 297).

7. In any case, country studies will investigate how the mineral rents gained from commodity exports to the Asian giants have been (are being) disposed. Such analysis should also include the impact of higher commodity exports on government revenues and the allocation of any increase on government spending.

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8. The tonnage balance is expected to remain tight at least until 2008. A continuous strengthening of freight rates is therefore expected in 2007 and 2008 while the scope for further expanding order books for bulk carrier is very limited. Shipyards in Japan and Korea which make most of the world's freighters have orders through 2007. There is no space for building additional Panamax/Capesize carriers before 2008 in particular (Svenning 2005).

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Chapter 5

The Asian Drivers as Potential Competitors

What impact does the emergence of China and India as exporters of manufactured good have on third markets for African products ? What about local African markets? In other words, is the emergence of China and India as strong competitors in manufacturing likely to derail Africa's attempt to diversify away from traditional exports?

5.1. Competition on Third Markets

African countries export very few manufactured products. In this context, in the manufacturing sector, the competition faced by third markets in the face of demand from China and India is limited, albeit not insignificant.

Table 15: **Export Similarity Index (ESI) for Selected African Countries in 2003**

	China	India
Angola	4.0	9.6
Cameroon	6.6	11.7
Congo	6.1	11.7
D R Congo	6.6	27.8
Ethiopia	4.3	9.3
Gabon	5.5	8.7
Ghana	12.2	18.7
Kenya	19.3	27.9
Nigeria	1.7	0.8
South Africa	27.7	40.2
Sudan	2.6	10.1
Tanzania	11.0	20.6

Note: The index varies between zero and 100, with zero indicating complete dissimilarity and 100 representing identical export composition. The index formula: XS j,k = sum [min (Xij, Xik) * 100], where Xij and Xik are industry i's export shares in country j's and country k's exports, which usually include a group of countries or competitors.
Source: Authors own calculations based on ITC Trademap (UNCTAD)

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The export similarity index (Table 15) points to a very limited overlap between Africa and India or China. The ESI is somewhat higher for India since the country is a significant exporter of minerals and fresh food, as are many African countries. Note that the two countries with the highest ESI scores – Kenya and South Africa – are also those with the most developed manufacturing bases. Tables C.1 and C.2 in appendix C integrate the picture. China has a revealed comparative advantage (RCA) in leather products, textile, clothing, electronic components, IT, consumer electronics, and miscellaneous manufacturing.[1] India has RCA in fresh food, minerals, leather products, textile, clothing, chemicals and basic manufactures. With respect to manufactured products, a RCA comparison between African countries and India/China indicates that China and India compete with Burkina Faso, Ethiopia, Kenya and Mali in leather products and with Lesotho and Malawi in clothing. China competes with Tanzania in textiles; India with Senegal in chemicals and with Mozambique, South Africa and Zambia in basic manufacturing.

These, however, are very crude indications. It cannot be concluded from a RCA analysis based on aggregate data that products where African countries and China/India have a common RCA are identical and that their producers are competing in the same markets. For instance, the exports of the Democratic Republic of Congo and India are *prima facie* similar. The top 10 products, that is, those with the largest shares in total exports of the Democratic Republic of Congo and India are the same and the difference in share of total exports is small, indicating possible competition. However, this similarity must be regarded with caution because of aggregation bias. In the case of precious stones, for instance, at a higher digit level, there is only one major export that could be in competition: *diamonds, not mounted or set*. Kennan and Stevens (2005) observe that China exports mostly processed leather goods, while in other developing countries included in their sample (including African countries) exports of leather mainly consist of unprocessed leather. Moreover, the RCA analysis ignores competition in sectors where African countries have not yet any RCA but which might nonetheless have opportunities for diversification away from traditional exports. For instance, countries such as Kenya, Uganda, and Ethiopia have no RCA in the clothing and garment sectors. Yet, since the implementation of the AGOA, a dramatic increase in the production of garment and apparels has been reported in these countries and substantial related investments have been undertaken locally (see Appendix B).

Edwards and Jenkins (2005) have therefore developed an alternative approach to the issue of Chinese and Indian competition on third markets. They identify those products in which China and India have been increasingly

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significant competitors in international markets, even though these products have no RCA in Chinese and Indian exports. Then, they fathom out whether these products represent a significant share of African countries' exports and ultimately examine whether these threatened exports are labour-intensive with, as a result, a strong adverse bearing on poverty. This approach shows that countries most affected by China's competition (i.e. more than 50 per cent of their exports are threatened) are Lesotho (90 per cent of exports, of which 80 per cent of labour-intensive products), Malawi, Mozambique, Namibia, South Africa and Zambia (Edwards and Jenkins 2005). But only in Lesotho, this is likely to have a strong impact on poverty: in the latter, threatened exports are indeed mostly made up of labour-intensive manufactured products, namely garments. Kennan and Stevens (2005) have adopted a similar approach: they have identified the most dynamic Chinese manufacturing export sectors, i.e. leather and articles, textile, clothing, footwear, aluminium, white and brown goods, and on this basis, they find that African countries producing leather (Nigeria and Ethiopia), textile (Zambia), clothing (Madagascar, Malawi, Mauritius, and South Africa)[2] and aluminium (Cameroon, Ghana, Mozambique, and South Africa) are likely to suffer most from Chinese competition. With respect to India, Edwards and Jenkins (2005) show evidence that only two countries could see more than 50 per cent of their exports threatened (Botswana and Sudan, in diamonds and refined petroleum products respectively). However, a more disaggregated analysis may suggest that products exported by Botswana and Sudan on the one hand, and India on the other hand, are not actually the same and do not compete directly. Should that be the case, still, the impact on poverty should remain limited (competition would not happen in labour-intensive products).[3]

The effects of Chinese and Indian competition on third markets take on special importance because of trade preference erosion. Trade preference erosion tends to undermine the competitiveness of African countries on markets in developed countries, vis-à-vis their Asian competitors. In a context of MFA removal, the case of textiles is specifically illustrative (see Appendix B for further analysis).

5.2. Competition on Local Markets

While China and India have emerged as strong competitors for third markets, where the handful of African producers of manufactured goods are concerned, imports of cheap Chinese and Indian manufactured products may also have flooded local African markets. In other words, Chinese and Indian

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companies may have emerged as significant competitors for local African markets. In this respect, three issues have to be considered:

- Do Chinese and Indian products which are mostly cheap, displace local African production or do they compete with imports from other foreign producers?
- If it turns out that imports from India and China undercut local production, do the latter consist of labour intensive goods, and if so what is the impact of imports from China and India on local employment, household revenues and, finally, on poverty?

Considering that imports from China and India are mainly made up of cheap products, i.e. products that are cheaper than goods manufactured locally, what are the expected benefits for the African (mainly urban) consumers purchasing Chinese and Indian final products and for local African companies using cheap inputs from China and India ? Balancing the purchasing power gains for the African consumer, the lower costs of inputs for African producers and the losses which might be incurred by local producers, what will the overall welfare impact of the influx of Chinese and Indian imports be on local African markets?

Evidence with respect to these questions are very scarce. Edwards and Jenkins (2005) analyse whether the growth of African imports from China and India has brought about an increase in China and India's share of total African imports or has added to existing imports. Only in the latter case, Edwards and Jenkins argue, would imports from China and India harm the local manufacturing sector. Based on a sample of countries for which the Asian drivers account for the highest share in total imports, only in Nigeria, have Chinese imports displaced local producers. Over the period 2000 to 2004, less than 50 per cent of the increase in Chinese imports were due to an increase in their share of total imports. Imports from India seem to have been more damaging to local producers and have undercut the local manufacturing sectors in Sudan, Uganda and Tanzania.

This analysis is however carried out at an aggregate level (the share of India and China in the *overall* imports of a given African country) and is based on a relatively *ad hoc* criteria (whether or not a threshold of a 50 per cent of increase in Chinese and Indian imports is attributable to an increase in their share of total imports). As a result, it offers limited insights into the actual competitive pressure exerted by Chinese and Indian *specific products* on local producers. Imports of specific products from China and India may indeed be damaging for some local producers, especially for labour-intensive local industries such

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as garments, thus impairing the development of nascent non traditional industries and making diversification of African economies difficult. They may yet leave the figures of imports by African trade partners unchanged and therefore do not come across as harmful for the local manufacturing sector when using the criteria established by Edwards and Jenkins (2005). Here there is some scope for supplementary research which would definitely benefit from a monographic approach.

Kennan and Stevens (2005) carry out a preliminary review of the impact of imports from China on African consumer welfare and local industries' competitiveness. They identify the sectors where Chinese exports have been specifically dynamic and which correspond to goods imported in large quantities by African countries, be they final products consumed by households or inputs being used by local industries. These are basically leather (in South Africa), textile (in Angola, Benin, Congo, Ghana, Kenya, Madagascar, Mali, Mauritania, Mauritius, Niger, Nigeria, Senegal and Sudan)[4], clothing (in Angola, Benin, Cameroon, Congo, Ghana, Guinea, Mozambique, Nigeria, Sudan, Tanzania, Togo and Uganda), footwear (in Angola, Ghana, Nigeria, South Africa, Sudan), aluminium (in Angola, Nigeria), "white goods" (in Angola, Ghana, Nigeria, South Africa and Sudan) and "brown goods" (in all sub-Saharan African countries used in the sample). With respect to these sectors and in countries indicated in brackets, households are set to gain as consumers of Chinese final goods and local producers as users of Chinese imported semi-final goods.

Based on an analysis of these trade gains (evaluated as accruing to a country when it is a large importer of a good exported by China or a significant exporter of a good imported by China) which are set against trade losses (understood to be a result of increased competition on third markets or of being an importer of a good imported by China) associated with China's ascendancy, Kennan and Stevens (2005) offer a typology of African "winners" and "losers". Countries that are "winners" are those for which the number of sectors recording trade gains associated with lower costs of imports or higher prices for exports exceeds the number of sectors undergoing losses due to increased Chinese competition on third markets or higher prices for imports attributable to higher Chinese demand for a given product. Those countries are Angola, Nigeria, Sudan and Tanzania and, to a lesser extent, Benin, Burkina, Cameroon, Congo, Democratic Republic of Congo, Ghana, Guinea, Mali, Mauritania, Mauritius, Niger, Senegal, South Africa, Togo,Uganda, and Zimbabwe. The impact is neutral for Chad, Ethiopia, Kenya, Madagascar, Mozambique, and Zambia and negative only for Malawi.

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A major limitation of this approach however is that Kennan and Stevens (2005) fall short of offering a *quantitative* estimate of trade losses and gains, and therefore fail to provide an estimation of the overall trade impact. They also do not study the adverse impacts of cheap Chinese imports on local producers, with its potential trail of lay-offs and subsequent revenue losses for local households. Cheap Chinese imports are merely regarded as a source of welfare gains associated with lower costs of imports.[5] Therefore, and as acknowledged by the authors, they provide a very preliminary and partial assessment of China's welfare impact on African countries.

To summarise, as China and India are currently integrating more than one billion people into the global labour pool, competition is intensifying in tradable labour-rich goods, the relative prices of which are dropping. However, labour-intensive manufacturing industries are less prominent in Africa than in other developing regions; and urban consumers benefit from the higher purchasing power of their incomes thanks to the lower prices of labour-rich goods. To be sure, such an analysis ignores opportunities for diversification away from traditional exports, i.e. potential rather than actual competition. Imports of specific products from China and India may indeed be damaging for some local producers, especially labour-intensive local industries such as garments, thus impairing the development of nascent non traditional industries and making diversification difficult.

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Notes

1. We measure the revealed comparative advantage in exports according to the Balassa formula:

   RCA_{ij} = (xij/Xit) / (xwj/Xwt). This formula compares the share of a given sector in national exports with the share of this sector in world exports. Where xij and xwj are the values of country i's exports of product j and world exports of product j and where Xit and Xwt refer to the country's total exports and world total exports. Values above 1 indicate that the country is specialized in the sector under review. A value of less than unity implies that the country has a revealed comparative disadvantage in the product.

2. Lesotho is not covered.

3. India is not analyzed in Kennan and Stevens (2005).

4. However the MFA quotas removal might have mixed impact on prices for garment and apparels: net importing African countries may be confronted with higher prices since demand from previously quotas-constrained importing markets has surged and some Chinese and Indian suppliers may redirect part of their exports towards these new, solvent and dynamic markets. Conversely, consumers in African net exporters of garments and apparels may benefit from lower prices, driven down by a redirection of local exports to the domestic markets as a result of surging competition on third markets.

5. Moreover the criteria used by the authors suffer from technical glitches. Sectors retained by Kennan and Stevens were those for which the growth of exports by or import from China have been "particularly rapid, and which are important products for developing countries"; the threshold for determining 'fastest growth' was 150 per cent of China's import and export growth. As a result, some important products for African countries, such as oil, are missing in their analysis, even if the impact of China on the global demand for some of these products is well documented. Consequently, most African countries appear to benefit from China's ascendancy merely as importers of cheaper Chinese goods: Angola for instance is identified as one of the main beneficiaries of China's trade ascendancy, but only as an importer of textile, clothing, footwear, aluminium, white and brown goods and ferrous metals, and not as an exporter of oil!

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Chapter 6

Back to the Raw-Material Corner? Dutch Disease and the Leamer Triangle

The impact of China and India, in particular for Latin America, is referred to as "Dutch Disease" (Corden and Neary 1982). The term "Dutch Disease", coined by *The Economist* in 1977, originated in the Netherlands after the discovery of North Sea gas. Corden (1984) points out that a resource boom can take place in three ways. Firstly, there can be exogenous technological progress in the booming resource sector. Secondly, the country can see a windfall discovery of some natural resources, and thirdly, there can be an exogenous rise in the world price of a natural resource exported by a country. The third case is of interest in the context of the emergence of China and India in the world as economic powers.

Firstly, China's and India's demand for raw materials has been rising since the late 1990s (see section 2). This exerts an increasingly upward pressure on prices, especially for those primary commodities that constitute a large part of Africa's exports.

Secondly, the long-term decline in commodity prices has been arrested and the worsening in African terms of trade has been halted at least for the time being. The dynamics of a country's terms of trade is determined to a great extent by the share of primary commodities in its trade basket. Insofar as the majority of African countries are still exporters of primary commodities with little diversification into manufactured exports, recent market trends have positively affected prices and improved the terms of trade.

Thirdly, there was a large real effective currency appreciation in some African countries as well (Table 16), regardless of the exchange-rate regime adopted. Either the Euro appreciated against the US dollar and hence led to real appreciation in CFA countries, or raw material prices translated into real appreciation elsewhere.

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The core model of *Dutch Disease economics* (Corden and Neary, 1982) assumes a small open economy with three sectors: two traded good sectors including one booming commodities' sector, and one lagging manufacturing goods' sector, with prices given internationally; and one non-traded sector, with prices determined by domestic demand and supply. A resource boom affects the economy through the *resource movement effect* and through the *spending effect*. Rising commodity prices increase the marginal product of labour in the booming sector, resulting in a shift of labour to the booming sector, away from manufactured goods sector (*resource movement*). The boom also leads to an increase in income and to higher demand for all three goods. With the price of tradable set in the world markets, the extra spending raises the absolute and relative price of non-tradable, resulting in an appreciation of the real exchange rate. In response, the non-booming tradable sector contracts (*spending effects) and* labour shifts to the non-tradable sector.

The combined effect of the *resource movement effect* and of the *spending effect* will produce the following effects on the economy:

- A fall in production in the manufacturing sector.

Table 16: **Real Effective Exchange Rates in Africa**
(2000 = 100)

	1977-2001	2002	2003	2004
Sub-Saharan Africa	102.7	93.5	102.5	104.8
Excluding Nigeria and South Africa	98.8	105.1	103.3	100.1
CFA franc zone	104.7	107.3	112.3	112.7
WAEMU	104.9	106.5	110.6	110.6
CEMAC	104.5	108.4	114.6	115.5
SADC	98.2	86.3	102.6	107.8
SACU	103.1	75.9	98.0	107.0
COMESA	93.2	111.0	102.4	96.0
Oil-producing countries	115.4	110.5	109.9	114.6
Non-oil-producing countries	100.4	89.1	100.3	101.9
HIPC Initiative				
(completion point countries)	105.2	96.2	93.4	90.7
Fixed exchange rate regime	101.9	127.7	132.1	125.0
Floating exchange rate regime	103.0	85.8	95.3	99.3

Source: IMF, *Regional Economic Outlook: Sub-Saharan Africa*, Supplement, September 2005.

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- A fall in the exports of manufactured goods.
- An appreciation in real exchange rates.
- An expansion in nontraded output if the *spending effect* is stronger than the *resource movement effect*. This is likely in those countries where the mineral rents are spent on public services and construction.

Whether or not *Dutch Disease economics* has empirical content can be tested in two ways. Gelb (1988) calculates a Dutch Disease Index (DDI) to measure the extent of sectoral distortion in economies that are heavily dependent on oil and other natural commodities.[1] This index is defined as:

$$DDI = (SN_{ag} + SN_{ma}) - (S_{ag} + S_{ma})$$

where SN_{ag} and SN_{ma} are the "normal" percentage shares of the traded sectors (agriculture and manufacturing) while S_{ag} and S_{ma} are the shares of the same sectors in the oil exporting countries. It should be noted that Gelb modifies the Chenery/Syrquin sectoral classification somewhat to eliminate construction from manufacturing since this is a predominantly non-traded sector which should not be considered as part of SN_{ma} in the analysis.

In a different approach, Stijns (2003) uses a *gravity model* of manufacturing trade (in order to control for macroeconomic determinants at home and by trade partners) to find that price-led energy booms hurt systematically, regardless of country-specific variables or of the exchange-rate regime adopted, energy exporters' manufactured exports. In a sample that covers 98 per cent of world trade during 1970-97, Stijns finds significant effects of Dutch Disease, both for a one per cent increase in world energy price and in energy exports, on reducing manufacturing exports.

For Dutch Disease to arise in Africa and become a serious policy issue, a number of conditions must be met:

- Firstly, there must indeed be other sectors for which the rise in the real exchange rate would create problems relating to competitiveness. On the face of it, manufacturing and agricultural processing are underdeveloped in Africa compared to other non-OECD regions.
- Secondly, it remains to be seen whether the favourable tendency in Africa's terms of trade is sustainable rather than transitory.

Because of the lack of non-commodity tradable activities in Africa, the concept of the *Leamer Triangle* may be more relevant when it comes to studying the impacts of both the resource boom and commodity price volatility that the

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Asian Drivers tend to exert on resource-rich economies. Leamer (1987) has shown using a three-factor multi-good model that resource-rich countries can take a development path very different from resource-poor countries. Figure 16 displays a *Leamer Triangle*. The corners of this triangle represent three factors of production: labour, natural resources, and physical as well as human capital. Both the factor endowments and the factor intensities of various industries are displayed by points in the triangle. A natural resource discovery, for instance, swings a country's endowment point directly toward the resource corner. The Figure can be used to contrast the development path A-B-C-D taken by resource-poor countries with the development path E-F-G-D taken by resource-rich countries. It may be worth investigating on a country basis whether the emergence of the Asian Drivers has led to a reversal towards the specialisation corner along the axis D-G-F-E.

The Leamer analysis can be used to analyse five problems connected to a resource boom in raw-material rich Africa (see also Leamer *et al.* 1999):

- Natural resources absorb more capital, impeding the emergence of the manufacturing sector. While income is raised by the boom, the absorption of low-skilled labour that goes along with the development of manufactured goods is foregone, hence inequality is deepened.
- Those manufacturing activities that do emerge are capital intensive and skill intensive; this may be beneficial as it can avoid the deterioration of terms of trade that results from direct competition with labour-rich China and India.
- Human capital accumulation may be impeded, as skills in the resource sector are very specific and spillovers limited. Capital market imperfections prevent the channelling of funds from the small elite group who control resources towards the poor who require education.
- Volatility in the prices of raw commodities may raise capital risk in resource-dependent, undiversified countries, which might deter investment and make it more difficult for other tradable activities to emerge.

Neither Dutch Disease nor Leamer effects have been prominently visible in Africa during the last five years. On the contrary, anecdotal evidence from South Africa and Zambia, for example, suggests that these countries have been able to diversify their economies. A more thorough investigation of these issues will be needed later when enough data have been accumulated to allow for statistically relevant analysis. Beyond the empirical concepts presented in this section, it might also be necessary to trace the share of non-traditional exports

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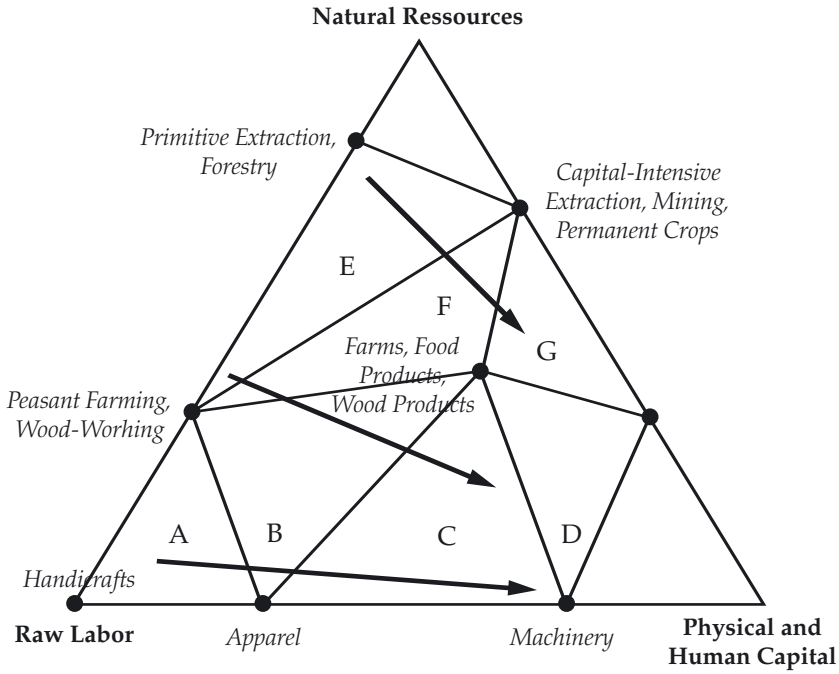
Figure 16: **The Leamer's Triangle**



Source: Leamer *et al.* (1999)

in total export proceeds (possibly corrected for nominal price changes) as suggested by Langhammer and Schweickert (2005).

To sum up, in order to avoid being trapped into the corner of vulnerable, capital-intensive and high-risk raw material dependence, resource-rich Africa will have to balance the need to match the promotion of job-rich sectors with the desire to capitalise on a windfall gain generated by higher commodity prices. Monetary authorities will have to lean against the real currency appreciation in order to avoid burdening industries competing with imports, and exporters outside the resource sector. Central banks need to be supported by fiscal authorities, which are required to limit public spending on services and construction to keep the prices of non-tradable in check. Investment abroad of export proceeds will further insulate the local economies from 'Dutch Disease' effects.

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Note

1. Kyle (2005) has calculated a modified DDI for Angola – with upper and lower bounds for the value to cope with the fact that the data to compute an exact, decomposed index were not available. As the author writes, "since the benchmark measure of the size of the traded manufacturing sector (incorrectly) includes construction, a measure of Angolan manufacturing will overstate the value of the index somewhat if it excludes construction, while including construction will understate the value of the index due to the presumably larger than "normal" size of the non-traded construction sector in the now distorted 2003 economy" (p. 29).

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Chapter 7

Foreign Direct Investment

It is possible to identify four main channels through which the Asian drivers impact on FDI into and out of Africa:

- Direct competition for projects;
- Because of the rise in prices, the financial viability of FDI projects;
- Interest of Chinese and Indian multinationals to invest in Africa, and
- Opportunities for African – or, more likely, South African – multinationals to invest in China and India.

The first channel has already received considerable attention – although it is doubtful that this is indeed the main one. In the medium run, however, the second and the third channels may be gaining importance and deserve to be treated carefully, not the least because along with the fourth channel, they point to the existence of opportunities, as much as threats.

7.1. Direct Competition for Projects

Over the past decade, China has emerged as one of the main destinations of FDI inflows. From $8.8bn on average in 1988-93, FDI inflows rose to $60.6bn in 2004 and over the same period its share in global FDI flows rose from 4.64 per cent to 9.36 per cent (UNCTAD, various years). In 2004, China became the most attractive destination for FDI in the world, followed by India and the United States (UNCTAD 2005; OECD 2005b).[1] FDI into India has also picked up lately – to $5.3bn in 2004, an amount that is almost 23 times higher than in 1988-93 (UNCTAD, various years). Given the size of the Chinese and Indian markets, their explosive growth, low labour costs and razor-edged export competitiveness, they are likely to keep on attracting massive investment inflows into both domestic and export market-oriented activities.

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Will therefore FDI be diverted away from other developing countries and region, Africa in particular? After a downturn in 2002, FDI flows to Africa recovered in 2003 (+39.7 per cent) and remained relatively stable in 2004 ($12.8bn). Although rising from 1.09 per cent in 1988-93, Africa's share in world FDI inflows remains small at 1.98 per cent. Depending on the country, 50-80 per cent of FDI in Africa is in natural-resource exploitation and natural-resource-rich countries (Angola, Chad, Equatorial Guinea, Nigeria, and South Africa) continued to be the principal destinations. A large number of smaller countries are receiving FDI in services, particularly in telecommunications, electricity and retail trade.

To the extent that Africa was part of global production networks shared with China or India, it could benefit as an investment destination from the increased attractiveness for FDI to the Asian giants. Such complementarities are weak in Africa, however, as the continent is mainly linked to the world economy through raw materials. As much of FDI in sub-Saharan Africa is geared to resource extraction and domestic markets (which will grow as services are liberalised), China does *not* pose a direct threat to other countries here; FDI inflows depend on each country's growth prospects, resource endowment, and investment climate.[2]

Countries do, however, compete for FDI in export projects. The number of such projects is determined by the global market, and if a multinational corporation (MNC) puts an export-oriented (and usually very capital-intensive) plant into China or India it deprives some other prospective sites of that plant. Some export-oriented activities are organised in tight global production chains where countries support each other, undertaking different functions. The largest foreign-owned multinationals in China – which mostly operate in information and communication technologies (ICT) manufacturing and account for the bulk of China's exports – have very little manufacturing capacity in sub-Saharan Africa (Table 17), so that direct competition is limited.

In low-tech activities like clothing or footwear, on the other hand, growing FDI in China and India is likely to crowd out investment.[3] Although no sub-Saharan African country ranks among the world's 20 largest apparel exporters, in Lesotho and Swaziland a clothing industry employing 70,000 in 2003 grew in the 1990s thanks to the Multifibre Agreement (MFA) quota systems and investment from Asia (Goldstein 2004 and Hilligas 2004).[4] Moreover, Cape Verde and Mauritius are also among the 20 economies with the highest dependence on apparel exports (Appelbaum 2005). With the end of the MFA and the removal of quotas, sourcing and investment decisions are affected more by economic fundamentals. But low labour costs alone will not be

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Table 17: **Foreign-owned Exporters in China and their African Presence**

Company	Country	Sector	Number of subsidiaries	Number of plants
Motorola	United States	Electronics	1	0
Volkswagen	Germany	Motor vehicles	0	1
General Motors	United States	Motor vehicles	3	4
Nokia	Finland	Electronics	0	0
Dell	United States	Electronics	0	0
Honda	Japan	Motor vehicles	0	0
Siemens	Germany	Electronics	1	0
Flextronics	Singapore	Electronics	1	0
Acer	Chinese Taipei	Electronics	1	0
LG	Korea	Electronics	1	0

Source: Chinese Ministry of Commerce (for listing) and companies' websites (accessed 10-11 August 2005).

sufficient for attracting investment – especially if other costs (such as logistics) make African producers uncompetitive. There is likely to be more consolidation of production into larger factories in a smaller number of locations. China and India are likely to be in a particularly strong position in this new geography of production. China alone accounted for 17 per cent of FDI projects in textiles and clothing manufacturing in 2002–2004. On the other hand, 6,000 textile workers lost their jobs in Lesotho in January 2005 alone.[5]

It must be borne in mind that various factors may also work against too much consolidation (Appelbaum 2005). Proximity to markets continues to play an important role for some product categories, and some producers have signalled that they will retain several production bases in order not to become too dependent on a single source country. Moreover, various trade policy measures – including preferential trade arrangements such as AGOA, ACP, and EBA, also influence sourcing and investment decisions and may still provide African countries with a relative advantage.[6] The idea of a regional association of textile and garment manufacturers was agreed at a Regional Cotton and Textile Executive Summit, held in Nairobi in May 2005. There is also scope for strategic responses that differentiate a country's industry and try to avoid competing with China at all costs.

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So far, the policy response in Africa has been rather slow. Another industry where the region may be shielded from Chinese competition is furniture and other wood products. South Africa has already attracted sizeable FDI, from Italy and other European countries, and may even benefit from the growing appetite of the Chinese middle class for quality, EU-branded furniture.[7] Yet, for the process to gather momentum would require a substantial upgrading of South African furniture producers (Kaplinsky *et al.* 2003).

7.2. Indirect Support for Natural Resources Projects in Africa

The second channel is indirect. A corollary to competition is complementarity. As is examined elsewhere in the paper, the demand from China and, most recently, India has driven the recovery in world prices for most commodities since 2001. Sub-Saharan Africa is incredibly well-endowed with non-oil mining resources – in 2002 Southern Africa alone accounted for at least 45 per cent of the global production of chromium, gemstones, kyanite, platinum, and vermiculite (Goldstein 2004, Table 20), and may benefit from the interest of Western MNCs. Crucially, the current climate of high demand and high prices, especially if it is confirmed in the medium run, makes it financially viable to start projects in areas that, for geological and other reasons, were not considered prime ones in the past. Industry experts argue that this holds true in particular in the case of deepwater oil exploration in the Gulf of Guinea. Producers including Angola and Azerbaijan are increasingly setting out aggressive contract terms upfront with Western majors, linking their share of the profits to the oil price and the profitability of a project.

7.3. Chinese and Indian Investments in Africa

The third channel, overseas investment by Indian and Chinese companies, is partly related to the previous one, insofar as the bulk of Chinese and Indian investments in the region is of resource-seeking nature and goes to oil and non-oil mining (Goldstein 2006). Reserves in sub-Saharan Africa have attracted the interests of national oil companies from China and India (as well as Brazil and Malaysia) as they seek to augment their international exposure (Table 20). For example, announcing on 2 August 2005 that it would abandon its $18.5 billion offer for Unocal, CNOOC (China National Offshore Oil Corporation) signalled that it would continue to work with foreign governments and companies in its search for overseas oil and gas reserves.

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Investment relations have attained momentum in recent years, as also shown by the signing of bilateral investment (BITs) and double taxation treaties (DTTs) (Table 18). The share of Chinese and Indian FDI flowing into the region is – with all the limitations associated with the poor quality of data (see Goldstein 2006 and OECD 2005b, Box 1.1) – probably higher than for OECD countries, for which sub-Saharan Africa is a minor investment destination. In the case of China, during 1991-2003, the cumulative value of FDI to Africa was equal to $847 million, or 19.5 per cent of total outward FDI flows (Table 19). The whole of Africa accounted for 17 per cent of India's outward FDI flows in 1975-1990, with the bulk going to Senegal and Nigeria (Pradhan 2003, Tables 2 and 3). The amounts may be negligible when compared to global FDI flows, but they can be significant in the case of African countries such as Sudan. Moreover, since 2005 Chinese and Indian oil companies have significantly increased the size and number of their projects in Africa, especially in the Gulf of Guinea (Table 20).

Table 18: **Investment Relations between China and India and Selected Sub-Saharan African Countries**

	China				India			
	BIT*	DTT**	FDI		BIT*	DTT**	FDI	
			Value [a]	Nrs. [b]			Value [c]	Nrs. [b]
Angola				4				
Botswana	✓							
DR Congo								
Ethiopia	✓					✓		
Ghana	✓				✓			
Kenya						✓		3
Mauritius		✓				✓	415	9
Mozambique								
Nigeria		✓ [d]	44	4				2
Senegal								
South Africa		✓	120	1		✓		13
Tanzania			41	1		✓		2
Zambia			134	2				

Notes: *BIT = bilateral investment treaties **DTT = double taxation treaties
(a) Cumulative investment value of approved projects (1999-2002);
(b) Number of projects (2002-June 2005);
(c) Equity (1991-March 2001);
(d) Treaty signed (15 April 2002) but not yet in force.
Source: www.unctadxi.org/templates/Page____1006.aspx; www.worldwide-tax.com

Thanks to Carmel Ferris for providing Logotec data for free and Richard Parry for help in accessing the IBFD Tax Treaties Database.

Table 19: **China's Approved OFDI Flows, by Region, 1991-2003**
(Millions of dollars)

YEAR	TOTAL			ASIA			AFRICA			EUROPE			NORTH AMERICA			LATIN AMERICA			OCEANIA		
	Number of Enterprises	Chinese Investment	Average Investment	Number of Enterprises	Chinese Investment	Average	Number of Enterprises	Chinese Investment	Average	Number of Enterprises	Chinese Investment	Average	Number of Enterprises	Chinese Investment	Average	Number of Enterprises	Chinese Investment	Average	Number of Enterprises	Chinese Investment	Average
1991	207	367.0	1.8	55	13.7	0.2	7	1.5	0.2	80	24.2	0.3	34	313.9	9.2	16	4.1	0.3	15	9.6	0.6
1992	355	195.3	0.5	106	57.5	0.5	23	7.7	0.3	131	53.7	0.4	46	171.2	0.4	26	13.0	0.5	23	46.3	2.0
1993	293	95.9	0.3	107	31.4	0.3	28	14.4	0.5	58	11.7	0.2	48	166.8	0.4	20	9.9	0.5	32	11.8	0.4
1994	106	70.6	0.7	49	25.7	0.5	12	28.0	0.2	14	5.8	0.4	17	73.9	0.4	6	0.8	0.1	8	2.9	0.4
1995	119	106.4	0.9	61	50.4	0.8	26	17.7	0.7	7	2.0	0.3	12	21.5	1.8	10	4.9	0.5	3	9.9	0.3
1996	102	293.8	2.9	53	109.3	2.1	23	56.2	0.2	8	2.7	0.3	10	4.9	0.5	4	119.8	30.0	4	0.9	0.2
1997	128	169.3	1.3	55	27.5	0.5	41	81.8	2.0	22	12.9	0.6	1	0.9	0.9	4	27.3	6.8	5	18.7	0.4
1998	266	259.0	1.0	85	68.1	0.8	40	88.3	2.2	78	33.4	0.4	21	30.5	1.4	32	24.2	0.8	10	14.5	1.4
1999	220	590.6	2.7	86	171.4	2.0	54	95.2	1.8	34	33.4	1.0	22	81.2	3.7	21	207.6	9.9	3	1.7	0.6
2000	243	551.0	2.3	102	159.6	1.6	52	214.3	4.1	32	47.7	1.5	23	54.8	2.4	19	60.7	3.2	15	13.8	0.9
2001	232	707.5	3.1	106	460.0	4.3	45	72.3	1.6	32	60.1	1.9	23	57.2	2.5	17	40.0	2.3	9	17.9	2.0
2002	350	982.6	2.8	141	605.9	4.3	36	62.4	1.7	63	74.9	1.2	45	15.3	3.4	46	37.0	0.8	19	49.5	2.6
2003	510	2,086.9	4.1	279	1139.6	4.1	53	107.4	2.0	47	52.1	11.1	94	120.9	1.3	25	164.2	6.6	12	34.1	2.8

Source: China, Ministry of Commerce (various years)

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Table 20: **Sub-Saharan Africa and Oil Investment from Brazil, China, India and Malaysia**

Company	Region			
	North Africa	West Africa	Central Africa	South-East Africa
CNPC (China National Petroleum Corporation) has also invested in Venezuela, Kazakhstan, and Myanmar.		Together with Sonangol, has shown interest in partnering with Argentina's state-owned Enarsa. In July 2005 was awarded four oil blocks in Nigeria in exchange for investing in the construction of hydropower plant in Mambila, Plateau State, with over 1,000 MW capacity, as well as taking controlling stake in the 1,100,000 barrels per day (bpd) Kaduna refinery.	In 1995, CNPC reached an agreement to form a joint-venture with the Government of Sudan and other partners (Talisman Energy, Canadian oil minor, as well as Malaysia's Petronas and Sudan's Sudapec). CNPC has a 40 per cent share in the $1.7 billion project known as Greater Nile Petroleum Operating Company. Separately, CNPC owns most of a field in southern Darfur, which began trial production this year, and 41 per cent of a field in the Melut Basin, which is expected to produce as much as 300,000 barrels per day by the end of 2006.	

Source: Goldstein (2006).

Table 20: **Sub-Saharan Africa and Oil Investment from Brazil, China, India and Malaysia** *(cont.)*

Company	Region			
	North Africa	West Africa	Central Africa	South-East Africa
ONGC (Oil and Natural Gas Corporation, India) also bought substantial interests in Russia (20 per cent stake in the Sakhalin 1 field), , Iran, and Vietnam.		In 2005 a deal by Shell to sell its half of the Greater Plutonio block 18 to ONGC for $620 million could not materialise since Sonagol exercised its pre-emption right and eventually sold it to a Chinese firm. India had reportedly offered $200 million for developing railways. Operates in Nigeria (Agbami and Akpo fields) and Ivory Coast.	ONGC Videsh, the overseas arm of India's ONGC, bought a 25 per cent stake in Greater Nile from Talisman and is also in talks to build a 750km pipeline from Khartoum to Port Sudan on the Red Sea.	
Petrobras, Brazil	Gained E&P rights for Libya's Area 18 in 2005.			Operates block number five off Tanzania's Mafia Island

Source: Goldstein (2006).

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Table 20: **Sub-Saharan Africa and Oil Investment from Brazil, China, India and Malaysia** *(cont.)*

Company	Region			
	North Africa	West Africa	Central Africa	South-East Africa
Petroliam Nasional Berhad (Petronas, Malaysia)		It undertakes E&P activities in Sudan (with CNOOC and Sudapet) and Chad (with ExxonMobil).		In 1996 it acquired a 30 per cent shareholding in Engen, the South African refining and marketing, eventually buying a controlling stake for $775 million. The Engen purchase gave Petronas control of 18 per cent and 27 per cent of South Africa's refining capacity and retail-fuel market, respectively. Engen's operations now contribute almost 20 per cent to total annual revenue. In November 2004 Engen and Sasol combined their liquid fuels operations in a new joint venture, Uhambo.
Sinopec, China		Is erecting a pipeline to Port Sudan on the Red Sea, where China's Petroleum Engineering Construction Group is building a tanker terminal. In February 2004 signed a technical evaluation deal with the Gabonese oil ministry for three onshore oilfields.		Was recently awarded two concessions (blocs 3/80 and 8) in Angola.

Source: Goldstein (2006).

While they do not master cutting-edge technology (as does Petrobras), Chinese and Indian energy companies have a number of possible advantages over Western majors. Privileged access to cheap loans extended by state-banks, particularly for Chinese companies, may make them competitive in bidding[8] – although in the future, authorities may become more attentive about the quality of the loan portfolios of Chinese banks. Junior petroleum and mining companies therefore have different discount rates and are willing to take on high political and security risks, even investing before there is a mining or petroleum code, in the hope of making major discoveries before their larger, more risk-averse competitors step into the fray.

While more competition on the demand side is welcomed by oil and gas producing countries, and may in theory contribute to making the bidding process for exploration and production rights more open, the risk exists that companies that are based in emerging economies may follow more flexible business practices. Legal texts such as the OECD Convention Against Bribery of Foreign Public Officials in International Business Transactions, stock market disclosure requirements, codes such as the OECD Guidelines for Multinational Enterprises, a revised version of which was issued in 2000, the British-led Extractive Industries Transparency Initiative and civil-society initiatives such as The Publish What You Pay coalition have all combined to increase revenue payments transparency in OECD countries – and more broadly for firms listed in OECD financial markets.

Other forms of outward FDI exist in manufacturing and services, especially from India. Mauritius has emerged as the third-largest destination for Indian outward FDI in 1991-2001, after the UK and the US, with 183 projects and a 9.73 per cent share in cumulated equity commitments (Pradhan 2003, Table 7).[9] More recently, the Tata Group has identified South Africa as the next frontier in its globalisation strategy (Goldstein 2006), where its interests already include IT services, telecoms, bus-body building, and car distribution. Tata Motors may take advantage of South Africa's free-trade agreement with the European Union to access European markets.[10] Other Indian conglomerates and firms are also active in Eastern Africa and Mauritius, where a sizeable diaspora with a secular history exists.

The Chinese in Africa constitute a more recent entrepreneurial diaspora. Although Chinese business networks are increasingly visible in hostile or indifferent policy environments, their potential role as catalysts for industrial development in fostering Asia-Africa linkages remains limited to information, input supply, consulting services, and technical assistance (Bräutigam 2003). In Sierra Leone, individual entrepreneurs (mostly from the Hunan province) are

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producing such necessities as spring mattresses, roofing tiles and hair lotions in a light manufacturing zone under the auspices of a joint venture between the two countries.[11]

Also of interest, not least for its interesting developmental consequences is the arrival in Africa of Indian (and Brazilian) producers of generics drugs (i.e., copies of branded drugs). Companies such as Ranbaxy and Dr. Reddy have become world leaders in generics, although they are still dwarfed by the leading pharmaceuticals companies in the West – and aim to take advantage of WTO provisions that allow patents to be broken in cases of national emergency, including public health crises such as AIDS or tuberculosis epidemics. Ranbaxy Laboratories – India's largest pharmaceutical company and the 11th largest producers of generics in the world – set up its first international joint venture in Nigeria way back in 1977. Ajanta Pharma was the first to open a plant in Mauritius in 1996.[12] In Uganda, a Chinese pharmaceutical firm is introducing a new anti-malaria drug and bidding on a contract to supply treated bed nets (Lyman 2005). [13]

As far as non-equity forms of investment are concerned, Chinese companies have been involved in major infrastructure projects, such as Olympic-style stadiums in West Africa and presidential palaces in Kinshasa, as well as the railroad in Tanzania, in competition with the nearly parallel road system built by the West (Lyman 2005). Chinese contractors are currently involved in many projects, which are financed by soft loans when not paid directly by Beijing. Of even greater impact is Chinese contractors' winning of the $650 million bid for the Nile River's Merowe Dam – the biggest international project secured by China so far. Costing about $1.5 billion, the project is financed largely by Arab multilateral and national funds. Growing familiarity with conditions in Sudan, lower risk contingencies built into the bid, and more modest expectations for pay and profit seem to have been influential.[14] All managers, 90 per cent of engineers and 75 per cent of technicians will be Chinese. Local staff will account for 20 per cent of skilled workers and all general labour. Sudanese staff earns on average $22 to $350 a week, while expatriates' earnings are $220 to $600.

7.4. African Investments in China and India

Last but not least, export-orientated and domestic market-orientated FDI coexist in China itself. As policies towards FDI have evolved from an export promotion regime into further liberalisation of the domestic market, new opportunities are emerging that open exciting opportunities for MNCs from

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other developing countries to follow an evolutionary entry path into China. Companies from emerging and developing countries may find it relatively easier to operate in other economies with more similar characteristics than Western competitors. Reasons include the habit of working in difficult environments, where some markets may be missing and the related functions must be internalised; the ability to deal with public authorities; a favourable attitude by stakeholders in the host economy; and the leverage provided by less stringent regulations in home countries. At the end-of 2004, South African FDI stock in Hong Kong, Singapore, and "Other" (mostly India) was equal to ZAR2,198million, ZAR100million, and ZAR227million, respectively – for a grand total of $414million. Although this option is, in all likelihood, only open to South African MNCs (Box 1) and Indian diasporas in East Africa,[15] it does point to the broader ramifications that the emergence of the Asian drivers - and by extension globalisation itself - have for developing countries. Liberalisation and the arrival of OECD-based competitors, far from condemning domestic manufacturers to oblivion, push managers and firms towards internationalisation patterns. Their heterogeneity makes it important to explore in

Box 1: **South African Multinationals in China and India**

As an increasing number of firms from South Africa are using their management capability, i.e. the ability to organise production and distribution activities and employ adequate technology, to derive a competitive edge in global markets, a few are investing in China. SABMiller has invested US$400 million in the Chinese consumer goods sector since 1994 through China Resources Breweries (CRB), a 49-51 per cent joint venture with China Resources Enterprise (CRE). CRB owns 30 breweries throughout China and leading local and regional beer brands. In the resource field, Kumba Resources has invested an estimated RMB92 million in a zinc smelter in Hongye. China also allowed foreign participation in gold mining in 1994. Although the country is the world's fifth-largest producer, its industry is plagued by production inefficiencies and safety problems, presenting opportunities for South African conglomerates, which are renowned the world over for their management and mining technology. Anglo American bought $150-million worth of shares in China Shenhua Energy (CSE) group, China's largest coal producer. Other South African corporations active in China include Sappi, the world's largest fine paper producer, Iscor, Polifin, ABSA, Naspers, South Africa Michael Diamonds, and Nedcor, while Standard Bank also has an East Asian operation based in Hong Kong. SABMiller also entered India in 2000. In May 2003 it announced

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a joint venture through its subsidiary Mysore Breweries with Shaw Wallace, in which it exercises management control. Steinhoff International, one of the top furniture and household goods groups in Europe, and the largest in Africa and the Pacific Rim, manufactures leather cut and sewn upholstered furniture covers in India. The production from the tannery is exported to Steinhoff factories in Eastern Europe for use in upholstered products sold into the German market. The group also has a large sourcing operation in China.

Of specific relevance are two more recent deals. South Africa pioneered the commercial use of coal-to-liquid fuel technology during the apartheid era as the country needed greater fuel self-sufficiency. In late 2004 Sasol, the world's largest producer of synthetic fuels, and a consortium of Chinese companies including CSE, signed a Letter of Intent on the feasibility study of the first phase of a "coal-to-fuel conversion" programme. The two projects, in northwest China's Ningxia and Shaanxi, are expected to cost about $3 billion each and will have a combined annual production of 60-million tons of oil. In November 2004, South Africa's largest grocery retail supermarket group, Shoprite, opened India's first hypermarket, of which the group is the franchisor, in a modern shopping centre in Mumbai. Running a $5 billion business with over 700 stores in 16 countries, Shoprite's long-term aim is to increase the operating income from its non-South African operations to more than 50 per cent of group revenue. The group's decision to expand to India is also justified by its predominantly Indian management team, which operates very successfully in the large Indian market of KwaZulu-Natal. Since FDI is still not allowed in the retailing sector in India (except in the cash-and-carry format, which Germany's Metro entered in 2003), Shoprite has entered into an agreement with the Nirmal group. Shoprite began retailing products from Nestle, Unilever and Procter & Gamble at discounts of 20-30 per cent, prompting locally-owned Big Bazaar and Food Bazaar stores to withdraw Nestle products from its shelves in retaliation. Eventually, the three MNCs have asked Shoprite to roll back the offers or face withdrawal of supplies.

great depth the linkages between the political and institutional environment, on the one hand, and corporate trajectories, on the other.

To sum up, in low-tech activities like clothing or footwear, increasing FDI into China and India is likely to crowd out investment in Africa, although geography and preferential tariff treatment may still provide some African countries with a competitive edge. Head-on competition, however, is unlikely to be the main channel through which the Asian drivers impact on FDI flows

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into (and out of) Africa. The first and foremost one is throughout increased international prices for oil and other natural resources, which underline the current dynamism of cross-border investment in this broadly-defined sector. Moreover, FDI from the Asian giants is growing, especially but not solely in the petroleum industry. Last but not least, the growing presence of South African multinationals in China and India is also noteworthy: the Asian giants FDI story is not a one-way street.

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Notes

1. Currently, FDI forms 12 per cent of global capital formation.

2. Of course the emergence of China and India may impact on the growth potential of the domestic market, on the attitude that policy-makers take vis-à-vis policy liberalisation (including privatisation), and more broadly on the investment climate. These topics are discussed elsewhere in this note.

3. FDI into India's information and communication technology industry requires an educated labour force and does not compete with sub-Saharan Africa. There may be some overlap with South Africa, though.

4. In 1997, Shanghai Huayuan Group Corporation (SHGC), together with a Nigerian company, acquired a textile company with an annual production capacity of 1,500 metres of printed and dyed cloth (UNCTAD 2003). In 2000, the partners expanded the operation with an additional capital injection of $6 million for building a cotton mill with a production capacity of 13,000 spindles. In the same year, the joint-venture operation made a net profit of $0.76 million, employed about 1,000 people, and became one of Nigeria's largest taxpayers.

5. "Lesotho facing ruin after textile trade rules change", www.telegraph.co.uk (12 February 2005).

6. The African Growth and Opportunity Act (AGOA) provides an effective 17 per cent price advantage along with quota-free access to all participating sub-Saharan African countries, along with liberal rules of origin for least developed beneficiary countries (LDBCs). Only Zimbabwe, among major African apparel-exporting countries, is excluded. In July 2004, AGOA was extended to 2015, and the special "third-country fabric" rule was extended until 30 September 2007. The EU–African, Caribbean and Pacific (ACP) Agreement allows most ACP exports (including 80 per cent of all industrial products) to enter the EU quota- and duty-free. The Everything but Arms (EBA) initiative, announced in September 2000, eliminates quotas and tariffs on all imports into the EU from the LDCs, with the exception of arms and munitions. The effectiveness of the AGOA and, above all, of the EBA schemes is however limited by complex and stringent rules of origin. The EU is therefore contemplating modifications of the rules of origin for LDCs (see Appendix B for further analysis).

7. A survey of the delocalisation projects of Italian firms provides interesting, albeit only indirect, evidence in this sense (ICE 2005, p. 389). Furniture is the only industry for which the number of respondents indicating projects in the "other countries" category (including South Africa as well as Brazil) vastly exceeds the number responding "Brazil" and "India".

8. At the centre of the anti-CNOOC allegations at the time of its unsuccessful offer for Unocal were claims that it was funded by subsidized loans – however, such arguments have been disputed by independent analysts. See "Winning Unocal

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only the start of the challenge", *Financial Times*, 30 June 2005 and "Antagonists argue over Chinese group's financing", *ibid.*, 6 July 2005.

9. Some Indian investment in Mauritius is likely to be of round-tripping nature.

10. In January 2005 Tata Motors bagged a $18 million export order to supply 350 buses to Senegal. This order is financed by India's EXIM Bank under its NEPAD scheme.

11. "Chinese investors target virgin markets", *Financial Times*, 16 March 2005.

12. In June 2005 Ranbaxy won regulatory approval to make and market lamivudine tablets for the $15 billion PEPFAR (President's Emergency Plan for AIDS Relief) programme. Cipla, another Indian drug manufacturer, has been roped in to supply paediatric AIDS drugs as part of President Clinton's $10 million fund. Both initiatives are targeted at Africa.

13. In 2003 Roche handed over development of a synthetic copy of an extract from the Chinese sweet wormwood plant that could fight versions of malaria that have become resistant to other drugs to Ranbaxy, which would eventually manufacture and sell the drug – without compensating Roche.

14. French, Austrian and other candidates peeled away. In the end, CCMD soundly underbid its sole surviving rival, Greek-based Consolidated Contractors International Co. teamed with Italy's Salini Costruttori. Alstom was the only Western victor, clinching the turbine order. See "Chinese Contractors Flex Lean Muscles in Sudan", enr.construction.com (filed 12 April 2004; accessed 5 August 2005).

15. Comcraft, which is owned by the Chandaria and Shah families of Kenya, is the most important group controlled by non-resident Indian families. It has a presence in over 30 countries with business interests in steel, aluminium and nonferrous metals, plastics, chemicals, engineering, electronics, and industrial components. In India it owns Steelco Gujarat Ltd., makers of paper thin steel, and Dexcel Electronics Designs in Bangalore. Sino-Mauritian firms have also started to invest in the Mainland (Bräutigam 2005). On Egyptian investment in China, see Bonaglia and Goldstein (2005).

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Chapter 8

Medium- and Long-term Scenarios

The medium-to-long term impact of China and India's emergence on Africa crucially hinges on what happens to the Asian Drivers themselves. In this section we discuss various scenarios with respect to economic developments in China and India and their likely impact on African economies.

8.1. Scenarios for China's and India's Medium and Long-Term Growth

Most analyses predict that over the next 20 to 30 years China and India will continue to grow more or less at the levels that have been prevailing since the beginning of the century. The underlying assumption of the OECD long-term baseline scenario (OECD 2006) is that the quantity and quality of labour, and labour-augmenting technical change are central determinants of economic growth. As mentioned in the macroeconomics section, capital accumulation and total factor productivity have been the major sources of growth in China since 1978.[1] With large sections of the Chinese and Indian population, unemployed or underemployed, still living in the rural areas, and with relatively low productivity, the growth potential is almost unprecedented.[2] [3] In China, in the presence of large labour reserves, growth will not be labour-constrained for some time and the productivity of capital will remain high in the industrial sector despite a vibrant pace of capital accumulation. In turn, capital accumulation, together with productivity gains driven by labour-reallocation, should support economic growth over the next 20 to 30 years. In India, by contrast, the move so far has been mainly from agriculture to services in the share of output, with no substantial increase in manufacturing, and the structure of employment has been stubbornly resistant to change (Ghosh 2005). However, with institutional reform, the enormous potential of Indian reallocation of labour into manufacturing should be unleashed. Moreover, both countries still have a lot to gain from enhancing their innovative capacity based on their large pools of engineers and scientists.

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Table 21: **Selected Baseline Labour Productivity Growth**
- Output per hour -

	2002	2007	2010	2020	2030
China	7.8	6.2	4.9	4.4	3.9
India	4.0	4.8	3.4	3.1	2.9
US	1.2	2.6	1.8	1.8	1.8
Japan	-0.4	2.2	2.3	1.8	1.7
South Africa	2.9	1.8	0.7	1.1	1.5

Source: Adapted from OECD (2006).

The *OECD baseline scenario 2030 (OECD 2006)* forecasts continued gains in labour productivity over the period 2002-2030 for China and India[4] (See Table 21).

The recent *Economic Survey* of China (OECD 2005a, p. 31) verifies the feasibility of Chinese government's stated goal of increasing per capita GDP four-fold between 2000 and 2020 (reaching $3,000 per capita), which would imply an average annual growth of just over 7 per cent.[5]

However, the success of the long term Chinese growth scenario depends heavily on the medium term governmental response to the current daunting challenges of imbalances caused by rapid privatisation. The recently-released 11th five-year Plan proposes a more pro-poor growth pattern and efficient utilisation of resource.[6] This is in line with tackling the current increasing inequality[7] and the high cost of commodities especially oil on the Chinese economy.

8.2. Prospects for Future Energy, Metals and Food Demand

Given China's growing importance as a driver of world trade growth, the expected medium term soft-landing could mean an ease in non-oil commodity prices and hence a possible moderate decline in the speed of terms of trade improvement for some of China's African commodities trading partners. However, considering China's relative scarcity in natural resources, a factor endowment approach to China's growth suggests that China will for some time remain a large consumer of commodities.

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8.2.1. Energy and Metals

Based on the assumption of no drastic measures to limit demand or create alternative fuels, the *World Energy Outlook 2004* forecasts Chinese petroleum demand in 2030 at just under 14 million barrels per day (b/d), and import at almost 10 million barrels per day (b/d), which is equal to as much as the United States imports today (IEA 2004). Of course, the scenario may need to be revised soon in light of recent government determination to build a more efficient and sustainable energy economy. Similarly, the IMF (2005) projects China's share in world demand for oil to rise from 6 per cent in 2003 to 13.5 per cent by 2030. Both IEA and IMF[8] reports confirm transport demand as the key driver behind China's strong demand for oil.[9] By contrast, the Chinese supply response remains uncertain: along the lines of the scenarios worked out by the IEA (2004) and the US Department of Energy (2004), the IMF does not expect a significant increase in China's oil production (neither from the non-OPEC suppliers)[10].

While Chinese demand for commodities is likely to remain high over the next 20 years, considerable downside risks exist[11]. First, even though China is relatively scarce in natural resources, it is still a significant producer of commodities (e.g. oil and metals): accordingly, if prices of some commodities were to skyrocket, a supply response from China can not be dismissed out of hand for some of them (Pomfret 1996).[12] Second, the scope for implementing alternative energy/metal-saving technologies is large. For example, there have been successful implementations of wind powered farms, operating nationwide as a result of reduced value-added tax for wind generation from 17 per cent to 8.5 per cent in 2002[13]. Thirdly, though China is currently in the midst of a take-off phase [14], hence reporting high levels of energy-intensive investment (not least infrastructure investment), the pace of investment and industrialisation should abate somehow over the next 20 years (UNCTAD 2005)[15]. Last but not least, the high commodity import price is taking its toll on the Chinese economy and although the energy prices are subsidised in China[16], one can expect that they will be at least partly liberalised in the near future, hence increasing domestic fuel prices and dampening Chinese demand for energy. These caveats notwithstanding, Chinese demand for energy and metals is set to grow at a more moderate but still sustained level.

On the other hand, India ranks seventh in the world in terms of crude oil import demand (IEA, 2005). Its economy is projected to grow 7 to 8 per cent over the next two decades, and in its wake will be a substantial increase in demand for oil to fuel land, sea, and air transportation. World Energy Outlook (IEA, 2004) projects its final energy consumption will increase at 2.1 per cent per annum

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while primary energy supply will rise by 2.3 per cent per annum between 2002 and 2030. Certainly, its medium to long term global impact is enormous.

8.2.2. Food and Soft Commodities

The Chinese and Indian demand for food products exhibits some caveats also. The most rapid phase of growth in Chinese demand for food is over. Firstly, population growth in China is slowing and is expected to be a third of what had been seen in the past three decades. Secondly, the gap between China and developed countries with respect to daily calorie intake is being bridged. By 1997-99, China had reached an average per person daily food consumption of 3040 kcal – only 10 per cent short of the level reported in industrial countries. Over the next three decades therefore, Chinese per capita food consumption is expected to grow at a quarter of the rate seen in the past three decades. As a result, China should be the main factor behind the expected slowdown of world demand for agricultural products from 2.2 per cent a year over the past 30 years to 1.5 per cent a year over the next 30 years, a stark contrast with its role as the major engine behind the growth of world demand for food and agricultural products over the past few decades (FAO 2002).

Yet, China's absolute demand for food will continue to rise while this increase will go hand in hand with structural changes in food consumption patterns. Driven by rapidly rising income and urbanisation, diet changes have to be expected in China. The outcome should be for instance a growing demand for meat. Should the latter be met by local producers (a credible assumption), self-sufficiency in meat should nonetheless induce an increasing demand for animal feed (so far, essentially soybean, but it could be maize in the future). Increased demand for edible oils and sugar, products from aquaculture, fresh fruits and vegetables is also to be expected. As a result, opportunities in the field of agribusiness and related-exports to China might be opening up in the near future.

In India, on the other hand, average food energy intake per person is still below 2500 kcal and its population is set to grow at an average of over 1 per cent a year over the next 30 years. Will India hence take over from China as a major driver of the growth in world demand for agricultural products? Meat and animal feeds consumption in India is currently at low levels and vegetarianism is likely to hold back the country's demand for these products (FAO 2002).

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Notes

1. Between 1978 and 2003, capital accumulation has contributed more than 4.5 per cent of annual output growth while that of total factor productivity growth (TFP) has been 3.7 per cent (OECD 2005a). Education enhancement and reallocation of labour from agriculture to manufacturing and service sectors have been quoted as two key factors driving TFP growth. Moreover, Heytens and Zebregs (2003) suggests reduction in the state sector (privatization), together with increased openness to trade and the change in the extent of urbanization, as also important contributors to the growth of total factor productivity.

2. In China, total labour force is reckoned at 740 million people, no more than 370 million currently work in the industrial segment of the economy and the number of those who would potentially abandon their agricultural activities to find a job in the urban-based industrial sector is estimated at around 150 million or more (OECD 2005a).

3. In 2002, Chinese per capita income was 13 per cent of that of the United States. By historical standards, and having in mind Korean, Japanese and Chinese Taipei's catching up process, scope for rapid growth in China is considerable (Dooley *and al.* 2004).

4. Deutsche bank (2005b) released a study of global growth centres in 2020, using Formel-G model, which puts India as the top growth centre (5.5 per cent) ahead of China (5.2 per cent) as India will have an even stronger population growth and increasingly more open economy.

5. GDP per capita = labour productivity x labour utilisation.

6. "National Economic plan for the next years (2006-2010), by the State Council, China" (*People's Daily*, 12 October 2005).

7. Chinese Gini coefficient increases from 0.18 in 1978 to more than 0.45 in 2003 according to World Development Indicators and World Bank's 'China Quarterly update' (April, 2005).

8. IMF projections are based upon a scenario which factors in an increase in car ownership from 16 to 267 vehicles for 1000 people between 2003 and 2030.

9. Currently, there are roughly 24 million vehicles in China, with projections anticipating 90-140 million by 2020. This would push transport demand from 33 per cent of total Chinese petroleum demand to about 57 per cent (from 1.6 million b/d in 2004 to roughly 5.0 million b/d in 2020) (IEA 2004).

10. Under these conditions, the IMF baseline scenario for the price of the oil barrel revolves around $34 from 2010 to 2030.

11. According to the IEA, worldwide petroleum reserves are sufficient to meet global demand through 2030 and beyond (Logan 2005).

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12. China is the world's sixth largest oil producer in 2004 (174 million tonnes of oil or 4.5 per cent of the world total) (IEA 2004).

13. "Grid connected wind power in China" (Department of Energy, US) http://www.nrel.gov/docs/fy04osti/35789.pdf

14. China's energy elasticity of demand stands at 1.5 (NBS 2004). In other words, for every one per cent increase in GDP, energy demand grew by over 1.5 per cent. This is not uncommon compared with other developing countries such as India and Brazil whose energy elasticity of demand also exceeds one (Logan 2005).

15. Patterns of metal/energy intensity evolves with time, broadly following a U-inverted curve as countries develop: it is very low in poor countries; dramatically increases as countries take off and are in the midst of a rapid industrialization phase; slowdowns as the pace of investment loses momentum and more efficient ways of using metal/energy are devised. China is at an intermediary stage on this U-curve (heading for its peak) while the U-curve itself is probably moving downward as new energy/metal saving technologies are being devised and implemented by late industrialisers such as China.

16. Currently, there are virtually no taxes on automotive fuels and the price for regular (90 octane) gasoline is 4 Yuan per litre (€0.40). However, the National Development and Reform Commission which regulates fuel price in China has lifted the fuel price five times in 2005 and has been contemplating a gradual introduction of fuel tax. On the other hand, Indian taxes comprise of about half the retail price of petrol and diesel, although kerosene (for lighting and cooking) and LPG (liquefied petroleum gas for domestic cooking) are heavily subsidized.

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Chapter 9

Policy Implications

This study has shown that on balance quantifiable effects of the Asian Drivers' rise in the world economy are largely positive for Africa. This neither implies that those benefits will persist, nor that they lay the ground for better economic performances for the continent. While those effects are positive for Africa, their interaction with a number of future policy challenges – governance standards, diversification, back- and forward linkages between modern-sector enclaves and the rest of the economy, labour absorption and skill formation – merit careful policy attention.

In this context, African policy-makers, donors, and the business community should devise appropriate policy responses along these three main principles.

Firstly, considerable room for improvement exists with respect to exploiting African natural resources in a sustainable manner. Making the case for diversifying African economies should not indeed preclude a more efficient exploitation of available natural resources on the African continent, especially once African relative factor endowments are factored in.[1]

Second, African diversification and trade strategies should be rethought in light of increasing Chinese and Indian competition in sectors which used to be regarded as potential avenues for Africa's industrialisation.

Third, donors' support, in particular in the realm of "trade as aid", should be enhanced so as to facilitate African economies' adjustment to rising Chinese and Indian competition on third markets. Upholding African access to OECD markets is key in this regard.

9.1. Unleashing Africa's Commodity Potential

As documented in the *African Economic Outlook* (AfDB/OECD 2005), sizeable commodity potential remains untapped on the continent. New oil

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fields are starting to come on stream in Angola and elsewhere in the Gulf of Guinea as the existence of tremendous reserves is attested. In a similar vein, it is only very recently that oil has started to flow in Chadian pipelines, while some substantial oil reserves allegedly exist in Mali at the border with Mauritania. Driven by a high international price, exploration aimed at discovering gold reserves is gaining momentum in Burkina Faso and mining has lately started in a few sites. There is considerable scope for further developing gold extraction in Mali and for increasing efficiency in the exploitation of diamonds in Botswana. Above all, the immense mineral potential of a large country such as the Democratic Republic of Congo is notoriously underexploited. These and other resources are costly to extract and investment has only recently become feasible as the prices of commodities recovered thanks, *inter alia*, to the demands of the Asian Drivers.

However, various constraints impede a proper exploitation of the large African natural resources potential, starting with the lack of appropriate physical infrastructures (rail and road transport facilities in particular). Transport costs are specifically high in Africa and they have increased as a share of export value since 1970 (Amjadi and Yeats 1995). While the margin of CIF prices over original shipment prices ("free on board") has declined in every region, it has increased in Africa, the continent where this margin is highest[2]. The culprits are deficient physical infrastructure together with excessive protection granted by African governments to their national carriers and cargo service providers. They tend to increase costs for both importers and exporters and reduce incentives for investment in export-oriented sectors.

There is also considerable room for improving the efficiency and productivity of primary agricultural production in Africa (e.g. through greater use of fertilizers and modern techniques). At this stage, Africa's primary agricultural exports exhibit no obvious complementarities with China's and India's current imports of primary agricultural goods. Yet, things might evolve with changes in Chinese dietary habits (see section 8.2). As a result, there are possibly opportunities to be seized by African countries provided they succeed in responding positively to rising and evolving demands. For instance, should the expected growing Chinese demand for meat materialise and part of the latter be met by local producers, China's imports of animal feed would increase. They may also be broadened from soybeans to maize, a commodity produced by several African countries. There are also some successful stories in Africa of countries with low labour costs and appropriate agro-ecological conditions developing market gardening to produce "off-season" and speciality fresh vegetables or cut flowers (Bonaglia and Fukasaku 2003).[3] [4] Moreover, for a commodity such as cotton, it is critical that African growers manage to find

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outlets in the most dynamic markets, namely Asian textile producers. Because of the MFA phasing-out, demand for cotton in the European Union and in the United States is bound to decline while Chinese and Indian demand is poised to increase.

In this regard, however, the window of opportunity for African countries is set to remain narrow: China is likely to source these products from other Asian countries while India is itself investing in these sectors[5]. Europe will therefore remain the main markets for African off-season products. Moreover, some scepticism prevails regarding the possibility of enhancing agriculture development in tropical areas. Sachs (2001) pinpoints many reasons which contribute to make food productivity in the tropics lower than in temperate zone, including soil formation and erosion, pests and parasites, effects of ambient temperature on plant respiration and on net photosynthesis. The lower rate of technical innovation in tropical areas may also be due to the low rate of technological diffusion from temperate zones as key technologies can not cross the divide of ecosystems. Prospects for increasing exports of coffee, tea or (South African) wine to Asia and China, on the other hand, seem at first sight more realistic. Tourism is another industry where African countries can offer a competitive product in China and, especially, India.[6]

9.2. Improving the Management of Commodity-related Revenues

Unleashing African commodity potential without improving the management of its revenues would fail to foster sustained development. The critical point here is to consider commodity endowments neither a "curse", nor a *per se* sufficient condition for development. Natural resources in general and windfall revenues stemming from Asian demand in particular, far from being a curse, may actually serve African commodity producers, provided the corresponding revenue is carefully and efficiently managed for development purposes. This issue by far exceeds the scope of this study.[7]

Countries rich in natural resources should regard them as assets that are certainly exhaustible but which may be used to develop new areas of competitive advantage, diversify the economy, create linkages with other productive sectors and remove development bottlenecks. As emphasised by Bonaglia and Fukasaku (2003), "natural resource sectors, such as mining and forestry, are nowadays characterised by higher technology content and can encourage the development of upstream and downstream activities as well as generate spin-offs towards side sectors, such as services" (page. 19). Resource-based sectors can be a channel for knowledge and technology transfers, as

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exemplified by the historical experience of both OECD (e.g. Australia, Canada, Scandinavia and the United States) and non-OECD economies (e.g. Brazil, Chile and several ASEAN countries). South Africa is also a world leader in mining equipment.

Commodity resources may also be a source of financial resources to be invested not only in non-traditional sectors but also in sectors where development bottlenecks are located, e.g. agriculture; where productivity gains are key to jump starting industrialisation (Gollin *et al.* 2002) and in infrastructures or social-economic building-blocks of growth (education and health in particular). [8] [9] In case the regulatory and institutional framework

Box 2: **Asset Policies and Non-Renewable Resources**

African governments, often the direct beneficiaries of the raw material boom, face several policy dilemmas (Collier and Gunning, 2005). While they have plenty to spend on, with a view to needs generally and the Millennium Development Goals specifically, it will be prudent to save part of the windfall, for at least three reasons. Firstly, the windfall is likely to be transitory, secondly, local absorption capacity is limited; thirdly, the income from accumulating net assets will allow a higher level of consumption even once the boom is over. Two well-run countries, Botswana and Chile, stand for the alternatives of using public receipts during a raw-material boom. The first has largely accumulated foreign assets, the second has reduced domestic public debt and built a special fund devoted to stabilise commodity-related government revenues (see Box 3).

In Botswana, the government responded to a diamond windfall by adopting a policy rule requiring all public investment proposals to be subjected to cost-benefit analysis. Only those domestic investment projects that promised returns above the world interest rate were implemented. In practice, this policy rule has implied that a substantial part of revenues be invested abroad. A similar strategy was adopted in Norway, which transferred a substantial part of the oil revenue into an oil fund that was invested exclusively in foreign assets.

Some resource-rich countries carry considerable domestic government debt. Governments in those countries have an alternative to investing revenues abroad by repaying local public debt. Sovereign and other risk premia usually raise the debt service cost beyond global interest rates, suggesting that public budgets will benefit from first paying down public debt. This may also stimulate private local investment, as crowding out is reversed.

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does not allow a decent social return on the domestic investment of raw material receipts, they can either be invested abroad, used to pay down domestic public debt, or saved to run a structural budget surplus that will enable the government to finance countercyclical fiscal policies (see Box 2).

Appropriate ways must be devised for managing the unwanted macroeconomic effects of unstable commodity prices and avoiding boom-bust pro-cyclical fiscal management. If fiscal revenues are highly volatile, structural budget rules and commodity stabilisation funds may provide the necessary framework to achieve saving (dis-saving) during expansions (contractions) as practiced in Chile, for instance (see Box 3).

The Hartwick rule offers a rule-of-thumb for sustainability in exhaustible-resource economies which helps avoid boom-bust fiscal management and

Box 3: **Policy Lessons from Chile's Counter-Cyclical Policy Stance**

A small and open economy requires saving in boom periods of commodity exports and big capital inflows, because tax revenues will significantly increase due to increases in absorption, profits and in the value of the domestic currency, increasing the associated tax collection. More generally, if the revenue base has high variability, there is a need to save even more when times are good. This should be recognized in a structural budget rule as higher saving (dis-saving) during expansions (contractions). Moreover, the structural budget methodology requires some adaptations in the case of introducing unemployment insurance benefits paid by the government.

The 2005 *OECD Economic Survey* of Chile (OECD 2005c) praises the country's *structural budget surplus rule* for ensuring a counter-cyclical fiscal stance. Chile's fiscal policy, an example for other raw-material dependent countries, has been guided by the rule since 2000; it calls for a budget surplus of 1 per cent adjusted for the effects of the business cycle and copper price fluctuations. Chile's counter-cyclical stance fiscal stance has been based on its copper stabilisation fund. Clear and strict rules for stabilisation funds are required; and, realistically, they can only be started in a favorable cycle, as is currently the case thanks to the Asian giants' raw material demand. With a slow mean reversion process for most commodity prices, stabilisation funds need to be very large to be effective (Budnevich 2002). The stabilisation fund and the structural budget surplus rule have helped Chile to turn its consolidated public position from a net debt to a net asset position.

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ensures a sustainable process of economic development (Hartwick 1977). The rule indicates that a constant level of consumption in a rent-economy can be sustained if the value of investment equals the value of rents on extracted resources at each point in time. Under these conditions, a zero or positive genuine savings rate can be achieved. Genuine saving provides a much broader indicator of sustainability than standard net savings rate by valuing and factoring in changes in natural resources, environmental quality, and human capital, in addition to the traditional measure of changes in produced assets. A persistently negative genuine saving rate implies that a country is on an unsustainable path and consumption must fall in the future. Sub-Saharan Africa is actually the only region that has constantly exhibited negative genuine savings rate since the mid-1970s (World Bank 2006).

Botswana provides one of the very few examples of sound fiscal management of natural resources revenues on the African continent: the management of its diamond wealth has actually largely been inspired by the Hartwick rule. "The treasury calculates a sustainable budget index to determine whether consumption expenditures are being financed out of resource rents, and adjusts expenditures accordingly. It also holds diamond revenues offshore in order to deal with issues of absorptive capacity, revenue stabilisation, and Dutch disease effects from currency appreciation" (World Bank 2006, p. 12).[10]

Another type of resource curse pertains to governance, namely predatory and rent-seeking behaviour, corruption, clientelism and capital flight.[11] In this respect, enhanced transparency surrounding the use of revenues from commodities should be regarded as a prerequisite. A number of initiatives have been undertaken lately that are aimed at raising the transparency of extractive industries (the Publish What You Pay Initiative, the Extractive Industries Transparency Initiative and various endeavours in the field of corporate social responsibility).[12] Yet, genuine transparency and accountability is still elusive. While 13 out of the 20 countries that have endorsed the principles of the Extractive Industries Transparency Initiative are in Africa (Congo, Ghana, Nigeria, São Tomé and Principe, Angola, Cameroon, Chad, Democratic Republic of Congo, Equatorial Guinea, Gabon, Guinea, Niger, and Sierra Leone), only four of them (Congo, Ghana, Nigeria, São Tomé and Principe) are actually reporting on their implementation. Others are currently at odds with the International Monetary Fund (e.g. Angola) and the World Bank (e.g. Chad) over fiscal transparency requirements and inadequate reporting of oil revenues, as well as over the use of oil revenues for social and development purposes.[13]

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9.3. Streamlining and Rethinking Diversification and Bilateral Trade Strategies

If unleashing the existing commodity potential is the most feasible and judicious option in the short/medium term, the persistent volatility in commodity prices and the exhaustibility of natural resources underline the urgency of diversifying the bases of African economies. Diversification strategies have been tried for a number of years, with mixed results. In view of the long-term nature of the exercise, the problem is that China and India have emerged as formidable competitors in these very low-tech, labour-intensive sectors where Africa could compete. The risk is that Africa may remain trapped in a pure raw material niche, with consequences for instability, skill formation and governance standards.[14] Hence there is a need to rethink African diversification strategies[15] and seize what new opportunities China's and India's ascendancy opens up to African economies.

Under the MFA framework, some African countries – such as Mauritius and to a lesser degree, Lesotho and Swaziland – developed a competitive edge in the garment industry which, it is important to underline, has been the harbinger of industrialisation under all latitudes. Since January 2005, Chinese and Indian competition has impeded at least some of the incipient African initiatives in this sector. To remain competitive in a post-MFA environment and leverage the "tremendous opportunity" of partnering with China as part of their global supply chain, African clothing producers must show "initiative and creativity" (South African Department of Trade and Industry 2005). Other countries offer some concrete examples in this respect (see appendix B for further details).

In Cambodia, clothes-makers have been trying to build a reputation for strict labour standards that might appeal to Western firms not wishing to be associated with sweatshops (World Bank 2004). The labour laws passed by the government in recent years embed elaborate principle of corporate social responsibility. In the Better Factories Cambodia programme, inspectors from the International Labour Organisation monitor compliance, most often through spot checks, and the government decided it would require all factories to submit to such inspections to obtain export licenses.[16]

Argentina's export of clothing has grown from $30 million in 2000 to $66 million (on an annual basis, based on the first eight months of the year) in 2005. Fundación ExportAr, a public-private partnership, organises the annual "Fashion Buenos Aires" show and carries out market intelligence activities on behalf of SMEs. According to a British buyer, Argentina combines price competitiveness with design excellence.[17]

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The government of Thailand is investing €350 million to turn the country into a hub. The "Bangkok Fashion Week", of which the second edition was held in September 2005, serves to promote local companies that do not just make clothes under contract for foreign retailers, but also design and market products of their own.

Clear opportunities deriving from enhanced South-South trade are likely to open up for the most responsive African countries (UNCTAD 2005). In particular, vertical diversification based on the processing of African primary products should be further explored. Industrial niches can also be found for the few African countries that have a significant industrial base. South Africa, in particular, may emerge as an important supplier of the Indian and Chinese markets in sectors such as agribusiness in general and wine in particular, the automotive industry, harbour wharfs, coal to liquids technologies and chemicals. South Africa also has a buoyant services industry and some firms, as shown in Box 1 above, have already invested in both China and India.

Yet, South-South trade in general, and with China and India, in particular is unlikely to be the "magic bullet" that can significantly accelerate the pace of Africa's insertion into the international trade arena. Firstly, substantial tariff and non-tariff barriers still exist among developing countries, despite the proliferation of regional trade agreements and the launch of the Global System of Trade Preferences among Developing Countries (GSTP) in 1989.[18] Secondly, imbalances in South-South trade are likely to subsist as heavyweights such as Brazil (not to mention some Asian countries) will possibly reap most of the benefits of trading with the Asian Drivers. Third, as the affluence of urban Chinese and Indian customers opens up new opportunities, it will also raise their demands and their expectations vis-à-vis the quality of consumer goods imports. Quality standards requirements in the food sector (sanitary and phytosanitary standards, cool chains, just-in-time delivery, packaging, traceability, stringent quality standards set by global retailers, etc.), in particular, will converge to the OECD norm, which is already proving very demanding for African exporters given problems such as poor transport and logistics. All these factors call for carefully identifying viable exports niches and for aligning trade negotiation priorities with market signals.

In this context, African countries should take a cautious approach to the negotiation of free-trade agreements with China and India.[19] At least from the point of view of producers, the issue here is how to balance the uncertain and rather modest prospects of significantly boosting exports to China and India, on the one hand, and the much more immediate risk of being flooded by

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imports of cheap Chinese and Indian consumer goods. The evidence so far is that African countries are indeed taking a cautious approach.

While five African countries granted China the market-economy status between April and August 2004 (out of eight that had taken such decision at the time), none has joined the list ever since, even if the total number of countries is now 48.[20]

Protective measures aimed at helping African countries to adjust to the shock of Chinese and Indian competition and/or to address unfair practices on local markets since China's WTO accession agreement (11 December 2001) could also be considered, albeit on a transitory basis. For instance, the South African Department of Trade and Industry (2005) contemplates such safeguard measures.[21] Accordingly, a more selective approach to trade negotiation with India and China has to be adopted, laying emphasis on the liberalisation of equipment and capital goods imports.

9.4. Upholding Trade Preferences Granted to African Countries

The need for OECD donors and trade partners to be consistent and coherent in their use of policy instruments has long been central to the debate about inclusive globalisation. Global trade liberalisation, Chinese and Indian increasing competition, and the renegotiation of key North-South partnerships such as the Cotonou agreement and others make it imperative to find appropriate mechanisms to uphold trade preferences granted to African countries.

In particular, it is essential to contain trade preference erosion. Supporting (and rethinking) diversification strategies through technical assistance and capacity building ("aid for trade") should therefore go together with a clear commitment of OECD countries to uphold trade preferences and reform complex and partly inefficient instruments such as the AGOA or the EBA preference schemes. Firstly, the renewal of preference schemes should be made more predictable: for instance, the extension of AGOA third party provisions after 2007 for African exports of garments and apparels to the United States is not yet guaranteed. Secondly, a comprehensive revision of rules of origin should be undertaken so as to increase the effectiveness of these schemes and their ability to cushion effectively the impact of China's and India's competition. In this respect, stringent rules of origin end up making the EBA schemes irrelevant for African exporters of garments and apparels (see appendix B). G8 countries should provide effective duty free and quota free access to all

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African goods, thereby providing African countries with a genuine competitive edge over intrinsically more competitive Asian competitors. As underlined by Carim (2005), "'trade as aid' preferences need to be improved in the short run to make them meaningful. This could include deepening the preferences, where technically feasible, to retain the margin over MFN rates".

In this context, the general move towards more reciprocity in international trade agreements may seem questionable when applied to trade relationship between Africa and developed countries. Exposing African producers to increased competitive pressures from European or American producers at a time where the former already have to weather the shock of rising China's and India's competition both on local and third markets can be inconsistent. The endeavour, if any, to uphold African countries' preferential access to the EU and the US markets vis-à-vis Asian competitors would lose part of its usefulness if counterbalanced and almost nullified by the implementation of reciprocal provisions in the context of future EU/US – Africa trade agreements. In this regard, reciprocity provisions that are being negotiated between EU and ACP countries in the framework of the Economic Partnership Agreements are disadvantageous to African countries.

Broadly speaking, the increased competition from Asian countries makes the case for enhancing the development agenda of the Doha round and underlines the need for, the relevance and the timeliness of greater flexibility (Special and Differential Treatment and GATT article 24 provisions) vis-à-vis the principles of reciprocity and non-discrimination as operationalised by means of the Most Favoured Nation (MFN) and the National Treatment (NT) requirements of GATT 47 Articles 1 and 3.

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Notes

1. While initial patterns of relative factors endowments are not destiny, Mayer and Fajarnes (2005) point to their very limited changes in Africa (in particular relative endowments of land, labour and skilled labour) overtime. They find that the share of primary products in African exports would remain very high (75 per cent instead of 85 per cent at present) even if African countries were to reach Latin America's per capita income. Therefore, a dramatic decline in the share of commodities in African exports is not to be expected over the coming years and, considering its factor endowments, Africa's comparative advantage is set to remain in commodities.

2. See Lehmann *et al.* (2003).

3. Malian authorities have ambitious plans in this respect. They build on the availability of vast fertile lands in the upper valley of the Niger that are currently largely untapped and inappropriately managed by the state-owned enterprise, the Office de la Haute Vallée du Niger (AfDB/OECD 2005).

4. See also Friedland (1994) on how technological advances have enabled long-distance "cool chains" and spurred changes in consumption behaviour toward healthier diets.

5. The State of Himachal Pradesh is fast emerging as a leading producer of vegetables, for instance. Moreover, Indian exports of floriculture products have grown markedly since the early 1990's and there is large scope for upgrading this sector, by gaining efficiency gains in production and marketing in particular (Dadlani 1998).

6. The Chinese government has now increased the number of African countries as a tourist destination for Chinese citizens from 2 to 12. A number of carriers, including Ethiopian and Kenya Airways, offer direct flights to China.

7. See the synthetic and very informative review of the commodity dependency literature by Andersson *et al.* (2005). See also Basedau (2005). For a description of how raw material wealth can be managed well, see an account of Norway's management of oil resources in Eifert *et al.* (2003).

8. See Nkounga (2005).

9. The commodity bonanza might be used so as to increase returns on investment in health and education and lift the least developed countries out of poverty traps. In more practical terms, windfall revenues derived from high international prices could also be used to reach Millennium Development Goals (Warner and Alexander, 2005).

10. Still, Lange and Wright (2004) point to considerable unproductive investment.

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11. See Basedau (2005).

12. See for instance Pourtier (2005) and Corsi (2005) for a review of transparency issues revolving around the use of oil revenues in Central Africa and Corporate Social Responsibility of oil multinational corporations operating in the same region respectively. See also and Gary and Karl (2003).

13. Commenting on the Oversight Committee's (Collège de Contrôle et de Surveillance des Revenues Pétroliers) "Report of Mission to Sites of Projects Financed by Oil Revenues" in Chad, the World Bank conveys its concerns vis-à-vis the findings in the report: "The report cites incidents of irregularities in transfers of funds; poor quality of, and long delays in the delivery of goods and services; and lack of competitive bidding processes, and cases of overpricing of goods and services. It also assesses that some local authorities were not informed of projects planned in locales under their administrative responsibility" (posted on the internet, 26 July 2005 - http://www.worldbank.org/afr/ccproj/news/index.htm)

14. This risk does not only apply to Africa, of course; it holds likewise for countries, e.g. in Latin America, that have started to diversify from their traditional raw material base and which are now being induced back into it as a result of China's and India's demand for raw materials.

15. Yet, the need for rethinking diversification strategies must not preclude a genuine effort by African authorities to improve the local business environment which has been so far little supportive of private sector development.

16. "The rag trade patches up its image", *Financial Times*, 13 September 2005.

17. "A la medida de Europa", *La Nación*, 20 September 2005.

18. Established in 1989, the GSTP serves as a framework for the exchange of trade preferences among 43 developing countries in order to promote trade within this group of countries. China and the Group of 77 will be invited to accede to the Agreement and to participate in the new round of negotiations, which is expected to conclude by end-2006. GSTP is not part of the WTO system and is serviced by a secretariat in UNCTAD. Participants finance operations through voluntary contributions.

19. Discussions on a Southern African Customs Union (SACU) -China trade agreement began in mid-2004.

20. End-August 2005 information, kindly provided by Marc Bacchetta, WTO.

21. Department of Trade and Industry South Africa (2005) argues that: "Within the global trading environment, and our own domestic legal environment, the instruments to address unfair practices, namely antidumping and countervailing duties, do exist and the processes involved in making use of these measures are well understood by industry. If China's success in the local market is attributed to unfair trade practices, measures are in place to address them". It also indicates that: "With a view to creating the space for the sector's transformation, government has indicated its willingness to explore restrictive measures (…). The long-awaited

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applications for safeguards received in recent months have opened the door to take this process forward. Based on the safeguards application, we have been engaging the Chinese side in order to find a speedy solution not only to the surge, but also broader economic cooperation in the sector."

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Chapter 10

Some Early Conclusions

China and India have fuelled the demand for African natural resources. Through their high rates of growth, export surpluses and reserve accumulation reinvested in US treasury bonds, they have contributed to dampen world inflation pressures, lower global interest rates, raise raw material prices and improve Africa's terms of trade. This is however no reason to remain complacent. With the proceeds of that demand, the future of labour-rich and skill-friendly activities may be compromised, inequalities deepened and rent-seeking get more pervasive. Governments should also avoid policies that crowd out other industrial activities, particularly policies that support an appreciating currency. They should also seek to utilise increased tax revenues from primary product exports to fund pro-poor initiatives.

There are a number of potential conduits through which African growth prospects might be affected by the rise of the Asian Drivers. One conduit of change lies in trading relationships. China and India are markets for African goods as well as competitors, especially in the export-oriented clothing and textile markets in which quotas to protect African exporters were removed in January 2005. On the other hand, African consumers gain from cheap consumer goods sourced from the Asian Drivers and African investors from cheap and appropriate capital goods. Another conduit is investment. China and Indian firms are increasingly outward-oriented and resource-hungry. Authorities will have to use the opportunity of higher Asian corporate presence in Africa to turn them into a source of technology, skill formation and world market access, apart from foreign finance that come with the investment. African countries will have to define how to fit into China/India-centred global value chains that are taking shape and not be confined to the role of primary products suppliers.

Resource rich Africa will have to balance the need to match the promotion of job-creating sectors (agro-business, textile, tradable services, etc.) with the desire to capitalise on a windfall gain generated by higher commodity prices.

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Monetary authorities might have to pursue a monetary policy that guards against the appreciation of the currency to the detriment of industries competing with imports and exporters outside the resource sector. Fiscal authorities are required to limit public spending on services and construction in order to limit real exchange rate appreciation. Prudent investment of windfall gains from exhaustible raw materials will also be needed, either to close financing gaps in reaching national Millennium Development Goals, through investment abroad or the reduction of domestic public debt. Increasing net assets will ensure higher consumption levels beyond the windfall period.

While a range of industries will face a real fight for survival over the next decades partly due to unit labour cost competition from China and India, there is a list of industries that are either complementary to the rise of Asian Drivers or relatively secure from competition, such as food production. Catering for the demand originating from China and India requires that Africa generate investment, technical skills and capacity in the field of agriculture, a tremendous task which in turn needs assistance from donors. Governments should also seek to ensure that smallholders are able to participate in new export markets.

Donors need to consider whether to adapt existing policies (e.g. market preferential access) aimed at reducing poverty and diversifying local economies in the light of China and India's expansion. Policies, such as emphasising the expansion of labour-intensive manufactured exports as a means of poverty reduction, may need to be fine tuned, in light of the increasing competition and falling prices for many such products (e.g. textile in a post-MFA context), while vertical integration in resource-based industries will have to be supported increasingly. China's and India's competition also make it imperative for donors to stem the process of trade preference erosion, improve the effectiveness of existing trade preference schemes targeted at Africa, and thereby uphold African preferential access to developed countries' markets.

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Appendix A

Sub-Saharan Africa's Trade Patterns

Understanding the extent to which China's and India's emergence as key players in global trade is of relevance to African countries requires a prior analysis of African countries' trade patterns. In this respect, and beyond the diversity of situation across the continent, two common and overriding features stand out: a widely shared reliance and dependency on commodity exports and the limited diversification of sub-Saharan African economies. Sub-Saharan African imports, on the other hand, are dominated by manufactured products.

African exports: the predominance of commodities in a context of limited economic diversification

Table A1 points out that for 27 out of 49 African countries, fewer than five products (mostly commodities) account for more than 75 per cent of exports. Considering Africa as a whole, crude oil makes up 35 per cent of the continent's total exports.[1]

The reliance on commodities is a fundamental characteristic of African countries and is consistent with their factor endowments. Indeed, the latter result in Africa having a strong competitive edge in the production of commodities: using a Heckscher-Ohlin theoretical framework, Mayer and Fajarnes (2005) illustrate that the uncommon concentration of African exports in primary products is largely the result of the region's unusual resource combination and endowments. Africa has abundant land resources and is scarce in skilled labour. In this context, African countries' competitive advantage lies in primary unprocessed products. Moreover, as shown in Table A2, African economies' exports are poorly diversified.

Some African countries may have a comparative advantage in low-cost and low-skilled manufacturing. However, they have failed to realize it: multiple factors, starting with a weak business environment and high production costs,

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Table A1: **African Countries' Three Main Exports, with their Share in Total Exports**

	Three main exports, with their share in total exports*			No. of products accounting for more than 75 per cent of exports
	Product I	Product II	Product III	
South Africa	Platinum (11.8%)	Diamonds.excl.industrial (9.6%)	Oth.coal,not agglomeratd (7.5%)	44
Egypt	Motor gasolene,light oil (15.3%)	Crude petroleum (13.4%)		42
Tunisia	Trousers, breeches etc. (17.1%)	Crude petroleum (6.8%)	Insultd wire,etc.condctr (5.9%)	35
Morocco	Trousers, breeches etc. (6.5%)	Diodes,transistors etc. (5.5%)	Insultd wire,etc.condctr (5.4%)	33
Kenya	Tea (16.9%)	Cut flowers and foliage (11.2%)	Motor gasolene,light oil (9.3%)	25
Tanzania	Fish fillets,frsh,chilld (12.6%)	Coffee, not roasted (8.9%)	Tobacco,stemmed,stripped (6.9%)	21
Zimbabwe	Tobacco,stemmed,stripped (30.8%)	Nickel,nckl.alloy,unwrgt (8.9%)	Nickel ores,concentrates (8.6%)	13
Mauritius	T-shirts,othr.vests knit (16.6%)	Sugars,beet or cane, raw (16.4%)	Jersys,pullovrs,etc.knit (11.5%)	10
Madagascar	Spices,ex.pepper,pimento (27.9%)	Crustaceans, frozen (14.6%)	Jersys,pullovrs,etc.knit (11.6%)	9
Eritrea	Elctrn comp pts,crystals (40.7%)	Electrical capacitors (11.8%)	Drawing,measurg.instrmnt (4.6%)	8
Namibia	Fish fillets, frozen (22.5%)	Diamonds.excl.industrial (15.4%)	Radio-active chemicals (10.8%)	8
Senegal	Molluscs (20.2%)	Groundnut oil, fractions (11.1%)	Fish,fresh,chilled,whole (9.4%)	8
Uganda	Coffee, not roasted (31.8%)	Fish fillets,frsh,chilld (11.0%)	Tobacco,stemmed,stripped (9.7%)	8
Cape Verde	Special trans not classd (19.1%)	Gas turbines, nes (18.2%)	Shirts (9.3%)	7
Côte d'Ivoire	Cocoa beans (48.2%)	Cocoa paste (7.7%)	Bananas, fresh or dried (4.8%)	7
Gambia	Aircrft etc.ULW >15000kg (40.3%)	Oth.frsh,chll.vegetables (10.4%)	Groundnut oil, fractions (7.3%)	7
Ghana	Cocoa beans (48.3%)	Wood,non-conifer, sawn (6.3%)	Alum.,alum.alloy,unwrght (5.1%)	7
Togo	Cotton,not carded,combed (36.7%)	Natural calc.phosphates (20.9%)	Cocoa beans (5.8%)	7
Zambia	Copper;anodes;alloys (40.7%)	Copper plate,etc.15mm+th (10.8%)	Cobalt,cadmium,etc.unwrt (10.4%)	7
Ethiopia	Coffee, not roasted (47.2%)	Sesame (sesamum) seeds (12.6%)	Sheep skin without wool (6.5%)	6

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Table A1: **African Countries' Three Main Exports, with their Share in Total Exports** *(cont.)*

	Three main exports, with their share in total exports*			No. of products accounting for more than 75 per cent of exports
	Product I	Product II	Product III	
Sierra Leone	Diamonds.excl.industrial (49%)	Convertible seats,parts (10.9%)	Parts,data proc. etc.mch (4.9%)	6
Djibouti	Sodium chloride, etc. (35.2%)	Oth.wheat,meslin,unmlled (11.5%)	Petrolm.bitumen,coke,etc (10.2%)	5
Cameroon	Crude petroleum (43.1%)	Wood,non-conifer, sawn (13.4%)	Bananas, fresh or dried (9.8%)	4
Guinea	Aluminium ore,concentrat (43.4%)	Alumina(aluminium oxide) (17.2%)	Crude petroleum (10.3%)	4
Lesotho	Jersys,pullovrs,etc.knit (33.3%)	Trousers,breeches,etc. (18.4%)	Trousers, breeches etc. (15.9%)	4
Malawi	Tobacco,stemmed,stripped (55.7%)	Tea (10.5%)	Tobacco,not stripped,etc (8.8%)	4
Somalia	Sheep and goats, live (27.6%)	Fuel wood, wood charcoal (20.7%)	Molluscs (17.1%)	4
Algeria	Crude petroleum (50.3%)	Natural gas, liquefied (15.1%)	Motor gasolene,light oil (14.8%)	3
Benin	Cotton,not carded,combed (68.7%)	Motor gasolene,light oil (5.8%)		3
Burkina Faso	Cotton,not carded,combed (66.9%)	Sesame (sesamum) seeds (6.4%)	Cigarettes contg.tobacco (4.1%)	3
Central African Republic	Diamonds.excl.industrial (42.7%)	Wood,non-conif,rough,unt (29.1%)	Cotton,not carded,combed (14%)	3
Congo DR	Diamonds.excl.industrial (54.9%)	Industrial diamonds (14.4%)	Crude petroleum (8.8%)	3
Guinea Bissau	Molluscs (32.8%)	Propane, liquefied (21.8%)	Fish,frozen ex.fillets (20.6%)	3
Mauritania	Iron ore,concntr.not agg (39.8%)	Molluscs (27.8%)	Fish,frozen ex.fillets (15.5%)	3
Chad	Cotton,not carded,combed (57.5%)	Crude petroleum (21.1%)	Natural gums,resins,etc. (11.9%)	2
Liberia	Ships,boats,othr.vessels (69%)	Wood,non-conif,rough,unt (9.5%)	Natural rubber latex (5.9%)	2
Mozambique	Alum.,alum.alloy,unwrght (70.9%)	Crustaceans, frozen (6.6%)		2
Niger	Radio-active chemicals (71.5%)	Special trans not classd (12.3%)		2
Rwanda	Crude petroleum (61.1%)	Ore etc.molybdn.niob.etc (14.8%)	Coffee, not roasted (14.6%)	2

Table A1: **African Countries' Three Main Exports, with their Share in Total Exports** *(cont.)*

	Three main exports, with their share in total exports*			No. of products accounting for more than 75 per cent of exports
	Product I	Product II	Product III	
Seychelles	Fish,prepard,presrvd,nes (54.5%)	Fish,frozen ex.fillets (27.3%)	Motor gasolene,light oil (4.3%)	2
Swaziland	Chem.products etc.nes (48.3%)	Yarn,staple fibres, etc. (29.1%)	Othr.organo-inorgan.comp (5.4%)	2
Angola	Crude petroleum (94.6%)			1
Botswana	Diamonds.excl.industrial (87.6%)	Nickel mattes,sintrs.etc (8.4%)		1
Burundi	Coffee, not roasted (78.9%)	Diamonds.excl.industrial (4.7%)	Ore etc.molybdn.niob.etc (4.4%)	1
Comoros	Spices,ex.pepper,pimento (88.1%)	Essential oils (8.8%)		1
Congo	Crude petroleum (78.4%)	Motor gasolene,light oil (5.8%)	Wood,non-conif,rough,unt (5.7%)	1
Equatorial Guinea	Crude petroleum (89.6%)	Acyclic monohydric alchl (4.6%)	Wood,non-conif,rough,unt (4.1%)	1
Gabon	Crude petroleum (77.4%)	Wood,non-conif,rough,unt (12.3%)	Manganese ores,concentrs (4%)	1
Libya	Crude petroleum (82.8%)	Motor gasolene,light oil (10.4%)		1
Mali	Cotton,not carded,combed (86.8%)			1
Nigeria	Crude petroleum (86.4%)	Natural gas, liquefied (4.6%)		1
São Tomé and Principe	Cocoa beans (82.2%)			1
Sudan	Crude petroleum (79.6%)			1
Africa**	Crude petroleum (38.4%) [16.3%]	Motor gasolene,light oil (4.7%) [5.5%]	Diamonds.excl.industrial (3.7%) [12.5%]	36

Sources: *African Economic Outlook 2005/2006,* based on African Development Bank Statistics Division; PC-TAS 1999-2003 International Trade Centre UNCTAD/WTO - UN Statistics Division

Notes: * Products are reported when accounting for more than 4 per cent of total exports.
** Figures in [ ] represent the share of Africa in the world export for each product.

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have hindered the development of a sound and diversified private sector in Africa.[2] With the exception of South Africa, that has developed with a significant, relatively diversified and long-standing manufacturing base, and Mauritius which has diversified out of sugar by building a large manufacturing base (textile for the most part) and a tourism industry[3], only a few countries have embarked on a diversification process and/or developed a manufacturing / agro-processing base. Underlying the figures presented in Table A2 stand the capacities developed by Senegal in the production of phosphoric acid and concrete, Kenyan exports of cut flowers and clothing, and the dramatic expansion of Lesotho's clothing industry.[4] [5]

Table A2: **African Countries' Limited Diversification**

	1999	2000	2001	2002	2003
Morocco	32.8	36.0	35.8	37.1	38.3
Tunisia	26.8	28.8	28.5	30.0	31.2
SACU *	28.1	29.8	29.3	26.6	22.2
Tanzania	13.8	17.6	19.5	20.8	21.7
Egypt	9.1	15.2	27.0	27.1	20.4
Kenya	11.2	11.8	11.8	12.2	16.0
Senegal	15.0	18.6	12.6	12.7	12.2
Mauritius	11.2	13.5	12.3	12.1	11.7
Cape Verde	6.2	8.5	10.3	5.4	9.2
Madagascar	16.9	11.3	9.1	8.3	8.1
Zimbabwe	10.0	11.9	9.7	7.5	8.1
Uganda	2.0	3.1	6.0	6.5	7.3
Africa	10.8	6.9	8.5	7.8	6.4
Somalia	3.8	3.1	10.3	5.7	6.1
Djibouti	14.2	26.2	26.8	17.7	5.9
Togo	6.1	7.2	7.5	8.9	5.3
Gambia	2.4	4.4	6.2	7.4	5.2
Eritrea	4.8	14.6	16.6	13.7	5.2
Zambia	5.6	4.5	4.1	5.4	5.0
Guinea Bissau	2.7	2.4	1.5	1.7	4.8
Cameroun	6.2	4.0	4.4	4.3	4.4

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Table A2: **African Countries' Limited Diversification** *(cont.)*

	1999	2000	2001	2002	2003
Guinea	3.5	3.5	3.4	3.9	4.2
Ghana	7.7	8.2	8.1	6.1	4.0
Ethiopia	2.5	2.5	5.4	5.1	4.0
Côte d'Ivoire	5.7	7.3	6.6	5.4	4.0
Sierra Leone	4.4	4.1	7.0	7.7	3.8
Mauritania	3.5	3.6	3.6	3.8	3.8
Central African Republic	1.9	1.9	2.5	2.0	3.4
Algeria	6.5	5.8	5.7	3.0	3.3
Malawi	2.7	2.4	2.7	2.9	3.0
Congo DR	2.0	2.4	2.4	1.8	3.0
Seychelles	2.0	1.9	2.6	2.8	2.7
Chad	1.6	1.7	1.5	1.7	2.6
Rwanda	2.6	3.1	2.6	2.8	2.4
Burkina Faso	2.2	4.5	4.6	7.9	2.2
Benin	2.8	3.4	2.1	4.0	2.1
Liberia	3.2	2.9	2.2	2.1	2.0
Mozambique	8.5	9.2	2.9	2.7	2.0
Niger	2.4	2.1	5.1	3.7	1.9
Gabon	1.8	1.6	1.7	1.7	1.6
Congo	1.7	1.5	1.5	1.4	1.6
Burundi	1.9	1.6	2.0	1.7	1.6
Sudan	6.4	1.9	1.6	1.7	1.6
São Tomé and Principe	5.3	3.8	7.1	2.3	1.5
Libya	1.6	1.5	1.5	1.2	1.4
Nigeria	1.3	1.2	1.3	1.3	1.3
Mali	1.4	1.9	3.1	2.6	1.3
Comoros	4.6	2.3	1.3	2.4	1.3
Equatorial Guinea	1.9	1.5	1.3	1.2	1.2
Angola	1.4	1.3	1.3	1.2	1.1

Note: * The diversification indicator measures the extent to which exports are diversified. It is constructed as the inverse of a Herfindahl index, using disaggregated exports at 4 digits (following the SITC3). A higher index indicates more export diversification

** Include Botswana, Lesotho, Namibia, South Africa and Swaziland.

Source: African Economic Outlook 2005/2006, based on African Development Bank Statistics Division ; PC-TAS 1999-2003, International Trade Centre UNCTAD/WTO - UN Statistics Division

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African patterns of imports

African imports are mostly made up of manufactured goods which account for close to 50 per cent of the total (60 per cent including chemicals). Evidence from further analysis suggests that literally all African countries are net importers of machines and transport equipment (item 7 in SITC-3 classification) while most of them are net importers of manufactured goods[6] (except South Africa, Zambia, Mozambique, Namibia, Zimbabwe and the Central African Republic), miscellaneous manufactured articles[7] (except Mauritius, Lesotho, Swaziland, Madagascar, Zimbabwe and Côte d'Ivoire) and chemicals (apart from Swaziland, Senegal and Guinea).

Table A3: **Africa's Patterns of Imports* (2003)**

	Share in total imports (per cent)	Cumulated share in total imports (per cent)
Machines, transport equip	26.1	26.1
Manufactured goods	11.0	37.1
Misc manufactured articles	10.3	47.3
Chemicals	13.3	60.6
Fuels, lubricants, etc.	16.0	76.6
Crude Materials, inedible, except fuels	4.3	80.9
Food and live animals	10.4	91.4
Animal,veg.oils,fats,wax	2.2	93.6
Beverages and tobacco	1.3	94.8
Goods not classified by kind	5.2	100.0

Note: * Including intra-continental trade
Source: UN Comtrade

More surprising is the significance of commodity and raw material in African imports. Even though Africa is chiefly regarded as an exporter of commodities and raw materials, practically all African countries are actually net importers of fuels and lubricants (only the countries featuring in Table A4 are net exporters) while a few African countries are net importers of raw materials (Table A5). In this context, the impact of China and India on international commodity markets, in particular on prices, and thereby on African economies may be more complex than it is commonly thought (see section 4.2).

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Table A4: **African Net Exporters of Fuels and Lubricants**

	Net exports of fuels and lubricants ($ million)
Nigeria	17383
Angola	8898
Congo	2274
Gabon	2007
Sudan	998
Cameroon	612
Congo DR	97
Côte d'Ivoire	31
Chad	19

Source: UN Comtrade (2002) figures for Nigeria, Gabon, Sudan, Cameroon and Côte d'Ivoire; Trademap (2003) figures for Congo DR, Chad, Congo and Angola.

Table A5: **African Net Importers of Inedible Crude Materials (except fuels) (2002)**

	Net imports of inedible crude materials ($ million)
Nigeria	81.9
Mauritius	49.0
Sierra Leone	28.3
Malawi	4.9
Burundi	4.2
Gambia	3.6
Eritrea	3.3
São Tomé and Principe	0.5

Source: UN Comtrade (2002).

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Notes

1. This figure also includes Northern African countries.

2. See in particular Collier and Gunning (1999); Collier (2003); Berman and Leys (1994); Eifert *et al.* (2005).

3. Mauritius is now adjusting to adverse developments in the textile and clothing industries by moving into high value-added service activities based on information and communication technologies (AfDB/OECD, 2005, p. 314).

4. For an account of the development of the Kenyan cut flowers industry, the garment industry in Lesotho and of the Mauritian diversification story, see Andersson *et al.* (2005).

5. Tanzania and Eritrea also rank among the most diversified African countries. On top of a large and varied base of traditional exports (coffee, cotton, tea, cashew nuts, cloves, sisal and tobacco), Tanzania also exports gold and has developed a significant tourism industry. With respect to Eritrea, its diversification index may be biased by large re-exports of electrical equipments.

6. Item n°6 in SITC, Revision 3 classification: leather, leather goods; rubber manufactures; cork, wood manufactures; paper, paperboard, etc.; textile yarn, fabric, etc.; non-metal, mineral manufactures; iron and steel; non-ferrous metals; metals manufactures.

7. Item n°8 in SITC, revision 3 classification: miscellaneous manufactured articles; Prefabricated buildings; sanitary, plumbing, heating and lighting fixtures and fittings; Furniture, and parts thereof; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; Travel goods, handbags and similar containers; Articles of apparel and clothing accessories; Footwear; Professional, scientific and controlling instruments and apparatus; Photographic apparatus, equipment and supplies and optical goods.; watches and clocks; Miscellaneous manufactured articles, n.e.s..

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Appendix B

Are Asian Drivers Nipping African Clothing in a Post-MFA Bud?

The impact of China's and India's ascendancy on African economies is well illustrated by the case of the textile and clothing industry in the context of the phasing out of the Multi-Fibre Agreement (MFA). It points to the difficulties for African economies to diversify and set up the basis of a manufacturing sector in an unfavourable context of tough international competition amplified by the erosion of trade preference schemes granted by developed countries.

The relevance of textile and clothing to African countries

Firstly, the textile industry is an economic activity that is by and large labour-intensive (at least in least developed and developing countries). It can therefore be a source of employment opportunities in the formal sector and an avenue for economic diversification away from traditional exports, with significant repercussions for poverty alleviation. Moreover, textile and clothing activities, at least at the lower end of the products range, rely on low-costs unskilled labour force. In this regard, African countries are rather well positioned. According to ITC (2004), countries such as Madagascar and Kenya have lower wage-related costs than, their Asian and Latin American competitors (Table B1).

Not only do African countries have an advantage based on a cheap labour force but some of them also produce the raw material, namely cotton. Several sub-Saharan countries are indeed world class cotton producers (even though their share in total world output remains modest, Table B2).

Cotton has been regarded for some time by African policy-makers as a basis for economic diversification and a resource to be tapped into with a view to

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Table B1: **Low Wage Costs in Madagascar and Kenya**

	Average hourly wage ($ cents)
Madagascar	**0.33**
Kenya	**0.38**
Indonesia	0.27
India	**0.38**
Bangladesh	0.39
Pakistan	0.41
Sri Lanka	0.49
Egypt	0.77
China	**0.88**
Philippines	0.91
Nicaragua	0.91
Colombia	0.98

Source: ITC (2004).

Table B2: **Major Cotton Producers**

		Output		Share in world total	
		2004/05	2005/06	2004/05	2005/06
		- in thousands of tonnes -		%	
1	China	6,320	5,770	24.3	23.9
2	USA	5,062	4,755	19.4	19.7
3	India	4,080	3,825	15.7	15.9
4	Pakistan	2,415	2,210	9.3	9.2
5	Brazil	1,250	1,250	4.8	5.2
6	Uzbekistan	1,134	1,125	4.4	4.7
7	Turkey	900	800	3.5	3.3
8	Australia	613	369	2.4	1.5
9	Greece	390	362	1.5	1.5
10	Syria	331	285	1.3	1.2
11	Egypt	292	273	1.1	1.1
12	**Burkina Faso**	**257**	**250**	**1.0**	**1.0**
13	**Mali**	**240**	**230**	**0.9**	**1.0**
14	Turkmenistan	203	200	0.8	0.8
15	Tajikistan	172	160	0.7	0.7

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Table B2: **Major Cotton Producers** *(cont.)*

		Output		Share in world total	
		2004/05	2005/06	2004/05	2005/06
		- in thousands of tonnes -		%	
16	**Benin**	**152**	**135**	**0.6**	**0.6**
17	Kazakhstan	148	128	0.6	0.5
18	Argentina	145	135	0.6	0.6
19	Mexico	141	152	0.5	0.6
20	Iran	140	109	0.5	0.5
21	**Côte d'Ivoire**	**130**	**110**	**0.5**	**0.5**
22	Tanzania	115	100	0.4	0.4
23	**Sudan**	**114**	**97**	**0.4**	**0.4**
24	Spain	110	110	0.4	0.5
25	**Cameroon**	**105**	**100**	**0.4**	**0.4**
26	**Nigeria**	**100**	**88**	**0.4**	**0.4**
27	**Chad**	**85**	**85**	**0.3**	**0.4**
28	**Togo**	**71**	**64**	**0.3**	**0.3**
29	Peru	70	70	0.3	0.3
30	Zimbabwe	65	65	0.2	0.3
31	Paraguay	65	80	0.2	0.3
32	Colombia	63	56	0.2	0.2
33	Azerbaijan	48	70	0.2	0.3
34	Uganda	44	36	0.2	0.1
35	Kyrgyzstan	40	38	0.2	0.2
36	Israel	26	26	0.1	0.1
37	**Mozambique**	**25**	**24**	**0.1**	**0.1**
38	**South Africa**	**21**	**18**	**0.1**	**0.1**
39	**Malawi**	**17**	**18**	**0.1**	**0.1**
	World Total	26,034	24,127		

Source: Cotton Outlook (2005).

develop a textile/clothing oriented manufacturing base, thus adding value to the raw commodity and moving up the value chain.

Sub-Saharan Africa has actually remained a minor player in world textiles (Figure B1) and the potential for clothing-based diversification has actually materialised only in very few countries (Figure B2). Still, a strong growth in clothing exports has been reported in some African countries, thanks to the

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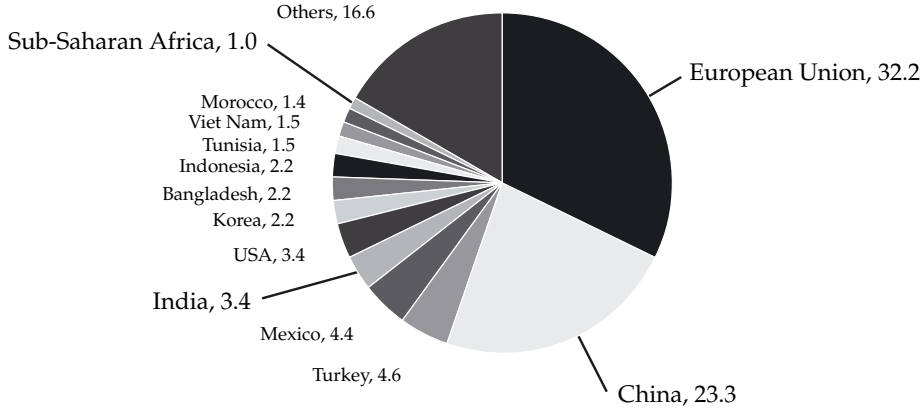
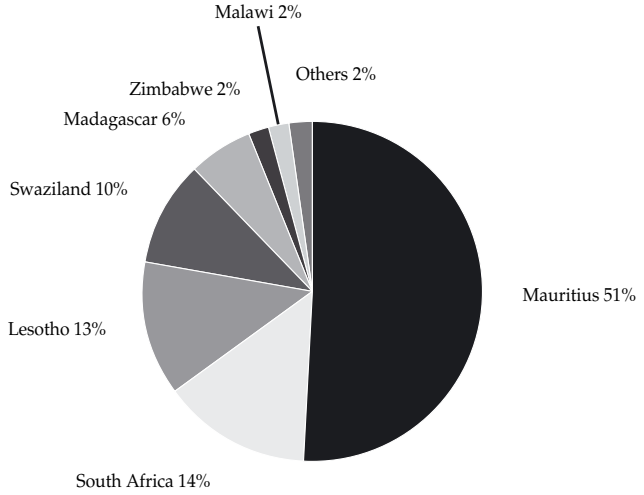
implementation of trade preference schemes. The two most remarkable schemes in this regard are the US "African Growth and Opportunity Act" (AGOA) and, to a lesser extent, the European Union "Everything But Arms" (EBA) arrangement. AGOA, originally implemented as part of the US Trade Act of 2000, provides for the duty-free and quota-free entry of certain categories of

Figure B1: **Sub-Saharan Africa : A Minor Player in World Clothing Trade**
% Share in World Exports of Clothing (2002)



Source: UN Comtrade.

Figure B2: **Main African Clothing Exporters**
% Share in African Exports of Clothing (2002)



Source: UN Comtrade

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apparel into the US market. EBA, introduced in February 2001, is a specific arrangement targeted at Least Developed Countries (LDCs) that goes beyond the standard EU Generalised System of Preferences scheme available to all developing countries. EBA grants quota-free and duty-free access to imports of almost all products from LDCs, except arms and munitions. Its time-span is unlimited and not subject to periodic renewal.

Moreover, the quotas associated with the MFA critically contributed to the efficiency of the AGOA and EBA schemes.

- Firstly, with the most efficient competitors in the sector of clothing and textile, namely Asian countries, being subject to MFA quotas, preference schemes such as AGOA and EBA grant eligible countries (incl. African countries) a strong advantage over their quota-restrained competitors in terms of access to western markets. In particular, it makes it easier for African countries to export to the EU and the US, and to sustain competition from Asian textile and clothing producers. African countries can afford to charge higher prices than their competitors to offset higher factor costs (electricity, transport, business environment, etc.) and to uphold margins while remaining competitive. ITC (2004) indeed indicates that the apparel sector in Madagascar and Kenya, despite lower labour costs than in any other apparel exporter to the US (Table B1), sees this competitive edge nullified by low productivity. In this context, preferential treatment is critical for African countries to retain their competitiveness vis-à-vis Asian producers.

- Secondly, since African countries were not subject to the MFA and were granted preferential access to the main export they attracted investment from producers constrained by quotas (starting with Asian ones).

Preference schemes, especially AGOA, together with the protection granted by the MFA have had a positive impact on the local textile industry. For instance, impressive developments had been reported in Comesa countries such as Kenya, Uganda and Madagascar[1]. Uganda did not export apparel to the US during the first years of the AGOA programme while it may have exported the equivalent of 2.7 million square meters in these products in the fifth year of the AGOA programme ending 30 September 2005. By the same token, exports of garments by Kenya and Madagascar to the US were projected to grow by 256 and 276 per cent respectively between the second year of the programme (the first full year of AGOA) ending 30 September 2002 and the fifth year of the programme (USAID 2005, p. 11).

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Trade preference erosion and its consequence for African exporters of textile and clothing

Yet, the emergence of an African clothing industry in the context of strong international competition by Asian countries may be impeded by the erosion of trade preferences.

The MFA has been gradually phased out in four phases spanning the period 1995-2005. The last and most critical phase was put in place in January 2005.[2]

The end of quotas is likely to induce the emergence of a new worldwide business model in the textile and apparel sectors to the detriment of second-tier producers, including African ones. The application of quotas from 1974 on led to the geographical fragmentation of value chains, from growing natural fibres to producing finished clothing. Clothing assembly processes were subcontracted to low-wage developing countries with spare export quotas. Asian countries such as Bangladesh first benefited from off-shoring by the most competitive quota-constrained Asian producers. Second-tier suppliers such as African countries followed once they gained preferential access to quota-protected markets. The end of MFA might bring about a vertical "reintegration" of apparel and clothing production, not least under the pressure of consolidated global retailers (Audet, 2004, p. 3). In this changing environment, Audet (2004) argues that access to high quality textiles, directly sourced from domestic sources to meet tighter delivery dates, will be key to competitiveness.

African exporters of textiles stand to lose from the changing patterns of production at the global level, while China and India will obviously be among the winners[3]. The Chinese share in the US market was 16 per cent. This can grow to 50 per cent since China is likely to become the supplier of choice for western retailers.[4] In January 2005 alone, Chinese exports to the US were up 546 per cent year-on-year for major apparel exports, 18.36 per cent for cotton knit shirts, and 13.32 per cent for knit trousers (US Census Bureau, August 2005). African exporters are likely to be partly crowded out and confronted with declining prices.

African exporters are especially vulnerable to the phasing-out of the MFA in a context of aggressive Chinese and Indian competition for the following reasons.

African products are chiefly destined for markets that were protected from quotas, i.e. the European Union and the United States, where competition is likely to bite most after the removal of the MFA (Figure B3).

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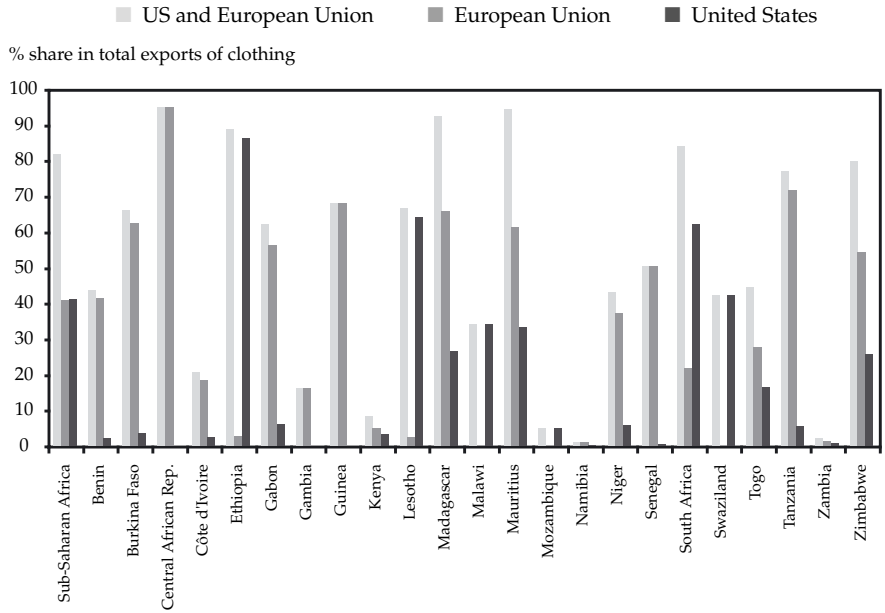
African exports are concentrated on lower-end products, e.g. basic trousers, T-shirts, sweaters and woven shirts. These products contain little value-added and are characterised by long production runs and limited styling changes. In other words, these are products where quotas were set in the former MFA environment and where exporters such as China and India are extremely price competitive.

The adjustment of African producers to the phasing-out of quotas has been slow and limited while they suffer from a significant productivity gap vis-à-vis their Asian competitors. The latter stand to benefit from economies of scale, produce in efficient factories and are in a position to offer full package services now favoured by global buyers (product development, fabric, sourcing, cutting, sewing, packaging, quality controls, trade, financing and logistics). AGOA producers have limited capacity to offer large volumes, display inferior logistics and muct cope with insufficient infrastructure (USAID, 2005, p. 5). By and large,

Figure B3: **The United States and the European Union as Main Markets for African Exports of Clothing**
% Share of the US and the EU as destinations for African exports of clothing



Source: : UN Comtrade.

AGOA producers just cut and sew garments. Moreover, they do not enjoy the advantages of geographical proximity to the EU market, let alone the US market, and are also hamstrung by poor logistical infrastructure. This must be regarded as an impediment to timely management and delivery, a critical underpinning of competitiveness (Audet, 2004, p. 3) and to the shipping of store-ready products to retailers on the basis of retail point-of-sale data (USAID, 2005, p. 6).

The removal of MFA has also highlighted the weaknesses and drawbacks of existing trade preference schemes. The phasing-out of MFA has brought to the fore the fact that the actual use of preference schemes by eligible countries is complex. Consequently, the advantages granted to beneficiaries over highly-competitive rivals such as China may be lesser than meets the eye.

The attractiveness of EBA and AGOA schemes is weakened by rules of origin that are too stringent and complex. The implementation of EBA is conditional on double-stage processing (from yarn to fabrics and fabrics to clothing). This has in effect made the EBA almost ineffective for African textile exporters: African countries can not comply with EBA-related double stage processing rules. Apparels made in Africa are indeed low-value added and largely rely on imported inputs since African countries have very limited spinning and weaving capacity to supply the local clothing industry. Furthermore, fabrics produced in Africa are hardly competitive. The EBA scheme merely allows the use of EU fabrics as "third-party" inputs[5], but EU fabrics are not competitive either. As a result of these constraints, African producers cannot benefit from EBA provisions while resorting to the most competitive Asian fabrics.[6]

The AGOA scheme has rules of origin which are less stringent, especially with respect to least developed countries that are authorised to use "third party" fabrics and yarns. However, the AGOA scheme also contains caveats: quotas ("tariff preference level") still limit the quantities of duty-free exports from Africa that can incorporate yarns and fabrics which are not sourced in the US or in the exporting country. Shipment above this quota enters the US territory at Most-Favoured-Nation (MFN) and less beneficial standard rates. Furthermore, uncertainties revolve around the extension of the AGOA scheme, in particular of its most advantageous provisions: while the entire scheme is scheduled to expire in 2015 for fabrics and yarns sourced in the region, provisions allowing the use of fabrics and yarns sourced outside Africa are due to expire in 2007 (and corresponding quotas should halve as early as 2006). The renewal of these provisions in 2007 is far from guaranteed.

In other words, schemes such as the EBA and the AGOA still discriminate against fabrics produced in Asian countries, thereby preventing eligible African

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exporters to benefit from the schemes while using the most competitive inputs (Mattoo *et al.* 2002). Moreover, these numerous requirements add to the complexity of the schemes, thus creating what Bhagwati and Panagariya (1996) have dubbed a 'spaghetti-bowl effect' of regulations that may discourage African exporters.

Beyond the specific glitches and weaknesses of the EBA scheme and the AGOA, the dismantlement of the MFA will result in an automatic erosion of the trade preferences granted to Africa over competitors from Asia. And further preference erosion is to be expected: the Doha Round may result in enhanced multilateral liberalisation while the spread of bilateral free-trade agreements between the EU and US and garment exporters (outside Africa) has been observed lately and should intensify over the coming years. As a result, a fall in standard MFN tariffs is likely to be observed that will further shrink the margin ('preference margin'[7]) between preferential tariffs granted in the framework of trade preference schemes such as the AGOA and EBA, on the one hand, and standard rates allowed by MFN / Generalised System of Preferences for developing countries, on the other hand. Africa is especially vulnerable since it is heavily export-dependent on preference-granting countries (the EU and the US). More specifically, Subramanian (2003) argues that textiles are among the products (together with tobacco, fisheries and cocoa) on which some developing countries, including those in Africa, rely heavily and the exports of which are likely to be strongly affected by preference erosion.

The African garment and apparel sector: a still-born industry?

In the short-term, some closure of factories and accompanying lay-offs may occur. A shift of FDI to more competitive garment exporting regions is predictable, while a fall in exports should be recorded (however, the impact on African countries' trade balance should be milder since a large share of fabrics used as inputs is imported). In late 2004 and early 2005, numerous plant closures have been announced. Around 8000 workers may have been laid-off in Kenya since late 2004; in Lesotho, eight factories closed in the last six months of 2004 leaving more than 12000 workers without jobs, followed by the closure of 17 more factories in January throwing another 11000 people out of work. These mass lay-offs are likely to have a substantial impact on poverty since the textile industry in Africa is labour-intensive, employs a chiefly female workforce and accounts for the bulk of formal employment.

However, despite the consolidation of the textile industry worldwide and even though China stands to become the supplier of choice of European and

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American retailers, some room for second-tier suppliers, including African ones, should be preserved: buyers in the US and the EU might indeed be keen on diversifying their suppliers' base. Moreover, with the elimination of quotas, duties will grab the spotlight: indeed, whereas the Agreement on Textiles and Clothing (ATC) requires the elimination of quotas, it does not address the issue of tariff protection. In this respect, the preferential treatment granted by a scheme such as AGOA is far from negligible. Average import tariffs applied to clothing remains high compared to average tariffs imposed on manufactures and even on textiles (Table B3).

Table B3: **Textile and Clothing, Simple average Tariffs**

	Manufactures	Textiles	Clothing
OECD countries	6.2	9.4	16.1
Australia	5.4	9.9	20.7
Canada	4.9	10.7	18.4
European Union	4.4	7.9	11.4
Japan	2.9	6.5	11
New Zealand	3.1	2.4	13.7
United States	4	9.1	11.4

Source: Audet (2004)

Steps should be taken to restore the level of preference margin granted by schemes such as EBA and AGOA. First, rules of origin embedded in trade preference schemes should be relaxed. African garment exporters should enjoy unrestricted access to the most competitive fabrics and source them overseas while continuing to benefit from duty-free and quota-free access to the US and EU markets.[8] Second, importing countries should find ways to streamline and simplify the rules, procedures, documentation and paperwork attached to the actual use of these schemes. In this respect, the EU and US trade preference schemes might be patterned upon Canada's "Market Access Initiative" for LDCs which does not include double-transformation requirement, makes it possible for fabrics to be sourced globally and only requires that 25 per cent of the value of the garment be added in the eligible country.

Niche markets and production for African clothing producers do exist, but they remain inaccessible to most of them due to insufficient managerial and sewing skills (the case of Mauritius notwithstanding). Therefore, donors could

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help improve the efficiency of production in sub-Saharan countries and narrow the productivity gap with other apparel exporters, not least by supporting the efforts of local producers in raising the productivity of sewing machine operators, training the middle-management and system engineers, and upgrading local technologies.

As already indicated, vertical integration (from the production of yarns and fabrics to the marketing of garments and apparels) is an important survival factor in the post-MFA world, especially if AGOA "third country" provisions are not extended. In this respect too, Africa is lagging behind. The availability of locally-made fabrics is very limited, while their quality is poor and their price is high. African countries have indeed very limited sewing and weaving capacities, despite a large textile-fibre base. Establishing a textile mill in Africa is overly costly, especially when set against the cost of establishing apparel manufacturing infrastructures. As a result, African fabrics are not competitive vis-à-vis products sourced in Asia: ITC (2004) indicates that in Lesotho the cost of standard cotton chino imported from China is $ 0.58 per square yard compared to $1.57 for identical fabric produced in South Africa. Here again, donors may provide assistance to develop a competitive textile industry, based on the locally available raw material, cotton, and capable of catering to the needs of the global clothing industry.[9]

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Notes

1. For a comprehensive and in-depth review of the challenges faced by the textile industry in Comesa countries, see USAID (2005).

2. The process of phasing-out had indeed been largely back loaded: out of 1325 original quotas, 1106 were due to be eliminated on 1 January 2005.

3. Under safeguard mechanisms allowed for by China's WTO accession agreements, new quotas have been instituted in the first half of 2005 following the surge in Chinese exports of apparels and garments to the EU and the US. They limit the imports from China of products that are very relevant to African exporters such as woven trousers, knit shirts and blouses. Yet, they are unlikely to modify the long-run dynamics of the textile industry at the global level.

4. Diverging estimates are provided by surveys. For general reviews of the impact of the ATC and the MFA removal, see among others Audet (2004), François and Spinanger (2004), Nordås (2004) and Mayer (2004).

5. "Third-party" fabrics are fabrics that are not made locally nor imported from the EU.

6. African countries can however enjoy an access to the EU market under the standard provisions of the Cotonou agreement, i.e. under more tolerant rules of origin. However, the terms of access under the Cotonou agreement are much less favourable that those of the EBA scheme.

7. 'Preference margin' is defined as "the percentage by which the trade-weighted average unit price received by a preference recipient for a particular product exceeds that received by an MFN exporter, due to the former's eligibility for a preference scheme." (Alexandraki 2005).

8. AGOA "third-party" provision should at least be renewed. USAID (2004) argues that despite the removal of the MFA, Comesa suppliers remain by and large competitive thanks to the AGOA preferential treatment.

9. Yet, time is running short and the scope for African countries to set up a competitive fabric and yarn industry by the time AGOA "third country" fabric provisions expire is very slim. Therefore, it is essential that the latter be extended since their expiry would merely damage the local apparel industry without being conducive to the development of a local yarn and fabric local industry. However, USAID (2004) argues that a "reward" (with respect to the access granted to the US market) should be offered to those African apparel manufacturers that use local yarn and fabrics.

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Appendix C

Balassa Specialisation Index for India, China and selected African countries

The Balassa Specialisation Index measures a country's revealed comparative advantage in exports according to the following formula:

$$RCA_{ij} = (x_{ij}/X_{it}) / (x_{wj}/X_{wt})$$

It compares the share of a given sector in national exports with the share of this sector in world exports. Where x_{ij} and x_{wj} are the values of country i's exports of product j and world exports of product j and where X_{it} and X_{wt} refer to the country's total exports and world total exports. It helps assess a country's export potential. Countries with similar RCA profiles are unlikely to have high bilateral trade intensities unless intra-industry trade is involved.

Values above 1 (in bold in Tables C.1 and C.2) indicate that the country is specialised in the sector under review. A value of less than unity implies that the country has a revealed comparative disadvantage in the product.

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Table C1: **Revealed Comparative Advantage in Selected African Countries**

	Angola	Botswana	Burkina Faso	Cameroon	Congo	Congo DR	Ethiopia	Gabon	Ghana	Kenya	Lesotho	Malawi	Mali
Fresh food	.	0.48	**17.72**	**6.49**	0.17	0.34	**18.67**	.	**14.47**	**10.39**	.	**17.63**	**18.73**
Processed food	.	.	**2.74**	0.23	.	.	0.81	.	**1.47**	**2.14**	.	**3.32**	.
Minerals	**8.97**	**8.62**	.	**4.10**	**8.09**	**8.07**	0.04	**8.07**	0.93	**1.98**	.	.	.
Wood products	.	.	.	**6.83**	**2.62**	**1.16**	.	**2.43**	**4.23**	0.57	.	.	0.52
Leather products	.	.	**3.94**	.	.	.	**5.13**	.	.	1.00	.	.	**1.86**
Textile	.	.	0.47	.	.	.	0.95	.	0.16	0.46	.	.	.
Clothing	.	0.20	.	.	.	.	0.14	.	.		**28.74**	**2.57**	.
Chemicals	.	.	.	.	.	.	.	.	.	0.44	.	.	.
Basic manufactures	.	.	.	0.46	0.10	0.50	.	.	0.80	0.79	.	.	.
Transport equipment	.	.	.	.	.	.	.	0.15	.	.	.	.	.
Non-electronic machinery	.	.	.	.	.	.	0.47	.	.	0.13	.	.	.
Electronic components	.	0.12	0.08	.	.	.	.	.	.	0.05	.	.	0.26
IT & consumer electronics	.	.	.	.	.	.	.	.	.	.	.	.	0.79
Miscellaneous manufacturing	.	.	0.16	0.05	.	0.09	.	.	0.09	0.66	.	.	0.16

Source: Intracen 2004

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Table C1: **Revealed Comparative Advantage in Selected African Countries** *(cont.)*

	Mozambique	Namibia	Nigeria	Rwanda	Senegal	Sierra Leone	Somalia	South Africa	Sudan	Tanzania	Uganda	Zambia
Fresh food	4.8	**7.94**	.	**3.67**	**6.16**	**1.29**	**12.66**	**1.51**	**3.71**	**15.16**	**20.15**	**1.16**
Processed food	0.62	**3.88**	.	.	**3.41**	**1.39**	.	**1.13**	0.20	**1.20**	**1.01**	0.46
Minerals	0.18	**1.57**	**8.84**	**7.20**	**2.11**	**4.67**	.	**1.86**	**7.37**	**1.52**	.	0.27
Wood products	**1.27**	0.24	.	.	0.28	0.43	**9.45**	**1.35**	.	0.33	.	.
Leather products	.	0.38	.	.	.	.	.		0.91	0.63	.	.
Textile	.	0.21	.	.	0.28	.	.	0.36	.	**1.01**	.	0.94
Clothing	0.13	.	.	.	.	0.93	.	0.28	.	0.19	.	.
Chemicals	.	0.12	.	.	**1.90**	0.21	0.22	0.71	.	.	.	.
Basic manufactures	**9.05**	0.67	.	0.16	0.40	0.50	.	**3.79**	.	0.33	.	**11.44**
Transport equipment	.	0.27	0.12	.	0.17	0.08	.	0.84	.	.	.	.
Non-electronic machinery	0.06	0.20	.	.	0.13	0.24	.	0.76	.	.	.	.
Electronic components	.	0.12	.	.	0.06	0.56	.	0.16	.	.	.	.
IT & consumer electronics	.	0.22	.	.	.	0.50	.	0.12	.	.	.	.
Miscellaneous manufacturing	.	**1.75**	.	.	0.48	**1.35**	.	0.43	.	0.10	.	.

Source: Intracen 2004.

Table C2: **Revealed Comparative Advantage in China and India**

	China	India
Fresh food	0.68	**2.23**
Processed food	0.47	0.76
Minerals	0.28	**2.03**
Wood products	0.43	0.17
Leather products	**3.34**	**2.18**
Textile	**2.39**	**4.27**
Clothing	**3.46**	**3.09**
Chemicals	0.42	**1.06**
Basic manufactures	0.96	**1.36**
Transport equipment	0.27	0.23
Non-electronic machinery	0.52	0.37
Electronic components	**1.04**	0.23
IT & consumer electronics	**2.43**	0.10
Miscellaneous manufacturing	**1.48**	0.80

Source: Intracen 2004.

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Appendix D

Commodity selection for Table 9, 10 and 11

Classification of HS-Rev 1 Products according to commodity categories

Primary Commodity	HS-Rev. 1 (1996) Code
Non-Fuel:	
i) Edibles:	
a) Food	2 (meat); 3 (fish); 7 (edible vegetables); 8 (edible fruits); 13 (gum)
b) Beverages	9 (coffee, tea)
ii) Industrial inputs:	
a) Agricultural Raw materials	10 (cereals); 12 (oil seeds); 18 (cocoa); 24 (tobacco); 40 (rubber); 41 (raw hides, leather); 44 (woods); 45 (cork); 50 (silk); 52 (cotton)
b) Metals/minerals	26 (ores, slag); 72 (iron); 73 (articles of iron); 74 (copper); 75 (nickel); 76 (aluminium); 78 (lead); 79 (zinc); 80 (tin); 81 (other base metals); 25 (salts, sulphur), 71(precious stones)
Energy:	
Petroleum	27 (mineral fuels, oil)

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Appendix E

China's and India's Import Structure

China's and India's Share of Commodity Imports in Total Imports, per cent

	India		China	
	1998	2003	1998	2003
Fuels, Lubricants, etc.	22.9	29.0	5.1	7.1
Manufactured Goods	22.1	16.8	23.6	15.5
Machines, Transport Equipment	19.1	20.9	43.1	46.7
Chemicals	14.9	9.5	15.3	11.9
Crude Materials, Inedible, except Fuels	6.8	5.2	8.1	8.3

Source: Estimates based on UN Comtrade database.

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Bibliography

AfDB/OECD (2004), *African Economic Outlook*, Paris and Tunis.

AfDB/OECD (2005), *African Economic Outlook*, Paris and Tunis.

ALDEN, C. (2005), "China in Africa", *Survival*, Vol. 47, No. 3, pp. 147-164.

ALEXANDRAKI, K. (2005), "Preference Erosion: Cause for Alarm?", *Finance & Development*, Vol. 42, No. 1.

AMJADI, A. and A. YEATS (1995), "Have Transport Costs Contributed to the Relative Decline of African Exports? Some Preliminary Empirical Evidence", *Policy Research Working Papers*, No. 1559, World Bank, Washington, D.C.

ANDERSSON, J., F. BONAGLIA, K. FUKASAKU and C. LESSER (2005), "Trade and Structural Adjustment Policies in Selected Developing Countries", *OECD Development Centre Working Papers*, No. 241, OECD, Paris.

APPELBAUM, R.A. (2005), "TNCs and the Removal of Textiles and Clothing Quotas", *Series of Current Studies on FDI and Development*, UNCTAD, Geneva.

AUDET, D. (2004), *A New World Map in Textiles and Clothing: Adjusting to Change*, OECD, Paris.

BASEDAU, M. (2005), "Context Matters – Rethinking the Resource Curse in Sub-Saharan Africa", *Working Papers Global and Area Studies*, No. 1, German Overseas Institute (DÜI), Hamburg.

BÉNASSY-QUÉRÉ, A., V. MIGNON and A. PENOT (2005), "China and the Relationship between the Oil Price and the Dollar", *CEPII Working Paper,* No 05-16, CEPII, Paris.

BERMAN, B.J. and C. LEYS (1994), *African Capitalists in African Development*, Lynne Rienner Publishers, Boulder, CO.

ISBN 92-64-02441-7

BHAGWATI, J. and A. PANAGARIYA (1996), "Free Trade Target Date Essential to Remove 'Spaghetti Bowl' of Barriers", *Financial Times*, June 25.

BLOCH, H., A.M DOCKERY, C. WYN MORGAN and D. SAPSFORD (2004), "Growth, Commodity Prices, Inflation and the Distribution of Income", *Research Papers*, No. 0404, The University of Liverpool School of Management, Liverpool.

BONAGLIA, F. and K. FUKASAKU (2003), "Export Diversification in Low-Income Countries: An International Challenge after Doha", *OECD Development Centre Working Papers*, No. 209, OECD Paris.

BONAGLIA, F. and A. GOLDSTEIN (2005), "Outward Foreign Direct Investment from Egypt", mimeo, OECD Development Centre, Paris.

BRANSON, W.H. (2001), "Intermediate Exchange-Rate Regimes for Groups of Developing Countries", *in* J. BRAGA DE MACEDO, D. COHEN and H. REISEN, *Don't Fix, Don't Float*, OECD Development Centre Studies, Paris.

BRÄUTIGAM, D. (2003), "Close Encounters: Chinese Business Networks as Industrial Catalysts in sub-Saharan Africa", *African Affairs*, Vol. 102, No. 408, pp. 447–467.

BRÄUTIGAM, D. (2005), "Strategic Engagement: Markets, Transnational Networks, and Globalization in Mauritius", *Yale Journal of International Affairs*, Vol. 1, No. 1.

BUDNEVICH, C. (2002), "Countercyclical Fiscal Policy. A Review of the Literature, Empirical Evidence and Some Policy Proposals", *WIDER Discussion Papers*, No. 2002/41, WIDER, Helsinki.

BUSTELO P. (2005), "China en la economía mundial: fortalezas, debilidades y perspectivas", *Cuadernos de Información Económica*, No. 186, FUNCAS.

CARIM, X. (2005), "Doha Development Agenda: An African Perspective", presented at the Africa Regional Workshop on WTO Negotiations, Cape Town, 31 August.

COLLIER, P. (2003), "Primary Commodity Dependence and Africa's Future", *in* B. PLESKOVIC and N. STERN (eds.), *Annual World Bank Conference on Development Economics*.

COLLIER, P. and J.W. GUNNING (1999), "Why Has Africa Grown Slowly?" *Journal of Economic Perspectives*, Vol. 12, No. 3, pp. 3-22.

COLLIER, P. and J.W. GUNNING (2005), "Asset Policies During an Oil Windfall: Some Simple Analytics", *The World Economy*, Vol. 28, No. 10, pp. 1401-15.

CORDEN, M.W. and P.J. NEARY (1982), "Booming Sector and De-Industrialisation in a Small Open Economy," *Economic Journal*, Vol. 92, No. 368, pp. 825-48.

CORDEN, M.W. (1984), "Booming Sectors and Dutch Disease Economics: Survey and Consolidation", *Oxford Economic Papers*, Vol. 36, No. 3, pp. 359-80.

ISBN 92-64-02441-7 © OECD 2006

CORSI, E. (2005), "Les multinationales du pétrole en Afrique Centrale: quelle contribution au développement économique et social?", presented at the Atelier régional tripartite "Comment maximiser l'impact de l'industrie pétrolière sur le développement des pays d'Afrique Centrale?", OECD Development Centre/INICA/ECA, Brazzaville, 14-15 July.

Cotton Outlook (2005), Vol. 83, No. 33, 19 August.

DADLANI, N.K. (1998), "Cut Flower Production In India", in *Cut Flower Production in Asia*, Food and Agriculture Organization of the United Nations, Regional Office for Asia and the Pacific, Bangkok.

DE NEGRI, F. (2005), "O Perfil dos Exportadores Industriais Brasileiros para a China", *Texto para Discussão*, No. 1091, IPEA, Brasilia

DE PAIVA ABREU, M., (2005), "China's Emergence in the Global Economy and Brazil", *Working Paper*, No. 491, Departamento de Economia PUC-Rio, Pontifícia Universidade Católica do Rio de Janeiro.

DEPARTMENT OF ENERGY (2004), *International Energy Outlook 2004*, Energy Information Administration, Washington, D.C.

DEPARTMENT OF TRADE AND INDUSTRY SOUTH AFRICA (2005), "Submission to the Portfolio Committee on Trade and Industry – Clothing, Textile & Footwear Sector", www.dti.co.za, accessed 3 November 2005.

DEUTSCHE BANK (2005*a*), "China Macro Strategy: 18 Ways to Play the RMB", Deutsche Bank Research, 20 May.

DEUTSCHE BANK (2005*b*), "Global Growth Centres 2020, *Formel-G* for 34 Economies", Deutsche Bank Research, 23 March.

DOBLER, G. (forthcoming), "South-South Business Relations in Practice: Chinese Merchants in Oshikango, Namibia".

DOOLEY, M., D. FOLKERTS-LANDAU and P. GARBER, (2004). "Direct Investment, Rising Real Wages and the Absorption of Excess Labour in the Periphery", *NBER Working Paper,* No. 10626.

ECLAC (2005), *Latin America and the Caribbean in the World Economy 2004: 2005 Trends*, ECLAC, Santiago.

EDWARDS, C. and R. JENKINS (2005), *The Effect of China and India's Growth and Trade Liberalisation on Poverty in Africa*, IDS/Enterplan.

EICHENGREEN, B., Y. RHEE and H. TONG (2004). "The Impact of China on the Exports of Other Asian Countries", *NBER Working Paper*, No. 10768.

ISBN 92-64-02441-7 © OECD 2006

EICHENGREEN, B. and H. TONG (2005), "Is China's FDI Coming at the Expense of Other Countries?", *NBER Working Paper*, No. 11335.

EIFERT, B., A. GELB and V. RAMACHANDRAN (2005), "Business Environment and Comparative Advantage in Africa: Evidence from the Investment Climate Data", *Working Paper*, No. 56, Center for Global Development, Washington, D.C.

EIFERT B., A. GELB and N.B. TALLROTH (2003), "Managing Oil Wealth", *Finance & Development*, Vol. 40, No. 1.

FAO (2002), "Towards 2015/2030 World Agriculture: Summary Report", FAO, Rome.

FIAS (2005), *Burkina Faso – Concurrence, Investissement et Compétitivité: Contraintes et Recommandations*.

FRANCIS, M., F. PAINCHAUD and S. MORIN (2005), "Understanding China's Long-Run Growth Process and its Implications for Canada", *Bank of Canada Review*, Spring, pp. 5-17.

FRANCOIS, J. and D. SPINANGER (2004), "Liberalizing Quotas on Textiles and Clothing: Has the ATC Actually Worked?", presented at the 7th Annual GTAP Conference, Washington, D.C.

FRIEDLAND, W. (1994), "The Global Fresh Fruit and Vegetable System: An Industrial Organization Analysis", pp. 173-189 in P. MCMICHAEL (ed.), *The Global Restructuring of Agro-Food Systems*, Cornell University Press, Ithaca, NY.

GARCÍA-HERRERO, A. and D. SANTABÁRBARA (2005), "Does China Have an Impact on Foreign Direct Investment to Latin America?", *Documentos de Trabajo*, No 0517, Bank of Spain.

GARY, I. and T.L. KARL (2003), *Bottom of the Barrel: Africa's Oil Boom and the Poor*, Catholic Relief Services, Baltimore, MD.

GELB, A. (1988), *Oil Windfalls, Blessing or Curse?*, Oxford University Press.

GHOSH, J. (2005), "China and India: The Big Differences". www.macroscan.com/cur/aug05/cur240805China_India.htm.

GOLDSTEIN, A. (2004), "*Regional Integration, FDI and Competitiveness in Southern Africa*", OECD Development Centre Studies, Paris.

GOLDSTEIN, A. (2006), *Emerging Multinationals in the Global Economy*, Palgrave, London.

GOLLIN, D., S. PARENTE and R. ROGERSON (2002), "The Role of Agriculture in Development", *American Economic Review*, Vol. 92, No. 2, pp. 160-164.

GOTTSCHALK, R. and D. PRATES (2005), "The Macro Economic Challenges of East Asia's Growing Demand for Primary Commodities in Latin America", mimeo, Institute for Development Studies, Sussex.

 ISBN 92-64-02441-7 © OECD 2006

HARTWICK, J. (1977), "Intergenerational Equity and Investing Rents from Exhaustible Resources", *American Economic Review*, Vol. 67, No. 5, pp. 972-974.

HEYTENS, P. and H. ZEBREGS (2003), "How Fast Can China Grow?", *in* W. TSENG and M. RODLAUER (eds.), *China: Competing in the Global Economy*, IMF, Washington, D.C.

HILLIGAS, A. (2004), "The Elimination of Quotas under the World Trade Organization Agreement on Textiles and Clothing: The Impact on Swaziland", mimeo, Southern African Global Competitiveness Hub, Gaborone.

HOLZ, C. (2005), "China's Economic Growth 1978-2025: What We Know Today about China's Economic Growth Tomorrow.", mimeo, http://ihome.ust.hk/~socholz/

IADB (2004), *The Emergence of China: Opportunities and Challenges for Latin America and the Caribbean*, Washington, D.C.

ICE (2005), *L'Italia nell'economia internazionale*, Rome.

IEA (2004), *World Energy Outlook*, OECD, Paris.

IEA (2005), *Key World Energy Statistics*, OECD, Paris.

IMF (2004), *World Economic Outlook*, Washington, D.C., April.

IMF (2005), *World Economic Outlook*, Washington, D.C., April.

ISL (INSTITUTE OF SHIPPING ECONOMICS AND LOGISTICS) (2005), *ISL Market Analysis 2005*, Bremen, June.

ITC US (2004), *U.S.-Trade and Investment with sub-Saharan Africa*, Investigation No. 332-415, Publication 3741.

KAPLINSKY, R. (2005), "Revisiting the Revisited Terms of Trade: Will China Make a Difference?", mimeo.

KAPLINSKY, R., O. MEMEDOVIC, M. MORRIS and J. READMAN (2003), "The Global Wood Furniture Value Chain: What Prospects for Upgrading by Developing Countries: The Case of South Africa", *UNIDO Sectoral Studies Series*, UNIDO, Vienna.

KENNAN, J. and C. STEVENS (2005), "Opening the Package: the Asian Drivers and Poor-Country Trade", mimeo, Institute for Development Studies, Sussex.

KERR-DINEEN, P. (2003), "A Model of Efficient Symbiosis: The Relationship between the Shipping Industry and World Trade Trends", A Presentation to Sir John Cass Business School, Logistics Research Network Annual Conference, 12 September.

KYLE, S. (2005), "Oil Revenue, The Real Exchange Rate and Sectoral Distortion in Angola", *Working Paper*, No. 2005-19, Cornell University, Department of Applied Economics and Management.

ISBN 92-64-02441-7 © OECD 2006

LALL, S. and J. WEISS (2004), "People's Republic of China's Competitive Threat to Latin America: An Analysis for 1990-2002", *ADB Institute Discussion Paper,* No. 14, Tokyo.

LANGE, G-M, and M. WRIGHT (2004), "Sustainable Development in Mineral Economies: The Example of Botswana", *Environment and Development Economics*, Vol. 9, No. 4, pp. 485–505.

LANGHAMMER, R. and R. SCHWEICKERT (2005), "Zurück in die Rohstoffecke? Asiatisches Arbeitsangebot und asiatische Rohstoffnachfrage bringen Lateinamerikas Industrialisierungserfolge ins Wanken", *IfW Fokus,* No. 8, Kiel Institute for World Economics, Kiel.

LEAMER, E. (1987), "Paths of Development in the Three-Factor, N-Good General Equilibrium Model", *Journal of Political Economy*, Vol. 95, No. 5, pp. 961-99.

LEAMER, E., H. MAUL, S. RODRIGUEZ and P.K. SCHOTT (1999), "Does Natural Resource Abundance Cause Latin American Income Inequality?", *Journal of Development Economics*, Vol. 59, No. 1, pp. 3-42.

LEHMANN, A., N.T. TAMIRISA and J. WIECZOREK (2003), "International Trade in Services: Implications for the IMF", *Policy Discussion Paper*, No. 03/6, IMF, Washington, D.C.

LOGAN, J. (2005), "Testimony at the Hearing on EIA's Annual Energy Outlook for 2005", Committee on Energy and Natural Resources, U.S. Senate.

LORA, E. (2005), "¿Debe la América Latina temerle a China?", *El trimestre económico*, No. 287, pp. 459-496.

LYMAN, P. (2005), "China's Rising Role in Africa", presentation to the US-China Economic and Security Review Commission, 21 July.

MARCHAL, R. (2005), "Comment être semblable tout en étant différent? Les relations entre la Chine et l'Afrique", *in* R. MARCHAL (ed.), *Afrique-Asie: Echanges inégaux et globalisation subalterne*, Institut de Recherche sur l'Asie du Sud-Est contemporaine and Les Indes savantes, Bangkok and Paris.

MATTOO, A., D. ROY and A. SUBRAMANIAN (2002), "The Africa Growth and Opportunity Act and its Rules of Origin: Generosity Undermined?", *Working Paper*, No. 02/158, IMF, Washington, D.C.

MAYER, J. (2004), "Not Totally Naked: Textiles and Clothing trade in a Quota Free Environment", *Discussion Papers*, No. 176, UNCTAD, Geneva.

MAYER, J. and P. FAJARNES (2005), "Africa's Exports of Primary Commodities: Endowments, 'New' International Trade Geography and 'Old' Market Access and Entry Conditions", mimeo, UNCTAD, Geneva.

 ISBN 92-64-02441-7 © OECD 2006

McKinnon, R. and G. Schnabl (2003), "China: A Stabilizing or Deflationary Influence in East Asia? The Problem of Conflicted Virtues", mimeo, Stanford University.

NBS (2004), *China Statistical Yearbook*.

Nkounga (2005), "Comment les revenus pétroliers peuvent-ils aider à la mobilisation des ressources privées autour de projets d'infrastructures régionales?", presented at the Atelier régional tripartite "Comment maximiser l'impact de l'industrie pétrolière sur le développement des pays d'Afrique Centrale?", OECD Development Centre/INICA/ECA, Brazzaville, 14-15 July.

Nordas, H.K. (2004), "The Global Textile and Clothing Industry post the Agreement on Textile and Clothing," *Discussion Paper*, No. 5, World Trade Organization, Geneva.

OECD (2005*a*), *2005 Economic Survey – China*, OECD, Paris.

OECD (2005*b*), *International Investment Perspectives,* OECD, Paris.

OECD (2005*c*), *2005 Economic Survey – Chile*, OECD, Paris.

OECD (2006), "Baseline for the Environmental Outlook to 2030", presented to the Environment Policy Committee's Working Party on Global and Structural Policies, Paris, 30-31 March.

Peters, E.D. (2005), "Economic Opportunities and Challenges Posed by China for Mexico and Central America", DIE Studies, No. 8, German Development Institute /Deutsches Institut für Entwicklungspolitik (DIE), Bonn.

Pomfret, R. (1996), *Is China a 'Large Country'? China's Influence on World Markets*, OECD Development Centre Studies, Paris.

Pourtier, R. (2005), "Comment rendre la gestion des revenus pétroliers plus transparente?", presented at the Atelier régional tripartite "Comment maximiser l'impact de l'industrie pétrolière sur le développement des pays d'Afrique Centrale?", OECD Development Centre/INICA/ECA, Brazzaville, 14-15 July.

Pradhan, J.P. (2003), "Rise of Service Sector Outward Foreign Direct Investment from Indian Economy: Trends, Patterns, and Determinants", *RIS Discussion Papers*, No. 63/2003.

Prebisch, R. (1950), *The Economic Development of Latin America and its Principal Problems*, United Nations Economic Commission for Latin America, Lake Success, NY.

Reisen, H., M. Grandes and N. Pinaud (2004), "New Issues in Macroeconomic Interdependence", *OECD Development Centre Working Papers*, No. 241, OECD, Paris.

Ribeiro, F. and H. Pourchet (2004), "O perfil do comércio Brasil-China", *Revista Brasileira de Comércio Exterior*, Vol. 18, No. 79, pp. 12-46.

ISBN 92-64-02441-7 © OECD 2006

SACHS, J. (2001), "Tropical Underdevelopment", *NBER Working Paper*, No. 8119.

SANTISO, J., J. BLAZQUEZ-LIDOY and J. RODRIGUEZ (2004), "Angel or Devil? Chinese Trade Impact on Latin American Emerging Markets", mimeo, BBVA Research Department, Madrid.

SINGER, H. (1950), "The Distribution of Gains between Investing and Borrowing Countries", *American Economic Review*, Vol. 40, No. 3, pp. 473-483.

STIJNS, J.-P. (2003), "An Empirical Test of the Dutch Diseases Hypothesis Using a Gravity Model of Trade", mimeo, UC Berkeley.

SUBRAMANIAN, A. (2003), "Financing of Losses from Preference Erosion," paper prepared for the World Trade Organization, WT/TF/COH/14, Geneva.

SVENNING, S.B. (2005), "Two Years of Exceptional Freight Markets Two Years of Exceptional Freight Markets. What's Next?", presentation given at the 5th China Steel & Raw Materials Conference, Qingdao, 24-26 October.

TRANSPARENCY INTERNATIONAL (2004), *Global Corruption Report*, Transparency International, Berlin.

TULL, D.M. (2005), "Die Afrikapolitik der Volksrepublik China", *SWP-Studie*, No. 20, Stiftung Wissenschaft und Politik, Deutsches Institut für Internationale Politik und Sicherheit.

UNCTAD (2003), *World Investment Report*, UNCTAD, Geneva.

UNCTAD (2005), *Trade and Development Report*, UNCTAD, Geneva.

USAID (2005), "Impact of the End of MFA Quotas on Comesa's Textile and Apparel Exports under AGOA. Can the sub-Saharan African Textile and Apparel Industry Survive and Grow in the Post-MFA World?", The East and Central Africa Global Competitiveness Trade Hub.

WARNER, M. and K. ALEXANDER (2005), "Does the Sustained Global Demand for Oil, Gas and Minerals Mean that Africa Can Now Fund its Own MDG Financing Gap?", *Enhancing Economic Performance in the Extractive Industries Sector*, Programme on Business and Development Performance, Overseas Development Institute.

WINTERS, L.A. (2002), "Trade Liberalisation and Poverty: What Are the Links?", *The World Economy*, Vol. 25, No. 9, pp. 1339-67.

WORLD BANK (2004), *Cambodia – Seizing the Global Opportunity: Investment Climate Assessment and Reform Strategy for Cambodia*, prepared for the Royal Cambodian Government, Report No. 27925-KH.

WORLD BANK (2006), *Where Is the Wealth of Nations? Measuring Capital for the XXI Century*, Washington, D.C.

ISBN 92-64-02441-7 © OECD 2006

ZHOU, Y. and S. LALL (2005), "The Impact of China's FDI surge on FDI in South-East Asia: Panel Data Analysis for 1986-2001", *Transnational Corporations*, Vol. 14, No. 1, pp. 1-25.

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