

## SECTION 1 POLITICAL ECONOMY

### 1 CHINA'S BOOM: WHAT'S IN IT FOR AFRICA? A TRADE PERSPECTIVE

*Andrea Goldstein, Nicolas Pinaud and Helmut Reisen*

China and India, the so-called Asian Drivers, are rapidly catching up with industrial countries and reclaiming their historical roles as world economic powers. Is this good news for the economic development of sub-Saharan Africa? This chapter explores two sets of interactions between Africa and China.<sup>1</sup> At the *global* level, China's ascendancy appears to have implications for raw material price levels and volatility, exchange rate dynamics, and income distribution.<sup>2</sup> In *bilateral* terms, competition from China in the production of labour-intensive goods affects resource allocation (de-industrialization, input

---

1 This chapter is based on a longer study that also considers the impact of India's ascendancy on Africa. Andrea Goldstein, H. Reisen, Nicolas Pinaud, and X. Chen, *The Rise of China and India. What's in it for Africa?* (Paris: OECD Development Centre Studies, 2006). 'Africa' refers to sub-Saharan Africa unless otherwise stated.

2 See also H. Reisen, M. Grandes and N. Pinaud, 'Macroeconomic Policies: New Issues of Interdependence', OECD Development Centre, Working Paper, No. 241 (2005).

linkages, and vertical integration), while demand complementarities have capital-flow effects (such as through FDI and project finance), which in turn may constrain the range of industrialization strategies available.<sup>3</sup>

The chapter begins with the indirect global macroeconomic effects of China's growth on raw material markets, through which Africa's economies are most prominently linked to the world economy. In order to explore possible allocative consequences (the so-called Dutch Disease effects), it then looks at changes in the terms of trade of African countries that are influenced by lower prices for manufactured goods and higher raw material prices. It goes on to study the intensification of trade between China and Africa and identifies the corresponding policy challenges that arise from the fact that, firstly, China is a 'swing importer' in certain raw material markets; and, secondly, China is exerting severe competition on local African and third markets for low value-added and labour-intensive manufacturing goods.

As the present study documents, African economies are affected differentially by Chinese economic growth. Complementary effects are possible in certain cases, as African producers benefit from increased Chinese demand. Further, China and other Asian countries may want to secure more raw materials, to improve export infrastructure in selected African countries, while offering project finance, FDI and other forms of trade-linked capital flows. In other cases where Asian economies indirectly divert investment resources away from African economies and compete with nascent local manufacturing sectors (e.g. clothing), 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 disincentives for investment in tradable activities in the non-traditional sector, which are required

3 See also Andrea Goldstein, *Emerging Multinationals in the Global Economy* (London: Palgrave, 2007).

in order to distribute more equitably between sectors the benefits of global trade.

### *China's global impact*

The sheer size of China's economy, its phenomenal rate of growth, its appetite for natural resources, and its growing economic and political power augur that it will reshape the world economy and provide both competition and opportunities across the board to major trading partners in OECD countries, to developing countries and to other emerging economies.

*The Chinese boom and its global impact: the channels.* Between 2000 and 2006, China contributed 23.7 per cent of global output growth, compared to 19 per cent between 1990 and 2000, and 7.8 per cent between 1980 and 2000.<sup>4</sup> This contribution has helped to hold world growth above the 4 per cent threshold which is critical for improving the terms of trade for primary commodity producers. A recent estimate finds that world commodity prices rise 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. High global growth has recently halted and reversed the secular decline of raw commodity prices since the Second World War, caused by the uneven effects of technological progress on the production of manufactured goods and raw materials.<sup>5</sup>

On the financial front, 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 US. That much of Asia is explicitly or implicitly pegged to the dollar (whatever may be officially

4 Authors' own calculation based on IMF World Economic Outlook Database (April 2007), i.e. on purchasing-power-parity (PPP) valuation of country GDP.

5 R. Prebisch, *The Economic Development of Latin America and its Principal Problems* (Lake Success, NY: United Nations Economic Commission for Latin America, 1950); H. Singer, 'The Distribution of Gains between Investing and Borrowing Countries', *American Economic Review*, 40, 3 (1950), pp. 473-483.

pronounced) is well known.<sup>6</sup> 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 2006, China and Hong Kong had accumulated 1.2 trillion dollars in foreign exchange reserves, of which 37.7 per cent were invested in US Treasury Bills and Bonds. China and Hong Kong have therefore become the second largest holder of US Treasury securities (US\$451 billion at the end of 2006), only second to Japan (US\$623 billion): China is now holding 9.2 per cent of outstanding US Treasury securities held by the public and 21.4 per cent of those in foreign hands.<sup>7</sup>

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 (the *Balassa-Samuelson effect*). This will raise China's purchasing power, while it will negatively affect its 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. 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.<sup>8</sup>

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

7 According to figures from the US Treasury ([www.treas.gov/tic](http://www.treas.gov/tic)), the Hong Kong Monetary Authority and the PRC's State Administration of Foreign Exchange (SAFE).

8 Deutsche Bank, 'China Macro Strategy: 18 Ways to Play the RMB', Deutsche Bank Research, 20 May 2005.

An analysis of the determinants of growth in China suggests that rapid growth should continue for the foreseeable future, albeit at a somewhat slower rate.<sup>9</sup> Not only has the output growth potential of the Chinese economy been increasing since 2000, but thanks to capital accumulation (investment growth) it has accelerated to reach 9.5 per cent in 2005.<sup>10</sup> As more capital is accumulated, its marginal product will fall, resulting in a smaller contribution of capital 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.<sup>11</sup> The continued reallocation of labour from agriculture to manufacturing is another major stimulant of productivity growth. With large sections of the Chinese population, unemployed or underemployed, still living in the rural areas, and with relatively low productivity, the growth potential is almost unprecedented.<sup>12</sup> 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.

*Global commodity markets and China's appetite for raw materials.* The current process of increasing capital intensity has spurred the drastic increase in both energy and metal use in China.<sup>13</sup> The average annual

9 C.Holz, 'China's Economic Growth 1978-2025: What We Know Today about China's Economic Growth Tomorrow,' mimeo (2005), <http://ihome.ust.hk/~socholz/> Projecting real GDP growth rates into the future, Holtz finds the size of the Chinese economy will surpass that of the US 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.

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

11 M. Francis, F. Painchaud and S. Morin, 'Understanding China's Long-Run Growth Process and its Implications for Canada', *Bank of Canada Review* (Spring 2005), pp. 5-17.

12 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, *2005 Economic Survey – China*.

13 Energy use is measured by the equivalent of kilotons of oil. Metal use is measured by the apparent consumption of crude steel (thousand metric

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 2000-3. Meanwhile, Chinese energy production also increased at an annual rate of 6.2 per cent (2000-3). 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 production increased at an average annual rate of 15.7 per cent.

Although the shares of commodities in China's overall imports are not high (8.4 per cent and 5.6 per cent for crude oil and metal-liferous ores respectively in 2006), China has nonetheless become a first-rank world commodity *net importer*<sup>14</sup> because of the rate at which its economy has grown. Table 1 highlights the fact that China has contributed tremendously to world import growth for selected commodities.

Kennan and Stevens find that six 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 from Burkina Faso, Ethiopia, Nigeria, Sudan, Tanzania; cobalt from South Africa and the Democratic Republic of Congo; copper from Zambia and South Africa; alumina from Guinea; ferrous metals from Mauritania, South Africa and Zimbabwe; chemicals from Niger.<sup>15</sup> Note that for the rest of the world the growth in commodity imports is far slower than in China over a similar period (1999-2004, Table 1). For example, in the case of cotton, had it not been for China's strong demand, world demand would have receded (-0.05 per cent) between 1999 and 2004. China's contribution to the growth of world demand for cotton was indeed over 100 per cent over the period. This can also be verified by the rise in China's share of global imports for major commodities: China's share in world imports of crude oil, metalliferous

---

tonnes).

14 From the perspective of Africa's raw commodity exporters, it is China's *net demand* that influences prices and export volumes.

15 J. Kennan and C. Stevens, 'Opening the Package: the Asian Drivers and Poor-Country Trade', mimeo, Institute for Development Studies, Sussex (2005).

## CHINA'S BOOM: WHAT'S IN IT FOR AFRICA?

	Average annual growth of world demand excluding China, %	Average annual growth of China's demand, %	China's contribution to growth of global demand, %
Crude Oil	19.1	48.8	7.0
Metalliferous ores	14.2	47.4	28.9
Woods	3.6	17.0	20.7
Cotton	-0.05	98.6	100.7
Precious stones	5.9	28.5	5.6

Table 1: China's contribution to growth of world imports of selected commodities, 1999-2004<sup>1</sup>

Sources: Authors' own calculations based on UN Comtrade database

<sup>1</sup> The chosen commodities are major commodity exports from Africa to China.

ores, woods and cotton rose from 1.9 per cent to 6 per cent, 6.4 per cent to 24.8 per cent, 2.5 per cent to 9 per cent and 4 per cent to 33.2 per cent respectively between 2000 and 2005.<sup>16</sup>

### *Africa's integration in global trade: does China's ascendancy make a difference?*

Many African economies are prominently linked to the world economy as important producers of raw material and soft commodities.<sup>17</sup> The emergence of China over the last decade as a key net importer of commodities means that global commodity markets are likely to be

<sup>16</sup> Figures from UN Comtrade.

<sup>17</sup> For a detailed description, see Goldstein *et al.*, *The Rise of China and India*, Appendix A.

## CHINA RETURNS TO AFRICA

the main channels through which the impact of China's ascendancy has been (and will be) felt on the African continent.

Figure 1 below shows considerable correlation between China's macroeconomic performance (GDP and industrial growth rates) and African commodity exports.<sup>18</sup>

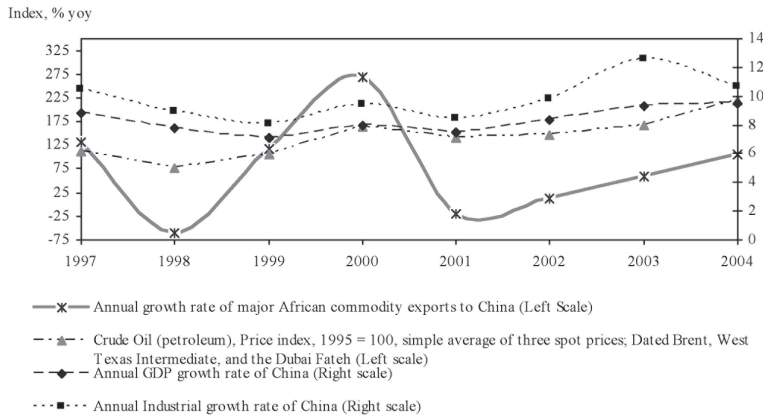


Figure 1: The Influence of China Growth Performance on African Commodity Exports

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

Africa is indeed linked to China's demand for primary commodities via two channels: first, *the international price of commodities*: exchange rates, global inflation, interest rates, bond yields, house prices, wages and profits are increasingly being driven by the state of the economy in China. 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 on Africa. Second, *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? Has Africa simply succeeded in redirecting its commodity

<sup>18</sup> 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).



exports towards China, currently the world's most dynamic markets? Or has Africa also become more dependent on the vagaries of the international markets for such commodities?

*Africa's 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 materials and imports of manufactured products.<sup>19</sup> This led to the influential policy suggestion that developing countries industrialize and diversify their exports into manufactured goods.<sup>20</sup> As already suggested, the performance of China has presumably helped reverse this secular trend.

Figure 2 shows the *net barter terms of trade* and purchasing power of exports (income terms of trade) for Africa and Asia from 1980 to 2002. 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.

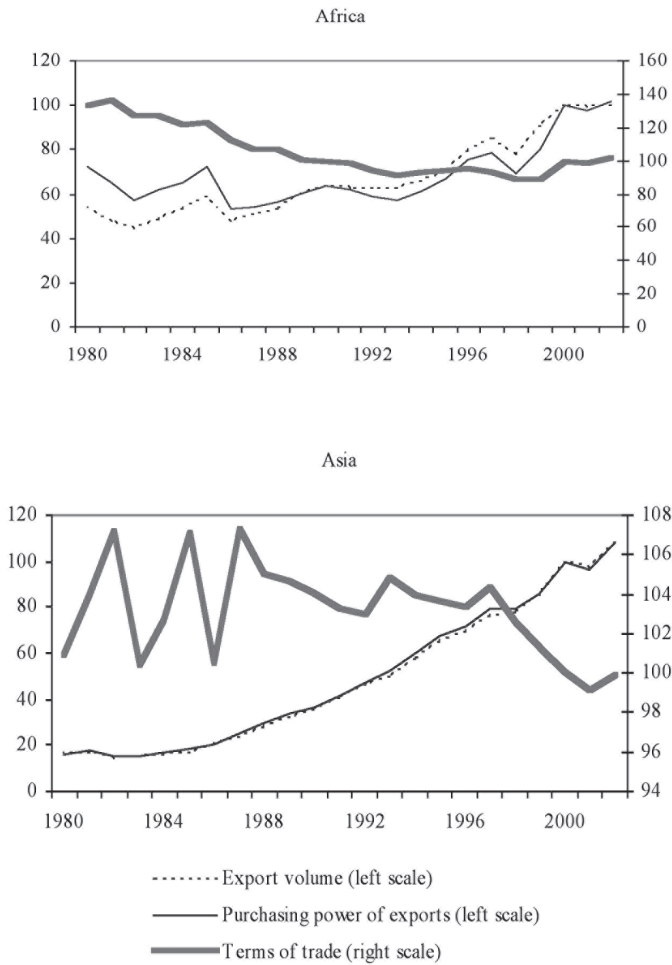
Conversely, terms of trade for exporters of manufactured goods have displayed a downward trend. The rapid export growth of low-skill and labour-intensive manufactured goods has increased the market competition for these goods and hence exerted a downward pressure on their prices. Yet Figure 2 underlines that the purchasing power of Asian countries has grown sharply even if their terms of trade have been declining since 2000. 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 terms of trade.

In this context, Africa's income terms of trade may well have benefited from Asia's emergence, through various channels: as suggested, a net rise in the demand for raw commodities translating into higher export unit prices and volumes; and urban consumers

19 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 purchasing power of exports is defined as the value index of exports deflated by the unit value of imports.

20 Prebisch, *Economic Development of Latin America*; Singer, 'The Distribution of Gains'.

## CHINA RETURNS TO AFRICA



(Index numbers, 2000=100)

Figure 2: Terms of Trade, Export Volumes and Purchasing Power of Exports in Africa and Asia, 1980-2002

Source: UNCTAD *Handbook of Statistics* (2005)

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.

Figure 3 shows the barter terms of trade and purchasing power of exports for the twelve major African trading partners of China.<sup>21</sup> Since 2000, African economies with a large share of oil, metals and agricultural products 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, 14.5 per cent on average in 2000-2. 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 6.9 per cent on average.

The benefits of China'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 by cyclical variations and is 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 demand from China is not necessarily an unfettered blessing for Africa.

China's *net imports* of the most important commodities relevant to Africa's exports (oil, metals, wood and cotton) have actually recorded large swings between 2000 and 2005. And, although all four commodities have recorded price increases since 2000 (cotton notwithstanding), their prices have been very volatile over the period. Table 2 compares the volatility (measured as standard deviation around the trend) in commodities relevant to Africa for two time periods.

21 They are classified according to the 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 exports. This would certainly imply that their terms of trade are also sensitive to changes in the prices of the remaining primary commodities in their export bundles.

## CHINA RETURNS TO AFRICA

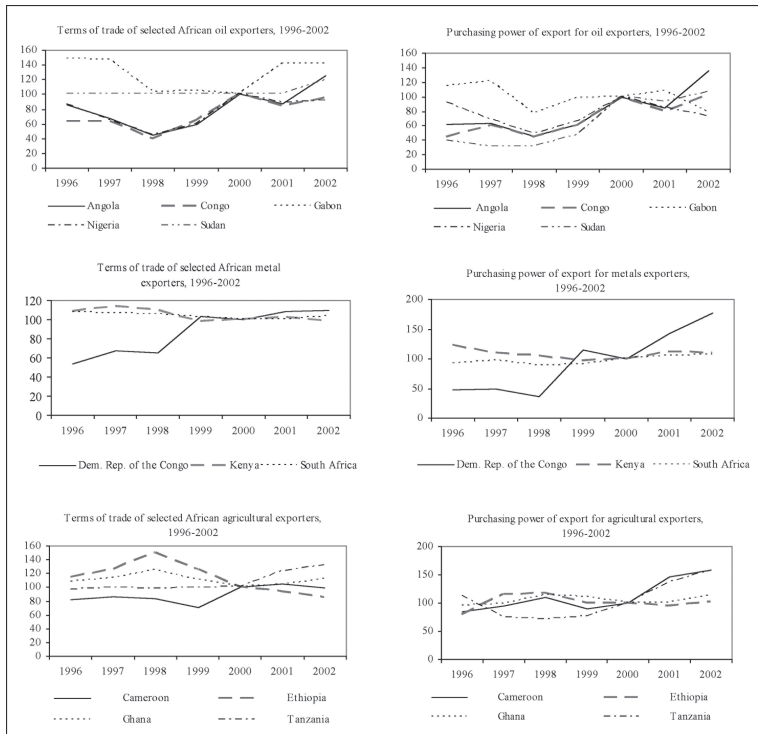


Figure 3: Terms of Trade of Major African Oil, Metal and Agriculture Exporters, 1996-2002

Source: UNCTAD *Handbook of Statistics* (2005)

Volatility rose for all commodities except copper. Although it is difficult to separate the relative contribution of different factors,<sup>22</sup> increased volatility between 2000 and 2005 (compared to the 1995-99 period) may have *been partly due* to the fact that China is a *swing producer*—exporting when prices are high and stockpiling when (be it for cyclical or exceptional reasons) they are not as attractive. Given

<sup>22</sup> *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 terrorist attacks against energy infrastructure, political uncertainty in oil producing countries, and the rise in China and India's demand (IEA 2004).

## CHINA'S BOOM: WHAT'S IN IT FOR AFRICA?

	Volatility in Prices*		
	1995-1999	2000-2005	Difference
Oil (crude)	7.66	8.48	+ 0.92
Iron Ores	1.90	2.76	+ 0.86
Copper	5.48	4.23	- 1.25
Cotton	4.26	5.12	+ 0.86

Table 2: Volatility in Commodity Prices Relevant to African Countries

*Note:* \* Standard deviation of monthly percentage changes

*Source:* Authors' own calculations based on World Bank data

its large economy, any behavioural change is likely to translate into volatility in world prices.

In turn, swings in prices of commodities relevant to Africa have resulted in substantial terms of trade variability which has in turn induced large movements in gross domestic income (Table 3). This illustrates that dependence on exports of primary commodity with little diversification involves a considerable developmental risk. China has diversified into the manufacturing sector to a greater degree. This has resulted in relatively low terms of trade variability, in spite 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's and India's demand for commodities. Far from Africa 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 raw materials. In this context, in their search for

## CHINA RETURNS TO AFRICA

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

Table 3: Terms of trade variability and effects on GDI, 1997-2003

*Notes:*

\* 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).

commodities, resource-poor African countries may regard China as a competitor. Some African countries may even bear the brunt of rising commodity prices (oil prices in particular). In fact, gains from rising commodity prices have mostly accrued to oil exporters, followed by exporters of metal ores (Nigeria, Chad, Equatorial Guinea, Gabon, Congo, Angola, Zambia, and to a lesser extent, Mauritania, Mali, Guinea, Democratic Republic of Congo and Sudan).<sup>23</sup>

23 IMF, *World Economic Outlook* (Washington, DC: IMF, April 2004).

## CHINA'S BOOM: WHAT'S IN IT FOR AFRICA?

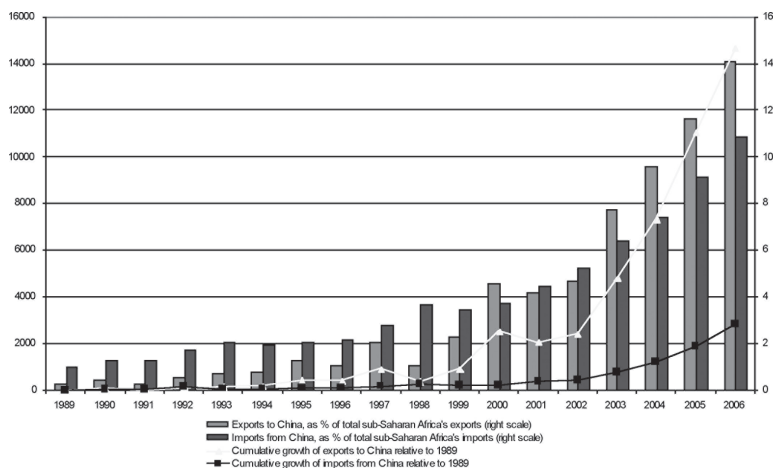


Figure 4: Africa's Trade with China, 1989-2006

Cumulative Growth and Share in Total sub-Saharan Africa's Trade, as %

Source: Authors' own calculations based on IMF Direction of Trade Statistics

*China, an ever larger outlet for African exports.* China's growing demand for commodities has not only resulted in higher commodity prices and 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.<sup>24</sup>

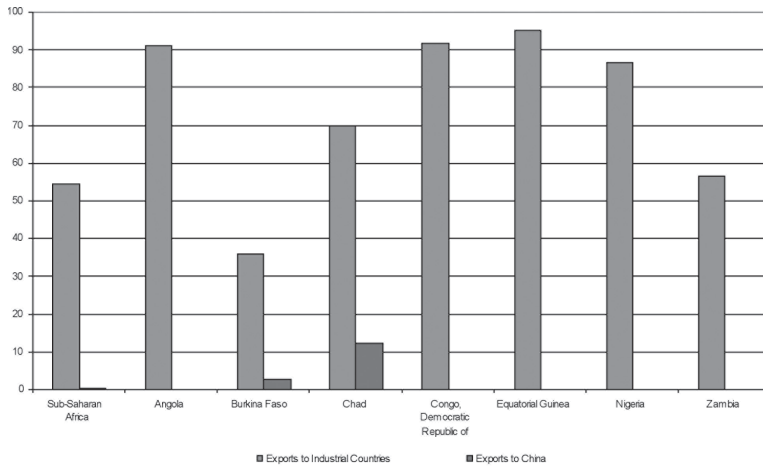
African trade with China has shown striking dynamism since 2000 (Figure 4). Sub-Saharan African exports to China started accelerating around 2002, and have since risen at an annual growth rate of 56 per cent. By 2006, African exports to China stood at \$20.4 billion. This was almost six times the exports in 2002, and accounted for 14 per cent of total sub-Saharan African exports to the world. Since 2002, the average annual growth rate of African imports from China (54 per cent) has shown similar dynamism.

However, this reorientation has not led to a change in the composition of the African export mix, which remains biased towards the export of raw and, though to a lesser extent, soft commodities.

<sup>24</sup> 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.

## CHINA RETURNS TO AFRICA

In 1991



In 2006

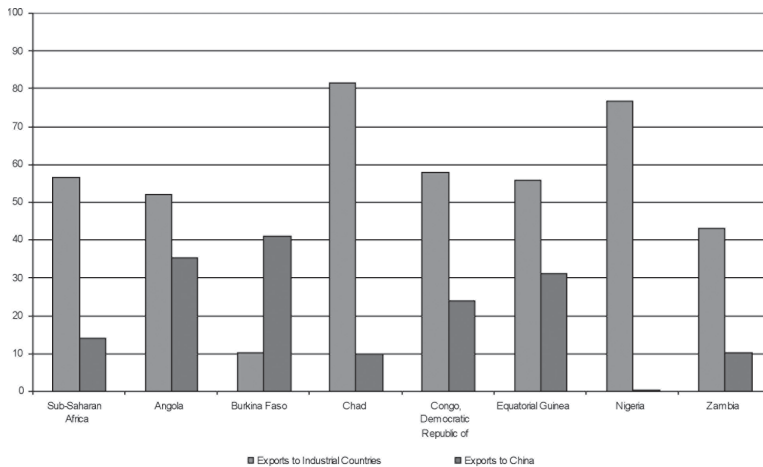


Figure 5: The Reorientation of Africa's Exports Towards the Asian Drivers: Destination of African Exports (% of total exports).<sup>1</sup>

Source: Authors' own calculations based on IMF Direction of Trade Statistics

1 Industrialized 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.



Chinese imports from Africa indeed show a very clear pattern in terms of commodity structure which is consistent with the latter's Ricardian advantage in commodity production (Table 5). Extractive mining and forestry in particular make up the bulk of African exports to China, as of African exports to the whole world: 'Product A, B and C', i.e. the top three items in total exports to China from each African country, closely correspond to Product I, II and III, each African country's biggest exports to the world. Crude oil (i.e. Product I for Angola, Sudan, Nigeria, Congo and Gabon) 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. 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 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 5, 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.<sup>25</sup> Exports of cotton to China have been boosted by the Multi-Fibre Agreement (MFA) phasing out and by the rapid build-up of the Chinese textile industry. Moreover, Chinese domestic supply of cotton remains in a state of flux and not always able to cater for domestic demand. The aforementioned figures suggest that labour-intensive agricultural (except cotton) and manufactured goods do not feature significantly in the exports of any African country.<sup>26</sup>

25 Cocoa actually comes second to metals among 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 Tanzania's overall exports of cotton.

26 Africa-India trade patterns are a bit different. African exports (oilseeds, cotton, edible vegetables and fruits, hides, nuts) to India are a bit more

## CHINA RETURNS TO AFRICA

Table 4 shows that African countries have not only been exporting mostly commodities to China over the last years, but have also succeeded in turning China (and India<sup>27</sup>) into significant markets for their commodities. China has largely driven the growth of world demand for African commodities: it 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

	China's	
	Share in aggregate commodity export of each country in 2002	Contribution in 2003
Angola	14.1	73.3
Cameroon	7.9	0.1
Congo	11.7	118.7
D R Congo	9.7	178.1
Ethiopia	..	..
Gabon	4.5	12.6
Ghana	2.6	3.0
Kenya	0.1	0.5
Nigeria	0.4	0.7
South Africa	3.2	5.2
Sudan	80.0	74.0
Tanzania	0.1	0.4

Table 4: China's Contribution to Growth of Commodity Demand for African Exporters in 2003

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

Notes: Table 4 indicates China's contribution to the growth of world demand directed to African countries in 2003.

---

diversified and labour-intensive than those to China (see Table 12 in Goldstein *et al.*, *The Rise of China and India*).

- 27 India absorbs almost half of Sudanese and Cameroon exports of metals while being by far the biggest importer of Tanzanian edible vegetables (68.7 per cent). The Senegalese production of phosphoric acid is almost fully exported to India.

## CHINA'S BOOM: WHAT'S IN IT FOR AFRICA?

Country	Share of China in Total Exports in 2003	Main Exports (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 I	25	99.9	7.5															
Cameroon	4.4%	Product I Product II Product III	4.4	44.2	0.2				17.4	15.9	0.4	8.6	39.7	1						
Congo	30.3%	Product I Product II Product III	31	85.9	2.4							37	9.8	1.7						
DR Congo	2.2%	Product I				41.4	99.6	0.4												
Gabon	5.5%	Product I Product II	3.4	54.8	0.3							32	42.3	1.4						
Ghana	1.6%	Product I Product II				13.2	59.8	0.12							1.2	33	0.2			
Kenya	0.3%	Product I Product II				2.48	29.1	0.01										8.6	42.8	0.1
Nigeria	0.5%	Product I	0.5	88.9	0.4															
South Africa	4.6%	Product I Product II				7.11	45.6	1.05				11	4.4	1						
Sudan	40.9%	Product I	81	98.8	5.5															
Tanzania	2.6%	Product I Product II							4.2	53.8	0.1	14	23.4	0.02						

Table 5: China as Market for African Exports in 2003<sup>1</sup>

Notes:

(1) Each export item to China as a 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.

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

1 Selected countries are those for which trade with China represents the highest share in total export of each African country in 2003. Selected commodities are major exports of those countries to China 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. 3.

not been fuelled by strong Chinese demand. China also accounted for 73.3 per cent and 74 per cent of the growth of world demand for Angola's and Sudan's oil respectively. As a consequence, China absorbed one quarter, one third and four fifths of Angolan, Congolese and Sudanese oil exports respectively in 2003 (Table 5). It also buys 32 per cent and 37 per cent of Gabonese and Congolese exports of timber respectively (idem).

*China and Africa: prospects, risks and opportunities*

China's growing demand for commodities has meant a significant redirection of African exports away from OECD markets, towards Asian markets in general and China in particular. But, as expected, 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 (oil and metals in particular). In parallel, China (together with India) is currently integrating more than one billion people into the global labour pool, and competition is intensifying in tradable labour-rich goods, the relative prices of which are dropping.

On the face of it Africa, which is mostly integrated in global trade as a supplier of commodities, should be benefiting from this economic environment. It is selling larger volumes of its raw commodities at higher prices. As already suggested (Figure 4), the continent has also been importing increasing volumes of ever cheaper manufacturing goods from Asia, specifically from China, thus enhancing the purchasing power of its consumers.

This is no time for celebration, though. Firstly, Africa's trade reorientation may imply some disadvantages. It may derail the endeavours of African commodity producers to diversify away from traditional exports. Increasing reliance on capital-intensive commodity industries may be incompatible with poverty reduction<sup>28</sup> and trap African economies into the corner of high-risk price-volatile raw materials. Also, 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. It is important to note, however, that China's increasing presence in the natural resources-related sectors has not been evidently conducive to deterioration in transparency

28 See Goldstein *et al.*, *The Rise of China and India*, Chapter 6, for a discussion of whether the Dutch Disease theory and Leamer's framework of analysis are relevant to African economies (E. Leamer, 'Paths of Development in the Three-Factor, N-Good General Equilibrium Model', *Journal of Political Economy*, 95, 5 (1987), pp. 961-99; E. Leamer, H. Maul, S. Rodriguez and P.K. Schott, 'Does Natural Resource Abundance Cause Latin American Income Inequality?', *Journal of Development Economics* 59, 1 (1999), pp. 3-42).

and corruption scores.<sup>29</sup> Secondly, China has emerged as a formidable competitor in local and third markets (the US and Europe in particular), in the very few labour-intensive low-skill sectors where Africa could diversify away from commodity production. Certainly, labour-intensive manufacturing industries are less prominent in Africa than in other developing regions and Africa exports very few manufactured products.<sup>30</sup> Yet, such an analysis ignores opportunities for diversification away from traditional exports, i.e. *potential* rather than *actual* competition. In other words, China may nip in a bud whatever *attempts* by African economies to diversify away from traditional sectors. The effects of Chinese competition on third markets take on special importance because of trade preference erosion. The latter tends to undermine the competitiveness of African countries on markets in developed countries, vis-à-vis their Asian competitors. In a context of the end of Multi-Fibre Agreement protection, the case of clothing is particularly illuminating.<sup>31</sup> As regards the influx of Chinese imports in local African markets, there is little empirical evidence as to whether the purchasing power gains for the African consumer and the lower costs of inputs for African producers outweigh the losses which might be and have already been incurred by

29 Goldstein *et al.*, *The Rise of China and India*, p. 53.

30 An analysis based on the calculation of Export Similarity Index shows limited competition between Africa and China, South Africa notwithstanding (Goldstein *et al.*, *The Rise of China and India*).

31 The quotas associated with the long-lived MFA combined with the AGOA scheme to support the emergence of a sizeable (by African standards) garment industry on the continent (in the COMESA and SADC regions in particular). For further analysis see Goldstein *et al.*, *The Rise of China and India*, Appendix B; R. Kaplinsky and M. Morris, 'The Asian Drivers and SSA; MFA Quota Removal and the Portents for African Industrialisation?', paper prepared for the OECD Development Centre *Asian Drivers* project (forthcoming); and presentation entitled 'Nipping African Clothing in a Post-MFA Bud?' made at the joint OECD Development Centre-Standard Chartered seminar *Africa and China: Economic and Business Perspectives*, Shanghai, 16 May 2007 (<http://www.oecd.org/dataoecd/55/7/38659120.pdf>).

local producers.<sup>32</sup> Its overall welfare impact has been insufficiently investigated to date and existing work remains inconclusive.<sup>33</sup>

In this context still, trade opportunities ensuing from China's increasing presence on the continent are to be seized. 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.<sup>34</sup> A sizeable commodity potential remains untapped on the continent, because these resources are costly to extract. But investment has recently become feasible as the prices of commodities have recovered thanks, *inter alia*, to the demands of the Asian drivers. The latter are also providing investments of resource-seeking nature that are complementary to imports from Africa and that could help unleash the African commodity potential. 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 current imports of primary agricultural goods. Yet, things might evolve with changes in Chinese dietary habits. As a result, opportunities might be seized

32 On competition exerted by Chinese products in African regional markets vis-à-vis local producers, see P. Kamau, 'The Developmental Impact of Asian Drivers on Kenya with Emphasis on Textiles and Clothing Manufacturing', paper prepared for the OECD Development Centre *Asian Drivers* project (forthcoming).

33 C. Edwards and R. Jenkins, *The Effect of China and India's Growth and Trade Liberalisation on Poverty in Africa* (IDS/Enterplan, 2005); J. Kennan and C. Stevens, 'Opening the Package: the Asian Drivers and Poor-Country Trade', mimeo, Institute for Development Studies, Sussex, 2005).

34 While initial patterns of relative factors endowments are not governed by inexorable fate, Mayer and Fajarnes point to the very limited changes in them in Africa (in particular relative endowments of land, labour and skilled labour) over time, and do not expect a dramatic decline in the share of commodities in African exports. J. Mayer and P. Fajarnes, 'Africa's Exports of Primary Commodities: Endowments, 'New' International Trade Geography and 'Old' Market Access and Entry Conditions', mimeo (Geneva: UNCTAD, 2005).

by African countries in agriculture and agro-processing. For instance, should the expected growing Chinese demand for meat materialize and part of it be met by local producers, China's imports of animal feed would increase. They may also be broadened from soya beans to maize, a commodity produced by several African countries.

Finally, the policy framework must be adjusted to the emergence of China as a significant trade partner of the African continent as well as a strong competitor on third markets. China may directly and indirectly help Africa unleash its commodity potential, but without improved management of its revenues, this would fail to foster sustained development. Countries rich in natural resources should regard the latter 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.<sup>35</sup>

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. Rethinking diversification strategies with the objective of avoiding direct competition with Chinese products and bolstering sectors that are complementary to Chinese growth should be encouraged. Improved access to the Chinese market for African products will be essential in this respect. China's at-the-border protection is now low and its tariff profile is relatively favourable to African products. But access to the Chinese market for African products is still impeded by tariff escalation in such key sectors as food, beverages and tobacco or textiles and leather, and by significant non-tariff barriers.<sup>36</sup> Also, supporting diversification strategies should translate into a clear

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

36 See Phil Alves, 'Trade and Market Access: Can China and Africa Cooperate?', presentation at a seminar entitled 'China in Africa in the 21st Century: Preparing for the Forum on China-Africa Cooperation', convened by South African Institute of International Affairs, Johannesburg, 16-17 October 2006.

#### CHINA RETURNS TO AFRICA

commitment of OECD countries to uphold trade preferences. In clothing, for instance, a comprehensive revision of rules of origin should be undertaken so as to increase the effectiveness of such schemes as the AGOA and Everything But Arms, and ensure their ability to cushion effectively the impact of China's competition. G-8 countries should provide effective duty free and quota free access to all African goods, thereby providing African countries with a genuine competitive edge over intrinsically more competitive Asian competitors.