
Original Article

China–Africa Trade Relations: Insights from AERC Scoping Studies

Oyejide Titiloye Ademola, Abiodun-S. Bankole and Adeolu O. Adewuyi

University of Ibadan, Nigeria.

Abstract This paper analyses the impact of China–Africa trade relations both at the aggregate African and at the national level of a selected sample of countries. The paper confirms that there are both trade-related gains and losses arising from China–Africa trade relations. Beyond this is the concern that the existing pattern of Africa-China trade – which continues to be strengthened by China’s rising profile – does not correspond to the region’s longer term objectives, that is, to diversify its economic and trade structure and ensure that trade contributes to the industrial development of African countries. This paper suggests that for many African countries, the negative effects may outweigh the positive ones. Hence, concerted policy measures may need to be taken in particular African countries, carefully crafted in each case to suit specific circumstances. In broad terms, the menu of policy measures could include those aimed at gaining enhanced market access to the Chinese market as well as those targeted at eliminating the binding supply response capacity constraints.

Cet article analyse l’impact des relations commerciales entre la Chine et l’Afrique, tant au niveau régional que national, à travers un échantillon de pays. Il confirme que ces relations commerciales donnent lieu tant à des gains qu’à des pertes. Au delà de cette constatation, l’article souligne que la structure existante des échanges entre l’Afrique et la Chine – renforcée par l’envergure croissante de la place occupée par la Chine – ne sert pas les objectifs de l’Afrique à plus long terme. Autrement dit, ces échanges ne contribuent pas à une diversification de la structure économique et commerciale de la région, et n’assure donc pas l’objectif de développement industriel de pays africains. Cet article suggère que, dans beaucoup de cas, les effets négatifs des relations commerciales entre la Chine et l’Afrique peuvent être plus importants que les effets positifs. En conséquence, des décisions politiques concertées devraient être prises, décision qui soient bien adaptées aux circonstances spécifiques de chaque pays. De façon générale, ces décisions consisteraient de mesures politiques visant le renforcement de l’accès des économies africaines au marché chinois ainsi que l’élimination des contraintes de capacité de production.

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Introduction

In virtually all African countries, there is a consensus around common development objectives of rapid, sustained and pro-poor economic growth. This consensus reflects the reality that Africa is not only the poorest region in the world but also the only continent in which poverty has continued to grow over the last three to four decades. It also reflects the new trend in development theory and policy which suggests that rapid economic growth may be the single most important means of reducing poverty in its various dimensions. One important implication is that Africa is unlikely to meet the Millennium Development

Goals unless African countries can achieve annual economic growth rates in excess of 7 per cent sustained these over several decades.

Economic growth performance of African countries has varied significantly over time and across countries, but the variation has tended to narrow, in both dimensions over the past 5 years (Oyejide and Ogunkola, 2004; IMF, 2008). There is considerable evidence that trade and trade policy play an important role in influencing Africa's economic growth patterns and trends (Ng and Yeats, 2000; Oyejide and Ogunkola, 2004; Pattillo *et al*, 2005). This evidence shows that although growth opportunities vary among African countries in terms of the availability of natural resources, external environment, inherited institutions and policy choices, African growth accelerations and decelerations operate through the trade channel. In particular, growth of terms of trade, exports and growth of trade partners' economies are the main elements of the trade channels; and the most robust of these is terms of trade.

It is, in this context, not unusual to blame poor growth performance in Africa on the concentration of the region's exports on a relatively few primary commodities whose unstable and low prices impact negatively on economic growth. In spite of this, however, surges in African growth have typically been ascribed to unusually strong demand for these export commodities, first during 1993–1996 and more recently since 2003. For instance, ADB (2005, p. 30) notes that 'in 2004, there was a strong global expansion and higher demand for commodities at increased prices' and hence concluded that 'increased demand for African exports, coupled with higher commodity prices, fostered Africa's growth performance'. Similarly, Finger (2007, p. 3) suggests that 'the strength of the current commodity boom contributed greatly to the high GDP growth in Africa in recent years, which was well above the long-term average trend for the 2002–2005'.

The current commodity boom referred to above is not unrelated to the rise of China as a major trading nation and the corresponding rise in the profile of China and Africa's trade patterns. Although Africa and China have been trading with each other for centuries, the level and intensity of their trade relationship have increased dramatically since 2000 (Wang and Bio-Tchane, 2008). In the process, China has become a major destination for a range of African exports as well as an increasingly significant source of a wide range of manufactured goods imported by many African countries.

The impact of the rising profile of China on Africa's trade pattern constitutes the focus of this paper. In the pursuit of this objective, the paper presents a comparative analysis of African and China economies in the next section, whereas it examines trade relations between Africa and China in the subsequent section, paying particular attention to both regional and country-level dimensions as well as sector differences and trade balance. In the next following section, the paper presents an analysis of the impact of Africa's trade with China in terms of the associated terms of trade and trade-related gains and losses as well as some trade-induced benefits. Based on this analysis, the penultimate section discusses some approaches for seizing the opportunities offered and confronting the challenges posed by the Africa-China trade relationship, whereas concluding remarks are presented in the final section.

A Comparative Analysis of the Features of African and Chinese Economies

It has been argued in the trade literature that the distribution of gains from trade between two economies is a function of each country's absolute 'economic size' (size of total output) and productivity growth performance. Thus, countries benefit from productivity

growth and increased income in trading partners' economies (Markusen *et al*, 1995). Thus, Nigeria could benefit from increased and sustained productivity and output growth in China, and vice-versa. The structure of output of each country should reflect the comparative advantage, pattern of trade and level of development. Therefore, the rest of this section examines the economic size, productivity growth and structure of output of each of the countries.

China's GDP in recent times is far higher than that of any African country (Table 1). Hence, on economic basis, China is relatively bigger than any of the African countries. Beginning from mid-1990s China has been recording a spectacular growth at a relatively sustainable rate of between 8.0 and 11.0 per cent up till now. However, some African countries (such as Chad, Angola, Nigeria, Tanzania, Uganda) have also recorded higher growth rates over time but it has not been sustained (Table 2). The relatively high income growth recorded in recent times might have been responsible for rising export demand by China and increased import demand by African countries. The impressive growth performance of China and some African countries is not unconnected with their high savings rate because of favourable trade balance and increased incomes. Table 3 indicates that savings rate in China has been very high at between 37 and 50 per cent since 1990s. Savings rate among some African countries have been also high but fluctuating around 20–50 per cent, and as low as 3–5 per cent. Thus, the fluctuating growth performance of African states may be a result of fluctuating savings rate with corresponding effect on investment.

Table 1: African countries and China: GDP (current US\$ billion)

Country	1990	1995	2000	2001	2002	2003	2004	2005
Angola	10.30	5.04	9.13	8.94	11.40	14.00	19.80	32.80
Cameroon	11.20	7.95	10.10	9.60	10.90	13.60	15.80	16.90
Chad	1.74	1.45	1.38	1.70	1.98	2.67	4.31	5.47
Congo, Dem. Rep.	9.35	5.64	4.31	4.69	5.55	5.67	6.57	7.10
Cote D'Ivoire	10.80	11.00	10.40	10.50	11.50	13.70	15.50	16.30
Ethiopia	12.10	7.61	7.85	7.89	7.34	7.94	9.73	11.20
Gambia, The	0.32	0.38	0.42	0.42	0.37	0.37	0.40	0.46
Ghana	5.89	6.46	4.97	5.31	6.16	7.62	8.87	10.70
Guinea	2.82	3.69	3.11	3.04	3.21	3.64	4.05	3.29
Madagascar	3.08	3.16	3.88	4.53	4.40	5.47	4.36	5.04
Mali	2.42	2.47	2.42	2.63	3.34	4.36	4.87	5.31
Namibia	2.35	3.50	3.41	3.22	3.12	4.47	5.71	6.13
Nigeria	28.50	28.10	46.00	48.00	46.70	58.30	72.10	99.00
South Africa	112.00	151.00	133.00	118.00	111.00	166.00	215.00	240.00
Tanzania	4.26	5.26	9.08	9.44	9.77	10.30	11.30	12.10
Zambia	3.29	3.48	3.24	3.64	3.70	4.33	5.42	7.27
Zimbabwe	8.78	7.11	7.40	10.30	21.90	7.91	4.71	3.37
Kenya	8.59	9.05	12.70	13.00	12.90	14.60	16.20	18.70
Sudan	13.20	7.19	12.40	13.40	15.10	17.60	21.50	27.50
Uganda	4.30	5.76	5.93	5.68	5.84	6.25	6.82	8.72
Mauritius	2.38	3.82	4.47	4.54	4.55	5.25	6.06	6.29
Sub-Saharan Africa	303.00	321.00	342.00	335.00	350.00	435.00	530.00	622.00
Middle East and North Africa	277.00	329.00	447.00	451.00	440.00	479.00	549.00	625.00
China	355.00	728.00	1200.00	1320.00	1450.00	1640.00	1930.00	2230.00

Source: World Bank, World Development Indicator, DC ROM 2007.

Table 2: Annual % GDP growth: African countries and China

<i>Country Name</i>	1990	1995	2000	2001	2002	2003	2004	2005
1 Angola	-0.3	10.4	3.0	3.1	14.5	3.3	11.2	20.6
2 Cameroon	-6.1	3.3	4.2	4.5	4.0	4.0	3.7	2.0
3 Chad	-4.2	1.2	-0.4	10.4	8.4	14.9	29.5	5.6
4 Congo, Rep.	1.0	5.0	8.2	3.8	4.6	0.8	3.6	9.2
5 Cote D'Ivoire	-1.1	7.1	-3.8	0.0	-1.4	-1.6	1.8	1.8
6 Ethiopia	2.1	5.4	5.4	7.9	0.0	-3.1	12.3	8.7
7 Gambia, The	3.6	0.9	5.5	5.8	-3.2	7.0	5.1	5.0
8 Ghana	3.3	4.1	3.7	4.0	4.5	5.2	5.6	5.9
9 Guinea	4.4	6.0	1.9	4.0	4.2	1.2	2.7	3.3
10 Kenya	4.2	4.4	0.6	3.8	0.6	3.0	4.9	5.8
11 Madagascar	3.1	1.7	4.8	6.0	-12.7	9.8	5.3	4.6
12 Mali	-1.9	6.2	3.2	12.1	4.2	7.4	2.2	6.1
13 Mauritius	5.8	4.1	4.0	5.6	2.7	3.2	4.7	4.6
14 Namibia	2.5	4.1	3.5	2.4	6.7	3.5	6.0	3.5
15 Nigeria	8.2	2.5	5.4	3.1	1.5	10.7	6.0	6.9
16 South Africa	-0.3	3.1	4.2	2.7	3.7	3.0	4.5	4.9
17 Sudan	-5.5	6.0	6.5	6.1	6.4	5.6	5.2	8.0
18 Tanzania	7.0	3.6	5.1	6.2	7.2	7.1	6.7	7.0
19 Uganda	6.5	11.5	5.6	4.9	6.3	4.7	5.5	6.6
20 Zambia	-0.5	-2.8	3.6	4.9	3.3	5.1	5.4	5.2
21 Zimbabwe	7.0	0.2	-7.9	-2.7	-4.4	-10.4	-3.8	-6.5
22 Sub-Saharan Africa	1.1	3.8	3.5	3.5	3.4	4.2	5.1	5.7
23 Middle East and North Africa	7.0	3.1	3.2	3.4	3.7	3.1	5.9	4.3
24 China	3.8	10.9	8.4	8.3	9.1	10.0	10.1	10.2

Source: World Bank, World Development Indicator, DC ROM 2007.

In terms of comparative advantage and relative specialisation/output supply, Table 4 shows that China economy has witnessed a significant transformation from a producer of primary (agricultural) products to that of manufacturer and service provider. However, many African countries have remained producers of primary (agricultural and mineral) products and providers of services to support their production and exports. Hence, the emerging pattern of trade is that African countries export primary products which they have more relative supply, while they import manufactured products and critical services which they have inadequate supply or expertise (which China and other trading partners have more relatively supply).

China–Africa Trade Relations

Key Factors Driving Recent China–Africa Trade Relations

It is useful to examine the underlying factors that have led to increased trade between China and the rest of the World to understand the of trade relations between China and Africa. The emergence of China as a major economic power on the world stage is traceable to the combination of three major factors (Oyejide, 2007). First, china has experienced high economic growth rates which have been sustained over two decades. As the Chinese economy grew at an annual average of around 10 per cent over this period, its GDP

Table 3: African countries and China: Gross domestic savings (% of GDP)

Country/year	1990	1995	2000	2001	2002	2003	2004	2005
Angola	29.7	—	41.8	15.1	23.9	19.2	25.1	32.8
Chad	-7.7	1.4	5.5	5.3	—	18.5	30.5	37.0
Congo, Rep.	23.8	37.7	57.7	53.1	50.0	47.4	51.4	51.6
Cote D'Ivoire	11.3	22.9	17.9	19.5	26.7	21.0	20.0	18.0
Ethiopia	9.6	11.9	8.0	8.8	8.7	7.5	4.1	3.6
Gambia, The	10.7	-3.9	8.5	12.0	12.9	11.1	10.5	4.4
Ghana	5.5	11.6	5.3	7.1	7.7	11.4	7.3	3.4
Guinea	17.7	12.8	16.8	15.7	9.1	7.5	6.8	8.5
Kenya	18.5	15.3	9.4	11.3	13.1	13.3	12.3	9.3
Madagascar	5.5	3.4	7.7	15.3	7.7	8.9	7.8	7.7
Mali	6.4	7.8	12.0	14.0	11.3	13.3	8.6	11.4
Mauritius	23.5	23.4	23.9	26.0	25.2	24.8	23.4	18.9
Namibia	18.2	15.5	14.0	17.0	17.8	26.2	26.7	26.7
Nigeria	29.4	18.4	42.3	34.9	25.5	32.1	39.5	38.8
South Africa	23.2	18.9	18.9	19.2	20.3	21.7	16.9	16.8
Sudan	—	—	15.9	9.8	13.3	15.7	18.7	13.4
Tanzania	1.3	1.9	9.3	8.6	11.6	9.5	8.5	9.7
Uganda	0.6	3.4	8.1	6.5	4.7	6.3	8.4	7.1
Zambia	16.6	12.2	8.3	17.3	17.7	18.7	18.2	17.0
Zimbabwe	17.5	17.0	13.3	11.6	7.1	7.0	5.9	3.7
Cameroon	20.7	19.5	20.3	19.0	19.0	17.8	18.5	19.0
Sub-Saharan Africa	18.8	16.2	19.1	18.3	18.0	19.2	18.2	17.6
Middle East and North Africa	18.8	21.7	25.9	23.9	25.3	25.5	26.0	27.2
China	39.9	44.1	37.5	38.4	40.4	43.4	45.8	49.0

Source: World Bank, World Development Indicators, CD ROM 2007.

increased more than 20-fold within a period of 25 years. Second, China has a large economy which is underpinned by a huge population; its 1.3 billion account for over 20 per cent of total global population. Combined with rapidly rising income, this provides a significant domestic economic base for stimulating further growth. The third factor magnifies this even further. China has a rapidly growing economy which is also largely outward-oriented. Emphasis has been placed on developing a manufacturing sector based on an export-led growth strategy; in the context of an industrial structure which is broad-based and closely linked into an Asia-based production sharing network. In this arrangement, China's relatively low labour costs ensure a strong competitive edge over a wide range of labour-intensive manufacturing activities. Thus, China's economic growth is intrinsically linked with huge increases in imports and exports. In effect, China's share of world exports rose from less than 2 per cent in 1987 to over 7 per cent in 2005; whereas among the major traders exporting manufactured products, China stands out with 28 per cent rise in merchandise exports in 2005 (WTO, 2006). Similarly, because China's rapid industrialisation and economic growth have been associated with a voracious appetite for imported inputs, it has made substantial contributions to the rising global demand for fuels and wide range of hard commodities whose prices have risen sharply since 2000. These include metals such as steel, copper, aluminum and timber. Partly because of the global demand pressure, exporters of fuels and other mining products achieved merchandise exports growth of 25–35 per cent in 2005; global exports of fuels rose by 41 per cent and its share of world merchandise export reached 13.8 per cent in 2005, its highest

Table 4: Structure of output of African countries and China

Country	1990				2005			
	Agriculture	Manufactures	Services	Others	Agriculture	Manufactures	Services	Others
Angola	17.9	5.0	41.2	35.8	7.2	3.6	18.7	70.5
Chad	29.3	14.4	53.0	3.3	22.7	4.7	26.1	46.5
Congo, Rep.	12.9	8.3	46.5	32.3	5.6	5.5	48.1	40.8
Cote D'Ivoire	32.5	20.9	44.3	2.3	22.8	19.3	51.4	6.5
Ethiopia	51.9	5.1	36.3	6.7	47.7	5.1	39.0	8.2
Gambia, The	29.0	6.6	57.9	6.5	32.6	5.2	54.2	7.9
Ghana	44.8	9.8	38.4	7.0	37.5	8.3	39.4	14.9
Guinea	23.8	4.6	42.9	28.8	24.7	4.5	38.8	31.9
Kenya	29.5	11.7	51.4	7.3	27.0	11.5	54.4	7.1
Madagascar	28.6	11.2	58.6	1.7	27.9	14.0	56.4	1.8
Mali	45.5	8.5	38.6	7.3	36.6	3.2	39.3	21.0
Mauritius	13.1	24.7	53.8	8.4	6.1	20.2	65.7	8.0
Namibia	11.7	13.8	50.2	24.3	9.9	13.5	58.4	18.3
Nigeria	32.7	5.5	25.9	35.8	23.3	—	19.9	—
South Africa	4.6	23.6	55.3	16.5	2.5	18.6	67.1	11.7
Sudan	—	—	—	—	33.7	6.6	36.6	23.1
Tanzania	46.0	9.3	36.4	8.4	44.5	7.5	37.6	10.3
Uganda	56.6	5.7	32.4	5.4	32.7	9.2	42.5	15.5
Zambia	20.6	36.1	28.1	15.2	18.5	11.7	56.3	13.4
Zimbabwe	16.5	22.8	50.4	10.4	18.1	12.8	59.3	9.8
Cameroon	24.6	14.5	46.0	14.9	41.1	7.2	44.8	6.9
Sub-Saharan Africa	19.6	16.5	46.9	16.9	16.7	14.0	51.6	17.8
Middle East and North Africa	17.2	14.3	49.8	18.6	12.0	14.2	47.7	26.1
China	27.0	32.9	31.3	8.7	12.6	33.5	39.9	14.1

Source: World Bank, World Development Indicators, CD ROM 2007.

level in almost two decades (WTO, 2006). China is a huge importer of fuels and minerals, it has accounted for about 40 per cent of the world market growth of these commodities since 1995 (Winters and Yusuf, 2007).

Resource endowments of specific African countries play a key role in relation to the import requirement of China. China's imports from Africa are heavily concentrated in the relatively few countries, which export petroleum and mineral and metal raw materials, such as Sudan, Congo, Angola, Zambia and South Africa. By comparison, China's exports of relatively cheaper manufactured products reach virtually all African countries. These have led to favourable terms of trade in favour of some African countries. Also, the increased demand for infrastructure by most African countries in an attempt to promote growth of output and export and the corresponding development of technical expertise for building and construction of infrastructure by China have promoted trade and other relations between the two.

Magnitude, Growth and Structure of Africa's Trade with China

It is suggested in the literature (see, for example, Winters and Yusuf, 2007) that international trade is the strongest and most direct channel through which China's growth affects other countries. In addition, the significance of the trade impact is related to the magnitude and structure of the trade between China and the partners.

Trade flows between Africa and China have been growing rapidly over time, with a significant acceleration in the rate of growth starting in 2000. In aggregate terms, Africa's merchandise exports to China increased over fourfold from US\$4.5 billion and \$8.3 billion in 2000 and 2003, respectively, to \$36.4 billion in 2007 (Table 5). Over this period, African exports to China increased faster than to the rest of the world. As a result, Africa's share in China's total imports rose from 2.5 per cent in 2005 to 3.8 per cent in 2007. China is now Africa's third largest export market destination, after the United States and European Union (EU); and its share of Africa's annual export growth has increased almost twofold between 2000 and 2007. However, China accounted for only about 16 per cent of Africa's total exports in 2007; this share is well below that of the United States and the EU.

Again, Africa's aggregate imports from China increased over fourfold from \$6.5 billion and \$10.1 billion in 2000 and 2003, respectively, to \$37.1 billion in 2007. Bilateral Africa-China trade has been fairly balanced in recent times. In particular, during 2004–2007, Africa enjoyed a small trade surplus with China (except in 2007), to the tune of about \$2 billion per annum (Table 5).

In 2007, fuels and mining products constituted 85.1 per cent of China's merchandise imports from Africa, split between fuels (73.3 per cent), ores and other minerals (8.0 per cent). Agricultural products accounted for 6.8 per cent; while manufactures provided 6.5 per cent of the total (International Trade Centre (ITC) Data Base, 2007). In comparative terms, the structure of Africa's exports to China is almost similar to that of its exports to other major trading partners such as the United States and the EU. Based on this, Finger (2007, p. 4) concludes that 'the expansion of Africa's merchandise trade with China is complementary, given the respective commodity export and import structures, and profitable for all parties involved'. This same fact is used by Wang and Bio-Tchane (2008, p. 44) to address a more specific concern: 'the similar composition of goods traded between African and its main trading partners suggests that the recent surge in Africa-China trade largely reflects the comparative advantage of each partner rather than any unilateral interest by China in exploiting natural resources'.

Table 5: Africa's trade positions with China (thousand US\$)

Countries	2003			2004			2005			2006		
	Import	Export	Trade balance	Import	Export	Trade balance	Import	Export	Trade balance	Import	Export	Trade balance
Africa	10 127 056	8 359 982	-1 767 074	13 731 978	15 646 043	1 914 065	18 605 472	21 062 122	2 456 650	26 587 068	2 456 650	26 587 068
Angola	145 791	2 205 935	2 060 144	193 518	4 717 339	4 523 821	372 794	6 581 829	6 209 035	894 186	6 209 035	894 186
Uganda	70 248	819	-69 429	103 090	4741	-98 349	109 217	5709	-103 508	138 260	-103 508	138 260
Zambia	43 226	16 564	-26 662	46 125	33 909	-12 216	85 458	38 432	-47 026	83 792	-47 026	83 792
Zimbabwe	NA	NA	NA	57 996	110 452	52 456	50 643	70 661	20 018	NA	20 018	NA
Guinea	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Madagascar	194 430	7339	-187 091	278 922	9681	-269 241	235 130	33 993	-201 137	312 537	-201 137	312 537
Mali	38 824	12 249	-26 575	67 243	46 950	-20 293	75 537	62 392	-13 145	111 913	-13 145	111 913
Namibia	18 224	5730	-12 494	28 337	31 857	3520	40 024	45 299	5275	96 827	5275	96 827
Sudan	310 068	1 616 074	1 306 006	558 836	2 319 408	1 760 572	1 316 162	3 323 849	2 007 687	1 662 407	2 007 687	1 662 407
Tanzania	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethiopia	313 697	5029	-308 668	367 772	15 047	-352 725	516 952	90 444	-426 508	639 539	-426 508	639 539
Nigeria	1 068 013	123 549	-944 464	NA	NA	NA	NA	NA	NA	NA	NA	NA
South Africa	2 218 784	889 126	-1 329 658	3 574 928	1 055 746	-2 519 182	4 945 611	1 368 724	-3 576 887	6 879 455	-3 576 887	6 879 455
Cameroon	87 083	98 585	11 502	110 617	62 830	-47 787	143 179	68 365	-74 814	199 822	-74 814	199 822
Congo	59 893	814 659	754 766	93 032	1 569 061	1 476 029	144 707	2 278 030	2 133 323	241 474	2 133 323	241 474
Chad	1680	2838	1158	5939	222 586	216 647	14 932	191 083	176 151	14 143	176 151	14 143
Cote D'Ivoire	NA	NA	NA	130 674	58 154	-72 520	179 151	81 743	-97 408	251 401	-97 408	251 401
Kenya	86 513	7621	-78 892	163 335	10 558	-152 777	289 424	16 508	-272 916	413 654	-272 916	413 654
Ghana	179 578	32 281	-147 297	364 797	20 071	-344 726	753 351	32 264	-721 087	504 040	-721 087	504 040
Gambia	8308	477	-7831	28 531	44	-28 487	24 118	56	-24 062	24 066	-24 062	24 066
Mauritius	199 613	7498	-192 115	257 024	6433	-250 591	310 247	6323	-303 924	314 709	-303 924	314 709

Source: International Trade Centre (ITC), Data Base (2007).

Table 5 *continued*

<i>Year</i>	<i>2006</i>		<i>2007</i>		
	<i>Export</i>	<i>Trade balance</i>	<i>Import</i>	<i>Export</i>	<i>Trade Balance</i>
Africa	28 771 680	2 184 612	3.7E + 07	36 357 071	−794 115
Angola	10 933 295	10 039 109	1 229 748	12 888 665	11 658 917
Uganda	6890	−131 370	274 322	14 407	−259 915
Zambia	256 545	172 753	233 976	188 346	−45 630
Zimbabwe	NA	NA	NA	NA	NA
Guinea	NA	NA	NA	NA	NA
Madagascar	22 188	−290 349	467 078	27 431	−439 647
Mali	94 505	−17 408	129 992	32 054	−97 938
Namibia	48 941	−47 886	101 477	123 108	21 631
Sudan	4 324 284	2 661 877	NA	NA	NA
Tanzania	NA	NA	NA	NA	NA
Ethiopia	101 353	−538 186	1 138 770	69 582	−1 069 188
Nigeria	NA	NA	NA	NA	NA
South Africa	2 108 757	−4 770 698	8 562 745	4 169 608	−4 393 137
Cameroon	121 535	−78 287	NA	NA	NA
Congo	2 791 642	2 550 168	433 979	2 835 732	2 401 753
Chad	260 313	246 170	65 683	84 069	18 386
Cote D'Ivoire	106 617	−144 784	438 173	37 898	−400 275
Kenya	21 541	−392 113	678 736	21 859	−656 877
Ghana	38 805	−465 235	806 060	32 695	−773 365
Gambia	41	−24 025	34 013	73	−33 940
Mauritius	5228	−309 481	443 713	4208	−439 505

Source: International Trade Centre (ITC), Data Base (2007).

In 2007, manufactured products dominated Africa's imports from China accounting for 93.4 per cent of the total (ITC Data Base, 2007). The major constituents of imported Chinese manufactured products were other machinery (17.4 per cent), textiles (15 per cent), all other manufactures (11.4 per cent), other semi-manufactures (11.4 per cent), clothing (10.4 per cent), office and telecoms equipment (9.9 per cent), transport equipment (8.80 per cent), chemicals (5.6 per cent), and iron and steel (3.4 per cent). Agricultural product accounted for 3.4 per cent of the total, whereas fuels and mining products constituted 1.7 per cent.

The analysis of Africa-China trade at the aggregate level obviously does not reveal significant African country-level differences, which may have significant implications for policy response. To reveal this, Table 6 shows that the 'foot-print' in terms of trade relations varies among these countries. For instance and with respect to exports, China's share in 2007 varies from less than 1.0 per cent for five countries – Mauritius (0.2 per cent), Kenya (0.54 per cent), Gambia (0.58 per cent), Ghana (0.78 per cent) and Nigeria (0.79 per cent) to 5.0 per cent and above for another six countries – Ethiopia (5.5 per cent), Zimbabwe (6.03 per cent), South Africa (6.5 per cent), Angola (32.7 per cent), Congo (35.8 per cent) and Sudan (50.03 per cent). However, all countries experienced a rise in exports over 2003–2007 except Mauritius, Cote D'Ivoire and Zimbabwe, where it fell. The rate of growth was between 7.0 per cent (Ghana) and 105.0 per cent (Ethiopia). This implies that export to China is more important to many African countries particularly for five of them

Table 6: China's share of Africa's trade and nominal growth performance

Country	<i>China's share of Africa's imports (%)</i>		<i>China's share of Africa's export (%)</i>		
	<i>Share in imports in 2007</i>	<i>Growth in import value between 2003 and 2007</i>	<i>Share in exports in 2007</i>	<i>Growth in export value between 2003 and 2007</i>	
1	Angola	10.28	79.0	32.67	55.0
2	Cameroon	11.78	45.0	3.39	10.0
3	Chad	13.46	127.0	3.36	100.0
4	Congo	13.42	63.0	35.8	36.0
5	Cote D'Ivoire	6.56	49.0	0.47	-10.0
6	Ethiopia	19.6	37.0	5.45	105.0
7	Gambia	10.6	30.0	0.58	-32.0
8	Ghana	11.18	39.0	0.78	7.0
9	Guinea	16.29	38.0	4.39	52.0
10	Kenya	7.55	66.0	0.54	33.0
11	Mauritius	11.37	20.0	0.2	-13.0
12	Mali	5.95	34.0	2.23	30.0
13	Madagascar	19.1	21.0	2.04	41.0
14	Namibia	2.52	59.0	3.05	93.0
15	Nigeria	13.44	22.0	0.79	42.0
16	Sudan	25.19	33.0	50.03	25.0
17	South Africa	10.72	40.0	6.51	46.0
18	Tanzania	NA	NA	NA	NA
19	Uganda	7.85	35.0	1.08	84.0
20	Zambia	5.89	49.0	4.08	99.0
21	Zimbabwe	8.28	49.0	6.03	-3.0

Source: Compiled from International Trade Centre (ITC) Data base (2007).

where it rose by more than 50.0 per cent. Beyond this level of aggregation, however, China's share of particular export categories has been substantial in several cases (Table 6). Thus, with respect to total oil exports, China's share has been substantial in Congo (28 per cent), Angola (30.9 per cent) and particularly Sudan (82.3 per cent). In addition, China has had a dominant share of the total export of crude raw materials, except food and fuels, in the following countries: Madagascar (25.7 per cent), Cameroon (38.4 per cent), Ethiopia (44.6 per cent), Tanzania (48.4 per cent) and Kenya (68.7 per cent).

With respect to total imports in 2007, China's share has been significant in Sudan (25.2 per cent), Ethiopia (19.6 per cent), Madagascar (19.1 per cent), Guinea (16.3 per cent), Chad (13.5 per cent), Nigeria (13.4 per cent), Cameroon (11.7 per cent), Mauritius (11.4 per cent), Ghana (11.2 per cent), South Africa (10.7 per cent), Zimbabwe (10.8 per cent), Gambia (10.6 per cent) and Angola (10.3 per cent) (Table 6). It should be stated that, again, all African countries witnessed a rise in imports over 2003–2007 and the increase was higher in Chad (127 per cent), Angola (79 per cent), Kenya (66 per cent), Congo (63 per cent) and Namibia (59 per cent), where it exceeded 50.0 per cent. At the more disaggregated level, China's share of total imports has been substantial with respect to manufactured products, machinery and transport equipments in many of the countries studied. In Ethiopia, for instance, China dominates the import markets for machinery and transport equipment (97.9 per cent), fuels and lubricants (51.3 per cent), and manufactured goods (43.1 per cent). China supplies substantial proportions of imported

manufactured products in Mauritius (20 per cent), Ghana 24.9 per cent), Sudan (29.3 per cent), Madagascar (39.2 per cent) and the Gambia (59 per cent). Similarly, China's share of the import of miscellaneous manufactured products has been substantial in Tanzania (21.8 per cent), Mauritius (23.9 per cent), Nigeria (30.6 per cent) and Cameroon (35.5 per cent).

This national level analysis of the trade relations between China and African countries reveals several important features that are not obvious from the earlier Africa-wide focus. In particular, given that China's exports of manufactures reach nearly all African countries at an increasing rate, then trade balance between each of these countries and China will depend on their resource endowments (as exports) needed by China. Thus, only a limited number of African countries have maintained favourable balances in their bilateral trade relations with China, while most others have struggled with increasing bilateral trade deficits. In 2003, Africa recorded unfavourable trade balance (Table 5). This is because many African countries except Angola, Sudan, Cameroon, Congo and Chad recorded trade deficits. Although beginning from 2004, Africa's trade balance with China became surplus, many African countries experience persistent trade deficits with the exception of Angola, Sudan, Congo, Chad, Zambia and Namibia. While Angola, Sudan, Congo and Chad recorded persistent trade surplus over 2003 to 2007, countries such as Zambia and Namibia witnessed fluctuating trade balances.

Analysis of Potential Impacts

The transmission channels of the impacts of economic relations between economies are dynamic in nature and importance depending on factors such as locations, resource endowment, trade relations and geo-strategic significance (Winters and Yusuf, 2007; Kaplinsky, 2008). Six important channels identified in the literature are trade, investment, aid, global governance, migration and environment. According to Kaplinsky (2008), the impact of each of these channels can be complementary or competitive and that each of the complementary or competitive impact can be direct and indirect. In this paper, attention is on trade channel and analysis covers terms of trade impact and trade-related gains and losses (in terms of direct complementary and competitive impacts) as well as the associated trade-induced impacts.

Impact of China's Growing Demand on Terms of Trade of Africa's Products

Following the global inflationary trend of the second half of the twentieth century was the period of price deflation in manufactures (Kaplinsky, 2008). This downward trend in prices of manufactures was attributed to the impact of China's outward oriented industrial growth. It was observed that there is a high tendency for the prices of products exported into EU by China and low income countries to decline than the prices of the same products-grouping obtained from other high income countries (Kaplinsky, 2008). As the prices of manufactures were falling the prices of components of commodity sector (minerals, metals, precious stones, fuels, food products, cotton, timber and palm oil) were rising owing to increased demand from China. This rising prices induced by China growing demand extended to the mineral products beginning from 1990s and also to the energy sector. Among the factors that have driven up the commodity prices are China thirst for energy both from minerals and bio-fuels (which require some agricultural

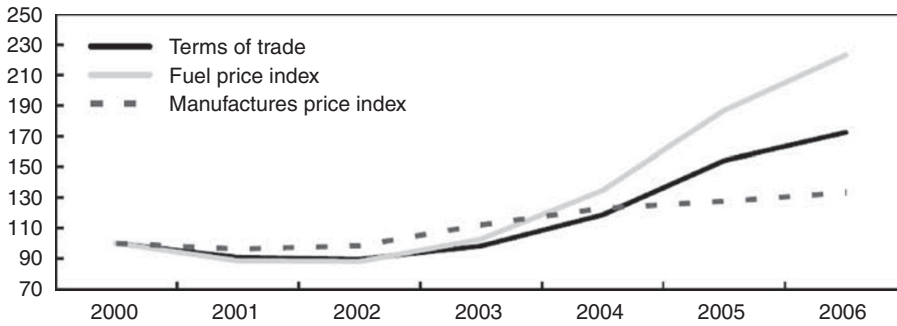


Figure 1: Africa's terms of trade with China, 2000–2006 (Index, 2000=100).

Source: Wang (2007, p. 7).

products) and the rapid income growth which led to changing consumption pattern of Chinese.

Africa's terms of trade with China was estimated by Wang (2007) in Figure 1. The figure reveals that beginning from around 2003, the fuel price index and the terms of trade has been relatively higher than that of manufacturing. This implies that, over 2001–2006 there was terms of trade gain (between 80 and 90 per cent) for African exporters of fuel, mineral and other raw agricultural products such as Nigeria, Sudan, Angola, Chad, Congo and Cameroon, while the terms of trade of manufactures imported by African consumers and firms declined.

Trade-related Gains and Losses

Concerns are being expressed in the literature about how and the extent to which the rapidly growing China–Africa trade might affect the development of African countries (Ajakaiye, 2006; Kaplinsky *et al*, 2006; Oyejide, 2007; Wang, 2007). In validating and addressing these concerns, it is necessary to examine the direct and indirect impact of China–Africa trade on Africa and identify specific areas of trade-related gains and losses as well as the corresponding winners and losers among African countries.

Stevens and Kennan (2006) offer a simple analytical framework for identifying the impact of trade with China on specific countries. In this context, whether and the extent to which an African country is subject to trade-related gains or losses arising from expanding Chinese trade depend on certain factors which can be categorised into four broad groups. First, to the extent that the expanding Chinese economy offers a rapidly growing market opportunity, an African country which *exports* a product that China *imports* stands to gain, it is able to take advantage of the market opportunity, because its exports should grow in the Chinese and/or third-country markets and this could, in turn, stimulate overall economic growth. Second, an African country which *imports* a product that china *exports* may gain to the extent that expanding Chinese exports are associated with falling prices. The potential trade-related gain takes the form of increasing welfare derived from the consumption of cheaper products. These are the two broad categories of potential trade-related gains.

Third, an African country which *exports* products that are the same or similar to those *exported* by China is likely to suffer a trade-related loss which would be caused by falling

export prices and reduction in market share. Fourth, an African country which *imports* products that are also *imported* by China is likely to incur a trade-related loss, as it faces significant import competition in third-country markets which is likely to be associated with rising prices, and, hence, reduction in consumers' welfare. These are the two broad categories of potential trade-related losses.

An application of this analytical framework suggests that the trade impact of the expansion of the Chinese economy is likely to vary across different African countries in relation to the structure of their imports and exports. More specifically, potential export-related gainers include exporters of crude oil, minerals, as well as other raw materials used mostly as industrial inputs such as cotton and sawlogs. That is, commodities that are heavily imported by China and whose world prices have tended to rise, partly as a result of increased demand from China. Among the countries covered by the African Economic Research Consortium (AERC) scoping studies, the main potential export-related gainers include Angola, Chad, Congo, Cameroon, Nigeria and Sudan for crude oil (Bazika, 2008; Corkin, 2008; Maglad, 2008; Ogunkola *et al*, 2008b; Tabo *et al*, 2008) Angola, Cameroon, Ethiopia, Ghana, South Africa, Tanzania, Zambia and Zimbabwe as major exporters of various minerals and metals (Edinger and Burke, 2008; Geda, 2008; Moshi and Mutui, 2008; Mwanawina 2008) Cameroon, Chad, Cote D' Ivoire, Mali, South Africa, Sudan, Tanzania, Zambia and Zimbabwe with respect to cotton (Sonogo, 2008; Seka and Kouakou, 2008) and exporters of sawlogs such as Cameroon, Congo, Cote D' Ivoire, Nigeria and South Africa.

Potential import-related gainers include virtually all African countries; although much of these gains are likely to be absorbed by the significant importers of products for which China accounts for substantial shares of African imports (Bazika, 2008; Corkin, 2008; Doumbouya and Gassama, 2008; Edinger and Burke, 2008; Geda, 2008; Maglad, 2008; Moshi and Mutui, 2008; Mwanawina, 2008; Odada and Kakujaha-Matundu, 2008; Ogunkola *et al* 2008b; Tabo *et al* 2008; Rakotomanana and Rajaobelina, 2008; Sanogo 2008; Seka and Kouakou, 2008; Sillah and Jammeh, 2007). The relevant study countries include South Africa, Kenya, Mauritius, Ethiopia and Nigeria for transportation vehicles; South Africa, Nigeria, Kenya and Ghana with respect to automobile parts; South Africa, Sudan, Mauritius, Nigeria and Gambia for textiles and clothing; South Africa, Sudan, Kenya, Zambia and Ghana for construction and mining machinery; and Nigeria, South Africa, Cote D' Ivoire and Kenya with respect to rice. Although some countries will benefit from either import or export, only South Africa and Nigeria have potential to gain more from both export and import. Beyond these specific cases and as shown in China–Africa trade relations' section above, many African countries obtain substantial proportions of their imported manufactured goods, miscellaneous manufactured goods, machinery and transport equipment as well as chemical products from China. Some of these countries face a dilemma. On the one hand they stand to gain from the consumers' welfare generated by lower prices; and on the other, those countries which have established some capacity for the domestic production of these goods are likely to suffer losses arising from the displacement of locally produced goods by cheaper Chinese imports. In particular, such countries may experience significant reduction in their industrial output and therefore also employment losses (Table 7).

Kaplinsky and Morris (2006) provide some evidence of significant losses of this type with respect to the displacement of domestic production of labour-textiles, clothing and furniture in Ghana, Kenya, Mauritius, South Africa and Swaziland. Noting that Chinese competition in the textiles and clothing sector is increasingly felt particularly in South

Table 7: Potential trade-related gains from China-Africa relationship by country and trade structure

Country	Export-related gains				Import-related gains				
	Crude-oil	Minerals and metals	Cotton	Sawlogs	Transport vehicles	Automobile parts	Textiles and clothing	Construction and mining machineries	Rice
1 Angola	Yes	Yes	No	No	No	No	No	No	No
2 Cameroon	Yes	Yes	Yes	Yes	No	No	No	No	No
3 Chad	Yes	No	Yes	No	No	No	No	No	No
4 Congo	Yes	No	No	Yes	No	No	No	No	No
5 Cote D'Ivoire	No	No	Yes	Yes	No	No	No	No	Yes
6 Ethiopia	No	Yes	No	No	Yes	No	No	No	No
7 Gambia	No	No	No	No	No	No	Yes	No	No
8 Ghana	No	Yes	No	No	No	Yes	No	Yes	No
9 Guinea	No	No	No	No	No	No	No	No	No
10 Kenya	No	No	No	No	Yes	Yes	No	Yes	Yes
11 Mauritius	No	No	No	No	Yes	No	Yes	No	No
12 Mali	No	No	Yes	No	No	No	No	No	No
13 Madagascar	No	No	No	No	No	No	No	No	No
14 Namibia	No	No	No	No	No	No	No	No	No
15 Nigeria	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes
16 Sudan	Yes	No	Yes	No	No	No	Yes	Yes	No
17 South Africa	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18 Tanzania	No	Yes	Yes	No	No	No	No	No	No
19 Uganda	No	No	No	No	No	No	No	No	No
20 Zambia	No	Yes	Yes	No	No	No	No	Yes	No
21 Zimbabwe	No	Yes	Yes	No	No	No	No	No	No

Source: Compiled from Stevens and Kennan (2006).

Africa, the region's largest clothing importer, Finger (2007, p. 19) claims that 'despite the very high most-favoured-nation applied duty of 38 per cent, the domestic producers had not been able to cope successfully against imported Chinese clothing products'. Burke *et al* (2008, p. 16) offer some quantitative evidence of the loss inflicted upon South Africa's local producers as a result of large increases in imports of textile, clothing and footwear products from China between 1995 and 2006; that is, that 'the effect has been a massive loss in jobs for workers across the industry, and although the precise figures are difficult to calculate, estimates range from 23 000 to 85 000'. In the case of Cameroon, Khan and Baye (2008, pp. 18–19) argue that local producers of manufactured are 'facing stiff competition on the domestic with cheaper product from China' and cite the example of batteries where the imported Chinese product is almost 67 per cent cheaper than the locally produced product. With respect to Kenya, Onjala (2008, p. 23) cites 'a growing body of empirical evidence documenting job losses, and displacement of existing and potential local producers by cheap Chinese products'. Similarly, in the case of Ghana, Tsikata *et al* (2008, p. 24) argue that 'Chinese textiles are displacing domestic textile products and in some cases forcing the closure of some textile plants; this has many dire consequences especially in relation to job losses, loss of revenue and loss of research and development capacity in the textile industry in Ghana'.

Potential export-related losses are likely to be incurred by African exporters of most labor-intensive manufactured products that are also exported by China. The most prominent among these include textiles and clothing, furniture, footwear and other household

goods. An analysis of national export structures of African countries suggests that the major potential losers include Mauritius, South Africa, Madagascar, Zimbabwe, Lesotho, Kenya, Swaziland, Ghana, Cameroon and Nigeria. These losses arise from the displacement of the exports of specific African countries in third-country markets by cheaper Chinese products. Quantitative evidence of this category of trade-related losses is mounting; particularly with respect to textile and clothing. WTO (2006) argues that the phase-out of the WTO Agreement on textiles and clothing has had a major impact on trade flows in these products; with the result that China enhanced its share of global exports of textile and clothing whereas African exporters suffered significant market share losses. More specifically, Kaplinsky *et al* (2006) show that between 2004 and 2005, unit prices of Chinese exports of textile and clothing products to the United States fell by 33.0 per cent to 51.9 per cent, China's exports rose by 58 per cent to 112 per cent, whereas the value of African export fell by 3 per cent to 45 per cent, in spite of the African Growth and Opportunity Act trade preferences which provided special market access benefits to African exporters in the US market.

There is considerable evidence of this category of trade-related losses with regard to several African countries. For example, Khan and Baye (2008) note that Cameroon has the most developed manufacturing sector in the Central African sub-region but that its exports of manufactured product to all other countries in this sub-region (that is, Congo Republic, Gabon, Equatorial Guinea, Central African Republic, Chad and Democratic Republic of Congo (DRC)) peaked in 2003 and then suffered a 42 per cent reduction over the next 2 years. This sharp of sub-regional export market share is ascribed to increased competition from cheaper imported Chinese products. In Kenya's case, Onjala (2008) documents the country's significant losses of export market shares in the East African regional market. In particular, it is estimated that Kenya's export of manufactured product to the region declined by 20 per cent during the 1997–2003 period, and that the country's textiles and clothing exports to Uganda and Tanzania declined by 55 per cent between 2000 and 2005. It is suggested that these regional export market share losses were because of the rapidly increasing imports of relatively cheaper product from China. The evidence relating losses in the case of Mauritius is presented in Ancharaz (2008, p. 10) which claims that 'between 2001 and 2005, more than 25 000 jobs were lost in the Export Processing Zone (EPZ) as 112 factories closed ... EPZ output contracted by 12.4 per cent'; as China's clothing sub-sector exports expanded sharply and globally. In relation to the same group of textile and clothing products, Burke *et al* (2008, p. 18) argue that 'Chinese exports to South Africa's neighbours such as Swaziland, Lesotho, Namibia and Mozambique have reduced the demand for South Africa's exports to these countries and this has had a detrimental effect on South African producers that have not been able to compete'. Some reports on the effect of Asian imports on footwear sector in Ethiopia have also been provided (Egziabher, 2006).

In summary, there is a strong consensus that African producers of manufactured products are severely threatened by the competition from Chinese exports in the three market spheres, that is, domestic, intra-African regional and global, regardless of the import barriers in the domestic market and the special trade preferences market and the special trade preferences offered in both regional and global markets. In the view of Finger (2007, p. 19), 'the establishment of an African (export) industry based on small- and medium-sized firms in a highly competitive environment dominated by established suppliers benefiting from economies of scale is a difficult task'. This raises particular policy concerns regarding how specific African countries should take advantage of the opportunities and responds to the challenges generated by the rapidly growing Africa-China trade relations.

Africa–China Trade Induced Opportunities

Trade theories have demonstrated that trade-in goods may be associated directly or indirectly with trade-in-factor services. This is because it is either a country import a good in which another country produces with its abundant factor(s) or import the abundant factor(s) for domestic production of the good depending on the political decisions. Alternatively, a country in an attempt to ensure regular flow of its import may provide some resources to augment what is available in the exporting country – its trading partner (Krugman and Obstfeld, 2000).

An important trade-induced opportunity from the increased China–Africa trade relations is the increased mobility of factors of production particularly labour and capital. In recent times, evidence abound that people move to – and from – African countries and China in search of trade opportunities (markets or goods), employment opportunities and tourism. In particular, some Chinese companies in some Africa countries have moved labour from their own country down to Africa to undertake trade and contract on development (infrastructure) projects. A major feature of Chinese market or ‘town’ in some African countries is the presence of Chinese (the owners of trading stores and factories) and employment of Chinese experts in the construction of infrastructure projects awarded by African governments to Chinese firms (Ajakaiye, 2006; McGreal, 2007). Similarly, traders from African countries and job-seekers have been moving to China and other Asian countries seeking for market and employment opportunities. In the area of tourism, the number of African tourists to China has been rising, and 17 African countries have become China tourists’ attractions, with Namibia, Botswana, Madagascar, Lesotho and Ghana added to the list (Wang, 2007).

In addition, Sino-Africa investment flow pattern has been somewhat unidirectional, with exception to Mauritius and South Africa (Ajakaiye, 2006; Wang, 2007). It can be said that Chinese direct investment in Africa is promoted basically by the need to secure the required commodities and energy assets and to capture under-tapped markets in Africa (Ajakaiye, 2006). Thus, in order to ensure regular flow of inputs (raw materials and energy) from the African countries, China has invested in their oil and energy industries. It has also invested in the construction of some Export Processing Zones in Africa to facilitate exports and Chinese markets or ‘town’ to create a special market for its goods been imported to African countries (Ogunkola *et al*, 2008a). It should be mentioned again that all these have generated employment opportunities for people in both sides. FDI from China to Africa has risen from \$317 million in 2004 to \$392 million in 2005, while it has been estimated to amount to \$6.6 billion over 2000 to 2006 (Wang, 2007). Some aid have also been given to some African countries particularly in terms of training of personnel, supply of drugs, financing of development of infrastructure at free – or lower – interest rates (concessionary rates), rescheduling of repayment terms and debt forgiveness. All these have directly and indirectly promoted trade relations between some African countries and China. Among the major African countries in which China has committed funds for infrastructure development are Nigeria, Angola, Ethiopia and Sudan. These countries are the major suppliers of commodities required by China. China’s investment commitment in the natural resource sector in Nigeria is the highest, followed by Angola (Ogunkola *et al*, 2008a, b). The relative share of Sub-Saharan African countries in China’s natural resource finance and power/transportation finance signals that Nigeria, Angola, South Africa, Sudan, Guinea and DRC take the major share. The grant element of such loans has been very high, and in 2002, it was around 25–29 per cent, growing to 50.3 per cent in 2004 (Ogunkola *et al*, 2008a, b).

Seizing the Opportunities and Confronting the Challenges

The rapidly expanding Africa-China trade relation is associated with both benefits and costs, which have been discussed earlier. Among the major costs of the relation which need special attention is that, the division of labour implied by the current structure of Africa–China trade which corresponds to the current relative comparative advantage of the trading partners is not necessarily consistent with the longer term objectives of diversifying Africa's export structure and using trade for enhancing the industrial development of African countries (Kaplinsky and Morris, 2006). Also, there is a significant risk that the expansion of Africa's mining sector, which is increasingly induced by the current Africa-China trade pattern, may divert critical financial and human resources away from non-mining sectors which face increasing costs for domestic inputs as well as increasing competition from cheaper imports from China.

In articulating long-term responses to these challenges, it is useful to categorise African countries into two broad groups, based largely on their endowment. These are resource-rich and resource-poor categories. Winters and Yusuf (2007) provide guidelines for both. It is suggested that the resource-poor countries should develop manufacturing capacity in low-wage, labor-intensive industry and thus position themselves to cut into China's current export market shares, roughly 10 years in future, as wages in China inevitably rise above the level needed to keep the country competitive in such industries. It is argued that the African countries with large natural resource exports will not be able to develop significant and export-oriented industrial sectors because their real exchange rates will be forced to rise by natural resource export and that this will, in turn, render their manufactured exports less competitive. The policy prescription for the resource-rich countries implicitly assumes that their natural resources can be exploited forever. Since this is not necessarily the case, such countries must articulate alternative policy responses that may, in the end, not be radically different from that of the resource-poor countries, except perhaps in terms of time phasing and sequencing. In broad terms, therefore, all African countries should articulate and implement policies aimed at releasing their export supply response capacity constraints, diversifying their production base, and expanding their access to external markets, both regionally and globally. The first two relate primarily to a domestic competitiveness agenda, whereas the third involves active Africa–China interactions and therefore deserves more detailed discussion.

First, it might be asked whether Africa will gain more from a greater liberalisation of global trade or the region would require an uneven playing field which the active Africa-China interaction in the form of preferences would imply. Ianchovichina *et al* (2002) suggest that there would be substantial gains from duty and quota-free access for 37 Sub-Saharan Africa (SSA) countries of all products to the QUAD (USA, EU, Canada and Japan) while the gains would be small with respect to duty- and quota-free access of apparel to the United States, all products to the United States, industrial products to Japan, all products except arms to the EU. These gains are in the areas of export revenue and welfare arising from expansion of agricultural exports to Japan, improved terms of trade, and efficiency gains associated with resource allocation. There is a caveat; though the relative importance of the industrial sector declines as resources move to agricultural sector, Polaski (2006) has showed that SSA would lose from global liberalisation of agriculture and derive little gain from liberalisation of manufactures, while SSA requires special measures to reap any little benefit. This confirmed the result of the simulation of global liberalisation (post-duty-free access granted to SSA) by Ianchovichina *et al* (2002)

which indicated an insignificant impact on total exports of SSA as well as a welfare loss owing to terms of trade deterioration. Both studies cited the need for some special arrangements for SSA exports which have mostly been actualised through preferential market access and may explain why China joined preference-granting league of countries.

A corollary of preference initiatives is whether it is advantageous to combine domestic trade protection for domestic producers internally with the externally generated special market access programmes. Because the internal trade protection would likely produce undesirable effects such as export bias and the need for additional compensatory mechanisms, this approach would probably rank inferior to external preferential arrangements. However, the results might be different if restrictive rules of origin and other conditionalities attached to preferential market access are attached.

As shown in China–Africa trade relations’ section above, only a few resource-rich African countries have been able to maintain a favourable balance in their bilateral trade with China while most other African countries have been incurring increasing trade deficits with China. This can be used as a lever for gaining enhanced access for African exports of non-mining product in the booming domestic market of China. There are basically two main entry points for this strategy. First, the relatively high levels and sharply escalating structure of Chinese tariffs substantially restrict the import into China of Africa’s non-oil export products. Second, China’s export production operates within a production sharing network which offers duty-free access to imported inputs, primarily from South East and East Asia. The exclusion of African producers from this network imposes a substantial penalty on them. Fortunately, China has shown the willingness to respond favourably to African pressures on enhanced market access. Thus, in January 2005, China removed tariff from 190 items exported by 25 of the least developed countries in Africa in the context of its Special Preferential Tariff Treatment (SPTT) programme. Wang (2007) reports that, within a year, the value of African export under the programme amounted to \$380 million, having achieved an annual increase of 88 per cent which was about 50 percentage points higher than the growth of Africa’s total exports to China over the same period. In November 2006, China announced a new package of commitments to Africa, including an increase to 400 of the number of African export product items covered by the SPTT, as well as setting up about 100 trade processing project and establishing three to five trade and economic cooperation zones in Africa between 2007 and 2009.

To expand Africa’s supply response capacity, Wang and Bio-Tchane (2008) suggest structured encouragement of partnerships between African and Chinese firms aimed at facilitating technology transfer and adding value to African exports. This could also be a route through which African producers can be integrated into the Chinese production sharing network. In addition, increased local sourcing of parts, equipment and labor by Chinese firms operating in Africa as a means of promoting effective technology transfer is another. These are medium-to-long-term strategies.

But some African countries have taken various short-term restrictive trade policy measures aimed at slowing down the tide of Chinese imports and protecting their domestic producers. In Nigeria, these have taken the form of import prohibition on certain textiles and clothing product. In South Africa, which is Africa’s largest clothing importer, the response since January 2007 has been the introduction of quotas on imports from China, on agreement with the Chinese. Under this arrangement, the growth of 31 textiles and clothing product groups is limited, quantitatively, for 2 years, with allowable increases of 7–20 per cent.

In spite of these short-term and restrictive trade policy measures, African countries cannot successfully resist the displacement of their domestic production in their own or foreign markets unless concrete steps are taken to significantly improve the competitiveness of their economies. They may also not be able to take full and beneficial advantage of enhanced external market access unless concerted efforts are made to eliminate the binding export supply response capacity constraints faced by their producers. This requires substantially increased investment, particularly on the development of key infrastructure which is now open to public-private partnership in some African countries and which Chinese businesses have explored in some countries. There is also the need to articulate policies to strengthen the competitive capabilities of African producers. This implies that other economic policies along with trade policy will have to be effectively deployed towards rejuvenating weak African economies.

Therefore, in terms of what policies African countries should currently engage in to improve the medium-to-long-term future Africa–China relations, they need to put greater emphasis on domestic capability building as part of Foreign Direct Investment activity through public-private partnership and local sourcing relations in the form of local content policies which will ensure that all sectors use a proportion of local resources in the domestic production of goods and services. This in conjunction with increasing encouragement of joint ventures and the enforcement of expatriate quotas that ensures that both Chinese and African managers work together to enhance African managerial capacities.

Concluding Remarks

Combined with the concern in Africa's policy community about the impact on African countries of the rapidly rising profile of China in the continent's trade pattern is the recognition that this will radically alter the environment in which African countries make critical trade policy decisions. The latter dimension has, in turn, posed a significant challenge to the African research community in terms of providing a better understanding of the rapidly expanding Africa-China relations as a means of identifying how specific African countries might best position themselves not only to maximise their gains but also to minimise the inherent trade-related losses emanating therefrom. This paper has presented above an analysis of what is known both at the aggregate African and at the national level of a selected sample of countries.

The paper confirms several broad findings in respect of the benefits and costs of the relations. On the positive side, there are trade-related (import and export) gains in form of lower import prices and access to a wider variety of final and intermediate goods; increased demand for Africa's exports and the resulting increase in prices of exports of interest to Africa. On the negative side are trade-related losses regarding strong adjustment pressures on African manufacturing sectors because of strong Chinese competition in both the domestic and external markets. There is also the concern that the existing pattern of Africa-China trade which continues to be strengthened by China's rising profile does not correspond to the regions longer term objectives of diversifying economic and trade structure; and the desire for trade to contribute to the region's industrial development.

Hence, for many African countries, the negative effects may outweigh the positive ones and concerted policy measures, carefully crafted in each case to suit the specific circumstances are required. Broadly, the menu of policy measures could include those aimed at

gaining enhanced access to the Chinese market for a broad range of export products and at making African economies more competitive by eliminating the binding supply response capacity constraints. Part of these include significantly increased investment in key infrastructure through public-private partnership which Chinese businesses can effectively participate; articulation of policies to strengthen the competitive capabilities of African producers through the effective deployment of macroeconomic and trade policies that aim to establish single inflation rates, reduce volatility of inflation and exchange rates as well as high tariffs, improve investment incentives, and strengthen political and economic governance generally. Policies relating to local sourcing or local content as well as encouragement of joint ventures should also assist in this regard. The current state of knowledge suggests that the latter requires more research and policy articulation work and, thus, deserves special attention and greater priority.

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