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Review of China's Trade on the Economic Growth of Ghana

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Abstract The search for an alternative to the western super-power market-led model and its possible replacement with a transformed China development model has led many African countries to making China a state-guided development. Whilst the volume of China's investment in Africa keeps up rising, there are several limitations and difficulties to this friendship between Africa and China, of which West Africans find it attractive in comparison to America and Europe. Africa is one of the fastest growing regions on the globe and is home to seven of the ten fastest growing markets in the world. The International Monitory Fund (IMF) estimated that, economic growth in Africa will be 5.6% in 2013 and 6.1% in 2014. Many African countries are viewed as fast growing markets and profitable outlets for the export of cheap manufactured goods and the future export of high-end products and services. Therefore, the purpose of this paper is to review and forecast the impact of China's trade on the economic growth of Ghana in West Africa.

Keywords International trade, Economic growth, Trade impact

1. Introduction

China has a history of trade relations, sometimes through third parties, dating back as far as 202 BC and AD 220. The first mention of Africa in Chinese writings was in the Yu-yang-tsa-tsu by Tuan Ch'eng-shih (died 863), a compendium of general knowledge where he wrote about the land of Po-pa-li (referring to Somalia) source Wikipedia.org. Forms to support Chinese investment abroad have been enacted. For instance; there have been several Chinese trade and investment promotion centres and special zones throughout some African countries. China in addition, promotes it economic interest in Africa by climaxing bilateral investment treaties. In 2007, China had concluded bilateral investment treaties with 33 African countries.

In 2011, the largest African exporters to China were South Africa and Angola, followed by the Democratic Republic of Congo, Mauritania, Sudan, South Sudan, and Zambia. In addition to countries such as South Africa, Angola, and the Democratic Republic of Congo, the major importers of Chinese goods were Tanzania, Kenya, Ghana, and Liberia

China imports hides and skins from Ethiopia for the manufacturing of shoes and other leather products. It fishes off the shores of Senegal and other coastal African countries. It grows cassava, maize, and sorghum in such countries as Zimbabwe and Madagascar and ships the produce home to feed hungry animals in China. China became a major purchaser of cotton grown in Mozambique, a country not hitherto known for its cotton but its new production was stimulate by a Chinese technical assistance effort, part of the Chinese attempt to help Mozambique improve its agricultural productivity.

However, China's rapidly growing presence in Ghana and some West African countries has become a topic of debate among economists and policy analysts. In view of that, much has not been researched or written about China-West African trade and its impacts on economic growth.

Therefore, this paper seeks to critically discuss and forecast the major impacts of China's trade and its activities on the economy of West Africa, using Ghana, a fast growing economy in West Africa as a case study.

2. Review of International Trade and Economic Growth

One can trace the positive impact of international trade on economic growth from the writings of Smith (1776).

According to Afonso (2001), the idea of international trade towards economic growth came out until the world war2, though a relative hibernation of economic growth experiment had some significance especially in Latin America.

Many studies have linked the gains of international trade only with static effects but Baldwin (1984), concluded in an empirical survey that the static effect was of little significance.

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Afonso (2001) stated that the debate had widened in the last decades precisely in the direction of pointing out and stressing on the dynamic effect of international trade.

However, the theoretical development afforded by the models of endogenous economic growth, for instance after the works of Romer(1986) and Lucas(1988),which stimulated the creation of empirical studies, moved towards an integrated analysis of economic growth and international trade theories, according to Afonso (2001). Ricardo (1817) presented a dynamic model of economic growth with three forces and two restrictions. He categorized the progressive state as having high savings accumulation, production, productivity, benefits and labour demand resulting in the increase of wages and demographic growth. However, in the case of scarcity of land and its limitation both in quantity and quality, the additional alimentary resources were obtained in condition of decreasing returns, in which production is absorbed by wages in an increasing proportion, reducing the stimulation of a new investment and later reaching the "stationary state". International trade could delay the fall in the rate of a profit. He further underestimated the importance of the positive effects of international trade on technology.

2.1. The Evolution of China and Ghana's Trade Relation

According to wikipidea.com the relations between the two countries dates back to 1960 when the countries first established diplomatic relations. Since then, Ghana has provided substantial diplomatic support to the PRC with the PRC reciprocating with material support to aid Ghana's development. In the 1960s President Nkrumah lobbied for the PRC's reinstatement in the United Nations. Nkrumah also supported the PRC during the Sino-Indian War in 1962. After the Nkrumah regime was overthrown, Beijing withdrew about 200 Chinese aid workers and embassy staff. In the early 1990s, China built Ghana's National Theatre as a reward for Ghana's diplomatic support during the Tiananmen Square protests in 1989.

Dr. Kwame Nkrumah the then president of Ghana in 1957-1960 had paid several official visits to China enhancing a good relation between the two countries.

After Kufuor was elected president of Ghana in 2001, the PRC gave Ghana a US$2.4 million grant to renovate the national theatre. In 2002, the then president of Ghana John Agyekum Kufuor paid an official visit to China, also enhancing the good relation between the two countries. The then president of China, Hu Jintao in 2003 embarked on an official visit to Ghana and China's premiered Wen Jiabao also visited Ghana on his seven-nation tour Africa in 2007.

The CPPCC'S Chairman, Jia Qinglin, granted a loan of US$30million to enhance the development of communication projects in order to enhance military and security ties between the two countries. In 2009, there was an estimated 700,000 ethnic Chinese migrants who had settled in Ghana

3. Ghana and China's Trade Pattern and others

In 2012, West Africa's trade deficit with China reached an average of 13 precent of regional GDP. In 2012, West Africa imported US$18.1 billion worth of Chinese goods while exporting just US$4.3 billion worth of goods to China. The trade deficit has widened since 2004, with Chinese imports growing at an average annual rate of 11.9 precent, while the annual growth rate of West African exports to China averaged 8.8 percent. Pigto, Miria; Gourdon, Julien (2014), Tsikata, Fenny and Aryeteey (2008), in their works stated that, China's export to Ghana increased to a value of 5.19% from 0.7% from 2000 to 2005.

Manufactured products export increased to 7.55% from the previous value of 0.08% in the year 2002. Products such as cotton and carded wool remain the highest followed by cocoa shells and cocoa waste products, metal cutting shears, lead waste scrap, raw feathers and processed wood.

Whilst year 2004 saw a decrease to about half of the previous year, China's percentage share of crude materials export remained a standstill and live animals and food increased to about 17%. According to Tsikata, Fenny, Aryeteey (2008), Ghana's cocoa beans accounted for about 87% of the total value of export to China.

3.1. China and Ghana's Trade Figures from 2000-2006

China's share of total imports to Ghana gradually increased from 3.94% to 7.87% in 2004, dropping to 7.38% in 2005 and 6.96% in 2006 (Table 1). However, since 2002 the gap between China's share and the total share as percentage has been widening showing that even though there has been an increase in the importation of goods from China, total imports from other countries is also on the rise at even higher rate.

Total imports from China to Ghana and China's percentage share in each category from 2000 to 2006 is shown from Table 1 to Table 3.

Table 1. Ghana's external trade figures (2000-2006) for import from china

Year	China million($)	China $million total trade	China share as% of total share
2000	96.12	2,438.47	3.94
2001	122.2	2,666.39	4.58
2002	116.95	2,452.95	4.77
2003	179.63	3,210.19	5.60
2004	364.81	4,632.89	7.87
2005	417.78	5,661.20	7.38
2006	502.82	7,223.14	6.96

Source: Ministry of Trade and Industry.

Table 2. Ghana's External Trade Figures for Exports (2000 – 2006) ($ Millions)

Year	China($)	Total Export	China share as %
2000	25.82	1,648.06	1.57
2001	22.71	1,791.10	1.27
2002	7.66	1,793.39	0.43
2003	32.28	2,324.30	1.39
2004	18.34	2,621.68	0.70
2005	31.26	2,583.37	1.21
2006	28.55	4,144.67	0.69

Table 3. China's % share of import by commodity groups (2000)

Commodity groups	China ($)	Total ($)	China share%
Food and live animals	2,846,739.35	301,404,342.21	0.94
Beverages and tobacco	17,193.94	41,374,341.23	0.04
Crude materials except food/fuel	260,208.01	186,952,226.87	0.14
Minerals	0.00	577,685,154.06	00.00
Animal/vegetable oil/fat/wax	850.10	17,100,625.33	0.00
Chemical products	8,501.902.08	283,073928.27	3.00
Manufactured goods	74,225,640.79	847,691,162.37	14.95
Machinery, transport and other equipment	10,283,249.79	847,691,162.37	1.21

Source; Ministry of trade and industry

In 2000, apart from the case of manufactured goods and chemical products, China's share of total imports in each of the categories was less than 2 percent. The highest share was the import of manufactured goods where China's share of the total was about 15% followed by chemical products at 3%. Manufactured goods increased to 17.75% with the share of the imports of chemical products also increasing to 7.13% (Table 4). The composition of top ten commodities imported from China was the same but beach sandals were replaced by petroleum coke.

In 2002, the total value of imports from China dropped slightly by almost $5 million. This trend was also reflected in China's percentage share in the various categories with the exception of food and live animals category where there was an increase of percentage points (table 5). The composition of the top ten commodities imported remained the same as previous years. In 2003, there was increase in China's percentage share of imports in the various categories (Table 6). The ten top commodities included broken rice, telephonic switching apparatus, footwear, electricity meters, trunks and suitcases, bicycles, primary cells and batteries, woven fabrics and air conditioning machines. The same trend carries through in 2004 with the only noticeable difference being an increase of China's percentage share of manufactured goods imports reaching the highest so far at 34.40% (Table 7).

Table 4. Computation of China's % share of imports by commodity groups (2001)

Commodity groups	China ($)	Total($)	China share%
Food &live animal	71,176,587.57	334,425.60	2.14
Beverages &tobacco	22,183.28	76,8145,510.10. 15	0.03
Crude materials except food/fuel	411,691.09	213,676,863.01	0.19
Minerals	0.00	566,258,383.96	0.00
Animal/vegetable/oil/fat/wax	33,499.31	14,589,422.23	0.23
Chemical products	19,318,130.59	270,800,939.47	7.13
Manufactured goods	79,603,473.50	448,460,103.00	17.75
Machinery, transport & other equipment	15,719,155.36	768,075,182.66	2.05

Table 5. Computation of China's % share of imports by commodity groups (2002)

Commodity groups	China($)	Total($)	China share%
Food & live animal	14,298,612.25	378,126,823.73	3.78
Beverages and tobacco	12,128.14	22,601,326.02	0.05
Crude materials except food/fuel	787,313.48	265,555,752.33	0.30
Minerals	-	-	-
Animal/vegetable/oil/fat/wax	10,334.40	23,962,686.69	0.04
Chemical product	28,649,641.19	840,216,741.80	3.41
Manufactured goods	67,980,967.71	415,513,931.77	16.36
Machiery, transport, other equipment	15,019,992.17	774,548,807.16	1.94

Source; Ministry of trade and industry

In 2005, there was an increase in the total value of imports from China and a further increase in 2006.China's share of imports of chemical products increased from about 7% in 2004 to 14.6% in 2005 and 16% in 2006. In the case of manufactured goods, there was a decrease from 34.4% in 2004, to about 28% in 2005 to 25% in 2006 (Tables 8, 9). Imports of crude materials from China increased significantly from 2005 to 2006, from a 1.68 percentage share in 2005 to a 15.82 percentage share in 2006. There was also a marked difference in the composition of top ten imports in 2005 where frozen parts of animals and fish, rock lobster, milk and cream, and butter took the top slots. This composition changed again in 2006, with imports of cement clinkers, bus and lorry tyres, tomato paste, wall tiles, woven fabrics, fishing nets, trunks and suitcases, footwear and flashlights and batteries accounting for the top ten commodities imported.

In the trade sector, the Chinese company's share of total investments has been consistently increasing over the past six years, from 4% in 2001 to almost 30% in 2005 and 25% in 2006. China has pursued unparalleled trade liberalization since 1978 and since then, China has gained a lot of benefits from its integration into the global trade system according to Sun and Heshmati (2010).

Table 6. China's % share of imports by commodity groups (2003)

Commodity groups	China($)	Total($)	China share%
Food and live animal	12,355,144.47	450,859,430.82	2.74
Beverages & tobacco	30,545.19	25,033,314.93	0.12
Crude materials except food/fuel	1,301,061.45	270,015,684.46	1.77
minerals	0.00	554,932,057.34	0.00
Animal/vegetable oil/fat/wax	827,405.23	41,210,402.29	2.01
Chemical products	16,376,167.19	306,639,149.65	5.34
Manufactured goods	112,332,558.91	592,053,355.24	18.7
Machinery, transport & other equipment	36,411,143.88	1,059,865,492.16	3.44

Source; Ministry of trade and industry

Table 7. China's % share of imports by commodity groups (2004)

Commodity groups	China($)	Total import trade ($)	China share %
Food & live animal	20,151,355.06	767,086,031.40	2.63
Beverages &tobacco	16,573.30	44,541,348.50	0.04
Crude materials except food/fuel	4,805,6.2178	269,061,301.46	1.79
minerals	0.00	625,725,048.57	0.00
Animal /vegetable oil/fat/wax	1,451,824.63	40,580,848.53	3.58
Chemical product	28,243,606.52	395,940,770.87	7.13
Manufactured goods	272,605,464.50	792,527,162.10	34.40
machinery, transport, other equipment	37,537,190.25	1,592,280,187.42	2.36

Source; Ministry of trade and industry

Table 8. China's % share of imports by commodity groups (2005)

Commodity groups	China($)	Total import trade($)	China share%
Food and live animal	22,860,071.57	848,231,562.07	2.70
Beverages and tobacco	26,488.91	51,726,650.00	0.05
Crude minerals except food/fuel	8,309,577.33	495,772,094.40	1.68
minerals	-	-	-
Animal/vegetable oil/fat/wax	1,484,558.63	54,258,178.00	2.74
Chemical product	58,592,172.50	401,280,784	14.60
Manufactured goods	237,033,215.72	851,644,511.96	27.83
Machinery, transport, other equipment	89,506,495.16	384,780.00	23.26

Source; Ministry of trade and industry

Table 9. China's % share of imports by commodity groups (2006)

Commodity groups	China($)	Total import($)	China share%
Food and animals	33,500,686.48	596,130,432.16	5.62
Beverages and tobacco	331,889.84	14,033,675.99	2.36
Crude materials except food/fuel	13,720,847.39	86,746,630.40	15.82
Minerals	0.00	23,941,018.09	0.00
Animal/vegetabl e oil/fat/wax	182,063.04	44,342,186.79	0.41
Chemical product	75,774,550.33	470,396,730.72	16.11
Manufactured goods	326,220,175.14	1,311,970,269.10	24.86
Machinery, transport, other equipment	53,084,916.79	1,077,686,558.92	4.93

Source; Ministry of trade and industry

3.2. Economic Growth

The link between International trade and Economic growth was studied by (Romer 1990, 1993) and Grossman and Helpman (1990). Romer (1993), in his advice to the LDC recommended the opening up to foreign investment with more advanced technology so as to register an increase in the rate of innovation and rate of growth of an economy. (Levine and Renelt, 1992) stated similar investment rates and economic growth relating to export and investment rate in their study.

3.3. Future Research

It will be very necessary to dive into Ghana and China's trade data on export and import in order to identify the trend of economic growth of the various sectors of the economy as a result of the international trade engagement with China and also estimate the level of trade diversion of both China and Ghana.

4. Conclusions

One would say China had had a long-standing aid relationship with Ghana dating back to the 1960s. However, Chinese aid is only a small percentage of the total development assistance. In most West African countries, such trade represents a significant share gross domestic product. West Africa's trade integration with China has accelerated over the last 6 years, and Chinese trade currently accounts for an inordinate share of West African trade flows. Trade with China has yielded higher export revenues as well as lowering prices for both consumer and capital goods. West Africa has been registering expanding trade deficit with China, partly because of consumer demands for relatively cheap Chinese products, and partly because of the import-content requirements that are frequently included in Chinese development assistance agreements. On the issue of import, Ghana's imports from China have increased consistently over the past few years, from \$96 million in 2000 to \$503 million in 2006, mirroring the overall increase in Ghana's total imports. This increase has been largely fuelled by a growth in manufactured goods imports and this observation has significant negative implications on the development of Ghana's industrial sector. On the other hand, the availability of cheap manufactured goods may increase overall welfare of Ghanaians, especially low-income consumers. There is the need for critical cost-benefit analysis to determine the overall effect and trade diversion.

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