

**An Analysis of South-South Relations:
Exploring the Influence of China on the Ghanaian Economy**

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Reference: Key Terms Explained*

Bilateral Trade Agreement: “Bilateral investment treaties (or, BITs) are international agreements establishing the terms and conditions for private investment by nationals and companies of one state in another state” (Cornell Law)

Foreign Direct Investment: “The International Monetary Fund (“IMF”) defines foreign direct investment (“FDI”) as a “cross-border investment” in which an investor that is “resident in one economy [has] control or a significant degree of influence on the management of an enterprise that is resident in another economy.” IMF, Balance of Payments and International Investment Position Manual 100 (6th ed. 2009). The direct investor’s managerial role distinguishes FDI, an active form of investment, from portfolio investment, a passive form” (Cornell Law)

Harmonized System Code: “The Harmonized Commodity Description and Coding System generally referred to as "Harmonized System" or simply "HS" is a multipurpose international product nomenclature developed by the World Customs Organization.

It comprises about 5,000 commodity groups; each identified by a six-digit code, arranged in a legal and logical structure and is supported by well-defined rules to achieve uniform classification”

The system is used by more than 200 countries and economies as a basis for their Customs tariffs and for the collection of international trade statistics. Over 98 % of the merchandise in international trade is classified in terms of the HS” (World Customs Organization).

Neocolonialism: “the economic and political policies by which a great power indirectly maintains or extends its influence over other areas or people” (Webster Dictionary).

Tranche: “a division or portion of a pool or whole; specifically: an issue of bonds derived from a pooling of like obligations (such as securitized mortgage debt) that is differentiated from other issues especially by maturity or rate of return” (Webster Dictionary). In this paper it is used to describe a pool of a loan. Tranches can be taken separately and at different times.

London Interbank Offered Rate (LIBOR)- “LIBOR or ICE LIBOR (previously BBA LIBOR)

is a benchmark rate that some of the world's leading banks charge each other for short-term loans. It stands for Intercontinental Exchange London Interbank Offered Rate and serves as the first step to calculating interest rates on various loans throughout the world. LIBOR is administered by the ICE Benchmark Administration (IBA), and is based on five currencies: U.S. dollar (USD), Euro (EUR), pound sterling (GBP), Japanese yen (JPY) and Swiss franc (CHF), and serves seven different maturities: overnight, one week, and 1, 2, 3, 6 and 12 months. There are a total of 35 different LIBOR rates each business day. The most commonly quoted rate is the three-month U.S. dollar rate" (Rodriguez 2015).

Commercial Interest Reference Rate (CIRR)- "A set of currency-specific interest rates for major OECD countries. CIRRs have been established for 15 currencies, the majority of which are based on three-, five- and seven-year bond yields, plus a margin, according to the length of the repayment period. They are adjusted monthly. In particular, CIRRs represent the minimum interest rates that shall apply to official financing support under the Arrangement on Officially Supported Export Credits and its Sector Understandings" (OECD).

Introduction

This paper examines South-South trade relations; specifically exploring Ghana and its relations with China. Trade agreements between Global South countries formerly comprised very little of all trade agreements, consisting of around 20% in 1970, but as of 2010 South-South agreements encompass around 65% of all preferential trade agreements, a sign of a shift in global commerce (WTO 2011, 55-56). South-South agreements in Africa are viewed as an effective way to promote business and create infrastructure in order to overcome some of the major impediments for effective business. China especially has seen a sizeable surge in trade exports to Africa, but China is not only involved with Africa through trade. The country is also increasing its FDI (Financial Direct Investment)* to the continent and is offering loans through their export-import bank. Many African leaders see the relationship as beneficial, but some question the intentions of the Chinese government and the effects that Chinese goods are having on African economies. As of 2013 China composed a major percentage of countries' imports including 22% in Nigeria, 11% in Cote d'Ivoire, 11%, in Togo, 14% in Democratic Republic of the Congo, and 15% in South Africa as of 2013 (OEC). Because of this rise, there have been objections to China's involvement in Africa, such as the idea that China is flooding the African continent with cheap goods thus destroying African industry. The argument is prevalent in Ghana where Chinese exports have increased more than 10 fold since 2000. Ghana is one of the leaders of West Africa politically and economically, and it is becoming involved with China in multiple ways. Ghana is not only entangled with the Chinese through trade and FDI, but Ghana also recently received an infrastructure for resource right loans from the Chinese valued at \$1.5 billion. Ghana has been framing the relationship as win-win, but many are concerned that China is establishing a neocolonial* relationship. The relationship is concerning considering the geo-

political significance of Ghana as the first Sub-Saharan African nation to gain its independence and as an economic leader of the region. Because of Ghana's involvement with China in a myriad of ways and its significance it can serve as a barometer for the region as a whole in order to ascertain important questions about the influence of China on West Africa

Research Questions

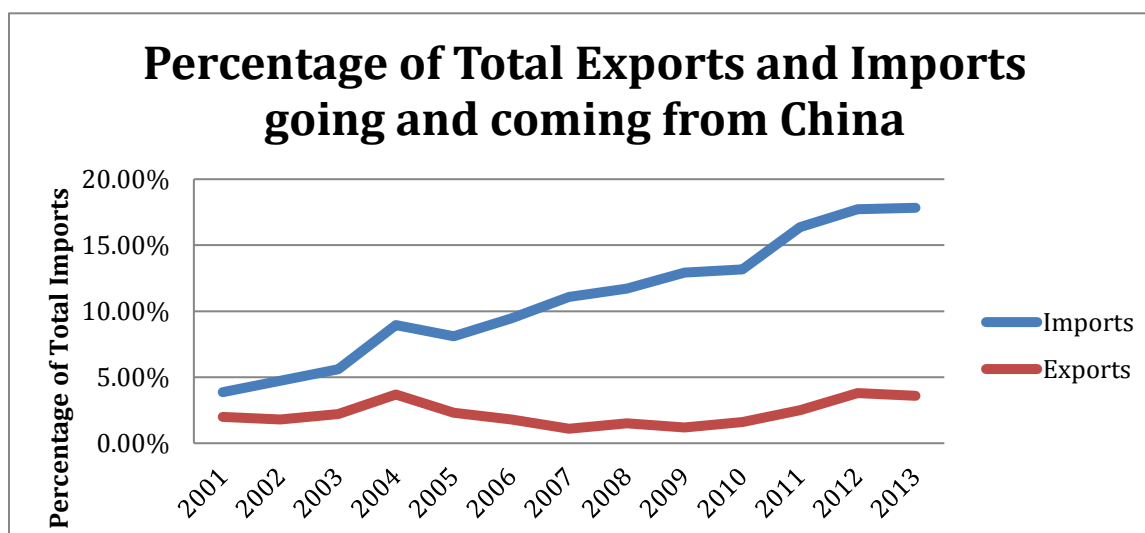
Is China creating neocolonial ties in Ghana? In order to answer this question, this paper will focus on the idea that neocolonialism occurs through inequitable deals, the control of the foreign economies, and political control. The questions posed by this paper are as follows: Are infrastructure deals cost effective, are Chinese goods destroying Ghanaian exports, and is China influencing Ghana politically? This paper will explore these questions by examining imports and exports, the effect of Financial Direct Investment, Bilateral Investment Treaties*, UN Voting Records, and infrastructure for resource agreements to assess the argument that Chinese development in Ghana should not been seen as progress, but rather neocolonial practices.

My findings refute this idea and reveal that while loans are not always equitable, they are filling a major hole in the Ghanaian economy. If loans are taken out overtime and paid back responsibly, they should bolster the struggling infrastructure of the country. Along the same line, this paper did not find a further aligning of Chinese and Ghanaian decisions and did not find sufficient results to show that Chinese industry was causing Ghanaian industry to decline.

History of Ghanaian Relations with China

Ghana was the first African countries to sign a bilateral trade agreement with the Chinese in the 1980s. During this time of improved Chinese openness, Ghana was the only African state of the 30 countries that signed a Bilateral Investment Treaty (BIT) with China (Kidane 2016). This is significant because it was a South-South interaction that involved two countries of

different regions that were seen as potential powers for their continents. While there has been an increase in overall South-South cooperation, there is no denying that the rise of China has had a significant impact on this proliferation. The rise of cooperation can be seen through a major increase in the percentage of imports from China to Ghana. In 2001, China comprised less than 5% of Ghanaian imports and has now risen to around 17-23% in 2013 (United Nations Commission on International Trade Law, 1970-2015). Trade is not always reciprocated as Ghanaian exports to China have stayed below 5% of Ghana's total exports singling a large trade imbalance (OEC). Trade is extremely important in the Ghanaian case, as trade as a percent of GDP was 99% in 2015 only surpassed by Togo and Liberia in the region (World Bank). China is increasingly having an impact on developing nations. Some experts have argued that this is a natural progression for China as it becomes more integrated into the world economy and will assist in spurring global growth, while others worry about the effect that such a large producer will have on the developing world.



The idea that China is having a negative effect on developing world is not new. When a

country has such a meteoric rise to become the second largest exporter of goods in a relatively rapid time span there is going to be an impact on the world economy, and China has argued that the impact on the world and especially the Global South is extremely positive. China has fashioned itself as a champion of the Global South and a provider of mutual growth as it contrasts itself to the others powers of the world that have histories of colonialism. Contrastingly the West has advocated that China is negative for the Global South, but it is difficult to realize whether this is political posturing or if Western leaders truly believe China is detrimental to the development of the African continent.

In 2011 then Secretary of State Hillary Clinton implied that China was participating in a new colonialism in Africa, which focused on extracting resources while not participating in effective development practices (Zhou 2014, 1033). This is a sentiment that many scholars support. Giorgia Giovannetti and Sanfilippo argue that China is having a negative impact on African states by crowding them out of international markets. They frame this idea in the context of a zero-sum game, which can be seen when quoting Morris's proposal that, China's growth "will likely to be at the cost of other clothing producers in the developing world" (Giorgia and Sanfilippo 2009, 6). Their conclusion was that there was a negative effect on the exports of African states. They surmised that if Africa and China compete in a sector and China gains that there would be a proportional decrease for African states in that same sector (Giorgia and Sanfilippo 2009, 19). Furthermore they stated that the industries to be affected were textiles, clothing, machinery, and equipment.

Not all analysts support this view. There has been a pushback from some scholars saying that there is no neocolonialism occurring and China is a positive force for the country. Famed economist and writer Damibisa Moyo wrote that the intentions of China were "quite pure" and

that according to pew research Africans see Chinese growth as “beneficial” (NY Times 2012). She ends her column by stating that the real issue is international aid flows, which she has long been proponent of abolishing. Others state that the idea of Chinese goods destroying African markets is unfounded. Nigeria’s President was quoted saying, “This is the century for China to lead the world. And when you are leading the world, we want to be very close behind you” (Zhou, 1038-1039). Some African leaders carry the belief they are forming a mutual coalition with China. This idea follows the sentiment that Global-South relations are inherently less exploitative because there is no history of colonization. Furthermore, there seems to be a feeling that the West uses this kind of propaganda to sully China’s relations. Senegal’s President stated it simply when he was said “today, it is very clear that Europe is close to losing the battle of competition in Africa” (Zhou 2014, 1038). For Africa, it is imperative to choose the best development partner and many leaders believe China is the best option.

China has long been seen as a violator of human rights, but some argue that this allegation is overstated. Some scholars argue that the West is also involved in human rights issues and China is no worse. Asongu and Aminkeng contend that the China is bad for Africa argument is a myth and that there is no substantial evidence to back these ideas up (Asongu and Aminkeng 2013, 261-263). They argue China is mutually beneficial for Africa in the short term, but that Africa needs to look at serious interventionist ideas in the long term (Asongu and Aminkeng 2013,263). Asongu and Aminkeng also argue that China respects workers as much as other western countries and are not violating human rights any more than Western countries and that the burden of protection should come upon the African countries (Asongu and Aminkeng 2013, 270). Ofodile supports the sentiment that the African nations must be responsible for their workers. Ofodile contextualize this argument with the idea of the “race to the bottom” where

corporations lower standards in order to become more competitive on the international stage (Ofodile 2013, 200). The race to the bottom phenomenon is an issue across in the developed and developing world as the neoliberal model searches for the cheapest labor, which often leads to a degradation of labor rights. The only real way to combat this phenomenon is to create laws and enforce laws that protect the workers in the country.

While there have been abuses and questions of the ethical nature around Western companies such as BP, there are examples of Chinese companies with major labor violations. For example in Zambia, the government had to ask a Zambian-Chinese company to stop locking its worker in the factory at night (Zhou 2014, 1045). In 2006, there were also riots at a copper mine in Zambia that led to Chinese workers firing upon and injuring workers. The idea that China is as fair to workers as Western countries is difficult to quantify because many abuses go unseen, such as the Ken Saro-Wiwa scandal in Nigeria. African states need to protect their workers not only with laws, but also the enforcement of the established laws.

Another aspect of Chinese policy that differs from the West is the country's willingness to work with nations that are not seen as viable to the Western World. One example of this is China's involvement with Sudan during the conflict in Darfur. China bought large amounts of Sudanese oil as well as supplied the country with arms (Zhou 2014, 1040). From the Western perspective this was seen as enabling human right abuses, but the alternative argument is that China is in Africa for business and that is all. This narrative is placed in a neoliberal context where business is an idealistic notion that improves the lives of many and therefore it is permissible to turn a blind eye to the issues of the country. The country's laissez-faire posture is troubling, but the majority of the issues are not as obvious as the conflict in Sudan. Many times the Chinese are stepping into a country that is unstable or has questionable economic strategies

that the United States is unwilling to cooperate with. The crux of the argument for Chinese involvement is that they are a good alternative to the conditionalities of the west. Asongu and Aminkeng describe the relationship as “promising,” but this might be an overstatement. A better way to describe their sentiment would be that they might not be as bad as Western intervention.

The authors of pro-China scholarship often focus on China as an alternative to the West, but in reality China should be treated as a completely different force. The question is whether China is assisting in African development, not is China better for Africa than the United States. It is almost a nihilistic relativism that leads to the argument that it is permissible for a country to enact some level of exploitation because other countries exploit on higher levels. This sort of rhetoric is one of the reasons that Africa is in its current position. Zuma stated in regards to China involvement: “Africa’s past economic experience with Europe dictates a need to be cautious when entering into partnerships with other economies” (Zhou 2014, 1033). Also in a neoliberal world, scholars should not be asking the intentions of the country, but rather their effect. The idea that business is a pure force and is mutually beneficial is a false narrative. It can be true, but because China is business friendly it does not mean that it is beneficial. As all of the scholarship has said, more research is needed to predict the long-term effects of these relations.

China is known for having a history of corruption in Africa. While it might be exaggerated, China has not shied away from controversial statements. One of the leaders of the Chinese Banks recently stated that “transparency and good governance are good terminologies, but achieving them is not a precondition of development; it is rather the result of it” (Zhou 2014, 1042). China seems to be arguing that there is t a trickle-down effect from development to corruption. Corruption has long been problematic for western countries. It seems that if one does not indulge in corruption business can fail. It is important not to paint African countries with a

wide brush when discussing corruption. Namibia stood up to the Chinese government by indicting them on corruption charges (Zhou 2014, 1042). Furthermore, workers in Zambia protested against the Chinese calling them “invaders not investors” (Zhou 2014, 1044). The relationship between China and Africa is complicated, but it does seem that Chinese investment gives China some leeway to circumvent the law, but there are promising actions displaying that African countries may be bucking this trend.

Some argue that China is moving to a period where they are more sensitive to the local communities because of the financial effect that bad press can have on investments. This can be seen in Ghana where there is a focus on hiring local. There are instances of Chinese philanthropy such as the Chinese donating \$700,000 to a university in South Sudan (Zhou 2014, 1047). African countries must force Chinese businesses to be responsible and ethical in their acts. This is best done with an effective press and government that are willing to take action against governments. While governments may be afraid to expose Chinese businesses because of their financial leverage, it is important for countries to follow the lead of Namibia and take action against these enterprises. Chinese businesses and government must be held accountable for the most effective growth to occur.

While many politicians have made it seem that China is enacting a large-scale neocolonial venture into Africa, others argue that the approach is more haphazard. Zhou argues that China is functioning in an ad-hoc manner, correcting the country’s mishaps as they go along. It might be naïve to believe China does not possess an overall plan, but it is fair to say that their venture into Africa has softened its tone in recent years. China does not value policy and human rights as significantly as the West, but China is aware that labor rights violations produce bad press and subsequently can lead to bad business. The question whether China is bad for Africa is

a challenging to answer and must be accomplished on a case-to-case basis. One of the reasons for this is the recent change China has made in their investments, which seem to do a better job of supporting of human rights.

China's BIT with Africa

The first BIT (Bilateral Investment Treaty) with Africa was signed in 1989, but since then China has invested heavily in the continent raising the number to 31 as of 2010, and now has trade or economic agreements with 45 African states (Ofodile 2013, 133-158). Ofodile argues that the major pillars of Chinese-Afro BITs are “a broad asset based definition of investments; absolute standards of treatment clauses; relative standards of clauses; protection against expropriation; protection against wars, riots, and related civil disturbances; State-State dispute settlement as well as Investor- State dispute settlement procedures; subrogation clauses; and clauses guaranteeing the right of investors to freely transfer funds” (Ofodile 2013, 159-160.) Scholars also note in the lack of mention of human rights, labor rights or environmental regulation in these agreements (Ofodile 2013, 160).

China differs from Western BITs in a few ways. Afro-China BITs focus on investment protection rather than investment liberalization, which is a major tenet of Western BITs. Under the majority of Afro-China BITs, African countries retain the right to control the industries where Chinese investment is found (Ofodile 2013, 177). Ofodile has issue with this broad definition of investment. Ofodile states that it is troublesome that there is not protection against land being acquired for non-business activities and commercial goods being produced by Chinese nationals in the African country only for sale to other nationals in a different country (Ofodile 2013, 182). These are common in other BITs, but this lack of protection can conceivably lead to land grabbing and creation of industry that does not promote development of

the African country. The purpose of these agreements is to have mutual growth, but the vagueness of investment leads to loopholes that have the potential to exploit African nations. Ofodile states that these agreements carry many of the same aspects of Afro-North Agreements including the “standard guarantees,” pay little attention to countries right to development and changing circumstances, and do not have “provisions providing for “special and differential treatment” (Ofodile 2013, 178).

Criticism of BIT

Some scholars argue that the lack of flexibility in BITs is concerning because it does not allow the state to alter agreements in order to follow development policy. Ofodile agrees with the idea that flexibility is needed, but says flexibility can be extrapolated from the adjustment clause (Ofodile 2013, 179). The admission clause is found in article 2 of the Ghana-China BIT and states that investment must be “in accordance with its laws and regulations” (Ofodile 2013, 164). This means that legislation can be created ad-hoc to control investments. There is no reason Ghana cannot create laws that curb the FDI that is coming into the country through legislation, but at the same time there is a Most-Favored-Nations Clause that protects against discrimination against the country. There cannot be laws that favor other countries over each other in the agreement, so if there were to be regulations they would have to be across all sectors (Ofodile 2013, 168). This clause can be troublesome as seen in the case of *Maffezini v. the Kingdom of Spain* regarding the BIT between Argentina and Spain. Maffezini was able to use the Most-Favored Nation clause to enact portions of the Chile-Spain BIT to gain more auspicious FDI terms (Ofodile 2013, 184). While the admission clause protects the country’s sectors, the Most-Favored Nation clause enables other countries cannot be involved in a sector if the Chinese are not, thus limiting development options.

While the Most-Favored Nation clause can be troublesome, the admission clause limits Chinese companies that do not have establishment rights and can be regulated by the country. This is related to the idea that treaties have protection of investment, but do not have the same full-liberalized ideas that are present in many United States BITs. There is a question to why the countries in Africa did not call for more protection and flexibility in these agreements. The admission clause is as strong as explicit laws and articles and should be used as such. While a preamble is not law as of the Vienna Convention on the Law of Treaties they do create a strong or weak tone for the treaty. One of the portions that are not as strong is the labor rights section. As a report from the African Labour Research Network revealed, there is a common trend of Chinese employers violating worker rights which they state has led to deaths in Kenya and Nigeria (Baah and Jauch 2009, 13). In order to protect workers there should be more explicit language that is found in other BITs between nations of great economic power and countries of lower GDP. As discussed earlier, the race to the bottom phenomenon is proving problematic for developing countries and thus a preponderance of the regulations are not being enforced. Ofodile attributes the lack of protection measures to “lack of negotiation capacity, disparities in bargaining power, lack of appreciation of the legal implications of BITs” to name a few (2013, 180).

Afro-China agreements are beneficial in the that they do not require states to fully liberalize and the admission clause gives flexibility to the state, but at the same time these agreements have no language of economic development, have a broad definition of asset based investment, and vague phrasing of promotion and expropriation. The African BITs are full of ambiguous language that is difficult to determine the true nature of. The ideas of “full and complete protection and security,” “non-discrimination,” “fair and equitable treatment,” and

“unreasonableness” makes it difficult to determine the effect and true meaning behind the idea of promotion. The language is profuse enough to have scholars question whether these terms could be used against the African state in arbitration (Ofodile 2013, 183). The same can be seen in the terms of expropriation. In the case of *Biwater Gauff Ltd. v. United Republic of Tanzania*, which is an intertwining of the privatization push by the World Bank and the push back by African states, these issues with expropriation are evident. It is often seen that developing nations are complicit with neoliberal privation of water hikes with the best example being the Cochabamba Water War in Bolivia. In 2003, Tanzania received a \$140 million loan from the World Bank and other international banks to build water infrastructure in Dar es Salaam. The Tanzanian government came to an agreement where City Water (owned by Biwater Gauff) would receive rights to run the sewage treatment for 10 years where it would collect an operator tariff as well as other fees while paying rental fees to Dar es Salaam Water and Sewerage Authority (Bjorklund, 2008). Biwater Gauff underestimated the difficulties of infrastructure, billing, push back from the people, and competition from illegal sources, so they attempted to raise the operational tariff, which Tanzania saw as unwarranted. Tanzania attempted to take back facilities after repudiating the contract (Bjorklund, 2008). Consequently, Biwater decided to claim damages between \$19-20 million. The court decided in favor of Biwater using the broad definition of investment and expropriation in the case saying the seizure of facilities was illegal (Ofodile 2013, 183) (Bjorklund, 2008). It was determined that the monetary loss was due to mismanagement before the actual injury occurred, so there was no monetary loss and therefore no award. While Tanzania lost no funds in the incident, the case does show that Tanzania was in violation of treaties and that these broad definitions set in BITs can in fact have adverse effects. As seen in this example, these treaties are important, and the vague and broad use can be used against a host

country attempting to protect its people from unreasonable measures.

When addressing the question are BITs good for Africa and specifically Ghana, a straightforward answer is difficult to find. It is difficult to make the assertion Afro-Chinese BITs are unfair to African countries. They are not overly restricting and give the Global South control in their economy. At the same time it can be said that these agreements are not overly beneficial or particularly protect the industries of the Global South. A good amount of the success of the agreement depends on how they are used. Use of the admission clause or the expansionary nature of some of the vague terms could shift the equity of the agreement especially in arbitration. Ofodile states that while the BITs have different characteristics than the North-South agreements they share the same goals, which are “coverage of investment issues, and development dimension” (Ofodile 2013, 206). Kidane on the other hand states that while they do share some characteristics it is difficult to assert that China is attempting to follow the same path as the North (2016, 176). At the same time Ofodile rejects the idea that these treaties are providing something better through South-South cooperation (2013, 206). The notion that China is providing a more equitable economic partner is not seen in the treaties, as there are not any overwhelming concessions that display China has a more benevolent ideal than any Western state. What both scholars can agree on is that these agreements are not doing enough to pull in FDI and need to be renegotiated as Africa still has the lowest FDI of any continent. Kidane goes as far to say that these agreements are “sporadic, outdated, uninformed by recent developments, incoherent, and even purposeless” (2016, 176). While I agree with Kidane in the respect that China does not realize that it is a superpower and has failed to use its financial power in treaties, it is important not to dismiss these treaties as benign. These agreements do hold legal power and create ties between countries. As can be seen in the Tanzanian case, vague language in treaties

can be used to bar countries from providing basic resources from their people at affordable prices. BITs do not show any pattern of neocolonialism, but they do beg the questions if the countries are able to protect their markets through such acts as the admission clause why are they not protecting their industries?

The Effect of FDI on African States

While considering the role of BITs, it is also important to study the effect of the FDI in country. Many economists state that FDI spurs growth through “finance saving gaps, introduce superior, cutting-edge technology and managerial skills which ultimately impact positively on the recipient economy.” (Sakyi, Commodore, and Opoku, 2015, 8). While OECD (Organization for Economic Co-operation and Development) countries experience significant positive impacts from FDI, the effect on African states is debatable. First African states receive far less FDI than OECD countries. OECD countries received 87% of the world’s FDI, while African states only received around 2%, which was the lowest of any region in the world (Wilson and Cacho 2007, 6-8). Lack of FDI and trade openness is seen as two of the major inhibitors keeping African economies from growth. While there are some reports that show this, I will argue that it is more about FDI management and that trade openness should be followed once there are viable industries. This argument strengthens the idea that BITs are important and the strategic uses of BITs are important for job creation in the region.

Ghana has recently been receiving more and more FDI. In the mid 2000s, FDI flows were under \$500,000 million, but as of 2015 this number was over \$3 billion (World Bank). Furthermore, FDI was 8% of GDP in 2015, which is a substantial increase from the 1-4% that was seen in the 1990s. The effects of this FDI are debated. The relationship between the recent high levels of imports that have been coming into the country has economist speculating if the

dual effect of foreign goods and foreign money will have a beneficial effect on the Ghanaian economy. According to Sakyi, Commodore, and Opoku, FDI and exports in Ghana complement each other in stimulating long term growth, which suggests that there are high levels of “integration of trade into FDI initiatives.”(Sakyi, Commodore, and Opoku 2015, 9). This leads Sakyi, Commodore, and Opoku to assert that Ghana should focus on comparative advantage industries and push for the basic neoliberal ideals of trade liberalization and FDI driving growth (2015, 5,10). Trade openness leads to increases in foreign capital investment and export related industries are strengthened leading to increased growth. Sakyi, Commodore, and Opoku came to this conclusion by finding that “an increase in FDI inflows triggers positive GDP growth in the long-run” (2015, 7). Trade openness and FDI’s relation to GDP growth are most prominent in their model when exports were used as a proxy for trade openness. Sakyi, Commodore, and Opoku debate that their findings show that FDI is creating high paying jobs. While there is a large increase in exports, which has had a great effect on GDP, the major exports of Ghana are raw resources. If Ghana is attempting to industrialize and leave the resource-exporting model, this assertion of trade openness is not as strong because the exports that are being used as a proxy are mostly oil, cocoa, and gold. The World Bank reports that there has been growth in employment, but this has been mostly in the informal sector (World Bank 2011, 4). This is not to say that there has not been growth in the formal sector, but the growth has been not been proportional to the growth in the informal sector (World Bank 2011, 5). Others have found that FDI has only had a positive effect for certain segments of the population because of its focus on the mining sector (Frimpong and Oteng-Abayie 2006, 16). Frimpong and Oteng-Abayie state that trade openness and FDI are increasing the wealth of the nation, but these gains have been highly unequal. In a UNICEF report on Ghanaian Inequality, it was cited that the Gini coefficient

has risen from 37 to 41 percent over the past few years (UNICEF 2016, 1). FDI can be a driver of growth, but in the Ghanaian case trade openness does not equal exports. Instead it displays an increase in mineral resources.

Table 1. FDI and Trade Performance (1970–2011).

Period	FDI (\$mil)	FDI (% GDP)	Trade (\$mil)	Trade (% GDP)	Exports (\$mil)	Exports (% GDP)	Imports (\$mil)	Imports (% GDP)
1970-74	27.71	0.63	5553.09	79.02	2229.59	31.77	3323.49	47.24
1975-79	15.75	0.37	4448.25	65.60	1608.79	23.77	2839.46	41.84
1980-84	10.51	0.25	2756.72	41.67	988.01	15.01	1768.71	26.66
1985-89	6.92	0.14	3092.95	40.30	1178.90	15.30	1914.05	25.00
1990-94	83.06	1.31	4526.36	47.22	1831.31	19.11	2695.05	28.11
1995-99	143.88	1.91	7257.72	61.55	3056.16	26.03	4201.56	35.51
2000-04	102.48	1.11	10940.46	75.60	4652.95	32.25	6287.52	43.35
2005-09	1120.05	8.61	14635.65	74.92	6017.42	30.69	8618.23	44.23
2010-11	2874.80	18.00	25269.90	100.15	10886.22	43.25	14383.68	56.90

Note: Computed with data from the UNCTAD and United Nations Statistics.

Table from Sakyi, Commodore, and Opoku, 2

This argument can be seen in the above graph, which Sakyi, Commodore, and Opoku use to argue that GDP is tied to trade openness and FDI. The main problem with the graph is the way it displays time. It shows low FDI in 2000-2004 and then an increase in FDI in 2005-09, but a decrease in exports as a percent of GDP. Then in 2010-11, there is a massive increase of FDI leading to exports as a part of GDP to rise by over 10%. The issue is this is the same year that Ghana discovered oil and increased gold production at the same time. The graph does not prove that FDI is increasing manufacturing but does show that FDI follows resources and can follow those resources quickly. The issue is that FDI can be fickle and leave very quickly when resources are not in demand (Wilson and Cacho 2007, 33). The table shows the volatility of FDI rather than its ability to produce growth. The volatility is even more concerning when it is considered that as of 2002 developing nations' FDI was around 33% of their GDP, while developed nations were much lower at 19%. The reliance of FDI is problematic and must be structured to ensure growth.

Wilson and Cacho have a more tempered view of the relationship between trade liberalization and growth. In their research they have found that while trade liberalization does produce growth, FDI must be invested strategically and trade openness does not assist in improving the “geographical and sectorial distribution of FDI” but must be supported by policies within and between nations (2007, 6). Enu, Havi, and Hagan also found that FDI must be channeled into productive areas of the economy such as agriculture, education, and health (2013, 189). Many economists agree that FDI can produce long-term growth for a country when invested into the appropriate industries. Ghana must ensure that their FDI is channeled into long-term industry. This is why BITs are important as they give countries the ability to strategically focus on certain industries. BITs can be enforced to protect industry while also strategically using the flows from FDI.

It is also important to consider the type of FDI that is entering a country. Greenfield FDI involves the building of a new business, while Brownfield is the acquisition of an established company. Greenfield is more apt to produce growth for the country, while brownfield offers very little technology transfer and other spill over effects. For reference, Ghana had \$15 billion mergers and transitions (Brownfield FDI) from 2004 to 2016 (Goodman 2017, 4). Between 2004-2014 Ghana brought in around 16.5 billion in FDI (World Bank). Depending on the final figures for 2015 and 2016 one can estimate that brownfield investments comprise a high amount of FDI, figuring to be well above 70%. This high level of brownfield investment is problematic and does not point to FDI that is going to produce substantial growth.

Another way BITs are related to trade and FDI is the idea that the enforcement of BIT law produces a decrease in the amount of FDI that a country will receive. Barrell and Pain found that the number of anti-dumping cases affect the decision to invest in a country. Sibanda also

stated that anti-dumping and anti-competition measures had clearly had an impact on the inflow of FDI (133). This observation provides a disincentive for Ghana to impose anti-dumping laws even though they might have the power to do so. For this reason the entanglement with China becomes more tenuous. China has been increasing their investment to Ghana in the last few years as can be seen in the table below, but it is unclear whether this increase is having an effect on Ghana pursuing anti-dumping measures. If China is crowding out Ghanaian industry, Ghana will be less likely for Ghana to act because of its entanglements in Chinese FDI.

Table 2.1 Total investment, China to Ghana (2001 -2006)

Year	Investment from China (\$ Million)	Total Investment (\$ Million)	China share as a % of the total investment
2001	6.93	97.31	7.12
2002	3.13	65.13	4.8
2003	2.17	118.31	1.84
2004	3.09	186.28	1.66
2005	17.87	201.95	8.85

Source: Ghana Investment Promotion Council

\$3 Billion Trade Deal

China has started to become involved in more loans to the Ghanaian government. In 2011 Ghana took out its largest loan at \$3 billion from the China Development Bank (CDB), which is owned by the Chinese state. It was to be taken in two tranches* valued at 1.5 billion each. The first tranche is at a rate of 2.95% per annum plus LIBOR* over 15 years with a 5-year grace period and the second is 2.85% per annum plus LIBOR over 10 years with a 3-year grace period. There is also an “originator” fee or upfront fee as it is called in the document of .25% which .125% of must be paid in the first 20 days (Ministry for Finance & Economic Planning 2011, 2). The focus of the loan will be infrastructure projects the first being the Western Corridor Gas Infrastructure Project with access roads and bridges upgrades and ICT enabled Surveillance

Project. The Ministry of Finance names 12 potential projects that could be included in this agreement and would be finalized in a subsidiary agreement. These projects include railways, toll roads, and irrigation projects. The payment for this project will be financed through the sale of oil. The oil is coming from the Jubilee fields, which produces around 80,000 barrels a day and 13,000 is claimed by Ghana. The payment will be sent to UNIPPEC (China International United Petroleum & Chemicals Co., Ltd.) (Vibe Ghana). The number of barrels is estimated to be around 5 cargo ships a year (Modern Ghana). The loan has been divisive with some members of parliament stating that it is funds needed to bolster the economy, while others stating that China is robbing the country.

Oppositions in parliament have argued that the loan will end up costing the country over \$5 billion in interest (Newsweek Africa). This speculation is based on the fact that the interest on the loan is 2.95% for the first tranche plus the LIBOR. The LIBOR at the time when the bill was being discussed was around .2%, but since has risen to around 1.5% as of 2017 (Beard, 4). Their calculations predict a high LIBOR rate and while it is not out of the question (it was 5% in 2007 and was 10% in the late 80s), it would need to take a large jump. A quick calculation holding the interest at 5% constant and using both grace periods assuming interest accrues during these periods comes to around 4 billion, which is sizable, but to reach the number he assumes one would have to go back to the 7% rate that was occurring in 2000. This is not out of the question, but rates were well under 1% when this deal was agreed to, and if Ghana does not use the grace period the loan will be paid well below the \$5 billion number. There are many variables to a loan service like this that can backfire such as oil prices and the LIBOR rate. The loan in this way poses many risks and is subject to the international finance markets.

Ghana has declined to take the second tranche \$1.5 billion of the \$3 billion deal

(Business news). It is not completely revealed why this occurred, but some have discussed that the issue was that China sought to pay \$85 per barrel when the asking price was around \$100 which would have resulted in around \$18 billion loss in revenue (Adam, 2014, 7). This \$85 number has been a number of disputes. The minister of finance, Seth Terkper, denied that this number was true (Newtime Africa). Terkper instead said that the number is not pegged at all and rather that oil prices are too volatile to have a set price and stated “off-taker agreement calls for the use of average prices that will be adjusted periodically” (Newtime Africa). The minority in parliament has not stated a number that oil is being sold at, but has stated that Ghana will be giving away \$750 million in oil for the loans. It is difficult to determine the set price that has been chosen for the first tranche and that price is a large determinant of the effectiveness of the loan. Ghana should be giving away some amount of their oil for the loan as they attempt to exchange their resources for real infrastructure. There has to be some give and take, but one must differentiate between compromise and an unbalanced deal. For example, Russia has made similar deals and charges \$3 below market price to the Chinese (Beard, 6). If this was the case in the Ghanaian example it would seem that the loan was much more attractive.

There are also concerns over who is building these projects. The infrastructure ventures will be using Chinese workers rather than Ghanaian companies (Newtime Africa). The contract stipulates that 60% of the loan must be used on contracts that involve Chinese firms (Beard, 7). This outsourcing clause is a major issue. While Chinese industry might be more efficient, Ghana is not investing in their domestic construction companies. If their major infrastructure projects continue to follow this model, then this is a serious loss to the construction companies and to Ghanaian employment. This is not to say that this also doesn't occur with some World Bank loans that often have transparency clauses included to ensure that the lowest bid for a project

wins, but it is difficult for domestic construction companies to build the resources to compete for these contracts when they are not even afforded their own country's projects (Beard, 7). The Chinese are not only being provided access to resources, but they are also being provided access to Ghanaian markets. Furthermore, Beard, who cites studies that support the idea that there is very little transfer of skills and technology between Chinese and Ghanaian workers, weakens the Chinese case.

There are also reports that there been corruption in the negotiations and this is the reason for the speed of the dealings. Gabby Asare Otchere Darko, who was the Executive Director of the Danquah Institute, argued that there were \$30 million in arrangement fees, but this claim was dismissed by members of parliament (My Joy Online). Seth Tekper has stated that the agreement was solely between the Ghanaian government and the CDB did not need any extra facilitator fees. He also cites that there is administration charges already included in the document in the form of the upfront fee. There are often of claims of corrupt dealings, and it is often too difficult to make sense of the validity of these statements because they can be so politically charged.

While there are obvious issues with the contract, one must also consider the advantages. Because the loan is going through the CDB, Ghana can avoid many of the conditions and red tape that is associated with World Bank loans. The contract also was expedited for a serious need in the Ghanaian economy. Beard found that the Ghanaian government had been in contact with the World Bank, but during their negotiations China stepped in with an offer. On paper all of these conditions look very promising, but the success of the contract rest on the variable factors. For one, if the loan is paid back without use of the grace period the government saves, Ghana millions in interest. Second, if LIBOR stays relatively low it greatly changes the amount of interest paid. Finally the most important variable is how much under market price the Chinese

are paying for this oil. It is not disclosed, but is a major factor when estimating the true cost of the loan. Without this number estimates can have a very large range.

The Bui Dam

The Bui Dam was a project that many countries attempted to negotiate to build over a 50-year period, but because of changing government regulations no foreign state agreed to the project until the mid 2000s when the Chinese became involved (Hensengerth 2013, 286). For this reason, there have been many European countries involved in the project. Even though China was providing a \$662 million loan through the China Export Import Bank and the Chinese Sinohydro was the construction company, other European countries wrote and designed the dam plans (Hensengerth 2013, 293). One of the reasons for this use of European firms was because the project had been in the development process for so long that the Ghanaian government already had relationships with companies who had done work on the planning of the dam. For example, in the 1990s the French company Coyne et Bellier did a feasibility report on the area around the dam (Hensengerth 2013, 291). Ghana similarly used a UK based firm who did the Environmental Social Impact Assessment for the project. This international use of information and firms shapes this project very differently from other projects where China has complete control over the development and implementation. This strategy produced a project that was more in line with international standards of environmentalism and hedged risk.

The reason for the building of the dam was to support Ghana's struggling energy infrastructure and was built to be the third largest in the country after the Akosombo and Kpong dams (Hensengerth 2010, 230). The Ghanaian government is attempting to remedy this problem by adding three other hydroelectric projects as well as improving the dams that are currently providing power. The Ghanaian government has more goals than just improving the power grid

though. The government is also attempting to strengthen trade ties with the Chinese. One of the reasons cited by Hensengerth for Ghana engaging is that they also want to increase their cocoa exports to China. This motive is evident when one sees that the terms of the loan include Ghana selling their cocoa to pay off the loan. For this to occur the Chinese have committed to buying 30,000 tons of cocoa at market price until the dam is completed (Hensengerth 2013, 295). For reference as of April 14, 2017 that is around \$580,000,000 worth of cocoa. This differs from the \$3 billion deal because coco is being bought at market price rather than for a discount. The revenue from the cocoa goes straight to the China Exim Bank. The idea is that China will become reliant on Ghanaian Cocoa and will continue to buy from Ghana even after the terms of the loan, but when one looks at the terms of the loan it is a steep cost to pay. There is a major flaw in this thinking because of the threat of climate change. It is difficult to predict the effect that climate change will have on the region, but Ghana has already seen years where climate change significantly affected their yields. In 2003, Ghanaians cocoa production went down from 5000kg to 2000kg due to climate factors (Codjoe, Ocansey, Boateng, and Ofori 2013, 19). It is difficult to assess the impact of climate change on the future, but this is a serious concern moving forward.

The terms of the loan consisted of three parts. It included a \$298.5 million buyers credit coming from the China Exim Bank, a loan from the government of Ghana and a concessional loan of \$263.5 million that had funding from the government of China (Hensengerth, 2010 261). These numbers have been debated from a few sources. Hensengerth contends that the number is 2% over Commercial Interest Reference Rate (CIRR)* over 20 years and argues that his information came from interviews with the ministry of finance and economic planning, while Brautigam's number of .75% interest rate plus CIRR comes from her book *The Dragon's Gift*:

The Real Story of China in Africa (index, 2009). This is much higher than the rates cited in the \$3 billion deal because LIBOR is currently much less than CIRR. LIBOR was at 1.42% and CIRR is over 3.5% as of 2017. Even with this steep price the Ghanaian government cites the profit potential of the dam and its ability to pay off the rest of the loan. The Ministry of Finance and Economic Planning estimates the dam has the potential to produce 400 MW. The ministry estimates that even if the rate for energy decreases it will still produce enough energy to fund the building of the dam. For this reason the government is asserting that the building of the dam is “sustainable” (Hensengerth 2010, 256). It is difficult to estimate the true cost of running the dam and the repairs that might occur in running the dam, and one cannot predict weather patterns and the volume of water that will actually be fueling the dam, but using the statistics that the Ministry of Finance and Economic Planning provides it would take around 4 years for the dam to produce the revenue equal to the project (the math is included below). It is important to note that this is total revenue and not profit, but the dam is producing a large amount of energy and the Chinese are buying large amounts of cocoa, so it is believable that this loan can be paid in the 20 year period.

Table 8.5 China Exim Bank credits and Ghana’s contribution to the construction of the Bui Dam (Interview at the Ministry of Finance and Economic Planning in June 2010)

Type of credit	Amount (million)	Interest rate	Amortisation period (years)	Grace period (years)
Buyer’s credit	US\$ 292	2 % over CIRR ^a	20 ^a	5
Concessional loan	US\$ 270	2 %	20	5
Ghanaian government loan	US\$ 60	–	–	–

Note ^a Brautigam (2009, p. 349, note 30) reports the following numbers: interest rate of 0.75 % over CIRR and a maturity period of 17 years

$$\frac{4.5 \text{ cents}}{\text{Kilowatt hour}} \times \frac{\text{Kilowatt}}{1000 \text{ watts}} = \frac{.0045 \text{ Cents}}{\text{Watt hours}}$$

$$\frac{.0045 \text{ Cents}}{\text{Watt hours}} \times \frac{1 \text{ hour}}{3600 \text{ seconds}} = \frac{.00000125 \text{ Cents}}{\text{Joule}}$$

$$\frac{500 \text{ cents}}{\text{Joule}} \times \frac{400 \times 10^6 \text{ Joule}}{\text{Seconds}} = \frac{500 \text{ Cents}}{\text{Seconds}}$$

$$\text{\$662 Million} = 62,200,000,000 \text{ Cents}$$

$$62,200,000,000 \text{ Cents} \div \frac{500 \text{ Cents}}{1 \text{ Second}} = \frac{124,400,000 \text{ Cents}}{\text{Seconds}}$$

$$\left[\left[\frac{124,400,000 \text{ Cents}}{\text{Seconds}} \div \frac{3600 \text{ Seconds}}{\text{Hours}} \right] \div \frac{24 \text{ hrs}}{\text{day}} \right] \div \frac{365 \text{ days}}{\text{year}} \\ = 3.94 \text{ years}$$

It is interesting to examine the differences in job regulations between the two projects as well. The Bui dam stipulates that 3,000 Ghanaian workers are employed while only around a 1,000 can be Chinese (Hensengerth 2010, 261). There is debate if there were 2,000 or 3,000 Ghanaians employed at the project, but reports confirm that there were only 700-1000 Chinese working the project. The Chinese did have to adhere to the Ghanaian labor laws and ran into issues with the Ghanaian laborers over working conditions. There were complainants about the living conditions where workers had to live 5-10 in a room. The Ghanaians attempted to unionize to receive the pay and benefits that they were entitled to under Ghanaian law. After years of negotiations, ambassador meetings, employees quitting, and doctors refusing to give workers the sick leave they were entitled to, the Trades Union Congress settled on a 80% increase for laborers and a 67% increase for artisans (Hensengerth 2010, 261). While there have been issues with the building of the dam, the main modes of paying back may seem sound, but there are major risk involved. Whenever paying a loan back with commodities there are always risks because of market fluctuations and unknown factors such as climate change, but the Ghanaian government seems to have the project well funded. The main issue is the high levels of interest

that are incorporated from the CIRR +2%. This is very high for a loan. Export banks usually charge the CIRR flat rate. This being said, if the dam brings in the expected revenue the high interest rate should not be a problem.

Need for Infrastructure

While there is debate whether these agreements are “good” deals, the reality is that Ghana is facing a major infrastructure deficit that is impeding their growth. A study by the World Bank concluded that Ghana has an infrastructure deficit of \$1.5 billion per year over the next 10 years (World Finance). In 2012, Ghana ranked 110th in the Global Competitiveness Index and scored a 2.87 out of 7 in infrastructure (Schwab 2011, 16). The yearly Global Competitiveness Report is released by the World Economic Forum and ranks infrastructure as one of the major factors in the competitiveness of a country’s economy and states, “extensive and efficient infrastructure is critical for ensuring the effective functioning of the economy” (Schwab 2011, 5). PWC argues that this lack of infrastructure is affecting the efficiency of Ghana’s logistics programs thus affecting Ghana’s commerce. (PWC 2013, 46). PWC describes Ghana’s infrastructure as hopeful because of the potential infrastructure investments that could be made with oil revenues, but the company also states that their lack of infrastructure is one of the reasons that the country cannot break into the middle-income category of countries. The company also found in their report that infrastructure matches socioeconomic status in the country with the South having more sound infrastructure than the North (PWC 2013, 47). The country’s infrastructure issues are impeding the country’s growth and exacerbating SES divides in the country. In fact the World Bank estimates that if Ghana was able to raise their infrastructure to the level of a middle-income country specifically Mauritius, that it could raise their GDP growth by 2.7% per annum (Foster and Pusha 2011, iv). The country’s lack of

infrastructure has lost the country money before. In 2006-07 when there was a power shortage due to drought and it is estimated the country lost 1.9% off their GDP growth (Foster and Pusha 2011, iv 21). When viable, hydroelectric power is much more affordable than oil. Hydroelectric power cost \$0.05 per kilowatt-hour, gas-fired generation is around \$0.06-0.08 per kilowatt-hour, and oil-based generation is more than \$0.20 per kilowatt-hour (Foster and Pusha 2011, iv 21). Ghana is in need of a major infrastructure improvement, and the country is being held back by its inability to provide sufficient power and logistically infrastructure to sustain efficient commerce. This is the reason that Ghana seems to be is willing to accept loan agreements that are unfavorable. Each year that the Ghanaian government waits on smaller loans from the World Bank, the country is losing potential earnings. While the debt ratio is becoming concerning, the logic behind these deals is sound considering the potential return on investment.

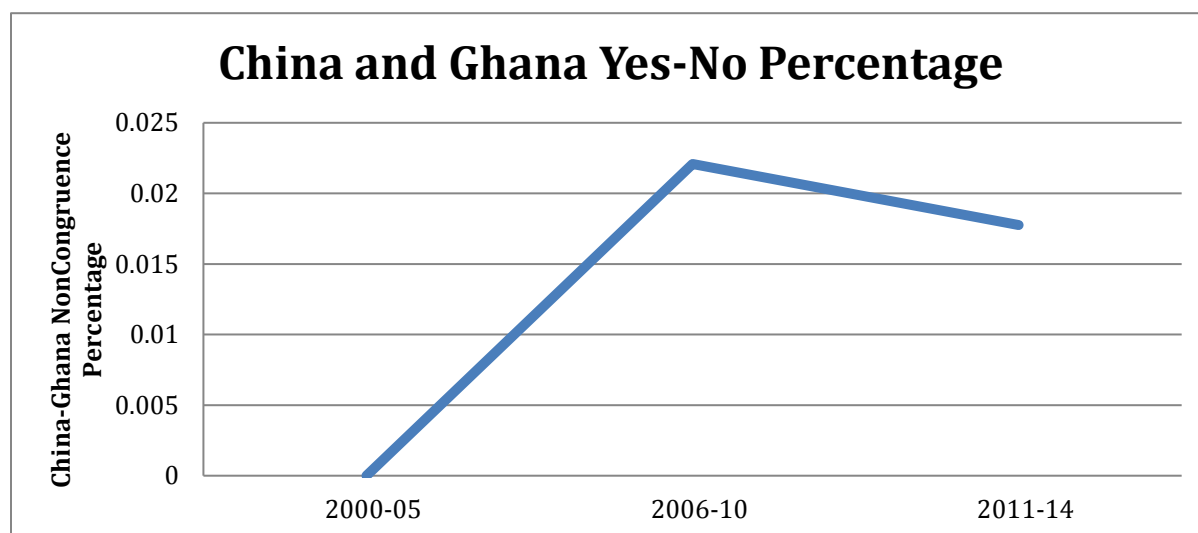
China and Ghana Alignment

There is also the question whether the Chinese are influencing Ghana. There are a few ways to see if this increase in economic ties is influencing Ghanaian policy. One is the Kastner's Buying Influence Model, which test to see if Ghana is aligning itself to China politically because of economic ties. (Thompson 2012, 25) Kastner looks at a few main issues to determine if there is a correlation between the two. Kastner focuses on the 2008 Anti-Secession Law that involved Twain, 2005 the "crackdown on unrest in Tibet," and if the country recognized China as a market economy after their entry into the World Trade Organization (Kastner 2016, 997-1001). Kastner finds that developing nations with high dependence are much more likely to recognize China as a market economy (Kastner 2016, 999). The high correlation shows that there is a deepening of economic policy when countries are tied in trade. On the other hand, Kastner did not find that countries decisions on political issues were significant to their economic ties to

China especially if it was a high stakes issue (Kastner 2016, 999). Ghana supported the one China policy and did recognize China under World Trade Organization status, but has stayed mostly quiet on Chinese issues, (Thompson 2012, 55). These results show that Ghana has some political ties to China, but that they are not deep. Kastner's debate seems fairly shallow and narrow. While it does focus on key issues, it is difficult to make definitive statements about how a country aligns with another nation over three decisions.

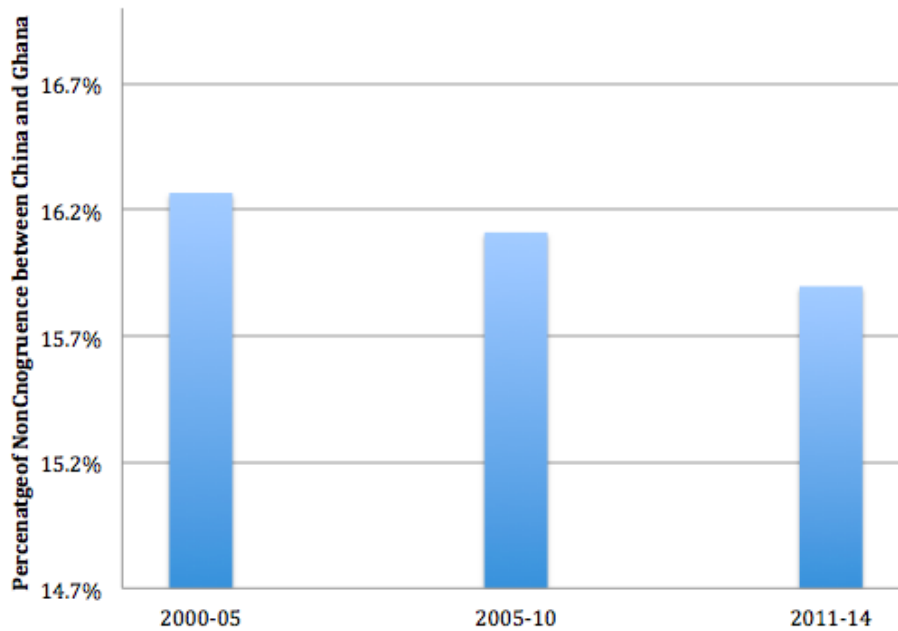
To deepen the analysis, I compiled UN voting data to see if Ghana was aligning with China politically (Voeten 2013). There is a large amount of existing literature on the effect of trade and FDI on UN voting. Existing scholarship shows that as states become more involved in trade with China they become more likely to converge with China on policy (Flores-Macías and Kreps 2013, 357 and 370). If this assertion is true there should be an increase in UN voting alignment as trade increases. Trade is not the only significant factor in voting alignment as it has been found that foreign aid is an important factor in foreign policy convergence (Rai 1980, 275). For this paper, there will be multiple test run, to see if as trade with China has increased there has been a convergence of policy. The first graph shows the percentage of times that there was a Yes-No vote between the two countries. It is difficult to ascertain the reasoning for an abstain vote or a not present, so all votes where a party did not vote yes or no were thrown out. The graph below displays the percentage of times that China and Ghana had a Yes-No decision in the listed time period. Again this graph does not include any votes of abstain or not present. As can be seen below there is a very low inference of the occurrences where the countries voted against each other. It occurred zero times between 2000-2005, 2.2% in 2006-2010, and 1.78% during 2011-2014. This does not mean that the countries agreed on all other issues. There were many votes where one party would vote against a proposal and the other would abstain. It is impossible

to be able to tell why the country did this on every occurrence. What this graph does show is that there is only a very small change even though there is a large increase in trade during this time.

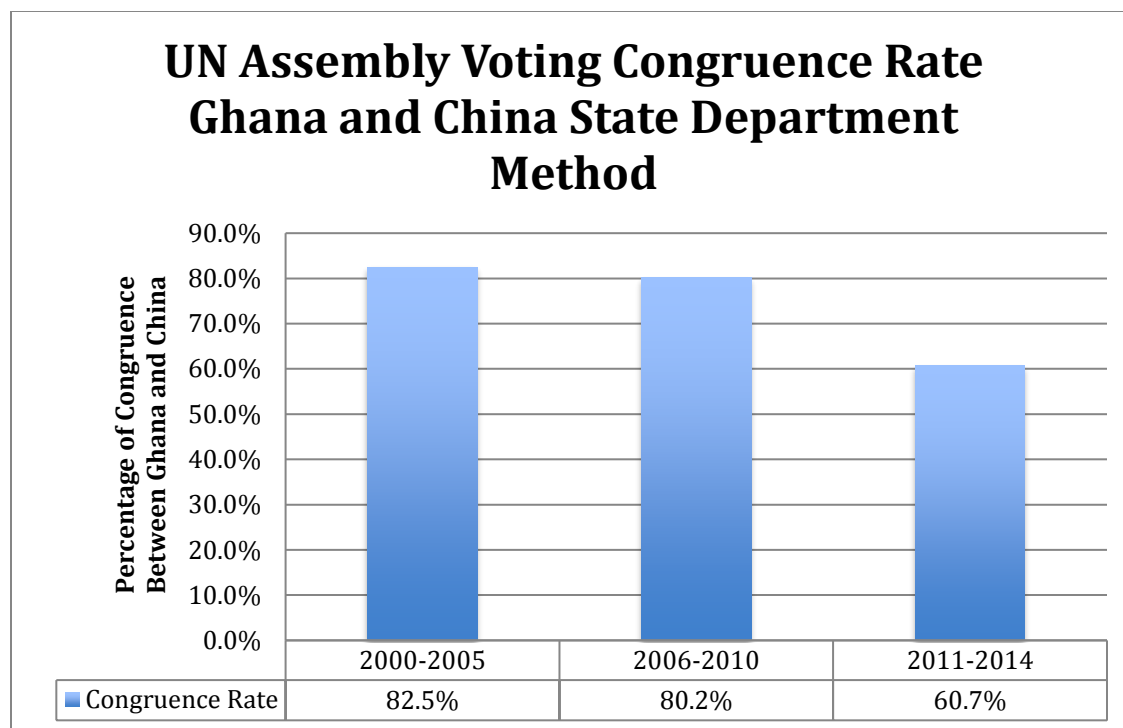


The next test includes abstain votes because there is some debate as to whether an abstain vote is actually a third choice between yes and no. This data set still excludes not-presents, but when there were disagreements whether yes-no or no-abstain or yes-abstain they were counted as non-congruence. As can be seen be in the graph below the non-congruence rate is much higher than just the instances were China and Ghana vote Yes to No. The interesting thing is that there is almost no change over the last 15 years even though trade, FDI, and loans have increased incredibly. The Non-congruence rates only shift .4% between the three time periods. It does not seem that the loans or FDI is affecting the political decisions of Ghana in reference to China in this model.

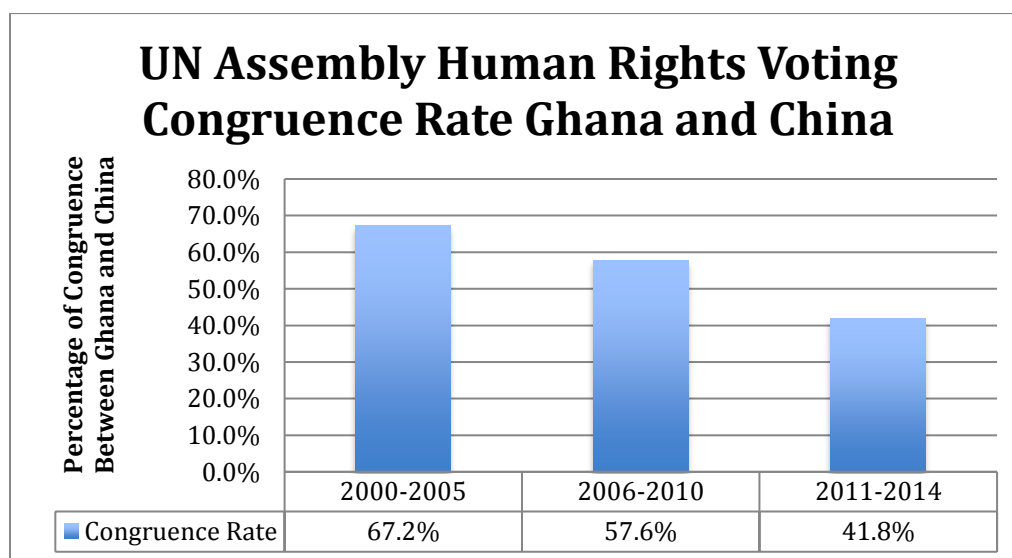
UN General Assembly Votes between Ghana and China



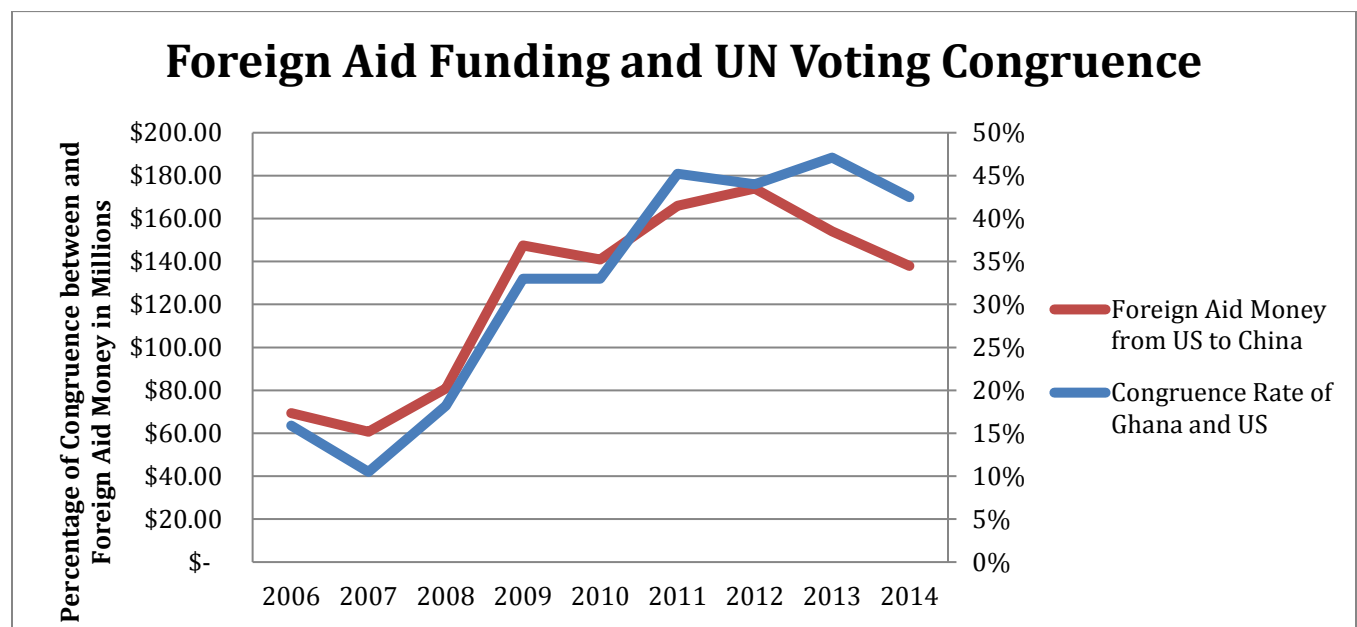
The next graph shows the congruence rate between the countries when abstain and not present votes are included as non-congruent. This graph counts yes-no, abstain-not present, not present-yes, abstain-no, not present-no, and abstain-yes as non-congruence scenarios. The reason for this method is that this is the method that the United States State Department used in many of their reports. It is important to note that there is a shift from measuring non-congruence to congruence in this graph. In this case it can be seen that there is a large drop off between 2006-2010 and 2011-2014. This is interesting considering the \$3 billion loan was made in 2011. This graph seems to point to the idea that China is not gaining that much influence because of these loan deals and increased trade.



To examine this question even closer I measured the congruence that occurs in human rights votes because these are often seen as more important votes. The following graph uses the same State Department model that was used in the last test. The report displays a similar result where Ghana is becoming less tied with China even though trade and FDI have increased over time.



In the same way, I measured the congruence of Ghana and US votes. Over the 2000s Ghana has increased their congruence rate with the US (State Department 2000-2014). The congruence between Ghana and the US was low in 2002-2008 where the coincidence was below 20%, but as trade increased with China in the early 2010's the congruence between Ghana and the US rose dramatically reaching 47% in 2013. There does not seem to be a trend where Ghana is aligning itself with China over the United States in these political issues. It is important to note that the United States has increased their aid to Ghana significantly in the last 10 years. In 2011 it was over \$150 million. While China gave over \$10 billion to Ghana between 2000-2013, the United States has recently surpassed them in aid (Foreign Assistance). While American politicians state that China is increasing their influence in the region and practicing new forms of colonialism, the data shows that China is losing influence in the region due to increased American aid in the region as can be seen in the graph below. This debunks the idea that China is controlling Ghanaian decisions from a political standpoint. The next section will examine the idea that China still has control over Ghanaian markets.

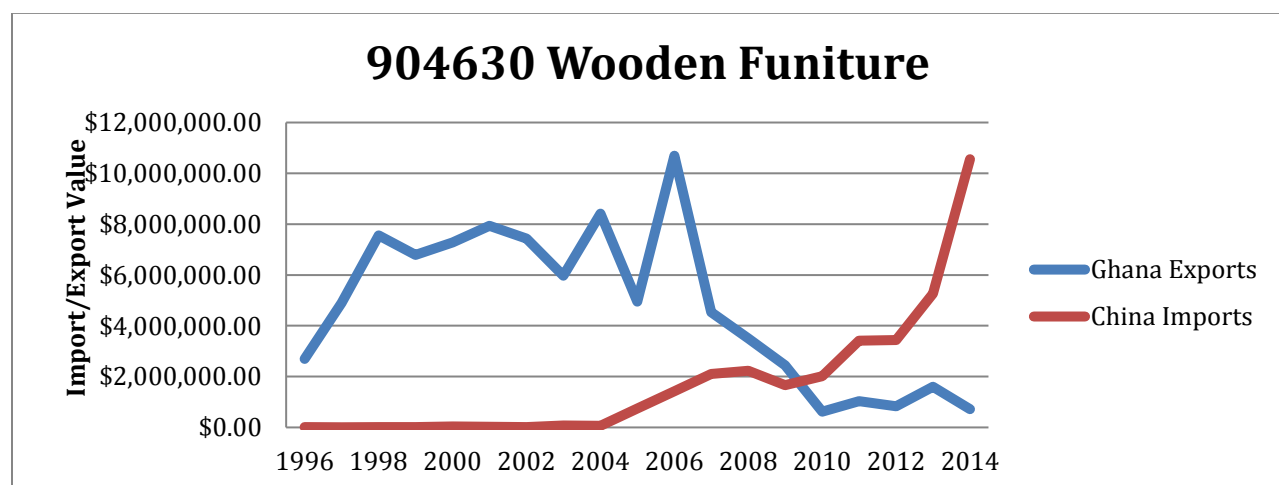


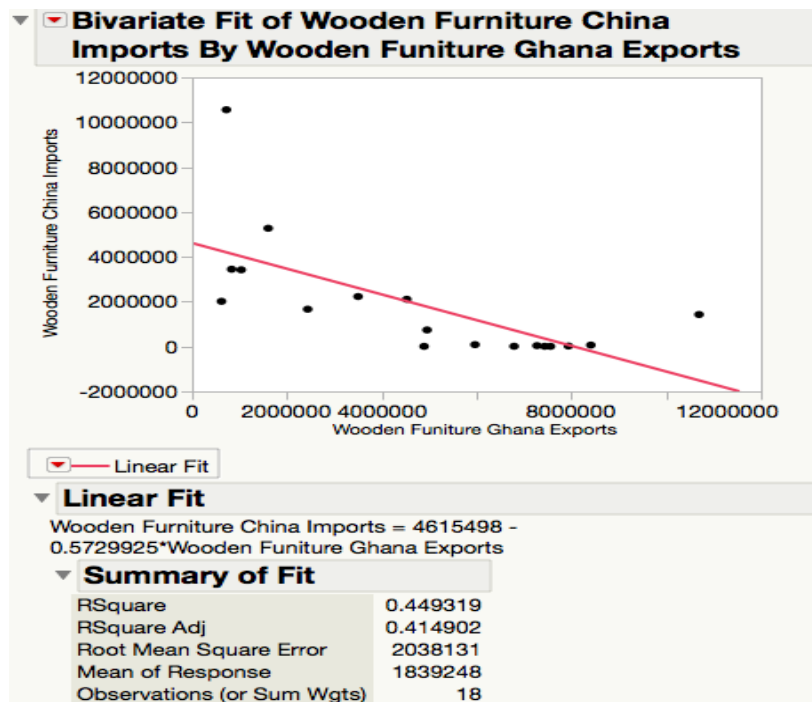
Trade Statistics

One of the questions that are being asked in this paper is whether entanglements with China are affecting Ghanaian economic decisions. As previously stated, China has been accused of dumping their goods onto Ghanaian markets and forcing out industry with cheap merchandise. In this section, bivariate test will examine whether there is a relationship between new high levels of Chinese imports and Ghanaian exports in the same sector. One of these areas that have been highlighted is the textiles industry. The textile industry is interesting specifically in Ghana. Ghana has been complaining that China is affecting traditional clothing industry. When looking at the data, there has been a large increase in the amount of textiles that are coming into the country. As seen in the graph below textile imports have skyrocketed in the last 10 years rising from under \$50 million to over 600 million (Appendix A). If one examines the exports from Ghana, exports vary incredibly (Appendix B). It has been stated that export data is sometimes unreliable which makes it difficult to determine the effect for the country. For this reason, it was deemed that the textile industry should not be included in this test and rather industries that have a similar flood of Chinese goods, but had more steady data would be included. The data I examined is also not general like textiles, but is specific such as certain types of pesticides or wooden furniture. The tests that were run were simple bivariate test to determine the relationship that was occurring in industries where Chinese goods were flooding the market. This test does not determine whether the industry was affected by the imports, but shows if there is a relationship imports and exports. The question that these tests are attempting to answer is if Ghanaian exports decline upon the entrance of high volumes of Chinese imports. This test cannot answer the question if China's industry is negatively effecting Ghanaian production overall, but there is not as much evidence that China is causing factories to shut down if exports are still

high. This makes the assumption that domestic production and exports are compliments, which varies. For this reason, this test cannot make a assertion such as China is or is not effecting Ghanaian industry, but it can see if Chinese imports are effecting production in certain exports industry which would thus exacerbate the trade deficit.

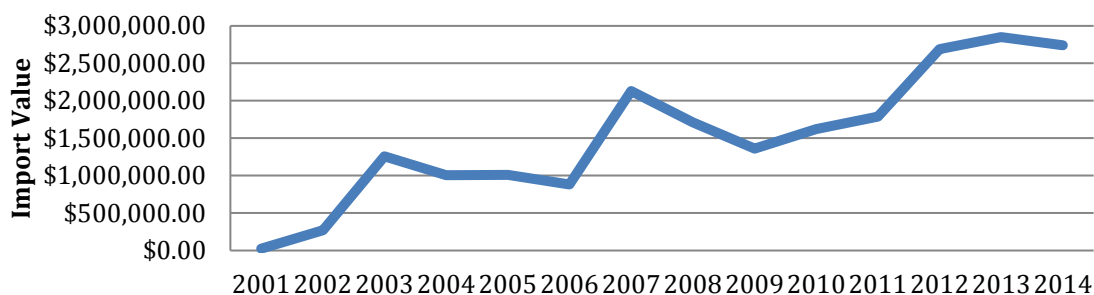
The first industry is the wooden furniture industry that has the Harmonized System (HS)* number of 904630. In 2006, Ghanaian exports of wooden furniture were over \$10 million, but around this same time there was a surge of Chinese imports and by 2014 Ghanaian exports of wooden furniture were around \$1 million and Chinese imports of the same material were over \$10 million. When running a bivariate test one can see that Chinese imports and Ghanaian exports have a negative slope, but only have a R-squared of .44, which shows somewhat of a relationship, but is not very significant. When one examines the graph one can see a relationship where Chinese goods begin to rise as Ghanaian goods fall. One can make the argument that this is an example of Chinese using their markets to destroy Ghanaian industry thus making Ghana reliant on China, but the issue is that this relationship is rare in my findings. The other industries that were studied showed a much more benign relationship.



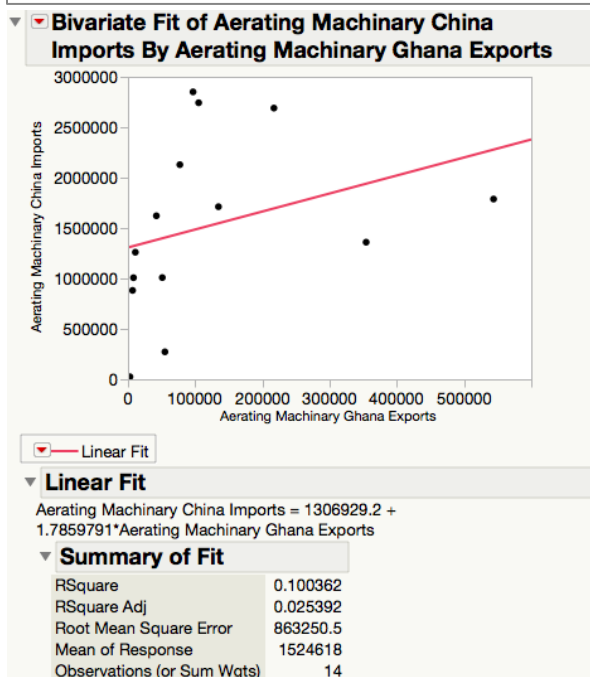
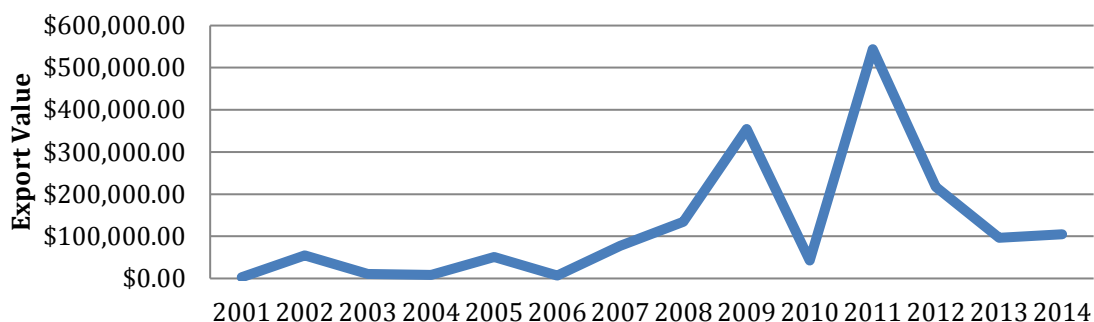


The next test is run on Aeration Machinery that has the HS number of 842230. The results are quite different. The Chinese again enter the market at a high rate, but the Ghanaian exports are much less affected. When the Bivariate fit test is run there are positive trends for both industries even though Ghana is importing large amounts of machinery each year. The R-squared is extremely low in this case at .10, which shows there is very little relationship between exports and imports. This graph is indicative of the majority of the findings.

842230 Machinery For Aerating Beverages China Imports

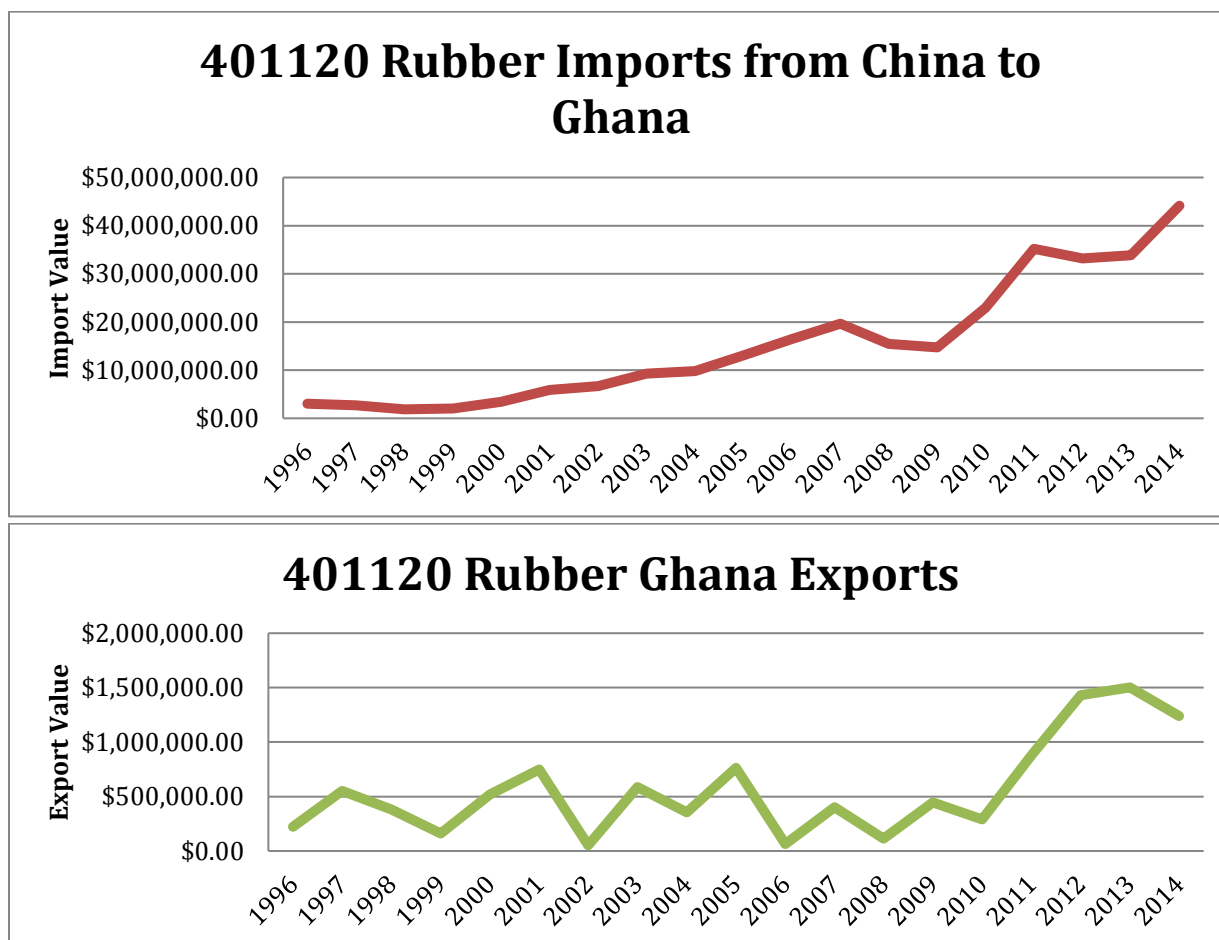


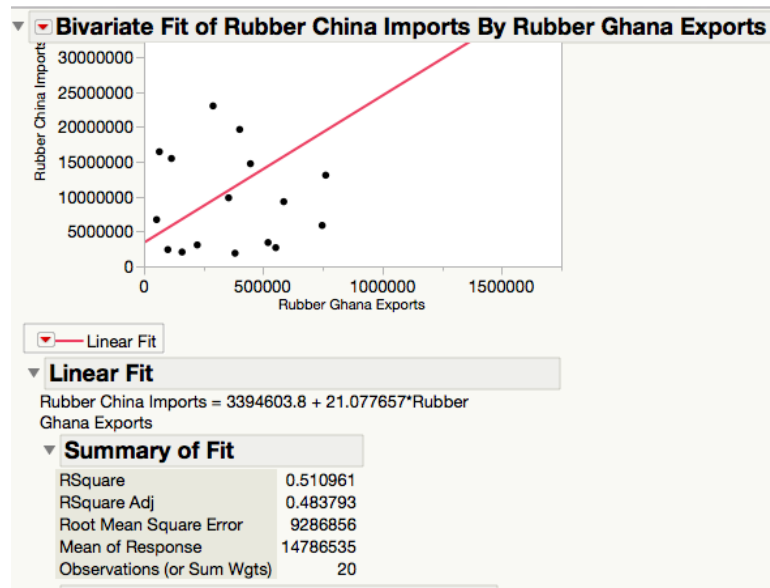
842230 Machinery For Aerating Beverages Ghana Exports



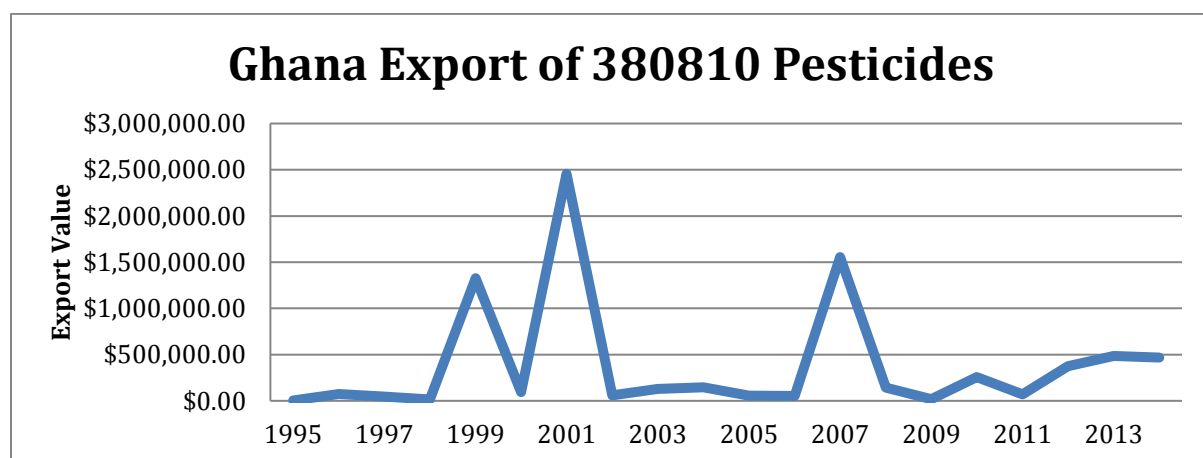
The next good has similar results as machinery for aerating beverages. Rubber or HS

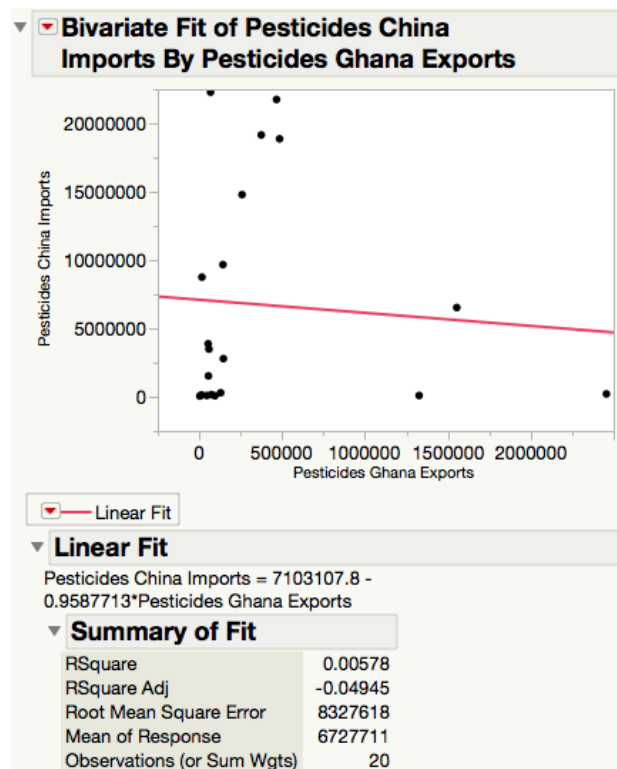
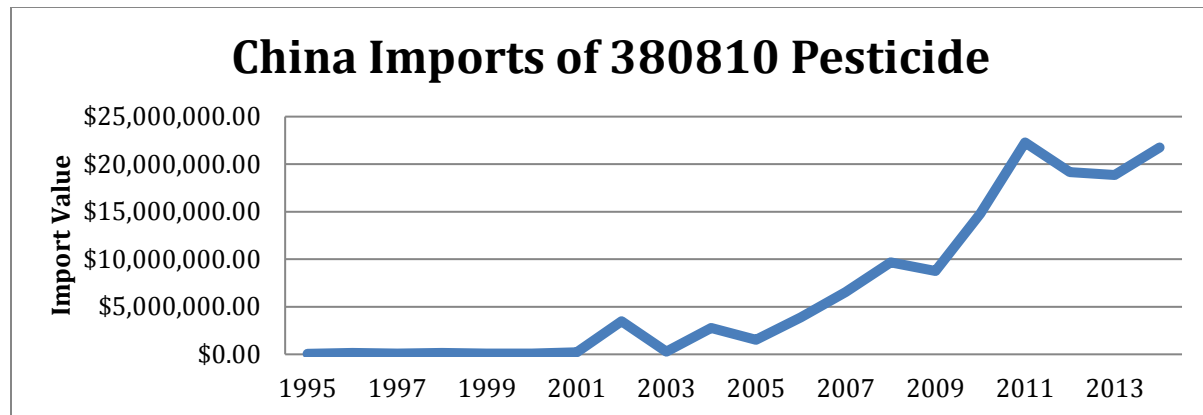
401120 has seen a large increase in imports from China, but when one looks at the Bivariate fit test there seems to be a positive relationship between the two, while it is important to note that again the R-squared is low at .51.





The final test shows another industry that has seen high levels of Chinese imports. Ghana has seen Chinese imports of pesticides skyrocket in the last fifteen years, but the effect on the Ghanaian export market of pesticides has been minimal. Ghana is buying over \$20 million in foreign imports in China to support their agriculture industry. Ghanaian pesticides have not seen the same amount of growth, but when one examines the bivariate test there is not a negative slope, but the R-squared is so low at .0005 that there can be very little extrapolated from the test.





The narrative that Chinese goods are flooding into Ghanaian markets and destroying exports is not supported by these tests. There are instances where this does occur such as the wooden furniture market, but this is correlation not causality, and one cannot make this case across all markets. None of the tests have high enough R-squares to make much comment on the effect of imports on exports through correlation. There is a lack of conclusive evidence that point to Ghanaian industries declining after the entry of high

volumes of Chinese goods. This lack of evidence hurts the case that China is practicing neocolonialism in Ghana.

Trade is not only bilateral between China and Ghana; the question of neocolonialism in Ghana can have widespread implications for the state of the rest of the continent. This is true particularly in Nigeria where there has been similar infrastructure for trade deals. Nigeria had a 22% of its imports coming from China, while South Africa has increased to 15% as of 2013. China is integrating into the major powers of Africa and the effects can be widespread. The issue that China presents is a potential to decrease inter-African trade. Ghana had imported 9.4% and 4.8% of total imports from Nigeria and South Africa respectively as of 2005, but this number has decreased to 6.2% and 2.3% as of 2014 (OEC). The effect on African imports is less pronounced in Nigeria because it has never had large flows of African goods, and the same can be said for South Africa, but inter-African trade import for the long-term growth of the continent and Chinese goods threaten that mutual growth.

Conclusion

Ghana has had increasing ties with China over the last 20 years. There have been increases in trade as well as increases in FDI and loans coming from the Chinese government. The reaction from this new relationship has been mixed. In reference to the larger scope of Africa, American politicians argue that China is bad for Africa and is establishing ties that resemble old colonialist relations. Other leaders argue that China is the future and is providing Africa with important resources. In order to explore these ideas, this paper looked at BITs, FDI flows, Infrastructure for resource agreements, China-Ghana political alignment, and the increase of imports from China. It found that while BIT laws were not unequal they did very little to help attract FDI to Ghana. What they did provide were important clauses that provide protection for

certain industries. FDI analysis determined that while FDI can be positive for a country it must be channeled into the correct industries and should be focused on sustainable industries instead of raw resources. When looking at the Infrastructure for Resource Agreements there are many questions left unanswered about the price that the Chinese are paying for the oil, but the reality is that the Ghanaian economy is losing around 2.7% of their GDP growth per year because of their lack of infrastructure. While the deals may be in favor of the Chinese, Ghana has to accept an unequal agreement in order to receive large loans of this kind. The Chinese are charging higher than normal interest rates, but these deals are not exploitive in the way that some politicians frame them. Ghana has the means to pay off these loans, and if the infrastructure is effective, it will be a key way to fill the energy gap that is plaguing the country's industry.

In the same way, the idea that China is controlling Ghana politically is unfounded. As Ghana has become more involved with China it has also started receiving high volumes of aid from the United States. The result of these aid flows has been Ghana aligning less and less with China in UN votes. Finally the idea that China is causing Ghanaian industry to decline is mostly unfounded. There have been instances such as the wooden furniture industry that has seen a decline since Ghana has begun importing goods, but the majority of industries tested did not see this decline.

This paper does not find the evidence for China imposing neocolonist policies in Ghana to be substantial. There is a lack of evidence that China is using these infrastructure for resource deals to extract goods while giving nothing in return. Ghana is receiving essential infrastructure to support their growth. The deal may be imbalanced, but not in a way that seems exploitive. China is not destroying the Ghanaian export economy with their cheap goods and has not become a pawn of China in international politics either. American politicians who fear the

Chinese's motives in Africa push for the narrative of China being bad for Africa, but these fears are mostly unfounded. It is true that Chinese imports can have negative effects on certain industries, but the BITs that are negotiated give Ghana the flexibility to protect their industries. If Ghana is fiscally responsible with the loans, and uses their BITs to protect certain industries and drive FDI to sustainable activities then the Chinese relationship could be very positive. I do not know if I agree with the idea from Moyo that the intentions of the Chinese are "quite pure," but I agree with Asongu and Aminkeng when they state that the relationship is "promising." The success of the relationship is dependent on the decision makers in Ghana. If Ghana protects their industries and stands up to bad loans such as the second tranche of the \$3 billion deal then the relationship can bolster their economy while providing consumer surplus in areas where Ghana has little industry.

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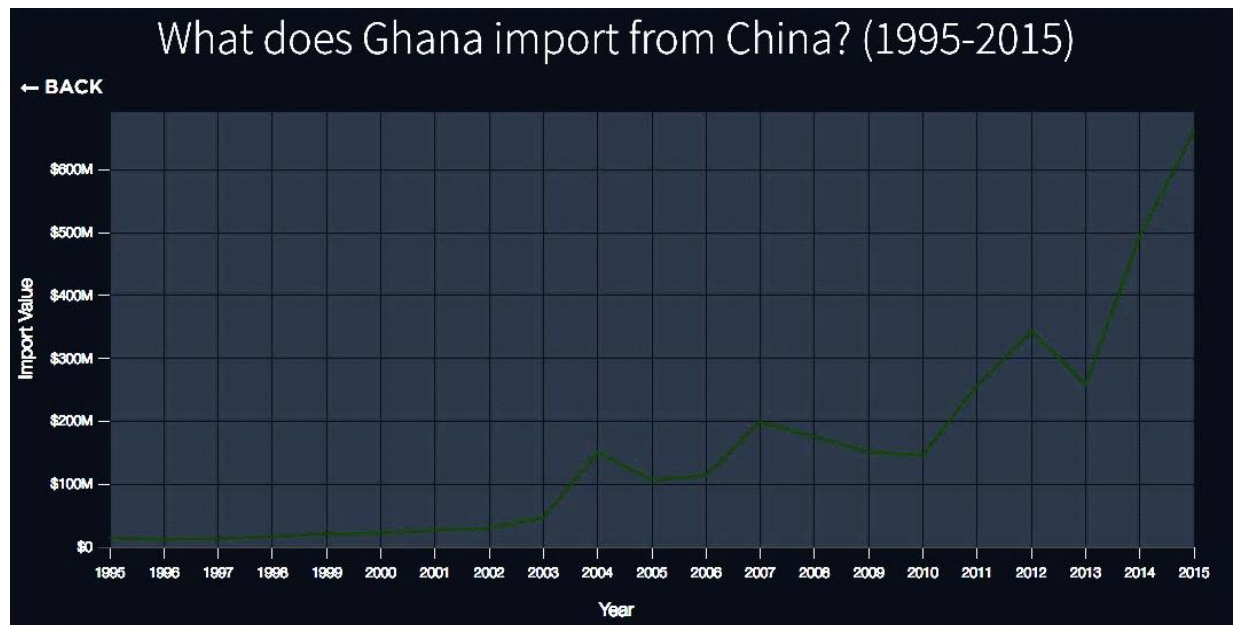
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Appendix A (In Reference to Textiles)



Appendix B (In Reference to Textiles)

