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**Impact of China-Africa Investment  
Relations: Case Study of Ethiopia**  
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African Economic Research Consortium Collaborative Research  
on the Impact of China on Africa

**Impact of China-Africa Investment Relations:**

**Case Study of Ethiopia**

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# ***1. Introduction***

Following its accession to the World Trade Organization (WTO) and its rapid growth, China is becoming important in the world economy, including those in Africa such as Ethiopia. As Alden(2003) puts it, “at a time when the world seems preoccupied by events in the middle east and the ‘global war on terror’, China’s growing engagement in Africa has gone little noticed in the west” (Alden ,2003:147.) Yet in a span of less than a decade trade between the regions has increased from US\$10 billion in 2000 to US\$28 billion in 2005 and close to US\$100 billion in 2009. Alden(2003) emphasized the Chinese concern in Africa as “China expended significant resources in foreign assistance towards African states, has started negotiations towards a regional economic free trade with the Southern African Customs Union, and has embarked on an unprecedented peacekeeping mission in Liberia” (Alden, 2003:147).

Over the last 20 years, China has grown at the rate of nearly 10 per cent per annum, driven primarily by an expansion of the modern, industrial export oriented sector. With some 20 million Chinese workers moving from rural underemployment to the modern sector annually, the impact is akin to adding another middle sized-industrial economy to the world economy each year (Eichengreen *et al*, 2004). According to Eichengreen *et al* (2004), with between 200 million and 300million Chinese workers still to be reallocated from rural underemployment, this is not simply a one-time shock but an ongoing process that should continue for a decade and more, and hence its implications for world economy in general and African countries in particular.

China’s emergence over the last decade as key net importers of commodities from Africa means that global commodity markets are likely to be the main channels through which the impact of China and India’s ascendancy has been (and will be) felt on the African continent(Eichengreen *et al*, 2004).This is generally accompanied by Chinese investment in the continent. Ethiopia is not exception to this impact. The last decade witnessed unprecedented growth in China-Ethiopia relation. In the last 7 years China became an important trading partner for Ethiopia accounting to about 15% of its trade which was none before 2005. Thus, Chinese interaction in the Ethiopian economy is becoming stronger than ever. Its interaction in the Ethiopian economy has both challenges and opportunities. The challenges could be i)Ethiopian firms which export labor-intensive manufactures may face competition in the third market and ii)local producers of labor-intensive manufactures could be displaced from the local market. This competition is severe in textile and footwear manufacturing sectors. There are also opportunities for domestic consumers to consume cheap imports from China; domestic producers may also benefit from cheaper and appropriate technology form these countries. The use of Chinese contract labor, rather than local workers in Chinese-sponsored projects in Ethiopia has been criticized locally (Alden: 157).In the construction and the energy sector, Chinese involvement in road and power plant construction projects through very low initial bid-prices has been displacing the local and other foreign construction firms. However, for example in the case of power plants, the very low initial entry bid-prices are off-set by high operational costs when the projects start operation. These are important areas that need to be examined in detail. Stock of knowledge on the impact of the emerging Asian drivers particularly that of China on Ethiopia is not available. This underscores the need to conduct an in-depth analysis of this impact.

Theoretically there are various channels through which an African economy such as Ethiopia could be affected by China. The four primary channels include:

- Trade flows
- FDI flows, technology transfer and integration in global value chain
- Aid flows
- Governance issues.

These are not the only channels through which a given country or region may have an impact on another country or region, however (Kaplinsky et al 2006). For example, there may be impacts transmitted through the environment, through financial flows, or through participation in institutions of regional or global governance. In each of an identified channel it is possible for Chinese-Africa relations to be either complementary or competitive (or indeed both). Notwithstanding this multifaceted linkage, we will focus in this study on one of the channels – the investment (FDI) channel. Other channels will be explored depending on the degree at which they shed light on understanding the Chinese-Ethiopian investment relations, which is the subject of this study. With this broader objective this study includes:

- Identification and analysis of the key features, patterns and developments in the main channels through which the impacts in growth of China are transmitted to Ethiopia
- Qualitative and quantitative evaluation of the nature, dimensions and magnitudes of the sector -specific and overall incidence of the impacts transmitted to Ethiopia over the period 1997 to 2007 using both micro and macro data
- Identification and analysis of sector- specific opportunities and challenges faced by Ethiopia as a results of impacts generated through the growth of and economic relationship with China
- Articulation and analysis of appropriate policy responses and overall development strategies for maximizing the benefits and minimizing risks emanating from the economic relationships with China

The rest of this study is organized as follows. The next section describes the general background for the study. This is followed by section three that presents review of the relevant literature. Section four presents the theoretical framework and methodology. This will be followed by section five where we have attempted to provide empirical analysis. Section six concludes the paper by offering summary of major findings of the study and the implication for policy.

## **2. Background: The Chinese Investment in Ethiopia**

As the Chinese economy booms, Chinese presence in Africa is becoming an obvious sight. The scene is similar in Ethiopia. To our knowledge there is no study about Ethio-Chinese investment. Two relevant studies in this regard are (Asayehgn Desta 2009) and (Tegegen G.Egziabher, 2006). We have briefly summarized their major findings in this sub-section.

Asayehgne's study is based on four Sino-Ethiopian Cooperative Investment case studies that analyzed the terms of their effects on 1) Ownership and Human Capital 2) Production Management and Operations, 3) Export effects 4) Technological Transfers 5) Efficiency 6) Foreign Exchange effects 7) Local Content requirements and spillover effects, and 8) Environmental. Though the analysis is somewhat anecdotal and difficult to generalize about the Sino-Ethiopia

investment relations, as the author himself noted, it has highlighted that given the Chinese investors in Ethiopia are unfamiliar with cultural makeup of the local situation and the Ethiopian labor laws, Ethiopian employees seemed to be in charge of the human resources management in these companies. (Asayehgn, 2009). This study further noted that since the Chinese marketing officers are well versed in some aspects of the international marketing, they might have trained local employees in export management and foreign marketing strategies. Based on the three cases, the author noted that the Chinese wholly owned companies don't seem to act as a platform for exports and their goal is to seek for themselves efficiency and market in their production process. The wholly owned Sino-Africa produces leather products that are designed to compete in the international market—it does not seem to crowd out the low quality local products. The Sino-Ethiopia pharmaceutical joint venture enterprise is of higher quality base and is more efficient; therefore, it is complementary and generates foreign exchanges indispensable for the country. Nonetheless, since the Ethiopian employees do not receive the necessary training in international marketing, the leather products seem to be totally dependent on the Chinese joint venture partners in order to promote and distribute their products in overseas markets. However Asayehgn, (2009) noted that the skill transfer is very limited in his case study. He noted, 'even in the Sino-Ethiopia Associate Africa joint firm, research and product design is forged in the headquarters rather than basing it on an equity ratio to include the Ethiopian partner. In terms of efficiency, since more than 50 percent of input materials executed by the Sino-Ethiopian firms come from China, it is very difficult to ascertain the contribution of efficiency to the new products made by the Sino-Ethiopian investments'.

Another interesting aspect of the Asayehgn's case study is that most of the foreign exchange generally used for the Chinese investments in Ethiopia originates from the China's EXIM and China's development banks. In addition, According to Asayehgne, based on the incentives given by the Ethiopian Government to Chinese investors, the four case studies utilize local content. Adhering to backward linkages, the Chinese investors purchase their factors of production from local suppliers. In addition, since they mostly sell their outputs in the domestic market, they have contributed to forward linkages. The four case studies act in creating complementary activities rather than "crowding out" domestic firms. In short, the Sino-Ethiopian foreign investments have forced local firms to restructure themselves to be more competitive (see Asayehgn, 2009).

The other study is that of Tegegne (2006) although he studies focused on the footwear industry. Contrary to Asayehgn's positive outlook about the impact of Chinese firms on local production structure in Ethiopia, Tegegne is rather worried about their detrimental impact on local producers. Based on survey of micro, small and medium size firms in the footwear industry he conducted, he noted that small scale shoe producers have downsized their activity, lost assets and property and have resorted to informal operation, with detrimental consequences on their activity and growth. Firms have followed both high and low road of competition in reaction to the Chinese imports, Tegegne (2006) noted. The high road strategies include improving designs, quality, and improving response time. Investment in machineries is also noted as part of such strategy. These strategies however are relatively common among small and medium enterprises compared to the micro enterprises as Tegegne's study shows. The latter seems to have resorted to lowering profit margins, reducing inputs and changing into informal operators or resorted to low road competition. Based on his finding Tegegne (2006) emphasized the need to invigorate the sector to withstand the competition and even excel. He, further noted, invigoration requires that both the producers and the government to work together. In addition a package of interventions have to be designed to strengthen the shoe producers and minimize the negative effects of Chinese shoe imports, he

noted. In short the long term effects of the footwear imports (including textile) is that it will crowd out the local effort to use these sectors as the basis of industrialization as the study of Tegegne (2006) shows.

A final point worth noting in the context of Chinese direct investment in Ethiopia is the planned Chinese industrial zone in Ethiopia. A Chinese Investment group, Jiangsu Qiyuan, has finalized preparation to construct a private Industrial zone in Ethiopia. The zone will be constructed some 37km south of the capital, Addis Ababa. Eighty (80) investment projects will be constructed at a cost of 5 about 500 million US\$). Over 20 Chinese companies have already shown interest to invest at the industrial zone which is named as Ethiopian Eastern Industrial Zone (EEIZ). The projects include textile and garment, shoe, leather and leather products, food, electrical materials and steel manufacturing sectors. When the construction of this private industrial zone comes to an end in the next 5 years it will create job opportunity to over 20,000 local people. A Chinese investment group has already signed an agreement with the Ethiopian Investment Authority and the construction of 5 projects will begin shortly as part of the 80- Industries projects. This will take the issue of Chinese direct investment in Ethiopia to a whole new dimension that deserves further analysis.

It is hoped that this study sheds more light on the various issues raised in these two studies that we are aware of.

### 3 Literature Review: Issues of FDI in Theory

#### *3.1 Determinants of FDI Flows*

Issues of FDI in relation to host countries are discussed in the literature from a number of angles. The bulk of studies focus on (i) determinants or motives for FDI, (ii) the role of FDI and multinational firms in host countries, and (iii) the impact of FDI on growth and vice versa.

Foreign direct investment does not comprise a major component of external finance flows to low income countries of Africa including Ethiopia. Nevertheless, we will briefly examine various theories on the determinants of foreign direct investment, in the hope that this may help to explain why this type of investment has not been important in that continent so far and becoming suddenly important with the rise of China and India. The early neoclassical approach, summarized in an article by MacDougall (1960), hypothesised that capital flows across countries are governed by differential rates of return (within the neoclassical market setting).<sup>3</sup> It is argued that such capital inflows are welfare enhancing<sup>4</sup> to both parties engaged in the capital movement. The MacDougall model assumes perfect

<sup>3</sup> See also Vos, 1994 and Helleiner, 1989: 1451 for a detailed discussion on this.

<sup>4</sup> In contrast to this approach, another strand of the literature focuses on 'immiserization of the recipient'. In their study of the implication of capital flows Brecher and Diaz-Alejandro (1977) showed that capital inflows to small open economies would reduce the recipients welfare, measured in terms of consumption. This condition is vividly illustrated when foreign profit remittance absorbs the increase in total output due to capital inflow (Brecher and Diaz-Alejandro, 1977: 319). Quibria (1986), using a simple model of 'North' (growing *a la* Solow and saving in a Keynesian

competition, risk free capital movement, mobility in factors of production and no risk of default. This is the basis for the mainstream Mendel-Fleming model that emerged in the 1960s. The portfolio approach to FDI, presented in reaction to The MacDougall model, emphasises not only return differential, but also risk (Iversen, 1935 and Tobin, 1958, both cited in Agarwal, 1980). This is strengthened by a theory which emphasises the positive relationship between FDI and output (sales in host country), along the lines of Jorgenson's (1963) model (see Agarwal, 1980).

Notwithstanding Vernon's (1966) contribution based on this 'product cycle' theory, a second wave of refinements to the neoclassical capital movement/ portfolio theory of FDI, building upon Hymer's original contribution came with the emergence of explanations based on the ideas of 'international firm' and 'industrial organization'. The fact that decision-making about foreign direct investment (FDI) takes place within the context of oligopolistic firm structures, - and that such investment includes a package of other inputs, such as intermediate imports and capital flows, - has led to the development of alternative explanations grounded in the theory of industrial organization (see Agarwal, 1980; Helleiner 1989:1452; Dunning, 1993). In this approach, as set out by Hymer, foreign firms are seen as having an advantage over local ones. The foreign firms pursuit of FDI is explained by the theory of internalisation. This is characterised by the desire to minimize transaction costs, *a la* Coase (1937), to tackle risk and uncertainty, increase control and market power, achieve economies of scale, and ensure advantageous transfer pricing (Hymer, 1976; Buckley and Casson, 1976). In this approach, oligopoly power is seen as mitigating, rather than creating, market imperfection (Helleiner, 1989). The works of Dunning (1993), which he terms the 'eclectic paradigm', represents a culmination of this trend towards a refinement of theories of FDI.

Without departing much from the Heckscher-Ohlin-Samuelson theory of trade, in explaining spatial distribution of multinational firms, Dunning's paradigm summarises this strand of theory under an 'ownership-specific, location and internalisation' (OLI) framework (see for example Dunning; 1988; 1993; 1998; 2000)). The Dunning(1998) version of FDI theory considers the OLI triad of variables (ownership, location and internalization) determining foreign direct investment (FDI) and MNE activity may be likened to a three-legged stool; each leg is supportive of the other, and the stool is only functional if the three legs are evenly balanced. The choice of the word eclectic was an ambitious yet deliberate one. It was meant to convey the idea that a full explanation of the transnational activities of enterprises needs to draw upon several strands of economic theory; and that foreign direct investment is just one of a number of possible channels of international economic involvement, each of which is determined by a number of common factors"(Dunning,1988). Helleiner notes that 'this "eclectic" theory of direct investment...drawing on firm-specific attributes, location advantages and internalisation advantages - is widely accepted' (Helleiner, 1989: 1253). There also exists an international trade version of FDI determination (termed the macro approach) which is associated with the works of Kojima (Kojima, 1982). The Kojima model argues that FDI may be explained by the 'comparative disadvantage' of industry within the investing countries. According to Kojima's theory, this may be mitigated by investing in foreign industry, which may be able to achieve comparative advantage in the production of a particular product and potentially, even export back to the home country. Naturally, this type of FDI will also have the effect of increasing trade volumes (Kojima, 1982). Based on the notion of OLI, four main types of foreign based multinational enterprises (MNE) activities (or FDI type) are identified (Dunning, 2001).

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way) and 'South' (saving in a Kaleckian way), concluded that capital flows (even in a situation of no distortion) may result in immiserization of the recipient.

- i. Those designed to satisfy a particular foreign market, or set of foreign markets, viz. *market seeking*, or demand oriented FDI.
- ii. Those designed to gain access to natural resources, e.g. minerals, agricultural products, unskilled labor, viz. *resource seeking*, or supply oriented FDI
- iii. Those designed to promote a more efficient division of labor or specialization of an existing portfolio of foreign and domestic assets by MNEs, i.e. *rationalized or efficiency seeking* FDI. This type of FDI though related to the first or second kind, is usually sequential to it.
- iv. Those designed to protect or augment the existing owner specific advantages of the investing firms and/or to reduce those of their competitors, i.e. *strategic asset seeking* FDI

In sum, the theory of determinants of FDI covers a range of explanations: the pure capital movement, product cycle, industrial organization, the stagnation thesis as well as other political consideration. In the African context, the pure capital theory does not work since the assumptions simply do not hold. Neither is Krugman's hypothesis workable, since it is more relevant to countries with a good industrial base and infrastructure. The most plausible theoretical explanation seems to be found in the 'eclectic' explanations. The concentration of Multinational Corporations in the mining sector of most African countries and, to a good degree, the importance of the colonial history in determining their spatial pattern might be taken as lending support to the importance of the 'eclectic' approach. This theoretical insight will be used in identifying the determinants of FDI in the empirical analysis in this study. Based on the economic and other characteristics of Chinese investment in Ethiopia, we will attempt to examine the possible motives relevant for Chinese FDI in Ethiopia. Once such characterization is done the next step is to see the impact of such FDI on Ethiopia.

### 3.2 The Impact of FDI on Host Country: Chinese FDI in Africa in Theory

FDI generates spillovers which are regarded as the most significant channel for the dissemination of modern technology (Liu et al., 2000, cited in Wang and Zhao; 2008). Spillovers have attracted much attention not only in the academic literature on FDI and but also in government policy circles because of their relevance for indigenous industrial development. Indeed, attracting inward investment now gains prominence in the policy agenda of many governments. Yet, there is an ongoing debate about the existence and extent of such positive effects. This debate assumes special importance in view of the emergence of a few developing countries as major recipients of FDI and the particularly important role of FDI in diffusing modern technology to these countries.

A strong research tradition exists that tests the extent of such spillovers by identifying whether foreign presence has induced higher level of productivity to local firms in the same sector through these channels. Although positive effects are often expected, the empirical literature has, however, produced rather mixed results, ranging from a positive, indeterminate, to even a negative effect (Buckley et al., 2002, 2005, 2007a, b; Wang et al., 2005; Wei and Liu, 2006). A possible explanation for this puzzle, according to Aitken and Harrison (1999), is that the observed productivity spillovers of FDI are the result of the interactions between positive and negative effects. This means that whether the overall impact is positive or negative would depend to a large extent on which of the effects prevails in a particular context. Recent studies have suggested that negative effects may emerge from the competition in final goods markets where incoming foreign firms are able to monopolize markets and draw demand away from local firms or confine competing local firms to less profitable segments of

industry (Aitken and Harrison, 1999), thereby suffocating local unproductive competitors. The negative effects may also arise in factor market where foreign investors increase demand for scarce resources such as skilled labour and domestic credit, and hence raise production costs for local firms (Wang and Yu, 2006). These possibilities lead to the reasoning that in sectors where foreign capital is large, there may be limited scope for positive spillovers, while negative effects will intensify with rising foreign presence. In fact, large foreign presence is a sign that domestic firms lack the capabilities to defend their market share against foreign firms. It is clear that further evidence on horizontal effects is still needed to unveil insights to advance our current understanding of FDI spillovers.

Although the importance of linkage effects of inward FDI has entered mainstream economics for a long time (Lall, 1980), the potential for inter-industry linkages has only recently been considered as a channel through which spillovers might impact on the domestic economy (Harris and Robinson, 2004). For example, Giroud and Scott-Kennel (2006) suggest that linkages as spillover mechanisms are differentiated from other spillover mechanisms due to the direct influence of the foreign subsidiary on the local firms' capabilities. The importance of linkages leads Dunning (1993) to define spillovers as a direct consequence of the linkages forged between foreign investors and other economic agents in the countries in which they operate.

Another aspect of spillovers relates to vertical spillover. Vertical spillovers are effects carried by FDI across industries through, for example, contacts between domestic suppliers of intermediate inputs and their multinational clients. Vertical spillovers are effects carried by FDI across industries through, for example, contacts between MNEs and their local suppliers of intermediate inputs. Many studies suggest channels through which such spillovers would manifest themselves. The major channels, according to for instance Javorcik (2004) include: direct knowledge transfer from foreign affiliates to local suppliers in the complementary sectors; imposing higher requirements for product quality and their management or technology; and MNEs' entry increasing the demand for intermediate products, which allows local suppliers to reap the benefits of scale economies. Linkages thus can be regarded as propagation mechanism for technological externalities above and beyond the pecuniary externalities highlighted by Hirschman (1977), leading to a nexus between FDI penetration and productivity improvements of local non-competing upstream and downstream manufacturers (Rodriguez-Clare, 1996). Following Wang and Zhao (2008), we can extend the following arguments to the Ethiopian case.

First, there are both horizontal and vertical spillovers of Chinese investment in Ethiopian industry. We attempt to see further whether vertical spillovers are more likely to emerge compared with horizontal effects (and are also large in magnitude or not) either by their prevalence or by the extent of resource transfer that occurs (e.g. Harris and Robinson, 2004). The literature on MNEs' optimal market penetration strategy emphasizes the minimization of the probability of leakage of knowledge to local competitors operating in the same industry (Ethier, 1986; Kugler, 2006). Thus horizontal effects may be less as is often seen in developing countries. This contrasts markedly with the situations where MNEs may voluntarily diffuse technology to upstream sectors for the benefit of more efficient supply chains for their operations. Furthermore, MNEs tend to operate in industries where the market structure yields less direct competition with local firms within its industry but in which upstream sectors are competitive, resulting in limited horizontal spillovers but stronger impact in non-competing and complementary sectors (Kugler, 2006). Despite the keen interest of policy makers in the subject, empirically little is known about the relative importance of these two types of spillovers in the form of productivity effects, for example. A further key issue is whether certain types of foreign investors are more likely to generate a particular type of spillovers than others. Dunning's eclectic paradigm (Dunning, 1993) posits that ownership advantages and the motivations for FDI vary with the

nationality of the investor. In a similar vein, Schroath et al. (1992) argue that MNEs in certain industries of a particular country possess specific advantage that accrued to them because of the way their industries developed in their home country. According to received theory, the differences in ownership advantage are capable of leading to different patterns of FDI and, by logical extension, to different patterns of spillovers. Most of the studies to date on FDI spillovers, however, tend to ignore the importance of heterogeneity of spillovers associated with the nationality of the MNE (Wang and Zhao, 2008) which is worth emphasizing in our case.

Empirical studies on the issue on Africa are limited. According to Jenkins and Peters (2006) and also Dunning (2001) noted above, foreign investments are usually distinguished according to their motivation: natural resource-seeking, market-seeking or efficiency-seeking. In our context, such distinction is very important and we will attempt to use this classification in this study to understand the impact of Chinese FDI in Ethiopia. This point becomes important when we look at the impact channels identified by Goldstein *et al* (2006) and Kaplensky *et al* (2006), among others: (1) direct competition for FDI (or what is commonly known as FDI crowding out by China); (2) indirect consequence of the rise in the price of commodities on FDI flows; (3) interest of China multinationals to invest in Ethiopia; and (4) opportunity for Ethiopian FDI in China, if there is any and (4) generally the direct and indirect impact of this process on Ethiopia.

China has been a leading destination for FDI (related to Manufacturing) by producers seeking to capitalize on its large domestic market and low labor costs (Eichengreen and Tong, 2005). This has been perceived by others as a crowding out effect of FDI from other destinations. Goldstein et al (2006) stress that as much as FDI in SSA is geared toward resource extraction (resource-seeking) and domestic market (market-seeking), China does not pose a direct (and significant) threat to Africa. In relation to the more indirect channel, the authors argue that the commodity booms that are at least partly fueled by Chinese demand are making Africa more attractive to “resource and raw-material-seeking” FDI. With straight foreword logic, they point out that Chinese FDI in Africa is also mainly resource-seeking (Goldstein et al, 2006). But this is largely a hypothesis that needs to be examined by an in-depth study of this type tailored to a particular country. Eichengreen and Tong (2005) used a gravity model to assess whether or not China is in fact crowding out FDI to other countries and found little evidence that China’s FDI creates problems for other developing countries by limiting their own access to FDI. “If anything, there is some evidence that developments making China more attractive destination for FDI also make other Asian countries attractive destinations for FDI, as would be the case if China and these other countries are part of the same global production networks” (Eichengreen and Tong, 2005: 23). Eichengreen and Tong (2006) performed a similar exercise (in terms of the research question and methodology) and conclude that the impact of China’s large and growing receipts of FDI on other countries depends on whether that investment is horizontally or vertically oriented and specifically whether the countries are linked to supply chains with China (Ibid:82). They found that countries that compete with China for horizontal FDI find it more difficult to attract FDI as a result of China’s emergence while countries that are potentially attractive destinations for vertical FDI find it easier, especially in components and intermediaries. Thus, such characterization of the Chinese FDI in Ethiopia will be important to clearly understand the impact of Chinese FDI in the country (see Mercereau 2005, however).

## **4. The Method of Analysis [Theoretical Framework]**

This section deals with the method/approach followed in this study. Based on the general literature noted above and the specific approach given in Table 2 below, we have attempted to examine the Ethio-Chinese investment relation both from macro and micro perspective. We have used all available macro data and information as well as detailed surveys that we conducted among 33 Chinese firms, 50 local producers and 20 consumers of Chinese products. In addition to this we have also managed to talk with a number of key informants.

We have used the theoretical literature about determinants of FDI noted above to characterize the nature of Chinese investment in Ethiopia. As regard to the impact of Chinese FDI we have used the framework given by Kaplinsky *et al* (2006), and shown below (Table2). This framework helps to make a systematic classification and analysis of Chinese investment in Ethiopia (as show in the first row of Table 2). The second raw in Table two about aid will be linked with investment issues noted in first raw. It will be used in as much as it sheds light on the impact of Chinese investment in Ethiopia which is the subject of this study.

**Table 2: A Synthetic view of the main channels: complementary-competitive and direct-indirect impacts**

		<b>Direct</b>	<b>Indirect</b>
<b>Investment/Trade</b>	<b>Complementary</b>	<ul style="list-style-type: none"> <li>• Chinese FDI in sub-Saharan African, particularly in fragile states</li> <li>• Cheap and appropriate capital goods</li> <li>• Technology transfer</li> <li>• Integration in global value chains, particularly in clothing</li> <li>• Low-cost infrastructure</li> </ul>	
	<b>Competitive</b>	<ul style="list-style-type: none"> <li>• Displacement of existing and potential local producers</li> <li>• Less spin-off to local economy than other foreign contractors</li> <li>• Use of scarce resources</li> </ul>	<ul style="list-style-type: none"> <li>• Competition for global FDI and production platforms</li> <li>• Disinvestment and relocation by other foreign investors (for example, clothing and furniture)</li> </ul>
<b>Aid</b>		<b>Direct</b>	<b>Indirect</b>
	<b>Complementary</b>	<ul style="list-style-type: none"> <li>• Grants and concessional finance</li> <li>• Technical assistance</li> <li>• Training</li> </ul>	
	<b>Competitive</b>		Chinese aid, say, to Latin America creates productive capacity which competes with sub-Saharan African producers and lowers export prices

Source: Kaplinsky – Morris (2006).

This Kaplinsky-Morris framework is used as an analytical model for this study. Although we have focused on Chinese investment, understanding Chinese trade and Chinese Aid/financing, as well as environmental/exogenous factors (including the current financial crisis and Ethiopia's regulatory framework) is also crucial to understand Chinese-Ethiopia investment. This is explored by collecting information related to each aspect. A modular questionnaire is used to collect the information required for each aspects of Chinese FDI shown in Table 2. Following the theory of FDI, the questionnaires are also helpful, for example, to explore the possibility of vertical and horizontal spillover effects as well as the motive for Chinese FDI in Ethiopia.

## 5. Empirical Analysis: China's Investment and Its Impact on Ethiopia

### 5.1 *Data source*

The data for this study is obtained from secondary sources (the Ethiopian Investment Authority, Government of Ethiopia, EIA) as well as the primary data that we have collected using structured questioners.

The survey is conducted to acquire key information from Chinese firms, domestic producers, consumers, government offices and other stakeholders. We this focused approach; the questioners are administered to limited but key informants that we managed to carry with limited resource and time at our disposal. This list includes:

- Key informant at Ministry of Trade, Foreign Affairs
- Selected vulnerable local producers
- Selected Chinese manufacturing firms (both Chinese owned and joint ventures)
- Key informants (selected consumer; and merchants that travel to China for trade)

Questionnaires are designed for each target group and face to face interview is administered. The targeted samples from the Chinese and domestic firms were 100 in total, 50 from each group. We managed a response from 32 Chinese firms. While it is very difficult to interview the Chinese, we found it relatively easier to obtain response from vulnerable local producers. The information is obtained from firms engaged in manufacturing and service industry categories. We encountered a problems that most of the Chinese firms with a given official investment licenses and willing to talk to us in our samples were found engaged in other investment activities, thus affecting the composition firms that we want to cover. The interviews are also conducted in difficulty situation: first, a number of Chinese firms are found to operate in an activity other than for which they were granted investment license. For example, a firm with investment license for manufacturing could be found performing service delivery activity. Second, most of the Chinese firm's addresses are different from what are formally registered. Third most of the Chinese did not like to be interviewed. In some cases, they just stop in the middle of the interview. Fourth almost all Chinese firms don't want to disclose their capital level. Fifth language was also a major barrier although translators are used. We also found some Chinese who are very cooperative and greatly facilitated our study. We hope this will give readers the context in which the data for the study is gathered.

### 5.2 *Macro Levels Analysis: Trends and Characterization of Chinese Investment in Ethiopia*

It is estimated that Chinese loans to Africa in recent years to be in the region of US\$ 10 billion per year and that they focus on building energy infrastructure (Financial Times, 2007). In 2005 China announced in the General Assembly of the UN that it would mobilize an additional 10 billion US\$ in three years for concessional loans. In December 2006 in Beijing, during the conference of heads of states from Africa, China announced it would probably be Africa's biggest donor by 2010 (La letter des economistes No. 15, Janvier 2007). The Financial Times (2007) warns that some African leaders can try to use Chinese loans to avoid having to hold elections. Also the donor-constructed notion of accountability could be threatened. The Forum on China-Africa Cooperation resulted in a three year action plan. Besides doubling aid by 2009 (to about 1 billion US\$), China has also cancelled 1billion

euro of African debt and announced it would cancel another 1 billion euro (Financial Times, 2007). It has set up a 5 billion US\$ development fund for Africa and promised to reduce tariffs on selected African imports. The Africa aid package will be tied to Chinese projects, however (Financial Times, 26-6-2007). This Africa wide investment and capital flows to Africa has certainly has an impact on Ethiopia.

The economic linkages between China and Ethiopia have been strengthened through both trade and Chinese direct investment in Ethiopia for past decades. The bilateral trade between China and Ethiopia started in 1956. Over the period 1974-1992, when Ethiopia was under socialist system which was the Soviet Union version of socialism, Ethiopia's interaction with China did not see much change. The year 2002 saw the total trade (both imports and exports) value of the two countries reaching US\$ 100.12 million, of which the Chinese export took up US\$ 96.43 million with Ethiopia's import of US\$ 3.69 million. The total export and import trade has grown to over US\$700.00 (Ethiopia's export growing to over US\$120) in 2006 and over one billion US\$ in 2009. The Chinese share in the total exports of Ethiopia is found to be the highest for 'crude materials' where the Chinese share is about 45 percent, followed by manufactured goods (19 percent) and machineries and transport equipment (about 7 percent). The Sino - Ethiopian bilateral trade has risen sharply following the Chinese accession to the WTO in the year 2000 as well as following its firms desire to exploit the AGOA opportunity given to Ethiopia..

The Chinese investment in Ethiopia has been growing since the year 2000 and takes two modalities of investment: joint venture and wholly Chinese owned investment. According data obtained from the Ethiopian Investment Agency, the total Chinese owned investment which is already operational and under implementation in Ethiopia was estimated at about 5.33 million birr (about 0.5 million USD) in the year 2001. The cumulative Chinese owned investment in the year 2007 reached 1,179.017 million birr (about 118 million USD) averaging 147.377 million (15 million USD) per year. In some years, such as the year 2004 it has reached about 107 million USD. FDI from China is concentrated in the manufacturing sector (over 60%) which is different from what happened in other African countries where the Chinese FDI is pretty much resource seeking.

The Ethiopian Investment Agency (EIA) is the only legal government entity that licenses domestic and foreign investment activity in Ethiopia. We obtained the list of Chinese investors in Ethiopia. The EIA is also the source for a list of domestic firms. We have augmented this information by the more refined list from the Ethiopian Chamber of Commerce. According to the existing secondary data from the EIA there are 812 Chinese firms in Ethiopia out of which 191 are operational while the remaining 621 are under implementation and pre-implementation phase. Generally, the Chinese firms are engaged in manufacturing and service sectors, as we noted above. Table 3 indicates the summary of the Chinese investment in Ethiopia

Table 3: Chinese Investment in Ethiopia (1992-2009)

<i>Item No</i>	<i>Investment phase</i>	<i>Status in Number of firms</i>	<i>Total capital (1000Birr)</i>	<i>Total capital (1000 US \$)</i>	<i>Expected Permanent Employment</i>	<i>Expected Temporary Employment</i>
1	Operational	191	1,556,117	155,611.7	9911	15,566

2	Pre- implementation*	610	9,044,088	904,408.8	33531	40,317
3	Implementation	11	210,603	21,060.3	721	790
	Total	812	9,410,308	941,030.8	44,163	56,673

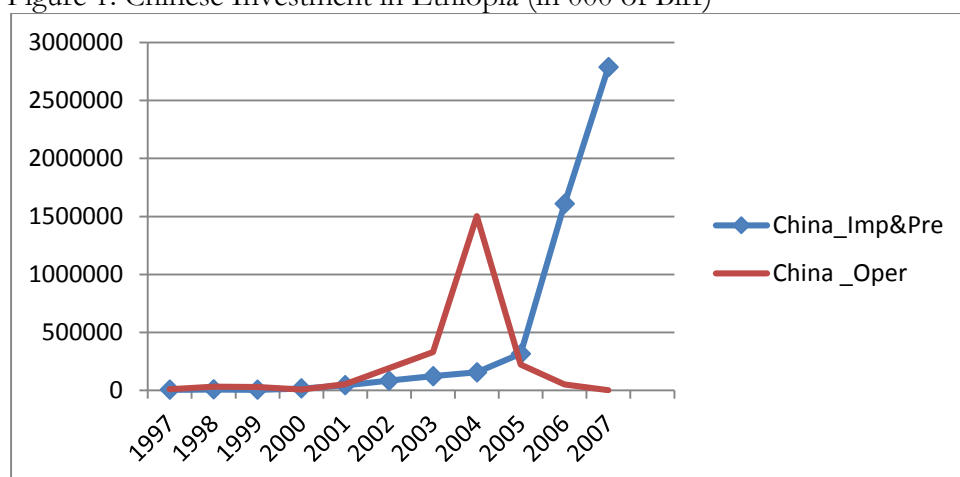
Source: Ethiopian Investment Agency and author's compilation

\* Just acquired license.

Table 3 is compiled for the period 1992 to 2009. During this period, Chinese FDI in Ethiopia reached 9.5 billion birr (about 950 million USD). The same source indicates that during the same period, total FDI in Ethiopia reached 267.4 billion birr. Chinese FDI represents only 3.55 percent of total FDI in Ethiopia. In terms of the number of projects, total number of foreign projects reached 5804 with total of 779,392 expected permanent employment creation out of which Chinese FDI contributed 44,163 or 5.66 percent. If we consider the temporary employment in Chinese FDI it would contribute to about 13 percent of the total employment expected to come from the total FDI.

As one would observe from Figure 1, the trend of Chinese foreign investment both in operation and at the implementation and pre-implementation stage has been increasing sluggishly up to the year 2000 from where it started increasing sharply, especially of those under the category of implementation and pre-implementation stage while those under operation has shown a sharp decline after 2004 following the jump in 2004. The 2004 jump doesn't show any specially thing except that a number of manufacturing firms in the chemical and chemical products, food and beverage, plastic and rubber as well as in metallic and non-metallic products have become operational in that year. Thus, the data from the Ethiopian Investment Agency shows that Chinese involvement in the Ethiopian economy since 2000, a year China joined WTO seems to accelerate. This fact was also observed in the trend of the pattern of trade flow which significantly increasing increased following Chinese accession to WTO.

Figure 1: Chinese Investment in Ethiopia (in 000 of Birr)



Notwithstanding this relatively sharp rise in total investment from China, its relative magnitude is not that big, especially of investment under implementation and pre-implementation stage as can be read from Figure 2. It is striking to note, however, that the Chinese investment in the category of projects

under implementation has shown the highest share of about 33% of total foreign investment under operation in 2004, to decline sharply thereafter.

Table 3 shows the trend of FDI from China directed to the various sectors. As can be read from this table, the Chinese FDI in Ethiopia is growing very fast. Currently it constitutes about 15% of the total foreign owned projects in Ethiopia that are under implementation and in operation. This share had reached as high as 22% in the year 2004. In the last five years Chinese FDI in Ethiopia constitutes about 11% of the total foreign owned projects under implementation and in operation in Ethiopia. Chinese share of foreign projects in the pre-implementation stage (which includes getting registered in Ethiopian and applied for license) is also about 4 % in 2007. In terms of sectoral preferences, the Chinese firms are consternated, in their order of importance, in the manufacturing, construction and real estate sectors.

Table 3 China's share of Ethiopia's FDI (in Millions of US \$: using 1US\$=10.00 Ethiopian Birr, Feb 2008)

		2000	2001	2002	2003	2004	2005	2006	2007
Agriculture	Under Implementation & in Operation	0	0	0	0.23	0	0	0	0
	Pre-Implementation	0	0	0	0	1.59	0	1.26	2.52
Manufacturing	Under Implementation & in Operation	1.46	5.56	0.79	15.04	55.32	6.49	1.81	0.09
	Pre-Implementation	0	0.9	0	3.07	4.03	20.34	16.36	122.08
Construction	Under Implementation & in Operation	0.53	0	0	1.31	39.89	6	0.26	0
	Pre-Implementation	0	0	0	0	0	0.4	34.24	15.36
Education and Health	Under Implementation & in Operation	0	0	0	0	0.05	0.2	0.09	0
	Pre-Implementation	0	0	0	0	0	0.3	0.49	0.7
Hotel and Restaurant	Under Implementation & in Operation	0	0	0	0.56	0.1	0.31	0.1	0
	Pre-Implementation	0	0	0	0	2.15	0.3	0.9	10.75
Mining	Under Implementation & in Operation	0	0	0	0	6	0.09	0	0
	Pre-Implementation	0	0	0	0	0	0	4.68	2.2
Real estate, renting and business activities	Under Implementation & in Operation	0	0	0	0	6	1.98	2.84	0.09
	Pre-Implementation	0	0	0	0.14	0	0.59	6.1	10.66
Total FDI from China	Under Implementation & in Operation	2	5.56	0.79	17.14	107.36	15.07	5.1	0.18
	Pre-Implementation	0	0.9	0	3.2	7.77	21.92	64.03	164.26
Total FDI to Ethiopia	Under Implementation & in Operation	130.65	221.91	76.03	245.26	481.73	236.97	207.8	1.14
	Pre-Implementation	44.21	80.3	146.8	186.57	470.65	1731.89	4236.41	3875.59
China's Share of Total FDI to Ethiopia	Under Implementation & in Operation	1.5	2.5	1.0	7.0	22.3	6.4	2.5	15.7
	Pre-Implementation	0.0	1.1	0.0	1.7	1.7	1.3	1.5	4.2

Source: Authors computation based on EIA data

In terms of geographic concentration the majorities of Chinese projects are located in the capital and its surrounding (Addis Ababa) and can be read from Table 4. This is followed, in far distance by Oromia and Amhara regional states. Table 4 further shows that most of the capital and expected employment is concentrated in the Capital. It is also instructive to note that the all projects under operation are in the manufacturing sector, except one which is in the mining sector located in Behishangul-Gumuz regional state (see Table 4).

Table 4 Characterization of Operational Chinese Investment Projects In Ethiopia 1992-2009

Region	Number of Concentred sector projects	Capital(1000 US\$ at 10birr/\$)	Permanent employee	Temporary
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	employment				
Addis Ababa	127	Manufacturing	178,444.	10510	16618
Afar	2	Manufacturing	180.00	3	35
Amhara	4	Manufacturing	3,951.7	1940	208
Benishangul Gumuz	1	mining	5,000.00	40	60
Dre Dawa	-	-	-	-	-
Hareri	1		250.00	5	5
Oromia	8	Manufacturing	20,382.3	586	686
Somali	1	Manufacturing	10.00	5	25
Southern People	-	-	-	-	-
Tigray	-	Manufacturing	10.00	5	5

Source: Based on EIA data.

### 5.3 *Chinese Quasi-Investment in Ethiopia*

In addition to such direct investment, Chinese firms are also active in major investment activities that are being carried by the government of Ethiopia, especially in infrastructure. The information about the value of Chinese total contract amount in road construction, electricity and telecommunication sectors obtained from the Ethiopian Road Authority, the Ethiopian Electric Power Corporation and the Ethiopian Telecommunication Corporation shows a surge in Chinese share in the last five years. We may not take such investment as direct investment as such since they are fundamentally the government's investment. However, given that some of the major projects, such as the investment in the telecom, may not be realized without Chinese financing, we have referred to the Chinese investment in this venture as quasi-investment. They are important in showing the Chinese engagement in the country than the level of Chinese direct investment in Ethiopia as such. Table 4a shows the magnitude of such investment in some sectors.

**Table 4a: A Snap Shot Picture of Chinese Share of Ethiopia's Foreign Quasi-Investment by sector in 2006**

Sectors	China	Total	China share as a % of the total
1. Agriculture	9,611,395	2,769,753,619	0.35
2. Manufacturing	266,895,552	4,888,908,895	5.46
3. Mining	6,957,130	10,608,458	65.58
- Solid Minerals			
- Oil and gas			
- Other minerals*			

4. Transport*	352,570,000	356,220,000	99.02
5. Electricity and Water	143,688,557	1,819,542,221	7.89
6. Telecommunication			
2006	12,113,000	34,520,000	35
2007	1,027,600,000	1,048,600,000	97.99
7. Other business services and relevant ministries**	33,097,324	2,614,800,837	
<b>Total</b>	<b>1,852,532,958</b>	<b>13,535,999,000</b>	<b>13.68</b>

In the power sector, the Chinese engagement is growing at an amazing rate in the last decade. As can be read from the information contained in Table 4b, the Chinese companies are involved nearly in all power generation projects (except some handled by an Italian firm named Salini) irrespective of the financier of the project. In sum the value of the power generation in which the Chinese companies involved is estimated at about 1.7 billion US\$; in power transmission about US\$ 350 million and in the governments universal access program US\$ 23 (See Table 4b).

Table 4b: Chinese Engagement in the Ethiopian Power Sector

Project	Company	Type of Work	In millions of Birr	In million \$ at 2009 rate of 12.45/\$
<b>Power Generation</b>				
Tekeze Hydroelectric Project	CWGS JV (China)	Construction of Arch Dam Head race Tunnel	2,746.05	220.57
Tekeze Hydroelectric Project	CWBEC (China)	Design, Supply and Erection Mechanical & Electrical Equipment	293.79	23.60
Tekeze Hydroelectric Project	JV Jppc and CCC (China)	Design, Supply and Erection of 230kv S/S	53.08	4.26
Tekeze Hydroelectric Project	JPPC (China)	Design, Supply and Erection of 230kv Transmission Line	78.67	6.32
Finchaa -Amerti- Neshe Melti Purpose Project	CGGC (China)	Design, Procure and Construction of the Plant	1,219.12	97.92
Beles Hydroelectric Power Project	CMEC (China)	Design, Manufacture CIF Supply, Transport, Loading/Unloading erection test and commissioning	613.32	49.26
Genale Dawa (GD3)Hydroelectric Power Project	CGGC (China)	Design, Manufacture CIF Supply, Transport, Loading/Unloading erection test and commissioning	5,770.66	463.51
Chemoga-Yeda Hydroelectric Power Project	Sinohydro (China)	Design, Manufacture CIF Supply, Transport, Loading/Unloading erection test and commissioning	7,100.45	570.32
Harena Messobo & Adama Nazreht	Hydro China	Design, Manufacture CIF Supply, Transport,	3,198.40	256.90

Wind Power Project	Corporation	Loading/Unloading erection test and commissioning		
<b>Power generation total</b>			21,073.53	<b>1,692.65</b>
<b>Power Transmission</b>				
Tekeze-IndaSilassie-Humera	(China)		150.00	12.05
Tekeze-IndaSilassie-Humera	(China)		211.51	16.99
Bedele-Metu Power Transmission Project	(China)		115.00	9.24
Bedele-Metu Power Transmission Project	(China)		94.57	7.60
Bahir Dar-Debre Markos-Addis Ababa Power Transmission Project	China CAMC Engineering Co. Ltd		410.54	32.98
Bahir Dar-Debre Markos-Addis Ababa Power Transmission Project	Shingai Electric Group Co. Ltd		388.81	31.23
Bahir Dar-Debre Markos-Addis Ababa Power Transmission Project	Shingai Electric Group Co. Ltd		609.70	48.97
Gibe III-Addis Ababa Transmission Line Contract	TBEA (China)		933.78	75.00
Finchaa -Gedho- Gefersa Power Transmission Project	CWBEC (China)		135.00	10.84
Finchaa -Gedho- Gefersa Power Transmission Project	CGGC (China)		246.76	19.82
Koka -Dire dawa Power Transmission Project	CWBEC & JPPC (China)		1,111.54	89.28
<b>Transmission Total</b>			<b>4,407.21</b>	<b>353.99</b>
<b>Universal Access Program</b>				
Sawla Key Afer Project	China Wanbao Engineering Co.	Supply of S/S and Power Transformer	56.90	4.57
ADB II Financed Project	CAMCO International, China	supply of OHL Accessories	9.88	0.79
ADB II Financed Project	China National Ele, Imp& Exp. Cop, China	Supply of MV & LV insulators	28.53	2.29
ADB II Financed Project	Zhejiang Hlley Int. Co. Ltd. China	Supply of MV & LV Switchgears	37.51	3.01

ADB II Financed Project	China Wanbao Engineering Corp, China	Equipment	81.02	6.51
EAREP I	Bonle, China	Supply of MV and LV Insulations	26.23	2.11
EAREP I	CE Lighting , China	Supply of energy saving compact florescent	42.36	3.40
EAREP I	Bonle, China	Procurement of Street light	6.05	0.49
<b>Total Universal Access program</b>			<b>288.47</b>	<b>23.17</b>

**Source: Ethiopian Electric Power Corporation, September, 2009**

Similarly Chinese firms are dominating in winning big projects in Ethiopian telecommunication and road sectors. One of the biggest Chinese telecom company, ZTE, which is owned by the Chinese government has offered the Ethiopian telecom a credit (vendor financing) to the tune of 1.5 billion US\$ (see Table 4a). This offer is conditional on ZTE doing the job without bidding. This credit is perhaps equivalent to the total current worth of the Ethiopian telecom monopoly, which is also publicly owned. Chinese firms are also dominating both rural and urban road construction in Ethiopia. This dominance has been accelerating in the last two years. Our observation reveals that this dominance is partly due to low bid prices offered by the Chinese firms and partly owing to the diplomatic and political ties the Chinese government made with the Ethiopian government. Provision of financing by the Chinese government for its firms in Africa, which Chinese's firms in turn offer as credit in the form of vendor financing during the bidding process, is another reason for this success by Chinese firms in Ethiopia.

Recent development as regards to the Chinese involvement in the telecommunication sector in Ethiopia witnessed that in the decades to come, the development both in quality and quantity of the Ethiopia's telecommunication utility is going to be guided by what is happening in China in connection to this technology. This is because once the existing telecommunications equipment is replaced by Chinese new equipment at cheaper prices, as the nature of the technology from China is such that it is not easily compatible with others or cannot be retrofitted to other technologies easily during operations, by necessity, China will have the monopoly position to deliver spare parts and related after sale services for the years to come, perhaps at a price much higher than the market supply price for similar quality product. The venture is also a good training ground for Chinese firms to work in other African/developing countries. Our discussion with some of our informants at the Telecommunication Corporation reveals that it seems that the Ethiopian government officials are concerned only with short run issues related to expansion of the telecommunication infrastructure without worrying about the long-run operational costs, quality and related issues. It was also transpired in our discussion that the Chinese are well organized, with skilled personnel and skilled negotiators while the Ethiopians are in bad shape in all these areas of expertise when such deals are negotiated and agreed upon, not to mention the political muscle of the Chinese over the Ethiopian telecom experts owing to their connection with the top Ethiopian government officials. Thus, the initial condition between China and its counterpart in Africa, as demonstrated by the Ethiopian case, determines how much an African country may benefit from its economic engagement with China. It is also fair to infer that what is

happening in Ethiopian telecom could be found in all big projects that Chinese firms run in collaboration with both the Ethiopian government and the African governments at large.

In the transport/road sector, Chinese have totally dominated the Ethiopian scene.. In general, there are about ten Chinese firms engaging in the construction of roads throughout the country. These firms' engaged on about 60 percent of the road works currently being carried out in the country. Four of the firms dominating the scene by holding nearly 70% of the Chinese engagement in the sector (see details in Table 4c). This is again as a result of minimum bid price they offer and innovative financing mechanisms they come up with. But high Chinese involvement is not going without complain. Some of the complains are related to 1) the quality of the construction undertaking itself; 2) the remuneration to the local labor which is far below the standard expected from such construction work 3) one also would expect high employment opportunities for local unskilled labor as one of the benefits whenever there are such big construction projects. However, such opportunities are rare from Chinese construction projects; 4) equipment and machinery for construction purpose are imported free of import duties and tariffs owing to the incentive scheme the government set out to develop infrastructure. Chinese use this opportunity to import technically outdated equipment which after the projects in Ethiopia are completed, invariably does not give significant service. Finally, (5) regarding the Chinese projects, it is reported that the standard of the Chinese labor (and also products) is by far below the international standard (for example, in terms of sanitation, and water supply facilities). The Chinese are also using their connection with top government official- political muscle - to crowd out domestic firms (perhaps the authorities may prefers to deal with the Chinese than domestic firms to get unnoticed in whatever they are doing – this however, hampers technology transfer from Chinese to African firms). Invariably Chinese firms that won big contracts are seen remaining in Ethiopian by opening offices and local subsidiaries of their company in the course of their first project in Ethiopia. The latter may have both benefits and costs that need closer examination.

Table 4c: Chinese Engagement in the Road Sector Investment of Ethiopia (2009)

Name of Chinese firm	Name of the Project	Road Constructed (KM)	Value in Millions of Birr	In Millions of \$ at 12.45	% of total road in RSDP	Financer
CGGC	Shire - Shiraro - Humera Lugdi lot.1	156	616.44	49.51	1.18	GOE
HUNAN HUNDA	Shire-Shiraro Humera Lugdi Lot.2	161	627.71	50.42	1.22	GOE
Hunan Hunda	Gonder-Humera Contract 2	117	341.18	27.40	0.89	GOE
CGC Overseas .	Kombolcha-Gundewoin Contract 1	173	694.15	55.75	1.31	GOE
CGC Overseas	Kombolcha-Gundewoin Contract 2	136	904.24	72.63	1.03	GOE
Hunan Hunda & bridge Corporation	Harar-Jijiga	106	350.00	28.11	0.8	GOE
CGC	Dodola-Junction-Goba	130	371.62	29.85	0.98	IDA
CGC Overseas	Magna-Mechara	120	468.17	37.60	0.91	IDA

Construction Ltd.						
CGC Overseas Construction Ltd.	Dodola-Junction-Goba	130	94.60	7.60	0.98	IDA
China Railway Engineering Corp.	Adigrat- Adiabun	108	283.22	22.75	0.82	IDA
Sinohydro Corp.	Nazreth - Assela	79	177.34	14.24	0.598	IDA
Sinohydro Corp.	Nekempt - Mekenajo	126.5	300.72	24.15	0.96	IDA
CRBC	Butajira - Hossana	95	217.47	17.47	0.72	ADB
China Sichuan Int.	Mekenajo - Dengoro - Billa -Hena - Nejo	61	138.60	11.13	0.46	OPEC
CRBC	Nejo - Mendi	74	147.77	11.87	0.56	OPEC
CRBC	Merawi-Gonder	208	395.58	31.77	1.57	IDA
CRBC	Alemgena-Butajira	120	223.65	17.96	0.91	ADB
CRBC	Awash-Hirna	140	256.54	20.61	1.06	IDA
CRBC	Kulubi-Dengego-Harar	80	162.18	13.03	0.61	IDA
CHINA WON.	Woldiya-Alamata	78	150.33	12.07	0.59	IDA
CHINA WON.	Betemariam-Wukro	117	203.41	16.34	0.89	IDA
CHINA WON.	Debre Markos-Merawi	220	327.07	26.27	1.66	IDA
CRBC	Gashena-Woldiya Cont.3 Woreta-Woldiya	107.69	370.78	29.78	0.81	IDA
<b>Total</b>	.		<b>7,822.77</b>	<b>628.34</b>	<b>21.52</b>	

ADB= African Development Bank

GOE= Government of Ethiopia

IDA= International Development Association

Source: Based on Ethiopian Road Authority data.

Notwithstanding these problems the Chinese are building the much needed roads, electric power stations, engaged in oil exploration and similar productive ventures in Ethiopia from which Ethiopia would benefit. It is interesting to ask whether this pattern of Chinese engagement affects the pattern of investment and investment policy in Ethiopia. On the positive side, Chinese investment in Ethiopia could facilitate investment in Ethiopia through the provision of infrastructure (in relatively short time) and affordable and appropriate technology to local firms, as can be gleaned from our survey results summarized in Tables 3.4 and 3.5 below. In fact the investment data in the last five years shows a growing number of Chinese-Ethiopian joint ventures. They also seem to teach work ethics to some Ethiopian firms and their employees.

The negative side relates to Chinese competitive threat to the infant but growing local firms. Chinese engagement in investment may also have a limited (but not major) impact on investment policy because it has the ability to call upon the political muscle of the Chinese government whenever it needs that from the government of Ethiopia. Given the strong relation between the Ethiopian and Chinese government, this is not difficult to bear fruits by making the investment policies and rules to benefit Chinese firms – the example of the Ethiopian telecom company noted in this study is a case in point.

### ***5.3. Micro/Firm Level Analysis on Chinese Investment and Its Impact in Ethiopia***

#### ***General Characterization***

In our survey we have managed to get a response from 30 Chinese firms engaged in Ethiopia. Our result shows that there are combination and multiplicity of motives ranging from resource seeking to demonstration effect. As one can observe from table 3:4, asked their source of input material, 56% percent of the firms from the responds affirmed that it is Ethiopia, where as for others the material supply is from different suppliers including from China and others, (most of them being the Middle East countries). When asked about the market for their products, 96% of them responded their target being as Ethiopia (very few noted neighboring country such as Kenya). Some of the firms also noted other export markets as a possible market destination for their activities. In general, however, the motive for Chinese investment in Ethiopia seems to fall in the generic category of market seeking (96%) although resource seeking is another characterization as about 56% of them mentioned Ethiopia being source of material for their activity (see Table 5)..

Table 5 Summary of responses categorized by motives for Chinese Investment in Ethiopia

<i>Asked</i>	<i>Response</i>	<i>Resource seeking</i>	<i>Market seeking</i>	<i>Efficacy seeking</i>	<i>Demonstration effect</i>
Source input materials for product	Ethiopia : 56%	√			
Market for output	Ethiopia : 96%		√		
Motivation					
Attractive sector	Construction: 32% IT: 12% Cement Factory 12% Agriculture: 12% Mfg : 8% Chemical industry 8%		√	√	√
Future plan	To continue: 84% Not to continue 12% Do not know 2%	√	√	√	√
Contribution they feel	Employment opportunity 52% Saving foreign exchange 8%				√
On contribution for technology transfer	Yes, 84%				√
Major constraints	Power: 8% Customs and shortage of skilled manpower 16%				

	Foreign exchange 28%				
	Corruption: 8%				
	Ethiopian government policy instability : 16%				
Chinese Government policy support	Yes: 20%	√			√
Ethiopian Governments financial support	No: 80%	√			
Contribution of Chinese aid for FDI,TRADE	Yes: 84%	√	√	√	√
	No: 14%				
Preference for joint venture	No: 88%			√	
	Yes: 12%				
Expected potential competition	Chinese 16%			√	
	No competition : 8%				
	India : 12%				
	Tanzania, Ethiopia ,Japan : 4% for each				
Impact of current financial prices	No Impact: 68%	√			
	Yes: 32%				

Our survey data also revealed that the construction sector is the most attractive sector for them, followed by agricultural activity and manufacturing. The majority of them (about 84) noted that they will continue their activity in Ethiopia. Although the majority of Chinese firms (84%) believe that Chinese government aid is helpful to foster Chinese FDI and trade, a number of them (above 80%) reported that they did not get any support from either the Ethiopian or the Chinese government. The majority of these firms also believe that they do contribute in terms of employment creation and technological transfer. The Chinese firms in Ethiopian see, lack of shortage of foreign exchange, skilled labour, and policy stability, in the order importance, as their major constraint while operating in Ethiopia. Finally, it is curious to note that most of the Chimes firms (nearly 90%) do not prefer to work in a joint venture with Ethiopian firms, while the majority of the Ethiopian firms would like to engage with Chinese in joint venture (see Box 1 below).

Finally, it is instructive to conclude this section by characterization of Chinese investment in Ethiopia as perceived by government functionaries relevant to the issue: the Ministry of Trade and Industry, and the Ethiopian Investment Agency.

1. Regarding activity or sector in which Chinese are most interested, according to the Ministry of Trade and Industry, it is reported that Chinese are interested and engaged in manufacturing, followed by communication, mining and energy sectors respectively. The ministry noted that Chinese are usually motivated by high rate of return that they perceive in Ethiopia.
2. Regarding the style, the ministry noted that most of the Chinese firm's are privately owned by Chinese themselves, they prefer to work alone instead of joint venture mainly due to skill gap and working attitude, and cultural differences. Some of the firms have a capital level of up to 10 million USD.
3. On the motive for Chinese engagement in Ethiopia, the offices noted that the most important motive is market seeking and demonstration effect (say for potential African market). According to the officials'

opinion, Chinese consider Ethiopia as a gateway to Africa, given the unofficial status of the country as the capital of Africa. Moreover, the Ethiopian government is also offering attractive investment packages.

4. Chinese FDI in Ethiopia is different from other in that most of their investment is usually in green field where as others such as the dominant MIDROC group is purchasing public enterprises and focus a lot on acquisition of privatized firms.
5. On special treatment for Chinese firms, authorities noted that there is no preferential treatment for Chinese firms as such. For example Chinese are offered 100 per cent tax exemption from imports of construction equipment like any other investors.
6. Regarding the use of labour by Chinese firms the ministry experts have the opinion that the Chinese labour is skilled, more disciplined and hence of higher productivity than Ethiopia's and hence the use of a number of Chinese labour in major Chinese related projects.
7. On the capacity of Chinese firms to generate employment opportunity, the experts' opinion is that, yes there is employment opportunity from Chinese FDI. And there are all kinds of linkage to domestic industry. Accordingly, there is big opportunity for technology transfer, management skill, horizontal and vertical spill over, consumers benefit from low cost product.

**Box 1:**  
***The challenge of Joint venture: The Ethiopian Lifan Car Assembly Case***







*Holland Car Plc was established in 2005 by Tadesse Tessema (Eng.) and Trento BV Engineering, a Dutch company, with a capital of about 1 million US\$. The company lies on 20,000sqm land in Mojo Town, 70Km to the South of Addis Abeba in Oromia Regional State. Currently Holland Car Plc has 200 permanent employees.. It has two show rooms in the capital, Addis Ababa. When the assembly plant started*

operation, it produced one car a day, gradually reaching seven to eight cars per day. The manager hopes that the company will soon be assembling 10 cars per day to satisfy the growing demand where currently about 60 customers are in the waiting list. The company was one of the 25 most successful business ventures in Ethiopia in 2008, and it became one of the five finalists for Africa's Small, Medium and Micro Enterprises Award (SMMEA) in 2009. Holland Car was also second among 70 Dutch overseas companies rated by the Netherlands Government.

Before the year 2009 this company could have been taken as a success story of Ethio-Chinese joint venture as the company is assembling the widely known LIFAN brand Chinese car by a creative marketing of giving a local name for the cars (shown in the picture): ABAY, TEKEZE, AWASH – apparently names of famous Ethiopian rivers. The company flourished selling each car at about \$15,000 and latter to about \$20,000. This is a good price in Ethiopia given the prohibitive tax rate of close to 270% on imported cars (either new or second-hand) in Ethiopia. In fact the company wouldn't survive without this tax when a good quality Toyota second hand car could be bought for less than \$5000 in UAE and Europe from which Ethiopian car importers source their car. Because of these factors once has to wait up to 6 months to buy the Ethio-Chinese made car by Holland Car Co.

Seeing this huge and potential market the Chinese partner (LIFAN) asked the Ethiopian partner to sell the company for them. It was unthinkable for the Ethiopian partner to do that after spending so much of creative advertising and literary created the market. This has led to the disagreement between the two and LIFAN decided unilaterally to stop supplying the parts to the Ethiopian partner. The Joint-venture then collapsed. The Ethiopian partner is then forced to find another Chinese partner. Now the parts of the new models will be imported from Anhui Jianghuai Automobile Co., Ltd (JAC) based in Shanghai, China. It has been mentioned in some quarters that the Ethiopian company is selling this new brands at a loss as they are relatively expensive owing to their superior quality to the original LIFAN model. One would expect that the government of Ethiopia would protect the interest of this Ethiopian company. Sadly that is not the case. Most of the legal action taken by the Ethiopian partner is not well taken by the Ethiopian government because the latter doesn't want to spoil its cordial relation with the government of China (although the deal is private to private companies). The moral of the story is to take the issue of joint-venture and technology transfer seriously by African governments as that is the sure way for technological and benefit transfer to Africans. Thus, there is a need to stand for African firms by their government in such situation. The story also shows the difficult of joint-venture (yet its importance) with Chinese firms as interest groups may be affected differently by that.

## ***Impact of Chinese Investment in Ethiopia***

We may began by looking at the trade related impact of China investment on Ethiopia. The effects of Chinese direct investment in Ethiopia on the bilateral trade hinge upon the motivations of Chinese direct investment. This effects could be looked at through series of scenarios such as strengthening the production chains and specialization, technology spillover, substituting Chinese exports to Ethiopia by local production. Following Zhao (2008) it can be read from our survey data that Chinese firms in Ethiopia are could be characterized as two of the four cases noted by Zhao (2008)<sup>5</sup>:

- (1) Chinese affiliates produce finished goods for Ethiopia with raw materials or intermediate inputs produced in Ethiopia (56% of Chinese firms in Ethiopia reported as doing this). In this case, FDI may reduce both Ethiopia's intermediate products' exports to China, and reduces the finished products' imports. Ethiopia might import the finished goods from China and export its raw materials to China if there were no Chinese direct investment.

<sup>5</sup> What is missing is the case of Chinese affiliates that produce goods for Chinese market using (a) inputs from Ethiopia and (b) inputs from China, respectively.

- (2) Chinese affiliates produce finished goods for Ethiopian with raw materials or intermediate inputs imported from China (84% of Chinese firms in Ethiopia reported to do this). In this case, FDI reduces Ethiopia's import of finished products, but raises Ethiopia's imports of intermediate products. Since there is value added in the production, as a whole, this kind of FDI is likely to reduce the value of the bilateral trade.

Following Kaplinsky and Morris (2006, 2008) we have used their framework to analyze the impact of Chinese investment using surveyed firms' view about the issues. Table 6 below shows the summary result about the impact of Chinese investment in Ethiopia from our survey

As we can observe from table 3:5, Chinese FDI in Ethiopia as perceived by Chinese firms, has strong complementary impact in a sense that 84% of the Chinese firms in Ethiopia have reported to be contributing to the real economy by creating new employment opportunity. However, this survey result need to be taken cautiously, as we have shown in the previous section that total employment generated by Chinese firms is only about 5.6% (13% when temporary workers are included) of expected employment to be generated by the total foreign investment in the country. In any case these effects could be interpreted as direct impact (see Table 6). Only 4% of Chinese firms think that they may squeeze Ethiopian firms. Given that almost all Chinese firms source their raw material and finance from their own country, their impact is generally positive. The only negative impact here may lie with the foreign exchange demand that they put on the official and parallel market through their operation in Ethiopia (see Table 6).

Table 6 Summaries of the Possible Impacts of Chinese Investment in Ethiopia

<i>Channel</i>	<i>Impact</i>	<i>Direct</i>	<i>Indirect</i>
Trade	Complementary	84% of the Chinese Firms import raw materials from China through trade channel	
	Competitive		4% of the Chinese firms squeeze out Ethiopia's export
FDI	Complementary	84% of the Chinese firms reported as they have directly contributed to employment generation and technology transfer	
	Competitive		
Finance	Complementary	Most of the Chinese firms started businesses by their own capital	
	Competitive		Chinese remit in USD may lead to shortage of Foreign currency in Ethiopia

### ***The Impact on Local Firms***

The Survey also sheds light on what the impact of Chinese investment in Ethiopia is from domestic firm's perspective. A summary of this result is given in Table 7. The majority of domestic firms (63%)

reported that there are benefits from Chinese investment. Among these domestic firms about 60% of them think this benefits take the form management and skill transfer; 50% of them also noted their benefit in fast performance and quick delivery, while a third of them mentioned they have benefited from low cost of production owing supplies from China.

The majority of Ethiopian firms also reported the threat from Chinese firms both in the third market (60%) as well as in terms of possible displacement from domestic market 40%. Thus, the majority of domestic firms (above 90%) believe in the need for government intervention to address these problems although a number of them noted that such action needs to be done cautiously so as not to scare Chinese firms which would benefit the country. (see Table 7). Finally, from the survey we noted that Ethiopian firms would like to see a joint venture with Chinese operators in Ethiopia although most Chinese firms are not willing to do that as we noted above.

Table 7: Impact on Producers and Producers Perception of Chinese Firms

	<b>Some Benefit</b>	<b>None</b>	
<b>Benefit from Chinese Presence</b>	63.3%	36.7%	
<b>Type of Benefit</b>			
Management Skill Transfer	58.3%		
Enabling Low cost of Production	33.3%		
Fast Performance and Delivery	50.0%		
<b>Competition threat from Chinese Firms</b>	<b>Very High</b>	<b>High</b>	<b>Low</b>
In the third market	66.7%		33.3%
Displacement from local market	40.0%	26.7%	33.3%
From Monopoly or Monoposony Position	33.3%	16.7%	50.0%
	<b>Yes</b>	<b>No</b>	
Do you need Government Protection	90%	10%	

Source: Authors' computation base on Survey of 53 domestic producers firms, June 2009.

### ***The Impact on the Local Consumers***

As part of this study we have attempted to see the potential benefits to Ethiopian consumers from Chinese investment and presence of Chinese goods in Ethiopia. Consumers are interviewed on different issues such as quality, price, frequently used product, and convenience of the products for ordinary uses. The summary of the response, which we found to be fairly similar across respondents, is summarized in Table 8.

Table 8: Impact on Consumers based on Consumers Survey

<b>Enquiry</b>	<b>Response</b>		
Quality of Chinese product compared to others	Poor: 77%	Fair: 23%	
Price of Chinese product compared to others	Cheap: 22%	Fair: 66%	Expensive: 10%

Frequently used Chinese product	Shoes, Socks, T-shirts: 66%	Electronics: 10%	Other Clothing 20%
Continuation in use of Chinese product	Yes: 60%	No: 40%	
Future potential domination of Chinese product in local market	Yes: 90%	No: 10	
Is there any other motive for using Chinese	Ease for use: 10%	Style and availability: 60%	Others: 20%

Source: Authors' computation base on Survey of 20 Consumers, June 2009.

To begin with the kind of goods that our informants used which are made-in China: footwear, Socks, T-shirts, clothing, plastic and rubber products and electronics items are the most frequently reported and this trend is expected to continue for the foreseeable future as explained by our informants. Consumer's response on motive for buying Chinese products varies ranging from cheaper prices to ease of use, style and availability on the local market. Consumers who responded availability as a reason for their use of Chinese goods noted that sometimes, they couldn't get the type of goods they get from China from other sources in domestic market. From the survey it is safe to conclude that all consumers have a common perception of low quality and cheaper price for Chinese made goods available in Ethiopia. On qualities, 77% of the respondents say poor, 23% rate them as fair. On the price, 66% of the respondent's rate Chinese goods as fair, 22% rate cheap and 10 % rate them as expensive (see Table 8). When asked whether the consumers will continue or not to buy Chinese products?' most of the consumers agree that it all depends on their income in the future (i.e. indicating some kind of inferior goods status to Chinese goods). Most of them also believe that Chinese products are going to dominate the local market in the time to come.

## ***6 Conclusion and Policy Implications***

In this study an attempt to investigate the Chinese investment in Ethiopia is made. We have attempted to look this issue through theories of FDI related to its determinant and effects. We have also attempted to see the impact of trade, aid and related relation between the two countries in terms of its effect on Chinese investment in Ethiopia. We found that in the last five years the Ethio-Chinese relation has grown quite strongly both in terms of trade and investment. This is found to be, in particular, important in the areas of road construction, supply of manufacture goods from China, telecommunication and installation of big electric power stations by Chinese companies as well as engagement Chinese firms in Ethiopian manufacturing sector. The success of Chinese firms in this areas is explained by the political ties their government created with the government of Ethiopia, low initial bidding price offered by Chinese firms in bidding for such projects, the self financing options (sometimes referred as 'vendor financing') that they give to the Ethiopian government owing to the support they get from the Chinese government, as well as the relatively lower level of skilled Ethiopian personnel (in terms of negotiation, technical and managerial skill) as well as poor institutional capability of the Ethiopian experts in various ministries who are dealing with the Chinese firms, are few among many. Chinese firms cost and technological advantages over Ethiopian counterparts are also found to be important for Chinese investment success in Ethiopia.

Given the position of Ethiopia's capital Addis Ababa as unofficial capital city of Africa with major continent wide institutions being located there, the Chinese also seem to make some of their

investment and aid directed to Ethiopia as a show cases for other African countries leaders to see what the Chinese did in Ethiopia when they come for one of their official work to Addis Ababa. This is usually done by publicly owned Chinese firms or big Chinese firms that get support from Chinese government. A case in point of such ventures include, the ultra modern airport hanger and storage facility of the Ethiopian Airline built by Chinese company, apparently at a price below cost so as to get the benefits noted above; the ultra modern Passover road being built by the government of China in the Ethio- Chinese friendship road with significant grant from the government of China, the ring road built around Addis Ababa, as well as the ultra modern headquarter building of the African Union, are few among many. In general this study shows that the Chinese investment, in particular in the manufacturing sector, in Ethiopia could be characterized as market seeking (and to a limited degree resource seeking).

The study also noted that there are some groups that gain from this Ethio-China engagement as there are others that lose from it. The former category includes consumers, commercial traders who bring manufactured consumer goods from China for sale in Ethiopia, entrepreneurs engaged in establishing small scale factories and service centers by buying machineries from China. The possible losers group includes small scale firms engaged in clothing and footwear sectors and their employees; traditional suppliers and contractors in the road, electric power and telecommunication sectors of the economy, which are invariably firms from industrialized countries. We have also noted that a number of Chinese firms seem to be insecure even to talk with researchers and some of the actually engaged in areas not related to their license. It is imperative to improve the working environment for them to address the root cause of such problems.

It is important to highlight the relevance of this study to the Ethiopian government, and perhaps also to the government of China, as well as the various stake holders that would be affected by this engagement between China and Ethiopia. This underscores the importance of designing optimal investment, trade and industrial policies in the world of emerging China that will bring a win-win situation for both Ethiopia and China. The first important point relates to the fact that the government of Ethiopia doesn't seem to have any policy about its economic engagement with China that is based on studies of this kind. It is high time to come up with such strategy. Second, we have shown that there are both positive and negative impacts that emanate from Chinese investment in Ethiopia. This calls for an appropriate policy direction and incentive schemes to benefit both countries from these economic relations. Third, the study noted that managerial skill transfer as well as technology transfer is very important for Ethiopian firms. One vehicle to do that is to engage in joint-venture between Chinese and Ethiopian firms. Our study shows, however, that while the Ethiopian firms would like to see that, Chinese firms are not enthusiastic about it. This calls for an appropriate incentive schemes by the government that encourages such joint ventures. Fourth, the study also noted that the level of skill and expert difference between Ethiopia and Chinese counterparts in negotiation and investment engagement might be working against the interest of Ethiopia in the short run and both countries in the long run. To tackle this, Ethiopia needs to upgrade the skill of its work force, bureaucrats/experts in the long run. In the short run, however, it may need to use qualified consultants (say from its Diaspora or the private sector) with adequate knowledge to deal with Chinese negotiators in all areas of investment and new projects. Fifth, Chinese investment in Ethiopia seems to be constrained by lack of skilled labour, foreign exchange as well as policy credibility of the Ethiopian government. These are areas that require government immediate action to redress them. Finally, we hope that this study will provide snap shot picture of Ethiopia's position in its engagement with China investment and the implication of this for the future of the two countries relation. It is also hoped that academic and research institutions, professional associations, as well as the private sectors, such as chambers of

commerce, may also benefit from this study and build on our first effort to come up with appropriate, wide and comprehensive engagement strategy with China that will benefit the two countries

## References

- Alden, C.(2005).China in Africa, *Survival*, 47(3), pp 147-164
- Alemayehu Geda and F. Huizinga (2004), 'The Theoretical Framework for Ethiopian Macroeconometric Model' (The Government of Ethiopia, Ministry of Finance and Economic Development, Addis Ababa, Ethiopia).
- Alemayehu Geda(2002).Finance and Trade in Africa: Macroeconomic Response in the World economy Context, London: Palgrave-McMillan
- Alemayhu Geda. (2006). 'The Impact of China and India on African Manufacturing: Review of the Relevant Literature." AERC Framework Paper (Addis Ababa University, and African Economic Research Consortium at [www.Aercafrica.org](http://www.Aercafrica.org)).
- Alemayehu Geda (2007) 'Scoping Study on the Chinese Relation with Sub Saharan Africa: The Case of Ethiopia' African Economic Research Consortium, Nairobi at [www.Aercafrica.org](http://www.Aercafrica.org).
- Alemayehu Geda and Atenafu G. Meskel (2008) 'China and India's Growth Surge: Is it a curse or blessing for Africa? The Case of Manufactured Exports' *Africa Development Review*, Vol,xx, No )
- Asayehgn Desta (2009), 'Chinese Investment in Ethiopia: Developmental Opportunity or Deepening China's New Mercantilism?' mimeo, Dominican University of California
- Stevens, Christopher and Jane Kennan(2006).*Opening the Package: The Asian Drivers and poor-country trade*, Institute of Development Studies, University of Sussex, Brighton, BN1, 9RE, UK, [www.ids.org](http://www.ids.org), (accessed: 11/28/2006)
- Eichengreen B., Ree,Y. and Tong,Y.(2004).*The Impact of China on the Exports of Other Asian countries*, National Bureau of Economic Research, WorkingPaper1078, <http://www.nber.org/papers/w1078>(accessed:05/12/2006)
- Eichengreen.B.andTong Hui (2006).How China is Reorganizing the world Economy, *Asian Economic Policy Review*, vol 1, pp 73-97
- Enterplan(2005). Department for International Development: *The effect of China and India's Growth and Trade Liberalization on Poverty in Africa*. DCP 70,Final Report, p1, [www.enterplan.co.uk](http://www.enterplan.co.uk)
- Frankel, J., Stein,E.,and Wei,S. (1995). "The natural, the unnatural and super-natural." *Journal of Development Economics* 47: 61-95.
- Gereffi, G. (1999). "International trade industrial upgrading in the apparel commodity chain." *Journal of International Economics* 48: 37-70.
- I-Hui Cheng and Howard J .Wall (2005). *Controlling for Heterogeneity in Gravity Models of Trade And Integration*, Federal Reserve Bank of St.Louis Review, January/February 2005, 87(1), pp 49-63
- Kaplinsky, Paphael, Dorothy McCormick and Mike Morris (2006) 'The Impact of China on Sub Saharan Africa' (DFID China Office, DFID, UK.
- Martyn Davies (2008): How China Delivers Development Assistance to Africa (Mimeo)
- Michel –Xiaobao Chen, Andrea Goldstein, Nicholas Pinaud and Helmut Reisen(2005).China and India: What is it for Africa? OECD Development Centre, Preliminary Draft
- Tegegne GebreEgziabher (2006) "The Developmental Impact of China and India on Ethiopia with Emphasis on Small Scale Footwear Producers." Development Policy Research Unit, Johannesburg, South Africa (October 18-20, 2006).

# APPENDIX

## Questionnaire Administered

### CHINA- ETHIOPIA INVESTMENT INDEPTH STUDY

The questionnaire below has two major modules that correspond to the two major aspects of Chinese investment (characterization and effect) that the study wants to cover. Thus, all the module questions may not be relevant for all interviewees. These modules are:

- a) Module 1: Characterization of Chinese Investment in Ethiopia
- b) Module 2: Effect of Chinese Investment (including that of Chinese Trade and Aid)

### MODULE 1: Characterization of Chinese Investment

#### 1. Key Informants: Ministries of Trade, and Foreign Affairs; Chinese Firms

1.1 Which activity(ies) is/are Chinese are most interested in and why?( give by rating as 1,2,2,3,4,5)

- a. Manufacturing\_\_\_\_\_
- b. Mining\_\_\_\_\_
- c. Energy\_\_\_\_\_
- d. Communication\_\_\_\_\_
- e. Any other/mention\_\_\_\_\_
- Why\_\_\_\_\_

1.2 What is the nature/ownership structure of investment and why

- a) (Private, public, public-private, public-public, private-private joint ventures)
- b) ( size capital and share of each owner in joint-ventures?)
- c) Why\_\_\_\_\_

1.3 What is the motivation for the investment? And how do you come to Ethiopia?

- a. Resource seeking
- b. market seeking, (also preferential access in USA and Europe)
- c. Efficiency seeking
- a) Demonstration Effect for other African countries,
- b) Owner, location and internalization [OLI] advantages?

- c) Any other \_\_\_\_\_
- d) How did you come to Ethiopia \_\_\_\_\_ -

1.4 How different is China's FDI compared to others, say for example MIDROC?

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1.5 If there is any preferential treatment for Chinese investment in the form of

- a. Access to bank loan \_\_\_\_\_  
\_\_\_\_\_
- b. Access to land ,electricity, water, etc \_\_\_\_\_  
\_\_\_\_\_
- c. Import duties \_\_\_\_\_
- d. Any others \_\_\_\_\_
- e. Special treatment if it is joint venture \_\_\_\_\_  
\_\_\_\_\_

1.6 Speed of implementation of Chinese new investment projects relative to others( say low, high very high) \_\_\_\_\_

1.7 What are the major constraints for your investment in Ethiopia \_\_\_\_\_

## MODULE 2: EFFECTS OF CHINESE INVESTMENT

### 2.1 GENERAL EFFECTS

- a) On the use of labor
  - a. How common is the use of Chinese Labor instead of local Labor, and why? \_\_\_\_\_  
\_\_\_\_\_
  - b. Employment opportunity generating capacity of Chinese Investments in Ethiopia compared to others  
Low \_\_\_\_\_ high \_\_\_\_\_ very high \_\_\_\_\_
- b) How linked China's investment/FDI are with other sectors and investment of both Chinese and or Ethiopian
  - a) (forward, backward, input and supply/demand, management etc linkages)
- c) Is there a speedy performance and low cost advantages of Chinese firms

- d) Benefits those could be reaped from Chinese investment in the form of technology transfer, horizontal spillover, vertical spillover, management skill transfer( low, high, very high)
- a. technology transfer\_\_\_\_\_
  - b. management skill transfer\_\_\_\_\_
  - c. horizontal spillover\_\_\_\_\_
  - d. vertical spillover\_\_\_\_\_
  - e. low cost products (consumer goods or producer goods?)
  - f. Self-financing (vendor financing) advantages

### 3 SELECTED VURNERABLE/BENFICERIES GROUPS

#### A. KEY INFORMANTS: LOCAL PRODUCERS

- 3.1 Sector\_\_\_\_\_
- 3.2 Performance of your firm before and after the year 2000 (Chinese accession to WTO) or Chinese show up in Ethiopia? measured in terms of the following quantities ( say improving, deteriorating, no change) in output, profit, input etc \_\_\_\_\_
- 3.3 Target customers (foreign or local)\_\_\_\_\_
- 3.4 Sources of raw materials( domestically produced, imported, imported from China)\_\_\_\_\_
- 3.5 The major input for production( intensity of production) say Labor intensive or capital intensive\_\_\_\_\_
- 3.6 Benefits of Chinese firms to your company in the form of (rate as 1,2,3,4,5--)
- a. technology transfer\_\_\_\_\_
  - b. management skill transfer\_\_\_\_\_
  - c. low cost production\_\_\_\_\_
  - d. employment opportunity\_\_\_\_\_
  - e. fast performance/gestation period\_\_\_\_\_
- 3.7 Threats from Chinese firms in the form of ( indicate the degree of risk involved as low, high, very high)
- a. High competition in third market\_\_\_\_\_
  - b. Displacement from local market\_\_\_\_\_
  - c. Monopoly or Monopsony position \_\_\_\_\_

3.8 Do you need government intervention in favor of local producers to cope with Chinese?

3.9 If your answer to 3.8 is yes, in what form do you propose the government to involve?

\_\_\_\_\_

3.10 How are you planning to resist competition from Chinese involvement? \_\_\_\_\_

\_\_\_\_\_

3.11 Is there a link between Chinese Trade and Investment and what form does it take?

\_\_\_\_\_

3.12 Is there a link between Chinese Aid/Credit Financing and Chinese investment? What form does it take?

\_\_\_\_\_

3.13 Are there other rivals than Chinese? How do Indian firms/government react to Chinese firms/government

\_\_\_\_\_

#### **B. KEY INFORMANTS FROM GROUP OF CONSUMERS**

3.14 Do you prefer Chinese products to others? And Why? Yes \_\_\_\_\_ No \_\_\_\_\_ why?

\_\_\_\_\_

3.15 How do you evaluate the price of Chinese products relative to their qualities? (cheap, fair, expensive) \_\_\_\_\_

3.16 How do you evaluate the quality/price of Chinese products (poor, fair, good)

a) Compared to local products \_\_\_\_\_

b) Compared other imported (none-Indian) commodities \_\_\_\_\_

c) Compared to Indian products \_\_\_\_\_

3.17 Which Chinese product do you usually use \_\_\_\_\_

3.18 Will you continue buying Chinese products? \_\_\_\_\_

3.19 What is your monthly income? and, If your income double, would you still go for Chinese products

3.20 If your answer to 3.6 is yes, up to when? \_\_\_\_\_

3.21 Do you think that Chinese products will continue dominating the market?

\_\_\_\_\_

#### **C. KEY INFORMANTS: TRADERS WHO HAVE RECENTLY SHIFTED FROM DUBAI TO CHINA**

a. For how long have you been using Dubai as source of supply? \_\_\_\_\_

b. Why did you recently shifted to China? (low price, quality, any other factor) \_\_\_\_\_

c. What type of commodities you normally bring? (Consumer goods, machineries, others?)

\_\_\_\_\_ --

d. Is there quality difference between commodities from China and Dubai? \_\_\_\_\_

- e. If your answer to question c above yes, how did you know the quality difference? \_\_\_\_\_  
\_\_\_\_\_
- f. Do you say this trade of yours by sourcing from China eventually lead you to engage in production in Ethiopia using Chinese Machine? \_\_\_\_\_
- g. Do you get suppliers credit in China? Were you able to get that in Dubai before
- h. How do you tackle your foreign exchange problem in your business in China  
\_\_\_\_\_
- i. How could you see India as potential competitor for your source of supply? In what way it is better/or not to that of China \_\_\_\_\_

#### **D. KEY INFORMANTS FROM CHINESE FIRMS**

- a. In what sector are you engaged? And how big is your investment in terms of capital, employment etc? \_\_\_\_\_
- b. Where is your source of supply and your market? Is it China/Ethiopia?  
\_\_\_\_\_
- c. How did you know that Ethiopia is profitable to invest? And what is your motivation for investing in Ethiopia (resource, market, efficiency etc)?  
\_\_\_\_\_
- d. Which sector is more attractive to invest? \_\_\_\_\_
- e. Are you planning to continue your business in Ethiopia \_\_\_\_\_
- f. What do you think the positive and negative effect of your investment on Ethiopia and Africa – will be \_\_\_\_\_
- g. Do you think there will be a transfer of technology, management skill or any other benefit or all to Ethiopian from your investment?  
\_\_\_\_\_
- h. What are the major constraints to your investment in Ethiopia? \_\_\_\_\_
- i. How sever foreign exchange and remittance problem is for your business (extreme, moderate, negligible? \_\_\_\_\_ -
- j. Did you get any support in terms of finance, advice etc from Chinese government to invest in Ethiopia? \_\_\_\_\_
- k. Is Ethiopian trade with China helping your business? How? \_\_\_\_\_
- l. Is Chinese Aid to Ethiopia or to you to use it in Ethiopia helping your business?  
\_\_\_\_\_

- m. Is there a quality and price difference between your products and other similar products from China? If yes why? \_\_\_\_\_
- n. Do you prefer to work in a joint-venture with Ethiopians or do you prefer to work by yourself? And why? \_\_\_\_\_
- o. Which country or firm do you think are the major competitors in the Ethiopian market? Is India a potential competitor?
- p. Do you think the current financial crises will affect your decision to continue or expand your business in Ethiopia? And why?  
\_\_\_\_\_

