

**Will the World Bank's Vision Materialize?  
Relocating China's Factories to Sub-Saharan Africa,  
Flying-Geese Style**

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**ABSTRACT**

A number of studies have recently explored China's growing--yet still nascent-- manufacturing investments in sub-Saharan Africa, which the World Bank hopes to see further expanded so as to ignite industrialization. These studies have looked mainly at the Africa-side situation (i.e., what is happening in the host region). Instead, this paper focuses on China-side factors that may motivate the country to relocate factories to the host region on a significant scale (i.e., the "push" factors) and touches on the institutional issues involved in this hoped-for scheme of industrial transplantation. The central question addressed in this study is whether the World Bank's wish will actually come true. China's potential in this scenario is assessed in terms of the "flying-geese" growth model that explains how comparatively disadvantaged industries in such a rapidly catching-up economy as China's may be transplanted overseas. This paper concludes that at the moment, China's capacity to transform the sub-Saharan region into a vibrant manufacturing base via FDI is still underdeveloped and quite limited.

Keywords: China's manufacturing investment in Africa, Flying-geese growth model, Foreign Direct Investment

JEL code: F21 - International Investment; Long-Term Capital Movements; O24 - Trade Policy; Factor Movement Policy; Foreign Exchange Policy; O43 - Institutions and Growth; O53 - Asia including Middle East; O55 - Africa

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## 1. Introduction

China has been cultivating increasingly close economic relations with Africa's resource-rich countries in its quest for oil and minerals via foreign direct investment (FDI) and economic and technical aid for infrastructure development and resource extraction. At home, the country is in the midst of modernizing heavy and chemical industries and building up physical infrastructure over the vast stretches of land. Its current growth is consequently intensive in the use of not only capital but also, more importantly, raw materials and energy for industrial production. In addition, China's rapidly rising income is simultaneously increasing demand for fuels and electricity, especially now that it has entered the phase of high-mass consumption. Given the size of its huge population (1.3 billion) and of its soaring GDP (having overtaken Japan's as the world's second largest economy in 2010), the country is understandably in the scramble for natural and energy resources abroad.

Although criticized by the West for dealing with "rogue" states and even warned by some African countries not to practice neocolonialism, China may have a great potential to play a leading role in helping jump-start industrialization on the continent. In fact, the World Bank President Robert Zoellick recently called on China to invest in Africa's manufacturing base by going beyond infrastructure and resource-extractive projects in which China has already been extensively engaged.<sup>1</sup> The primary purpose of this study is to examine if such a hope of the World Bank will actually materialize.

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<sup>1</sup> This was widely reported in the media. See, *inter alia*, "China and World Bank in talks to establish industrial zones in Africa," *Financial Times*, December 4, 2009, p. 1.

A related question in this context is whether China's advance into Africa's manufacturing, if it occurs on a significant scale, will be another repeated outcome of the sequence of cross-border industrial transmigration East Asia has gone through in the recent past. The transmigration of labor-intensive industries (e.g., apparel and textiles) has entailed a sequential pattern of growth spurts across East Asia. Since the end of the Second World War, Japan and then the NIEs (Newly Industrializing Economies: Hong Kong, South Korea, Taiwan, and Singapore)—and more recently, though to a lesser extent, the ASEAN-4 (Association of South East Asian Nations: Thailand, Malaysia, the Philippines, and Indonesia)—have initiated rapid catch-up growth in a staggered fashion, each time by first mobilizing its relatively abundant labor for export industries and eventually ending up relocating offshore those industries that had soon lost comparative advantages. In other words, comparative advantages in labor-intensive goods have thus been “recycled” (or “relayed”) mainly via FDI activities from higher-developing to lower-developing countries down the Asian hierarchy of economies. Each round of this comparative advantage recycling resulted in the jump-starting of local industrialization (by way of stepped-up labor-intensive production and exports followed by a sharp rise in labor costs and currency appreciation that in turn induced the outflow of such industries abroad). These developments have been explained in terms of the so-called “flying-geese (FG)” theory of economic development originally expounded by Akaname Akamatsu in the 1930s (*inter alia*, 1935). At present, labor-intensive production is most highly concentrated in China, but is expected to be relocated overseas when China, too, loses a comparative advantage in such production.

Although the topic of this paper is new, many pioneering studies have already been made by African experts on China's investment activities in sub-Saharan Africa mostly through pains-taking field research, telling mainly Africa-side stories—looking at the continent as a host region.<sup>2</sup> This paper, instead, evaluates mostly China-side factors within the context of Asia's FG-style growth, still an unexplored aspect, and asks whether these may decisively lead to a transmigration of factories from China on a scale substantially large enough to jump-start local industrialization. Further, the importance of institutional elements in this new possible phase of China-Africa economic relations that are hopefully to be built on Chinese FDI-led manufacturing and growth is emphasized.

Other issues raised and examined here are: Why is it that China alone is singled out and urged by the World Bank to relocate factories to sub-Saharan Africa—why not, say, other emerging economies of BRICs<sup>3</sup> that, too, all began to invest more actively than ever before in the host region? And will China seriously do so by advancing farther than its southern neighbors where it has only recently begun to make FDI in manufacturing? What conditions and what motivations may prompt China in this new direction? In what follows, this paper (i) discusses why China is considered the most promising investor in low-cost manufacturing in sub-Saharan Africa, (ii) reviews the current status—and unique nature--of China's emerging manufacturing FDI in the region as a backdrop for our analysis, and (iii) assesses the prospects for China's FDI capacity to help spark the host region's industrialization in terms of East Asia's recent experiences and the FG

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<sup>2</sup> Just name a few, Allen, et. al. (2008), Brautigam (2009, 2010), Brautigam et. al. (2010), Broadman (2007), Dent (2010), Goldstein (2004), and Goldstein, et. al. (2006).

<sup>3</sup> BRICs has lately morphed into BRICS, a new acronym that now includes South Africa. As expected, South Africa is another home country that eagerly invests in the rest of Africa: About 22 % of its outward FDI stock is in other African countries. Yet, it is not really active in manufacturing FDI: "The 2.250 South African projects in other African countries recorded in 2009 were concentrated in infrastructure, telecoms, mining and energy" (UNCTAD, 2010, p. 36).

theory of comparative advantage recycling, a restated FG theory (Ozawa, 2009; 2011), as the overall framework of analysis.<sup>4</sup>

## **2. China as the most promising investor in low-cost manufacturing**

Labor-intensive manufacturing is associated with the early stages of economic development in which labor costs are relatively low. The rise and decline of such manufacturing is essentially a function of growth and structural change that are necessarily accompanied by increasing labor costs. Given the fact that low-wage-based production occurs in the early stages of economic development, China is not the only economy that is currently active in such activities; many other emerging economies, especially other BRICs, are more or less in the similar stage and modality of growth. So, what makes China so special to be counted on for relocating factories to sub-Saharan Africa?

There are several important reasons. In the first place, China has amassed a huge build-up of low-wage factories the world has ever known—the very reason why it has come to be deservingly known as “the workshop of the world.” Its secondary sector (manufacturing and construction) employs as many as 200 million workers, who are, in most part, migrants from rural areas, numbering roughly 160 million—the latter *alone* being as much as over four-fifths of Brazil’s *entire* population (192 million in 2008), and much larger than either of Russia’s (142 million in 2008) and Japan’s (128 million in 2008), for example. Furthermore, there are “still 70 million [more] people in China’s

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<sup>4</sup> It should be noted that Brautigam (2008) questioned if China would be “flying-geese” or “hidden dragon” for Africa and also referred to the flying-geese theory (Brautigam, 2009). In this regard, she was a pioneer in relating China’s advance into Africa to the phenomenon of flying-geese growth. However, her analysis did not look at the economic forces of industrial upgrading and shedding that might “push out” comparatively disadvantaged industries from China—that is, not in terms of Asian growth dynamics that is captured and posited in the flying-geese model of FDI. She used the phrase “flying-geese” merely as a nomenclature for Chinese investors.

villages who might be expected to leave in search of work.”<sup>5</sup> And all these migrant workers, existing and expected alike, are to remain engaged in low-end manufacturing and services.

This means that China has a far more extensive experience with low-cost production than any other country. Thanks to its labor-driven catch-up strategy, moreover, more than 400 million people (that is, 100 million more than the entire population of the U.S. in 2010) have so far been lifted out of abject poverty.<sup>6</sup> And, paradoxically enough, such a highly populated country as China has lately begun to face labor shortages and rising wages, motivating its firms to relocate some factories inland as well as to its neighboring countries, especially Vietnam and Cambodia, where low-wage labor still exists. Thus, China has demonstrated its remarkable capability to make efficient use of such an enormous labor force (mostly un- and semi-skilled labor) for its industrialization effort, thereby swiftly elevating the standard of living for the masses in a short space of time, an unprecedented achievement in the history of economic development. Especially well known is its effective use of special economic zones (SEZs) as the free-market enclaves to attract foreign multinationals’ investments in order to jump-start its industrialization previously stalled under the communist central planning and control (as will be detailed below).

The hope is, therefore, that if even a fraction (say, 10 per cent) of China’s low-end industrial activities could be transplanted onto the sub-Saharan region, still an enormous number (16 millions to be exact) of jobs would be instantly created, kicking off regional

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<sup>5</sup> This prediction is made in “The rising power of Chinese worker,” *Economist* July 31, 2010, p. 9.

<sup>6</sup> The headcount ratio of the population living on U.S.\$1 a day in China decreased from 53.1 per cent in 1984 to 26.5 per cent in 2001. More recent statistics should no doubt indicate a further drastic decline in the ratio. See ADB (2004).

growth in a similar fashion as has happened in China. This would surely be a godsend to sub-Saharan Africa where high rates of unemployment and poverty prevail. (Another populous country, India, so far has failed to secure such an effective use of its abundant labor in its industrialization drive and to trigger labor shortages at home as China has done. The same thing can be said about Brazil and Russia, other economies of BRICs).

Furthermore, China carries the momentum of Asia's regional dynamics of structural upgrading that pushes out comparatively disadvantaged industries abroad, as will be explained below. In fact, some Chinese factories have already been set up in sub-Saharan Africa, though on a relatively small scale and across scattered areas. These may be important vanguards of what is hoped for by the World Bank. After all, China has so far been involved more intensively than any other country in the host region through development projects for resource extraction and infrastructure, gaining knowledge about, and networking relations with, local economies. No wonder, then, the World Bank has singled out China as the most promising investor to help build Africa's manufacturing base. If this new round of industrial transplantation materializes, it will arguably be the greatest one ever in the history of the world economy because of the sheer size of China's low-end production that will eventually have to be shed over the course of structural upgrading.

### **3. Peculiarities of China's Manufacturing FDI**

As mentioned earlier, there are already a large number of studies made on China's investment activities in Africa. Hence, this section only briefly makes an interpretive survey, by drawing on the recent literature, of the current status of China's FDI in the host region as a backdrop for our analysis.



### **3.1. A rapidly grown but still relatively small investor**

Ever since China adopted the “go-global” policy in the late 1990s, its outward FDI has been soaring dramatically, reaching the \$48 billion level in 2009 from the average of only \$450 million a year in 1982-89, an over 10-fold rise (UNCTAD, 2010). What drives this outward advance of Chinese businesses is mainly a huge accumulation of reserves (approximately \$2.5 trillion at the end of 2010) and China’s search for natural resources and export markets. Although China’s investment activities in Africa are often played up in the media, “Chinese FDI stock in Africa—40 per cent of it in South Africa—reached \$7.8 billion by the end of 2008, accounting for only 4 per cent of China’s total outward FDI stock.” (Ibid., p. 35) Its African involvement via FDI is still relatively insignificant in value terms as compared with FDI from the advanced world which accounts for as much as about 90 per cent of the investment stock in Africa (Broadman, 2011).

### **3.2. A newly emerged leader in South-to-South investment**

Among the emerging world investors, nonetheless, “China, in particular, has become one of the most significant foreign investors in some sub-Saharan African countries” (UNCTAD, 2010, p. 34). As shown in Table 1, China is the second largest investor in the African continent next to South Africa; \$2.5 billion as against \$2.6 over 2006-2008. Given a much higher rate of growth in China’s recent investment in the continent than that for South Africa, the former may have already become the largest investor by now.

Table 1. Major developing economy investors in Africa, 2006-2008  
(Millions of dollars)

South Africa	\$2,609
China	2,528
Malaysia	611
India	332
Taiwan	48
South Korea	45
Chile	44
Turkey	35
Brazil	14

Source: constructed from a figure in UNCTAD, 2010, p. 35.

### 3.3. What is exactly the amount of Chinese FDI in manufacturing in Africa?

Interestingly enough, China's white paper on China-Africa economic and trade cooperation (December, 2010) shows a share breakdown by industry for China's direct investment in Africa at the end of 2009: 29.2% in mining; 22.0% in manufacturing; 15.8% in construction; 13.9% in financing; 5.4% in commercial services; 4.0% in wholesale and retail; 3.2% in scientific research, technological services and geological prospecting; 3.1% in agriculture, forestry, animal husbandry and fishery 3.1%; and 3.4% in others. Although no information is given whether these statistics are based on values or numbers of investments, manufacturing FDI stands out as the second largest. This is rather unexpectedly large if value of FDI stock is involved—but, not surprising if number of cases is measured in relative terms for reasons discussed below.<sup>7</sup> Since concessionary

<sup>7</sup> This type of official statistics needs to be taken with a grain of salt. There is no breakdown by sub-industry and by host country—and for that matter, no inter-temporal breakdown/figures is available. One may naturally raise questions: (i) Is this sort of statistics on FDI on an approved or implemented basis? In

loans and grants dominate China's involvement in resource extraction and infrastructure construction—but are not given for manufacturing, FDI in mining and construction will surely have much greater share (thereby making the manufacturing share smaller) if total finance is factored in.<sup>8</sup>

Despite these statistical limitations, nonetheless, the above breakdown is still useful to figure out an approximate amount of manufacturing FDI by multiplying \$7.8 billion (a stock of manufacturing FDI in Africa at the end of 2008 as given by UNCTAD above) by 0.22 (share of manufacturing FDI) and getting \$1.7 billion as an estimate, which seems a substantial sum in aggregate. Africa's most advanced economy, South Africa, alone must have received 40 per cent of it, hence, \$680 million, and the balance of \$1,020 million is dispersed across the rest of Africa, especially in Angola, DRC, Madagascar, Mauritius, and Tanzania where Chinese businesses are actively involved.

#### **3.4. Diaspora-forming-type direct investment by “family multinationals”**

So far as China's manufacturing investments in Africa is concerned, because official statistics are lacking in detail and generally poor in quality, academic researchers usually conduct their own field investigations, making case studies and gathering firm-level data/information through interviews with the local and Chinese companies and public agencies involved—and rely on news articles written by journalists/reporters who are

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many instances, the former exceeds the latter simply because intended investments may not be really carried out particularly because of political, economic and institutional problems that often arise in African host countries. (ii) Given the recent encouragement and incentives given by the Chinese government to invest in Africa's manufacturing sector, aren't Chinese companies, especially SOEs, eagerly registering their planned investments for approval? (iii) Is this manufacturing investment actually a disguised export activity? Since China's manufacturing direct investments are aimed at “processing”, “final assembly” and “packaging” operations, they include the values of machinery, equipment, tools, and other capital goods, as well as the value of knowledge transfer (know-how, management fees, training, etc.) exported from China.<sup>8</sup> China, however, keeps actual amounts of economic aid (e.g., concessionary loans and grants) in secret—except its occasional PR announcements of aid commitments (say, \$10 billion aid to such and such African countries): “[A]id figures remain state secrets. The Chinese government releases only the barest of information about the quantities of aid it gives. There are no official figures on aid allocations to individual countries or regions, no breakdown by sector or purpose” (Brautigam, 2009, p. 12).

dispatched from trustworthy newspapers and periodicals (such as *The Financial Times*, *The Wall Street*, *The Economist*, and the like).<sup>9</sup>

When it comes to China's manufacturing FDI, furthermore, it is well known that large state-owned enterprises (SOEs) have so far been not much involved in manufacturing overseas. They heavily invest in infrastructure and resource extraction projects abroad, whose activities in Africa are usually tracked by the Chinese government and registered in official data. Instead, it is China's individual entrepreneurs and small-and medium-sized private firms which have *so far* been the major players for local manufacturing and services in Africa. They are setting up local service stores (such as restaurants, groceries, hoteliers, and retail shops) and small factories to produce a motley array of labor-intensive low-end goods (such as apparel, footwear, travel goods, furniture, and kitchen/household appliances) in sub-Saharan Africa. And their exact numbers and investment values are not exactly known to *even* the Chinese government, because they autonomously go out overseas and operate on their own. Consequently, this is why field work becomes crucial for academic researchers who are interested in exploring the topic of China's investment activities in manufacturing in the host region.

Jing Gu, a researcher at the Institute of Development Studies, Sussex University, makes a revealing observation:

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<sup>9</sup> In general, aggregate statistics and data on FDI in Africa themselves, when available, are rather of poor quality. For example, the data on FDI outflows collected by home governments to a given host country usually do not match those collected by host governments. Although this applies to practically all the countries, statistical inadequacy is probably a more serious problem for China's manufacturing FDI in Africa. Systematic collection of reliable data is definitely the first priority for a policy debate on FDI in the region. This task is quite urgent: "Much is at stake for the 800 million people in sub-Saharan Africa... in the policy debate concerning the continent's accelerated integration into the world economy through South-South commerce, now led by China and India. The quality of this debate needs to be improved. It could start by: development of systematic empirically –derived, cross-country and cross-sectionally consistent data..." (Broadman, 2011. p. 3).

Estimates regarding the number of Chinese enterprises in Africa vary considerably. In 2006, the Chinese EXIM Bank estimated that there were about 800 Chinese companies operating in Africa. According to these data, approximately 85 per cent were privately owned. However, evidence from interviews with Chinese Embassies and the Chinese business communities in Africa during 2007 and 2008 indicates that China now has more than 2000 enterprises in Africa. According to one senior Chinese official interviewed by the author: 'To be honest, we don't know how many firms, especially private firms, invest overseas. There are only about 2800 companies registered with us [in our (Chinese) Province]. In fact, I believe that there are more than 28000. Even 10 times is a conservative figure' (Gu, 209, p.573).

These small-scale private investors' overseas ventures are self-financed and family-owned in most cases. And their businesses are carried out with the help of personal business connections (known as "guanxi" in China) among widely scattered overseas Chinese diasporas.

In this respect, their advance into sub-Saharan Africa is largely *no* different from the traditional pattern and process of emigration of aspiring individuals and their extended families/ relatives who sought opportunities for better lives abroad and were willing to take risks to settle in foreign countries. In fact, those individuals and small businesses that have recently moved to Africa come *exactly* from those Chinese provinces with a more-than-century-old tradition of emigration; Zhejiang, Guangdong, Fujian, Jiangsu and Shandong: "Zhejiang enjoys one particular advantage that many other Chinese provinces do not have, namely, the overseas Zhejian diaspora. It is estimated that there are over 1 million overseas Zhejiangese, and, with many based in Africa, this was said by Zhejiang's companies to be a strong factor in facilitating their investments" (Gu, 2009, p. 375). Therefore, many emigrating entrepreneurs simply do not bother to register even with their provincial Chinese governments that are supposed to have greater authority to oversee emigration than the central government.

Indeed, *The Economist* (March 12-18, 2011)<sup>10</sup> incisively puts a figure on the dynamism of China's economy by observing that it stems from "bamboo capitalism:" "Just as Germany has its mighty Mittelstand, the backbone of its economy, so China has a multitude of vigorous, (very) private entrepreneurs; a fast-growing thicket of bamboo capitalism" (p. 13)—and that China's "family multinationals" are the vanguard of its overseas businesses, particularly in the Middle East (in Dubai alone, "There are more than 4,000 Chinese enterprises, selling through the Dubai Dragon Mart" [p. 81])—but now also in Africa and Latin America. And many of them come out of the Zhejiang province, and "often operate outside not only the powerful state-controlled companies, but outside the country's laws" (p. 13).<sup>11</sup>

These family multinationals' renewed expansion abroad has only recently come into existence once emigration restrictions were removed. Kaplinsky and Morris (2010) outline a three-phase history of Chinese FDI flows into sub-Saharan Africa: (i) Mid-1950s--mid-1990s. Subsequent to the Bandung Conference of Non-Aligned Nations in 1955, China provided official development assistance (as exemplified by railroad building in Tanzania) and political support to decolonized Africa; (ii) Mid-1990s—2000.<sup>12</sup> The Chinese government began more proactively to engage in extending economic cooperation via concessionary loans for, and state-backed FDI in, resource extraction and infrastructure as its need for natural resources rapidly rose over the course of modernization of heavy and chemical industries at home; and (iii) 2000 and onward:

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<sup>10</sup> "Bamboo capitalism: The rise of entrepreneurial China," *Economist*, March 12-18, 2011.

<sup>11</sup> This province is largely considered the major cradle of bamboo capitalism: "Provincial politicians, whose career prospects are tied to growth, often let these outfits operate free not only of direct state management but also from many of the laws tied to land ownership, labour relations, taxation and licensing Bamboo capitalism lives in a laissez-faire bubble" (Ibid., p. 13).

<sup>12</sup> Gu (2009) presents a five-stage model of China's FDI evolutionary development. But here, a simpler three-stage model is taken up for our analysis.

As soon as restrictions on emigration was lifted and the go-global policy adopted, entrepreneurs and small-scale firms started autonomously to invest in local services and manufacturing without any significant government supervision and coordination with China's official Africa diplomacy.<sup>13</sup>

Here, two observations are in order. First, the latest phase of development is in many cases the outcome of the second phase in which China's infrastructure building (such as railroads, highways, port facilities, dams, and power plants) brought to Africa Chinese construction workers in hundreds (or even thousands) and related service providers (hotels, restaurants, groceries, etc.). And many simply remained to expand local businesses in the host countries. Second, this newly emerged type of China's manufacturing FDI in the sub-Saharan region does not really match the contemporary notion of FDI by large multinationals and is, therefore, of the "immature/primitive" genre--in the sense (a) that the majority of these overseas shops are opened by immigrant entrepreneurs and small businesses, (b) that these establishments are mostly self-financed or *guanxi*-funded, and (c) that if "manufacturing" is involved, their operations are basically of the small-scale *processing* type (like apparel making and food processing) with materials imported from China or overseas Chinese diasporas or from Taiwan, Hong Kong, and Singapore (all ethnically related economies).

Also, the typical pattern of local business operations by China's new business immigrants is an evolutionary progression from trading to local processing operations, and finally, to formation of industrial clusters—or what Gu (2009) calls the "three-jump process" of business engagement abroad. In the beginning, trading helps immigrant

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<sup>13</sup> Kaplinsky and Morris roughly sketched out the three-phase growth of China's FDI in the region. Hence, our own interpretations are added to fill in details.

businesses test the local market potential of their host country/region/town. If found promising, they then move to do downstream processing operations (such as sewing, stitching, and knitting) locally by importing or procuring all the necessary raw materials and intermediate goods (fabrics and yarns) from their compatriot/expatriate suppliers. And eventually when a volume of local production and business at Chinese shops grows, they adopt a “clustering industry” strategy by establishing an “industrial park” (or “production clusters”) so as to more formally cultivate and thrive on networking economies among themselves. China’s business engagement is presently at the third “step.” Consequently, several clusters are currently being organized by overseas Chinese business diasporas in Africa.<sup>14</sup>

There is no doubt that shops of Chinese entrepreneurs are sprouting up across Africa as vibrantly as anywhere else:

Chinese private investment in Africa is increasingly in manufacturing. For instance, if one considers China’s 336 Chinese investment projects, more than 100 are in the manufacturing sector. In Ethiopia, about 66 per cent of Chinese companies are in the manufacturing... Chinese enterprises are springing up all over Africa, working across industries such as agriculture, forestry, food processing, fishing, furniture manufacturing, footwear, textiles and garment making, pharmaceuticals and services” (Gu, 2009, p. 573).

A recent article in *The Economist* (Aug. 7, 2010), entitled “The Chinese are everywhere: Even in the farthest backwaters of Africa, the Chinese are moving in,” has the following to say:

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<sup>14</sup> It is worth noting a similar pattern of the growth of Chinese overseas business elsewhere. For example, Prato, Italy’s fashion textile hub, has been transformed into a low-end garment manufacturing capital: “The city is now home to the largest concentration of Chinese in Europe—some legal, many more not. Here the heart of Tuscany, Chinese laborers work round the clock in some 3,200 businesses making low-end clothes, shoes and accessories, often with materials imported from China, for sale at midprice and low-end retailers worldwide... There are 11,500 legal Chinese immigrants, out of Prato’s total population of 187,000. But the [mayor’s] office estimates the city has an additional 25,000 illegal immigrants, a majority of them Chinese” (*New York Times*, September 12, 2010).



...Mokhotlong is the remotest town in one of Africa's poorer countries...On the main street, the petrol station is Chinese-owned. Next to it stands the Hui Hua supermarket. Then comes the Hua Tai ironmonger and the Ji Li Lai general store. Farther down the road is the Fu Zhong hardware and furniture wholesaler.

It is one of four enterprises owned by Chen Juo-feng, who is only 22. Business is good, he says, much better than in China...Mr Chen started off with just one shop when he came to Lesotho four years ago from Fujian, a coastal province that has provided many Chinese emigrants through the ages; 172 other members of Mr. Chen's family are scattered across Lesotho, too (p. 44).

The point we emphasize here is that the existing, as well as newly created, overseas Chinese diasporas play a crucial role in setting up small local factories for light industry goods and shops for retailing and other services. And this type of local manufacturing activity are of the market-seeking genre (or better still, of the settlement-seeking one). Furthermore, it is worth noting that some of China's current local production in sub-Saharan Africa is designed to capitalize on the preferential trade programs that allow the region to export apparel, duty free, to the U.S. and the EU, the programs such as the U.S.'s African Growth and Opportunity Act (AGOA) and the EU's "Everything But Arms (EBA)" initiative. In fact, one survey (Gu, 2009) finds that "taking advantage of African regional or international trade agreements" is the fifth most important reason for investing in Africa, though "access to local market" is the foremost important one. The World Investment Report (UNCTAD, 2010, p. 34) also observes: "This [strategy to make use of Africa's duty-free, quota-free access to the advanced world] has been the case particularly in the textiles and clothing industries, with TNCs from China, Hong Kong (China), Singapore and Taiwan Province of China among the most active investors."<sup>15</sup>

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<sup>15</sup> UNCTAD (2010) calls this type of FDI motivation "the efficiency-seeking investment." It also points out that some Indian investors are similarly taking advantage of the trade preferences given to African countries: "80 per cent of Indian investments in eight East African countries, for example, are market-seeking. While labour costs in Africa may not differ significantly from those in the firms' home economies, the duty-free, quota-free access [programs] have generated some efficiency-seeking investment" (p. 34).

Here, ethnicity-based business connections (*guanxi*) are clearly evident; all these Asian economies are basically ethnic-Chinese in population.

And most interestingly, the Chinese government seems recently to have begun to be more actively involved in helping these ongoing overseas Chinese businesses—and more importantly, encouraging other Chinese enterprises at home to go out abroad under its “go global” policy--by constructing across Africa what is officially dubbed “economic cooperation zones (ECZs)” that are modeled on China’s own SEZs. This new economic cooperation scheme was announced in 2005, and a total of 50 such zones were proposed, supposedly to replicate China’s success with the zones as a springboard for labor-intensive industrialization. The Chinese government has so far approved seven ECZs to be set up in the region since 2006.<sup>16</sup> According to African experts on China’s investment in the continent (Brautigam, et. al., 2010), however, only one such zone (the Chambishi Zone in Zambia) is in the early phase of operation, while others are still in construction or planning. They all are plagued by problems such as “infrastructure shortfalls, administrative weaknesses, ineffective management, policy uncertainty, and poor strategic and operations planning” on the part of the hosts (Ibid., p.2).

Nonetheless, in February 2010 Chinese President Hu Jintao, together with Zambian President Levy Mwanawasa, attended the opening ceremony for Zambia’s Chambishi Zone, which was showcased as a model for other zones to follow. President Hu promised an investment of \$800 million in the zone from China’s private and public companies.

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<sup>16</sup> According to Hurst (2011), these are (i) Chambishi, Zambia (copper and copper related industries); (ii) Lusaka, Zambia (garments, food, appliances, tobacco and electronics); (iii) Jinfei, Mauritius (textiles, garments, machinery, high-tech manufacturing, trade, tourism and finance); (iv) Oriental, Ethiopia (electrical machinery, construction materials, steel and metallurgy); (v) Ogun, Nigeria (construction materials, ceramics, ironware, furniture, wood processing, medicine, and computers); (vi) Lekki, Nigeria (transportation equipment, textiles, home appliances, telecommunications, and light industry); (vii) Suez, Egypt (petroleum equipment, electrical appliances, textile and automobile assembly).

Yet, by the end of 2010, merely several hundred local workers had been employed in the zone, attracting only a dozen Chinese companies and practically none from other (non-ethnic Chinese) countries. Absence of non-Chinese multinationals was perhaps expected since these zones are basically intended for Chinese businesses more than anything else; China's Eleventh Five-Year Plan (2006-2010) specifically states that these zones are "part of China's Ministry of Commerce's plan to encourage domestic private-run enterprises to venture overseas."<sup>17</sup> In this regard, China's FDI activities in the host region are, indeed, on the verge of evolving into a *new* fourth "step" of overseas business engagement—that is, the stage of ECZ formation with the backup of the Chinese government. This may signal the government's move to bridge a coordination gap between its official African policy and the private sector's own autonomous engagement in the region's manufacturing and services.

Given the "immaturity/primitiveness" of current Chinese FDI in local manufacturing that is driven by Chinese immigrants and diasporas, perhaps the Chinese government is intent on "modernizing" such investment activities by helping establish ECZs in sub-Saharan Africa in order not only to give assistance to fast-expanding overseas Chinese business communities but also, and more importantly, to facilitate overseas investments by larger and better-established Chinese companies, as well as by non-Chinese multinationals. Large Chinese companies, such as Huawei Technologies, Holley Group, Zhongxing ZTE Corporation, and Haier, are already running factories, though still on a small scale.<sup>18</sup> In any event, those planned ECZs appear to be aimed at harnessing

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<sup>17</sup> *afrol News*, July 18, 2010.

<sup>18</sup> Brautigam (2008, pp. 54-56) tries to present as much comprehensive a picture of China's manufacturing activities in Africa's low-end light industries as practical by gleaning and gathering together fragmentary pieces of information available in different countries. She observes; "As of 2007, there has been very

private investors' disparate activities towards a more unified thrust of China's advance into local manufacturing that can be orchestrated and governed by the Chinese government as part and parcel of its economic cooperation program.

### **3.5. China's economic cooperation for FDI in local manufacturing**

What is really needed here is a clear policy focus by the Chinese government to promote manufacturing FDI, especially by large SOEs whose activities the government is in a position to control and direct. And there are some signs that the government seems to have begun to move in this direction. For example, Lu Shaye, director-general of the African Affairs Department with the Ministry of Foreign Affairs, was quoted as saying, "Chinese companies can explore more opportunities in sectors like agriculture and manufacturing, apart from the current focus on infrastructure and energy resources," and Wei Jianguo, former Vice-minister of Commerce, echoed Lu's view, saying "Now is the best time for Chinese firms to invest in the continent as Africa needs to upgrade its economic structure."<sup>19</sup> At present, however, large SOEs (such as Anhui Construction Engineering Group, China Civic Engineering and Construction Corporation, China Henan International Cooperation Group, and Golden Nest International Group) are all engaged mostly in big development and engineering projects in Africa and not much in local manufacturing, since their very nature as SOEs makes them capable of carrying out state-supported and –financed projects. At the moment, as seen above, manufacturing investments loom very large, but *merely* in numbers, and have yet to produce any kick-

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limited fieldwork on the impact of mainland Chinese investment in Africa" (p. 64), an observation that is not limited to the manufacturing sector but that applies to all other sectors (especially resource extraction and infrastructure).

<sup>19</sup> "Chinese firms told to invest more in Africa," May 29, 2010. Source: [http://english.gov.cn/2010-05/29/content\\_1616248.htm](http://english.gov.cn/2010-05/29/content_1616248.htm).

starting effect on the host economies, since they are carried out most actively by family multinationals in large numbers.

#### **4. Three Crucial Determinants of FDI in Labor-intensive Industries**

What motivates outward FDI in labor-intensive industries? To answer this question, it is crucial to understand the logic of comparative advantage recycling, namely how labor-intensive production has been recycled from one country to another across East Asia, since the same factors that have induced East Asia to relocate low-cost factories overseas in successive waves will be basically at work in China. Judging from this perspective, three factors are crucial for labor-seeking FDI to transmigrate *en masse* to less-developed countries: labor costs, exchange rates, and institutions. These determine the direction and speed of outward FDI and other cross-border business activities involving low-end manufacturing (mostly labor-intensive light industry goods and standardized parts, components, and accessories in electronics and automobiles), for which demands are highly price-sensitive and whose production locations are equally cost-sensitive and footloose. In what follows, we will examine how China is responding to each of these factors.

##### **4.1. Labor Costs**

The first task of industrialization required of any populous latecomer is to employ its most abundant resource, unskilled or semi-skilled labor, in export-oriented light industries. Nowadays this task can be accomplished by inviting multinational firms that seek low-cost labor to produce labor-intensive goods, since they possess needed technology, capital, and most critically, access to export markets. Apparel is the primary example. In some developing countries such as Pakistan and Cambodia textiles and

apparel now accounts for over 70 per cent of their exports, earning much needed hard currencies.<sup>20</sup> Above all, such a labor-intensive industry can provide a large number of local jobs to otherwise unemployed workers.

The most interesting outcome of this labor-driven strategy is labor shortages and rapid wage increases that can occur much sooner than anticipated in even a highly labor-abundant country once the country begins to mobilize labor for export-oriented production. This has happened in early postwar Japan, then in the NIEs, more recently in the ASEAN-4, and has just begun to happen in China. Although forgotten nowadays, the Japanese textile firms started out in the early 1950s as low-cost subcontractors for America's then Big Five apparel makers: Regal Accessories, Republic Celini (Hy Katz), Marlene, Spartan Mayro, and CBS (Jack Clark), all southern U.S. textile makers who produced low-end apparel in Japan (Bonacich and Walter, 1994). And in those days, most of the apparel imported into the U.S. was from Japan (Ozawa, 2005).<sup>21</sup> The rapid pace of labor-driven growth (based not only on textiles but also on other labor-intensive exports) in Japan was soon accompanied with the rising wages that quickly eroded export competitiveness. And the American companies had to shift their supply sources to the NIEs. But, soon afterwards they again encountered the same problem of fast-rising labor costs in the NIEs and had to relocate to the ASEAN-4 and other low-wage developing countries elsewhere.

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<sup>20</sup> The significance of textiles for the Pakistan economy, in particular, cannot be exaggerated. "Today, textiles contribute 8.5 percent to GDP and provide employment to no less than 15 million people, a full 38 percent of the country's manufacturing workforce...2007 exports valued at US\$10.62 billion, represented a staggering 46 percent of Pakistan's total productive output" (Ebrahim and Baig, 2010).

<sup>21</sup> Early postwar Japan also produced and exported whatever it was able to export, including shoddy and cheap toys and sundries that were once sold at discount stores in the U.S. and Europe. "Made-in-Japan" used to be associated with poor-quality goods.

The phenomenon of fast increases in wages can be explained in terms of three economic theories; the “pro-trade FDI” theory (Kojima, 1975; Kojima and Ozawa, 1985), the “factor-price magnification” theorem (Stolper and Samuelson, 1941), and the “unlimited-labor-supply” growth model (Lewis, 1954). Kojima’s “pro-trade FDI” theory emphasizes the situation in which inward FDI is of such a type that a host country’s comparative advantage is *augmented* and that its exports are all the more expanded—that is, of the pro-trade type. For example, a labor-abundant country has a potential comparative advantage, say in apparel, but may lack the necessary modern technology and export-marketing skills and channels. Here, multinationals from the advanced world can provide the missing inputs to make the local industry viable and competitive in the world market. In other words, the developing host countries need to attract multinationals to its comparatively advantaged industries (both existing and potential)—and not to comparatively disadvantaged (import-competing) ones—as a priority strategy for early catch-up growth. And this is exactly what China has sagaciously accomplished by way of inviting export-oriented multinationals first to the SEZs. Immediately after the adoption of its open-door policy to trade and investment in 1978, China established the zones in the eastern coastal regions. In fact, they were modeled on the free-market export-processing zones (EPZs) set up earlier in the 1960s and the early 1970s by Singapore, South Korea, and Taiwan. Hong Kong itself was a free-market economy in its own right unencumbered by government interferences in economic activity.

The Stolper-Samuelson theorem states that the price of a particular factor rises *more than* proportionately than that of an export good itself, for whose production the factor is most intensively used. That is, if labor is more intensively used in production than any

other factors, wages increase more than proportionately than the price of a labor-intensive export good (e.g., apparel) itself. This is the very mechanism that can explain the paradox of “labor shortages and rising wages in a once-labor-abundant economy,” as has just begun to be witnessed in China (Ozawa, 2005, p. 41-43). China’s open-door policy of 1978 thus brought about opportunities for labor to earn wages in labor-intensive production higher than had ever been dreamed of when isolated from the global economy. And these employment opportunities have already lifted hundreds of million peoples out of dire poverty.<sup>22</sup>

On the other hand, Arthur Lewis’s “unlimited-labor-supply” model explains *how* industrial labor is supplied when a developing country kick-starts economic development. It describes the process of early stage industrialization that transfers rural labor (migrants) to industry, raising productivity and profits (to be reinvested in further industrial expansion, abetting further growth). A reserve army of labor in agriculture is converted into industrial labor at a constant low rate of wage so long as the former continues to be in “unlimited supply.” A turning point at which surplus labor is eventually exhausted means the start of industrial wage hikes, signaling the unavoidable end of labor-driven industrialization.

Here it is interesting to note Charles Kindleberger’s account (1967) of Europe’s early postwar recovery, which was framed in terms of the Lewis model. He found strong evidence that “the major factor shaping the remarkable economic growth which most of Europe has experienced since 1950 has been the availability of a large supply of labor”

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<sup>22</sup> According to the Asian Development Bank (2004), for example, the headcount ratio for those living on \$1 a day in China decreased from 53.1 percent in 1984 (more than half the entire population of 1.3 billion) to 26.5 percent in 2001. The latest statistics, when made available, must reveal a further drastic decline in abject poverty. This poverty reduction effect of labor-driven growth is discussed in Ozawa (2009).



(Kindleberger, 1967, p. 3). Specifically for the German miracle, “the *sine qua non* was the elastic labor supply which held down wages and maintained profits and investment” (p. 30). Similarly, in early postwar Japan, a large reserve army of workers, either unemployed or underemployed in the aftermath of war destruction and defeat, provided a basis for rapid growth, because it ensured low wages, thereby relieving any immediate pressure of a profit squeeze on businesses (Ozawa, 2005). This phenomenon may also be interpreted as akin to Paul Krugman’s notion of “input-driven” growth, in which available labor and capital were merely mobilized to raise output with the use of existing technologies (i.e., without any increase in total factor productivity) (Krugman, 1994).<sup>23</sup>

It is said that China similarly has just entered the Lewisian turning point. Appropriately, however, it ought be called a “turning *period*” (Garnaut, 2010) instead of a “turning *point*,” simply because of an enormous size of labor force that can only *gradually* be shifted out of different rural areas toward the industrial sector at various speeds over a rather *prolonged* period of time without marking any clear-cut point in time. Moreover, a clear-cut distinction between the rural and the industrial sector, as used in the Lewis model, misses the unique feature of China’s geographical vastness. China’s rural sector is not monolithic; in fact, it is *multi-layered* in terms of income levels (i.e., standards of living) which *generally* decline *the farther a region is located into the hinterlands away from the industrial coast* (though there are some inland commercial/industrial pockets such as Qinghai, Xinjiang, and Tibet). Hence, any increase in rural wages tends to occur first in those regions that are close to the industrial coastal areas and gradually spreads to the inland.

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<sup>23</sup> These points on the Lewis model in the above paragraph are discussed in Ozawa (2005, pp. 31-37).

Besides, it is not in one direction in which labor alone moves in search of industrial jobs, as envisaged in the Lewis model. Actually, labor mobility may be hindered for a variety of reasons, and instead, capital (or factories) moves to the rural areas in search of low-cost labor. This results in two-way movements of labor and capital, each in an opposite direction. The recent development in China's labor market for migrant workers illustrates the beginning of this phenomenon. Instead of the smooth uni-directional flows of rural labor into the industrial sector, many migrant workers decided, starting in the early 2000s but most dramatically in 2009, not to return to their industrial jobs after year-end holidays in their home provinces, causing a serious shortage of migrant labor in the coastal regions. Now that infrastructure development in the hinterlands have been promoted by China's central government under its 2008 economic stimulus program in the wake of the global financial crisis, rural workers are finding jobs close to home more easily than ever before, though they may be less paid than on the industrial coast.

Furthermore, how fast wages rise depends on the size of rural labor reserves that would eventually be employed in industry. In this respect, unlike Japan and the NIEs that had a relatively limited reserve of rural labor simply because of their small geographical size, China has a massive rural labor force yet to be tapped. As pointed out earlier, China's migrant workers are estimated to be roughly 160 million *plus* 70 million more potential migrants. After all, 750 million people still live in China's countryside with the average rural income only one third of its urban counterpart. This is the reason for China's central government is implementing an income-doubling plan (by 2020) for its rural regions, and the recent economic stimulus program was designed in part to this end by devoting nearly 38% (1.5 trillion yuan) of the total expenditure to invest in rail roads,

airports, and power grids and other infrastructure.<sup>24</sup> Therefore, the government is expected to facilitate and encourage relocation of industries inland. Hence, China's own vast interior regions are more likely to be tapped first as new production sites than any faraway countries.

Most importantly, after all, what has really driven China's own export-oriented low-cost production so successfully is *not Chinese firms themselves but foreign multinationals from the advanced world*. The latter have eagerly capitalized on low-wage labor in the final processing/assembly production of goods that they can import back home or to other countries. They are the investors who flocked to China's SEZs and are responsible for a majority of China's labor-intensive exports-- hence, for China's labor-driven industrialization. Yet, none of those multinationals that run factories in China has so far shown any sign of moving to Africa yet, though some have already started to shift their production to other locations in China's interior or in its nearby countries. At present, indeed, many of them are more preoccupied with, and gearing up to, the task of adapting their production for China's fast-growing domestic markets than thinking about relocating to somewhere else. A prime example is Foxconn Technology, a unit of a Taiwan-based multinational. This multinational, the world's largest contract electronics assembler, employs *no less than* 1 million workers in China. In response to the rising wages in the coastal region, the company will soon move 200,000 jobs to cheaper inland provinces, converting its south China manufacturing base into a higher value-added engineering center. And this is one of those key foreign multinationals that helped transform Schenzhen into a global manufacturing base for the consumer electronics

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<sup>24</sup> "China's Stimulus Package: A Breakdown of Spending", *Economic Observer* July 3, 2009, [http://www.eeo.com.cn/ens/finance\\_investment/2009/03/07/131626.shtml](http://www.eeo.com.cn/ens/finance_investment/2009/03/07/131626.shtml).

industry.<sup>25</sup> But Foxconn is not even thinking of relocating to such faraway Africa—for that matter, as yet to China’s neighboring countries, either.

Moreover, the present phase of labor-driven industrialization is expected to last another 10 to 15 years (Yao, 2011) before higher-tier, more capital-intensive industries become the engine of growth in China. Given the vast size of labor reserves in its huge interior, even in 15 years China may not likely dismantle low-end manufacturing and service as completely as Japan and the NIEs have done previously. Besides, still tens of millions of people live in abject poverty despite its recent success to reduce the impoverished. A dual industrial structure (a co-existence of capital-intensive high-tech industries in the coastal regions and labor-intensive industries in the hinterland) may persist for a considerable period of time over the course of its catch-up structural transformation.

#### **4.2. Exchange Rates**

It is well known that developing countries’ currencies tend to remain undervalued relative to advanced countries’<sup>26</sup> Most developing countries actually want to keep their currencies undervalued, if possible, to gain export competitiveness and protect fledgling domestic industries. An undervalued home currency is thus a plus factor in export-led growth. Yet, the very success of such a currency strategy ironically leads to home currency appreciation as its trade balance improves and its foreign exchange reserves increase. If the exchange rate is nominally fixed, the currency becomes even more

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<sup>25</sup> This example draws on “Foxconn to move China jobs inland,” *Financial Times*, March 3, 2011, [www.ft.com](http://www.ft.com).

<sup>26</sup> Different reasons are suggested for this phenomenon. See Balassa, 1964; and Samuelson, 1964 for the “low labor productivity in tradables” account, and Bhagwati, 1984; Kravis and Lipsey, 1983 for the “low capital-labor ratio” account.

undervalued in real terms (i.e., real depreciation). This may strain trade relationships with other countries and eventually cause inflation and rising wages at home.

Some argue that the Bretton Woods system of fixed exchange rates has been *revived* in Asia, where exchange rate fluctuations against the dollar are contained by the Asian governments' foreign exchange market interventions (Dooley, et. al., 2003)—and that such stabilized exchange rates may be even *a desideratum* for early catch-up growth and should not be disturbed by rate adjustment (McKinnon, 2005—in defense of China's present currency policy). Undervalued currencies are thus one key explanatory variable in Asia' phenomenal growth. And this explains why China is letting the yuan appreciate only reluctantly and slowly.

Paradoxically, however, any undervalued currency eventually meets the fate of sharp appreciation in the course of export-driven industrialization, since productivity rises as a result of industrial upgrading. For example, in the wake of Japan's swift catch-up growth with its current-account surplus rising, the Japanese yen became grossly undervalued under fixed exchange rates. Consequently, as soon as the fixed rates were abandoned in 1973, the yen began to soar in value and became even overvalued (i.e., exchange rate overshooting). The yen had gained more than fourfold in value against the dollar by 1995. For the sake of survival, Japanese firms had to shift production out of Japan into neighboring low-cost countries--not so much because Japan lost real comparative advantages, but *rather* because the abnormally high yen made it disproportionately more costly to produce at home than abroad, causing "excessive" outward FDI and sparking fears of "industrial hollowing-out" at home (Ozawa, 2005).

Although less dramatic, a similar exchange-rate effect has been observed in the NIEs' overseas investments in the ASEAN-4 and China. In 1985, the NIEs' currencies likewise began to exhibit a secular trend of appreciation. In the meanwhile, the ASEAN-4's currencies and China's yuan in particular became undervalued. These changing trends in exchange rates have no doubt played a key role in the rapid transmigration of labor-intensive production, first from Japan to the NIEs and then from the NIEs to the ASEAN-4 and China.<sup>27</sup>

Because of China's rapid catch-up growth, indeed, the yuan is now grossly undervalued and under pressure for appreciation from its trading partners. The "yuan-U.S. dollar" exchange rate became a hot political issue, the U.S. and Europe criticizing China for playing a beggar-thy-neighbor policy, while China retorting that the former's low saving rates and ultra-low interest rate policy are forcing down the value of their currencies. Also, China argues that currency stability is of paramount importance, and that only *gradual* yuan appreciation, therefore, is justified in the interests of both China and the global economy. And this appreciation gradualism is a buying-time tactic for China to prepare for an inevitable eventual transition for a much higher-valued yuan.

The potentially large appreciation of the yuan has already been compelling multinational firms (foreign and Chinese alike) to plan moving some labor-intensive production out of China to Vietnam, Cambodia, and other still low-cost locations—and even back to the ASEAN 4 that have fallen behind China in the race for catch-up growth. Currency appreciation "taxes" exports and inward FDI (and returns on FDI), while it "subsidizes" imports and outward FDI. Also, the unavoidable trend of currency

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<sup>27</sup> Although the undervaluation is not emphasized, Kwan (1994) observes how the changes over time in the exchange rates of East Asian currencies contributed to transmigration of production in a FG fashion across the region.

appreciation is simultaneously prompting China to move up the ladder of development, as evidenced in its strenuous efforts to acquire new technologies. Relocating to China's interior where low-wage labor still exists may help temporarily, but currency appreciation as an unavoidable trend, coupled with a potential wave of rising wages reaching the inland, sooner or later, ineluctably spells doom to low-end manufacturing in China.<sup>28</sup>

In the short run, nevertheless, China needs to provide jobs for unskilled and semi-skilled labor in hundreds of millions, who cannot be so easily retrained to work in higher value-added industries such as automobiles and telecommunications equipment, which themselves do not yet have enough capacity to employ even trained ones in such large numbers. These higher productivity industries are more capital- and skill-intensive and less unskilled-labor-intensive. China is clearly unwilling to permit a sharp yuan appreciation to cause havoc to its labor-intensive industries that currently provide jobs for tens of millions of migrant workers at home. Besides, the gradual pace of appreciation gives exporters more time to raise productivity or relocate inland, thereby allowing them to hang on a while.

### **4.3. Institutions**

Institutions play a critically differentiating role in economic performance among countries (North, 1990). This is particularly so with regard to inward FDI. International trade itself does not require any adaptive changes in trading countries' internal institutions. In contrast, multinational corporations are, after all, the creatures of global capitalism and make investments only in those developing countries that provide a business-friendly market environment in which they can operate and produce and take

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<sup>28</sup> Any further appreciation of China's currency (in addition to the 20% rise against the U.S. dollar in 2005-2008) is sure to expand its outward FDI, just as Japan's FDI "tripled from US \$6.5 billion in 1984 to US\$19.5 billion in 1986, peaking US\$48 billion in 1990" (Sauvant and Davies, 2010, p. 2).

out profits with reasonable freedom. It is in this respect that the developing countries mired in poor or underdeveloped institutions need to establish EPZs (SEZs or ECZs), if they cannot have a wholesale institutional modernization of the entire economy overnight.

Radelet and Sachs (1997) who recognize and interpret the FG theory as a major doctrine of development strategy alongside the big push and import substitution, identify the distinct *institutional* arrangements that are each specific to the three major doctrines:

If the paradigmatic institution of the big push was *state ownership of industry* [as exemplified by the Stalinist drive toward rapid industrialization in the 1930s and China's Great Leap Forward of 1958-61], and for import substitution was *private ownership backed by protectionism* [as once seen throughout Latin America], for flying-geese development it is *the export platform*. The idea behind an export platform is to create an *enclave economy hospitable to foreign investors and integrated into the global economy, without the problems of infrastructure, security, rule of law, and trade policies that plague the rest of the economy* (emphasis added, pp. 52-53).

The “big push” approach was thus pursued in the interest of nationalistic self-reliance under communism and in isolation from the outside world. The “import-substitution” strategy, too, was carried out in an inward-focused fashion without much integration with the global economy. Both doctrines proved to be failures. In sharp contrast, the FG doctrine promotes integration with, and capitalization on, the outside world, by setting up what Radelet and Sachs call “capitalist enclaves” (p. 45) that serve as the bootstraps of catch-up development.

The enclaves, such as EPZs and SEZs, constitute the *localized pockets of market capitalism*, free from and unencumbered by regulatory controls and political/bureaucratic constraints that prevail in the rest of the country—so as to be integrated into the global economy that is currently molded and driven by U.S.-led capitalism. They are, therefore,



attractive to foreign multinational corporations that can bring in all the necessary productive resources (such as technology, managerial skills, capital goods, and access to export markets) lacking at home, kick-starting industrialization (Ozawa, 2011).

And what China has accomplished is a textbook-perfect example of such institutional reform designed to attract multinational corporations from the advanced world. With a switch to the open-door policy in 1978, China created SEZs along the Golden Coast, the zones that sparked export-driven industrialization initially via labor-intensive production and set in motion its climb up the ladder of technical development.<sup>29</sup> Foreign multinationals from different advanced countries piled into the SEZs, which quickly grew and expanded to gobble up the rest of the economy--except the monopolized territories of SOEs mostly in heavy and chemical industries. The SOEs themselves then began to tie up with foreign multinationals in joint ventures to modernize their moribund industries and diversify into new fields.

China's FDI in manufacturing overseas began in the late 1990s with the new "go-global" policy in order to promote "overseas processing trade" through overseas factories to be set up in Africa, Central Asia, Middle East, Eastern Europe, and South America to which intermediate goods were to be exported from China and processed into finished goods there (Ebara and Hakosaki, 2009). This new policy was a 180-degree turnabout from its previous policy to restrict outward manufacturing FDI because China quickly found itself no longer constrained by the availability of foreign exchange reserves which it had rapidly accumulated. Interestingly, China itself used to be eager to host such trade by attracting foreign multinationals to process imported inputs into finished goods in the

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<sup>29</sup> For a detailed analysis of how significantly the SEZs have contributed to national GDP, employment, exports, and attraction of foreign multinationals, see Zeng (2010).

SEZs. It now began to replicate exactly the *same* processing activity abroad under its “go global” policy. This type of outward FDI in processing trade may be identified as “export-promoting FDI.” And even now this new “disguised” export strategy continues when it comes to China’s labor-seeking FDI in low-end manufacturing. (Here it is worth noting in passing that Japan had previously pursued a similar FDI strategy as it was once worried and concerned about the hollowing-out of industry at home.) Therefore, China may be seriously interested in establishing SEZs overseas, too, especially in sub-Saharan Africa where local institutions are, on the whole, inhospitable and underdeveloped for labor-seeking inward FDI. In other words, China is exporting its own model of labor-driven industrialization built on SEZs to those developing countries that are institutionally unprepared as hosts and that thus need export-processing enclaves as a starting point.

Nevertheless, China is still a novice manufacturing multinational in the Third World where institutional inadequacies compound the problems of China’s inexperience with outward FDI. For example, China is often criticized for its tendency toward ethnicity-bound groupism, as evidenced in the employment (even over-employment) of Chinese construction workers in droves for aid projects in hundreds or even thousands,<sup>30</sup> the settlement of Chinese migrants and petty merchants/caterers in host countries and the one-sided presence of Chinese consortia for overseas development projects without much participation of local and other countries’ multinationals.

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<sup>30</sup> According to Brautigam (2010), it is a misconception that China’s construction projects in Africa are not always carried out mostly by Chinese workers. She points out that in Angola Chinese workers accounted for 45%, while locals for 55% in Angola; in Tanzania Chinese workers 10%, while locals 90% in Tanzania. For the entire continent, the former is 20% of the construction workers employed. But the absolute numbers of Chinese workers sent from home are nonetheless still large by any standards. They are reportedly paid as much as three times the wages at home, a strong incentive to work overseas (*Asahi Shimbun Global*, No. 47, September 6, 2010).

There may be good practical reasons, however, why Chinese construction crews are usually dispatched from home to overseas infrastructure projects in Africa—simply because there exist no sufficient number of civil engineers and skilled workers to complete the work within a contract period. The market structures in the Third World are not yet well organized, causing the problems of coordination failure, which can be ameliorated only by the networking skills of compatriot firms brought from home. (Here, again, Japan’s FDI was early on similarly criticized for overstaffing their ventures with Japanese top-to-middle level managers without giving opportunities for locals to be promoted—and for tightly knit *keiretsu*-based investment activities.)

Besides, overseas infrastructure projects can provide job opportunities for Chinese construction workers who might otherwise be unemployed at home. Be that as it may, China has a long historical tradition of emigrating and settling across Southeast Asia and elsewhere—and now more in faraway places like Africa. The “Chinese-ness” feature that has a good economic rationale, therefore, may not fade away so quickly even as China gains more experience as overseas investors. Nevertheless, it should be stressed that all the free-market zones set up in East Asia, including those in China, became successful *because* they attracted multinationals from all over the world, thereby attaining a critical mass in creating a viable production environment with a balance of competition and cooperation. And this feature has not yet come into play in China-sponsored SEZs in sub-Saharan Africa (and as mentioned above only few SEZs are operational at present).

Lest China-sponsored SEZs turn into “industrial ethnic-Chinese diasporas,” they would need multi-national participation, especially by local African manufacturers themselves. South African multinationals, in particular, ought to participate in such

zones. Recently, the International Finance Corporation decided to fund \$10 million as a joint financier of a commercial complex project (worth about \$33 million) in Tanzania with a Chinese company and a local non-profit organization, inviting a third party to fund an additional \$6.5 million<sup>31</sup>--an arrangement designed to encourage multi-national participation and adherence to internationally acceptable social and environmental standards. Also, the U.S.'s AGOA may nudge China to invest more in democratic and market-based economies.

As hinted above, when it comes to institutional preparedness for hosting foreign MNEs in local manufacturing, there seem many more difficulties confronting the sub-Saharan region. Institutional deficiencies abound: for example, unreliable power and water supply, underdeveloped transportation systems, poor governance, inhospitable regulatory environments, and the work ethic) throughout the continent are well known.<sup>32</sup> This explains why foreign multinationals in general, let alone China's, have not yet seriously advanced into Africa in search of low-cost labor. In contrast, the governments of developing countries in East Asia quickly realized the potential of Japanese and Western FDI and thus were prepared to provide accommodating infrastructure (such as SEZs and transportation facilities) and regulatory reforms.

Yet, SEZs alone are not sufficient, if necessary. For example, India has already set up more than a dozen SEZs modeled after China's, but it is experiencing some difficulty operating them largely because of strong labor unions and socialist labor laws that

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<sup>31</sup> "World Bank unit to finance Chinese Africa venture," *Financial Times*, April 22, 2010 ([www.ft.com/cms](http://www.ft.com/cms)).

<sup>32</sup> In this regard, Mo Ibrahim's index of all-round governance derived from four sub-indices (for "safety and rule of law," "human development," "sustainable economic opportunity," "participation and human rights") is useful to assess the institutional qualities of African economies. <http://www.moibrahimfoundation.org/en/section/the-ibrahim-index>.

hamper employment flexibility, though internationally acceptable labor standards are definitely needed.<sup>33</sup> Thus, enclaves alone are *not* a sufficient condition unless they are relieved from other institutional obstacles. Besides, in general, Africa faces more serious “other” obstacles such as political instability, wide-spread corruption and poverty, crimes than India which practices democracy under stable government. In this regard, the New Partnership for Africa’s Development (NEPAD)-OECD Africa Investment Initiative aims to strengthen the capacity of African countries to design and implement reforms that improve their business climate and to unlock investment potential in the continent.

## **5. Concluding Remarks**

Even if the time comes for China to be serious about relocating low-cost factories to sub-Saharan Africa, there are a host of hurdles to clear on both sides. In the near term, China still can relocate labor-intensive manufacturing inland or to its low-cost neighbors (such as Vietnam, Cambodia, Laos, Pakistan, and Bangladesh) where locational factors are far more favorable (hence, transaction costs are much lower as production sites) than in Africa. Indeed, China’s own huge hinterland itself can be regarded as its own Africa that is in need of economic vitalization and growth. China’s rural wages may be about equal to or even lower in some instances than those in Africa. All in all, our analysis strongly indicates that the World Bank’s vision is still a far distant future prospect if it is to be realized.

It is true that Chinese entrepreneurs and migrant workers are already in Africa (estimated to be over one million) and will continue to accompany any large-scale China-sponsored development projects, ending up creating many more production/service clusters across the continent as has been in the recent past. But these private investments-

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<sup>33</sup> “India, Known for Outsourcing, Expands in Industry,” *New York Times* (on the Web), May 19, 2006.

-mostly by “family multinationals”-- may not be large enough to ignite local industrialization. Besides, there are concerns that existing local businesses may be swamped and simply replaced by newly transplanted Chinese businesses.

Nowadays, many sub-Saharan African countries are prospering under a resource boom. The recent IMF (October, 2010) forecast that growth in the region will reach 5.5% in 2011, a rapid rate growth that, for instance, already moved around 10 million Nigerians into the middle-income bracket.<sup>34</sup> And their growing markets have recently begun to encourage those multinationals already in the region (e.g., Nestle, Vodafone, Yum Brands [the owner of KFC outlets]) to expand their operations, and others in retailing and services such as Wal-Mart are moving in for the first time. These investments are of the market-seeking type, and not of the labor-seeking one—without sparking labor-driven industrialization. Despite the facade of prosperity, furthermore, African economies are growing in a more uneven manner than ever before by creating disparities in income distribution and wealth creation. Only the politically connected and elites are made better off, while the masses are still eking out their existence.

In addition, Africa’s resource-based growth is resulting in the Dutch disease (high wages in the resource extractive sector crowding out any nascent manufacturing sector) and all sorts of the resource curse (particularly of the corruption-, inequality-, and autocracy-causing type). China’s no-string-attached aid policy itself is aggravating these adverse effects of resource-based growth. In fact, China’s private investors themselves are not even concerned about corruption and problematic political governance a serious obstacle: “Interestingly, unlike many western investors, corruption, crime and

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<sup>34</sup> “Catering to New Tastes as Incomes Climb: Zambian Beef Processor Expands to Nigeria With Aim of Spreading Out Across the Continent,” *Wall Street Journal*, February 10, 2011, B1.

bureaucracy did not seem to disturb Chinese investors particularly,” an observation based on a survey on impediments to FDI (Gu, 2009, p. 578). In order for the African hosts to attract multinationals from the advanced world, institutional reforms, particularly political and social reforms, are badly needed—but for this to occur will take time.

Although China itself has succeeded in reforming its previously anti-capitalist institutions partially for the purpose of hosting foreign multinationals to set up labor-intensive factories at home, it has not yet succeeded equally well in preparing its own investors as an effective agent of economic development in the host countries. At the moment, as mentioned earlier, China’s newly emerged “multinationals” in local manufacturing are mostly (with a few exceptions) of the “immature/primitive” genre, characterized by the diaspora-forming type activities of individual entrepreneurs and small-and medium-scale businesses. No doubt, as China gains more experience and as many more of its own large multinationals in the modern mode of corporate governance and business organization will emerge, they are likely to exhibit a similarly “normal” pattern of manufacturing FDI--normal by the advanced world’s standards. In fact, large Chinese companies like Huawei , China National Offshore Oil Corp (CNOOC), Industrial & Commercial Bank of China (ICBC), and TCL Corporation are already actively playing the game of Western-style M&A investment. This may be a well-come early sign of the maturing quality of Chinese multinationals.<sup>35</sup>

At the moment, however, China’s FDI involvement in local manufacturing in Africa is in the very early stage of evolution, and its capacity to transform the sub-Saharan region into a vibrant manufacturing base is still underdeveloped and quite limited. Such a

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<sup>35</sup> At the moment, China’s “modern” large MNCs are either wholly or at least partially owned by the Chinese government, central or provincial. For example, China’s 18 large MNEs are practically all SOEs, excepting Lenovo Group. See Xue (2011).

hopeful prospect can materialize only when the time comes for those foreign multinationals operating in China to seriously look for Africa as possible sites for their labor-intensive production. After all, they are the strongest force that has engendered the FG-formation of sequential “economic miracles” across East Asia. It is therefore imperative for the sub-Saharan countries to strive to attract not only Chinese multinationals but also, and more importantly, those multinationals from the advanced world that are heavily involved in labor-seeking FDI. They are the real kick-starters of industrialization.



## References

Asian Development Bank (ADB) (2004), *Key Indicators of Developing Asian and Pacific Countries*, Manila: ADB.

Akamatsu, Kaname (1935), “Wagakuni Yomo Kogyohin no Boeki Suisei [The Trend of Japan’s Foreign Trade in Woolen Manufactures],” *Shogyo Keizai Ronso* [Journal of Nagoya Higher Commercial School], Vol. unknown, 129 ff.

Alden, Chris, Daniel Large, and Richard Soares de Oliveira (eds.) (2008), *China Returns to Africa: A Rising Power and a Continent Embrace*, New York: Columbia University Press.

Bhagwati, Jagdish (1958), “Immiserizing Growth: A Geometrical Note,” *Review of Economic Studies*, 25, 201-5.

Bonacich, Edna, and David V. Walter (1994), “Managing a Global Industry: Apparel Production in the Pacific Rim Triangle,” in E. Bonacich, et. al. (eds.), *Global Production: The Apparel Industry in the Pacific Rim*, Philadelphia: Temple University Press.

Broadman, Harry G. (2011), “The backstory of China and India’s growing investment and trade with Africa: Separating the wheat from the chaff,” *Columbia FDI Perspectives* No, 34, Feb. 18.

Broadman, Harry G. (2007), *Africa’s Silk Road: China and India’s New Economic Frontier*, Washington, D.C.: The World Bank.

Brautigam, Deborah (2010), “Chugoku no Afurika Enjo o meguru Yottsuno Gokai [Four Misconceptions about China’s Economic Cooperation for Africa]” (translated into Japanese), *Asahi Shimbun Globe*, No. 48, September 20.

Brautigam, Deborah (2009), *The Dragon’s Gift: The Real Story of China in Africa*, Oxford: Oxford University Press.

Brautigam, Deborah (2008), ‘Flying Geese’ or ‘Hidden Dragon’? Chinese Business and African Industrial Development,” in C. Alden, D. Large, and R. Soares de Oliveira (eds.), *China Returns to Africa*, New York: Columbia University Press.

Brautigam, Deborah, Thomas Farole, and Tang Xiaoyang (2010), “China’s Investment in African Special Economic Zones: Prospects, Challenges, and Opportunities,” *Economic Premise*, No. 5 (March), Poverty reduction and economic management (PREM) network, World Bank, <http://www.worldbank.org/economicpremise>.

Dent, Christopher M. (2010), *China and Africa Development Relations*, London, U.K.: Routledge.

- Ebara, Noriyoshi and Hakohaki Dai (2009), *Chugoku Keizai Sanzensen: Tainai-Taigai Tohshi no Jittai* [The Frontlines of the Chinese Economy: Inward-Outward Investments], Tokyo: JETRO.
- Ebrahim, Muhammad Iqbal, and Mirza Ikhtiar Baig (2010), “Textiles—The Very Texture of Pakistani Society,” *Foreign Affairs*, Vol. 89, 89 Issue 1, Jan/Feb., pp. .
- Garnaut, Ross (2010), “The turning period in Chinese development,” *East Asian Forum*, Australian National University, August 1, [www.eastasiaforum.org](http://www.eastasiaforum.org).
- Goldstein, Andrea (2004), *Regional Integration, FDI and Competitiveness in Southern Africa*, Paris: OECD Development Center.
- Goldstein, Andrea, Nicholas Pinaud, and X. Chen (2006), *The Rise of India and China: What’s in it for Africa?* Paris: OECD.
- Gu, Jing (2009), “China’s Private Enterprises in Africa and the Implications for African Development,” *European Journal of Development Research*, 21 (4), pp.570-587.
- Hurst, Luke (2011), “China’s Special Economic Zones in Africa,” March 6, <http://chinainvests.org/2011/03/06>.
- Kaplinsky, Rapghael, and Mike Morris (2010), “The Policy Challenge for Sub-Saharan Africa of Large-Scale Chinese FDI (ARI), ARI 169/2010 -30/11/2010, [www.realinstitutoelcano.org/wps](http://www.realinstitutoelcano.org/wps).
- Kindleberger, Charles P. (1967), *Europe’s Postwar Growth: The Role of Labor Supply*, Cambridge, Mass.: Harvard University Press.
- Kojima, Kiyoshi (1975), “International Trade and Foreign Investment: Substitutes or Complements,” *Hitotsubashi Journal of Economics*, 16, 1-12.
- Kojima, Kiyoshi and Terutomo Ozawa (1985), “Toward a Theory of Industrial Restructuring and Dynamic Comparative Advantage,” *Hitotsubashi Journal of Economics*, 26 (2), 135-45.
- Kravis, I.B. and R.E. Lipsey (1983), *Toward an Exploration of National Price Levels*, Princeton Studies in International Finance 52, Princeton, N.J.: International Finance Section, Princeton University.
- Krugman, Paul (1994), “The Myth of Asia’s Miracle,” *Foreign Affairs*, 73 (6), 62-93.
- Kwan, C.H. (1994), *Economic Interdependence in the Asia-Pacific Region*, London: Routledge.

Lewis, Arthur W. (1954), "Economic Development with Unlimited Supplies of Labor," *Manchester School of Economics and Social Studies*, 12, May, 139-191.

McKinnon, Ronald I. (2005), *Exchange Rates under the East Asian Dollar Standard: Living with Conflicted Virtue*, Cambridge, MA.: MIT Press.

North, Douglass C. (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge, U.K.: Cambridge University Press.

Ozawa, Terutomo (2011), "The (Japan-born) 'Flying-Geese' Theory of Economic Development Revisited—and Reformulated from a Structuralist Perspective," *Global Policy* (forthcoming).

Ozawa, Terutomo (2009), *The Rise of Asia: The "Flying-Geese" Theory of Tandem Growth and Regional Agglomeration*, Cheltenham, Glos. UK: Elgar.

Ozawa, Terutomo (2005), *Institutions, Industrial Upgrading and Economic Performance in Japan: The "Flying-Geese" Paradigm of Catch-up Growth*, Cheltenham, Glos. UK: Elgar.

Radelet, Steven and Jeffrey Sachs (1997), "Asia's Reemergence," *Foreign Affairs*, 76 (6), 44-59.

Samuelson, Paul A. (1964), "Theoretical Notes on Trade Problems," *Review of Economics and Statistics* 46 (May), 145-154.

Sauvant, Karl P., and Ken Davies (2010), "What will an appreciation of china's currency do to inward and outward FDI?" *Columbia FDI Perspectives*, No. 30, October 18.

Stolper, Wolfgang F., and Paul A. Samuelson (1941), "Protection and Real Wages," *Review of Economic Studies*, 9 (November), 58-73.

UNCTAD (2010), *World Investment Report*, 2010, New York and Geneva: United Nations.

Yao, Yang (2011), "What drives Chinese current account surpluses?" *East Asia Forum, Weekly Digest*, Feb. 28, [east\\_asia\\_forum-bounces@anu.edu.au](mailto:east_asia_forum-bounces@anu.edu.au).

Xue, Qiuzhi (2011), "Chapter 3 – The People's Republic of China's global players," in Karl Sauvant et. al. (eds.), *MNEs from Emerging Markets: New Players in the World FDI*, e-book, New York: Vale Colombia Center on Sustainable International Investment, pp. 69-81.

Zeng, Douglas Z. (ed.) (2010), *Building Engines of Growth and Competitiveness in China: Experience with Special Economic Zones and Industrial Clusters*, Document #56447, World Bank, <http://www.worldbank.org/publications>.