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**Research Report**

## "Africa's China": Chinese Manufacturing Investment in Nigeria in the Post-Oil Boom Era and Channels for Technology Transfer

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## POLICY POINTS

**Adopt preferential policies**

for companies that encourage the provision and hiring of skilled local staff & greater collaboration with local schools and universities.

**Import-substitution policy**

**incentives** can be used to foster industries that maximize the use of local content and build up human capital.

**Ensure policy stability**

and a secure investment environment.

**Improve transportation and**

**logistics infrastructure.**

## “Africa’s China”: Chinese Manufacturing Investment in Nigeria in the Post-Oil Boom Era and Channels for Technology Transfer

**Yunnan Chen**

NIGERIA IS A PRIMARY DESTINATION FOR SMALL AND MEDIUM-sized Chinese investments in manufacturing. These investments have the potential to foster technology transfer that can contribute to industrialization and structural transformation. However, this potential appears limited. This study uses in-depth surveys and site visits of Chinese firms’ clusters, including in Lagos, Ogun, and Benin City, to understand the motivations driving investment as well as the challenges faced after the post-oil price collapse. While positive examples exist of technology and skills transfer, these mechanisms are hampered by poor infrastructure and weak local supply chains. Political and exchange rate instability have been consistent challenges for Chinese firms, though those that localized most successfully may be better prepared to weather future challenges.

Capital investment from China into African economies has accelerated in the last two decades, both from large state-owned enterprises as well as smaller investors and enterprises. Along with Ethiopia and South Africa, Nigeria has been a major destination for Chinese foreign direct investment (FDI), not only for its energy sector, but also in its nascent manufacturing industries. China’s domestic economic slowdown after 2011 has contributed to the “going out” of smaller, privately-owned manufacturing enterprises, often operating independently of the Chinese state, as domestic overcapacity and rising wages have hit the competitiveness of Chinese manufacturing. Successive governments in Nigeria have tried to leverage these waves of investment to foster industrialization and structural transformation, recognizing manufacturing’s economic potential as a sector for job creation, and reducing dependence on oil commodity exports. This has taken form in new industrial zones and manufacturing clusters, sometimes offering preferential incentives to investors.

Alongside Ethiopia, Nigeria has been one of the top destinations for Chinese FDI and for small and medium sized manufacturing enterprises. We found that in Nigeria, Chinese investment has clustered in major state-initiated free trade zones (FTZ), including the Lekki FTZ and Ogun-Guangdong FTZ, although many more investors have also invested in private industrial zones. We found clusters of manufacturing investment centered around the construction and real estate sectors, as well as household goods, driven by the appeal of the large Nigerian consumer market, and

helped by import-substitution policies. However, we also found that push-factors, including increasingly stringent Chinese environmental regulations, have also been salient to firms “going out”. Understanding the investors’ motivation is key in strengthening Nigeria’s policy framework.

We found positive cases of technology transfer initiatives and skills training, particularly in non-homogenous product sectors such as furniture. However, low linkages to domestic Nigerian firms has hindered the development of industrial clusters and local supply chains. The currency depreciation following Nigeria’s recession in 2014 has also been a major hit for foreign investors, though more localized firms were better able to weather these fluctuations and challenges, while traders and raw material importers were hardest hit.

Though taking place after the period of this research, the global economic contraction resulting from the COVID-19 outbreak will also have serious ramifications for future China-Nigeria investment links. While the diplomatic and official relationship with China is unlikely to waver, the economic recession will have magnified impacts for small entrepreneurs, compared to effects of the oil price collapse, for both Chinese and Nigerian firms. These trends present a severe challenge to manufacturing and industrial development in the years to come.

## INVESTMENT CLUSTERS

OUR DESK STUDIES TRACKING MANUFACTURING investments collated data from both Chinese and Nigerian official records. A 2015 list of registered firms, from China’s Ministry of Commerce, identified 218 Chinese firms registered in Nigeria, with 128 in manufacturing. Meanwhile, the Nigerian Investment Promotion Commission identified 215 companies registered from 2006-2012 under Chinese nationality, of which 88 were listed as operating in manufacturing or production-related sectors. A 2017 update showed another 157 firms from China registered between 2012-2017, with 24 listed under manufacturing. These data discrepancies illustrate the difficulty of tracking Chinese investments, particularly in the small and dispersed manufacturing sector.

## INVESTMENT SECTORS

WE FOUND SIGNIFICANT INVESTMENTS in sectors oriented around the real estate and domestic construction markets. For example, many small recent entrants interviewed produced steel pipes and rivets, doors and windows, and prefabricated housing. In several areas, including ceramics, furniture, and bottled water,

Chinese entrants have now crowded out Nigerian competitors. The ceramic tile industry, in particular, is now dominated by a handful of large Chinese firms. In fact, due to market saturation, these ceramic firms have created an association where they collude to restrict production and keep prices high.

Other investment areas have targeted the domestic consumer market, including food and beverage. One example is CWay, now the largest bottled water and beverage company in Nigeria. Geographically, many of these investments cluster around Lagos, included in two major FTZs born out of the Forum of China Africa Cooperation. These are managed and co-owned as a joint venture between Chinese and Nigerian ownership:

Lekki FTZ hosts around 30 firms (as of 2017), both Chinese and Nigerian, with over 10 in manufacturing sectors. Yulong Steel and Yafei semi-knock down (SKD) assembly are two of the largest companies, while the rest are relatively recent entrants producing furniture and household consumables like mops, slippers, and wigs. The Lekki FTZ offers preferential policies including zero customs fees for imported raw materials and exported products, conditional on a 35 percent local content requirement, and a minimum US\$ 100,000 investment.

Ogun-Guangdong FTZ has around 45 firms registered (as of 2017), with 26 active and operational. Some of the largest firms include Goodwill Ceramics, Hewang Cardboard, and Snowsea Freezers, as well as a large glass factory still under construction. Ogun hosts three furniture manufacturers and two to three firms producing steel pipes and rivets. Ogun FTZ has similar local content requirements and preferential tariffs on imported and exported goods.

Other sites with significant Chinese manufacturing investments include Calabar FTZ in Cross Rivers State, the oldest FTZ in Nigeria, which was established in 1992 by the government and hosts Chinese steel and household appliance manufacturers. Despite FTZs’ preferential policies, large numbers of Chinese investors choose not to locate in a zone, purchasing instead their own land for factory sites. Others have established private industrial zones, often based around regional ethnic and linguistic ties. A recent example of this kind of cluster is Benin City, where a group of Fujianese businessmen co-invested in a series of factories manufacturing ceramics, sheet glass, and other construction-oriented products. Given the competitive environment overseas, having a shared dialect or home province helps facilitate social trust and cooperation between investors. This kind of clustering along linguistic and provincial lines, rather than by industrial sector, is common.

## INVESTMENT MOTIVATIONS

INTERVIEWS WITH CHINESE INVESTORS and firm managers identified several “push” factors as well as “pull” factors driving investment in Nigeria. *Push* factors were salient for more recent arrivals. Many of these recent arrivals cited an increasingly competitive market back in China, where profit margins were low after the 2008 global recession, and more recently, where increasingly strict environmental regulations have forced out a number of small-scale energy intensive ‘low-tech’ companies, including the plastics and ceramics sectors. While the Belt and Road Initiative (BRI) has had a powerful signaling effect for some firms and has been used liberally for naming new industrial parks, the BRI offers scarce material incentives for small, private manufacturing firms.

*Pull* factors for Chinese companies have been the huge market potential of Nigeria’s large and increasingly middle-class population. Our firm surveys showed that, overwhelmingly, investors were drawn to Nigeria by the domestic market environment, rather than low labor costs or raw materials. While many investors knew about preferential policies and incentives available from Chinese central and provincial level governments, with new opportunities springing from the BRI, few manufacturers were able or large enough to qualify for these incentives. Meanwhile, by having the ability to set up FTZs, offer concessions for Chinese investors in the form of tax incentives, or reduce land or utilities costs, Nigerian state governments have their own ways to attract Chinese investment.

Nigerian import substitution policies have been strong incentives for investment in certain product sectors like with tomato paste and float glass. Such policies have also incentivized the transfer of assembly line production processes such as white goods or SKD vehicles. Assembly line goods, however, tend to have limited potential for technology transfer in terms of building staff skills or creating a local supply chain, as inputs and parts must still be imported. Nigerian import bans on shoes, furniture, second-hand vehicles and (more recently) tomato paste, have also incentivized investments in processing and assembly plants for these products.

## KNOWLEDGE AND TECHNOLOGY TRANSFER

### HORIZONTAL SPILLOVERS

WE FOUND SIGNIFICANT CASES OF SKILLS transfer and training initiatives within firms, though this varied widely between product sectors. We found extensive examples of

informal, in-firm training for local staff as well as relatively high local employment ratios at every Chinese firm interviewed—on average 80 percent of staff in firms interviewed were Nigerian.

However, many construction materials, appliances, and vehicles plants involve an assembly line with low knowledge transfer aside from machinery operation. Labor mobility is high, particularly in steel and ceramics where workers are able to ‘hop’ between firms and poaching is common. Despite this, we came across few cases of true ‘spin-off’ companies. Furniture is one sector where, over time, production skills and responsibilities have shifted to local staff. Due to the complexity of products and longer-training process required, worker retention is relatively more important, compared to assembly-line industries.

Representation of Nigerian workers at managerial levels in most of the manufacturing firms surveyed remained low. However, we found the Confucius Institute had a prominent role. Institute graduates are in high demand from Chinese companies to serve as translators and administrative staff, with higher possibility for managerial promotion.

### VERTICAL SPILLOVERS

THE LACK OF AN INDUSTRIAL ECOSYSTEM for parts means many firms still rely on imported inputs from China, and upstream linkages, as well as genuine joint ventures, were rare. In firms that were dependent on local suppliers for products, such as wood (furniture) and quarry stone and minerals (ceramics), there was greater incentive to work with the supplier to improve product quality and the the supplier’s productivity. Such backward linkages were generally shallow, and many firms noted they would opt for an alternative supplier rather than wait for standards to improve.

## FIRM CHALLENGES

OUR INTERVIEWS WITH CHINESE FIRMS produced several emergent themes in the challenges that investors face: in the Nigerian context, political instability and corruption, as well as security—in the form of frequent kidnappings and ransoms—were frequent complaints. Regulatory agencies, including customs, employment, and standards authorities, were perceived as extractive, frequently issuing fees for infractions. Even in the FTZs, customs offices exercised huge leverage over firms trying to move their manufactured goods out of the zone. Political instability, and the policy uncertainty it led to, also meant difficulties in making long-term investment decisions.

More materially, poor infrastructure, particularly roads, was a serious problem for firms, such as for Goodwill Ceramics who had to cover the cost of road refurbishing themselves to ensure the transport of their fragile goods. Some firms noted the high cost of inland transportation and customs as being higher than the cost of raw materials. Poor roads also led to logistical challenges, like a four to five day wait to transport a container from Apapa port at Lagos to Ogun FTZ, for example.

## POLICY RECOMMENDATIONS

FOR NIGERIAN POLICYMAKERS SEEKING to develop domestic manufacturing industries, it is clear that import-substitution policies alone are insufficient to ensure the economic spillovers from manufacturing FDI that would allow processes of technology transfer to occur. However, measures can be taken to promote further skills and knowledge transfer through the domestic economy, through both intra-firm and inter-firm channels, targeted to key product sectors in engineering or food processing.

1. *Adopt preferential policies for companies that encourage the provision and hiring of skilled local staff as well as greater collaboration with local schools and universities.* This could include employing Nigerian graduates from domestic training schemes such as the Industrial Training Program (ITP) after graduation. Policies should also encourage greater collaboration and communication between foreign firms and local schools and universities, promoting the ascension of Nigerian

staff into skilled and managerial positions within new companies.

2. *Import-substitution policy incentives can be used to foster industries that maximize the use of local content and build up human capital.* Policy incentives to encourage domestic investment should target graduates of Nigerian ITP programs and Confucius Institutes, as well as encourage linkages and joint ventures with Nigerian management
3. *Improve transportation and logistics infrastructure.* Maintaining and improving key roads and port infrastructure will be key to the development of an industrial ecosystem and manufacturing supply chains.
4. *Ensure policy stability and a secure investment environment.* Removing bureaucratic predation and ensuring macroeconomic stability is key for attracting continued foreign investment. ★

## AUTHOR

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