

Global Experiences with Special Economic Zones

- With a Focus on China and Africa

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Global Experiences with Special Economic Zones: With a Focus on China and Africa

The special economic zones (SEZs) can be an effective instrument to promote industrialization if implemented properly in the right context, as shown in some of the emerging countries, particularly those in East Asia. More and more countries have begun to implement this instrument for their industrialization process, especially as a way of attracting foreign direct investments (FDIs) mostly in the manufacturing sector, creating jobs, generating exports and foreign exchanges, and so on. So far, the results are quite mixed with some countries quite successful such as China, Singapore, Malaysia, South Korea, Jordan, Mauritius, etc., and others still struggling, in particular those in Sub-Sahara Africa (SSA).

This paper is intended to provide a brief overview of the different SEZ experiences in China and Africa, the key lessons that Africa can learn from China, as well as the recent Chinese zones in Africa. For this purpose, the paper is structured in the following way: section 1 starts with definition of SEZs, then followed with the Chinese experiences (section 2), African experiences (section 3), the lessons that Africa can learn from China (section 4), Chinese zones in Africa (section 5), and then concludes.

I. Definition of SEZs

There is a big variation of "special economic zones (SEZs)". The term "SEZ" here covers a broad range of zones, such as free trade zones, export-processing zones, industrial parks, economic and technology development zones, high-tech zones, science and innovation parks, free ports, enterprise zones, and others.

The basic concept of SEZs includes several specific characteristics: (a) it is a geographically delimited area, usually physically secured; (b) it has a single management or administration; (c) it offers benefits for investors physically within the zone; and (d) it has a separate customs area (duty-free benefits) and streamlined procedures (World Bank 2008; Farole 2011). In addition, a SEZ normally operates under more liberal economic laws than those typically prevailing in the country. In general, the SEZs confer two main types of benefits, which in part explain their popularity: "static" economic benefits such as employment generation, export growth, government revenues, and foreign exchange earnings; and the more "dynamic" economic benefits such as skills upgrading, technology transfer and innovation, economic diversification, productivity enhancement of local firms, etc. (Zeng 2010).

II. China's Experience with Special Economic Zones

China is one of the most successful countries in terms of leveraging SEZs to achieve far-reaching economic transformations. It started with four zones at the initial stage to experiment with market-oriented economic reforms which involves laws, regulations, taxation, land, labor, finance, customs, immigration, etc. After being successful, the zone program and relevant reforms were gradually rolled out throughout the nation in more diversified forms, and some of the zones were designed with more sophisticated agenda, such as the high-tech industrial parks. Together with the numerous industrial clusters, the SEZs have contributed significantly to national GDP, employment, exports, and attraction of FDIs. It was estimated that in recent years, SEZs at national

level accounted for about 22% of national GDP, 46% of FDI, and 60% of exports and generated in excess of 30 million jobs (Zeng 2010). The SEZs have also played important roles in bringing new technologies to China and in adopting modern management practices.

While most lessons in China are positive, such as gradualism with a pragmatic and experimental approach; reform-oriented mindset; strong commitment and active facilitation of the state; open-up to FDIs; sound infrastructure; effective marketing and investment promotion; and continuous technology learning and upgrading, etc. (Zeng 2010), there are also some adverse lessons for the late-comers to avoid, such as the "mushroom approach" at the local levels and high-level overlaps of various zones with vicious competitions at the later stage; environmental degradation; and limited urban-industry integration, with some exceptions such as the Suzhou Industrial Park.

II.1 A Brief Overview of China's SEZ Programs

After decades of centrally planned economy, the Government of China adopted the Open Door policy in 1978, and in July 1979, it decided that Guangdong and Fujian provinces should take the lead in opening up to the outside world and implement "special policies and flexible measures". By August 1980, Shenzhen, Zhuhai, and Shantou in Guangdong Province were designated as special economic zones, followed by Xiamen in Fujian Province in October 1980. The four SEZs were quite similar in that they comprised large areas within which the objective was to facilitate broadly based, comprehensive economic development, and they all enjoyed special financial, investment, and trade privileges.

The combination of favorable policies and the right mixture of production factors resulted in unprecedented rates of growth in the SEZs. Encouraged by initial success, the Chinese government opened more SEZs mostly in the form of economic and technological development zones (ETDZs), informally known as China's national industrial parks, which were smaller than the earlier zones.

By March 2013, there are 191 national level ETDZs in China. In addition to the SEZs mentioned above, there are many other types of SEZs in China at various levels, including high-tech industrial development zones (HIDZs), free trade zones (FTZs), export-processing zones (EPZs), and others.

The SEZs have made crucial contributions to China's success. Most of all, they—especially the first ones—successfully tested the market economy and new institutions and established role models for the rest of the country to follow. The institutional reforms within the SEZs promoted synergy between a host of domestic and international factors which led to accelerated growth. Economically, SEZs have contributed significantly to national GDP, employment, exports, and attraction of foreign investment as mentioned above. In some regions, industrial parks account for anywhere between 50% to 80-90% of growth in GDP. SEZs have also aided the increased openness and resource clustering by offering a vehicle and platform for the entry of capital, technology, talents and R&D activities from all over the world.¹

In addition, SEZs have significantly contributed to technological progress and innovation. Up to date, China's overall technology commercialization rate is only about 10%, while industrial parks in China on average boast a commercialization rate of over 60%. In agriculture, the contribution

4

¹ Cited from comments received from the China Development Bank in May 2015.

of technological development stands at 55.2%, while in agro-tech parks and agricultural demonstration zones, the contribution rate of technology reaches roughly 70%, nearly the average level of developed nations. These parks have also significantly contributed to the increase of farmers' income – on average, agricultural incomes within these parks are over 30% higher than incomes in surrounding villages.²

II.2 Major Factors for Success and Lessons Learned

Many factors contributed to the success of China's SEZs, and in every case, the situations and factors might be different. However, their success points to some common lessons.

- Strong commitment and support of the government to pilot market-oriented economic reforms. Despite the high uncertainty at the beginning, the top leaders were determined to make changes, through a gradualist approach. Such a determination ensured a stable and supportive macro-environment. The central government also tried to decentralize its power and help create an open and conducive legal and policy environment for the SEZs. At the same time, the local governments made a great effort to build a sound business environment. They not only put in place a conducive regulatory environment for reforms, an efficient administrative system such as "one-stop-shops", but also good infrastructures for the zones.
- Land Reforms. In China, the land reforms started from Shenzhen has played an important role in the SEZs' success. Before 1981, all land belonged to the State in the urban areas and, in rural areas, land was "collectively" owned. Since 1981, the government allowed SEZs to lease land to investors with an initial term of 20-50 years with the possibility of renewal. Meanwhile, a land auction system was established for all the commercial land (2002) and industrial land (2007) to ensure the efficient use of land resources (Shen and Xu 2011). These reforms helped to establish a modern land market which has transformed whole China's urban landscape.
- Investment incentives and institutional autonomy. To encourage firms (especially FDIs) to invest in the zones, the SEZs had in place various fiscal and non-fiscal incentives³ and preferential policies, including streamlined administrative process, sound infrastructure, rapid customs clearance, concessionary tax rates, and flexibility in hiring and firing workers, among others (Ge 1999; Enright, Scott, and Chung 2005). Favorable policies were also in place to attract skilled labor, such as the provision of housing, research funding, education subsidies, etc. In addition, the SEZs (especially the early-stage ones) were given greater political and economic autonomy. They had the legislative authority to develop municipal laws and regulations to govern these zones. Such an unusual discretion allowed them more freedom in pursuing new policies and development measures deemed necessary to vitalize the economy.
- Foreign Direct Investment and the Chinese diaspora. FDI and the Chinese diaspora have played important roles in the success of the SEZs by bringing capital investment, technologies, and management skills; generating learning and spillovers; and ultimately helping to build local manufacturing capacity. At the same time that the SEZs were opening up in the 1980s, Hong Kong (China), Macao (China), and Taiwan (China) were also beginning to upgrade their

³ Some of these incentives were applied to all firms but many are only for FDIs. For example, for FDI, the corporate tax rate was especially generous—15 percent as opposed to 30 percent for domestic firms—plus exemption from local income tax. This was streamlined later – 25% for both foreign and domestic firms as mentioned above.

² These figures are based on comments received from the China Development Bank in May 2015.

industrial structure and transfer out their labor-intensive manufacturing sectors. The cheap labor and good infrastructure in the SEZs, as well as the Open Door policies coupled with various incentives, provided a great opportunity for FDI to flow into China from the diaspora.

- Technology learning, innovation, upgrading, and strong links with the domestic economy. One of the key strengths of the SEZs is that they have a high concentration of very skilled people, including many R&D personnel, especially in the HIDZs and ETDZs. As a result, they have become centers of knowledge and technology generation, adaptation, diffusion, and innovation. The abundance of FDI provides a good opportunity for technology learning. Governments also put strong emphasis on technology learning and innovation, as well as technology-intensive industries. In addition, the SEZs are closely linked to domestic enterprises and industrial clusters through supply chains or value chains. This connection not only helps achieve economies of scale and business efficiency, but also stimulates synergistic learning and enhances industrial competitiveness (Zeng, 2010).
- Innovative cultures. In addition to institutional flexibility, the composition of people in the SEZs also helped nurture innovation and entrepreneurship. Because most SEZs were built in new areas or suburbs of cities and were open to all qualified workers, they have attracted a large number of immigrants from across the country and, later on, from overseas, who hoped for better jobs and new opportunities. Such a strongly motivated migrant community tends to generate an innovative and entrepreneurial culture.
- Clear objectives, benchmarks, and competitions. In China, SEZs were normally set up in batches—initially four—and then the number increased rapidly. Despite the large number of these zones, most of them have clear goals and targets in GDP growth, exports, employment, revenues, FDI generation, and the like. These expectations put a great deal of pressure and responsibility on the shoulders of the zone management. Meanwhile, the SEZs are highly competitive among themselves. Such competition helps make them more efficient and competitive.
- Location advantages. Most SEZs in China are located in the coastal region or near major cities with a history or tradition of foreign trading or business and thus are better linked to the international market. They also have good access to major infrastructure, such as ports, airports, and railways. The location advantage is especially obvious for the SEZs in the Pearl River Delta region (close to Hong Kong, China) and the Min Delta region (close to Taiwan, China).

II.3 Some Pitfalls to Avoid

While overall SEZs lessons from China are positive and encouraging, there are also a few adverse lessons which other countries should try to avoid in their pursuit of SEZ programs. Such lessons include:

• Mushroom approach at local level and high-level overlaps at the later stage. Seeing the success of SEZs at the coastal region, in the 1990s and early 2000s, many local governments and cities began to imitate this approach and set up various industrial zones/parks to attract investments or to support the local township and village enterprises (TVEs) without any appropriate assessment and planning. This led to big waste of resources and environmental damage and many of them have failed. At the central and provincial levels, the zone programs

were more organized with better planning and management, but at the later stage, after huge success in the coast region, there was also a high level of competitions since late 90s, with "race-to-the-bottom" fiscal incentives. This situation led to significant overlaps and declining efficiency of the zone programs.

- Environmental degradation. In China, the GDP performance used to be the top priority for the government officials, also related to China's growth model based on low technology and labor- and resource intensive manufacturing, many SEZs face serious environmental and resource challenges. The World Bank estimates that the environmental costs in China is about 8% of GDP. To tackle these issues, China has since implemented tougher environmental standards and tried to use fiscal policies to force firms to adopt "green technologies" and conduct innovations.
- Unbalance between industrial development and social dimensions. While the special economic zones have achieved great economic success, many of them are somewhat lagging behind in providing the commensurate social and urban services, especially those located in remote areas or lagging regions. Such zones have problems attracting high-quality investments and talents and face great challenges in sustaining their growth or upgrading their industrial structures.

III. SEZs in Africa - A Long Journey Ahead

In the Sub-Sahara region, several countries launched zone programs in the early 1970s (Liberia in 1970, Mauritius in 1971, and Senegal in 1974), but they did not operationalize programs until the 1990s or 2000s (table 1). Also, these zones are largely different from the modern large scale multiuse zones that are currently being proposed (Farole 2011).

Table 1. Overview of African zone programs by decade of launch

1970s	Liberia, Senegal, Mauritius			
1980s	Djibouti, Togo			
1990s	Burundi, Cameroon, Cape Verde, Equatorial Guinea, Ghana, Kenya, Madagascar,			
	Malawi, Mozambique, Namibia, Nigeria, Rwanda, Seychelles, Sudan, Uganda,			
	Zimbabwe			
2000s	Gabon, Gambia, Mali, South Africa, Botswana, Zambia, Eritrea, Mauritania, DRC			
	Congo, Tanzania, Ethiopia			

Source: FIAS (2008) with author's amendments. Note that this list is not exhaustive.

The lack of data makes it hard to have a comprehensive analysis of Africa's performance in SEZs—in terms of investments, exports, and employment—relative to other regions. The available evidence suggests that SSA's experience with traditional EPZs and IZs has been relatively poor in terms of both employment generation and export performance (Table 2).

Table 2. Estimates of direct employment and exports in zones in select regions around 2004-07

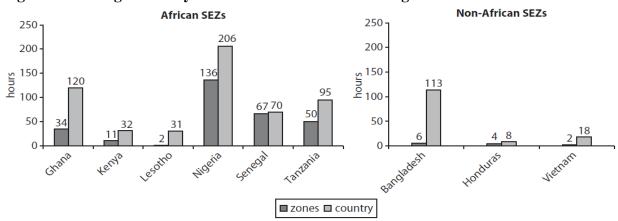
Region	Direct employment (million)	Exports (US\$ million)
Sub-Saharan Africa	1.0	8,605

Asia and the Pacific	61.1	510,666
Americas	3.1	72,636
Central and East Europe and Central Asia	1.6	89,666
Middle East and North Africa	1.5	169,459
Global	68.4	851,032

Source: FIAS (2008).

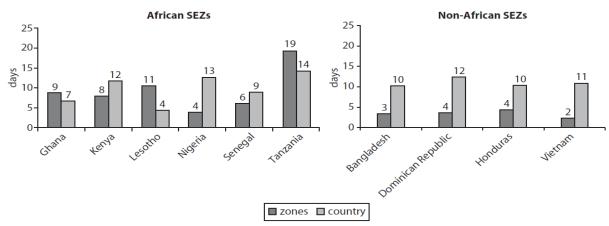
A World Bank study (Farole 2011) of six African Zone programs (Ghana, Kenya, Lesotho, Nigeria, Senegal, and Tanzania) in comparison with four non-African countries (the Dominican Republic, Honduras, Vietnam, and Bangladesh) shows that success in Africa zones are rather limited with a few countries with relatively better performance, such as such as Mauritius, Kenya, Madagascar, and possibly Ghana. In terms of investments, exports and employment generation, the African zones are in general falling behind their peers in other continents. One important reason could be the weak business environment (Farole 2011). Figure 1 shows that the downtime (measured by hours) due to power shortages is still quite high in absolute terms in most African zones despite some reduction compared with outside zones (on average the reduction is about 54% in African zones vs. 92% in non-African zones). Figure 2 shows that the average time needed for custom clearance is not significantly reduced in most African zones, and in some cases, it actully takes longer within the zones than outside.

Figure 1. Average Monthly Downtime Due to Power Outages



Source: Farole 2011.

Figure 2. Average Time Needed for Imports through Major Seaport to Customs Clearance (days)



Source: Farole 2011.

However, when measuring the African zone programs, it's important to consider that most African counries are relatively latecomers in implementing modern zone programs and many of these zones are still in the early stages (Farole 2011). The change and reblancing of the global value chain and industrial structure can possibly provide a good opportunity for these zones.

Overall, various evidence shows that so far very few African zones (with the exception of Mauritius) appears to have made significant progress toward taking advantage of the dynamic potential of economic zones as an instrument of sustainable structural transformation. Some of the key challenges, among others, include (Zeng 2012a):

- Legal, regulatory and institutional framework. In many African countries, the current legal, regulatory and institutional framework for SEZs is either outdated or does not exist, even though the SEZ initiative has been launched or, even in some cases, the parks have been built and operational. This is like "putting the cart in front of horse", which has created a lot of confusion and deterred potential investors. This is quite evident through a review of six zones in Nigeria (Zeng 2012b).
- *Poor business environment*. In most Sub-Sahara African countries, the costs of doing business are high due to overall constraining environment in terms of registration, licensing, taxation, trade logistics, customs clearance, foreign exchange, and service delivery. Many one-stop-shops for investors do not live up to their names.
- Lack of strategic planning and demand-driven approach. International experience shows that effective zone programs are an integral part of the overall national, regional or municipal development strategy and build on strong demand from business sectors, such as those in Malaysia, China, South Korea, and Mauritius, etc. However, many zone initiatives in Africa are driven by political agenda and lack a strong business case.
- *Inadequate infrastructure*. This is an overall constraint for all the zones but at different degrees. In general, power, gas, roads, ports, and telecom are the key constraints and many governments and developers try to resort to the PPP approach to solve the constraints. Given the large investments required for the zones, a strong commitment from government and active participation of the private sector is essential.

- Zone management and operational know-how. Most of the zone developers, including the relevant government agencies, do not have the zone management and operational experiences, and many zone developers are only construction companies; therefore, it's a challenge for them to identify the right partners to provide the critical knowledge and expertise on zone management and operations. This seriously undermines the implementation capacity.
- Host government ownership & policy consistency. This is especially a challenge for those zones that face a new government that does not fully recognize the potentials of the economic zones and or fully acknowledge the commitments made by the previous governments. Strong and long-term government commitment is crucial for the zone's success.
- Resettlement issues. In several zones, state governments promised to provide the compensation in the case of land acquisition and resettlement, however, these promises were not or only partially fulfilled, which hinders the further development of the zones.

IV. What Can Africa Learn from China?

Given the various challenges that the SEZ programs in Africa face, in order to avoid falling into the same pitfalls in the past, Africa needs a new SEZ strategy. Such a strategy can draw on the useful lessons and experiences of China and other countries, and can build on the following thrusts (Zeng 2012a):

- Using SEZs to address the market failures or binding constraints that cannot be addressed through other options. Such constraints may include issues related to land, infrastructure, trade logistics, etc. If the constraints can be addressed through country-wide reforms, sector-wide incentives, or universal approaches, then SEZ might not be necessary. Since SEZ is a very expensive undertaking and involves very careful and skilled planning, design and management, it should not be taken lightly. China leveraged the SEZ as a breakthrough towards a market-oriented growth model in an overall very constraining environment. Given its extreme situation in the early days, China offered generous fiscal incentives besides good infrastructure and efficient public services to lure foreign investors. However, today's macro-environment is different and many African countries are the destinations of industrial transfer from East Asia. Instead of focusing on tax incentives, they should put more efforts on improving the business environment including infrastructures and consider "smart incentives" that encourage skills training, technology transfer and local economic linkages.
- A sound legal, regulatory framework and effective institutions with strong and long-term government commitment. In China, the first SEZ legislation was formulated to govern the SEZs at the local level: in August 1980, the SEZ Act for Guangdong Province was passed by the National Congress at the same time when the Shenzhen SEZ was launched. Although it was drafted by the provincial government, it was enacted by the national congress to ensure its supremacy and the full support of the central government. In South Korea, Malaysia, Jamaica, Jordan and other countries with successful SEZ programs, relevant laws and regulations are also put in place when they launched the programs. In addition, strong and long-term government commitment is needed to ensure the policy continuity and the adequate provision of various public goods. It's also important to establish a proper dialogue and cooperation

mechanism between the central, provincial and local governments and across different government agencies.

- Adopting the suitable development model through strategic planning and industrial positioning. SEZ programs should be part of the national or regional development strategy and based on the most suitable model which depends on the local comparative or competitive advantages. To identify the right model which is built on local strengths, it is important to conduct an in-depth analysis of the base conditions through a strategic planning and industrial positioning exercise. This would include a rigorous assessment of the local market condition, connectivity, industrial base, supply chain, business environment, and land and labor supply, etc. Such an exercise will also help the zones to better leverage foreign technologies and knowhows optimally catering to the local needs.
- A better business environment inside the zone, including efficient services, such as one-stop shop and good infrastructure. One of the key objective of the zones is to overcome the constraints (both soft and hard) of doing business in an economy. In most Chinese zones, unlike those in many African countries, all the basic infrastructures are provided with high quality and the one-stop-shop services and aftercare are very efficient and effective such as those in Shenzhen, Suzhou, and TEDA, run by skilled and competent professionals. One thing African countries can do differently is that they can attract more private investors through a PPP framework given the limited resources. China is also increasingly moving towards this direction.
- A realistic scheme starting small and implementable. It's crucial to make one or two zones work first before scaling-up. Although there were many overlaps in terms of the zone programs at the later stage, initially China started with only four zones at very strategic locations, and once successful, the program was then rolled out in the entire economy. Many African countries start with 10 or even 20 zones all at once, which is a recipe for failure.
- Skills training and technology transfer and diffusion. This is crucial for the zones to acquire sufficient manpower and make their products competitive. In China, many zones have well-equipped skills training center, which works closely with technical and vocational schools, colleges and universities to provide relevant skills training and technology support for the firms in the zones. Local governments also have talents strategy to attract highly skilled people to work in the zones.
- Better linkages with local economy. Zones need to build on local comparative advantages and have local suppliers/clusters as part of their value chains. In China, unlike many African countries, most zones are well plugged in the existing local clusters, so the zones and local clusters reinforce each other through business linkages. Chinese zones also encourage foreign investors to establish joint-ventures with local counterparts. In Taiwan (China) and South Korea, governments also encourage the backward linkages through technical assistance and other policy interventions.

V. Chinese Investments in SEZs in Africa: "Flying Geese" from Asia?

In the mid-1990s, the Chinese Government began to emphasize a policy of "going global" (*zou chuqu*), which encouraged Chinese companies to target new markets, build global brands, and invest abroad. One component of this policy was the establishment of overseas industrial and trade

zones. Overseas economic zones were believed to serve several strategic objectives. First, they would help increase demand for Chinese-made machinery and equipment, while making it easier to provide post-sales product support. Second, by producing overseas and exporting to Europe or North America, Chinese companies would be able to avoid trade frictions and barriers imposed on exports from China. Third, they would assist China's efforts to boost its own domestic restructuring and move up the value chain at home. Fourth, they were intended to create economies of scale for overseas investment, and in particular, to assist less experienced SMEs to venture overseas "in groups". Finally, they were viewed as a way to transfer one element of China's own success to other developing countries; a strategy that the government believed would be helpful for recipient countries (World Bank 2010).

This strategy was pioneered by Chinese companies such as Haier, which established an industrial zone in Camden, South Carolina, USA, in 1999, and then officially endorsed by the central government in 2006, which announced a policy decision to eventually establish up to fifty special economic and trade cooperation zones outside the country (World Bank 2010). Under the 2006 policy, the Chinese government identified SEZ projects in about 15 countries⁴—including four in SSA—that would be formally supported by MOFCOM.

The Chinese government views overseas zones program as a long-term initiative and the zone projects currently are still in early stages of implementation as shown in Annex 1. Therefore it is premature at this stage to draw definitive conclusions on the performance of these overseas Chinese zone projects. Overall the implementation of Chinese SEZs in SSA so far seem to be slow compared with other regions. The process has been delayed in some cases due to difficulties over access to land, regulatory barriers, and resettlement issues by the host government, restructuring of the Chinese investments during the global financial crisis, and coordination issues, etc. MOFCOM has highlighted four key challenges faced by these overseas Chinese zones, including those in Africa, as follows (World Bank 2010):

- Improving the management capability of the zone developers: the current Chinese investors are largely industrial, engineering or trading enterprises and lack specific experience in developing and managing industrial development zones;
- *Difficulties in coordination with host government counterparts*: the practical problems involving laws, policies, government services and work efficiency require effective communication, which is difficult due to the unequal status of the Chinese developers and local governments during the negotiations as well as communication problems;
- *The lack of external infrastructure*: many zones have to develop their own infrastructure, which increases the development costs and construction difficulties; and
- Financing difficulties faced by the developers: the zone developers are facing financing difficulties due to the high capital requirements for infrastructure development and the high cost of finance in the host countries.

Despite these challenges, several zones have made some good progress and began to show positive impact on the host countries. Such initial impact is manifested in the following areas:

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⁴ A total of 19 zones were approved in 2006.

- 1) Investments and employment. In the Zambia Chambishi zone, 36 firms had signed contract and 26 were operational, with a total investment of \$322 million actual and over \$1 billion committed by July 2013. It employed 7,973 Zambian workers and 1,372 Chinese, including the mine workforce (Brautigam and Tang 2013). The Lekki Free Trade Zone in Nigeria had attracted \$76 million investment (\$700 million commitment) by July 2013. 30 firms had signed lease agreements and 6 were operational. Among the 30 investors who signed contracts, 60% were Nigerians, 20% were Chinese, and 20% were from other countries including UK, India and Ukraine (Brautigam and Tang 2013; Gabriel 2012). The Ogun-Guangdong Free Trade Zone had attracted 34 investors who signed contracts, and 7 were operational, with actual investment of \$58 million and committed investment of \$150 million. As of June 2013, all the committed investors were private firms. They employed 1,619 African workers and 177 Chinese workers (Brautigam and Tang 2013). In Ethiopia, all the factory shells in the Eastern Industrial Zone have been leased out with 12 investors, and one remarkable story is the Huajian Shoe Manufacturer from China, which has set up 2 production lines in the zone with a production capacity of 2,000 pairs per day, exporting to the US and European markets. It employs around 3,000 people, mostly local, and provides vocational training to its employees, including training of local technicians overseas.⁵
- 2) Infrastructure and regional development. This potential will become more prominent once the zones are more successful. The Lekki Zone is planned as part of the urban development of Lagos, and the zone and its associated (planned) port and airport are intended to form a coastal city in the Gulf of Guinea and the logistics center of West Africa (Xinhua 2011). The Chambishi Zone in Zambia is located in the country's industrial hub, and envisaged to forge a relatively complete value chain of copper/cobalt mining and processing, eventually creating a regional "strategic base" using the Tanzam Railway and extending through Central Africa (Brautigam and Tang 2013). The China-Egypt Suez zone is situated near Egypt's new deepwater Sokhna Port and 40 km away from the South entrance of the Suez Canal. It will be integrated with the port facility, the canal to be part of the regional industrial and logistics hub (GAFI 2011).
- 3) *Knowledge learning and policy experiment.* The Chinese zones in Africa have played an important role in sharing the Chinese experiences and practices in the zone development. Through seminars, training and study tours, often facilitated by the Chinese government and international donors, such as the World Bank, the host government officials and zone managers learned a lot about the experiences and lessons from East Asia, especially China. Such knowledge sharing and learning helped many host governments to understand the concept and operation mechanisms of industrial zones and began to accept SEZs as an instrument for development and to experiment certain new policies to build a more pro-business environment, such as opening-up to FDIs, improving the trade logistics and setting-up one stop shops. In Ethiopia, both the World Bank and the Chinese government work actively to assist the Ethiopian government's SEZ initiatives.
- 4) *Backward linkages*. Besides the employment and skills linkages, some backward linkages seem to begin to emerge among the firms. In Ethiopia, the Huajian Group in the Eastern

13

⁵ Based on author's field visit to the Eastern Industrial Zone in Ethiopia in November 2014.

Industrial Zone is actively seeking local material suppliers, though so far it can only source no more than 30% of its leather inputs locally. In the Ogun zone, Hazan, a major Chinese shoe manufacturer from Wenzhou, had identified a potential to produce rubber soles in Nigeria from local rubber and were in discussions with one of the suppliers, though in the end this process was stopped in 2012 due to the financial problem of its parent company (Brautigam and Tang 2013).

In comparison, so far Chinese overseas zone projects in other regions beyond SSA, such as those in Egypt, Thailand and Vietnam, seem to be more successful. In some of the SSA zones, especially those in conflict and fragile states, it's important to establish early risk warning and crisis management systems to ensure the safety of the zones and workers.⁶

VI. Conclusion

In conclusion, the concept of SEZ and its impact on economic growth is gaining more and more acceptance globally and the instrument has been widely applied. However, the mixed results of SEZ development in different continents/countries show that it is not a panacea and has to be implemented properly and carefully tailored into a country's specific situations. It is not necessarily a suitable instrument for any country. Given the complex and heterogeneous environments in which zone programs are implemented, it would be useful to establish a clear framework to guide the operations of SEZs in countries where they are deemed relevant.

China has successfully implemented the SEZ programs and offers many very useful lessons. These lessons should not be taken as given and need to be carefully tailored into the local context of African countries, just as China did when it implemented its own SEZ programs in the 1980s.

The Chinese investments in Africa in the backdrop of a new wave of industrial transfer from East Asia, present an unprecedented opportunity for Africa. It could be the continuation of the "Geese Pattern", which created the "East Asia Miracle", from Asia to Africa. However, to make this truly successful, the host governments and investors need more mutual understanding of the difference of development stages, legal and governance systems, institutions, social norms, cultures and even mindsets, etc., and come out a pragmatic approach which builds on the strengths of both sides and fits into the local context. Such an approach will eventually leads to a win-win situation.

Despite the various efforts to understand Chinese investments overseas, the data availability is still quite scarce and many areas still need to be further studied and understood. Such studies can help the policy-makers and private investors to understand the situations better and to make more informed decisions. *Under the new World Bank-China partnership, two areas could be further explored:* 1) Chinese overseas zones (including those in Africa): status, progress, challenges and future directions; and 2) Chinese investments in Africa: key motivations, geographical and sector distributions, progress today, key constraints and way forward, etc.

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⁶ Cited from comments received from the China Development Bank in May 2015.

References

Alder, S., et al. 2013. "The Effect of Economic Reform and Industrial Policy in a Panel of Chinese Cities". Working paper No. 207, Center for Institutions, Policy and Culture in the Development Process, University of Zurich.

Asian Development Bank. 2007. "Special Economic Zones and Competitiveness: A Case Study of Shenzhen, China." PRM (Pakistan Resident Mission) Policy Note, Islamabad.

Baeumler, Axel, et al. 2009. Sino-Singapore Tianjin Eco-City: A Case Study of an Emerging Eco-City in China. Technical Assistance Report, Washington, DC, World Bank.

Bräutigam, D.A. and X. Tang. 2010. "China's Investment in Africa's Special Economic Zones". Mimeo. Washington, DC: World Bank.

Bräutigam, D.A. and X. Tang. 2013. "Going Global in Groups: Structural Transformation and China's Special Economic Zones Overseas". *World Development* (2013).

China Development Zones Association. 2011. China Development Zones Yearbook. Beijing: China Financial & Economic Publishing House.

China Knowledge Online. 2009. "China Special Report: Industrial Parks—China's Vehicles for Manufacturing." http://:www.chinaknowledge.com.

Enright, Michael J., Edith Scott, and Ka-mun Chung. 2005. Regional Powerhouse: The Greater Pearl River Delta and the Rise of China. Singapore: John Wiley & Sons (Asia).

Farole, Thomas. 2011. Special Economic Zones in Africa: Comparing Performance and Learning from Global Experience. Washington, DC: World Bank.

FIAS. 2008. Special Economic Zones: Performance, Lessons Learned, and Implications for Zone Development. Washington, DC: World Bank.

Gabriel, Omoh. 2012. "Lekki free trade zone attracts N170bn investment". Vanguard, August 6.

Ge, Wei. 1999. "Special Economic Zones and the Opening of the Chinese Economy: Some Lessons for Economic Liberalization." World Development 27 (7): 1267–85.

General Authority for Investment (GAFI). 2011. "Special Economic Zone". http://:www.gafinet.org/ English/Pages/SpecialEconomicZone.aspx.

Hong Kong Trade Development Council. 2014. "China-Singapore Suzhou Industrial Park (Including Suzhou Industrial Park Export Processing Zone)". Hong Kong, China. http://china-trade-research.hktdc.com/business-news/article/Fast-Facts/China-Singapore-Suzhou-Industrial-Park-Including-Suzhou-Industrial-Park-Export-Processing-Zone/ff/en/1/1X000000/1X09WGSW.htm#sthash.iMoxx367.dpuf

Li, Yaorao. 2011. Agglomeration Development Theory: The Economic Measurements of China's Development Zone Evolution. Jinan (China): Jinan University Press.

Lin, Justin Yifu, and Y. Wang. 2014. "China-Africa Cooperation in Structural Transformation: Ideas, Opportunities and Finances", UNU-WIDER working paper 2014/046.

Mengistu, Amanuel. 2014. "Connecting Africa & Asia: Business Trends that are Driving Opportunities on Both Continents". *Selamta* (Ethiopia), March/April.

MOFCOM (Ministry of Commerce) and MOF (Ministry of Finance). 2008. "Temporary Methods to Manage the Development Funds for Overseas Economic Cooperation Zones". Beijing.

ProLogis. 2008. "China's Special Economic Zones and National Industrial Parks—Door Openers to Economic Reform." ProLogis Research Bulletin (Spring).

Razaq, Ayinla. 2014. "Chinese investors to establish power plant, four additional factories in Ogun-Guangdong FTZ". Businessday, February 19.

Shen, Xiaofang, and S. Xu. 2011. "Shenzhen Special Economic Zone: A Policy Reform Incubator for Land Market Development in China". Washington, DC: World Bank.

Sklair, Leslie. 1991. "Problems of Socialist Development—The Significance of Shenzhen Special Economic Zone for China Open-Door Development Strategy." International Journal of Urban and Regional Research 15 (2): 197–215.

Wang, Jin. 2013. "The economic impact of Special Economic Zones: Evidence from Chinese municipalities", *Journal of Development Economics*, Volume 101, 2013, pp133 – 147.

Watson, P. L. 2001. "Export Processing Zones: Has Africa Missed the Boat? Not Yet!" Africa Region Working Paper Series No. 17. World Bank, Washington, DC.

World Bank and the Development Research Center of the State Council of China. 2014. "Urban China: Toward Efficient, Inclusive, and Sustainable Urbanization". Beijing.

World Bank. 2010. "Chinese Investments in Special Economic Zones in Africa: Progress, Challenges, and Lessons Learned." Washington, DC: World Bank.

Xinhua. 2011. "Sino-Nigerian Lekki Free Trade Zone Having Promising Future". http://www.china.com.cn/econo-Mic/txt/2011-06/27/content 22865210.htm.

Yeung et al. 2008. "China's Special Economic Zones at 30." Eurasian Geography and Economics 2009 50 (2). Yeung, Yue-man, J. Lee, and G. Kee. 2009. "China's Special Economic Zones at 30." Eurasian Geography and Economics 50 (2): 222–40.

Zeng, Douglas Zhihua. 2001. "Suzhou Technology Park." Research note for WBI Development Series. China and the Knowledge Economy: Seizing the 21stCentury, Washington, DC: World Bank.

Zeng, Douglas Zhihua. 2010. Building Engines for Growth and Competitiveness in China: Experience with Special Economic Zones & Industrial Clusters. Washington, DC: World Bank.

Zeng, Douglas Zhihua. 2012a. "SEZs in Africa: Putting the Cart in Front of Horse?" (blog). Washington, DC: World Bank.

Zeng, Douglas Zhihua. 2012b. "An Overview of Six Economic Zones in Nigeria: Challenges and Opportunities". World Bank Policy Note.

Zhang, Ming. 2009. Competitiveness and Growth in Brazilian Cities: Local Policies and Actions for Innovation. Washington, DC: World Bank.

Zhong, Jian, et al., eds. 2009. Annual Report on the Development of China's Special Economic Zones. Beijing: Social Sciences Academy Press.

Annex 1. Overseas Chinese SEZs Officially Supported by MOFCOM

Region	Zone	Tender Year	Status				
Sub-Saharan A	Sub-Saharan Africa						
Zambia	Chambishi Nonferrous Metal Mining Group Industrial Park	2006	Operational				
	Lusaka sub-zone		Under construction				
Nigeria	Lekki Free Trade Zone	2007	operational				
	Ogun-Guangdong Zone	2006	operational				
Ethiopia	Eastern Industrial Park	2007	operational				
Mauritius	JinFei Economic and Trade Cooperation Zone	2006	Under construction				
North Africa	-	•					
Algeria	Jiangling Economic and Trade Cooperation Zone	2007	Not implemented				
Egypt	Tianjin TEDA Suez Zone	2007	Operational				
East Asia							
Vietnam	China-Vietnam (Shenzhen-Haiphong) Economic and Trade Cooperation Zone	2007	Under construction				
	Longjiang Industrial Park	2007	Operational				
Thailand	Thai-Chinese Rayong Industrial Zone	2006	Operational				
Cambodia	Sihanoukville SEZ	2006	Under construction				
Indonesia	China-Indonesia Economic Trade Zone	2007	Under construction				
S. Korea	Korea-China Industrial Park	2007	Delayed due to funding problem				
South Asia							
Pakistan	Haier-Ruba Industrial Zone	2006	Operational				
Latin America							
Venezuela	Venezuela-China Science Technology Industry Zone	2007	Not Implemented				
Mexico	Mexico and China (Ningbo) Geely industrial and trade cooperation zone	2007	Not Implemented due to land access issue				
Eastern Europe			•				
-	Ussuriysk Economic and Trade Cooperation Zone	2006	Under construction and partly operational				
Russia	Tomsk Timber Industry and Trade Cooperation Zone	2007	Operational				
	St. Petersburg Baltic Economic and Trade Cooperation Zone	2006	Dropped				

Note: Due to limited information, the status of the zones is not necessarily the latest. *Source:* World Bank (2010), Brautigam and Tang 2013, and Author's compilation.