Professor Matthew McCartney Head of Research, Africa Urban Lab (AUL)





2024

KEY TAKEAWAYS

Tanzania has established numerous Special Economic Zones (SEZs) and is intent on expanding the scheme in the near future.

A previous policy brief evaluated the impact of SEZs in Tanzania in relation to the immediate impact on economic growth through investment, exports, and employment. This current policy brief focuses on the sustainability of economic growth through the promotion of local industrialization, export diversification, the adoption of new technologies, and the impact of SEZs on national-level economic reform.

This policy brief concludes that while SEZs in Tanzania have shown some promise, there are not likely to be any benefits from agglomeration externalities. There are some signs of local linkages but not enough to promote national-level industrialization. There is no sign that SEZs have contributed to diversifying exports from Tanzania, though there is some limited evidence that SEZs have involved transfer of technology to local firms. The degree of this transfer is limited by the low levels of investment, especially foreign investment, into the SEZ program. Finally, the SEZ program has failed to inspire national-level policy reform.

Executive Summary

Tanzania has established numerous Special Economic Zones (SEZs) and is intent on expanding the scheme in the near future. It is not clear whether these zones are fully operational, simply exist on paper, or are somewhere in-between. Better data is needed before we can think more carefully about the economic impact of the zones.

In Tanzania, the economic zones are overseen by the Export Processing Zone Authority (EPZA), which acts as a developer, offering commercial assistance to firms, as a promoter of the SEZ scheme to potential investors, and as the regulator of the SEZ program overall.

This policy brief seeks to explain whether, or to what extent, SEZs in Tanzania have contributed to rapid economic growth, not whether SEZs can help Tanzania escape from economic failure.

A previous policy brief¹ evaluated the impact of SEZs in Tanzania in relation to the immediate impact on economic growth through investment, exports, and employment. This current policy brief focuses on the sustainability of economic growth through the promotion of local industrialization, export diversification, the adoption of new technologies, and the impact of SEZs on national-level economic reform.

A survey found that by 2019 over 70% of the SEZ companies in Tanzania were operating as single-factory SEZs, outside any public or privately constructed SEZ. While most of these firms were located in the industrial hub between Dar es Salaam and Bagamoyo, the failure to bring firms together into an SEZ has reduced the potential for productivity-boosting agglomeration externalities.

The share of local linkages from SEZs in Tanzania is relatively high and, perhaps surprisingly, even higher than in Bangladesh and Vietnam, two commonly cited SEZ success stories.

There is no clearly defined or understood government policy framework to promote linkages between the SEZs and the local economy.

Local linkages have failed to promote local industrialization because the aggregate size of these linkages is very small. Another policy brief (see footnote 1) noted that total investment in SEZs was limited.

The failure to promote labor-intensive industrialization in Tanzania has contributed to the slow-down in progress in poverty-reduction.

There is some limited evidence from Tanzania that contradicts the general pessimism about the potential for technology transfer from foreign firms in SEZs to local firms. While Tanzanian firms have been able to acquire new technology, there is evidence that they are unable to utilize it efficiently. This may be related to failures in education, on-the-job training, and limited labor circulation from foreign to local firms.

The SEZ program has failed to inspire national-level policy reform in Tanzania.

A related policy brief (see footnote 1) showed that SEZs in Tanzania have failed to achieve their stated goals of boosting foreign investment, exports, and employment.

This 'failure' is not unusual in Sub-Saharan Africa; other than Mauritius, Madagascar, and perhaps Kenya, SEZs are widely considered to have been a relative failure.

SEZs are not a panacea for the promotion of sustainable economic growth. In related policy briefs we will explore in more detail aspects such as governance, provision of utilities, taxation, and political commitment that influence the success or otherwise of the SEZ program in Zanzibar, Tanzania, and Africa more widely.

This policy brief (and all those about SEZs in Tanzania and Zanzibar) should be read in light of the difficulties in obtaining data that is both useful and reliable.

https://chartercitiesinstitute.org/policy-briefs/did-special-economic-zones-sezs-fail-in-tanzania-investment-employment-and-exports/

1. Special Economic Zones (SEZs) in Tanzania

A Special Economic Zone (SEZ) is defined as a:

"spatially delimited area within an economy that functions with administrative, regulatory, and often fiscal regimes that are different (typically more liberal) than those of the domestic economy. Operating through a variety of different forms – such as export processing zones, economic processing zones, free zones, and foreign trade zones – SEZs aim to overcome barriers that hinder investment in the wider economy, including restrictive policies, poor governance, inadequate infrastructure and problematic access to land."

1.1. SEZs: A Tanzanian History

In the 15 years after 1990, Tanzania transitioned from a centralized-socialist to a market economy. Tanzania experienced rapid economic growth in the decade after the mid-1990s (around 6% p.a.), which was not translated, as hoped, into widespread improvements in well-being. The share of the population living below a 'Basic Needs Poverty Line' declined slowly, from 39% in 1990 to 33.5% in 2007. Economic growth was driven by mining, construction, and communications, and to a lesser extent by the financial sector and tourism. These sectors tended to generate jobs for the already better educated and prosperous, and at most only a few low-paid jobs for the poorest. Economic growth did not lead to job-creating structural change. The share of manufacturing declined from 13% of GDP in the 1970s to around 10% in 2010. The failure to create job-hungry and export-oriented factories in electronics, textiles and other sectors left 70% of the labor force still working in traditional agriculture by 2010 and urban unemployment rates of 30%. In 2010, only 5% of the new entrants to the labor market found work in the formal-modern sectors².

In 1980s, China SEZs drove the process of market-oriented reform while in Tanzania the motivation to create SEZs was a consequence of market-oriented reform that needed to be made more inclusive. Against this backdrop the government of Tanzania enacted the EPZ Act in 2002 and established the Export Processing Zones Authority (EPZA) in 2006. In 2006, the government launched the SEZ program as part of its 'Mini-Tiger Plan' to attract foreign and domestic investment. A 2011 Economic Zones law unified the EPZ and SEZ schemes and gave oversight authority for both programs to the EPZA³.

Today, there are three types of special economic zone in Tanzania. The Export Processing Zone (EPZ) requires that firms undertake new investment (they cannot just relocate from elsewhere in Tanzania), the firm has to have a minimum annual export turnover of \$100,000 for local investors or \$500,000 for foreign investors, and at least 80% of goods produced by the firm must be exported. The second is a Special Economic Zone (SEZ), which, again, requires that a firm undertake as new investment, that this investment is at least \$100,000 for local investors and \$500,000 for foreign investors, and that the investment must be located within a designated Special Economic Zone Park but there is no export obligation. The third is a facility whereby a factory located anywhere in Tanzania, 80% of whose output is exported, can be designated as a standalone SEZ and receive the same incentives as any other SEZ firm.

The development of SEZs in Tanzania can be initiated by the government, by the private sector, or through various forms of Public Private Partnerships (PPP). The governance of SEZs is varied in Tanzania, and includes SEZs established and owned by the central government,

local government, and the private sector, all of whom then lease serviced (i.e. provided with water, power, transport links) land to investors.

In Tanzania economic zones are overseen by the EPZA as an autonomous government agency which was established in 2006. The EPZA website lists ten functions⁴ that it is mandated to carry out. These activities are related to EPZA as **developer**, such as acquiring land for investors, providing basic infrastructure in the EPZ (i.e. sewage and waste removal), assistance with wider government administration (i.e. company registration, obtaining visas and work permits, and realizing promised tax incentives). These services are offered under a 'One-Stop-Shop' service center at the EPZA office in Dar es Salaam. The EPZA provides **commercial assistance** to firms, offers to identify potential suppliers and partners for joint ventures, and provides them information on investment opportunities and market information. The EPZA acts as **promoter** of the SEZ scheme to potential investors both domestically and internationally. It also acts as the **regulator** of the SEZ program and issues the licenses for firms to operate in the SEZ/EPZ scheme and monitors the compliance of firms with those licenses.

There are a range of incentives offered to investors in EPZs and SEZs. There is some distinction in incentives offered between the two, but generally they include exemption from VAT paid on raw materials and capital goods used in production, a 10-year holiday on corporate tax payments and payment of withholding tax on rent, dividends and interest. Other non-tax incentives include exemption from pre-shipment or destination inspection requirements, onsite customs inspection of goods in the EPZ, provision of a business visa at the point of entry to key technical, management and training staff, entitlement to an initial automatic immigrant quota of up to five persons during the startup period, the provision of infrastructure within the zone, and the ability to transfer funds oversees in freely convertible currency of profits, dividends, loan repayments, and royalties⁵.

The EPZA currently (2024) lists 10 central government SEZs, 5 local government SEZs, and 11 private SEZs. The distinction between SEZs and EPZs, and the number of standalone EPZs is not clear from the EPZA website. A recent survey found that only four of these – Benjamin William Mkapa SEZ, Hifadhi EPZ, Kamal Industrial Estate (partially), and Kisongo EPZ – were operational at the time of writing, with the remainder still being at the development stage⁶. This more subdued outcome is supported by the EPZA Strategic Plan for 2019-20 to 2023-24, which aspires to have three SEZs developed by 2024. Beyond this the EPZA has significant ambitions to expand the program, and the strategic plan includes goals to have the development of five SEZs by local government and pension funds "influenced" by 2024 and the feasibility study and master plan for at least five SEZs carried out by 2024⁷.

2. How Should We Judge the Performance of SEZs in Tanzania?

2.1. The Aims of SEZs in Tanzania

The EPZA website lists seven objectives of SEZs in Tanzania⁸. Three correspond to the **immediate** impact on economic growth: 'Attract and promote investment for exportled industrialization', 'To create and expand foreign exchange earnings', and 'Create and increase employment and development of skilled labor'. Three correspond to the longer-term **sustainability** of economic growth: 'Attract and encourage the transfer of new technology', 'Foster linkages of the local economy with the international market', and 'Promote processing of local raw materials for export (value addition)'. The last is a more general aspiration that summarizes all these impacts, and aims to 'enhance international Competitiveness'.

2.2. These Goals are Reasonable

The goals Tanzania has set for its SEZ project are widespread across the world, similar to those governments set for themselves as practical goals for SEZ programs, and also use the same criteria that academic studies apply to evaluate the success of SEZs⁹.

2.3. SEZs as a Policy Solution for Tanzania

A survey in Tanzania conducted by the World Bank¹⁰ identified six main constraints across sectors and firms that impede the competitiveness of light manufacturing in Tanzania: availability, cost, and quality of inputs; access to industrial land; access to finance; entrepreneurial capabilities, both technical and managerial; worker skills; and trade logistics. The World Bank advocated setting up SEZs as a potential policy solution to alleviate these constraints and so to promote light manufacturing.

2.4. What are We Trying to Explain?

This policy brief seeks to explain whether, or to what extent, SEZs in Tanzania have contributed to rapid economic growth, not whether SEZs can help Tanzania escape from economic failure. Figure One shows that economic growth in Tanzania has been sustained at a rapid rate since the launch of the EPZ-SEZ program in 2002 and the further consolidations of the program in 2006 and 2011. Economic growth remained in a narrow band between 5% and 7% between 2002 and 2020. There was some interruption to economic growth during the 2020 COVID-19 crisis. However, Tanzania remained resilient, avoided an economic recession, with growth falling to 2% in 2020 and then reviving rapidly thereafter. This policy brief argues that the SEZ program has not made a significant contribution to this rapid economic growth.

Figure One¹¹: Economic Growth in Tanzania (%, per annum)



Another policy brief¹² evaluated the impact of SEZs in Tanzania in relation to the immediate impact on economic growth through investment, exports, and employment. This policy brief focuses on the sustainability of economic growth through the promotion of local industrialization, the adoption of new technologies, and the impact of SEZs on national-level economic reform.

6

3. Industrialization via Agglomeration and Linkages

A promise of SEZs is that they can promote local industrialization. The first means is through agglomeration externalities as industrial firms cluster together inside the SEZ and the second is through linkages and spillovers.

3.1 The Failure to Promote Agglomeration Externalities

An SEZ may attract multiple firms from the same economic sector to a specific geographic location and this proximity may promote agglomeration externalities, or firm-level productivity gains. When firms are clustered together, they may attract suppliers of specialized inputs. Workers with relevant skills and experience will have an incentive to re-locate nearby to look for work and the presence of a resident labor force will encourage more firms to re-locate. Formal (through, for example, a business association or sub-contracting relationships) or informal (through learning about the management methods, technology, or production methods in other firms) exchange of ideas is facilitated by firms being in close proximity to each other¹³. African examples of successful industrial clusters (not all inside SEZs) include automotive parts in Nigeria, metalworking in Ghana, and furniture manufacturing in Tanzania¹⁴.

It is difficult to obtain detailed and reliable data on the operation of the zones, in particular the activities of firms located in the zones. There is no reliable publicly shared data on how many firms operate in the various economic zones in Tanzania. An impressive effort by academic researchers from the UK to undertake original fieldwork collected data on all companies operating under the SEZ scheme from its inception until 2022¹⁵. This survey found that from 2008 until 2019 the EPZA licensed 148 firms, which have started operations and reported production for export in at least one year. By 2019, there was evidence that 100 companies were registered and in operation under the SEZ/EPZ scheme. The survey also found that over the period 2008–2018, a total of 48 firms exited the scheme, with the number of exiting firms increasing after 2017. It is not clear whether the exiting firms stopped producing or re-located to locations outside the SEZ. By March 2022, a year after President Samia Suluhu Hassan took office, the EPZA was reporting that 23 new firms had entered the scheme¹⁶. While we have some data on the number of firms, we have no detailed evidence on whether those firms are operating in similar economic sectors with the potential for agglomeration externalities.

One piece of evidence is suggestive that the SEZ scheme will do little to promote agglomeration externalities. A 2022 survey found that by 2019 over 70% of the SEZ companies were operating as single-factory SEZs, outside any public or privately constructed SEZ. While most of these firms were located in the industrial hub between Dar es Salaam and Bagamoyo, the failure to bring firms together inside an SEZ has reduced the potential for productivity-boosting agglomeration externalities¹⁷.

3.2 The Failure to Promote Linkages (spillovers)

The second means whereby SEZs can promote local industrialization is through local linkages (also known as spillovers), whereby firms inside an SEZ source inputs from domestic firms

outside the SEZ (backward linkages) or sell their output to firms or consumers outside the SEZ (forward linkages). A third linkage occurs when firms outside the SEZ learn about the better technology, production methods, or management skills of (usually foreign) firms inside the SEZ. A fourth linkage occurs when workers inside an SEZ leave for employment elsewhere, taking newly acquired skills and experience with them (horizontal spillovers – discussed in Section 5 of this policy brief).

In general, many SEZs across the world have remained isolated islands, cut off from their host economy¹⁸ and often with very low numbers of local linkages. A recent survey found that linkages between firms within SEZs and the local community were "dismal"¹⁹. In the mid-1990s, for example, almost 95% of materials and inputs used by SEZs in Costa Rica and Guatemala were imported²⁰. One of the most successful efforts to generate local linkages was through the Masan Zone in South Korea, opened in 1971²¹. Initially, domestic firms supplied only 3.3% of materials and intermediate goods used by firms inside the SEZ but within four years the total reached 25%, and eventually went up to almost 50% by the 1990s²². The government of South Korea used a range of industrial policies to encourage backward linkages with local industries and sub-contractors. In South Africa, the Coega Industrial Development Zone established in 2001 close to Port Elizabeth then generated considerable linkages, especially with small firms again, promoted by government policies aiming to facilitate linkages. Between 2015 and 2020 the Coega IDZ purchased an average of 35% of its inputs from small businesses outside the SEZ, almost reaching an ambitious government goal of 40%²³.

The World Bank carried out original surveys and case study research of SEZs in 2009 across six African countries (Ghana, Kenya, Lesotho, Nigeria, Senegal, and Tanzania) and two countries each in Latin America (Dominican Republic and Honduras) and Asia (Bangladesh and Vietnam)²⁴. Across most of the countries studied, SEZs were found to be enclaves with limited links to the domestic economy²⁵. Table One shows that the share of raw material inputs sourced from the local market by main sector, as reported in the SEZ firm survey. The average reported in the African zones is higher than in the non-African zones primarily because of the relatively larger share of agro-processing activity in the African zones. The overall share in Tanzania (33%) falls in the middle, higher even than SEZ success stories Bangladesh (18%) and Vietnam (23%). For Tanzania, this is mainly due to the very high rate of local linkages experienced in food and agro-processing (55%).

Table One²⁶: Share of Materials Inputs in Each Sector Sourced from the Domestic Market

	Garments	Food/ agro-processing	Other manufacturing	Services	Total (mean)
Bangladesh	17%		17%	30%	18%
Dominican Republic	16%		17%	19%	17%
Honduras	44%		9%	43%	37%
Vietnam	16%	58%	24%		23%
Ghana	5%	60%	15%		40%
Kenya	17%	84%	34%	41%	34%
Lesotho	9%	35%	25%	18%	14%
Nigeria			29%		29%
Senegal	20%	27%	43%		41%
Tanzania		55%	26%		33%

The reasons for this relative success are suggestive. Some sectors are more receptive to development of backward linkages in Africa than others. For example, a garment SEZ in a cotton-growing country will find it easier to generate local linkages than an electronics SEZ needing more sophisticated inputs²⁷. A survey of 12 SEZ firms in Botswana, Kenya, Tanzania, and Zimbabwe in 2019-2020 found only six sourced inputs from the host economy; these were mainly agro-processing firms that utilized inputs such as canvas, sisal palm, and leather (hides and skins)²⁸. The decline of the industrial sector in Tanzania (and elsewhere in Africa) during the 1980s and 1990s means that firms inside SEZs now have to import goods such as cotton and silk fabrics that were previously manufactured locally²⁹. A survey of 24 firms in Tanzania located inside SEZs found that forward linkages were constrained by the export obligation and most (78% of output) was sold directly onto export markets. The results also confirmed the 2009 World Bank survey and found that 52% of raw materials were sourced locally, with about 31% being purchased from domestic non-state firms in Tanzania³⁰.

While local linkages are relatively high in Tanzania, this was not supported by any clear government policy. A survey of high-level representatives of SEZs in Tanzania in 2019-2020 found that there was no clearly defined or understood government policy framework to promote linkages between the SEZs and the local economy³¹.

While the share of local linkages is relatively high in Tanzania, they have failed to promote local industrialization because the aggregate size of these linkages is very small. Another policy brief³² noted that total investment in SEZs was limited. A more recent report suggests that over the next decade (2007-2019), Tanzania received around \$2.4 billion in FDI to its economic zones³³. EPZA data shows that total investment in SEZ companies increased from \$1,292 million in 2014 to \$2,242 million in 2019, implying an average of only \$192 million investment per year³⁴.

3.3 The Consequences of Failed Industrialization

Between 2007 and 2018, Tanzania's national poverty rate fell from 34.4% to 26.4% and extreme poverty fell from 12% to 8%. This represented good progress, but economic growth became less pro-poor after 2012, when there was a distinct slowing in poverty decline³⁵. In 2018, about 14 million Tanzanians lived in poverty, up from 12.3 million in 2011-2012. Using the international extreme poverty rate of US\$1.9 per day, poverty in Tanzania has remained stagnant at 49% between 2011 and 2018, with 27.6 million people being classified as poor³⁶.

A key reason for this slow (and slowing) progress in reducing poverty is the failure to create jobs outside of agriculture for unskilled and semi-skilled poor people. There has been a steady increase in urban employment in services and industry, but these jobs have tended to go to already better off groups. By comparison, poor rural households have tended to exit agriculture for low-productivity self-employment³⁷. Job creation in Zanzibar between 2014 and 2019-20, for example, was limited. Unemployment and inactivity both increased, and female youth unemployment reached almost 50%³⁸. Figure Two shows how the share of manufacturing value added in GDP started low in 1999 (10.2%) and has been slowly declining over the last two decades, reaching 8.4% in 2023.



2008 2009 2010

Figure Two³⁹: Tanzania: Manufacturing, Value Added (% of GDP) 1999-2023

4. Promotion and Diversification of Exports

Another policy brief focused on whether the SEZ scheme in Tanzania had increased exports and found that annual foreign exchange earnings from EPZ operations increased from \$22 million in 2008 to about \$200 million in 2016⁴⁰. Figure Three shows that the passing and implementation of the various SEZ and EPZ Acts in Tanzania, in 2002, 2006, and 2011 have not energized national export growth. Export growth in Tanzania has been on a downward trend from 2002 to 2022. This is not surprising; in 2016 total exports from Tanzania reached \$8 billion, meaning SEZ exports accounted for only 2.5% of the national total⁴¹.

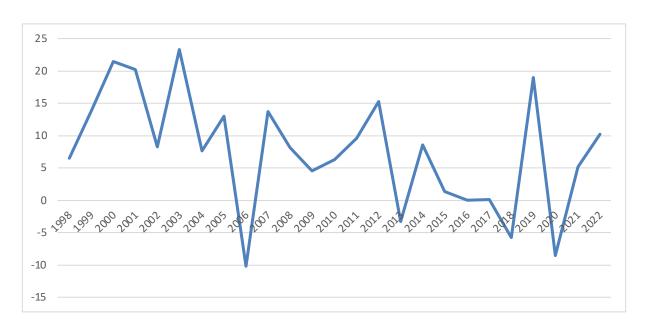
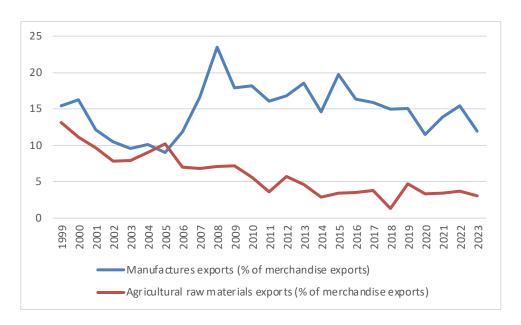


Figure Three⁴²: Tanzania - Exports of Goods and Services (annual % growth)

The 2009 World Bank survey of ten countries, including Tanzania, can be used to ascertain the link between the diversification of exports and the establishment of SEZ programs⁴³. The study only shows a correlation and says nothing about causality. In Vietnam, the Dominican Republic, and Bangladesh the establishment of SEZs was associated with a dramatic diversification of exports towards manufactured goods, but in Bangladesh only 5 to 10 years after the zones were established. Among the African countries there was a very different outcome⁴⁴. Lesotho (already a successful exporter of garments) and Nigeria experienced no diversification of exports. Senegal and Ghana saw fluctuations in their export structure with no discernible trend. Kenya and Tanzania did see some diversification of exports, in Kenya towards manufacturing, and in Tanzania towards services and minerals, which were not connected to the SEZ program. Figure Four shows how the share of agricultural raw materials as a share of total merchandise exports was steadily declining in Tanzania between 1999 and 2023, save for a short-lived surge between 2005 and 2008. The share of manufactured exports in total merchandise exports has also been steadily declining.

Figure Four⁴⁵: Tanzania - Manufacturing and Raw Material Exports, 1999-2023



5. Technological Upgrading

A frequently targeted benefit of SEZs is to attract foreign direct investment (FDI) that brings with it new technology or management techniques that are then learned from and copied by domestic firms, either inside or outside the SEZ⁴⁶. This transfer of knowledge may take the form of a backward linkage whereby a firm helps a supplier upgrade or a horizontal linkage, and domestic firms in the same sector upgrade. There is general pessimism that FDI in SEZs in the global south will result in technological transfer as, for the most part, such firms conduct labor-intensive, low-assembly operations where there is little scope to introduce new technology.

In Tanzania, it is difficult to get detailed and reliable data on the operation of the zones, in particular the activities of firms located in the zones. At most there is an impressive effort by academic researchers from the UK to undertake original fieldwork, which found that by 2019 there was evidence that 100 companies were registered and in operation under the SEZ/EPZ scheme. Of these, 90% have a license to operate manufacturing and industrial activities, while the others are in services and commerce⁴⁷. There is limited evidence against pessimism in Tanzania that shows some technological transfer is taking place. A recent survey of 24 firms located in Tanzanian SEZs found that 16 firms received orders for export goods and almost all of these (14) came with "product specification, designs or materials for producing the goods", and of these, 8 firms "indicated that the foreign partners provided technology and expertise". Again, almost all firms (14) indicated that they "have an internationally recognized quality certification which required them to meet certain standards of production". Of the surveyed firms, 9 indicated that "their relationship with the input suppliers required additional investments", and 8 of those indicated that this "resulted in technology transfer from the supplier to the firm"⁴⁸.

There is more to technological transfer than buying and installing new technology. A more general study of manufacturing firms in Tanzania, using panel data between 1996 and 2017, shows that large firms were well able to acquire new technology, especially in food products, beverages and tobacco, and rubber, plastics and non-metallic minerals. The evidence suggests that these firms were then unable to utilize that technology effectively, as they did not subsequently experience any productivity growth⁴⁹. One possible reason for this failure is the poor quality of the education system in Tanzania – skilled workers are needed to operate more complex technology efficiently. Education failures encompass high numbers of school drop-outs and the poor quality of secondary education. The majority of firms do not provide on-the-job training⁵⁰. There is also some evidence that the quality of management may be weak. In 2013, the World Bank found that in Tanzania 70% of small-business owners have less than seven years of education; in Vietnam, the corresponding share is less than 5%. In China and Vietnam, nearly 90% of small-business owners have more than some secondary education; in Tanzania, this is true among only 20% of small-business owners⁵¹.

Another means of technology transfer is through the circulation of labor, whereby workers employed and trained by FDI firms inside SEZs can then leave, join local firms, and take newly acquired skills with them. In the Masan Zone in South Korea, an estimated 3-4,000 people received specialized training, either in the zone or abroad (mainly Japan) and half of these workers eventually left the SEZ to work in local electronics firms⁵². The most famous example was the South Korean firm Daewoo who partnered with the Bangladeshi textile firm Desh in 1979. As part of the collaboration agreement Daewoo recruited 130 workers from Desh

for training at their Pusan plant in South Korea. Over seven months these workers received intensive on-the-job training in garment production⁵³. The emphasis was on providing actual experience with running a factory that produced world-quality, exportable goods. Desh workers learned the whole system of production, marketing and management. 115 of the original 130 workers left Desh after the end of the agreement often to set up their own firms. In 2022, Bangladesh exported almost \$50 billion of textile exports.

There is almost no evidence for Tanzania; however, there is also little reason to think labor circulation will have a significant effect on technology learning. The 2009 World Bank survey found that the share of the workforce sourced from local vocational training programs (a measure of the extent to which zone-based firms hire locally trained skilled workers) was low, but the highest in Tanzania (at 14%) and much lower by comparison in Kenya (1%). These are the workers who are most likely to be in a position to transfer knowledge across firms (inside and outside the zones) or to employ their knowledge in an entrepreneurial venture⁵⁴. While promising, this relatively high share is undermined by the low total employment of workers in SEZs. By 2019, SEZ employment was 45,000 in Tanzania, which implied that Tanzania was creating only about 4,000 jobs a year in SEZs⁵⁵⁵⁶, thus limiting potential productivity gains from labor circulation.

6. Pioneering Reforms that Go National

The first-best policy to boost domestic and foreign investment is to create national-level well-protected property rights and investor protection. Figure Five shows that in Sub-Saharan Africa measures of property rights protection have stagnated since 2005.

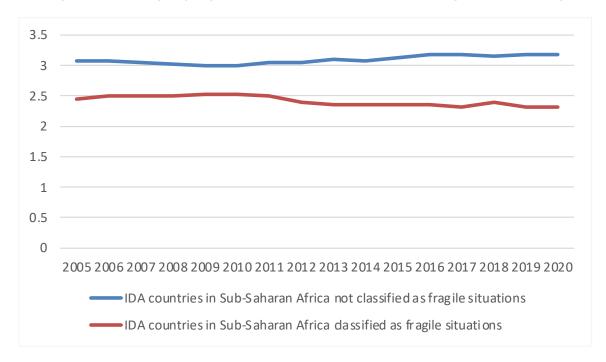


Figure Five⁵⁷: Property Rights and Rule-Based Governance Rating (1=low to 6=high)

National-level reform of investor rights and property rights in Sub-Saharan Africa has been undermined by elite interests (lack of property rights makes it easier to acquire the property of the politically disenfranchised), overlapping property rights (some property is private and some held through customary or tribal laws), lack of government capacity, and stalled democratic progress (which makes it easier for elites to protect themselves).

In some countries SEZs have played an important catalyst role in the policy reform process. They did this by allowing governments to protect the rents of powerful elites (traditionally dominant industry sectors and their connected political interests) in the broader economy while using zone enclaves to test reforms, provide a safety valve for political compromise with alternative interests (e.g. powerful minority interests, secondary regions), and provide a demonstration effect to facilitate broader reforms over time⁵⁸. This catalyst role can occur in three ways: expansion, replication, and national-level policy reform.

SEZs can be **expanded.** The Shenzhen SEZ in China, for example, grew from a population of 300,000 in 1979 to a city of 12 million people by 2020. Another policy brief in this series shows that SEZs in Tanzania failed to expand rapidly in terms of employment, investment, or exports⁵⁹.

SEZs can be **replicated**. The first four SEZs were created in 1980. In 1984, China opened 14 more coastal SEZs. In 1985, SEZs to the Pearl River Delta, the Yangtze River Delta and the Min Delta in Fujian were opened up. In 1988, a large SEZ was established in Hainan,

and in 1990 the Pudong New District in Shanghai was established⁶⁰. Tanzania has enduring, if stalled, plans to replicate the SEZ model. In 2009, before it even had its first operational SEZ, Tanzania announced plans for 25-30 zones by 2020, spread out around the country⁶¹. The EPZA Strategic Plan for 2019-20 to 2023-24 has scaled back on this ambition, and now aspires to have three SEZs developed by 2024. Beyond this, the EPZA retains ambitions to expand the program; the strategic plan includes goals to have the development of five SEZs by local government and pension funds "influenced" by 2024 and the feasibility study and master plan for at least five SEZs carried out by 2024⁶².

SEZs can inspire **national-level reform.** The success of an SEZ may influence the trade policy regime of the host country⁶³. In China, the Shenzhen SEZ was a laboratory for reform, pioneering reforms in labor and land markets, enterprise, price setting and financial reform, and foreign investment that were then adopted nationally⁶⁴. More widely in China, SEZs strengthened reform-minded local leaders by providing them with a source of foreign investment, technology, employment, and tax revenue that gradually created a wider constituency of local and national leaders who sought equivalent benefits. In Mauritius, the SEZ program in the 1980s was politically-feasible in that it allowed the government to promote labor-intensive export-oriented textile industrialization (usually employing women) whilst retaining the unionized, import-substituting, industrial sector (mostly employing men)⁶⁵.

SEZs have failed to promote national-level policy reform in Africa (as shown in Figure Five) and in Tanzania. Figure Six shows that the 'Rule of Law'⁶⁶ in Tanzania, as measured by the World Bank Worldwide Governance Index, has steadily declined throughout the era of the SEZ program, from 2002 to 2022.

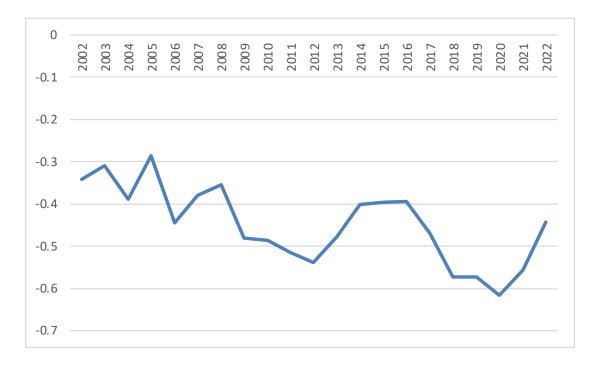


Figure Six⁶⁷: Tanzania - Rule of Law (Estimate)

In Tanzania, according to the Atlantic Council Freedom and Prosperity Index, 'Property Rights⁶⁸' were marginally lower in 2022 (51) than they were in 2015 (51.7). 'Investment Freedom⁶⁹' in 2022 (57.9) was lower than in 2010 (68.4). In 2020, according to the World Bank Doing Business Indicators, Tanzania ranked (out of 190 countries) 162nd for starting a business, 149th in dealing with construction permits, 165th in paying taxes, and 146th in registering property⁷⁰.

This failure should not be surprising; as noted above, a survey in 2019 found that 70% of SEZ firms in Tanzania were standalone single-factory SEZs. This gives the scheme a degree of invisibility and, as there are no physical SEZ parks to admire, we can hardly expect the SEZ scheme to have inspired politically difficult national-level reform.

7. Conclusion: We Should Not Be Surprised

We saw in the introduction that the World Bank recommended SEZs as a policy solution to various constraints on the growth of light manufacturing in Tanzania. Though a long-established policy solution in Africa, with several African countries having launched SEZs in the 1970s, including Liberia in 1970, Mauritius in 1971, and Senegal in 1974, the use of SEZs on the continent has surged in recent decades. Inspired by the China SEZ success story in the 1980s, many more African countries launched economic zones in the 1990s (Ghana, Kenya, Malawi, Uganda, Zimbabwe) and 2000s (South Africa, Zambia, Tanzania)⁷¹. Some countries (Egypt, Ethiopia, South Africa, and Tanzania) are today expanding their SEZ program and others (DRC, Botswana, and Gabon) are launching new programs. The number of SEZs in Africa increased from 20 in 1990 to 237 in 2020. Currently, 38 African countries have SEZs while more are planned elsewhere⁷². This surge is only a small fraction of the global picture. The number of SEZs globally increased from an estimated 176 zones in 47 countries in 1986 to 3,500 zones in 130 countries in 2006 and to 5,400 zones across 145 countries in 2019, with 500 SEZs in the development pipeline⁷³.

This policy brief concluded that SEZs in Tanzania have shown some promise but there are not likely to be any benefits from agglomeration externalities. There are some signs of local linkages but not enough to promote national-level industrialization. There is no sign that SEZs have contributed to diversifying exports from Tanzania. There is some limited evidence that SEZs have involved transfer of technology to local firms; however, the size of this is limited by the low levels of investment (especially foreign investment) into the SEZ program. Finally, the SEZ program has failed to inspire national-level policy reform. A related policy brief⁷⁴ showed that SEZs in Tanzania have failed to achieve their stated goals of boosting foreign investment, exports, and employment.

In answer to our opening question, SEZs have not contributed to the rapid economic growth experienced in Tanzania in recent decades.

This 'failure' is not unusual; in Sub-Saharan Africa, other than Mauritius, Madagascar, and perhaps Kenya, SEZs are widely considered to have been a relative failure but this is not a uniquely Tanzanian failure. As one study⁷⁵ explained:

"Most African SEZs have failed to reach the levels of physical, institutional, and human capital needed to attract global investors. African zones have low levels of investment and exports, and their job creation impact is limited. They have few links with the domestic economy, and from the perspective of agglomeration it is notable that African SEZs have a much lower density of enterprises within the geographical boundaries of the SEZ than zones in Asia or Latin America."

A rigorous study⁷⁶ of 346 SEZs in 22 countries across the developing world and South Korea used nightlight data from satellite readings between 2007 and 2012 to measure the economic impact of SEZs. Nightlights are closely related to the number of firms and employment in SEZs. The study found that the growth rate of SEZs was approximately the same as the rate of economic growth of the country in which they are located. Only 65 from those 346 SEZs experienced faster economic growth than the country in which they were located. Globally, SEZs have not fulfilled the ambitious claims made by governments and the World Bank according to academic researchers.

SEZs are not a panacea for promoting sustainable economic growth. In related policy briefs we will explore in more detail aspects such as governance, provision of utilities, taxation, and political commitment that influence the success or otherwise of the SEZ program in Zanzibar, Tanzania, and Africa more widely.

This policy brief (and all those about SEZs in Tanzania and Zanzibar) should be read in light of the difficulties in accessing data that is both useful and reliable. EPZA data on the operational status, employment, and exports of firms located in economic zones has been called "contradictory, patchy and unreliable" This policy brief uses data from a wider variety of sources, including fieldwork surveys and macroeconomic data from the World Bank and often has to focus on the wider economy of Tanzania, rather than specifically the functioning of firms in economic zones.

References

Adu-Gyamfi, R., Asongu, S.A., Mmusi, T.S., Wamalwa, H., & Mangori, M. (2020). A comparative study of export processing zones in the wake of sustainable development goals: Cases of Botswana, Kenya, Tanzania, and Zimbabwe. *Research Africa Network* WP/20/025.

Alexianu, M., Saab, M., Teachout, M., & Khandelwal, A. (2019). Doing Special Economic Zones Right: A Policy Framework. *Synthesis brief, Nov*, 1-21.

Andreoni, A. Boys, J. & Therkildsen, O. (2022). The Political Economy of 'Specialism' in Tanzania: How to make Export Processing Zones work via conditional special licensing. *Anti-Corruption Evidence, Working Paper* No.47. London, SOAS.

Brautigam, D., & Xiaoyang, T. (2011). China's Investment in Special Economic Zones in Africa. In: T. Farole and G. Akinci (eds) *Special Economic Zones: Progress, Emerging Challenges, and Future Directions.*, World Bank, Washington D.C., 69-100.

Diao, X., Ellis, M., McMillan, M.S., & Rodrik, S. (2021). Africa's Manufacturing Puzzle: Evidence from Tanzanian and Ethiopian Firms. *NBER Working Paper* No.28344, Cambridge, MA.

Dinh, H.T., & Monga, C. (2013). Light Manufacturing in Tanzania: A Reform Agenda for Job Creation and Prosperity. World Bank, Washington, D.C.

Dube, C. Matsika, W. & Chiwunze, G. (2020). Special economic zones in Southern Africa: Is success influenced by design attributes?. *WIDER Working Paper 2020/61*, Helsinki.

EPZA. (2019). EPZA'S STRATEGIC PLAN, 2019/2020-2023/2024. Export Processing Zone Authority, Dar Es Salaam.

Farole, T. (2010). Second Best? Investment Climate and Performance in Africa's Special Economic Zones. *Policy Research Working Paper* No.5447, World Bank, Washington, D.C.

Farole, T. (2011a). Introduction. In: Special Economic Zones in Africa: Comparing Performance and Learning from Global Experience. Washington, D.C., World Bank.

Farole, T. (2011b). Assessing the Outcomes in Africa's SEZs. In: *Special Economic Zones in Africa: Comparing Performance and Learning from Global Experience*. Washington, D.C., World Bank.

Farole, T. (2011c). Zone Practices: Policy, Planning, and Strategy. In: *Special Economic Zones in Africa: Comparing Performance and Learning from Global Experience*. Washington, D.C., World Bank.

Farole, T. (2011d). Policy Conclusions: SEZs in Africa – When, What, and How?. In: *Special Economic Zones in Africa: Comparing Performance and Learning from Global Experience*. Washington, D.C., World Bank.

Farole, T., & Moberg, L. (2014). It worked in China, so why not in Africa? The political economy challenge of Special Economic Zones. *WIDER Working Paper* 2014/152, Helsinki.

Frick, S.A., Rodriquez-Pose, A., & Wong, M.D. (2019). Toward Economically Dynamic Special Economic Zones in Emerging Countries. *Economic Geography*, *95*(1), 30-64.

Johansson, H., & Nilsson, L. (1997). Export Processing Zones as Catalysts. World Development, 25(12), 2115-2128.

Kinyondo, A., Newman, C., & Tarp, F. (2016). The role and effectiveness of Special Economic Zones in Tanzania. *WIDER Working Paper* No 2016/122. UNU-WIDER, Helsinki.

Kweka, J. (2018). Harnessing Special Economic Zones to Support Implementation of Tanzania's Five-Year Development Plan 2016/17 – 2020/21. ODR, DFID, London.

Madani, D. (1999). A Review of the Role and Impact of Export Processing Zones. World Bank, Washington D.C.

McCartney, M. (2024). Did Special Economic Zones (SEZs) Fail in Tanzania? Investment, Employment, and Exports. Charter Cities Institute, Washington D.C.

Newman, C., & Page, J. (2017). Industrial clusters: The case for Special Economic Zones in Africa. WIDER Working Paper 2017/15, Helsinki.

Rhee, Y.W. (1990). The Catalyst Model of Development: Lessons from Bangladesh's Success with Garment Exports. *World Development*, 18(2), 333-346.

Rodriguez-Pose, A., Bartalucci, F., Frick, A.S., Santos-Paulino, A.U., & Bolwijn, R. (2022). The challenge of developing special economic zones in Africa: Evidence and lessons learnt. *Regional Science Policy and Practice*, 14(2), 456-482.

Statista. (2024). Exports from Tanzania.

www.statista.com/statistics/1190590/export-of-goods-and-services-in-tanzania/#:~:text=As%20of%20 2019%2C%20the%20export,to%205.8%20billion%20U.S.%20dollars.

UNECA. (2022). Harnessing the Potential of Special Economic Zones for Private Sector Development and Inclusive Industrialization in Southern Africa. Economic Commission for Africa, Addis Ababa. UN. ECA. https://repository.uneca.org/handle/10855/47557

UNCTAD. (2019). World Investment Report 2019; Special Economic Zones. UNCTAD, New York.

White, J. (2011). Fostering Innovation in Developing Economies through SEZs. In: T. Farole and G. Akinci (eds) Special Economic Zones: Progress, Emerging Challenges, and Future Directions. World Bank, Washington D.C., 183-205.

World Bank. (2019). Tanzania Mainland Poverty Assessment: Executive Summary. World Bank, Washington, D.C.

World Bank. (2020). Poverty and Equity Brief: Tanzania. World Bank, Washington, D.C. https://databankfiles.worldbank.org/public/ddpext_download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global_POVEQ_TZA.pdf

World Bank. (2022). Towards a More Inclusive Zanzibar Economy: Zanzibar Poverty Assessment 2022. World Bank, Washington, D.C.

World Bank. (2024a). World Development Indicators. World Bank, Washington, D.C.

World Bank. (2024b). Doing Business Indicators 2022. World Bank, Washington D.C.

Yuan, Y., Guo, H., Xu, H., Li, W., Luo, S., Lin, H., & Yuan, Y. (2010). China's first special economic zone: The case of Shenzhen. In: D.Z. Zeng (ed) *Building engines for growth and competitiveness in China: Experience with special economic zones and industrial clusters.* World Bank Publications, Washington D.C., 55-86.

Yeung, Y., Lee, J., & Kee, G. (2009). China's Special Economic Zones at 30. *Eurasian Geography and Economics*, 50(2), 222-240.

- 1 Farole (2011a:17).
- 2 Dinh and Monga (2013).
- 3 Dinh and Monga (2013).
- 4 www.epza.go.tz/pages/functions
- 5 www.epza.go.tz/services/epz-sez-licensing
- 6 Dube et al. (2020).
- 7 EPZA (2019:20).
- 8 www.epza.go.tz/pages/epza-objectives
- 9 Madani (1999).
- 10 Dinh and Monga (2013:4).
- 11 World Bank (2024a).
- 12 McCartney (2024).
- 13 Newman and Page (2017:2).
- 14 Newman and Page (2017:2).
- 15 Andreoni et al. (2022).
- 16 Andreoni et al. (2022:19).
- 17 Andreoni et al. (2022:19).
- 18 White (2011).
- 19 UNECA (2022:92).
- 20 Madani (1999:25).
- 21 White (2011:194).
- 22 Alexianu et al. (2019).
- 23 Rodriguez-Pose et al. (2022).
- 24 Farole (2010).
- 25 Farole (2011c).
- 26 Farole (2011b:93).
- 27 Madani (1999:33).
- 28 Adu-Gyamfi et al. (2020:24).
- 29 Adu-Gyamfi et al. (2020:25).
- 30 Kinyondo et al. (2016:9).
- 31 Adu-Gyamfi et al. (2020).
- 32 McCartney (2024).
- 33 UNECA (2022:76).
- 34 EPZA (2019:4).
- 35 World Bank (2019:6).
- 36 World Bank (2020:1).
- 37 World Bank (2019:14).
- 38 World Bank (2022: x).
- 39 World Bank (2024a).
- 40 Kweka (2018:6).
- 41 Statista (2024).
- 42 World Bank (2024a).
- 43 Farole (2011b).
- 44 Farole (2011b:88).
- 45 World Bank (2024a).
- 46 Madani (1999).
- 47 Andreoni et al. (2022:19).
- 48 Kinyondo et al. (2016:11).
- 49 Diao et al. (2021).

- 50 Dinh and Monga (2013).
- 51 Dinh and Monga (2013).
- 52 White (2011:195).
- 53 Rhee (1990:330).
- 54 Farole (2011b).
- 55 Rodriquez-Pose et al. (2022:463).
- Other sources have different estimates for SEZ employment in Tanzania, such as 60,000 in 2019 (UNECA, 2022:76) and 52,395 in 2017 (Kweka, 2018:6). All of these estimates imply an unsuccessful rate of employment creation.
- 57 World Bank (2024a).
- 58 Farole (2011d:243).
- 59 McCartney (2024).
- 60 Yeung et al. (2009).
- 61 Farole and Moberg (2014).
- 62 EPZA (2019:20).
- Johansson and Nilsson (1997:2115).
- 64 Yuan et al. (2010).
- 65 Farole and Moberg (2014:9).
- Rule of law captures perceptions of the extent to which agents have confidence in, and abide by, the rules of society; in particular, the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.
- 67 World Bank (2024a).
- "This indicator assesses the extent to which a country's legal framework allows individuals to acquire, hold, and utilize private property, secured by clear laws that the government enforces. Its component parts are protection of property rights and risk of expropriation, which are taken from the Fraser Institute's Economic Freedom of the World Annual Report and the Credendo Group's Expropriation Risk Country Rankings," respectively (Atlantic Council Methodology,
 - 2) https://www.atlanticcouncil.org/wp-content/uploads/2022/06/Methodology-for-researchers.pdf).
- 69 "This indicator measures the ability of individuals and firms to move capital within and across a country's border without restrictions. It comes from the Heritage Foundation's "Index of Economic Freedom" (Atlantic Council Methodology,
 - 4) https://www.atlanticcouncil.org/wp-content/uploads/2022/06/Methodology-for-researchers.pdf
- 70 World Bank (2024b).
- 71 Farole (2010:4).
- 72 Rodriquez-Pose et al. (2022:459).
- 73 Farole (2011a); UNCTAD (2019).
- 74 McCartney (2024).
- 75 Newman and Page (2017:24).
- 76 Frick et al. (2019).
- 77 Andreoni et al. (2022:27).

Acknowledgments: Special thanks to Jeff Mason and Jidy Chitta for providing invaluable feedback, and to Katie Estes for designing this policy brief.

This publication was made possible through the support of Grant 63321 from the John Templeton Foundation. The opinions expressed in this publication are those of the author(s) and do not necessarily reflect the views of the John Templeton Foundation.

Professor Matthew McCartney Head of Research Africa Urban Lab (AUL) matthew.mccartney@aul.city