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Lessons from developing countries

by

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Abstract

Special Economic Zones (SEZs) are a popular policy tool for the promotion of economic development. However, questions remain about their economic contribution and about what aspects of SEZ policies are most relevant to investors. This article sheds light on these issues by comparing SEZs across Africa, Asia and Latin America. We find that, while investment decisions by foreign companies are driven by market access, political stability and low labour costs, adequate SEZ policies facilitate the attraction of investment. A good industrial infrastructure together with a strategic location and service provision within the zones draw investment. Fiscal incentives, by contrast, have a limited influence on investment decisions.

Keywords: Special Economic Zones, inward investment, industrial policy, developing countries, FDI location decision

JEL Codes: F21, O14, O24, L52

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Introduction

Special Economic Zones (SEZ) have been on the policy agenda for a considerable amount of time, but have increasingly attracted attention over the past two decades. Most low- and middle-income countries have introduced SEZ policies, leading to a twentyfold increase in the number of SEZs since the late 1980s. Estimates put the number at more than 5,300 (UNCTAD, 2019), making them one of the dominant economic development interventions of our times.

Definitions of SEZs are as heterogeneous as their real-life manifestations diverse. SEZs are fundamentally aimed at boosting (foreign) investment, increasing exports, diversifying the economy, and generating direct and indirect jobs. They come in all guises, sizes and shapes, from small industrial park-type zones to entire cities. Despite their diversity, all SEZs share common features. In its most basic definition, a SEZ is an area where national rules and regulations of making business differ from the remainder of the country. The differentiated regulatory regime aims to render the zone more attractive for foreign and local investment.

Scholarly attention on SEZs has grown of recent. Their impact in terms of employment generation, institutional reform, spillovers and investment has been extensively covered (e.g., Alder et al., 2016; Ambroziak & Hartwell, 2018; Ciżkowicz et al., 2017; FIAS, 2009). However, gaps remain in our understanding of the influence of SEZ policies on firms' locational decisions. Research on the topic mostly reports aggregate employment or investment within the zones as evidence of zone impact (e.g., FIAS 2009), but it typically does not disentangle the specific contribution of SEZs from other factors. Whether the zones truly attract additional investment or simply relocate investment that would have in any case ended up in the country is a question that remains largely unanswered.

In recent years, research has relied on better data and gone beyond case studies, increasingly using quantitative approaches (e.g., Alder et al., 2016; Ambroziak & Hartwell, 2018; Ciżkowicz et al., 2017; Hartwell, 2018; and Wang, 2013). While these studies represent important additions, they generally remain constrained to individual countries. Hence, their capacity to explain the role of SEZs for firms' international location decisions is limited. We still know little about how SEZ policies influence firms' investment decisions. Moreover, SEZs are often treated as a black box in the existing literature. Factors such as the variety in their set-ups and in what they offer to investors is frequently overlooked. Despite the growing

number of best practice guides, there is —with few exceptions— limited academic research looking at specific aspects of the SEZ policies and their importance for the attraction of investment.

In light of the above, the objective of this article is twofold. First, we assess the influence of SEZ policies in developing countries on the location decisions of both local and foreign firms. Second, we explore which specific aspects of SEZ policies and the SEZ itself are important to investors. While SEZs have a wide range of objectives, the study examines investment attraction as a common feature to all SEZs and a necessary first step to achieve any of the other objectives.

The study focuses on SEZs in low- and middle-income¹ countries across Africa, Asia and Latin America. In these countries SEZs have been often sold as a particularly effective tool to overcome the weaknesses of the local business environment. While admittedly, this classification includes countries with large variations in terms of economic, institutional and social ecosystems, low- and middle-income countries share many characteristic that make understanding the similarities and differences in their use of SEZ policies a worthwhile exercise.

The analysis draws on a series of comparative, in-depth case studies of seven large SEZs. 103 interviews with foreign and local firms were conducted across the seven SEZs and complemented with interviews with key informants in each country. We find that while firms are primarily attracted by certain country characteristics, such as market access, political stability and cheap labour costs, SEZ policies have played a non-negligible facilitating role in securing investment. Distinct aspects of the policy and the specific SEZ set-up matter to a varying degree, depending on country context and target sectors.

The rest of the article is structured as follows. The next section reviews the relevant literature on the economic impact of SEZs and the factors shaping SEZ performance. The subsequent section introduces the methodology and conceptual framework, followed by the results and a discussion of the findings. The last section concludes and draws policy implications.

Research on SEZs in developing countries

Special Economic Zones and their impact on economic activity

As the popularity of SEZs as a development tool has increased, so has the research assessing their economic impact. A wealth of academic studies and reports in the grey literature have examined the effects of SEZs. FIAS (2009), for instance, reports that SEZs accounted for 40 million direct jobs and US\$200 billion worth of exports globally in 2008. At country level, Aggarwal (2005) shows that in 2002 SEZs represented 20 percent of overall exports in Bangladesh, 5 percent in India, and 32 percent in Sri Lanka. Between 90,000 and 145,000 people were employed in SEZs in each of these countries. Similar conclusions have been reached for other parts of the world (e.g., Cling et al., 2005 for Madagascar; Monge-González et al., 2005 for Costa Rica).

These studies show the importance of SEZs for many countries. They remain, however, fundamentally descriptive in nature and do not fully address the question of additionality. Hosting a given number of firms and jobs in a zone says *per se* little about the overall additional contribution of the SEZ policy. Often, it remains difficult to unravel whether the reported investments would have taken place in the absence of a SEZ or SEZ policy (Cirera and Lakshman, 2017).

A growing body of literature has attempted to overcome this shortcoming by looking at different outcome indicators using quantitative methodologies (e.g., Alder et al., 2016 and Wang, 2013 on SEZs' impact on Chinese cities and prefectures; Ambroziak & Hartwell, 2018 and Ciżkowicz et al., 2017 on SEZ's impact on Polish regions; and Hartwell, 2018 on SEZs' impact on institutional development). These studies represent major steps in addressing previous shortcomings about the economic impact of SEZs. However, important gaps remain. First, existing research provides limited insights into the role of SEZ policies for attracting investments to a specific country and to regions within a country. Firms typically follow a two-step process when deciding to invest (Hutzschenreuter et al., 2020): first, they choose a specific country; second, they focus on where to invest within that country. Single country studies (e.g., Alder et al., 2016; Ambroziak and Hartwell, 2018; Wang, 2013)—cannot shed light on the choice of country. As many countries employ SEZ policies as a tool to attract investments, this is an important gap in our knowledge.

Second, SEZs are typically treated as a black box. Crucial SEZ policy aspects, such as what is important to investors and what is not, are generally overlooked. Given the diversity of SEZ policies, this is an important gap. The notable exceptions are Frick and Rodríguez-Pose (2019, 2022), Frick et al. (2019) and Ciżkowicz et al. (2021). These authors explore the impact of different SEZ policy characteristics on growth within the zones and spillover effects to surrounding areas. All of them find that zone growth is determined by contextual factors while fiscal incentives play a less relevant role than assumed. Similarly, they report that spillovers are weaker if the SEZ policy includes an export requirement. Overall, our understanding of how different aspects of SEZs shape investors decisions remains limited, mostly based on policy documents rather than sound academic analysis.

Determinants of SEZ effectiveness

Research and ‘best practice guidelines’ on the determinants of SEZ performance have tabled a large number of factors that contribute to zone performance. However, it is not always clear how these ‘best practices’ are established. Some are driven more by ideology than sound evidence. Following Frick et al. (2019), the factors guiding zone success can be broadly grouped into three categories: 1) SEZ policy characteristics; 2) zone characteristics; and 3) contextual factors. We review the evidence on each below.

The primary focus has been on SEZ policy characteristics. Fiscal incentives, such as corporate tax exemptions, duty free import and export, or VAT exemptions, traditionally form the backbone of any SEZ policy and are often considered key for SEZ success. There is, however, mixed evidence for this assumption. Farole (2011) detects no correlation between tax exemptions and SEZ performance, while Frick et al. (2019) show that fiscal incentives are only related to SEZ performance in higher income developing countries. Ciżkowicz et al. (2021) confirm that differences in tax incentives between Polish SEZs have no significant effect on their attractiveness. The Asian Development Bank (2015) suggests that, while countries feel compelled to offer generous tax incentives, their effectiveness in attracting investment is well below that of other factors in SEZ policies. Older studies have, however, a more positive view of fiscal incentives and underline their role for SEZ development (Aggarwal, 2005; Rolfe et al., 2004). The mixed nature of these findings is in line with the general literature on FDI location choices, which finds mixed evidence for the impact of lower tax rates on FDI attraction (for an overview, see Nielsen et al., 2017). Despite the prominence of this aspect of SEZ policies, there is no solid evidence for their effectiveness.

Fiscal incentives are complemented by non-fiscal enticements, including administrative facilitation through one-stop-shops and on-site customs offices. Frequently, SEZ firms also benefit from streamlined administrative procedures. The underlying idea is to create an attractive and cost-reducing business environment for investors. Most international organizations regard facilitation services as desirable and embrace them as best practice when designing a zone policy (Asian Development Bank, 2015; FIAS, 2009; OECD, 2009). While research generally acknowledges the positive role of a conducive regulatory environment for investments (see for example Blonigen, 2005), it remains less clear in how far non-fiscal enticements at zone level contribute to attract investment. Few studies explicitly explore this issue and those that do find little evidence to support the claim (Farole, 2011; Frick et al., 2019; World Bank, 2017).

A second set of factors includes the characteristics of the zone itself. These comprise a strategic location, the type of operator, and the infrastructure and services provided within the zone. These factors have attracted increasing attention. Strategic locations, such as proximity to a major port or large city, have been reported as essential for zone success (Aggarwal, 2005; Asian Development Bank, 2015; FIAS, 2009; Madani, 1999). Likewise, the provision of reliable electricity, water and waste management infrastructure is considered fundamental for zone performance (Madani, 1999; Rolfe et al., 2004). An interesting debate evolves around the question of private versus public operators. While many best practice guides stress the superiority of private operators (FIAS, 2009; OECD, 2009), little hard evidence is available to sustain this point (Farole, 2011; Frick et al., 2019).

Finally, contextual factors linked to the countries and/or regions where a zone is located are also key for their viability. They include the availability of cheap(er) labour and preferential access to markets (Farole, 2011; Madani, 1999; Rolfe et al., 2004). Frick et al. (2019) report that proximity to large markets drives SEZ investment. The general business environment and institutional set up is also considered vital for the attraction of FDI (Blonigen, 2005; Kang & Jiang, 2012). Other factors —such as human capital endowment, the presence of a large labour pool, or infrastructure quality— also facilitate the attraction of firms to zones (Asian Development Bank, 2015; Ciżkowicz et al., 2021; Nel & Rogerson, 2013).

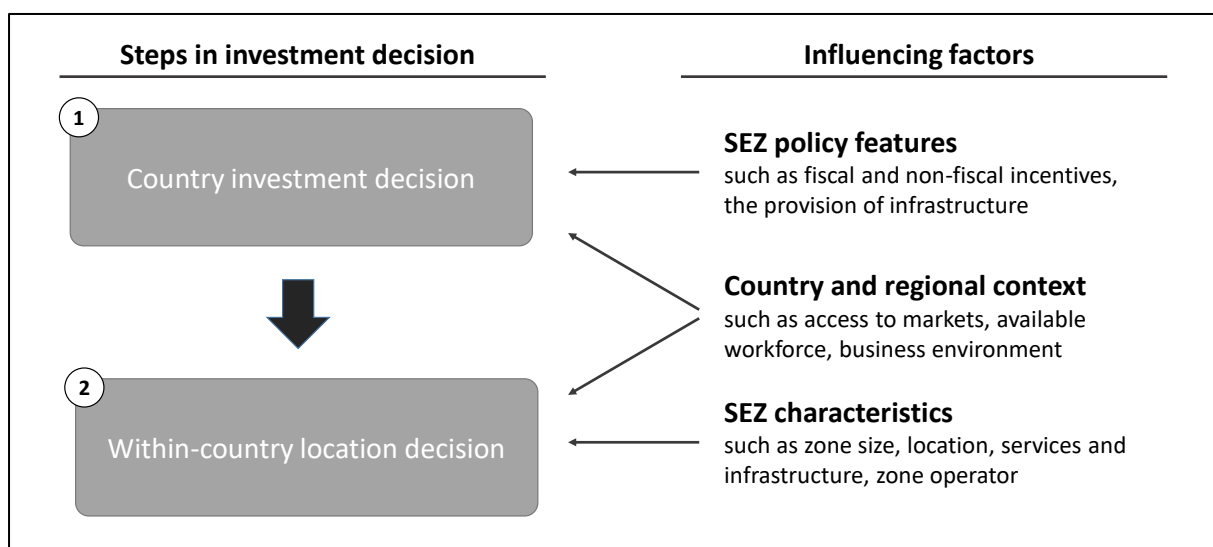
Methodology

Approach and conceptual framework

This research addresses whether the popularity of SEZs in low- and middle-income countries is justified by their track-record of generating additional investments and which specific SEZ policy interventions have been most relevant for investors. We rely on comparative qualitative case studies, conducted using semi-structured, elite in-depth interviews with firms located in seven SEZs across the developing world to improve our understanding of the ways in which SEZ policies influence investment decisions. We scrutinise the investment decisions of firms as opposed to other SEZ objectives, such as exports, employment generation or innovation. The attraction of investments and firms is the necessary first (albeit not sufficient) step in the pursuit of any other objectives and is common to all SEZs.

The analytical framework is informed by the assumption that location decisions by firms are conducted in a two-step process (Hutzschenreuter et al., 2020). First, (foreign) firms make a ‘country investment decision’: they select a country offering them features and opportunities aligned with their interests. Second, firms choose a specific location within the selected country: the ‘side investment decision.’

Figure 1. Investment decision process



The three types of factors influencing SEZ performance identified in the literature —SEZ policy features, SEZ characteristics and contextual factors— impact at various stages of the investment decision. The country and regional context influence investment during both steps

of the process. A country's access to markets and its workforce and business environment shape location choices. Contextual factors in the region surrounding the specific SEZ influence the within-country location decision. Specific features of national SEZ policies, common to all SEZs within a country, such as fiscal and non-fiscal incentives, affect country choice investment decisions. The characteristics of individual SEZs influence choices of SEZ within a given country. Figure 1 illustrates the theoretical framework.

The interviews were structured following this logic, teasing out the specific contributions of SEZ policies and the factors affecting investment decisions in the two phases. A high-level interview guide, with open-ended questions to facilitate the conversation, was put together to steer the interview process. Firm managers were asked about the reasons for investing in a specific country, followed by what influenced their firm's decision to locate in a specific SEZ within the country. Questions were asked in an open manner, without the provision of specific answer categories or themes. Follow up questions targeted the specific role of SEZ policies and SEZ characteristics for investment decisions and aimed to clarify initial answers.

A thematic analysis of the transcribed interviews was conducted, using both deductive and inductive coding frameworks. Deductive codes were developed based on the literature review, while inductive codes reflected new concepts emerging in the interviews themselves.

Scope and country coverage

The analysis examines seven zones in low- and middle-income countries. To select the cases from the myriad of existing zones, we relied on purposeful sampling. Purposeful sampling allows to select information-rich cases to ensure the most effective use of limited resources (Patton, 1990).

To be selected, each zone had to meet a minimum set of criteria, including: 1) the existence of a national SEZ policy with at least one —and ideally more— successfully established SEZs; 2) the presence of clear territorial boundaries, hence excluding single-factory zones or large wide zones; 3) a demonstrated capacity of the zone to fill the delimited geographical area with new firms, or a minimum threshold of occupancy; and 4) a focus on manufacturing or services within the zone, with the objective of identifying and eliminating zones that function primarily as commercial and logistics hubs.

We also applied intensity sampling, i.e., choosing zones that reflect the real-world diversity of SEZs rather than aiming for a homogenous group. This approach allows to analyse variations among zones, while simultaneously detecting shared patterns across cases (Patton, 1990). For this purpose, SEZs with a mix of different sectors were included to understand variations by industry. We considered SEZs in countries at different stages of economic development to capture the heterogeneity of contexts in which SEZs operate.

Based on these criteria, seven zones were selected: four in Africa, two in Asia, and one in Latin America. Table 1 provides an overview of the resulting case countries and zones.

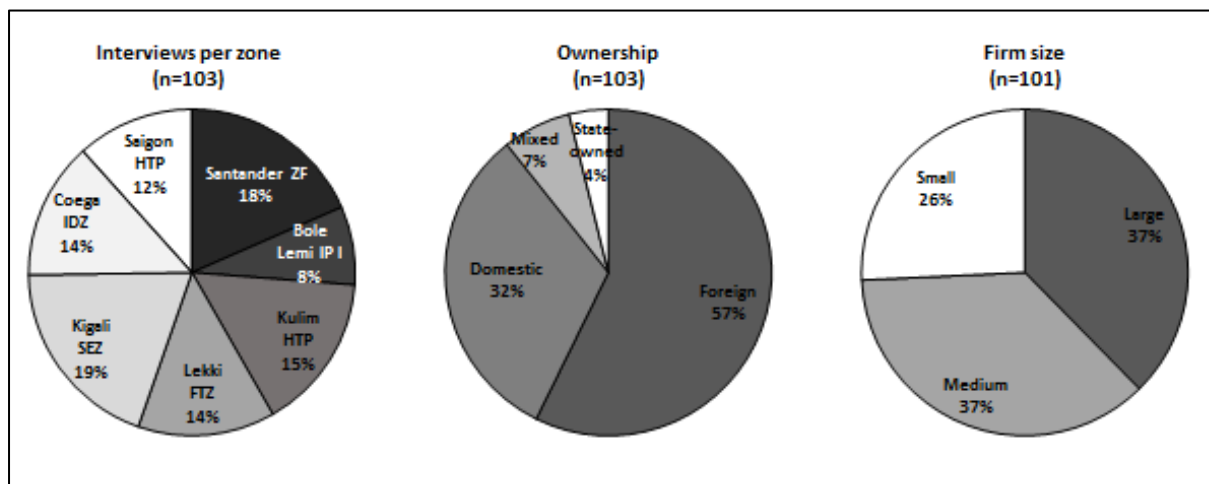
Table 1. Case studies included in the analysis

Country	Zone	Year established
Colombia	Santander Zona Franca (ZF)	2008
Ethiopia	Bole Lemi Industrial Park (IP) I	2014
Malaysia	Kulim Hi-Tech Park (HTP)	1996
Nigeria	Lekki Free Trade Zone (FTZ)	2008
Rwanda	Kigali Special Economic Zone (SEZ)	2013
South Africa	Coega Industrial Zone (IDZ)	1999
Vietnam	Saigon Hi-Tech Park (HTP)	2002

Interviews

103 interviews with firms across the seven SEZs were conducted in 2018. Those interviewed were in senior management positions, including CEOs, managing directors and heads of strategy. 30 additional interviews with key informants—including representatives of the zone operator, authorities and investment promotion agencies— provided additional background information on the zones and what they perceived as most enticing for firms. Figure 2 gives an overview of the firm interviews.

Figure 2. Interviews per zone, ownership type and firm size



The variation in the number of firms interviewed per zone is driven by differences among zones. Bole Lemi IP I in Ethiopia, for example, only hosted nine firms (100 percent occupation) at the time of the interviews, while Kigali SEZ in Rwanda hosted 86. Moreover, the availability and willingness of firms to participate in the interviews played an important part. Cultural differences and factors, such as the relationship of individual firms with the zone management or with the country government, were essential in determining the willingness of firm representatives to participate in interviews.

In terms of ownership, more than half of interviewed firms were foreign (57 percent) and 7 percent of mixed ownership, i.e., both local and foreign. The high percentage of foreign firms is not surprising, as SEZs aim to attract foreign investment. 32 percent of the interviewed firms were domestic and 4 percent state-owned.

Appendix 1 includes a more detailed description of each case study.

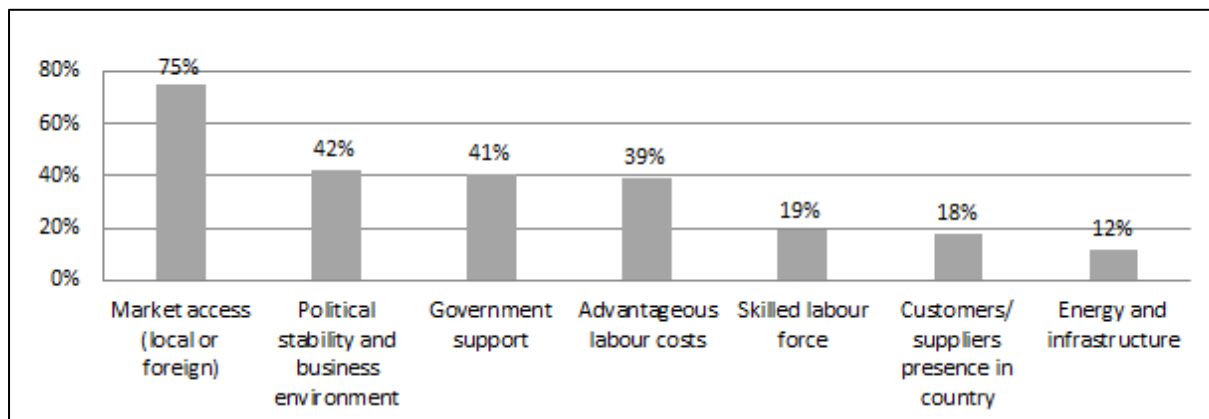
Drivers of firm investment decision

This section describes the findings of the firm interviews. It follows the framework outlined in the previous section. The first section is dedicated to the country investment decisions. The second contains an analysis of the specific role of the SEZ policy in this step. We assess how firms choose a specific SEZ, before discussing the findings.

Key drivers of foreign investment in a country

To understand what factors push firms to locate in an SEZ in a given country, all foreign firms were asked about the essential drivers behind their investment decision. Figure 3 summarizes the main themes mentioned in the interviews.

Figure 3. Key reasons for country investment decision across all SEZs

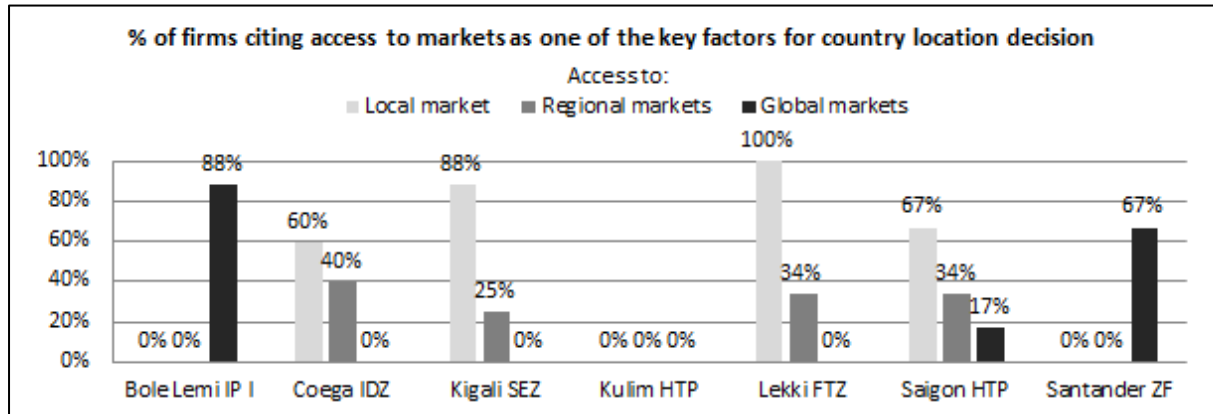


Gaining access to the local or a foreign market was by far the most frequently mentioned factor. 75 percent of firms cited this as one of the fundamental reasons for their location decision. This was followed by three factors with a similar weight: (1) political stability and a country's business environment (42 percent); (2) government support (41 percent); and (3) advantageous labour costs (39 percent). A skilled labour force, the presence of customers and/or suppliers, and costs of energy and general infrastructure played a less vital role with 19, 18 and 12 percent of firms respectively quoting those factors as key. Hence, traditional pull factors, such as market access, labour costs and a favourable business environment remain basic drivers of FDI. But each of these means a different thing in different countries, with their relevance varying between countries and SEZs.

When analysing these factors separately for each SEZ, such variation becomes clear. 'Access to markets' was central in all SEZs, bar Kulim HTP in Malaysia. There were, however, differences regarding which markets firms were aiming to access when selecting a specific country. Figure 4 illustrates these differences. Foreign investors in Lekki FTZ (Nigeria), Kigali SEZ (Rwanda) and Coega IDZ (South Africa) targeted fundamentally the local and regional markets. In Nigeria, 100 percent of firms stated this as their primary reason for locating there. Similarly, Rwanda was perceived as a growing market with little existing competition from established firms. Many firms also expected to use the Kigali SEZ as an

entry point into other East African markets. Likewise, foreign firms in Coega IDZ saw South Africa as a gateway into the other Southern African countries.

Figure 4. *Access to markets as a driver for country location decisions*

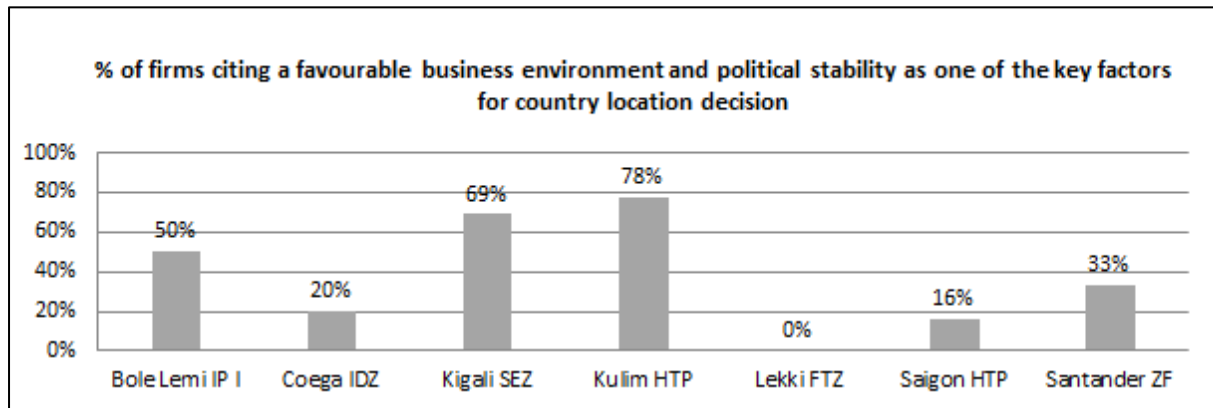


In contrast, Santander ZF in Colombia and Bole Lemi IP I in Ethiopia served foreign investors as pure export hubs for global markets with limited links to the local economy. The attractiveness of Bole Lemi stemmed from duty free and/or preferential access to the EU and US for garments, which, together with cheap labour, made Ethiopia an ideal hub. Colombia’s cultural and geographic proximity to Spain and the US made Santander ZF a hub for exports to these countries.

Saigon HTP in Vietnam is the only case where foreign firms invested to serve the local, regional and global markets. A unique constellation of factors in a country with relatively low production costs made this possible. Finally, firms in Kulim HTP (Malaysia) did not view market access as fundamental in their location decision.

The theme ‘political stability and a favourable business environment’ was the second most frequently cited factor influencing firms’ location decision across all SEZs. However, important differences among zones and countries are in evidence (Figures 5).

Figure 5. Business environment and political stability as drivers of country location decisions



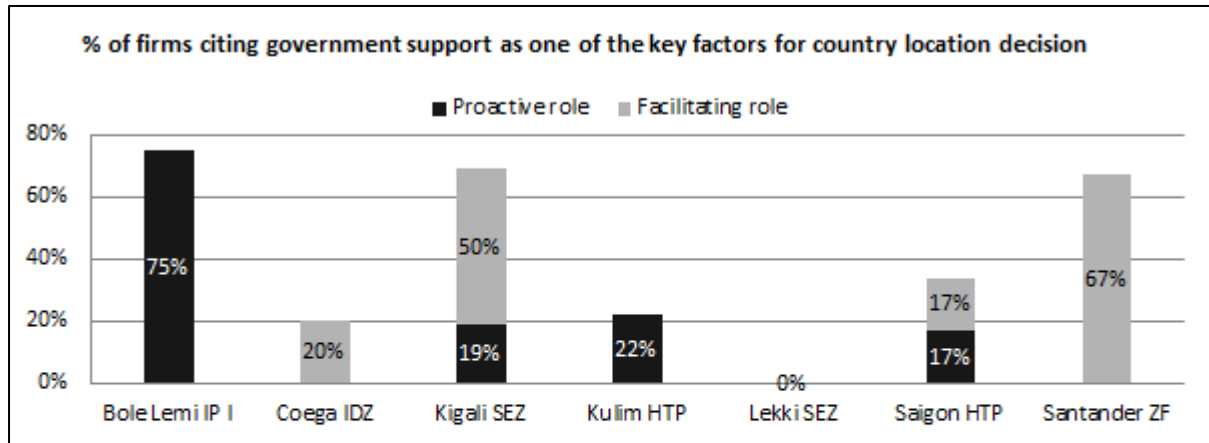
In Kulim HTP, almost 80 percent of the firms surveyed mentioned political stability as essential for their investment decision. Most firms in the Malaysian SEZ were committed to the country long-term, due to the relatively high investment costs involved in high-tech sectors. Hence, a stable political environment became a non-negotiable pre-condition for investment. Although investment costs were lower in Rwanda and Ethiopia, political stability remained an important driver for foreign investments. 69 and 50 percent of firms, respectively, cited this as a key factor. In both cases, investors mentioned the political stability of these two countries, relative to other countries in the region, in a favourable way. Rwanda and Ethiopia thus differentiate themselves from potential regional competitors by providing greater political stability and sounder institutions than their neighbours (Rodríguez-Pose and Cols, 2015). Most interviewees also referred to stable leadership (minimising the risk of sudden political changes) than to “ease of doing business” as a driver of investment, in contrast to what is frequently suggested in the literature (Aggarwal, 2005; Blonigen, 2005; Farole, 2011).

At the other end of the spectrum, none of the firms established in Nigeria’s Lekki FTZ mentioned political stability and the business environment as investment drivers. Firms invested in the zone despite of what they perceived as challenging institutional and business environments. Colombia, South Africa and Vietnam lay somewhat in the middle, with some firms mentioning political stability as a positive driver of investment.

Related to political stability is the active role governments play in attracting investments. For 41 percent of interviewees government support drove investment (Figure 3). Two sub-themes were frequently mentioned: (1) governments either proactively approach firms as an

attraction strategy; and/or (2) governments facilitate settlement once a firm has displayed interest in investing in the country. Again, differences between countries abound (Figure 6).

Figure 6. Government support as a driver for country location decisions



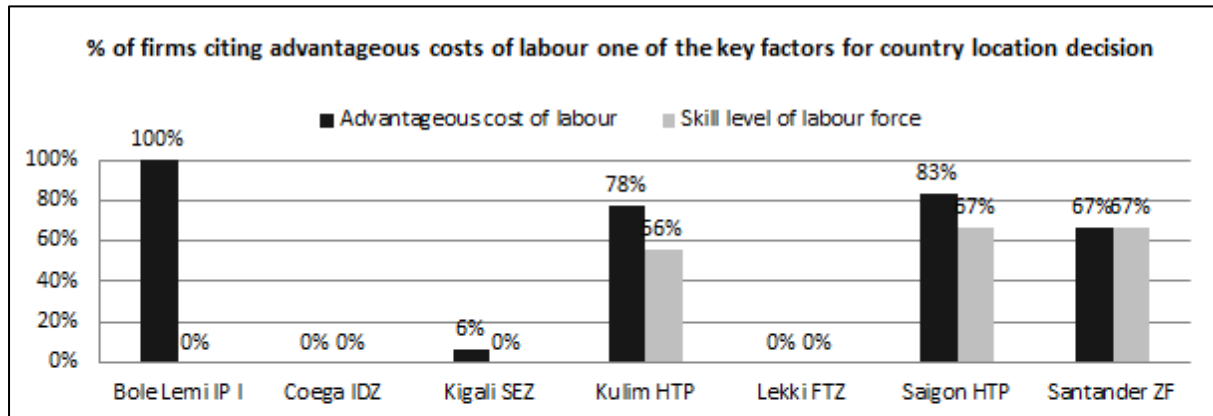
Governments of Ethiopia and Rwanda were particularly active on this front. 75 percent of interviewed firms in Bole Lemi indicated that they had been proactively approached by the Ethiopian government and/or that government support was essential for investing in Ethiopia. This was done through the investment promotion agency in collaboration with foreign investments agencies, but also through informal routes. In Kigali SEZ, the situation was similar. The percentage of proactively contacted firms was lower (19 percent), but many of these firms (50 percent) considered government support essential. Without government support they would not have invested. 34 percent of firms in Saigon HTP and 22 percent in Kulim HTP also signalled that support from the Vietnamese and Malaysian governments, respectively, had played a role in their investment decisions. In contrast, it was less relevant in Coega IDZ (South Africa) and entirely absent in Lekki FTZ (Nigeria).

Proactive governments were particularly appreciated in countries with a low industry base. Such appreciation was most prominent in Rwanda and Ethiopia, which, despite being landlocked and among the less developed countries considered, have attracted a significant amount of investment over the past years. The governments' consistent and proactive efforts to lure business have paid off in this respect.

Favourable labour costs were mentioned as a pull factor in four of the seven SEZs (Figure 7). Labour costs either play a key role or none at all. For SEZs serving as an entry point to the local market or as a regional hub —Lekki, Kigali and Coega— labour costs were not considered a draw for investment. In fact, investors mentioned that other countries would

have been more attractive from a labour cost perspective, but suffered from deficiencies in other factors. In the remaining SEZs (Bole Lemi, Kulim, Santander and Saigon), where foreign firms produce part of their output for global markets, low labour costs were viewed as critical for the choice of country.

Figure 7. Labour costs as a driver for country location decisions

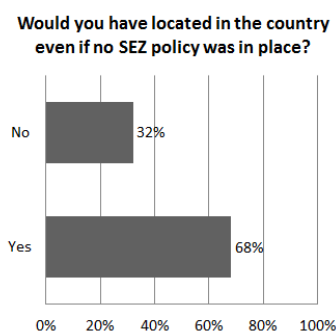


In Santander ZF, Kulim HTP and Saigon HTP, low labour costs were complemented by a relatively well-educated workforce. Between 56 percent and 67 percent of firms in these three SEZs mentioned skills as a driver of investment decisions. One investor in Vietnam explained: “This was [...] a particularly important factor. It was cheap to produce in Vietnam, but also human capital is relatively skilled and productive (especially compared to Malaysia). This is a crucial factor for lots of companies.” In Bole Lemi, in contrast, with its low-tech labour intensive garment industry, the skill-level of Ethiopian workers was not factored in the investment decision. The same emerged from interviews in Nigeria, Rwanda and South Africa.

The role of SEZ policy in attracting investors to countries

So, how far do SEZ policies influence decisions to invest in a particular country and zone? As discussed in the previous section, other factors top the list of FDI location drivers. The interviews, however, revealed that SEZ policies facilitated the investment: almost one third of firms interviewed said that they would not have invested in the chosen country without a SEZ policy (Figure 8). However, different aspects of the policies adopted have shaped investment decisions differently depending on countries.

Figure 8. *The role of a SEZ policy for location*



Even firms reporting that they would have located in the zone regardless of incentives recognised that specific SEZ policies increased the attractiveness of specific countries and zones. The dimension of this factor, nonetheless, differed strongly between countries: almost 80 percent of firms in Ethiopia implied that without the industrial park policy, they would not have located there; in Vietnam 84 percent of firms declared that they would have invested regardless of the incentives put on the table.

What aspects of SEZ policies matter most to investors? The traditional pillars of SEZ policies —fiscal incentives and corporate tax exemptions— did not rank highly in interviews. Few of the firms mentioned fiscal incentives as a driver of their decision to invest (13 percent across all SEZs, with no major variations between them). Given the emphasis placed on fiscal incentives as pull factor for firms and their centrality in SEZ policies, this was a surprise. However, the fact that fiscal incentives were rarely mentioned or awarded importance in interviews may underestimate their actual impact. First, fiscal incentives are often taken for granted. Foreign firms investing in low- and middle-income country SEZs expect incentives and discount them in their decision to invest. As indicated by one interviewee, fiscal incentives are somewhat of a “hygiene factor:” investors expect to get them, but alone they rarely sway investment decisions. Other factors matter more. As one firm manager put it: “we are here because of the massive labour pool which differentiates the country from others; we can have fiscal incentives in any country.” This, however, implies that no fiscal incentives may be a deterrent, as the default expectation by investors is that they will be on the table. Second, several firms admitted, when probed on the question, that, while fiscal incentives were not overly important in their initial due diligence, they became far more relevant when shortlisting potential investment sites. Incentives, thus, have a facilitating role. Moreover, the line between the frequently cited ‘government support’ and fiscal incentives is blurry. Many

firms praised the role of the government in facilitating their investments through accommodating their needs. In many cases —although not made explicit in the interviews— this included the promise of fiscal incentives.

Other types of incentives were mentioned more frequently. The ability to import raw materials and machinery duty free was, for example, a frequent game changer. Most foreign firms, when relocating to a developing country, purchase part of their inputs abroad, despite an often stated desire to purchase more goods locally. Hence, the duty free import of inputs is often considered non-negotiable, although, as in the case of fiscal incentives, not indispensable on its own.

Among non-fiscal incentives, industrial infrastructure within the SEZs was repeatedly alluded to. Firms appreciated the ease of setting up operations when pre-built factories units were available, but also the more general provision of serviced industrial land. This was particularly true for zones in countries with lower levels of economic development and a less developed country-wide infrastructure (Ethiopia, Nigeria, Rwanda and Colombia, where two-thirds of firms touched on this topic). One investor in Santander ZF indicated that, facing tight time restrictions for starting operations due to client demands, the zone guaranteed serviced industrial land, something that would not have occurred in most other places. Another investor in Ethiopia emphasized that investment outside the parks was impossible due to a lack of general infrastructure. Poor and inefficient power supply, roads and waste water treatment plants put new investments in jeopardy. Furthermore, investors in sectors with highly integrated global value chains highlighted that park infrastructure was key to the fulfilment of requirements from their customers in terms of sustainability standards. Water treatment plants and waste management were of particular importance in this regard.

Safety concerns were also a major reason for firms to locate within a SEZ rather than outside. Two-thirds of firms in interviews in Santander, Lekki and Coega mentioned security as a significant concern. Colombia, Nigeria and South Africa are the countries with the highest crime rate in the sample. In the other SEZs, safety featured far less prominently.

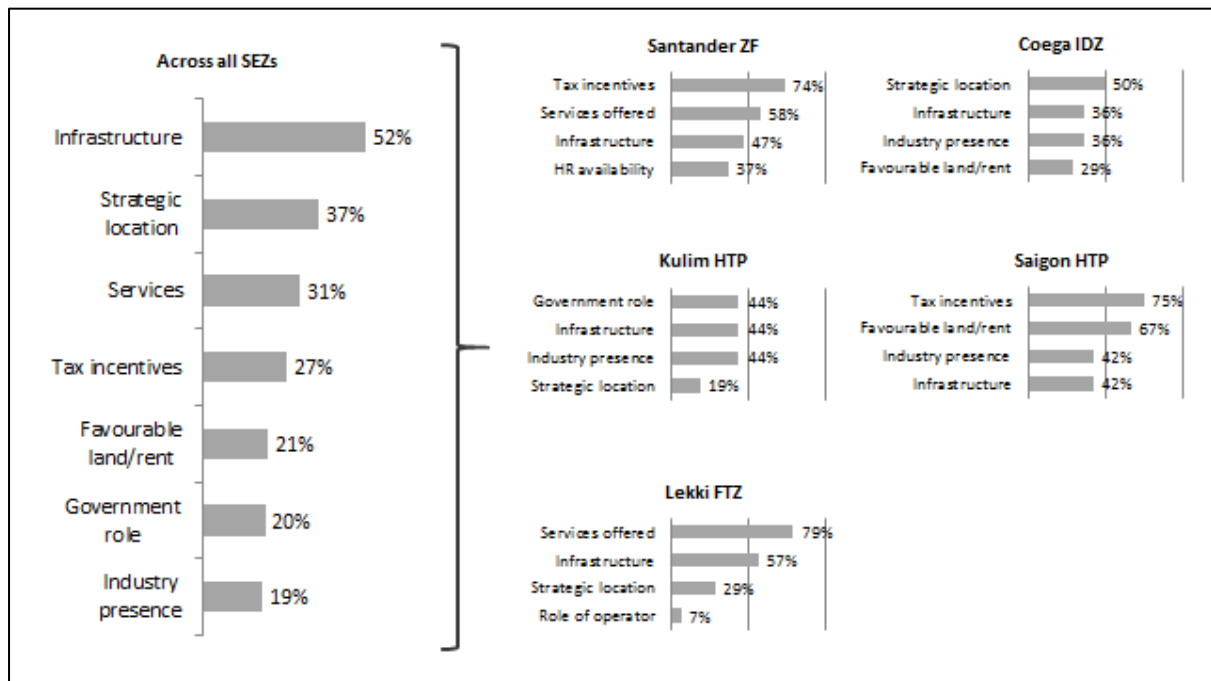
Factors aimed at facilitating the ease of doing business, such as one-stop-shops for administrative facilitation, did not matter much for investors. If at all, they were often considered in interviews as a ‘nice-to-have aspect’ of SEZs. This may be related to the fact

that many of the one-stop-shops exist more on paper and are far from being truly efficient facilitators.

The choice of a specific SEZ

Finally, what drives a firms to choose a specific SEZ within a country? What makes a SEZ attractive to potential investors? To answer these questions, all investors (foreign and domestic) where asked why they decided to locate in their specific SEZ. The reasons are heterogeneous, but some common themes emerge. Figure 9 summarizes the most frequently mentioned themes in interviews across zones as well as the top four characteristics by SEZ.

Figure 9. Key factors for firms 'side selection decision'



In two of the seven sampled zones, Bole Lemi and Kigali, SEZ location choice was primarily driven by having only one SEZ available in the country at the time of investment. Investors were attracted by targeted government efforts to lure firms to the newly built industrial sites. There was not much room for choice. The top four reasons for those two zones are therefore not listed separately in Figure 9. In both cases, the provision of infrastructure and (cheap) industrial land was vital in the decision to invest. Both zones are also located in close vicinity to the capital.

In the remaining five zones, investors could choose their location from a range of SEZs. The right part of Figure 9 summarizes the most important characteristics per SEZ. The numbers include responses by both foreign and domestic investors.

The top factor for selecting a zone was infrastructure availability within it (left side of Figure 9). 52 percent of firms cited this as an advantage for choosing a SEZ. We observed no major differences in firm manager replies between foreign and domestic investors in this regard (58 vs 52 percent). Across most SEZs, infrastructure referred primarily to a stable supply of electricity, water and, in one case, gas (Kulim HTP). Firms in more high-tech industries in Kulim HTP and Saigon HTP put particular emphasis on the role of infrastructure for the smooth functioning of their operations. In Coega and Bole Lemi, apart from the provision of general infrastructure, firms also stressed the convenience of pre-built factory units following firms' specifications. Investors suggested that without the pre-built factory units, investment costs may have skyrocketed. As put by a Bole Lemi investor, "this allowed us to 'test' whether Ethiopia was a feasible production location without taking too many risks."

A strategic location is, with 37 percent of responses, the second most frequently mentioned advantage of the selected SEZs. It was one of the top four location drivers in three zones: Kulim, Lekki and Coega. For most investors, a strategic location meant proximity to transport infrastructure, in particular ports and airports or, at least, an easy highway connection to those. One investor stressed: "we did not consider any alternative location because the position of the SEZ next to the port was very convenient." For exporting firms access to an international airport was particularly important. Proximity to a main city or business was also highlighted as an advantage.

Service provision within the SEZs came third. 37 percent of firms said that it influenced their location decision. The provision of in-house customs services and administrative support was highly rated, especially by service firms. An interesting variant of this was Nigeria's Lekki FTZ, where investors highly valued the management of the SEZ by a Chinese company. This was considered crucial for facilitating communication and ease of doing business in the country. In contrast to the lack of importance of red-tape at the country selection stage, where administrative facilitation did not feature prominently, these findings suggest that, when it comes to specific location choice, SEZs can differentiate themselves from alternative locations by providing effective administrative facilitation.

The fourth and fifth aspects for site selection were fiscal incentives and cheap land and/or building rent, with 27 and 21 percent of mentions, respectively. Cheap land and/or building rent concerns the availability of favourable rates for serviced industrial land and pre-built facilities for rent or purchase. Land costs were particularly relevant in Saigon HTP, where 67

percent of firms confirmed this as an advantage that influenced their location decision. Land costs also featured prominently in Coega (29 percent), Kigali (25 percent) and Bole Lemi (25 percent). One investor underlined: “An important thing was cost. We later opened up a facility [in a different location] which is a little bit bigger than this facility but is three times more expensive. In terms of value for money, it’s difficult to beat this location in general and then [...] the SEZ itself has a lot of good deals for your money.”

Finally, industry presence —suppliers or customers— was mentioned by 19 percent of firms. There are strong variations between zones. Industry presence was among the top four drivers in Coega (36 percent of mentions), Kulim (44 percent) and Saigon (44 percent). In the remaining four cases, it was negligible. The presence of other industries was a particularly important for more advanced industries. Firms appreciated the signalling effect it provided to new investors. Having other industries in the zone implied a favourable environment for investment.

Discussion

How far do these findings help fill the gaps in our knowledge about the role of SEZs for investment decisions? What do these results tell us about the contribution of SEZ policies to inward investment attraction in developing countries? And what is the relevance of various aspects of SEZ policies for investors?

On the question of attracting international investment and their additionality —whether such investments would not have happened in the absence of SEZ policies— our findings are somewhat positive. While a country’s contextual factors, such as market access and low labour costs, predominantly drive country investment decisions across all our cases, SEZ policies are a facilitating factor for the attraction of firms and contribute to generate investments which would rarely have happened otherwise. A third of interviewed firms suggested they would not have invested without a SEZ policy. This finding is important as, to date, there is little evidence on how far SEZ policies really drive country investment decisions in low- and middle-income countries. However, there is considerable variation between cases: firms in Bole Lemi were the keenest on SEZ policy; those in Saigon HTP were at the other end of the spectrum. SEZ policies are thus particularly important in countries at lower stages of economic development, with less pre-existing investment to showcase the viability of operations, and with weaker industrial infrastructure endowments.

With regards to untangling the different aspects of SEZ policies and how much they matter to firms' investment decisions, our findings both confirm some established wisdom and, simultaneously, provide novel insights. First, SEZ programmes do not operate in a void. Their design and chances of success depend on a country's context. Across all SEZs, firms' primary investment decisions were based on matching the firms' needs with contextual factors, such as market access, government support, political stability and labour costs. Lack of consideration of—or changes in—those factors in the design of the SEZ programme could significantly undermine the viability of any SEZ policy. This is in line with research on FDI and industrial policy (Blonigen, 2005; Farole, 2011; Madani, 1999) and more recent SEZs literature (Frick et al., 2019, Ciżkowicz et al., 2021), which highlight the relevance of contextual factors for SEZ growth. However, these results do not always coincide with recommendations in some SEZ best practice guides and the policy debate, where the main attention remains on incentives (FIAS, 2009; OECD, 2009).

On the question of fiscal incentives, the findings suggest that corporate tax exemptions—the core of SEZ policies—may have lost their allure in low- and middle-income countries. Given the proliferation of SEZ policies in developing countries, investors have an extensive choice of countries with similar incentive packages on offer. Fiscal incentives are thus often taken for granted—they need to be in place but do not entice investment on their own. Hence, the provision of tax incentives makes little difference for FDI in developing countries. This finding is in line with research by Frick et al. (2019) and Ciżkowicz et al. (2021), who report a limited role of fiscal incentives. Incentives matter more at the within-country investment decision stage, where they were the most important reason to choose a specific SEZ in two of the SEZs in the sample.

The same applies for administrative facilitation through one-stop-shops. At the country investment decision stage, they matter only slightly for investment decisions. However, they influence growth when choosing the final location. This finding nuances Frick et al. (2019), who find no support for the role of one-stop-shops in their quantitative analysis.

The greatest novelty in terms of SEZ policy and zone characteristics is the relevance of industrial infrastructure within SEZs. Serviced industrial land, pre-built factory units and other infrastructure, such as electricity and water supply, made a world of difference for both international and in-country investment decisions, particularly in lower-income countries. In places where general infrastructure remains less developed, SEZs are a critical and cost-

efficient way of overcoming infrastructure constraints. This finding contrasts with the majority of existing policy literature, where infrastructure frequently is a footnote, as the focus is on other dimensions, such as fiscal incentives (FIAS, 2009). It also fills a gap in scholarly research, which has remained mostly silent on the role of infrastructure provision within SEZs.

Finally, the analysis emphasizes the salience of adapting the design of SEZ policies and SEZs themselves to the country and regional context and to target industries. The specific drivers for investment decisions are heterogeneous across zones and strongly influenced by the country environment and firm sector. No one-size-fits-all solution for SEZ design emerges, despite recurrent themes in the analysis. What is a non-negotiable factor for investors in one place, may only be a ‘nice-to-have’ feature in another. A reliable electricity, water and waste management infrastructure is an important pre-condition in particular for zones targeting more high-tech industries and those that form part of buyer-led industries, such as garment. A strategic location (Asian Development Bank, 2015; FIAS, 2009; Frick et al, 2019, Madani, 1999) also matters. However, depending on context, it can mean proximity to a large city, port, airport, or a combination of those. Hence, moving from generic location advantages to specialised ones is a must for the success of SEZs (Narula and Zhan, 2019). Similarly, SEZ security matters in countries with high crime rates. A well-crafted SEZ policy, thus, requires an analysis of target investors and industries based on the country’s endowments and should be shaped by both.

Conclusion and Policy implications

This study has analysed the role of SEZ policies in the attraction of foreign and local investments in low- and middle-income countries. It has considered the influence of different aspects of SEZ policies and the specific SEZ set-up with the aim of improving our understanding about (1) the additionality of investment in the zones, and (2) identifying SEZ policy and zone characteristics that matter most to investors. Both topics have been neglected in research, where conclusions are drawn from mainly descriptive accounts of SEZ performance. The analysis is based on 103 interviews with firm managers across 7 SEZs in different countries in the developing world, complemented with interviews with 30 key informants.

The findings indicate that the popularity of SEZs as a policy tool is not entirely unfounded and that they can be a valuable tool for influencing firms' international investment decisions. This seems crucial for economies with low economic development and a low industrial base. However, countries need to be cautious not to overly rely on them as a magic 'potion': SEZ policies will not work in every context nor will copying other countries' experiences guarantee success. In particular, relying on fiscal incentives —the traditional core of SEZ policies— is less relevant due to similarities in the tax packages offered across different countries. By contrast, the provision of industrial infrastructure is an important, if often underestimated aspect of SEZ policies. Tax incentives or one-stop-shops can, however, help determine the final location of investment within a country. Overall, the analysis has provided staunch support for contextualizing SEZ policies and zone set up to the specific characteristics of the host country and region as well as to sectors the country is aiming to attract.

Future research in this area should ideally go beyond firms' investment decisions and shed light on how different SEZ set-ups influence the wider impact SEZs have on their surrounding areas and host countries. More causal quantitative evidence on the role of SEZ policies for firms' international investment decisions would also help substantiate the findings of this qualitative analysis.

Endnotes

1. We use the term 'low- and middle-income countries' and developing countries interchangeably in the rest of the article.

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APPENDIX 1

Case studies

This appendix takes a closer look at the seven SEZs considered. Table A1 provides an overview of their key characteristics. The zones reflect the heterogeneity of SEZs around the world, representing a real mix in terms of set-up, sectorial focus, number and size of firms, as well as incentives and facilities offered.

In terms of type of operator, publicly operated zones dominate the sample (Kulim HTP, Saigon HTP, Coega IDZ, and Bole Lemi IP I). Santander ZF is the only fully privately operated zone, while Lekki FTZ and Kigali SEZ are set up as public-private-partnerships.

The number of firms and employment within each SEZs varies greatly. As mentioned above, Bole Lemi IP contains the smallest number of firms (9) and Kigali SEZ the largest (86). The range was even larger in terms of employment numbers. Lekki FTZ currently provided jobs for around 850 people, whereas 38,000 people worked in the Saigon HTP. The total number of firms did not necessarily correlate with employment created. While Bole Lemi IP I had the lowest number of firms, it employed *circa* 14,000 people, as all firms in the park fell into the ‘large’ category. In contrast and despite housing the highest number of firms, only 6,600 employees worked at the Kigali SEZ, as many firms were small- and medium-sized.

In terms of sector focus, manufacturing dominated, with the exception of the Santander ZF (which is mixed). There were differences in the technological composition of the zones. Kulim and Saigon HTPs, by design, targeted more high-tech industries, whereas the rest hosted either relatively low-tech firms or firms with a more varied profile. Bole Lemi IP I was the only single sector focused zone in the sample.

There were also a large range of fiscal incentives on offer. The most comprehensive package was linked to the Lekki FTZ, including a full exemption from all federal, state and local taxes, while the incentive packages were less generous in some of the other zones, such as the Kigali SEZ and Coega IDZ. All zones offered some sort of duty free import of inputs.

Finally, the majority of the zones supplied both serviced industrial land and pre-built factory units, depending on companies’ preferences. The only notable exceptions where Bole Lemi IP I—which only provided pre-built factory units—and Kulim HTP—which primarily contributed serviced industrial land.

Table A1. Overview of SEZs

SEZ	Operator	Firms	Employment	Sector focus	Key fiscal incentives on offer	Infrastructure
Bole Lemi IP I	Public	9	~14,000	Garment	<ul style="list-style-type: none"> - 100% corporate tax exemption up to 10 years - Duty free import of raw materials, inputs and capital goods - Subsidized land rents 	<ul style="list-style-type: none"> - Pre-built factory units
Coega IDZ	Public	40	~5,500	Mixed manufacturing	<ul style="list-style-type: none"> - Subsidized electricity, sewer, Internet and infrastructure services - Corporate tax exemptions planned, but not implemented yet - Customs and Control Areas (CCA): relief from customs duties and VAT on raw material used for manufacturing, goods for storage, capital equipment used in the CCA and goods for the construction and maintenance of infrastructure inside the CCA, service rendered in the CCA, and rental payments made within the CCA 	<ul style="list-style-type: none"> - Serviced industrial land - Pre-built factory units
Kigali SEZ	PPP	85	~6,600 (up to 15,000 non-permanent)	Mixed manufacturing	<ul style="list-style-type: none"> - Corporate Tax Rate for companies exporting more than 80%: 15% vs 30% in the rest of the country - Duty free import on raw materials and inputs 	<ul style="list-style-type: none"> - Primarily serviced industrial land, but also some pre-built factory units
Kulim HTP	Public	37	~22,500	Mixed high-tech manufacturing	<ul style="list-style-type: none"> - Pioneer Status (income tax exemption ranging from 70% to 100% for a period of 5 or 10 years) - Investment Tax Allowance (60% or 100% on qualifying capital expenditure for 5 years) - Reinvestment Allowance (60% on qualifying capital expenditure for 15 consecutive years) - Import Duty Exemption for raw materials / components and machinery and equipment) 	<ul style="list-style-type: none"> - Primarily serviced industrial land, but also some pre-built factory units
Lekki FTZ	PPP	25	~850	Mixed manufacturing	<ul style="list-style-type: none"> - 100% tax exemption from all federal, state and local government taxes - Duty free import of raw materials, components and capital goods - Waiver on all export and import licenses - Permission to sell manufactured/assembled/imported goods into the domestic market with import duty on manufactured goods calculated upon value of raw materials or components 	<ul style="list-style-type: none"> - Serviced industrial land - Pre-built factory units
Saigon HTP	Public	60	~ 38,000	Mixed high-tech manufacturing	<ul style="list-style-type: none"> - Corporate Tax Exemption: 0% for the first 4 years, then 5% for the following 5 years, and 10% for the final 2 - Import duty exemptions for capital goods and raw materials - Import duty and VAT exemptions for goods for direct use in scientific research and technological development - Export duty exemption and 0% VAT for exporting hi-tech products 	<ul style="list-style-type: none"> - Serviced industrial land - Pre-built factory units

SEZ	Operator	Firms	Employment	Sector focus	Key fiscal incentives on offer	Infrastructure
					- Subsidized land rents	
Santander ZF	Private	35	~ 1,500	Services & mixed manufacturing	<ul style="list-style-type: none"> - Corporate Tax Rate: 20% vs 37% in the rest of the country - 100% exemption from VAT - 100% exemption for 3 years from Industry and Commerce municipal tax and a gradual payment in the 10 years thereafter 	<ul style="list-style-type: none"> - Serviced industrial land - Pre-built factory units