

CHAPTER IV

SPECIAL ECONOMIC ZONES



INTRODUCTION

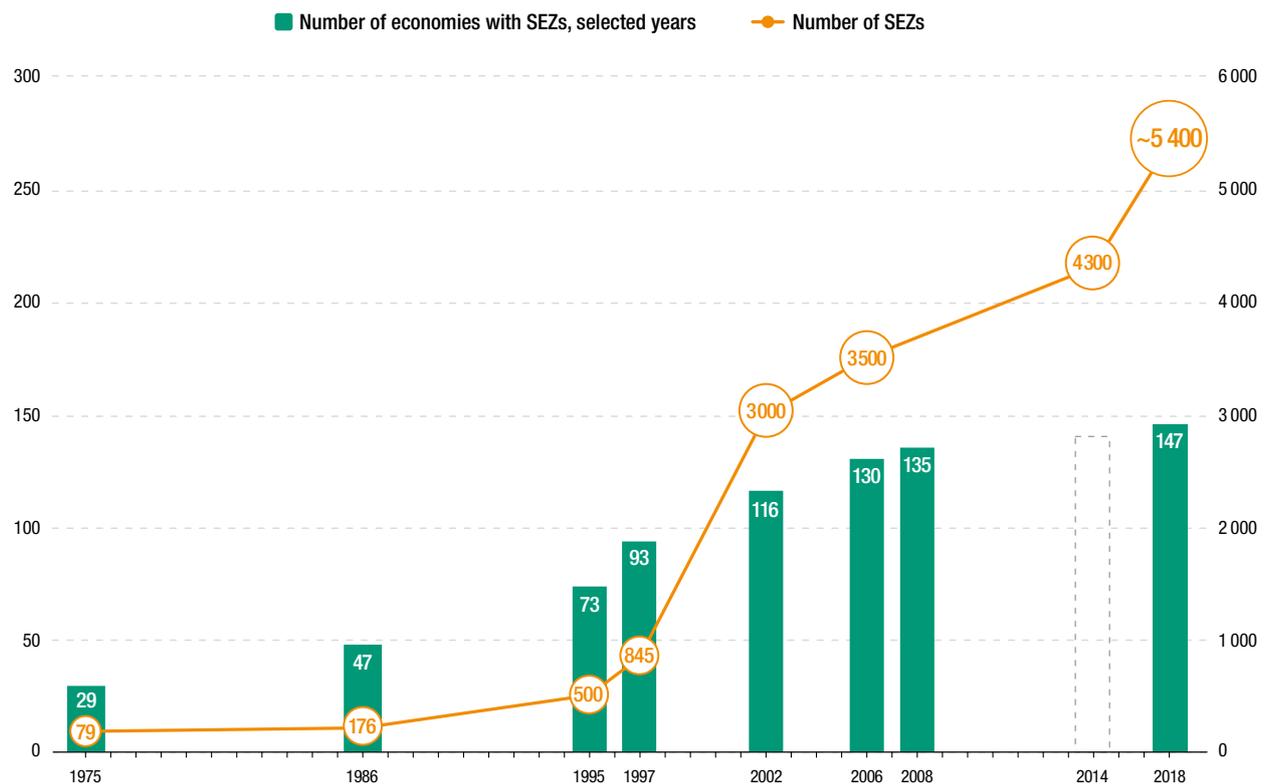
Special economic zones (SEZs) – geographically delimited areas within which governments facilitate industrial activity through fiscal and regulatory incentives and infrastructure support – are widely used across most developing and many developed economies. Although the performance of many zones remains below expectations, failing either to attract significant investment or to generate economic impact beyond their confines, new zones continue to be developed, as governments increasingly compete for internationally mobile industrial activity. Policymakers face not only the traditional challenges of making SEZs succeed, including the need for adequate strategic focus, regulatory and governance models, and investment promotion tools, but also new challenges brought about by the sustainable development imperative, the new industrial revolution and changing patterns of international production.

SEZs go by many names and come in many varieties and sizes. They have in common that, within a defined perimeter, they provide a regulatory regime for businesses and investors distinct from what normally applies in the broader national or subnational economy where they are established. The most common types of SEZs are variations on free zones, which are essentially separate customs territories. In addition to relief from customs duties and tariffs, most zones also offer fiscal incentives; business-friendly regulations with respect to land access, permits and licenses, or employment rules; and administrative streamlining and facilitation. Infrastructure support is another important feature, especially in developing countries where basic infrastructure for business outside these zones can be poor. In return for these customs, fiscal and regulatory concessions; business-support measures; and investments in physical infrastructure, governments expect investors operating in SEZs to create jobs, boost exports, diversify the economy and build productive capacity.

SEZs have a long history (figure IV.1). The concept of freeports dates back many centuries, with traders operating off ships, moving cargoes and re-exporting goods with little or no interference from local authorities. Modern free zones, adjacent to seaports or airports or along border corridors, appeared in the 1960s. They began multiplying in the 1980s, with the spread of export-oriented industrial development strategies in many countries, especially in Asia, as well as the increasing reliance of global manufacturers on offshore production. The acceleration of international production in the late 1990s and 2000s and the rapid growth of global value chains (GVCs) generated another wave of new SEZs, with many developing countries across all regions aiming to emulate the early success stories. Global trade rules limiting incentives linked to exports and the phasing out of exemptions to those rules for low-income countries were expected to curtail the growth of export processing zones (EPZs). Yet the trend barely slowed, as SEZ policies adapted to the new rules, while maintaining the basic offer to investors – business-friendly environments with relief from customs and fiscal duties. The global financial crisis and the resulting dip in global trade only marginally slowed the establishment of new SEZs. The current deceleration in globalization and international production is having the opposite effect, as governments are responding to greater competition for mobile industrial activity with more SEZs and new types of SEZs. There are nearly 5,400 SEZs today, more than 1,000 of which were established in the last five years. At least 500 more zones (approximately 10 per cent of the current total) have been announced and are expected to open in the coming years.

The continued enthusiasm for SEZs among governments around the world belies the impact of these zones, which is often mixed. In developing economies that followed export-

Figure IV.1. | Historical trend in SEZs (Numbers of countries and SEZs)



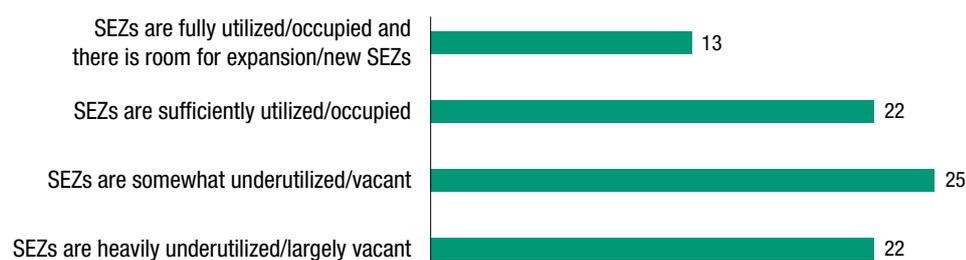
Source: UNCTAD.

Note: The trend is indicative only. Historical estimates are based on ILO (2014) for 1975, 1986, 1995, 1997, 2002 and 2006; FIAS (2008) for 2008; *The Economist* (2015) for 2014; and UNCTAD for 2018. Scope and definitions of the various estimates across years may differ.

oriented development strategies, there are many examples of highly successful SEZs that played a key role in industrial transformation. But even in those economies, examples abound of zones that did not attract the anticipated influx of investors or did so only late. In latecomer countries, there are many more cases of zones that, once established by law, remained un- or underdeveloped for decades, and today’s stock of SEZs includes many underutilized zones (figure IV.2). Even where zones have successfully generated investment, jobs and exports, the benefits to the broader economy – a key part of their rationale – have often been hard to detect; many zones operate as enclaves, with few links to local suppliers and few spillovers.

In addition to doubts about the economic benefits of SEZs, the very concept of establishing a regulatory regime distinct from – and in many respects laxer than – the rest of the

Figure IV.2. | Level of utilization of SEZs according to national investment promotion agencies (Percentage of survey respondents)



Source: UNCTAD Investment Promotion Agencies Survey.

Note: The survey was conducted from February to April 2019. Results are based on information from 114 respondents.

economy has raised concerns about social standards and labour conditions in EPZs, and about their environmental impact. Looser regulations have mostly focused on labour rules, including, for example, precarious employment arrangements and the discouragement of unions (although some studies also highlight the formal nature of jobs in SEZs and the often relatively high wages compared with those in the surrounding economy). Even where there may not be formal exemptions from national rules such as those on health and safety, weaker controls and limited enforcement within the zones resulting from a desire to avoid disrupting businesses have often meant that standards within zones differed significantly from the rest of the economy.

Despite these concerns, SEZs remain top of mind for industrial and investment policymakers, for a number of reasons.

First, the relative ease of implementing business reforms through SEZs. In countries where governance is relatively weak and where the implementation of reforms nationwide is difficult, SEZs are often seen as the only feasible option, or as a first step. Yet developing countries that have made progress towards more attractive investment climates also continue to rely on SEZs. When such progress fails to deliver better competitiveness rankings or expected foreign investment, SEZs may still be seen as a necessary complement to the investment promotion package and as a signal of the country's progress in building an attractive investment climate.

Second, the perceived low cost of establishing SEZs. A key rationale for SEZs is their low cost in relative terms, compared with that of building equivalent industrial infrastructure in the entire economy. But even in absolute terms, the upfront investment costs can be contained. Capital expenditures for the development of an SEZ – especially basic zones offering plots of land rather than hyper-modern “plug-and-play” zones – are often limited to basic infrastructure connections to the zone perimeter. Additional costs, which are mostly outsourced to a private development company, are then incurred gradually as the zone attracts investors and develops individual plots. In such cases, the government considers basic zone development costs as largely “no cure, no pay”. The development cost, as well as the cost of common services in the zones, is subsequently recovered from tenants. Much of the cost of SEZs is the income foregone from the incentives provided, which can amount to substantial revenue loss. Such foregone income is rarely a concern for policymakers when they consider establishing SEZs, however.

Third, increased competitive pressure. SEZs, especially EPZs, traditionally attract internationally mobile efficiency-seeking investments, for which countries compete. Despite the emergence of new forms of zones linked to natural resources, aimed at domestic markets or targeting innovation capabilities (e.g., science, high-tech or green zones), most SEZs remain essentially part of countries' competitive investment promotion package, together with other forms of incentives. Global FDI has been weak over the last decade. Manufacturing FDI across all developing regions has been structurally lower over the last five years than in the preceding period. In response to the tight market for investment in industrial activity, governments continue to make their investment promotion packages more attractive.

With the long experience and widespread use of SEZs, there is a vast amount of research documenting success stories and failures, describing key characteristics of SEZs and analysing their economic, social, environmental and development impacts. Policy advice tends to centre on three dimensions: (i) the strategic focus of SEZs, (ii) the regulatory framework and governance of SEZs and (iii) the design of the SEZ value proposition, or the package of benefits for investors.

Strategic focus. Economies that have most successfully achieved rapid industrial development through the use of SEZs underscore that zones are not only an investment

promotion tool, but first and foremost an industrial policy tool. East and South-East Asian economies, by design or by implementation, present many cases of zones focused on specific industries or on economic activities and value chain components that rely on similar factors of production, skills, technologies and market linkages. The scope for synergies, as well as for sharing resources and costs, in such clusters is an important factor driving the success of these SEZs and their contribution to national economic development. Latecomers to SEZs, including many of the least developed countries (LDCs), have often followed a multi-activity approach with no active efforts to promote specialization or clustering, reducing the zones to mere investment promotion tools – essentially incentives available in limited geographic areas.

Regulatory framework and governance. SEZs, as territories with regimes that depart from national rules, are necessarily a public initiative. The development, ownership and management of individual zones, however, can be public, private or a public-private partnership (PPP). Private developers are often engaged to minimize initial public outlays and to access international expertise in zone design, construction and marketing. Zone management and oversight can involve various government levels (local, regional, national), investors and businesses operating in the zone, and numerous other stakeholders, such as financiers, industry associations and representatives from local communities or other interest groups. Numerous governance models exist, sometimes within the same jurisdiction, and the choice depends on the objectives and desired strategic focus of individual SEZs. The legal framework for SEZs – mostly national SEZ laws or provisions in customs or other legal frameworks – often sets the parameters for these zones' governance and institutional set-up.

Value proposition. SEZ legal frameworks almost always define the package of benefits for investors in zones, especially exemptions from customs, tax and other national regulatory regimes. As SEZs all derive from the concept of free zones – free from tariffs, taxes and red tape – the basic components of incentives package are very similar across most types of zones and most geographies. Much research identifies the provision of hard and soft infrastructure around the zones, the availability of adequate skills and supplier bases, and business facilitation and shared services as critical success factors for zone development and impact. These are also the benefits that can more easily support active clustering and specialization efforts in the zones.

In today's global business and investment climate, the strategic focus, the regulatory and governance models, and the incentives package offered remain the key ingredients of a successful SEZ policy framework. However, policymakers also face emerging challenges resulting from the sustainable development imperative, the new industrial revolution and changing patterns of international production.

The global sustainable development agenda embodied in the United Nations Sustainable Development Goals (SDGs) is affecting the strategic decisions and operations of businesses

Key dimensions driving SEZ success

- Strategic focus
- Regulatory framework and governance
- Value proposition for investors

New challenges facing SEZs

- Sustainable development imperative
- New industrial revolution and digital economy
- Changing patterns of international production

around the world. The efficiency and cost savings that might be associated with lower social and environmental standards are no longer considered a viable competitive advantage, especially in industries that have incurred or are at high risk of reputational damage. As such, offering laxer social and environmental rules or controls is no longer a competitive

advantage to attract investment in SEZs. As reported in a recent UNCTAD study on the contribution of SEZs to the SDGs, some zones are beginning to shift away from lower standards and are instead incorporating sustainable development into their operating model, with sustainability-related shared services (e.g. common health and safety services, waste management plants, renewable energy installations) among the clustering synergies that SEZs can deliver.

The new industrial revolution – the adoption across all industries of digital technologies, advanced robotics, 3D printing, big data and the internet of things – is transforming manufacturing processes, related services and business models, with wide-ranging implications for international production and GVCs. Some of these changes, mainly the heightened technological scope for reshoring production and the declining importance of labour costs as a locational determinant for investment, have fundamental implications for SEZs and their use in industrial development and investment promotion strategies. The new industrial revolution also comes with opportunities for SEZs (or SEZ development programmes) that can offer access to skilled resources and clusters of relevant business and technology service providers.

Changing patterns of international production, as routinely documented in the *World Investment Report* over recent years, are driven in part by structural changes in international business, with a shift towards intangibles and overseas operations that are increasingly asset light. These patterns are therefore less concerned with the production advantages offered by SEZs. They are also driven by economic and policy factors. The growing weight of emerging markets in global trade and investment has implications for SEZ clientele. The return of protectionist tendencies and slow progress in the international policy regimes for trade and investment are leading industrial investors to constantly assess strategic locations for low-cost production in light of potential new trade barriers or shifts in preferential market access. The regionalization of trade and investment agreements has further implications for SEZ competitiveness, depending on import sources and export destinations, as well as the status of SEZs in regional agreements.

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This year's *WIR* takes stock of SEZs as key industrial and investment policy tools around the world. It provides an overview of how governments have approached the key challenges related to strategic focus, regulatory and governance models and investment promotion packages. In its policy guidance, the report then focuses on the new challenges of supporting sustainable development, adapting to the new industrial revolution and responding to shifts in international production.

To do so, the first section of this chapter documents the current universe of SEZs, details archetypes of zones and maps zones around the world, as well as identifying different approaches to functionality, governance and investment promotion tools across countries.

The subsequent section looks at policy support and legislative frameworks for SEZs through a global data set of national SEZ laws. The section also discusses the international policy framework for SEZs.

The third section examines lessons learned about the SEZs' impact in terms of investment, jobs and exports, as well as their broader impact on sustainable development.

The concluding section brings together insights from the mapping of SEZs, SEZ laws and impacts, and offers recommendations to address today's "triple challenge".

A. THE UNIVERSE OF SEZs

1. Mapping SEZs: scope, definitions and taxonomy

SEZs go by many different names (including free zones, export processing zones and industrial parks), and come in many varieties. For the purpose of data collection, this report focuses on zones with a distinct regulatory regime. However, governments also use other zone-based concepts (e.g. science parks, regional development zones, urban regeneration zones), which are included in the policy discussion. The report proposes a taxonomy of zones based on (i) specialization and (ii) design and governance characteristics.

Estimates of the number of SEZs worldwide in studies carried out over the last few decades range significantly. This lack of certainty reflects the absence of a universal definition for SEZs. The terminology used across countries varies wildly, with the most common terms – free zones, special economic zones, free trade zones, export processing zones, free economic zones, and freeports, in that order – all used inconsistently.¹ *This report has opted to use the term special economic zones or SEZs as the generic term covering all types.*

As part of the research undertaken for this report, UNCTAD has collected data on SEZs worldwide. The data, from public sources or from relevant institutions in each economy, have been verified with national authorities where possible. A summary data set with key statistics by economy is included as a web-based annex to this report.

UNCTAD's data set is based on the most commonly used definition of SEZs, which centres on three key criteria:

- A clearly demarcated geographical area
- A regulatory regime distinct from the rest of the economy (most often customs and fiscal rules, but potentially covering other relevant regulations, such as foreign ownership rules, access to land or employment rules)
- Infrastructure support

Data sets developed by other organizations and researchers have used similar criteria. One of the most comprehensive catalogues of zones, used by the World Free Zone Organization and based on the “Atlas mondial des zones franches” (Bost, 2010), uses the same criteria but focuses on customs-free zones only, excluding SEZs that provide other regulatory exemptions. Other organizations, notably the International Labour Organization (ILO) and the World Bank, have also developed data sets that differ from UNCTAD's data set, mainly because the broad definition of SEZs leaves room for different interpretations.

On the basis of the three criteria above, some types of economic zones commonly assimilated in or equated with SEZs either fall outside the definition or should be regarded as borderline candidates. Common industrial parks, which can be found in almost all urban agglomerations, especially in developed economies, have a clearly demarcated area and may even provide some publicly funded basic infrastructure, but they do not offer a special regulatory regime or incentives. With the exception of those in some Asian countries, which are combined with active clustering initiatives, they are generally not driven by a national industrial policy.

Similarly, many science parks, which are particularly popular in developed countries (there are more than 360 in the European Union (EU), for example), occupy a defined area and enjoy infrastructure support (box IV.1). Unlike industrial parks, they are established

Like SEZs, science parks come in different forms and under different names. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has estimated that there were over 400 science parks by the early 2010s. Other estimates vary depending on how such institutions are defined. The International Association of Science Parks and Areas of Innovation defines the aim of a science park as “promoting the culture of innovation and the competitiveness of its associated businesses and knowledge-based institutions”.

Relatively few entities meet the criteria for both SEZs and science parks. Most science parks are not SEZs as defined in this report, as they tend to lack a distinct regulatory framework. Conversely, not all SEZs that focus on science, technology and innovation qualify as science parks since they may not have recognizable links to knowledge-based institutions (e.g. universities). The activities in science parks and high-tech zones tend to be distinct, with the former focusing on the commercialization of research and the incubation of start-ups, and the latter on scaled-up manufacturing in technology-intensive industries.

An EU report in 2013 estimated that there were 366 science and technology parks in the EU member States, covering about 28 million square metres of completed building floor space and hosting some 40,000 organizations that employed approximately 750,000 people (European Union, 2013). The report estimates capital investment in these parks to have been about €11.7 billion in the period 2000–2012, of which €4.8 billion was public funding. Much of the capital expenditure was for building works.

China had established 156 high-tech development zones (HTDZs) by the end of 2017. Starting in the late 1990s, HTDZs were established in major cities such as Beijing and Shanghai and in provincial capitals, building on the existing knowledge and industrial base. They then spread across the country. Incentives offered include access to quality infrastructure, corporate income tax exemptions for the first two years, a preferential 15 per cent corporate income tax, exemptions from tariffs on high-tech equipment and special treatment for employees at the discretion of each zone, such as exemptions from income tax, subsidies on housing, cars, etc. In 2017, the 156 HTDZs contributed \$1.42 trillion to China’s GDP, or 11.5 per cent of the economy. In these zones, the ratio of research and development (R&D) expenditures to total production value was 6.5 per cent, three times the average in the national economy. Patents granted to enterprises in the zones account for 46 per cent of all business patents granted nationwide.

In Turkey, technology development zones (TDZs) are areas designed to support R&D activities and attract investments in high-tech fields. There are 83 TDZs, 20 of which are under construction. Incentives include exemption of corporate income tax on profits for software development, R&D and design activities; exemption from value added tax on the sale of software produced in TDZs; and exemption from income tax for employees engaging in R&D, design and support activities. Exemption from customs duties on imported goods and subsidies on social security premiums are also offered.

In the transition economies, the Russian Federation established six techno-innovative SEZs between 2005 and 2015, three in the Moscow region, one in St. Petersburg and two in other regions. These six zones have been among the most successful SEZs in the country (Kuznetsov and Kuznetsova, 2019). By early 2018, they hosted 374 residents, including 39 foreign firms. With over 14,000 jobs created, they exceeded the job creation performance of industrial SEZs in the country (13,000 jobs). The Skolkovo Innovation Centre (Moscow), a high-tech business area established by a separate law in 2010, enjoys tax privileges similar to those of SEZs. In addition to hosting firms in advanced microelectronics, nanotechnology and other science-based areas, the Centre also aims to spearhead sustainable development by sourcing at least half of the energy consumed by the zone from renewable sources and by constructing energy-neutral buildings, recycling water and minimizing pollution by transport.

In Belarus, the Free Economic Zone Gomel-Raton (established in 1998) and the China–Belarus Industrial Park Great Stone (established in 2012, designated an SEZ since 2018) target high-technology investors. The two host a combined 111 residents, not only from Belarus but also from Austria, China, Germany, the Russian Federation and the United States, among others. In Kazakhstan, the SEZ Technological Innovation Park in Almaty (established in 2003) focuses on attracting technology-based activity by hosting an information technology (IT) centre, robotics facilities and business solutions in the form of a special cluster.

Source: UNCTAD.

by the public or semi-public sector to foster active clustering, attracting businesses in high-tech industries and nurturing start-ups linked to university research institutions. But like industrial parks, they generally do not offer exemptions from customs, fiscal or other regulatory obligations.

Differences in terminology and the appropriation of terms for other purposes can also cause confusion. For example, the term “free zone” – a form of SEZ focused on customs relief – is used in some countries for concepts that fall outside the definition of SEZs. For example, “urban free zones” in France are initiatives that support small businesses and local services in underprivileged inner-city areas.

Similar initiatives to revive local areas or regions with relatively high unemployment exist in other, mostly developed countries. Some of those initiatives may include some form of fiscal incentives, making them borderline SEZs. For example, in the United Kingdom, enterprise zones promoted by local governments provide discounts on local property taxes (but not corporate income taxes, which is the norm in most SEZs). These zones mostly focus on supporting small and medium-sized enterprises (SMEs), and are not part of active clustering efforts or a national industrial policy. Opportunity zones in the United States are another example. These provide relief from capital gain taxes when investing in economically distressed areas.

Some countries also provide the benefits of free zones to individual production sites. The maquiladoras in Mexico were the original example of this approach. Such a free-point regime can be considered a form of free zone, without the demarcated geographical area. In some countries individual free points are counted as zones, resulting in reports of hundreds of SEZs. (For the purpose of the inventory in this report, the nearly 8,400 free points worldwide have been excluded from the count.)

At the other extreme are province-sized SEZs, originally conceived in China. (The Chinese Government reserves the term “special economic zone” for its five original province-sized zones.) Most SEZs around the world range from less than a hundred to a few hundred hectares in area (about 1 square kilometre on average). Free zones, which usually are fenced to demarcate the separate customs territory, tend to be particularly limited in surface area. Province-sized zones, whose original purpose was to pilot economic or business reforms, provide distinct regulatory regimes. A province can also arguably be considered a defined area (if not, perhaps, demarcated). However, the infrastructure in such areas consists of existing urban or provincial infrastructure and is not dedicated to the zone.

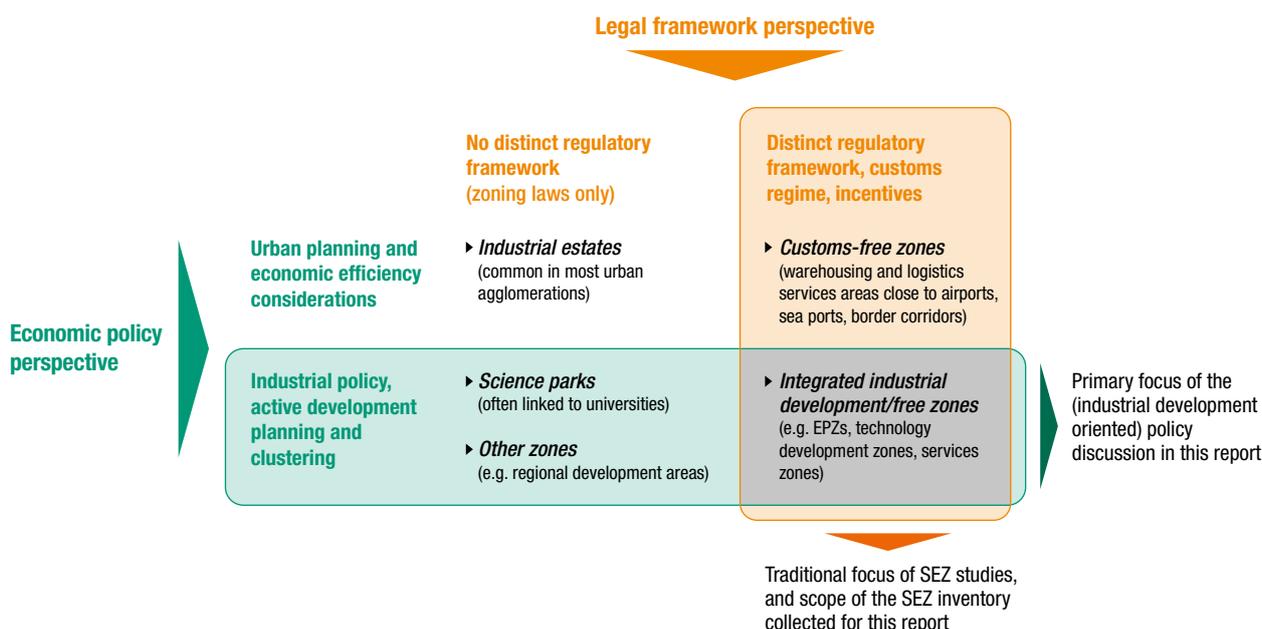
If defining the exact parameters of SEZs is difficult, distinguishing between different types of SEZs can be similarly complex. Most SEZs derive from the concept of free zones (also called free trade zones or commercial free zones), the defining characteristic of which is a separate customs area. Free zones tend to be located next to seaports, airports or border corridors, hosting mostly firms that provide warehousing, logistics and services. In most developed economies, the free zone model has remained close to this original concept. Often, such zones have adjacent industrial parks for businesses that rely on these services and on easy access to international markets, but these adjacent areas generally do not fall under a distinct regulatory regime themselves. In developing countries, in contrast, most SEZs are meant to attract investment in diversified industrial activity and therefore tend to provide customs, fiscal and regulatory benefits to all businesses in larger, integrated industrial free zones.

To add to the complexity, there are numerous examples of zones within zones. The province-sized zones in China often contain various other types of SEZs. But even smaller SEZs that offer fiscal or regulatory incentives sometimes host a free zone (thereby adding customs exemptions) within their perimeters.

The approach followed in this report combines a *legal framework perspective* – what is special about the regulatory framework within a zone – with an *economic purpose perspective* – to what extent is a zone part of an active industrial policy or clustering effort (figure IV.3).

For the purpose of mapping SEZs around the world, this report takes a pragmatic approach focusing on zones with a distinct regulatory framework (i.e. the right-hand column in the matrix in the figure). That criterion ensures an objective source in the form of a national law and, in the vast majority of cases, a national authority that can verify and confirm the data.

Figure IV.3. SEZ scope and definitions: a matrix combining two perspectives



Source: UNCTAD.

From a development perspective, as well as an investment policy perspective, zones that are established as an integral part of industrial policy with active clustering efforts (i.e. the bottom half of the matrix) are the more relevant. Although free trade zones (FTZs), which mostly focus on logistics and warehousing services, are important – especially in developed countries – most existing and planned zones in the developing world are integrated free zones that aim to attract investment in industrial activity.

Many zones that do not have a distinct regulatory regime are established with clear industrial development objectives in mind. Government authorities, often at the subnational level, as well as semi-public and private institutions, have brought enormous innovations to the concept of zones, building specialized zones for science, start-up incubation, R&D, biotech, greentech and many other purposes. Such zones can certainly be valid policy options and alternatives to SEZs. Although it is impossible to provide an exhaustive catalogue of these zones – national governments often do not keep statistics on initiatives of this kind – this report includes them in the policy discussion where relevant.

The statistics presented in the next sections present further complexities. For example, the tallying of zones depends on whether to consider zones as planned, established, under development or operational. There is no uniform approach: studies assessing the impact of SEZs, for example, need to focus on operational zones, while those assessing SEZs as part of investment promotion focus on established zones. An added difficulty is that countries are inconsistent in their labeling of zone status, and zone development pipelines vary – for example, “under development” can mean that several tenants are operating in the zone already, but additional investors are being sought. This report includes all zones established by law. Information on planned zones, where available, is included separately in the web-based annex table.

In addition, SEZs can be classified according to their specific objectives or industrial focus (e.g. high-tech parks, services parks), their location (e.g. port-based zones, border zones), or the type of regulatory regime that applies (e.g. FTZs, commercial free zones). Table IV.1

Table IV.1. A functional taxonomy of SEZs

Organizing principle	Type	Description
Specialization	Logistics hubs (FTZs)	<ul style="list-style-type: none"> Commercial, warehousing and logistics services Trade facilitation services for trans-shipping and re-exports, at airports, seaports, borders Can be located next to or within larger industrial estates
	Multi-activity SEZs	<ul style="list-style-type: none"> General industrial development, non-specialized
	Specialized SEZs	<ul style="list-style-type: none"> Focused on sectors (e.g. services, resource or agro-based) Focused on industries (e.g. automotive, electronics, garments) Focused on GVC activities (e.g. business process outsourcing, call centres, R&D centres)
	Innovation-driven SEZs	<ul style="list-style-type: none"> Focused on industrial upgrading and new industries, e.g. high-tech zones, biotech zones, ecozones
Design and governance	Wide-area zones	<ul style="list-style-type: none"> Large, integrated zones, often coinciding with a subnational administrative region or built as townships with residential areas and amenities Original purpose of the largest zones was to pilot economic reforms
	OFDI/ODA-driven zones	<ul style="list-style-type: none"> Established under a partnership between capital-exporting economies and lower-income economies
	Cross-border/regional development zones	<ul style="list-style-type: none"> Established to foster regional economic cooperation and to exploit economies of scale associated with regional markets

Source: UNCTAD.

FTZ = free trade zone, GVC = global value chain, ODA = official development assistance, OFDI = outward foreign direct investment, R&D = research and development, SEZ = special economic zone.

takes a different approach, combining as organizing principles (i) the focus of zone activities and (ii) the design and governance of zones. It provides a functional taxonomy of zones that is referred to throughout the report.

2. Overview of SEZs worldwide

a. Global patterns: the SEZ development ladder

SEZs are used by more than 140 economies around the world, almost three quarters of developing economies and almost all transition economies. Their number has grown rapidly in recent years, and at least 500 more are in the pipeline. Most SEZs are multi-activity zones. Industry-specialized zones and zones focusing on innovation are concentrated in more advanced emerging markets. Most developed-country SEZs focus primarily on logistics. The use of zones by countries at different stages of industrialization shows a clear SEZ development ladder.

UNCTAD's inventory for this report includes at least 5,383 SEZs in 147 economies (tables IV.2 and IV.3).

The economic significance and policy objective of SEZs differ substantially among economies at different levels of development. In developed economies, most SEZs are customs-free zones. Their role is to provide relief from tariffs and, more importantly, from the administrative burden of customs procedures, in order to support complex cross-border supply chains. In developing economies, in contrast, the primary aim of SEZs is generally to build, diversify and upgrade industries by attracting FDI. In fact, economies that have

Table IV.2. Number of SEZs, by region 2019

	Total number of SEZs	... of which under development	Additional SEZs planned
World	5 383	474	507
Developed economies	374	5	..
Europe	105	5	..
North America	262
Developing economies	4 772	451	502
Asia	4 046	371	419
East Asia	2 645	13	..
China	2 543	13	..
South-East Asia	737	167	235
South Asia	456	167	184
India	373	142	61
West Asia	208	24	..
Africa	237	51	53
Latin America and the Caribbean	486	28	24
Transition economies	237	18	5
<i>Memorandum</i>			
LDCs	173	54	140
LLDCs	146	22	37
SIDS	33	8	10

Source: UNCTAD.

Note: Zones are counted on the basis of their establishment by law. They exclude 8,368 single-enterprise zones (free points) found in 18 economies. SEZs in other developed economies (Australia, Israel, Japan and New Zealand) and in Oceania were counted towards the respective economic group's aggregate and the global total. Data for those individual economies are available in the web annex table.

Table IV.3. Number of economies with SEZs, by approach to SEZ regime, 2019

	SEZs only	SEZs + free points	Free points only	No SEZ/ No information
World	129	17	1	51
Developed economies	26	0	0	12
Europe	23	0	0	12
North America	1	0	0	1
Developing economies	87	16	1	38
Africa	32	5	1	16
Asia	33	2	0	5
East Asia	4	1	0	2
South-East Asia	11	0	0	0
South Asia	6	0	0	3
West Asia	12	1	0	0
Latin America and the Caribbean	20	9	0	7
Transition economies	16	1	0	1
<i>Memorandum</i>				
LDCs	26	3	1	17
LLDCs	20	2	1	9
SIDS	6	4	0	18

Source: UNCTAD.

Note: The total number of economies examined is 198, consisting of all UN Member States, Hong Kong (China), Macao (China), Taiwan Province of China and other non-UN Member States with at least one established SEZ (Aruba, Cayman Islands, Curaçao, Kosovo and the State of Palestine). Information on other developed economies (Australia, Israel, Japan and New Zealand) and the 12 economies in Oceania was counted towards the respective economic group's aggregate and the global total. Data for those individual economies are available in the web annex table.

traditionally struggled to attract FDI show a higher propensity to adopt SEZ programmes. Excluding small island developing States (SIDS), where the availability of resources to build zones is limited (box IV.2), SEZs are found in most structurally weak economies (LDCs and landlocked developing countries (LLDCs)) (see table IV.3). All but one of the transition economies operate SEZs, which, as in China, were considered instrumental in building market economies and increasing participation in international trade.

Although SEZs are widely used, a handful of economies account for the majority of them. China alone hosts over half of all SEZs in the world. Other countries with high numbers of SEZs include India, the United States and the Philippines. Zone concentration is observed at the regional level, too. Economic activity among SEZs is also relatively concentrated, with a few large zones attracting significant amounts of investment and generating a large share of exports while many others, often smaller zones, remain relatively inactive (FIAS, 2008). Nevertheless, even one or two zones can significantly affect a country's FDI and export performance.

Three groups of economies have relatively low SEZ densities. Most developed economies do not have SEZs apart from free zone programmes. The business environment in these countries is considered sufficiently attractive, and many offer alternative policy schemes to facilitate trade in cross-border supply chains, such as duty drawbacks or systems of bonded warehouses. Second, economies that face particular geographical challenges – most notably, as mentioned above, SIDS – have limited resources to create zones, and their locations often make the development of export-oriented manufacturing less viable.

Box IV.2.

SEZs in SIDS

Reflecting the limited public resources in small island developing States (SIDS), SEZ programmes are found in only one third of the 28 SIDS economies, most of which run a system of free points. Given the limited potential for manufacturing, newer SEZ regimes in SIDS are seeking to attract diverse industries, especially services.

To overcome the problem of limited land availability, most SEZ programmes in SIDS offer a special SEZ license or certificate that is not tied to a designated multi-user zone. In Mauritius, for example, the concept of an EPZ has never been limited to any specific geographical zone. Likewise, in Seychelles, the international trade zone license is granted to qualified companies, while the country's fenced-in area, called the Financial Services Authority zone, does not stipulate a special incentives regime for zone occupants, which can be domestic or foreign enterprises with or without an international trade zone license.

Traditionally, the SEZ regime has been used to attract export-oriented FDI in the manufacturing sector. The majority of SIDS economies, however, are increasingly targeting foreign investments in business process outsourcing, information and communication technology, and large-scale hotel and resort projects, as well as private and public investors for developing new zones.

To comply with the World Trade Organization's rules on subsidies, some middle-income SIDS (e.g. Cabo Verde and Jamaica) are modernizing their existing EPZ-type regimes. Mauritius amended its Income Tax Act and the Freeport Act in 2018 to remove the corporate tax exemption on export of goods.

SIDS economies without established SEZs are considering new schemes. Maldives, where the SEZ law was adopted in 2014, has proposed several SEZ projects, including an integrated port and EPZ, as well as an island-wide "Youth City" project to curb youth unemployment by attracting private sector investors. Vanuatu is preparing a new framework to implement a pilot FTZ project (covering 50 ha) in 2019. The proposed zone will seek to attract manufacturing plants as well as call centres, data centres and other digital services.

Source: UNCTAD.

Third, economies with insufficient resources or relatively weak institutional or governance capabilities also tend to have fewer SEZs; the multiplication of zones driven by outward FDI (OFDI) or official development assistance (ODA), however, has eased these constraints.

The development of SEZs has occurred in a series of regional waves (Bost, 2010). In each region, the majority of economies adopted zone programmes within a short period of time. Most countries in East and South-South East Asia began establishing SEZs in the 1970s and the early 1980s. In Latin America, the majority of SEZ programmes were introduced in the late 1980s and 1990s. Transition economies adopted SEZ regimes mostly in the 1990s. In Africa, most programmes were adopted in the 1990s and 2000s.

The adoption of SEZ programmes in waves was due to a combination of emulation and competition. Successful SEZ programmes in East and South-East Asia, which were part of export-led development strategies, provided a model for other regions to emulate. Within regions, individual countries both followed the example of, and competed with, early adopters' successful programmes. As regions compete for investment, SEZs may be seen as both a tool to attract FDI and an instrument to limit the "race to the bottom" to confined areas. Changes in the political climate have also contributed to the adoption of SEZ programmes in waves, particularly in formerly planned economies, where they facilitated economic experimentation and relatively rapid business reforms.

As a result of the development of SEZs in different contexts and at different times, the distribution of zones across regions by type varies (table IV.4). The majority of zones are multi-activity zones (following the functional taxonomy proposed in table IV.1). Industry-specialized zones are more common in transition economies. Innovation-driven zones are most common in the more advanced emerging markets in Asia (they are absent in developed countries because science parks without a distinct regulatory regime are not included in the inventory developed for this report). The bulk of zones in developed markets are pure free zones focusing on facilitating trade logistics.

Countries tend to adopt specific types of SEZs according to their stage of economic development (table IV.5.). Relative newcomers to SEZ programmes, such as numerous economies in Africa, are using SEZs to kick-start manufacturing, industrialization and exports. Many more advanced economies use zones to stimulate industrial upgrading. In transition economies, technology-focused zones are important.

The SEZ development ladder is also apparent in the evolution of zones within economies, especially early adopters of SEZ programmes. In high-income Asian countries (e.g. the Republic of Korea, the United Arab Emirates), for example, zones that were initially intended to attract export-oriented manufacturing are now diversifying towards services and vertical integration, whereas in Latin America and the Caribbean, SEZs that initially focused on warehousing and logistics only have evolved towards manufacturing and services.

Table IV.4. Distribution of zone types, by region or grouping (Per cent)

	Logistics hub	Multi-activity ^a	Specialized	Innovation-driven
World	8	62	24	5
Developed economies	91	9	1	0
Africa	1	89	10	0
Asia	2	65	26	7
China	1	93	1	6
Latin America and the Caribbean	9	77	13	1
Transition economies	3	34	59	5

Source: UNCTAD.

^a Includes unspecified and unknown.

Table IV.5. The SEZ development ladder

	Zone policy objectives	Prevalent zone types
High-income economies	<ul style="list-style-type: none"> • Provide an efficient platform for complex cross-border supply chains • Focus on avoiding distortions in the economy 	<ul style="list-style-type: none"> • Logistics hubs free zones only (not industrial free zones) • Innovation and new industrial revolution objectives pursued through science parks without separate regulatory framework, or though incentives not linked to zones
Upper-middle-income economies	<ul style="list-style-type: none"> • Support transition to services economy • Attract new high-tech industries • Focus on upgrading innovation capabilities 	<ul style="list-style-type: none"> • Technology-based zones (e.g. R&D, high-tech, biotech) • Specialized zones aimed at high value added industries or value chain segments • Services zones (e.g. financial services)
Middle-income economies	<ul style="list-style-type: none"> • Support industrial upgrading • Promote GVC integration and upgrading • Focus on technology dissemination and spillovers 	<ul style="list-style-type: none"> • Specialized zones focused on GVC-intense industries (e.g. automotive, electronics) • Services zones (e.g. business process outsourcing, call centres)
Low-income economies	<ul style="list-style-type: none"> • Stimulate industrial development and diversification • Offset weaknesses in investment climate • Implement or pilot business reforms in a limited area • Concentrate investment in infrastructure in a limited area • Focus on direct employment and export benefits 	<ul style="list-style-type: none"> • Multi-activity zones • Resource-based zones aimed at attracting processing industries

Source: UNCTAD.

Many countries develop more than one type of zone; for example, FTZs and EPZs in Brazil, and SEZs, single-enterprise free points and FTZs in Mexico. This is often the result of a transition to new SEZ models.

b. Regional patterns and innovations

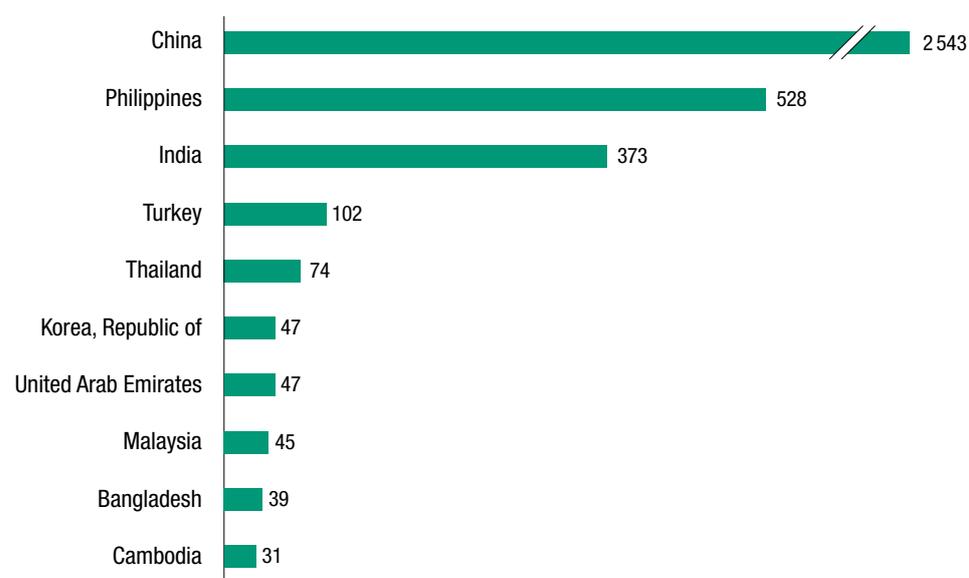
SEZs are used extensively across most regions. The highest numbers of SEZs are found in China, the Philippines, India, the United States, the Russian Federation, Turkey, Thailand, the Dominican Republic, Kenya and Nicaragua, in that order. Countries vary their approach to zone development along several dimensions: the number and physical dimensions of zones; the concentration of zones in a few large ones, multiple free points, or combined schemes; the level of specialization of zones; and the design of zones as stand-alone industrial sites or integrated townships. Examples abound of ambitious zone development schemes, shifts in strategic focus, efforts to turnaround underperforming zones and zone phase-outs.

(i) Asia

Asia is host to three quarters of all SEZs in the world (figure IV.4). Thirty-five economies in the region have SEZ programmes. The nature and history of SEZs vary greatly across the region's diverse economies.

In East and South-East Asia, economies that pursued successful export-oriented development strategies were early adopters of SEZ programmes in the 1960s. In recent decades, the more advanced economies in the region have transformed their SEZs and launched new types of zones, such as high-tech zones and integrated wide-area zones, which include residential areas and amenities. Less developed economies in the region are now rapidly building and expanding SEZ programmes to attract some of the labour-intensive manufacturing activities that more advanced neighbouring economies used to host.

Figure IV.4. | Developing Asia: economies with the most SEZs, 2019



Source: UNCTAD.

In both West and South Asia, SEZ programmes introduced in the 1970s have also recently been revitalized. Since the 2000s, these economies have introduced different types of zones, such as specialized SEZs focusing on services and innovation-driven SEZs, to diversify and upgrade their industries.

A few resource-rich Asian economies, such as Indonesia and the Islamic Republic of Iran, are experimenting with SEZs that specialize in natural resource processing, to attract investment in downstream activities.

Asian foreign investors (e.g. from China, India, Japan, Malaysia and Thailand) participate in the development and operation of OFDI-driven zones in the region. Some of these are being developed in conjunction with bilateral and multilateral assistance in finance and capacity building (e.g. in Bangladesh and Myanmar).

(ii) East and South-East Asia

Among the first economies to establish EPZs were Taiwan Province of China (1966), Singapore (1969) and the Republic of Korea (1970). Through their EPZs these economies succeeded in developing labour-intensive, export-oriented industries, providing a model for others to follow. Most other economies in South-East Asia adopted EPZ policies in the 1970s.

The Asian economic crises in the late 1990s led governments to focus on productivity improvements and industrial upgrading, to reduce reliance on low-cost labour. As a result, SEZs shifted from multi-activity zones to specialized and, in the more advanced economies, innovation-driven SEZs. For instance, Taiwan Province of China established three science parks in the 1980s and four environmental science and technology parks in the 2000s. Three specialized SEZs focusing on agricultural biotechnology were also launched in the 2000s as part of an industrial upgrading strategy. The original Kaohsiung EPZ, the first SEZ in Taiwan Province of China, now includes designated areas for the software industry and for logistics.

Wide-area (or township) zones have been introduced to boost economic growth in underdeveloped regions. In the Republic of Korea, for example, free economic zones were launched in the early 2000s to promote FDI and balance regional growth. These zones

offer not only productive facilities but also residential areas, quality medical services, leisure opportunities and educational institutions. There are eight such zones in the country, along with 13 FTZs and 26 specialized SEZs (complex foreign trade zones).

Similar SEZ policy transformations have taken place in South-East Asia. Singapore established multi-activity zones in the 1960s and specialized SEZs (e.g. petroleum refinery activities) in the 1970s. In the 2000s, its SEZ policy shifted to creating knowledge-intensive clusters through the establishment of innovation-driven SEZs focused on R&D and other high value added activities. In the Philippines, SEZs evolved from customs-free zones limited to foreign trade, first introduced in 1969, to multi-activity zones (EPZs hosting only manufacturing) in the 1970s, and then to specialized SEZs in the 1990s (“ecozones” hosting both manufacturing and services activities, including information and communication technology (ICT) and business process outsourcing). Today, all the zones in the country have an industry focus – either manufacturing, information technology (IT), agroindustry, tourism or health services.

The CLMV countries (Cambodia, the Lao People’s Democratic Republic, Myanmar and Viet Nam) began establishing SEZs to attract labour-intensive manufacturing in the late 1990s and 2000s. Cambodia launched a new SEZ programme in 2005, establishing specialized SEZs to diversify its industrial base beyond electronics and automobile parts. Other low-income countries in the region are just starting their SEZ programmes. Myanmar has one SEZ, with a further two under construction in partnership with China, Japan and Thailand.

Besides their impact on national economies, SEZs in East and South-East Asia also significantly contribute to regional economic integration by facilitating regional value chains (AIR17). A number of recent SEZs in the region were expressly established to facilitate not only regional trade but also exchanges of resources. In Cambodia, the Lao People’s Democratic Republic and Thailand, most SEZs have been developed near border corridors with neighbouring countries, to promote cross-border trade and investment.

In addition, some SEZs in South-East Asia explicitly seek to address uneven development within economies, as in the Korean example. One of the objectives of Cambodia’s SEZs is to establish economic links between urban and rural areas. In Malaysia, regional economic corridors – a new type of SEZ – were launched in the 2000s to promote development in rural provinces.

(iii) China

China’s SEZs originated in its “reform and opening up” policy in the early 1980s. To experiment with market economy reforms, SEZs were established in four coastal cities (Shenzhen, Zhuhai, Shantou and Xiamen) located close to Hong Kong, China; Macao, China; and Taiwan Province of China. These were followed in the mid-1980s by zones established in cities along the east coast, to fully leverage the geographical advantages of those cities as foreign investment destinations. In the early 1990s and 2000s, two waves of SEZ expansion built on the previous successes. As economic growth took hold in the coastal regions, the geographical focus of new SEZs shifted inland and to the west of China, to promote regional development. The 2018 official Zone Directory records five categories of 552 State-level zones and 1,991 provincial zones, together accounting for over half of all SEZs in the world (table IV.6). This total excludes SEZs established at local levels.

China has been experimenting with new types of wide-area zones. The pilot FTZ established in 2013 is the latest programme of this kind. After 2010, the original four SEZs were expanded to include their entire city administrative areas. These new-generation wide-area zones are expected to test institutional innovations in tackling specific development issues, before being replicated at the State or regional level. Instead of traditional fiscal incentives,

Table IV.6. State-level zones in China

Five categories in the official Directory	Selected types of wide-area zones
<ul style="list-style-type: none"> • Economic and technological development zone (ETDZ) • High-tech industrial development zone (HIDZ) • Special customs zone (SCZ) • Border/cross-border economic cooperation zone (BECZ) • Other types 	<ul style="list-style-type: none"> • Special economic zone • National new area • National innovation demonstration zone • National key experimental zone for development and opening-up • Pilot FTZ • Cross-border e-commerce pilot zone

Source: UNCTAD, based on the Directory of Development Zones of China (Announcement No. 4, 2018), the National Development and Reform Commission, the Ministry of Science and Technology, the Ministry of Land and Resources, the Ministry of Housing and Urban-Rural Development, the Ministry of Commerce and the General Administration of Customs.

support from the central government to these zones focuses on economic liberalization, including investment policy experimentation. For example, the negative list approach for foreign investment (a more open approach to foreign investors that restricts access only in those industries explicitly listed) was first tested in the Shanghai pilot FTZ in 2013, further extended to other pilot FTZs and provinces from 2015 to 2017, and ultimately adopted as national policy in 2018.

(iv) South Asia

India was among the first in the region to adopt SEZs, establishing an EPZ in 1965. Its SEZ programme largely stagnated in the 1960s and the 1970s, however. In the 1990s, in the context of economic liberalization, many of the controls that had stymied SEZ operations were removed. A new scheme introduced in 2000 permitted state governments as well as the private sector to establish SEZs. The SEZ Act in 2005 aimed to push private sector investment to support industrial development. The Act converted EPZs to SEZs and clarified the rules for establishing other SEZs, resulting in a proliferation of new zone plans – although many were subsequently withdrawn in the face of contentious land acquisitions, a lack of demand for SEZ space, economic slowdown and a change in the tax incentive regime for SEZs (Moberg, 2015; Aggarwal, 2010). Today, 231 SEZs are operational, more than 60 per cent of which specialize in ICT-related manufacturing and services. India is now taking a more cautious approach to SEZ development, having eliminated incentives for developers in 2016 and currently phasing out direct tax benefits for tenants by 2020.

Bangladesh’s eight public and one private EPZ are all specialized SEZs focusing on apparel and textiles. The private EPZ, the Korean Export Processing Zone, was developed and is managed by a subsidiary of Youngone Corporation (Republic of Korea). In addition to the nine EPZs, the country hosts another 30 economic zones, 24 of which are under development. Four of these are being developed by international partnerships (box IV.3).

The number of SEZs in South Asia is set to increase substantially in the coming years. India has over 200 new zones in the pipeline, although growth may lose momentum now that permits for a substantial number of zones have been retracted. In Bangladesh, a further 60 SEZs are in the approval process. Pakistan is planning another 39 SEZs, in addition to its existing seven. Nepal, which has two zones, one of which is under construction, has plans to create 12 more.

(v) West Asia

Turkey, which enacted its Free Zone Law in 1985, operates 18 active free zones and has one more under development. Located on the coast or within easy access to ports, the zones are designed to promote classic export-oriented manufacturing investment. In the 2000s, Turkey created a new type of SEZ – technology development zones – to attract

To accelerate economic growth and diversification, Bangladesh established two new agencies in 2010, tasked with leading the development of economic zones and high-tech parks: the Bangladesh Economic Zones Authority (BEZA) and the Bangladesh Hi-Tech Park Authority. Moving away from the EPZ model, the new agencies rely mainly on private capital and expertise to build, own, manage and operate new zones serving both domestic and foreign markets.

BEZA's mission is to establish 100 economic zones across the country between 2015 and 2030, with the goal to create 10 million jobs (compared with the cumulative employment of half a million people created by the country's eight existing EPZs over three decades) and an additional \$40 billion in exports (almost equivalent to the country's total exports in 2017). The programme's FDI target of \$9.6 billion is also ambitious, given the country's annual average FDI flows of \$2.2 billion in 2015–2017, 15 to 20 per cent of which was attracted by the eight EPZs. Additional objectives include fostering linkages between the economic zones and local industries and narrowing regional economic disparities.

BEZA's list of approved economic zone projects grew from two at the beginning of 2015 to 88 at the end of 2018, 29 of which are being developed by the private sector. The development programme is supported by a multi-year technical assistance scheme of the Japan International Cooperation Agency. The total value of expected investment in just three of the economic zones amounts to nearly \$17 billion – more than two thirds of the country's GDP in 2017 – \$8 billion of which will come from foreign investment in manufacturing.

As of the beginning of 2019, development work was continuing on 28 approved projects, of which 11 are already operating while adding new buildings or facilities. The remaining 17 projects are at various stages of development.

The 12 Government EZs under development include four “G2G/PPP” economic zones, in which the Government of Bangladesh assumes 30 per cent of the equity and allows public and private partners from China, India and Japan to develop and operate the zones. Land for the Chinese-run economic zone (321 ha in Anowara), two Indian-run zones (204 ha in Mirsarai and 83 ha in Mongla) and the Japanese-run zone (202 ha in Araihasar) has already been purchased. A preliminary list of target industries in these four economic zones combines foreign investors' continuing interest in Bangladesh's traditional EPZ activities (textiles, footwear and ready-made garments) with additional manufacturing activities (e.g. liquified natural gas, steel, automotive, pharmaceuticals and food processing).

Private economic zone projects are moving faster than public ones, reflecting the fact that most private economic zones are single-entity zones covering smaller areas of no more than 40 ha. The public projects, in contrast, cover areas that are often larger than 100 ha and sometimes exceed 10,000 ha, including underdeveloped areas where basic infrastructure is not always in place.

Besides the need to build infrastructure, key challenges in the rapid development of the economic zones include delays in the acquisition of land, the limited availability of long-term finance for private developers and the lack of expertise in zone marketing.

Source: UNCTAD, based on information from BEZA.

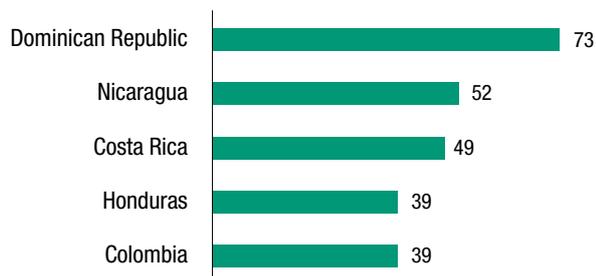
investments in R&D and high-tech industries. These zones offer tax incentives focused on research, software development and other innovative activities.

The Gulf Cooperation Council countries use SEZ programmes to support strategic transformation in key industries (e.g. finance). Many are built with public finance and boast state-of-the-art facilities. The most notable examples are SEZs in the United Arab Emirates, where the first free zone was established at the Jebel Ali Port in 1985. The objective was to assist the development of the port, which was located far from populated areas and was struggling to attract business, by drawing in multinational enterprises (MNEs) to establish regional distribution hubs. Following the success of the Jebel Ali Port, SEZs proliferated in the country. Many of the free zones in the United Arab Emirates operate as re-export hubs. In 2000, the first non-trade free zone – a technology, e-commerce and media free zone – was established, targeting investment in a range of IT-related services. Subsequently, other specialized free zones were established, including Dubai Internet City, Dubai Media City, Knowledge Village, Dubai Multi Commodities Centre and Dubai Health Care City.

(vi) Latin America and the Caribbean

Free trade zones have a long tradition in Latin America, with some established as early as the early 19th century. The Colonia and Nueva Palmira FTZs in Uruguay were created in 1923. Most countries in the region drafted their current SEZ legislation during the 1990s.

Figure IV.5. Latin America and the Caribbean: economies with the most SEZs, 2019



Source: UNCTAD.

Since 2010, however, much activity has taken place – renaming, re-focusing and expanding zones, and opening new zones – as part of a drive to revive SEZs as engines of economic growth and employment creation. Currently, the region has almost 500 SEZs, hosting more than 10,000 enterprises and employing about 1 million people (figure IV.5).² SEZs are found in almost all economies in Central America and South America, except Suriname and Guyana. In the Caribbean, in contrast, only a few economies have an SEZ regime.

Single-enterprise free points are popular in the region, especially in countries that are relatively more dependent on SEZs for exports, including Colombia, the Dominican Republic, Jamaica, Mexico, and

Trinidad and Tobago. Although free points, like SEZs, typically seek to attract large projects and foreign capital, the prevalence of this model in some countries in the region was driven

Box IV.4. The single-enterprise free-point approach

Many countries have adopted single-enterprise free points schemes that provide SEZ incentives to individual enterprises regardless of location. Leading examples include Colombia, the Dominican Republic, Guatemala, Mexico, the Republic of Korea and the United Republic of Tanzania. The free points approach is similar to a bonded manufacturing warehouse scheme but offers a broader set of benefits.^a

The schemes' official objectives often align with industrial policy goals^b and can include the development of an "investment project with high economic and social impact" (Colombia), the "alleviation of unemployment problems" and efforts to "modernize infrastructure [and] promote the adoption of new technologies and knowledge" (Mexico). Governments allow single-enterprise free points to target a specific industry that either needs significant capital investment, knowledge or technology not available in the country or requires a location close to natural resources or existing customers, and ultimately cannot benefit from the clustering economies offered by the SEZ model. Examples include farmers or agribusiness companies that need to import machinery; ports, hospitals and clinics (Colombia); or offshore exploration platforms (Colombia), as well as – as in the case of Mexico – manufacturing companies looking for low-cost workers.

Free points allow governments to target specific industries while avoiding specifying the location of zone investors. Not being located in delimited zones, free points companies potentially avoid the "enclave risk" and are believed to be better integrated into local economies. However, granting free zone status for existing enterprises increases the cost of zone programmes by absorbing existing businesses under incentives schemes – thereby reducing the tax base – rather than attracting new investment. Single-enterprise free points are also considered more susceptible to corrupt practices, with companies bribing officials in exchange for free-zone status (Moberg, 2015). Also, control and enforcement of social and environmental rules is more complex in distributed zones than in designated areas. Finally, the normal benefits of zone-based industrial development, including synergies, clustering effects and savings on infrastructure and services development, are foregone.

Typically, the most critical and difficult aspect of operating this kind of scheme is customs compliance and monitoring. Physical control measures can be particularly costly, involving stationing customs officers at licensed premises. This is why, in many cases, countries have moved from physical arrangements to documentary and accounts-based systems. In Mexico, for example, companies operating under the IMMEX (Manufacturing, Maquila and Exports Services) scheme^c are required to use specialized software to track all imports, exports and scrap. Detailed reporting of these activities and a correct classification of the inventory is also required when audits and non-compliance can result in large fines and possibly the loss of the company's IMMEX permit. In fact, the Mexican public administration encourages IMMEX companies to outsource customs, as well as general accounting and administrative tasks, to a reputable shelter company so as to avoid any liability and exposure in Mexico.

Source: UNCTAD.

^a Bonded warehousing is a customs procedure allowing the import of goods for storing in a secure area without payment of import taxes until the goods are removed for domestic consumption or re-exported.

^b Single-enterprise free-point schemes can be considered industrial policies that use selective investment promotion tools and measures to maximize positive spillovers (see WIR17).

^c Until its new SEZ programme started in 2016, Mexico relied solely on single-enterprise free points formally known as the IMMEX programme. The maquiladora system was established in the 1960s. In December 2018, there were some 6,200 IMMEX enterprises, employing more than 3 million workers.

by policy choices to provide free zone benefits to local SMEs (in their existing location) and by a focus on industrial activities that cannot easily be moved to a delimited area (box IV.4).

The most well-known free points are Mexico's maquiladoras, which originate from the National Border Industrialization Program launched in the 1960s. Under this programme, authorized factories along the border with the United States, were able to import materials and production equipment duty-free and export their outputs to the United States at lower tariffs than those from other countries. As the objective of the Maquiladora Program was economic development of the vast border region, the regime was based on individual factories anywhere in the area, rather than in geographically confined zones. Maquiladoras initially focused on textiles, simple electronics and industrial products, but by the 21st century, they had turned Mexico into a top 100 exporter of auto parts and a strong player in other industries such as aerospace, electronics, medical devices and alternative energy. The success of maquiladoras, boosted by the country's accession to the North American Free Trade Agreement in 1994, has contributed to making the northern part of Mexico prosperous, with a high level of foreign investment; however, the southern part of the country has been left behind. To address the regional disparity, a law was introduced in 2016 to establish seven new SEZs in the south-east and an additional zone in the northern border region (although a recent government decision may reverse these plans).³

Another prominent user of free points is Colombia. Legislation was introduced in 2005 that allowed individual companies (foreign or domestic) that invest in sizeable projects with high economic and social impact to become FTZs. The requirements for investment and employment to qualify as single-enterprise free points are slightly different from those entering a free trade park or SEZ, depending on the sector. Today, there are 72 such free points, active in a range of industries including agribusiness, ports, hospitals and clinics, and offshore exploration activities. Free points have been a significant source of employment: the 72 single-enterprise free points represent less than 10 per cent of the total number of investors operating under the combined free zone schemes (a total of 979 in 2018) but account for 42 per cent of the jobs generated by the scheme.

Although SEZs in lower-income countries in the region, such as Honduras and Nicaragua, still focus on labour-intensive industries, mainly apparel and textiles, many – under pressure from low-cost competitors from Asia – are restructuring SEZs to attract higher value added activities. The Dominican Republic, for example, has increased efforts to attract new investors in more advanced manufacturing and services (box IV.5). Some exporters (notably Grupo M) have responded to increasing competition among SEZs by opening zones in neighbouring Haiti to take advantage of lower labour costs and preferential access to the United States market (through the HELP Act).⁴

In Costa Rica, SEZs evolved from hosting low value added manufacturing (e.g. textiles) and services (e.g. BPO operations) to more high-tech manufacturing, most notably medical devices, and advanced services such as sophisticated shared service centres and R&D operations (Gereffi et al., 2019). Colombia is using the concept of SEZs and single-enterprise free points as public-private partnership ventures to innovate, fill financing and knowledge gaps and develop selected industries, including public services. Since 2000, single-enterprise free points have financed the construction and operation of 12 hospitals and clinics, contributing to the country's emergence as a destination for health tourism.

Countries in Latin America, especially the smaller economies in Central America, face a number of challenges besides competition from Asian economies. Their reliance on the United States market makes them vulnerable to trade shocks. The recent fiscal reform in the United States has weakened the attractiveness of some Latin American SEZs, especially in those countries not yet well positioned in GVCs. Facing the possible expiration

The Dominican Republic is one of the world's pioneers in SEZs. The programme is widely considered a success, attracting FDI and fueling sustained economic growth in the 1990s. At its peak in 2003, SEZ companies accounted for 7.5 per cent of GDP in the country. The key factors driving this performance include the country's proximity to the United States consumer market, preferential trade agreements, incentives granted to SEZs and the availability of low-cost labour.

At the turn of the century, however, the country faced several external shocks: a global economic slowdown, a rise in oil prices and, for the textiles sector then at the heart of the SEZ scheme, the end of the Multi-Fiber Arrangement in 2005 and China's accession to the World Trade Organization in 2001. The number of companies in, and exports from, SEZs fell, and the programme stagnated until 2010 (Burgaud and Farole, 2011).

In this context, local SEZ investors pushed at the national and regional (Caribbean) level towards expanded market access in the United States. Through the leadership of the SEZs' official trade association (the Asociación Dominicana de Zonas Francas, or ADOZONA) and the SEZ regulating body, the National Free Zones Council, they lobbied successfully for the Dominican Republic's accession to the Central America Free Trade Agreement (2007) and to the Economic Partnership Agreement between the Caribbean and the EU (2008).

In collaboration with workforce development agencies, human resource development was encouraged so as to support the upgrading of the country's production profile. While foreign manufacturers in the textiles industry relocated to lower-cost economies, local firms invested in new technology (new types of fibres) and human capital to be able to integrate vertically and stay competitive with low-cost producers.

Local investors developed inter-industry linkages and diversified production. Some shifted production from apparel to footwear, some opened call centres and pursued joint ventures with Indian IT companies (Schrank 2008), and others opened factories and SEZs in neighbouring Haiti. As part of this private engagement, the SEZ regulating authority – the National Free Zones Council – and ADOZONA increased their efforts to attract new investors from emerging industries, including services (call centres and business process outsourcing), surgical equipment, pharmaceuticals, jewellery and electrical appliances.

Since 2010, SEZ exports, output and employees have rebounded and continued growing, although not yet to the levels of the early 2000s in terms of relative contribution to GDP or total exports. Their contribution to total exports and GDP has stabilized at 55 per cent for exports and 3.2 per cent for GDP – lower than the past levels of 85 and 8 per cent, respectively – indicating that the non-SEZ economy is also growing.

The number of industrial parks has grown by a third since 2012, standing at 73 zones today. Production in SEZs has grown more diversified, with exports of medical and pharmaceutical products representing over a quarter of total exports, and electrical and electronics products representing about the same share (16 per cent) as the traditional garment and textile industry in 2018. The United States still represents the biggest market, with the majority of companies exporting there (58 per cent), even though that share has declined since 2000 (from 86 per cent).

In 2017, SEZs provided about 166,000 direct jobs and an estimated 250,000 indirect ones, the majority of which were still low-skilled workers (blue collar, 71 per cent), even though the share of technical workers has steadily grown since 2012. A growing number of SEZs are entering into collaboration agreements with local universities. Training through a programme offered by the National Institute of Technical-Vocational Training and ADOZONA is reaching increasing shares of SEZ workers. In 2018, the Ministry of Education signed an agreement with ADOZONA and the CNZFE to improve the quality of tertiary education, making it more relevant for SEZ companies.

Source: UNCTAD, based on information from the National Council for Export Free Zones (CNZFE).

of the Dominican Republic Earned Import Allowance Programme (EIAP), which grants duty free export of apparel to the United States, the National Free Zones Council is not only lobbying for its extension but also working to open new export opportunities in Europe (including in Spain, Germany, and Finland), while exploring collaborations with China and with African countries (Morocco).

Another challenge is the sustainability of fiscal incentives. In countries where SEZs account for a sizable part of the economy, governments are foregoing a substantial amount of potential tax revenues. In 2018, Costa Rica enacted a tax reform bill to replace the sales tax with a value added tax. Although the exemption for FTZ regime companies was maintained, this was highly controversial, as the Government was dealing with a severe fiscal crisis.

Argentina, Brazil, Ecuador, El Salvador, Guatemala, Mexico, Paraguay, Peru, and Uruguay have all re-examined their FTZ strategies in the last five years, seeking to make special regimes more conducive to economic development. New regimes focus more on the internal market and on cluster specialization, making them more similar to industrial parks and development zones. This could result in 20 to 30 new SEZ being established or brought into operation in the next five years.

(vii) Africa

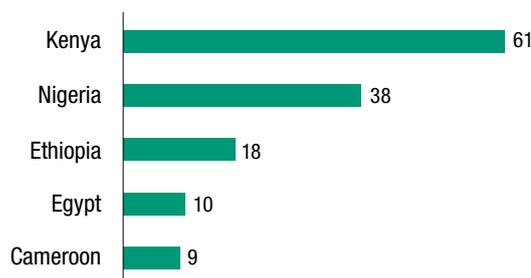
SEZs were adopted relatively late in Africa, although they have been gaining increased traction recently. Mauritius was the first African country to establish an EPZ, introducing its EPZ Act in 1970. Others such as Ghana, Liberia and Senegal followed in the 1970s. Yet SEZs and free zones were adopted more widely only in the 1990s, as governments sought to replicate the rapid development of East Asian economies. With infrastructure and institutional weaknesses widely recognized as major factors hampering economic development in Africa, the creation of zones that allow governments to concentrate administrative resources and infrastructure provision in confined areas is often seen as a pragmatic solution to structural shortcomings.

Today, there are an estimated 237 established SEZs in Africa, although some are still under construction (table IV.2). In addition, there are more than 200 single-enterprise zones (or free points). SEZs are found in 38 of the 54 economies on the continent, with the highest number in Kenya (figure IV.6). SEZ programmes in the three largest economies on the continent — Nigeria, Egypt and South Africa – are well developed. Many smaller economies have established SEZ frameworks only in the last 10 to 15 years and tend to have a relatively smaller number of zones.

Although the objective of most SEZs on the continent, especially in Sub-Saharan Africa, is to enhance manufacturing and exports in low-skill, labour-intensive industries such as garments and textiles, some countries are targeting diverse sectors and higher value addition. For example, Morocco has oriented some its free zones to high-tech activities and the automotive industry. Even in Sub-Saharan Africa, the SEZ regimes (re-)established in the last decade (e.g. in Rwanda and Senegal) are focusing on a broader range of value added activities. Some countries link SEZs to natural resource endowments, aiming to attract investors in downstream processing industries, to diversify an export profile that is skewed towards unprocessed resources. For example, Nigeria established a number of zones focused on oil refining (box IV.6).

Some African countries, especially the LDCs, have benefited from bilateral and multilateral assistance in finance and capacity building for the construction of SEZs, notably from China (see also section IV.A.3). The first instance of Chinese involvement in the establishment of SEZs in Africa was in 1999, when China signed an agreement with Egypt to develop an industrial zone in the Suez Canal area. In 2006, as part of the implementation of its 11th five-year plan, China announced the development of 50 SEZs overseas, seven of which were to be in Africa. Subsequently, as Chinese investment and interest in Africa deepened, plans were announced for several additional zones to be built with Chinese support. For instance, China signed an agreement with Djibouti in 2016 to build an FTZ as part of the Belt and Road Initiative; the first phase of the zone was launched in 2018. This 10-year

Figure IV.6. Africa: economies with the most SEZs, 2019



Source: UNCTAD.

Where natural resources are a substantial part of the economy, natural resource-based zones are common. These zones host a subset of the manufacturing sector, processing raw materials and intermediate products derived from agriculture, fisheries, forestry or extractive industries. The objective is to pursue vertical integration, higher value added exports and broader economic transformation.

African governments are developing agro-zones to promote both food security and a shift from subsistence farming to agro-industrial development. To this end, they are developing agricultural corridors, agro-based clusters, agro-industrial parks and agro-incubators (IISD, 2017). These zones range from a few hectares in urban areas to tens of thousands across regional, national or supranational areas, offering benefits from infrastructure to customs facilitation as well as advantageous regulatory frameworks. South Africa's Dube AgriZone, which is part of the Dube TradePort SEZ, is one such example. The zone hosts the region's largest climate-controlled, glass-covered growing area and also includes packhouses, a central packing and distribution centre, and a laboratory.

Zones based on minerals and hydrocarbons are also gaining popularity in Africa to promote downstream value addition locally. In Nigeria, for example, at least 10 SEZs intended to promote oil and gas processing (among other activities) are under construction or have been announced. The flagship Lagos Free Trade Zone is being developed as a multi-product and logistics hub for the West Africa subregion. Plans are for the fully developed zone to host petroleum and petrochemical complexes, as well as agri-commodity and other manufacturing industries.

Natural-resource based zones are not only being developed in Africa. In Asia, Indonesia plans to attract downstream activities in both agricultural and extractive industries through SEZs. The Sei Mangkei zone offers incentives for investors processing palm oil and rubber. In 2016, a year after the zone became operational, Unilever opened an oleochemical factory processing palm oil for various consumer goods products, targeting the domestic market and South-East Asia. The country is also using SEZs to attract refineries, such as in the Galang Batang SEZ which has opened for alumina refining.

Investments in natural resources zones can be a tool for economic transformation and diversification, as well as poverty alleviation and improved food security. However, the planning and implementation of such zones is not without pitfalls, including potential controversies related to land access, risks to the livelihoods of small farmers, environmental concerns and quality control issues.

Source: UNCTAD.

project, costing \$3.5 billion, is to create Africa's largest FTZ, spanning 4,800 ha. The zone will be managed by a joint venture comprising the Government of Djibouti as the majority shareholder and three Chinese companies: the China Merchants Group, Dalian Port Authority and IZP. Involvement by Chinese development companies has also been reported in Algeria, Angola, Ethiopia, Kenya, Mauritius, Nigeria, Rwanda and Zambia, among others.

Although on a much more limited scale, other countries and development agencies have also been involved in development of SEZs in Africa. In 2015, Turkey signed an agreement with Djibouti to create a 500-ha SEZ where Turkish companies would invest to manufacture and export goods to East African and other regional markets. In 2018, the Singapore Cooperation Enterprise, a Singaporean Government agency, signed a tripartite agreement to develop a single electronic window solution to facilitate trade and increase trade efficiencies for the special economic zone in Nkok, Gabon. The other two parties to the agreement were the Gabon Special Economic Zone – an international public-private partnership comprising the Government of Gabon, Olam International (Singapore) and the African Finance Corporation – and the Singapore-based global trade facilitation platform provider vCargo Cloud.

Other examples include the involvement of the Mauritius Development Board and the Mauritius Africa Fund in the development of Senegal's first industrial park. The development of the Gambia's only EPZ, the July 22nd Business Park, was funded by the World Bank. This business park will be upgraded to become the GIETAF Special Economic Zone by a private-sector developer, TAF Africa Global, through a joint venture agreement with the Gambia Investment & Export Promotion Agency.

The appeal of SEZs in Africa is likely to continue to grow. The success of a few countries, such as Ethiopia, in using SEZs as springboards for participation in GVCs is likely to prompt

others to follow suit. Many LDCs in Africa that have no or few zones (e.g. the Democratic Republic of the Congo, Lesotho, Madagascar and Rwanda) are planning to set up at least one new SEZ.

(viii) Transition economies

Transition economies began adopting SEZ regimes in the 1990s, soon after they embarked on their transition from planned economies. The pace of newly established SEZs accelerated from the second half of the 2000s onwards, especially over the 2015–2019 period, due to the creation of Territories of Advanced Development (TADs; also called advanced special economic zones) in the Russian Federation, as a response to the global crisis. The rapid expansion of the number of zones also included failures: 11 SEZs were abolished between 2010 and 2017 (Kuznetsov and Kuznetsova, 2019). During the same period, SEZ programmes also went through a rapid expansion in 10 other economies in the region, although the vast majority of SEZs in the region are concentrated in the Russian Federation (figure IV.7).

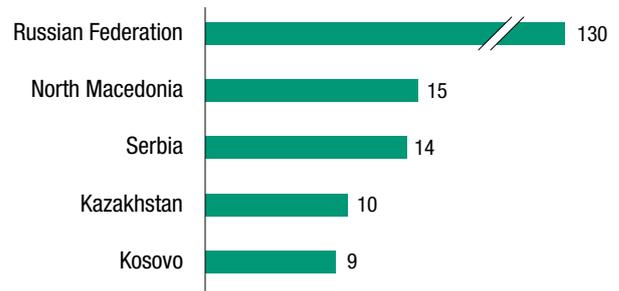
With the exception of Ukraine,⁵ all the transition economies now have some form of SEZ. The Russian Federation, which accounts for over 70 per cent of the region’s GDP, hosts more than half of the 237 zones in the region. The country has a complex network of different types of zones, including two wide-area zones (Kaliningrad and Magadan); 26 SEZs falling under the SEZ law adopted in 2005; the Innovation Centre Skolkovo, which enjoys SEZ privileges according to a 2010 law; 100 TADs in the Russian Far East and in single-industry towns (also called monotowns); and the Free Port of Vladivostok, consisting of at least five subzones (ports). Smaller economies undertaking significant export processing activities, such as North Macedonia and Serbia, also host many SEZs (15 and 14, respectively). Transition economies include a number of LLDCs; as SEZs are often integral parts of infrastructure hubs, typically close to urban zones, border crossings and transportation corridors, they are a favoured policy tool of LLDC policymakers.

A few transition economies have SEZs that cover large areas. The large surface areas of SEZs in some transition economies reflect their availability of land and the focus of some zones on resource-based industries (e.g. petrochemicals zones require relatively large surface areas).

SEZs in the region vary significantly by size, numbers of tenants, industry focus and governance models (public versus private involvement). Export-oriented zones tend to attract mostly foreign firms, whereas zones geared towards regional development, such as those in the Russian Federation, host mostly domestic firms. At the end of 2017, only 19 per cent of the 656 resident firms in the Russian Federation’s 26 zones established on the basis of the SEZ law were foreign affiliates, but they accounted for some 60 per cent of investment.

SEZs in transition economies tend to focus on general manufacturing, although in the Russian Federation, technology-oriented zones also play an important role. In addition, the Russian Federation hosts nine tourism zones (box IV.7). The SEZs’ industry focus often reflects the host countries’ industrial traditions and resource endowments. Due to the recent addition of 82 single-industry cities among SEZs, more than half of the zones in the region now focus on a specific industry.

Figure IV.7. Transition economies with the most SEZs, 2019



Source: UNCTAD.

Various countries have created SEZs to promote tourism or tourism-related industries: examples include Bangladesh, China, Indonesia, the Lao People's Democratic Republic, Malaysia and the Russian Federation. Others, such as Uzbekistan, are considering the creation of such zones. In countries such as the Republic of Korea, tourism is allowed in combination with other activities (e.g. in zones catering to health tourism).

Tourism SEZs offer similar advantages as SEZs in manufacturing: customs reduction on capital goods, tax benefits, infrastructure support and facilitation of business registration. Given the characteristics of tourism (mostly bound to certain locations of natural beauty or cultural value), most countries do not consider SEZs a policy tool to promote the industry, relying instead on general incentives schemes or for the development of remote or underdeveloped areas, or other clustering techniques.

Countries using SEZs to promote tourism do so for a number of reasons:

- SEZs have administration companies that can look after investor needs, especially in countries with no one-stop shop.
- Tourism zones, given their confined and homogenous nature, can offer a better framework for integrated resort and leisure community development.
- Tourism zones can also be a conduit to bring in specific foreign investors (such as Chinese investors in the SEZ Grand Baikal in the Russian Federation).
- Environmental protection and sustainable, green development (including ecotourism) can be better administered in the confined area of the SEZs than in the national territory at large.

Source: UNCTAD.

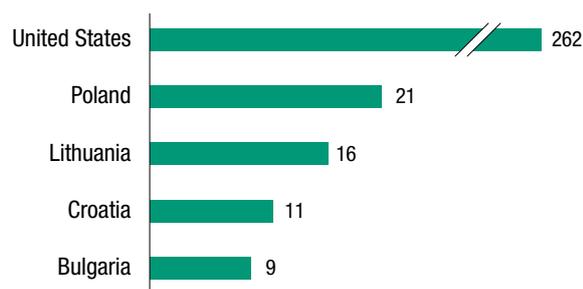
Urban and inland SEZs dominate, due to the landlocked situation of a large part of the region. Ownership is often private but the larger zones are usually publicly owned. Foreign zone operators are present in Belarus (in the Chinese–Belarussian Industrial Park Great Stone), in Armenia (the high-tech FEZ Alliance in Yerevan is managed by Sitronics of the Russian Federation) and in Georgia (the Free Industrial Zone Hualing Kutaisi 2 is managed by a Chinese firm). Various countries in the region are planning to add new zones, and at least 18 are under construction, particularly in the Russian Federation, Serbia and Turkmenistan.

(ix) Developed economies

SEZs are found in about 70 per cent of developed countries. Almost all the zones are customs-free zones, and their economic significance as a share of the overall economy in which they are located is relatively limited, except possibly in the United States. Foreign-trade zones in that country account for over 70 per cent of the zones in developed countries (figure IV.8). Most European countries have either no SEZs or only customs-free zones. Bulgaria, Lithuania and Poland, however, have both customs-free zones and zones in which other fiscal incentives are offered.

Figure IV.8.

Developed economies with the most SEZs, 2019



Source: UNCTAD.

The general thrust of economic policy in developed countries is to create a level playing field across the economy, rather than setting up privileged areas. The main rationale for establishing SEZs in developed economies is to reduce the distortionary effects of tariffs and regulatory “costs” associated with importing.

Governments of many developed economies do assist in the establishment of various forms of science and technology parks. However, government involvement mostly takes the form of capital expenditures rather than fiscal or other regulatory incentives conditioned on locating in

defined zones (see box IV.1). Science and technology parks without a distinct regulatory regime are not included in the inventory of SEZs produced for this report.

Regional development or support for underprivileged or high-unemployment areas also provides a rationale for SEZs in developed countries. Japan and Poland offer incentives (or more generous incentives) to investors in less developed regions of the country through SEZ mechanisms. Enterprise zones in the United Kingdom and urban free zones in France are other examples of such zones which, however, do not function as special economic areas with separate regulatory regimes.

The SEZs in the United States, known as foreign-trade zones, are customs-free zones. The objective of these zones is to encourage firms to undertake distribution or manufacturing operations at United States facilities, rather than elsewhere. Foreign-trade zones provide relief from tariffs and customs administrative burdens that put United States locations at a disadvantage in relation to competing locations abroad. Their benefits are extended to local firms without the need for those firms to relocate or establish a presence in the zones: foreign-trade zones can establish subzones for use by individual companies in the area, similar to free points. There are over 500 approved subzones that may undertake manufacturing activities. The largest industries currently using these zone procedures include oil refining, automotive, electronics, pharmaceutical, and machinery and equipment.

In the EU, member States are permitted to designate parts of the customs territory of the Union as free zones, where goods from outside the EU can be brought in free of import duties and other charges. Consequently, many of the free zones in the EU are located on the periphery of the Union.

Some customs-free zones most common in developed economies are referred to as “freeports”. These are essentially warehouse facilities that are designated as tax-free and used for storage of valuable items such as artwork, jewellery, precious metals and other luxury goods. In Europe, such freeports exist in Luxembourg, Monaco and Switzerland.

SEZs aimed at industrial or regional development are found in Central and Eastern European countries (i.e. Bulgaria, Lithuania and Poland), where SEZ programmes mostly predate EU accession, as noted earlier.

The European Commission considers tax incentives in SEZs to be state aid. All measures that constitute state aid must be notified by the member State for approval by the Commission, unless they fall under the *de minimis* regulation or the general block exemption regulation. The latter permits categories of state aid that are deemed to bring benefits to society that outweigh their possible distortions of competition. It includes, among other categories, aid to address regional problems.

In those European countries that operate SEZs, there is typically substantial public involvement in their management. Bulgaria’s SEZs are managed by a State-owned company. SEZs in Czechia and Poland are also publicly owned. In Croatia, real estate in the port free zones is mostly owned by the Government and managed under the jurisdiction of local port authorities. In Slovenia, the free zone Koper is managed by a public limited company which is majority owned by the State. In Switzerland, the management company of the freeport, Geneva Free Ports & Warehouses, is a limited company whose principal shareholder is the State of Geneva. Only the freeport in Luxembourg is privately owned.

In the United States, foreign-trade zones are created at the instigation of local organizations rather than the federal Government. A local organization (e.g. city, county or port authority, economic development organization) applies to a federal body for a license to establish and operate a foreign-trade zone, which may be granted by a federal body, the Foreign-Trade Zones Board.

SEZs in Poland were initially established for a period of 20 years. Subsequently, in 2008 and again in 2013, their lifetime was extended to the end of 2026. In 2018, however, Poland adopted a new law to create the “Poland Investment Zone”. This new regime enables investors to benefit from the preferential conditions associated with SEZs in the entire territory of Poland, provided that they meet certain criteria.

Poland's zones were generally considered a success. The main benefits offered to investors were exemptions from corporate income tax. To qualify, investors needed to obtain an SEZ permit, which was granted on the basis of capital expenditures and newly created jobs. (Since the accession to the EU, preferential conditions offered to investors in SEZs have had to conform to the EU's General Block Exemption Regulation, which stipulates exemptions to the state aid rules.) SEZs in Poland have succeeded in attracting investment and generating employment. By June 2018, the cumulative number of jobs created in the 14 zones had reached 448,000 while the cumulative investment had reached \$35 billion.

Despite the success of the zones, their disadvantages also became apparent. By their nature, SEZs discriminated against firms based outside the zones. Since the criteria for obtaining an SEZ included the size of investment, most investment projects by domestic SMEs did not qualify for tax exemption. In addition, neighbouring countries, such as Czechia, Hungary and Slovakia, offered income tax exemptions to investors regardless of their location. The system of zones therefore risked putting Poland at a disadvantage both as a destination for FDI and as a location for domestic SME investment.

The New Investment Support Act lowered the criteria for obtaining public support so that more SMEs can qualify for it. Moreover, the system is designed so that investors in less developed regions are able to obtain more generous public support. Whereas the previous system granted SEZ permits only to newly installed businesses, the new regime also provides support to expanded projects. The new criteria are not just based on quantitative measures, but also take into account the sustainability and innovative aspects of projects. Thus, the Act removed or loosened discriminatory elements of the older SEZ legislation in terms of geography and investment size, while placing more emphasis on externalities, including knowledge and skill generation as well as social and environmental impacts.

Source: UNCTAD.

Looking at the trend in developed countries, while the number of foreign-trade zones has been on the rise in the United States, the use of customs-free zones and SEZs in Europe is in decline. In 2018, Poland adopted a law to create a “Poland Investment Zone”. This new regime enabled investors to benefit from preferential conditions in the entire territory of Poland. The existing SEZ authorities assumed the function of administering the new regime in their respective regions. But the current SEZ permits are set to expire in 2026, when the existing demarcated SEZs will effectively dissolve into the broader territories (box IV.8). Cyprus recently converted its free zone to free warehouses, a system also in use in major ports such as Rotterdam and Antwerp.

The loss of free zone status does not mean that these zones cease to operate. For instance, Shannon, which is widely considered the first modern SEZ, no longer offers special tax incentives or a regulatory regime different from the rest of Ireland. However, Shannon continues to attract businesses. There are 170 companies based in the Shannon Free Zone, employing approximately 8,000 workers. In addition to forming Ireland's largest aviation/aerospace cluster, Irish and multinational companies have invested in a range of other industries including medical devices, high-tech, ICT, financial services and manufacturing of electric and self-driving cars.

3. International cooperation and regional development zones

Foreign investment in SEZ development has been increasing. In addition to private foreign zone developers, governments have increasingly engaged in developing SEZs overseas. Deepening regional integration has accelerated the development of border SEZs, and cross-border SEZs spanning two or more countries with joint ownership have emerged, fostering regional and international cooperation.

a. Foreign partnership zones

FDI in SEZ development is on the rise. Large conglomerates and industrial estate developers are increasingly involved in economic zone development abroad. For instance, Sembcorp Industries (Singapore), Ascendas-Singbridge (Singapore), and Mitsubishi, Sojitz and Sumitomo (all Japan) are major international zone developers. Chinese companies, such as Holley Group and Yantian Port Group, are also increasingly visible in economic zone development, particularly in Asia and Africa.

There are various zone development models that host economies tend to label as “zones constructed with the cooperation of a foreign partner” (table IV.7.). Despite the attention that government-to-government partnership zones have attracted, the majority of such zones are developed by foreign private companies with no bilateral government agreements. Some foreign (manufacturing) MNEs have developed their own economic zones to house their suppliers and improve logistical efficiency. For instance, since 1998 Toyota has established an agglomeration of supply chain networks in its industrial parks in India. Samsung developed its own large industrial complex within a major industrial park in Viet Nam in 2016 (AIR17).

Many zones are developed as PPP projects in host economies, and foreign developers have undertaken these projects through joint-venture arrangements with both public and private local partners. In most cases, the foreign developer becomes the manager of the zone or a partner in the management company.

Government-to-government partnership SEZs have also become popular in recent years. They are underpinned by a bilateral agreement to jointly develop SEZs, setting up the cooperation framework, the division of responsibilities, and the development and management mechanism of the zones. Government partnership zones can be built and

Table IV.7. Types of SEZs developed with foreign partners

Types of SEZs	Examples
<p>Zones developed by foreign developers or through joint ventures with local companies as private FDI</p>	<ul style="list-style-type: none"> • Amata City Bien Hao, developed by Amata (Thailand) in Viet Nam (1994) through a joint venture with Viet Nam’s State-owned enterprise Sonadez • Techno Park Poipet, developed by Toyota Tsusho (Japan) in Cambodia (2015) • Cali Tech Park, developed by Zonamerica (Uruguay) in Colombia (2016) • Pearl River SEZ, developed by New South (China) in Kenya (2017) through a joint venture with African Economic Zones Ltd
<p>Zones developed through public-private partnerships with foreign developers</p>	<ul style="list-style-type: none"> • Savan-Seno SEZ in the Lao People’s Democratic Republic (2003), developed through a joint venture between Malaysian private companies and the Government • Free Industrial Zone Hualing Kutaisi 2, developed by Hualing Group (China) in Georgia (2015), on the basis of a memorandum of understanding with the Ministry of Economy and Sustainable Development of Georgia • Lekki FTZ, developed by Chinese consortiums in Nigeria (2006) through a joint venture with the Lagos State Government
<p>Zones developed as government-government partnership projects</p>	<ul style="list-style-type: none"> • Suzhou Industrial Park, developed in China (1994) through a joint venture between Singaporean and Chinese consortiums • Thilawa SEZ, developed in Myanmar (2011) through a joint venture between the Myanmar and Japanese governments, and private consortiums from Myanmar and Japan • Belarus–China Industrial Park Great Stone in Belarus (2011), developed through a joint venture between a Chinese private developer and Belarus Public Administer • Russia Industrial Zone, developed in Egypt (2018) by a Russian Federation developer

Source: UNCTAD.

managed by host-economy developers, home-country developers, joint ventures or third-country developers, to benefit from their capital or expertise in zones development. One of the Japanese townships in India, OneHub Chennai, was developed by Japan's Mizuho Bank and engineering company JGC, along with Ascendas, an experienced business complex developer from Singapore.

Government partnership zones are being established at the initiative of both the host country and the partners (table IV.8). A mixture of development assistance, economic cooperation and strategic considerations is encouraging the development of partnership zones initiated by investor home-country governments. Major ODA donors and multilateral development institutions have included development of SEZs as part of development assistance. The World Bank, along with the U.S. Agency for International Development and the European Investment Bank, supported the establishment of the Gaza Industrial Estate in 1999 to increase employment and GDP, for example. Japan added industrial park development to its menu of industrial development assistance in the early 2000s and through the Japan International Cooperation Agency helped build SEZs in the Middle East and Africa. Since 2000, France, Germany, India, the Republic of Korea and Turkey have all engaged in the construction of FTZs in the State of Palestine to promote economic development and Israeli–Palestinian cooperation.

In the case of Singapore, building a network of strategic zones in key markets⁶ was a critical component of the country's Regionalization 2000 programme. The programme intended to facilitate Singapore's transition to a "total business centre" by relocating low value added manufacturing activities to regional sites, while restructuring Singapore's economy into a regional hub for the higher-end activities of Singapore-based MNEs (Yeung, 1999).

Table IV.8. Selected government partnership zones

Zone	Home economy	Host economy	Bilateral agreement	Development model
Batamindo Industrial Park	Singapore	Indonesia	1989	Joint venture between Singapore Government-linked companies and Salim Group, Indonesia
Suzhou Industrial Park	Singapore	China	1994	Joint venture between Singaporean and Chinese consortiums
Lekki Free Trade Zone	China	Nigeria	2006	Joint venture between Chinese consortiums and the Lagos State Government
Bethlehem Multidisciplinary Industrial Park	France	State of Palestine	2008	Joint venture between the Agence Française de Développement, and French, Palestinian, and other private investors
Sihanoukville SEZ	China	Cambodia	2010	Joint venture between a Chinese conglomerate and Cambodia International Investment Development Group
Belarus-China Great Stone Industrial Park	China	Belarus	2011	Joint venture between a Chinese private developer and a Belarus public administrator
Caracol IP	Unites States	Haiti	2012	Developed by the Government of Haiti, the Inter-American Development Bank, the United States Government and Sae-A Trading (Republic of Korea), which is also the anchor tenant; managed by Haiti National Society of Industrial Parks
oneHub Chennai	Japan	India	2013	Joint venture between an Indian public administrator, a Singaporean private developer and a Japanese consortium
Sittwe SEZ	India	Myanmar	2016	Still in the planning stage
Russia Industrial Zone	Russia	Egypt	2018	To be developed by a Russian industrial developer

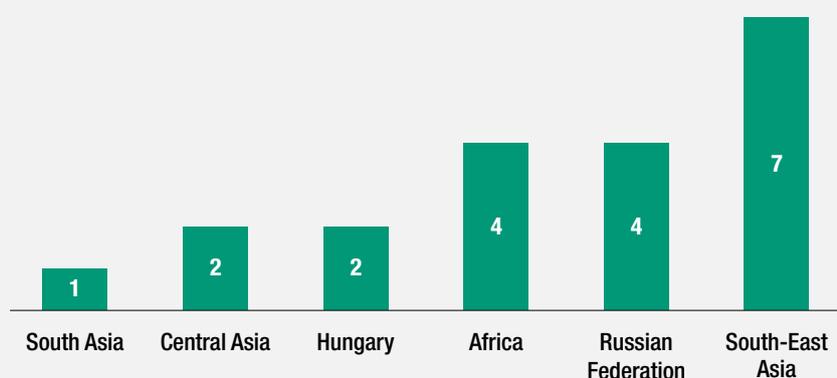
Source: UNCTAD.

Box IV.9.**Development of China's Overseas Economic Cooperation Zones**

Although the Chinese Government announced in 2006 that it would establish up to 50 overseas economic and trade cooperation zones, only 19 overseas zone proposals were selected as China's Overseas Cooperation Zones (COCZs) through two rounds of tenders in 2006 and 2007. The zones were required to submit an annual report to the Ministry of Commerce and the Ministry of Finance and to be evaluated annually on the basis of their performance in zone construction, investment committed, number of tenants, investment of tenants, corporate social responsibilities, environmental protection and the like. Zones that failed to pass the evaluation for three consecutive years would be no longer eligible for government incentives.

The tender experiment was suspended in 2014. Enterprises are now encouraged to build overseas industrial zones on the basis of their business needs and apply for verification as national COCZs from the Ministry of Commerce. Verified zones can then apply for concessional loans or low-cost finance from development banks and funds. There were 20 verified zones as of 2018 (box figure IV.9.1).

Box figure IV.9.1. | Distribution of the 20 verified COCZs, 2018



Source: UNCTAD, based on Ministry of Commerce, China.

Since the early 1990s, over a dozen Singapore Industrial Parks have been built in Indonesia, Viet Nam and China by Singapore Government-linked companies.

China announced its Overseas Economic Cooperation Zone programme in 2006 with multiple objectives (box IV.9). They included boosting China's domestic economic restructuring and moving up the value chain; creating economies of scale for Chinese overseas investment and assisting SMEs in venturing overseas; and achieving strategic objectives including South-South cooperation, sharing China's industrial experience with other developing countries. Avoiding trade frictions and barriers imposed on exports from China by producing overseas has also become a more prominent objective. Chinese enterprises are encouraged to participate in overseas SEZ development, taking the lead in proposing and developing SEZs overseas for profit and competing through an open tender system for support from the Chinese Government (Farole, 2011; Farole and Akinci, 2011).

The latest large-scale overseas-zone project is the development of 12 "Japan Industrial Townships" in India. The project, agreed in 2014 as one of the initiatives in the Japan-India Investment Promotion Partnership, aims to encourage Japanese SMEs to invest in India. The Russian Federation and Egypt also signed an agreement in March 2018 to build the Russian Industrial Zone in the Suez Canal Economic Zone in Egypt. This \$7 billion investment, to be undertaken in three phases, will be built by a Russian industrial developer and is expected to be finalized by 2031, providing some 35,000 direct and indirect jobs in Egypt.⁷ In Africa, Mauritius has been actively participating in the development of SEZs in Côte d'Ivoire, Ghana, Madagascar and Senegal to create a conducive environment for

local operators to tap into business opportunities in these countries and develop business corridors, as well as to enhance the demand for Mauritian products and share Mauritius' experience in zone development.

Host countries welcome foreign partners in SEZ development for a number of reasons. The first advantage is to share the development cost. Modern zone development can require large amounts of capital and entail long payback periods. Limited budgets and the need for more economic zones have led some countries to actively attract FDI for this purpose. Cooperation with foreign governments or enterprises can provide access to various sources of finance or lower costs of borrowing.

Second, host countries benefit from the expertise and experience of foreign zone developers. Most of those involved in the development of overseas zones have many years of experience in delivering successful economic zone projects domestically and abroad. Singaporean zone developers such as JTC and SembCorp Industries are Singapore's main industrial infrastructure planners and builders. Companies such as Sumitomo and Sojitz (both Japan) have strong zone marketing and management experience in overseas zones.

Third, having foreign partners in SEZ development brings a certain guarantee of attracting foreign investments into these SEZs. Some private zone developers have close business networks with many major MNEs. They play a crucial role in bringing anchor and major tenants to the zone. Some private zone developers are themselves anchor tenants in the SEZs they develop, such as Toyota Tshuno in the industrial parks it develops. These anchor tenants in turn play a significant role in attracting their suppliers and in creating an industrial cluster. In addition to developers' expertise in infrastructure development and zone management, a government-endorsed zone also provides some degree of certainty to home-country enterprises venturing into a relatively undeveloped locale.

Government partnership zones require a higher level of coordination by both home-economy and host-economy governments (table IV.9). Some governments have established special coordination mechanisms between relevant government agencies to supervise and monitor zone development and solve issues through dialogue and consultation. Some make use of an existing bilateral mechanism to discuss issues raised during the zone development process. For instance, the Singapore–China Suzhou Industrial Park established a three-level coordination mechanism: a Joint Steering Council chaired by vice premiers with members from relevant ministries, a Bilateral Working Committee between the Suzhou Municipal Government and Singapore's Ministry of Trade and Industry, and an Organ for Liaison with representatives from both sides.⁸ For the Russia Industrial Zone in Egypt, however, no special coordination mechanism was established. Instead, the Russian Ministry of Industry and Trade and the General Authority for the Development of the Suez Canal Economic Zone were designated as competent authorities for coordination.

Table IV.9. Key governance elements of foreign partnership zones

Elements	Function
Memorandum of understanding or bilateral agreement	<ul style="list-style-type: none"> • Political commitment • Institutional framework
Coordination mechanism	<ul style="list-style-type: none"> • Monitor and review • Effective dialogue
Joint-venture framework	<ul style="list-style-type: none"> • Zone development and management • Participation of relevant stakeholders
Third-party participation	<ul style="list-style-type: none"> • Foreign capital • Expertise on zone development and management

Source: UNCTAD.

Overseas cooperation zones have raised concerns about lack of transparency and accountability and about ownership complexity. Many African governments have not published contracts they have signed for the Chinese overseas zones (Farole and Akinci, 2011). The Jericho Agro-Industrial Park was considered to lack Palestinian ownership, as project developers spoke only English and Japanese and no reports existed in Arabic. The project was also criticized for lacking clear financial reports and budgets (Bisan Center for Research and Development, 2012).

b. Border and cross-border SEZs

The geographic advantage of border SEZs is their proximity to targeted foreign investment and foreign markets, especially for specialized export-processing zones. Mexico's first maquiladoras were established in the northern border areas of Tijuana, in Baja California and Ciudad Juarez, in Chihuahua in the 1960s. The United States manufacturers were encouraged to build assembly plants in a 12-mile-wide free zone starting at the border, which offered special incentives provided by Mexico, lower labour costs and proximity to their markets in America. LLDCs are also more likely to plan their SEZs near borders, to offer better economic connection to neighbouring countries. SEZs in Mongolia and the Lao People's Democratic Republic, for example, are almost all located in border areas.

Border SEZs are developed at different stages in SEZ programmes. In some countries, they are among the first group of SEZs established. Other countries have built border SEZs at a later stage to reduce domestic regional disparity. After its initial success with SEZs in eastern coastal areas, for instance, China established SEZs in its less developed regions near borders to boost local economic development.

Deepening regional integration has also accelerated the development of border SEZs. Regional development initiatives and cooperation programmes have promoted the establishment of SEZs along regional economic corridors. The development of the Greater Mekong Subregion corridors, a regional economic cooperation programme that involves Cambodia, China, the Lao People's Democratic Republic, Myanmar, Thailand, and Viet Nam, has encouraged these countries to build SEZs in border areas to better utilize the improved connectivity along the corridors. Thailand adopted a new SEZ programme in 2015 to establish 10 SEZs at its border. The CLMV countries have also adopted similar strategies (table IV.10).

GVC-based industrial development benefits from strong ties with supply bases and markets in neighbouring economies (*WIR13* highlighted the value of "regional industrial development

Table IV.10. Border zones within the Greater Mekong Subregion economic corridors	
Bavet Cambodia	Moc Bai Viet Nam
Chiang Kong Thailand	Houaysai Lao People's Democratic Republic
Dong Kralor Cambodia	Khong Phapeng Lao People's Democratic Republic
Koh Kong Cambodia	Trat/Souy Cheng Thailand
Lao Bao Viet Nam	Dansavanh Lao People's Democratic Republic
Mohan China	Boten Lao People's Democratic Republic
Myawaddy Myanmar	Mae Sot Thailand
Pak Nhai Cambodia	Pleiku Viet Nam
Poipet Cambodia	Aranyaprathet Thailand
Savan–Seno Lao People's Democratic Republic	Mukdahan Thailand
Tachileik Myanmar	Mae Sai Thailand
Thadeua Lao People's Democratic Republic	Nong Khai Thailand
Vang Tao Lao People's Democratic Republic	Chong Mek Thailand

Source: UNCTAD, based on ADB (2018).

compacts” to create cross-border industrial clusters through joint investment in GVC-enabling infrastructure and productive capacity building). SEZs in border areas can exploit advantages that arise from resources available in neighbouring countries, proximity to their markets and the potential for cross-border linkages with suppliers. For instance, in 2016, most firms operating in the Mae Sot SEZ in Thailand were Thai firms using domestic inputs and finance to produce goods for the Thai market but employing day labour from Myanmar to reduce their wage bills. With the business environment in Myanmar improving, some entrepreneurs have relocated to Myawaddy, the Myanmar side of a border zone (ADB, 2018).

In Africa, intercontinental trade and economic cooperation through border SEZs is also high on the agenda. The Musina/Makhado SEZ of South Africa is strategically located along a principal north–south route into the Southern African Development Community and close to the border between South Africa and Zimbabwe. It has been developed as part of greater regional plans to unlock investment and economic growth, and to encourage the development of skills and employment in the region. Similarly, the governments of Burkina Faso, Côte d’Ivoire and Mali launched a cross-border zone encompassing all three countries to leverage the opportunities provided by regional integration.

Cross-border SEZs – where zones physically straddle borders, under joint ownership by neighbouring countries – involve even deeper integration. The Horgos/Khorgos Cross-Border Economic Zone straddling China and Kazakhstan, as well as the Mohan/Boten Cross-Border Economic Zone between China and the Lao People’s Democratic Republic, are two such zones, albeit with different approaches. The former was designed to be a hub for trade, entertainment and intercultural exchange, where merchants and travelers from China, Central Asia, Europe, the Russian Federation and Turkey could meet and stay for 30 days visa-free to communicate and trade. Since its opening in 2012, the SEZ has served mainly as a duty-free commercial centre, hosting shopping centre and convention facilities.

The zone on the Chinese–Lao border, in contrast, sought to incorporate two border SEZs into one joint zone. The Mohan SEZ on the Chinese side was established in 2001 as a border trading zone. The Boten Zone on the Lao side was developed in 2003 as a warehouse, tourism and trade centre. The development plan of the cross-border zone was finalized in 2015 between the two governments, and the construction is still under way (Chen, 2019).

Cross-border SEZs are a relatively recent phenomenon, and it is still early to draw any definitive conclusions. Political support from all governments involved is key to their success, as is close coordination at both state and local levels. Such zones challenge zone developers and management companies to find innovative ways to work with governments on both sides of the border. Although the development of cross-border zones is challenging, more countries are trying to combine their SEZ strategies within regional cooperation efforts. On 1 March 2019, for example, Ethiopia and Kenya agreed to establish an FTZ and enhance infrastructural development along the Moyle border region, to create a commonly administered economic hub.

B. THE REGULATORY AND INSTITUTIONAL FRAMEWORK FOR SEZs

SEZs, including their establishment, operation and eventual dissolution, are regulated by legal frameworks enacted at different levels of governance. This section reviews specific aspects of this regulatory framework at the national and international levels. The national analysis covers domestic SEZ laws in 115 countries and models of institutional set-up. The international review includes relevant rules contained in three bodies of international economic law: international investment agreements (IIAs), the agreements of the World Trade Organization (WTO) and regional trade agreements (RTAs).

1. The national regulatory framework

a. Overall regulatory framework

National SEZ policies around the world differ considerably, reflecting countries' specific industrial structures, current development stages and growth opportunities. Nonetheless, they all include a special regulatory regime for SEZs and a separate institutional set-up.

The SEZ regulatory framework deals with a variety of policy issues, mainly trade, investment promotion and facilitation, establishment of investment, access to land, taxation, as well as labour and environmental issues.

Rules and regulations that apply in SEZs are contained in countries' general regulatory framework and in SEZ-specific legislation, such as SEZ laws and decrees (figure IV.9).

Figure IV.9. Main elements of the regulatory framework of SEZs



Source: UNCTAD.

SEZ-specific rules are generally more favourable for zone users, as they offer certain benefits and privileges not available outside the zones. The manner in which this special regime and the general legislation interact, as well as the degree to which SEZ rules differ from the general legal framework, vary considerably between countries.

Trade rules establish tariff systems for imports and stipulate other non-tariff related requirements and administrative procedures to be fulfilled for both imports and exports. In SEZs, investors are often fully or partially exempt from these **customs duties**. Zone users may also benefit from **trade facilitation** through, e.g., expedited customs clearance procedures or the possibility to store items in special warehouses.

Host countries **protect, promote and facilitate investment** through various means, including protection against certain political risks, the granting of investment incentives and various services offered by investment promotion agencies. In SEZs, investment incentives and facilitation services normally exceed those available in other parts of the country. Investors may also benefit from additional protection, e.g. through stabilization clauses in investment contracts.

FDI entry rules of the host country determine to what extent foreign companies face investment restrictions. SEZ regulations may provide foreign investors with additional entry rights in industries that are otherwise closed or restricted. Investment liberalization may also be piloted in SEZs first, before a subsequent country-wide opening to foreign investors.

Real estate laws establish the general rules on access to land by foreigners. These general rules are often relaxed in SEZs, allowing foreign ownership or preferential long-term leases that are otherwise not available. In addition, SEZ regulations may provide privileged access to investors by offering land for free or at a reduced price, or by exempting investors from real estate taxes.

Firms are subject to the **tax regime** of their host country. In SEZs, they often enjoy certain fiscal benefits, such as a partial or complete exemption from paying corporate taxes for a specific time or the application of a reduced tax rate.

Companies are also subject to the **general labour and environmental regulations** of their host countries. SEZ rules may stipulate labour-related obligations that go beyond those existing in the rest of the country (e.g. skills development of local personnel) – in exchange for certain benefits granted to the investors. Also, investors in SEZs may be expected to undertake particular measures against pollution or excessive noise, or related to water treatment and waste disposal. At the same time, some SEZ legislation allows employers to demand work requirements that go beyond those contained in the general laws (e.g. more flexibility for zone employers to arrange working hours).

b. SEZ laws: a core part of the regulatory framework

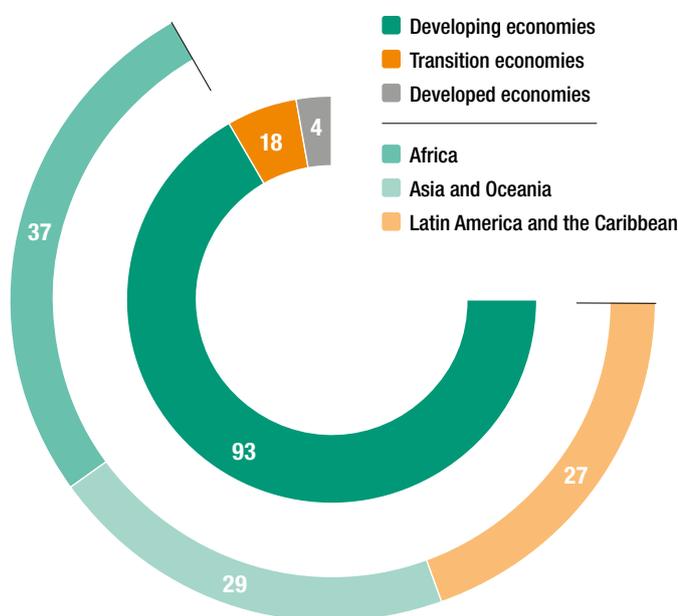
A key element of the regulatory framework for SEZs are SEZ laws. These laws provide a special regulatory regime for the establishment and operation of SEZs and specify the rights and obligations of SEZ authorities, zone developers, operators and users. They are implemented through executive decrees establishing each SEZ. These decrees specify the particularities of a zone, including the assignment of concrete plots of land to be developed, targeted industries or activities, detailed objectives and other zone-specific regulations. The remainder of this section presents the results of a recent UNCTAD survey of SEZ laws (and of investment laws containing SEZ provisions).

Although national SEZ laws are the most common SEZ policy instrument around the world, some countries have adopted other approaches by establishing separate legislation for each SEZ or delegating powers to local governments – with China being one prominent example.

(i) Distribution of SEZ laws

Some 115 countries have adopted at least 127 SEZ laws; they are most commonly used in developing countries. Twenty-seven SEZ laws have been identified in Latin America and Caribbean economies (in 69 per cent of countries in the region), 29 in Asian and Oceanian economies (57 per cent) and 37 in African countries (69 per cent). All transition economies regulate SEZs through SEZ laws (figure IV.10). Furthermore, 62 per cent of all LDCs have SEZ laws. In developed economies, SEZ-related legislation is rare and deals primarily with customs and state aid, among other matters.

Figure IV.10. Regional distribution of SEZ laws (Number of countries, n = 115)

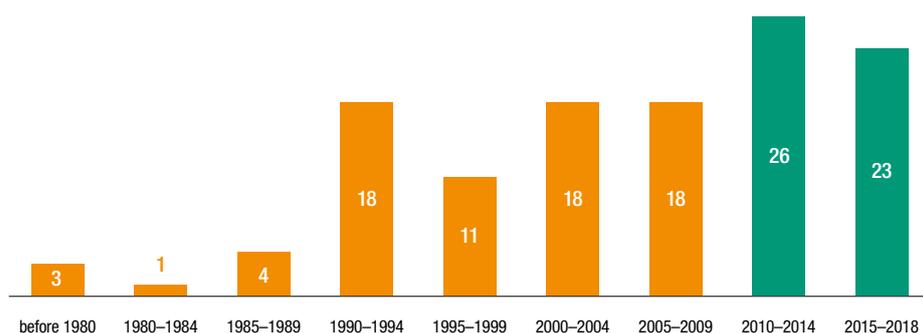


Source: UNCTAD.

The number of SEZ laws in force has increased significantly since the 1990s, with almost 70 per cent adopted since 2000 (figure IV.11). This trend has accelerated over the last decade, with nearly 40 per cent of all recorded national legislation having entered into force since 2010 – the vast majority in developing countries. The existing legal frameworks are therefore relatively recent.

SEZ laws usually enable the setting up of a variety of zone models, including free zones and EPZs. The decree establishing an individual zone then determines which model is chosen. This openness of SEZ laws to different categories of zones implies that their content is usually limited to some core policy issues that are relevant for any type of zone. This gives host-country authorities flexibility to design the regulatory framework for each individual zone in accordance with the specific situation and objectives. Federal states such as the Russian Federation, may have more complex SEZ regimes, consisting of diverse legal acts approved at different levels of government (box IV.10).

Figure IV.11. | Current SEZ laws, number adopted by period



Source: UNCTAD.

Box IV.10.

Regulatory framework for SEZs in the Russian Federation

In the Russian Federation, there are more than 130 SEZs established under several SEZ laws.

The Federal Law on Special Economic Zones adopted in 2005 is a generic legal framework for the establishment and operation of four major types of SEZs: industrial, technological, touristic and logistical. It aims to develop targeted sectors and industries. The law provides customs benefits and financial preferences at the federal, regional and local levels, and facilitates administrative procedures. It stipulates that the establishment of an SEZ requires a federal government decree. As of April 2019, there were 26 such SEZs operating in the country.

In addition, the regional development policy is supported by the Federal Law on Territories of Advanced Social-Economic Development, which distinguishes between two types of territories of advanced development. As of April 2019, there were 18 such territories in the Far East part of the country that are run by the public entity, JSC Far East Development Corporation. The law also allows for the establishment of “single-industry town” territories of advanced development, which are confined to municipal boundaries and operated by local authorities. There are 89 territories of that type.

Furthermore, some additional federal laws have set up specific zones and regulate all aspects of these SEZs’ operations without needing implementing decrees. Their aim is the development of specific regions.

Finally, the Federal Law on Innovation, Science and Technology Centres adopted in 2017 allows for the establishment of special zones focused on scientific and technological development, as well as commercialization. The first centre was established in March 2019 at the Moscow State University.

Source: UNCTAD, based on information from the Russian Academy of Sciences.

(ii) Content of SEZ laws

SEZ laws share some core elements. They include provisions on SEZ definitions and their different types, the objectives of SEZ regimes and targeted sectors, and investment attraction measures. They also regulate establishment procedures and operational conditions for zone users. Finally, they deal with institutional matters – an issue covered in subsection 2.

Definition of SEZs

Almost 90 per cent of SEZ laws contain a general definition of an SEZ, while less than one third (30 per cent) explicitly mention specific zone types as well and define them. Most laws use similar core criteria for their general definition of SEZs (table IV.11).

Objectives of SEZs and targeted sectors

Close to two thirds of SEZ laws (61 per cent) indicate the **objectives of the zones**. The most frequently mentioned goal is quantitative growth, followed by dynamic growth objectives. Much less attention is given to socioeconomic objectives. This breakdown is similar in all regions (figure IV.12).

Table IV.11. SEZs: general definitions and types

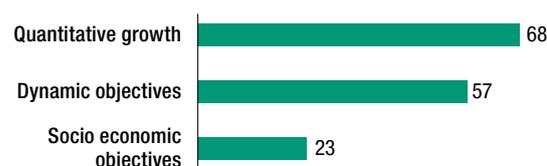
		Examples
Types	Geographical location Special regulatory regime Economic activity	<p>Poland: a separated, uninhabited part of the territory, on which a business activity may be conducted in accordance with the rules of the Act</p> <p>Pakistan: a geographically defined and delimited area that has been notified and approved for economic, industrial and commercial activities</p> <p>Indonesia: zones with certain boundaries within the territory that are designated to carry out an economic function and are granted certain facilities and incentives</p> <p>The Gambia: any area designated as a free zone where goods and services are deemed, insofar as import duties and taxes are concerned, as being outside the customs territory, where the benefits provided under the law apply</p>
	Broad coverage of many zone types	Botswana: free trade zone or commercial special economic zone, export processing zone, enterprise zone, free port, single-factory economic zone, specialized zones, and others
	Typology based on specific purposes of each type	Uzbekistan: free trade zones (trade focused); free production areas (stimulating entrepreneurship and priority sectors), free scientific and technical zones (development of scientific and production potential)
	Typology based on geographical considerations	Dominican Republic: other free zones of border character (at the frontier with Haiti), special free zones (proximity to natural resources processed), industrial free zones or services (any location)

Source: UNCTAD.

Quantitative growth goals are those aiming at attracting investment, promoting trade, increasing exports or creating jobs. Dynamic growth objectives seek innovation, industrial upgrading, skills development, economic diversification and structural change, as well as integration into value chains. Socioeconomic objectives relate to sustainable development, the quality of employment or environmental protection (box IV.11). Gender issues have received very little attention so far.

Only a minority of SEZ laws **target specific sectors and industries**. This means that the zones are either open to any kind of economic activity or that the designation of targets is left to the subsequent decrees establishing an individual SEZ. Manufacturing and the services sector are most frequently mentioned, whereas the primary sector and new cross-sectoral growth engines figure much less prominently. The latter category includes a variety of activities related to digitalization, industry 4.0, new technologies, software development and R&D centres (figure IV.13).

Figure IV.12. Objectives of SEZs as defined in SEZ laws (Number of laws)



Source: UNCTAD.

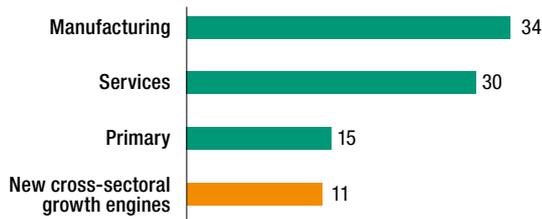
Box IV.11. Socioeconomic objectives (Examples from SEZ laws)

- In *Mexico*, the Federal Law on Special Economic Zones specifies that the purpose of establishing SEZs is to promote sustainable economic growth, reduce poverty, allow the provision of basic services and expand opportunities for healthy and productive lives in the regions of the country where social development is lagging.
- In *South Africa*, the Special Economic Zones Act states that the creation of decent work and other economic and social benefits, including the broadening of economic participation by promoting medium-size enterprises and cooperatives, as well as skills and technology transfer, are among the purposes of SEZ establishment.
- In *Liberia*, the Special Economic Zone Act declares that its purpose is to carry out de-urbanization of highly populated cities; achieve long-term environmental, labour, and gender sustainability; promote the advancement of human rights; increase the standard of living; reduce poverty levels; and achieve sustainable economic development.

Source: UNCTAD.

Figure IV.13.

Sectors targeted in SEZ laws
(Per cent)



Source: UNCTAD.

Investment attraction tools in SEZ laws

Most SEZ laws include investment attraction instruments for the zones (figure IV.14).

Almost 80 per cent of the SEZ laws provide for **fiscal incentives**, such as tax holidays for a defined period (often 5 to 10 years) or the application of a reduced tax rate. Tax exemptions may apply to the payment of profit taxes, corporate taxes, wages and salaries taxes, and value added taxes invoiced by local suppliers of goods, services and works necessary for carrying out SEZ activities (e.g. *Kenya*,

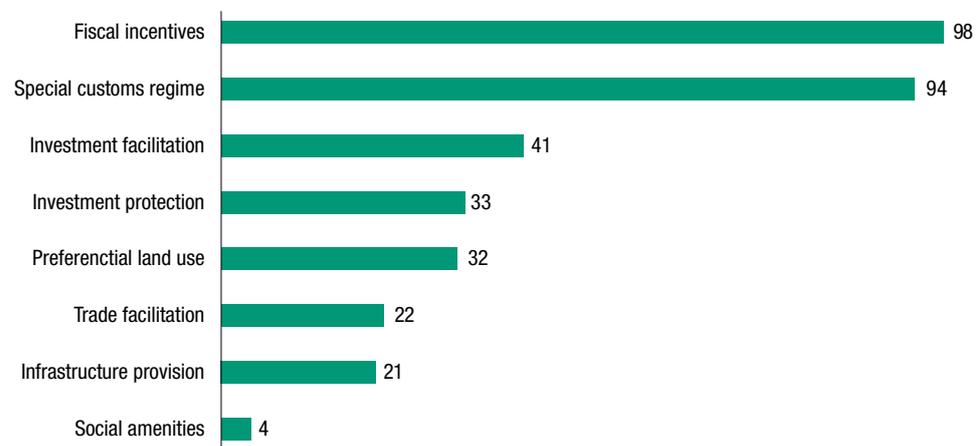
Special Economic Zones Act and Export Processing Zones Act). Some countries allow the deduction of a certain percentage of training expenses for local personnel from the tax bill. Others link the granting of fiscal incentives to specific investor performance, for example, reliance on the use of local content or local employees, or compliance with certain export targets (e.g. *Mali*, Code des Investissements) or training of personnel (e.g. *Mexico*, Ley Federal de Zonas Económicas Especiales).

Similarly, most SEZ laws provide for a **special customs regime**, eliminating or reducing tariffs on goods, plants or machinery imported into the zone. This applies to items to be used exclusively inside the zone (e.g. *Azerbaijan*, Law on Special Economic Zones). In addition, there may be expedited and simplified customs procedures. In most SEZs, customs officers are present to conduct on-site checks.

Approximately one third of the SEZ laws include rules on **investment facilitation**. One frequently used tool is the streamlining of registration procedures, for instance by providing a list of documents required for admission or by setting deadlines for the completion of approval procedures. Other laws require zone operators to establish a single point of contact or a one-stop shop to deliver government services to businesses within SEZs (e.g. the *Philippines*, Special Economic Zone Act). Other laws provide for the creation of business incubators in zones to assist enterprises in their initial periods of operation by offering technical services and to ensure the availability of physical work space (e.g. *Kosovo*, Law on Economic Zones). Some laws also eliminate restrictions on recruitment and employment of foreign personnel within the zones (e.g. *Nigeria*, Export Processing Zones Act).

Figure IV.14.

Investment attraction tools in SEZ laws
(Number of laws, n = 127)



Source: UNCTAD.

About one fourth of SEZ laws address **investment protection**. In some cases this may go beyond the level applicable in the rest of the country. For instance, some laws guarantee that investors operating in SEZs may not be expropriated or nationalized (e.g. *Republic of Yemen*, Free Zones Law). Other SEZ laws guarantee that future changes of the existing regulatory framework will not negatively affect investors in SEZs (e.g. *Turkmenistan*, Special Economic Zone Law). Another option is to ensure that in case of any conflict or discrepancies between the SEZ law and other domestic legislation, the former shall prevail (e.g. the *Lao People's Democratic Republic*, Law on Investment Promotion).

Preferential land use is mentioned in less than 30 per cent of SEZ laws. It mainly includes a permanent or temporary exemption from lease payment or the application of a reduced rent (e.g. *Republic of Korea*, Act on Designation and Management of Free Economic Zones).

Only about one fifth of SEZ laws deal with some sort of **trade facilitation**. Examples include the simplification of tax records for import and export operations involving companies in SEZs, or the possibility to report any movement of goods to or from zones or between SEZ companies on a single form filed monthly with a one-stop service (e.g. *Paraguay*, Ley No 523/95 and *Gabon*, Law No. 010/2011).

The **provision of infrastructure** as a promotion tool is mentioned in less than 20 per cent of SEZ laws. Authorities may be required to supply zones with electricity, fuel, water and telecommunication services, among others (e.g. *Islamic Republic of Iran*, Special Economic Zone Law, Article 18). In some cases, governments grant preferential fees for port services, telecommunication, electricity and water supplied to enterprises established in the zones (e.g. *Togo*, Loi n°2011-018 portant statut de Zone Franche Industrial).

Only a few SEZ laws provide for the installation of **social amenities**. These may include educational institutions, hospitals, recreation facilities (e.g. *El Salvador*, Ley de zonas francas industriales y de comercializacion; *Costa Rica*, Ley de Régimen de Zonas Francas).

Establishment and operational requirements for SEZ users

Slightly more than one third of all SEZ laws (38 per cent) include criteria that companies must meet in order to invest and operate in the zone. The overwhelming majority of SEZ laws open the zones to both domestic and foreign companies.

The establishment and operational requirements fall into three broad categories: (i) minimum amount of investment, (ii) expectation to contribute to certain development goals, and (iii) specific performance requirements, which typically focus on employment-related obligations, export performance and skills transfer (box IV.12).

2. Institutional set-up of SEZs

a. Key stakeholders

The institutional set-up of SEZs is complex. It involves a multitude of actors both public and private, with different responsibilities. Furthermore, it is highly dependent on country-specific political, economic, regulatory and administrative systems. Thus, there is no uniform institutional model for SEZs. Nonetheless, existing SEZ regimes share some key commonalities concerning the main stakeholders involved (table IV.12).

The **government** is the pivotal player in the domestic SEZ regime. It sets the overall economic development goals, adopts underlying industrial policies and implements them through, inter alia, the establishment of SEZs. The government coordinates its SEZ policies

Minimum investment requirements

- In *Jamaica*, the Special Economic Zones Act, 2016 stipulates that investment in machines, equipment, facilities, buildings and other assets during the first year must exceed \$50,000.
- In *Turkmenistan*, a participant in a free economic zone must invest an amount fixed in the investment contract.
- In *Costa Rica*, companies may settle in a zone only with initial new investment in fixed assets of at least \$150,000 initially (or its equivalent in local currency).

Expectation to contribute to certain development goals

- In *North Macedonia*, the Law on Technological Industrial Development Zones requires zone users to meet the following criteria: job creation, compliance with high environmental standards, production based on new technologies and high energy efficiency.
- In *Botswana*, while evaluating applications to operate within SEZs, the authorities must consider “indicative performance standards” such as exports, target export volumes, values and their markets, and expected benefits from the investment in terms of production and exports.
- In *Eswatini*, investors operating in SEZs are expected, among other things, to generate new and innovative economic activities, create employment and other economic and social benefits, promote integration with local industry and increase value added production.

Specific performance requirements**Employment-related obligations:**

- In *Djibouti*, investors in SEZs must employ Djiboutian personnel for at least 30 per cent of their workforce by the end of the first year of operation and at least 70 per cent after five years of activity.
- In *Cambodia*, foreign managers, technicians or experts may be employed, provided that the number of foreign staff does not exceed 10 per cent of total personnel.

Export requirements:

- In *Nepal*, at least 75 per cent of services and materials produced within a zone must be exported.
- In *Malaysia*, goods manufactured in a free industrial zone may be transported from the zone only for export or with the approval of the relevant authority.
- In *Gabon*, the law requires that at least 75 per cent of production in a zone be exported.

Skills transfer:

- In *Ethiopia*, an industrial park enterprise is obliged to replace expatriate personnel or professionals with Ethiopian nationals by transferring the required knowledge and skills through specialized trainings.
- In *Madagascar*, the Law on Special Economic Zones obliges zone users to report to zone developers on training provided to local staff.
- In *Maldives*, under the Special Economic Zones Act, approval from an SEZ Authority to employ expatriate staff above statutory limits may be granted only temporarily and under the condition that a zone user provides for adequate training for Maldivians to fill the position.

Source: UNCTAD.

with other relevant policy areas and its international obligations and allocates necessary resources – budgetary, personnel and the like – to SEZs. Through individual decrees, it establishes particular zones on its territory on its own volition or in response to demand from specialized agencies, local governments or private companies. The government is also responsible for the overall administration of the SEZ regime.

Most countries have established a separate **SEZ authority** to support the government's policymaking functions. It is either a specialized agency or a State-owned company, supervised by the highest governmental officials, such as the president, the prime minister, another minister, or a separate unit – predominantly within the ministry of economics, trade or finance.

SEZ authorities coordinate zone policies and initiate related programmes. They are responsible for strategic and operational planning, conducting feasibility studies in relation to planned zones as well as for evaluating applications for zone development. They monitor

Table IV.12. Main stakeholders in SEZ regimes

Stakeholders	Main Functions (selected)
Government	<ul style="list-style-type: none"> • Adopts SEZ-relevant policies and supervises its implementation • Establishes specific SEZs through decrees
SEZ Authority	<ul style="list-style-type: none"> • Conducts strategic planning and assessment • Licenses private sector stakeholders
Zone developer	<ul style="list-style-type: none"> • Provides essential infrastructure • Makes land arrangements
Zone operator	<ul style="list-style-type: none"> • Manages and administers a zone • Promotes a zone and selects zone users
Zone user	<ul style="list-style-type: none"> • Invests and undertakes business activities in a zone

Source: UNCTAD.

the SEZ regime, promote and enforce underlying policies and standards, and collect relevant data on the effectiveness of individual zones and the entire system. They may also suggest SEZ policy changes to the government and prepare relevant decisions. This may include, for example, the selection of zone developers and contract negotiations with successful candidates. The SEZ authorities may also plan and execute the integration of SEZs into the local economy, for example, through the construction of off-site infrastructure.

Furthermore, SEZ authorities are often, directly or indirectly, responsible for issuing relevant permits and approvals within zones, including construction permits, environmental impact assessments, work permits, and visas for foreigners and approvals of foreign land ownership. In addition, SEZ authorities may assist and facilitate the operations of zone developers and zone users by offering training, liaising with local authorities, utilities companies, customs and tax officials and other entities. Accordingly, SEZ authorities are normally physically present within the zones through branches or representatives.

Zone developers are responsible for the establishment of a particular zone. Their main functions include land arrangements and provision of essential infrastructure. Zone developers may buy land, or public authorities may assign plots to them. In addition, they initiate and participate in zoning and land use processes leading to the adoption of a master plan for the zones. In relation to infrastructure, zone developers construct on-site networks and utilities, and connect them to existing systems.

The technical and financial capacities and expertise of zone developers are critical to the success or failure of SEZs. Because of a lack of domestic public resources, many developing countries have turned to the private sector to fill the gap. In 2008, an estimated 62 per cent of SEZs in developing and transition countries were privately developed (and operated), compared with only 25 per cent in the 1980s (FIAS, 2008). To attract private partners, governments have introduced promotion programmes. They mainly include financial incentives but may extend to preferential land access, investment facilitation or simplified capital access. At least 40 per cent of SEZ laws include some kind of support scheme for private zone developers. In countries that prefer public zone developers, there is room for public-private partnerships.

Under most SEZ regimes, zone developers are also responsible for the day-to-day operations of SEZs. Yet **zone operators** may also be separate entities. Operators also attract individual investors to the zone, often in cooperation with domestic investment promotion agencies. In addition, they are responsible for the smooth operation of a zone

by providing basic infrastructure services, such as electricity, telecommunication and water supply, security and maintenance. Potential additional services include consultancy desks, one-stop shops, training centres, focal points for recruitment, as well as the provision of office space and conference facilities. In cooperation with local authorities, they may offer health care, education, transport, housing and recreation facilities as well.

Finally, SEZs are created with **zone users** in mind. Investors are the direct beneficiaries of the special regulatory regimes instituted in each zone. Their productive, technological and trading capacities make them essential for zone performance.

b. Institutional models

Although the broad institutional set-up is similar among countries with regard to its general structure and the principal actors involved (governments, SEZ authorities, zone developers, operators and users), differences exist, in particular concerning the legal status and responsibilities of zone developers. Most institutional set-ups fall within three basic models.

In the **public model** (figure IV.15), all institutions at the national and the zone level, including zone developers, are public or publicly controlled. Zone developers are often called “zone administrations”. Although these administrations may be organizationally and financially autonomous, SEZ authorities exercise strong control and oversight over their operations. In this model, the selection of zone users is an administrative decision. Often, central and local governments delegate regulatory powers to zone administrations. A strong zone administration with the government’s backing may also help to coordinate the responsibilities of different public authorities having a stake in SEZs.

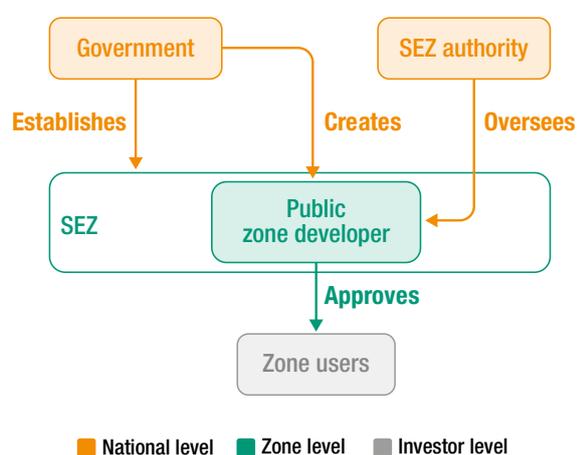
This model is widespread in economies where zone land and utilities are mainly in public hands. It can be found with some variations in countries such as the Russian Federation, Tajikistan and Viet Nam.

At the opposite end of the spectrum is the **private model** with private zone developers being selected in a competitive process on the basis of statutory criteria (figure IV.16). They have broad operational autonomy and report to the SEZ authorities, which have limited and strictly defined regulatory powers. Most importantly, zone developers are responsible for the admittance of zone users, with which they conclude investment contracts that regulate land leases, relevant fees and charges, or other operational issues. In addition, this model

creates an opportunity for zone users to link to the private developer’s existing business networks and to receive direct training and other knowledge transfer from that developer. This institutional set-up is found in Georgia, Serbia and Uruguay, for example.

The **hybrid model** is a combination of the two models (figure IV.17). It provides for the possibility of public or private zone developers that retain relatively broad autonomy in their operations. As regulators, SEZ authorities licence all private stakeholders and thus retain some control over the admission process. Nevertheless, the admission of zone users at the zone level falls again into the purview of zone developers, as user status in the zone is governed predominantly by a contract. This model gives broad flexibility to policymakers to shape SEZ regimes according to zone activities and specific investment

Figure IV.15. Public model of SEZ institutional set-up



Source: UNCTAD.

projects. It also allows for greater involvement of local governments (e.g. they can be the sole zone developer). This hybrid approach is most common in China, Ethiopia, and Poland, among others.

c. Other SEZ stakeholders and the role of subnational authorities

Other stakeholders may also have a role in the SEZ regime. Tax and customs authorities administer special fiscal regimes applicable in zones and undertake on-site inspections in relation to goods entering and leaving the zones. Investment promotion agencies may assist in attracting new investors to the zones, preparing ready-made investment packages, sharing information on new developments in SEZ policies and building an investor-friendly image of the country abroad. In addition to the central government, regional and local governments may also have important roles.

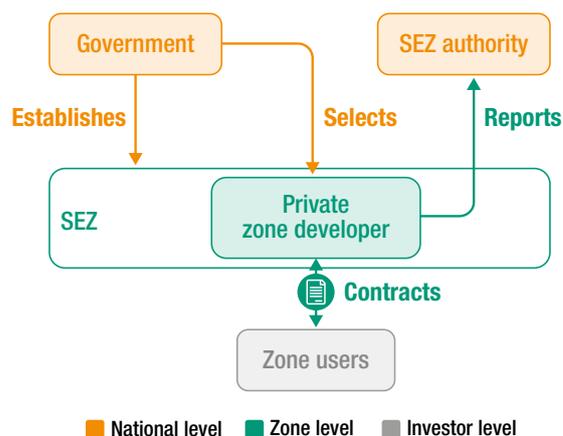
The UNCTAD World Investment Prospects 2019–2021 survey of investment promotion agencies found that almost 50 per cent of respondent agencies promote investment both within and outside SEZs, whereas more than 23 per cent have dedicated promotion programmes targeting SEZ investments. These agencies may also be involved in other SEZ-related activities, such as evaluating SEZs’ performance and impact (9.5 per cent), acting as an SEZ authority (7.5 per cent) or being involved in establishing and managing SEZ developers (6 per cent).

Other stakeholders may include industry associations, staff unions and zone employees’ representatives, as well as civil society.

The central government may share SEZ responsibilities with subnational or local authorities (box IV.13). Regional or local governments often have better knowledge of local conditions in relation to infrastructure, availability of land and utilities, and the specific regional or local investment needs and conditions. In addition, they may have the power to provide additional investment incentives or facilitation measures for engaging companies in zones. Furthermore, they can be instrumental in creating spillovers and linkages with local companies, because of their specific knowledge of the local economy and local training centres. It is also quite common for regional or local governments to petition the central government for the establishment of an SEZ on their territory.

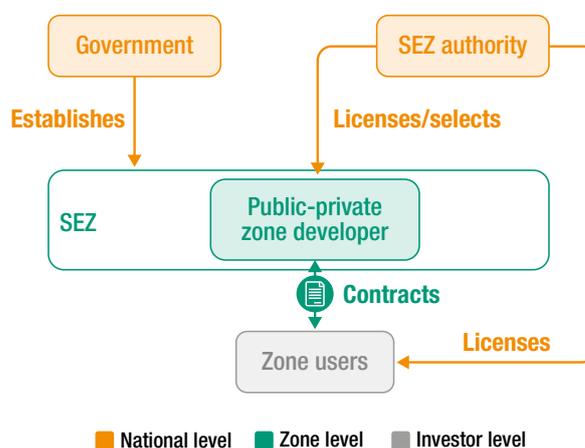
Properly designing and implementing the regulatory and institutional framework for SEZs is a challenging task, and one that determines the success or failure of a zone. Key decisions to be taken relate to the type of zone to be created, the specific development objectives pursued through SEZs, the kind of promotion tools to be offered to SEZ investors, the content of investor obligations and the integration of the zone into the broader economy to avoid an enclave effect.

Figure IV.16. Private model of SEZ institutional set-up



Source: UNCTAD.

Figure IV.17. Hybrid model of SEZ institutional set-up



Source: UNCTAD.

- In *Indonesia*, Zone Councils consisting of central and regional administration representatives are established on the provincial level to assist the National Council in administering SEZs and to oversee administrative services in each zone.
- The Federal Law of Special Economic Zones in *Mexico* stipulates that, once a zone is established through a decree, three levels of government – federal, state and municipal – must enter into a coordination agreement. The agreement is meant to coordinate their respective actions, including financial involvement, granting incentives at the local level and facilitating administrative procedures. As a rule, local governments need to have authorization from their respective local legislatures or town councils.
- In *Poland*, zone operators are companies in which either the Treasury or the regional government holds the majority of shares. If the Treasury is the majority shareholder, the supervisory board of a zone operator consists of representatives of the Minister of Economy and Finance and the President of the Office of Competition and Consumer Protection, as well as up to two representatives of the local governments with the highest share of capital. However, if the regional government controls a zone operator, it appoints two board members, the Minister of Economy appoints one, and up to additional two members are appointed by other local governments with the highest capital participation.

Source: UNCTAD.

The multitude of policy areas that are relevant for SEZs add to the challenge. Governments need to ensure policy coherence and seek synergies between trade, investment, tax, labour and environmental policies – to mention the most important ones. Fostering coordination in SEZ policymaking and ensuring transparency are critical.

The success of SEZs also depends on the “right” institutional set-up. All relevant stakeholders should be involved in the process, starting from the design stage through to the operational phase. Governments need to identify the SEZ institutional model that is most appropriate to their country’s specific situation and administrative system. The responsibilities of the various government authorities, zone developers and operators should be clearly defined and assigned.

3. International regulations and SEZs

Although the SEZ regime is typically a tool of national policymaking, governments need to be mindful of SEZ interaction with their international obligations. International rules can either facilitate or constrain such national policymaking (table IV.10).

Two key areas of SEZ-related national policymaking interact with countries’ international obligations:

- Support measures granted to SEZ resident companies (e.g. tax and other benefits, exemptions from customs and duties, relaxed regulatory requirements, easier establishment and foreign ownership requirements, streamlined administrative services)
- Requirements placed on SEZ investors (e.g. certain performance requirements or duties applicable to imports)

International rules can either facilitate (allowing or requiring) or constrain (prohibiting or requiring phasing out) such measures (table IV.13). States are advised to design and administer SEZs in a way that does not breach their international obligations and that maximizes the benefits these obligations may provide (Cheng, 2019b).

Table IV.13. SEZs and international law: the interface (Examples)

Impact of measure	Measures	International rules limiting the measure (prohibiting it or phasing it out)	International rules allowing or requiring the measure
Supporting firms	<ul style="list-style-type: none"> • Tax and other benefits • Exemption from customs and duties • Relaxed regulatory requirements • Additional liberalization for foreign investors • Streamlined administrative procedures 	<ul style="list-style-type: none"> • WTO SCM • Human rights instruments • ILO conventions • Environmental agreements 	<ul style="list-style-type: none"> • Kyoto Convention • WTO GATT • WTO GATS/RTA (establishment commitments) • WTO TFA • IIA (investment facilitation rules)
Constraining firms	<ul style="list-style-type: none"> • Establishment and operational requirements 	<ul style="list-style-type: none"> • WTO TRIMs • IIA/RTA rules on performance requirements 	<ul style="list-style-type: none"> • RTA/IIA reservations for performance requirements

Source: UNCTAD.

a. International investment agreements

International investment agreements (IIAs) typically guide government action with respect to investment protection – and to a lesser extent investment liberalization (investor entry rights), promotion, facilitation and investor obligations. Host countries sign IIAs, among other reasons, to attract investment, which is also a key objective of SEZs.

Typically, bilateral investment treaties (BITs) and treaties with investment provisions (TIPs) do not single out investments in SEZs. Rather, they apply equally to SEZ-hosted investments as they do to other covered investments. Most BITs allow investors to enforce substantive protections through international arbitration against host States (investor–State dispute settlement, ISDS) (see chapter III). A search through over 900 publicly known treaty-based ISDS cases revealed 11 disputes relating to investments in SEZs.

Measures challenged in these cases include the revocation of benefits, such as tax benefits or free zone status (seven cases) and the imposition of restrictions or additional charges or requirements on investors (four cases). Thus far, three disputes were decided in favour of the State and four in favour of the investor. In two cases, the parties settled, and two cases are still pending.

The relevance to SEZs of these 11 cases varies. The most pertinent cases involve three actions:

- The SEZ authority's termination of the investor's land lease agreements (*Lee John Beck v. Kyrgyz Republic*)
- The revocation of the investor's SEZ tax status (*Ampal v. Egypt*)
- The imposition of environmental requirements, allegedly in breach of the stabilization clause in the host country's SEZ law (*Bogdanov v. Moldova*)

In the cases decided in favour of the investor, tribunals held, for example, that certain adverse changes to the regulatory regime (e.g. revocation of SEZ benefits) frustrated investors' legitimate expectations and breached the obligations of fair and equitable treatment and/or indirect expropriation.

Other IIA clauses may also affect the design and operation of SEZs:

- Clauses prohibiting performance requirements, if included in an IIA, potentially limit the type of industrial policies that a government may wish to pursue through an SEZ (i.e. certain export requirements imposed on foreign investors). Many BITs do not include such clauses.

- Not lowering standards clauses can signal that governments do not wish to compromise environmental or labour regulations through their SEZs. These clauses may help in the process of re-orienting SEZs towards the sustainable development imperative.

b. World Trade Organization

Like BITs, the World Trade Organization (WTO) rules do not single out SEZs. Accordingly, WTO rules apply to covered government measures that are taken in the context of SEZs (Defever and others, 2017; Shadikhodjaev, 2011).

Most relevant is the WTO Agreement on Subsidies and Countervailing Measures (SCM). While not referring to SEZs explicitly, the SCM Agreement prohibits export subsidies and subsidies that are contingent on the use of domestic goods over imported goods (Art. 3 and Annex 1 SCM).⁹ To the extent that SEZs employ such measures, questions of WTO compatibility – or lack thereof – may arise.

At the same time, the SCM provides flexibility for certain subsidy-related measures possibly applied in the SEZ context (Coppens, 2013). For example, general infrastructure that is available to all (or nearly all entities) within SEZs is not deemed a subsidy and thus not subject to the rules of the SCM Agreement.¹⁰ Similarly, exempting an exported product from duties or taxes borne by the like domestically consumed product, or the remission of such duties under duty-drawback schemes¹¹ are also not subject to the rules of the SCM Agreement.¹²

Through its provision on special and differential treatment, the SCM Agreement provided some flexibility to developing-country members (e.g. phase-outs for export subsidies and subsidies contingent on the use of domestic goods).¹³ Most of the phase-out periods and processes for transition periods, however, have since expired (Coppens, 2013). As a result of the expiry, only LDCs and developing countries with a GNP per capita below \$1,000 per year can maintain export subsidies.¹⁴ Several WTO members have carefully managed the transition and phase-out of this flexibility and may offer lessons in this regard. A prominent example of a country having undergone this process is the Dominican Republic (see box IV.5).

Like the SCM Agreement, the WTO Agreement on Trade-Related Investment Measures (TRIMs) does not mention SEZs but potentially affects SEZ-related measures. Trade-related investment measures, such as local content requirements or import-export balancing requirements, are examples. To the extent that SEZs employ such measures (typically referred to as performance requirements), questions of WTO compatibility – or lack thereof – would arise. The TRIMs Agreement also offers transitional arrangements (for developing and least developed countries). These arrangements will expire in 2020.¹⁵

Given the importance of customs facilitation measures in SEZs, the WTO Trade Facilitation Agreement affects SEZ policies as well. Concluded in 2013, the Agreement entered into force in February 2017. It establishes rules aimed at expediting the movement, release and clearance of goods (including goods in transit) with flexibility for developing and least developed country members. A developing or least developed country's obligation to implement the provisions of the Agreement is conditional upon that member's acquisition of the necessary technical capacity. This may require donor support, based on each member's own evaluation of its needs.

At its meeting on 28 May 2018, the WTO's Dispute Settlement Body established a dispute panel to examine certain alleged export subsidies in India (DS541) pursuant to a request from the United States.

The measures at issue are, among others, (i) the Export-Oriented Units Scheme and sector-specific schemes, including the Electronics Hardware Technology Parks Scheme; (ii) the Merchandise Exports from India Scheme; (iii) the Export Promotion Capital Goods Scheme; (iv) SEZs; and (v) a duty-free import for exporters programme.

According to the United States, India appears to be providing prohibited export subsidies inconsistent with Articles 3.1(a) and 3.2 of the SCM Agreement. Incentives are allegedly given to SEZs on condition that they generate positive net foreign exchange earnings for a five-year period. This requirement allegedly implies that fiscal incentives given to SEZs are export contingent and, hence, are "prohibited subsidies" in terms of the SCM Agreement.

The Panel is expected to issue its final report to the parties later in 2019.

Source: UNCTAD, based on WTO.

In addition, several WTO processes involve SEZ-related issues:

- **WTO accession:** Prospective WTO members are expected to document their trade-related policies, including regulations and incentives in SEZs and/or plans for future SEZs. They may make additional commitments that relate to, or specifically mention, SEZs.
- **Trade Policy Review Mechanism:** WTO members are to provide a full and detailed report on their trade policies and practices, including those related to SEZs, to the Trade Policy Review Body.
- **WTO dispute settlement:** A pending case, *India – Export Related Measures* (DS 541), brings into the spotlight issues regarding SEZs and the SCM Agreement's prohibition of export-oriented subsidies (box IV.14). Earlier WTO disputes involving SEZ-related measures include *Colombia – Customs Measures on Importation of Certain Goods from Panama* (DS348), and *Colombia – Indicative Prices and Restrictions on Ports of Entry* (DS 366).¹⁶

c. Regional trade agreements

Similar to BITs and WTO agreements, RTAs also cover the SEZs of the RTA parties, unless such SEZs are explicitly excluded from the RTA or from specific provisions. Exclusion from the entire Agreement happens rarely, if ever: the limited review of RTAs undertaken for this chapter did not identify any such instances.

A modern RTA is typically a complex agreement that consists of multiple chapters addressing various aspects of the parties' economic relationship. Although RTAs focus on issues concerning trade in goods and services, they also cover other subjects, including investment, entry of businesspeople, government procurement, intellectual property, competition policy, State-owned enterprises, labour, environment and regulatory cooperation. The rules covering these areas interact to different degrees with SEZ-related policies.

Two types of interests are at play when SEZs are considered in the RTA context. Countries that host SEZs typically seek to have as few constraints as possible on their capacity to create and administer SEZs (e.g. by protecting policy space to provide incentives, introduce industrial policy requirements and transition SEZs to focus on sustainable development).

Other RTA members, however, have an interest in preventing partner countries' SEZs from hampering their own competitiveness and economic performance (e.g. "free riders" from outside the RTA areas or products whose production process benefits from SEZ support). Countries' interests are not necessarily static, as new SEZs may appear while others are being phased out. Therefore, developing balanced rules benefits all RTA partners.

The great majority of regular RTA provisions apply to SEZs in the same manner as they apply to the remainder of a party's territory. Sometimes, however, RTAs include rules that explicitly refer to SEZs; such rules are normally rare. Such rules include definitions, reaffirmations of treaty obligations, exceptions or reservations from obligations, provisions on institutional cooperation, or rules setting out specific SEZ-focused content. Some rules specific to SEZs set out how products originating from partners countries' SEZs should be treated upon importation. Others modify general rules of origin for products originating from SEZs (by making them more stringent, for example) (Koyama, 2011).

The interactions between SEZ-related policy action and the respective legal frameworks (at the national and international level) pose several challenges, but also create a number of opportunities. In order to maximize benefits, countries should consciously shape this interface at three levels:

- The strategic level: set investment policy priorities that maximize SEZs' development contribution. National and international investment policies, as they apply to SEZs, should be geared towards the realization of national development goals. These goals may be grounded in a country's overall development strategy and linked to the globally agreed Sustainable Development Goals.
- The policymaking level: shape the rules to foster synergies and support sustainable development objectives. Examples include fostering synergies between international law and SEZ objectives, and between national and international law and policies.
- The policy implementation level: strengthen cooperation among relevant entities to ensure transparency, due process and policy coherence in the governance, management and administration of SEZs.

C. THE PERFORMANCE AND IMPACT OF SEZs

1. A sustainable development impact assessment of SEZs

There is little systematic research on the impact of SEZs, and few countries have a comprehensive process for monitoring and evaluating SEZ performance. A sustainable development impact assessment of SEZs should consider their direct and indirect economic contributions, fiscal and financial sustainability, technology and skills contributions, social and environmental impacts, support to regional integration, and policy experimentation and learning opportunities.

SEZs are widely used and have been around for decades, yet there is relatively little systematic research on their performance or economic impact. Although the research for this report has painted a comprehensive picture on the number and types of SEZs, large gaps remain in the data on their design and on the benefits they offer. Data on zone performance, in terms of investment, jobs and exports, are even more sketchy. (The lack of data on exports is inherent in zones where trade does not pass through standard customs procedures.) With little comparable cross-country data on SEZs, the measurement of their performance and impact must be largely based on case studies.

Case studies can provide evidence on the potential for SEZs to contribute to economic growth and development, and insights on the characteristics that make them successful. However, many focus on the more successful cases, and lessons learned from such cases are not always replicable. In addition, research often focuses on a detailed analysis of specific areas of impact, zooming in on export performance or job creation, spillovers, or social and environmental impacts. Few case studies provide a comprehensive cost-benefit assessment of zones.

Table IV.14 illustrates the key areas of impact and performance that, together, determine the success or failure of SEZ programmes (in the form of an SEZ sustainable development “profit and loss statement”). The expected economic contributions from zone development are both direct and indirect. The direct benefits include FDI attraction, job creation and income generation, export growth and diversification, and foreign exchange earnings. Some of these benefits can be especially important in poorer countries where jobs and foreign exchange earnings are scarce.

Indirect economic benefits are more difficult to define and measure, yet they are an essential component of the sustainable development impact of zones beyond their confines. They include supplier linkages beyond the zones and the indirect employment they create, as well as the induced income and jobs resulting from zone-based wages being spent in the surrounding economy.

Ultimately, the combination of direct and indirect economic contributions should result in higher economic growth. The establishment and early development of zones provides a temporary boost to GDP growth. Yet given the benefits and incentives continuously provided to investors in SEZs, they should also provide a sustained stimulus to growth – in other words, the growth of economic activity in the zones should outpace overall economic growth after the zone’s early development phase.

To measure the impact of SEZs, these economic benefits should be weighed against the costs of zones, and both their efficiency and effectiveness considered. Zone development entails financial costs and capital expenditures, including infrastructure development outlays, the costs of operating the zone authority and other operating expenses, and revenues foregone through exemptions from import duties and taxes. Some of these costs increase when existing domestic businesses relocate from the national customs territory to the zone or when they obtain free-point status. The investment and operating costs of zones can be

recovered through rent income and service charges. Public expenditures on SEZs tend to be highest where governments develop and manage zones, and especially if they provide subsidies.

The combined economic impact of SEZs measured against their development and running costs provides a picture of their fiscal and financial sustainability, including the payback period of initial capital outlays and the burden (or benefit) that zones might generate for the public budget in the long run.

The impact and performance of zones, however, should not be measured against economic and financial benchmarks only. The dynamic economic effects, as well as social and environmental factors, play a key role in determining SEZs' overall sustainable development impact.

The dynamic effects of SEZs, especially their impact on technology and skills development and their spillover effects on the broader economy, are especially important to industrial development and upgrading. Many zones have raised concerns about their dependence on low-skill, low-technology, assembly-type operations and the concentration of their activities in one sector (such as apparel). But there are examples of zones that have promoted industrial upgrading and economic diversification. Enhanced regional economic cooperation – including through cross-border or international cooperation zones – is another dynamic benefit of zones that can be important, especially in the context of the development of regional value chains (WIR13).

SEZs have long been criticized for negative social and environmental impacts. The treatment of women, labour standards and working conditions in zones have been highlighted (ILO, 2017), as have pollution and misuse of land. Common concerns regarding labour issues include the suppression of core labour rights (e.g. collective bargaining), poor employment conditions (e.g. working hours, health and safety standards), lack of training or skill upgrading, use of trainees to lower wage costs, and exploitation of women (e.g. lower wage levels, lack of childcare, inadequate rights during pregnancy).

Table IV.14.

**SEZ sustainable development
“profit and loss statement”**

Cost-benefit areas	Key elements
Direct economic contributions	<ul style="list-style-type: none"> • Attraction of FDI • Job creation • Export growth • Foreign exchange earnings
+	
Indirect economic contributions	<ul style="list-style-type: none"> • Supplier linkages beyond the zones • Indirect and induced job creation
=	
Combined economic impact	<ul style="list-style-type: none"> • Additional GDP growth
+/-	
Net cost of/revenue from zones	<ul style="list-style-type: none"> • Investment expenditures • Operating costs • Foregone revenues and subsidies • Income from zones
=	
Fiscal/financial viability of zones	<ul style="list-style-type: none"> • Payback time of zone investment • Fiscal burden
+	
Dynamic economic contributions	<ul style="list-style-type: none"> • Technology dissemination • Skills and know-how transfers • Industrial diversification and upgrading • Enhanced regional economic cooperation
+/-	
Social and environmental impacts and externalities	<ul style="list-style-type: none"> • Labour conditions • Environmental impact • Appropriation or misuse of land • Illicit flows
+/-	
Policy learning and broader reform impact	<ul style="list-style-type: none"> • Pilot function of zones • Catalyst function for reforms • Reduced motivation to reform
=	
Overall sustainable development impact	<ul style="list-style-type: none"> • Evolution of the role of zones in the economy • Long-term zone transformations

Source: UNCTAD.

Finally, and cutting across the economic, social and environmental impacts of SEZs is the potential for zones to support broad-based reforms. On the one hand, as enclaves of differential regulation, zones can reduce the pressure for governments to pursue difficult nationwide structural reforms. On the other hand, zones can serve as regulatory laboratories by allowing countries to test different policies and new approaches, with successful experiments serving as a catalyst for countrywide policies. China is well known for using SEZs to pilot economic policies that later have been introduced across the country. Zones have been used as pilots in other regions as well, including South and West Asia, where SEZs have been used to test the liberalization of foreign ownership restrictions.

The fiscal and financial viability of SEZs and their overall sustainable development impact are both equally important. Governments may well accept bearing the fiscal burden of zones for some time in order to support industrial development objectives and to spur broader business reforms. Yet they cannot endlessly cover the costs of zones that do not pay for themselves through direct and indirect economic contributions that lead to higher fiscal revenues. Zones that are not run on a cost-recovery basis or that entail significant subsidies are at higher risk of becoming financially unviable.

Ultimately, a positive overall sustainable development impact contributes to gradual industrial transformation. This implies that the role of SEZs needs to evolve over time. The economic activities within zones should change, along with the emphasis that governments place on different parts of the cost-benefit analysis.

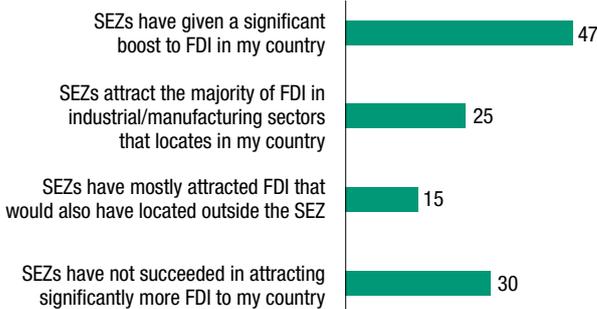
2. Direct and indirect economic contributions of SEZs

Zones can give a boost to investment, exports and jobs. However, they are neither a precondition nor a guarantee for above-average performance on FDI and GVC participation. The overall impact on economic growth tends to be temporary: after a build-up period, most zones grow at the same rate as the national economies.

Investment attraction. Zones are a key investment promotion tool and can play an important role in attracting FDI (figure IV.18). Through adequate infrastructure and best practice, zones can to a certain degree compensate for an adverse investment climate. Unfortunately, the impact of zones on FDI – and especially on additional FDI that would not have been attracted without SEZs – is hard to measure because data are scarce. Countries and international statistics (including UNCTAD’s FDI data) do not track investment in zones separately from investment outside zones, and SEZs themselves mostly do not register foreign investment flows separately.

Research on China, however, has shown that SEZs can have a strong positive effect on FDI, including on new greenfield investments. Importantly, SEZs do not seem to crowd out domestic investment (World Bank, 2017a). Early research on the Philippines showed that the share of FDI flows going to SEZs increased from 30 per cent in 1997 to over 81 per cent in 2000 (UNCTAD, 2002). Scattered data available for current zone programmes demonstrate that SEZs are an important destination for FDI in many countries. In China, SEZs account for over 80 per cent of cumulative FDI. In Malaysia, almost 90 per cent of total investment found in SEZs originates from foreign investors. In Viet Nam, between 60 and

Figure IV.18. Contribution of SEZs to investment promotion (Percentage of respondents)



Source: UNCTAD Survey of Investment Promotion Agencies (IPAs).
 Note: UNCTAD’s World Investment Prospects Survey 2019; respondents from 120 IPAs from 110 economies.

70 per cent of all FDI is located in SEZs. In Myanmar, 80 per cent of investors in the Thilawa SEZ are foreign owned, and another 15 per cent are joint ventures with foreign firms. In the other low-income countries in the region, Cambodia and the Lao People's Democratic Republic, zones also almost exclusively attract foreign investment and account for a significant share of total FDI (A/R17). Similarly, in Bangladesh, foreign investors represent 72 per cent of zone tenants in eight publicly owned zones. In some other countries, however, zones either have failed to attract significant investment or have attracted primarily domestic investors rather than FDI. In Colombia, for example, the free-point scheme has resulted in many domestic SMEs obtaining free-zone status.

Export generation and diversification. Another primary goal of SEZs is export development, in terms not only of export growth, but also of diversification. The latter is particularly important for developing countries that rely on the export of commodities and aim to add value to these exports.

In many countries, zone programmes account for a major share of exports, particularly manufactured exports. In Latin America and the Caribbean, SEZs contribute more than 50 per cent of total exports in Costa Rica, the Dominican Republic and Nicaragua; 31 per cent in Mexico; and 13 per cent in Colombia. In Asia, SEZs are credited with more than 60 per cent of the Philippines' exports and close to 10 per cent of India's. In Bangladesh, just eight publicly owned zones account for about 20 per cent of the country's exports of goods. In West Asia and North Africa, a number of countries rely heavily on oil and gas exports, and SEZs account for approximately 60 per cent of net non-oil exports in Morocco, 25 per cent in Egypt and 40 per cent in the United Arab Emirates. Even in Sub-Saharan Africa, where the proportion of manufactured goods in total exports tends to be low, zones account for nearly 10 per cent of exports in Kenya and Ghana.

Some African governments have used SEZs as part of their export promotion strategies, backed by trade preferences. EPZs have played a pivotal role in Kenya's export strategy – enabled by the African Growth and Opportunity Act (AGOA) – by attracting foreign investors in the apparel industry and orienting them to target exports to the United States. Strategically focusing SEZs on specific trade preferences does carry risks. Changes in trade preferences may require strategic re-focusing of zone specialization, as in the case of the Dominican Republic after the end of the Multi-Fiber Arrangement (see earlier box IV.5).

SEZ programmes have been a key component of export diversification efforts in many countries. For example, countries in Central America and the Caribbean have used SEZs to reduce their reliance on fruit and vegetable exports. In Costa Rica, the SEZ share of manufactured exports increased from less than 10 per cent in 1990 to 55 per cent in 2003 (FIAS, 2008; Gereffi, 2019). At the same time, SEZs have diversified production from apparel and textile to electronic components.

SEZs have been instrumental in the development of GVCs and, as policy tools, in boosting countries' participation in GVCs. Trade costs such as tariffs, transportation and insurance, as well as other border taxes and fees, accumulate when intermediate goods are imported, processed and then re-exported downstream in complex GVCs, going through various transformation steps in different countries. By lowering such transaction costs within GVCs, SEZs contribute to the profitability of MNE operations, which explains much of the zones' success.

Table IV.15 shows, within the three developing regions and transition economies, the top- and bottom-ranked economies in terms of trade growth, GVC integration and FDI attraction, as well as the number of SEZs they host. (The analysis is illustrative only and ignores the significant variations in types and sizes of SEZs and in the export composition of economies.)

Kenya actively pursues a strategy based on the African Growth and Opportunity Act (AGOA), which provides duty-free market access to the United States for qualifying Sub-Saharan African countries. Since the AGOA was enacted in 2000, Kenya has increased the value of its exports to the United States from \$110 million to \$550 million in 2016.

Kenya was one of the first countries on the continent to establish SEZs. By the time the AGOA came into force, zones already had a well-functioning manufacturing ecosystem, including adequate infrastructure. EPZs were given a pivotal role in the AGOA-based strategy by targeting foreign investors in the apparel industry seeking to export to the United States.

Kenya currently has 71 EPZs (including 10 single-firm zones); they account for 55,000 jobs and an annual sales turnover of about \$650 million, more than 90 per cent through exports (compared with national exports of approximately \$6 billion). In 2017, EPZs accounted for 94 per cent of the \$340 million in apparel exports from Kenya to the United States. EPZs have made Kenya the biggest exporter of apparel and textiles to the United States from Sub-Saharan Africa, with an estimated \$4.3 billion worth of garments exported to the United States duty-free since 2000. Most of the apparel firms in EPZs are foreign owned; foreign companies invested an estimated \$460 million in 2017.

The deliberate targeting of FDI in the apparel industry has not only generated large-scale employment, but also integration in manufacturing GVCs and utilization of local textiles and raw material. Moreover, using the industrial capacities developed, apparel firms in Kenya's EPZs have now started to diversify their markets and are increasing exports to other developed economies, such as the EU and Canada. In recent years, as part of broader economic planning, Kenya has issued a five-year National AGOA Strategy and Action Plans which prominently feature the role of SEZs. It also announced the intention to increase the value of total exports and of SEZ exports in non-apparel industries to the United States. The targeted products include processed food, coffee, tea, fresh fruit and cut flowers.

Source: UNCTAD, based on information from the Office of the United States Trade Representative, International Trade Administration (United States Department of Commerce) (2019); African Growth and Opportunity Act; Kenya's National AGOA Strategy and Action Plan 2018–2023; and the Kenyan EPZ Authority.

Looking at growth in exports of goods, the top-ranked economies tend to have a higher number of SEZs relative to both bottom-ranked ones and the regional median. This is particularly clear for Asia and Latin America and the Caribbean. In these two regions, the countries with the fastest growth in exports generally show a number of SEZs aligned or significantly higher than the regional median. Yet, both groups include countries with high growth rates in exports and little use of SEZs; thus, while SEZs can support trade expansion, they are not a precondition.

In Africa, which has the largest number of economies with no SEZs to date, the impact is less clear. However, all the countries whose exports are growing the fastest have one or more SEZ. In this region, the presence of SEZs at the very least signals policy efforts to stimulate international trade and investment. Some countries, such as Ghana and Ethiopia, have gone further, explicitly pursuing an SEZ-driven strategy to fuel their trade growth.

It is important to note that, across the three developing regions, SEZ statistics for the countries with the lowest growth rates in exports show that the mere establishment of SEZs is not a sufficient condition. A number of countries show no growth in trade despite a relevant number of SEZs.

The relationship between the number of SEZs and GVC integration confirms these findings. In Asia and in Latin America and the Caribbean, some champions of GVC integration such as the Republic of Korea, Malaysia or Mexico have heavily relied on SEZs to sustain their GVC integration strategy, but others have achieved good results with a limited presence of SEZs (e.g. Chile). In Africa, the results are again mixed. Some countries with relatively high GVC participation, such as the United Republic of Tanzania and Botswana, have a significant number of SEZs relative to the median, while others, such as Namibia, have no SEZs. Tunisia used SEZs to achieve its relatively high GVC participation and has since extended SEZ benefits to the broader economy. With some exceptions, the least integrated countries in each developing region have few SEZs.

Table IV.15

Impact analysis of SEZs

A. Trade growth. Economies ranked by average annual growth rate of trade goods, CAGR 2007–2017

	Africa			Asia		
	Economies	CAGR 07–17 ^a (%)	SEZs ^b (number)	Economies	CAGR 07–17 ^a (%)	SEZs ^b (number)
Top five economies	Rwanda	20	2	Lao People's Dem. Rep.	18	12
	Burkina Faso	17	2	Viet Nam	16	19
	Ghana	13	4	Cambodia	13	31
	Ethiopia	9	18	Mongolia	12	3
	Madagascar	9	4	Bangladesh	11	39
Bottom five economies	Angola	-2	1	Malaysia	1	45
	Gabon	-3	2	Saudi Arabia	-0	10
	Nigeria	-4	38	Iraq	-1	4
	Algeria	-5	1	Kuwait	-1	4
	Equatorial Guinea	-9	2	Brunei Darussalam	-3	1
Median	4	2	4	16		

B. GVC integration. Economies ranked by foreign value added share, 2017

	Africa			Asia		
	Economies	FVA share ^c (%)	SEZs ^b (number)	Economies	FVA share ^c (%)	SEZs ^b (number)
Top five economies	Eswatini	43	2	Singapore	62	10
	United Republic of Tanzania	39	8	Korea, Republic of	37	47
	Namibia	27	0	Malaysia	35	45
	Tunisia	27	0	Viet Nam	32	19
	Botswana	27	8	Thailand	31	74
Bottom five economies	Ghana	8	4	Pakistan	6	7
	Gabon	8	2	Kuwait	3	4
	Côte d'Ivoire	7	1	Qatar	3	2
	Nigeria	6	38	Iraq	2	4
	Angola	5	1	Myanmar	0	3
Median	13	2	14	19		

C. FDI attraction. Economies ranked by ratio of inward FDI stock to GDP, 2017

	Africa			Asia		
	Economies	FDI/GDP (%)	SEZs ^b (number)	Economies	FDI/GDP (%)	SEZs ^b (number)
Top five economies	Mozambique	301	2	Singapore	397	10
	Congo	239	4	Mongolia	162	3
	Mauritania	142	1	Cambodia	94	31
	Equatorial Guinea	110	2	Jordan	83	16
	Tunisia	72	0	Viet Nam	58	19
Bottom five economies	Cameroon	19	9	Sri Lanka	13	12
	Eswatini	17	2	China	12	2 543
	Algeria	17	1	Iran, Islamic Republic of	12	23
	Kenya	16	61	Bangladesh	6	39
	Angola	10	1	Iraq	6	4
Median	38	2	25	19		

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Table IV.15 Impact analysis of SEZs (Concluded)
A. Trade growth. Economies ranked by average annual growth rate of trade goods, CAGR 2007–2017

	Latin America and the Caribbean			Transition		
	Economies	CAGR 07–17 ^a (%)	SEZs ^b (number)	Economies	CAGR 07–17 ^a (%)	SEZs ^b (number)
Top five economies	Guyana	8	0	Bosnia and Herzegovina	8	4
	Nicaragua	7	52	Armenia	7	4
	Uruguay	7	23	Moldova, Republic of	6	8
	Haiti	7	13	North Macedonia	6	15
	Honduras	6	39	Georgia	6	4
Bottom five economies	Barbados	-1	0	Belarus	2	7
	Cuba	-1	1	Kazakhstan	0	10
	Trinidad and Tobago	-3	1	Russian Federation	0	130
	Jamaica	-6	17	Turkmenistan	-2	7
	Venezuela, Bolivarian Republic of	-8	14	Azerbaijan	-3	6
Median	4	14	3	7		

B. GVC integration. Economies ranked by foreign value added share, 2017

	Latin America and the Caribbean			Transition		
	Economies	FVA share ^c (%)	SEZs ^b (number)	Economies	FVA share ^c (%)	SEZs ^b (number)
Top five economies	Mexico	30	17	North Macedonia	36	15
	Barbados	29	0	Turkmenistan	24	7
	El Salvador	26	17	Bosnia and Herzegovina	21	4
	Jamaica	24	17	Armenia	20	4
	Chile	23	4	Georgia	16	4
Bottom five economies	Paraguay	10	2	Kazakhstan	14	10
	Peru	10	4	Russian Federation	9	130
	Colombia	9	39	Azerbaijan	9	6
	Trinidad and Tobago	8	1	Uzbekistan	6	7
	Venezuela, Bolivarian Republic of	7	14			
Median	16	14	16	7		

C. FDI attraction. Economies ranked by ratio of inward FDI stock to GDP, 2017

	Latin America and the Caribbean			Transition		
	Economies	FDI/GDP (%)	SEZs ^b (number)	Economies	FDI/GDP (%)	SEZs ^b (number)
Top five economies	Barbados	150	0	Georgia	115	4
	Jamaica	108	17	Kazakhstan	92	10
	Chile	99	4	Turkmenistan	90	7
	Guyana	90	0	Serbia	86	14
	Nicaragua	78	52	Azerbaijan	73	6
Bottom five economies	Haiti	20	13	Moldova, Republic of	45	8
	Paraguay	19	2	Armenia	41	4
	Ecuador	17	12	Belarus	36	7
	Argentina	12	14	Russian Federation	28	130
	Venezuela, Bolivarian Republic of	9	14	Uzbekistan	19	7
Median	46	14	49	7		

Source: UNCTAD Stat for data on trade, GDP and FDI stock; UNCTAD-EORA GVC Database for data on FVA. FVA = foreign value added.

Note: For each region excluded from the ranking and computation of the median: offshore financial centres and countries with trade in goods below the region's first quartile in 2017.

^a CAGR 07-17: the compound average of annual growth rates of trade goods over the period 2007–2017.

^b SEZs: the number of special economic zones.

^c FVA share: share of foreign value added in exports.

Direct and indirect employment creation. One of the key rationales for SEZ development is to generate employment. Zones are generally considered an effective tool for job generation, particularly for women entering the workforce. Worldwide, an estimated 90–100 million people are directly employed in SEZs and free-zone programmes.¹⁷

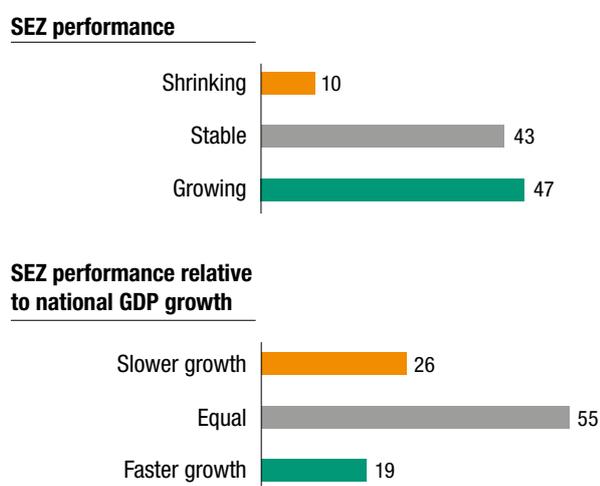
The indirect employment impact of zones can also be substantial. The ratio of indirect to direct jobs created ranges from one fourth in countries where zones function as relative enclaves, to multiples of two in countries where zones are significantly linked to the domestic economy. This implies that the indirect employment effect of SEZs globally could range from 50 million to 200 million jobs.

Zones can play a major role in employment creation in individual countries. In several countries, the rate of job creation in national SEZ programmes has significantly outpaced employment growth in their economies as a whole. Job creation in the United States FTZ programme since 2013 has averaged over 7 per cent per year, compared to less than 2 per cent for the wider economy. Employment in Tunisia’s SEZs has grown from 8 per cent of the workforce to in 2008 to 8.7 per cent today. Ethiopia has been able to generate nearly 50,000 jobs within a few years through its SEZs, with a high proportion of the jobs going to women, while in Kenya, EPZs account for close to 60,000 jobs. In Colombia, FTZs have created more than 65,000 direct jobs and 155,000 indirect jobs. Similarly, in the Dominican Republic, SEZs are credited with generating 166,000 direct jobs and an estimated 250,000 indirect ones, a growing share of which are higher-skilled technical jobs.

The impact of these jobs in countries with high rates of unemployment and underemployment is significant. Especially in the poorest countries, SEZs can be an important avenue to formal employment. Yet although SEZs can be effective tools to boost employment, zone jobs can be relatively insecure. The flexible use of labour can lead to fluctuations in employment levels with shifts in production. Also, MNEs in the industries prevalent in SEZs can be prone to relocate or restructure when costs in the host economy rise.

Overall economic growth impact. SEZ success can be measured directly by looking at FDI, exports and employment indicators, and at overall production growth in the zones. But in order to isolate the economic growth effect of SEZs, a comparison to the rest of the country provides the necessary counterfactual (figure IV.19).

Figure IV.19. Absolute and relative growth performance of SEZs, 2007–2012
(Per cent)



Source: Frick et al. (2019).

A recent study (Frick et al., 2019; World Bank, 2017a), based on a sample of 346 SEZs across developing regions over the period 2007–12, found that the average economic growth rate across all SEZs was about 14.7 per cent over the period, with significant variation, and the median growth rate was only 2.8 per cent. Looking at the SEZs’ performance relative to the broader economy in which they are located, however, showed that the growth of SEZs was on average 2 to 5 per cent lower than national GDP growth.

Even in countries where SEZs’ absolute growth was relatively high, such as Kenya, Turkey, and Ghana, it remained below overall national GDP growth. In other countries with high SEZ growth, such as Viet Nam and the Russian Federation, zones grew faster than the national average. The average differential over national growth, however, never exceeded 5 per cent.

The analysis further concluded that zone growth is difficult to sustain over time. SEZs provide a temporary boost during their development phase. The additional growth effect gradually wanes as zones mature.

There are exceptions across the overall sample. A study on SEZs in India (Hyun and Ravi, 2019), based on similar performance data and methods, concluded that they had an overall positive and persistent impact on economic activity that extended well beyond their geographical limits. In addition, it found robust evidence that SEZs led to a formalization of the economy, with resources moving away from the informal sector.

Yet the study also revealed that the SEZ growth stimulus mostly benefited workers at the upper end of the income distribution. Those at the lower end of the wage and educational scale did not benefit significantly. Moreover, the transition towards formalization did not occur as a result of upgrading but rather at the cost of informal firms. This highlights potential unintended downsides of SEZs for parts of the population, even in cases where SEZs are successful and outperform the rest of the economy.

3. Zone costs and revenues

The direct and indirect economic contributions of SEZs should be weighed against their construction and running costs. Factors that can negatively affect the financial and fiscal viability of zones include high up-front costs due to over-specification, subsidies for zone occupants, transfers to zone regimes of already operating firms and illicit financial flows.

The growth of economic activity in an SEZ does not necessarily ensure that the zone makes a net positive contribution to the economy, because zones may rely on significant government subsidies. SEZs' economic contribution should thus be weighed against the resources they receive from the public sector.

The decision to establish a zone programme tends first and foremost to consider the investment expenditures required to build SEZs. Capital outlays can be substantial. A recent review of the World Bank portfolio of SEZ projects (World Bank, 2017b) shows several projects with capital outlays exceeding \$100 million, although early projects below \$10 million are also cited.

Capital expenditures for the initial construction of the zone depend chiefly on three elements:

- i. The location, which determines the need to build expensive additional transport infrastructure to serve the zone
- ii. The quality and coverage of the existing utilities and telecommunication infrastructure, as zones in some countries may require dedicated power, water and waste management plants
- iii. The type and specifications of zones

The latter element is a key factor in the relatively high costs associated with many modern zones. On the one hand, with the extensive zone construction experience that developers have today, modern zone programmes tend to ensure that new projects are located close to existing public infrastructure and facilities, thereby reducing government outlays. On the other hand, many modern zones offer “plug and play” models for investors with pre-built facilities, warehouses and offices, or they combine residential areas and other amenities with traditional industrial facilities in township (wide-area SEZ) models. Both types of development multiply the initial capital outlays for zones. In contrast to the high commitments for such modern zones, entry-level zones can be relatively inexpensive to build. In addition, outlays tend to be spread over time, as the site develops gradually with the addition of new tenants.

SEZs' operating costs are largely associated with the running of the zone authority. Other operating costs are usually recouped from investors in the zone through building rentals, fees and service charges. Most zones are thus established on a cost-recovery basis, although government-run SEZs regularly subsidize operating costs and utilities, which can make these zones expensive to run. Both zone development and zone management are increasingly outsourced to the private sector, however, significantly reducing government outlays and risk.

Conversely, governments can derive significant revenues from SEZs. Government-run zones generate rents paid by investors (tenants) in the zone and fees for service costs. In private zones, government revenues consist of concession fees for the zone area and for other facilities (e.g. port structures, power plants, waste management sites). Further revenues for the public sector include personal income taxes on zone wages (more relevant in higher-income economies), as well as import duties and charges on zone production sold in the domestic market. Corporate income taxes, by contrast, are usually only a marginal part of revenues, given the tax holidays or discounted rates associated with most SEZs.

Yet a comprehensive assessment of SEZs' financial impact for the public sector is made difficult by two further complications. First, much of the real cost of zone programmes is in the form of foregone revenues from duties and taxes. Assessing such costs would require an evaluation of the efficiency and effectiveness of the incentives provided, i.e. an understanding of how much economic activity the zones would have attracted in the absence of incentives. Second, SEZs' final cost to the public increases when domestic enterprises shift their activity to zones in order to benefit from fiscal relief, thereby reducing the existing tax base. Some SEZ programmes, especially free-point programmes that do not require physical relocation in designated zone territories, risk attracting mostly domestic exporting firms that are already operating – and some are designed for that purpose.

Finally, negative financial impacts can also arise through the misuse of zones for illicit financial flows and trade mis-invoicing, which can be an important problem in zones with laxer government controls. Leakages of duty-free goods from zones into the domestic economy can cause further damage, with not only negative fiscal consequences but also unfair competition with domestic products. Zones can also be constructed as a solution to the problem, however. The Tunisian Government recently announced that it will build a zone at the border with Libya to discourage the smuggling of contraband.

4. Dynamic zone contributions: industrial development and upgrading

SEZs are an important instrument of industrial policy because of the opportunity they can provide for technology and skills development and upgrading in GVCs. Linkages with local firms, spillovers, crowding in and demonstration effects are key to maximizing the industrial development impact of SEZs, but these effects do not occur automatically.

SEZs have been criticized for perpetuating the middle-income trap, due to their typical focus on low labour costs, the low value added activities for exports and their enclave nature with consequent limited spillovers and technology transfer to the domestic industry. Various studies have shown that the average skill level of SEZs' workforce is relatively low and rarely increases over time (FIAS, 2008).

Yet there are numerous examples of how development strategies that incorporate SEZs have contributed to industrial development and upgrading. Early examples include the Republic of Korea and Taiwan Province of China, which successfully developed extensive backward supplier linkages with domestic firms. ASEAN countries, such as

the Philippines and Malaysia, have also been able to attract FDI to SEZs and upgrade to higher value added and technology-intensive industries, including electronics, services and software development (AIR17). Outside of Asia, zones have also contributed to structural transformation in a number of countries. The Dominican Republic was a commodity exporter before SEZs turned it into a hub for export manufacturing. Other examples include Mauritius and Lesotho.

SEZs' contribution to industrial development strategies is driven in large part by workforce upgrading and skills development that occurs through formal training and work experience. As zone-based production processes typically involve basic skills and low technology, however, such skills development is often limited. In zones that attract efficiency-seeking investors and focus on processing industries, labour is often primarily considered as a cost to be contained, rather than a resource to develop (UNCTAD, 2002).

SEZ programmes in East and South-East Asia have increased the domestic value added in exports over time, which indicates both higher value added activities in the zones and greater linkages with the domestic economy. A number of early Latin American examples, however, illustrate that this process is not automatic. For example, value added in exports from the Mexican maquiladoras during their rapid growth in the 1990s and 2000s did not increase significantly, despite their success in attracting FDI and generating employment (FIAS, 2008).

Several factors can explain why some zones tend to remain enclaves with few linkages to the rest of the economy:

- i. The relatively high import intensity of some of the industries common in SEZs, such as apparel, footwear and electronics
- ii. The tendency of MNE affiliates in zones to rely on internal suppliers or on suppliers that are already in their international network as part of global sourcing strategies
- iii. The scarcity of competitive local suppliers in relevant industries – or unawareness of their existence by zone-based firms. Local firms in many developing countries may lack the capacity to serve zone-based investors, may not produce according to the required standards or may struggle to access zone-based firms

Linkages between zone-based investors and domestic suppliers are important not just to transmit technological and skills spillovers that support broader industrial development. They are also important to ensure that zones become bridges to structural reform in the broader economy, as SEZ investors interact with the local business environment and local firms indirectly experience SEZs' business climate. This is the key rationale for the continued use of SEZs in the recent wave of new industrial policies (WIR18).

5. Social and environmental impacts

Modern SEZs can make a positive contribution to the environmental, social and governance (ESG) performance of countries' industrial base. Controls and enforcement, as well as support services (e.g. inspectors, health services, waste management and renewable energy installations) can be provided more easily and cheaply in confined areas. New zones are increasingly competing on the basis of high ESG standards.

Since the earliest EPZs were launched in developing countries, concerns have been raised about working conditions and environmental impacts. SEZs have also been criticized for misappropriating or destroying agricultural land in the pursuit of industrialization, or for fraudulent private gains (Moberg, 2015).

As of 2017, the ILO concluded that “problems persist [in zones] in the protection of fundamental principles and rights at work, in particular freedom of association and collective bargaining, and gender equality” and that “other violations of workers’ rights are also common, especially concerning hours of work and safety and health.” Most countries with zone programmes have ratified relevant ILO conventions, yet some countries have pursued “a low-wage strategy for EPZ development, where labour law either does not apply or is not enforced” (ILO, 2017).

ILO surveys continue to report instances of unpaid overtime, unremunerated work at night and lack of social security. The survey of SEZ laws and regulations conducted for this report, however, shows that such practices are less and less the result of lax regulatory standards. Instead, divergent practices mostly result from insufficient resources for effective inspection and administration of labour (ILO, 2017). In contrast, some countries have developed mechanisms to monitor labour practices and avoid disputes, such as involving trade union representatives on SEZ boards (Farole and Akinci, 2011).

It is also important to note that SEZs’ working conditions and environmental impacts have sometimes more to do with general conditions in the surrounding economy or within a specific industry than with the SEZ status per se. Wage levels and occupational safety and health standards tend to be higher in SEZ-based foreign affiliates of MNEs than in domestic firms outside the zones. Wages and labour practices depend on the local context and on prevalent industries and economic activities in the zones. The most cited incidents have generally been associated with zones hosting low value added manufacturing operations.

Furthermore, SEZs have a significant impact on the formal employment of women. Female workers are estimated to account for more than 60 per cent of zone workforces worldwide (FIAS, 2008). This share is highest in EPZs focused on light manufacturing (e.g. garments, footwear and electronics); it is lower in zones focusing on heavy manufacturing or diversified economic activities, although it nonetheless remains above 50 per cent on average in those zones.

Poor environmental practices in SEZs have also long been of concern. An often-cited example of environmental degradation relates to Mexican maquiladoras (e.g. FIAS, 2008). Their rapid growth caused air and waste pollution that became a health hazard for nearby populations. Weak monitoring and enforcement capabilities compounded the problem. SEZ programmes in other countries, especially free points or single-factory free zones, have also caused environmental concerns.

However, SEZs operating as confined industrial areas, as opposed to dispersed single-factory zone programmes, can actually make it easier for governments to enforce environmental standards. More modern zones, in particular, offer facilities tailored to the needs of target industries (e.g. high-tech, petrochemicals, software development). Such SEZs tend to have zone-specific environmental regulations and dedicated facilities for waste treatment. Modern zones also use effective environmental management as a selling point for investors, especially those operating in industries perceived to carry higher reputational risks.

Services provided by zone operating companies or shared services among zone investors are increasingly used to support higher social and environmental standards. Many EPZs assist companies operating within the zone with labour-related issues (UNCTAD, 2015b). This assistance comes in a variety of forms, from inspection services (such as labour inspectors), to management assistance (such as on-site labour and human resources bureaus that help resolve labour disputes). Some SEZs set out clear labour standards for companies operating within their confines, addressing minimum wages, hours and conditions for the operation of unions. Mostly, these stated labour standards conform to

local and national laws, but in some cases (including SEZs in China and India), standards are higher than those required at the state or national level (UNCTAD, 2015).

More than half the SEZs polled in UNCTAD's survey on their sustainable development contribution have policies on environmental standards and regulations, and a few have adopted international environmental standards (UNCTAD, 2015). In some cases, these policies are further developed or controlled through a dedicated committee. It is not uncommon for zones to have relatively well-developed environmental reporting requirements under which companies are required to disclose their anticipated amounts of waste and pollutants, and the decibel level of noise expected to be produced. Examples from UNCTAD's poll include zones in Turkey; two of the three zones in South Africa; several in India, Morocco and the United Arab Emirates; and zones in Argentina and China.

Leading SEZs provide technical assistance, institutional mechanisms and physical infrastructure to assist companies with incorporating environmental standards and to promote compliance. Most notable is the availability of hazardous waste management systems in SEZs in, for example, Argentina, the Republic of Korea, Saudi Arabia, South Africa and Turkey (UNCTAD, 2015). This type of service is particularly important because many zones host manufacturing activities that generate significant waste. Whereas numerous zones provide services related to the disposal of hazardous waste, only a few provide recycling services (UNCTAD, 2015). Several EPZs around the world, including in China and India, have been certified as compliant with the ISO 14001 environmental management system standard. The EPZ authority of Kenya launched a strategic plan to achieve the ISO 14001 certification for all of the country's zones. An SEZ in India polled as part of UNCTAD's survey actively encourages companies operating within the zone to become ISO 14001 certified. The use of these standards by SEZ management companies positively steers companies operating within their zone towards responsible business practices.

UNCTAD (2015b) provided a Framework for Sustainable Economic Zones to help SEZs enhance their competitiveness by switching from a narrow focus on cost advantages and lower standards to championing sustainable business (table IV.16). Zones can find new grounds for competitiveness by meeting the growing expectations placed on MNEs and their suppliers to exercise good social and environmental practices. "Next generation" SEZs can gain a competitive advantage by providing not only conventional benefits, but also cost-effective support for good environmental and social practices for firms operating within their boundaries.

6. Critical success factors of SEZs

The performance of SEZs is dependent on external factors as well as factors that can be managed by governments and zone developers. External factors include high competition for internationally mobile investment and changes in the policy environment, such as shifting trade preferences. Manageable factors revolve around the strategic focus of zones, the regulatory and institutional framework and the infrastructure, services and benefits provided to investors in zones.

The failure of SEZs is often related to basic problems such as poor site locations that require heavy capital expenditures or that are far from infrastructure hubs or cities with sufficient pools of labour; unreliable power supplies; poor zone design with inadequate facilities or maintenance; cumbersome administrative procedures; and/or weak governance structures or too many institutions involved in zone management.

Table IV.16.

Framework for Sustainable Economic Zones (Key elements for promoting Sustainable EPZs)

	Policies/standards	Infrastructure assistance	Administrative assistance
	Maintains and enforces policies and standards, including:	Provides services or specialists to insure compliance/offer assistance, including:	Provides guidance and training to companies, covering how to:
General Approach	<i>Create multi-stakeholder partnerships to identify opportunities and develop an action plan</i>		
Labour	<ul style="list-style-type: none"> • Minimum wage • Working hours and benefits • Respecting right of unions to be active within the zone • Gender equality and related issues • Incentives for third-party certifications 	<ul style="list-style-type: none"> • Labour inspectors • Conflict resolution specialists • Reporting hotlines • Gender focal points 	<ul style="list-style-type: none"> • Improve labour conditions • Engage in social dialogue
Environment	<ul style="list-style-type: none"> • Emissions • Waste disposal • Energy use • Incentives for third-party certifications • Promoting circular economy 	<ul style="list-style-type: none"> • Centralized effluent treatment • Water reclamation systems • Recycling services • Hazardous waste management services • Alternative energy sources • Reporting hotlines • Enabling circular economy 	<ul style="list-style-type: none"> • Further reduce natural resource use • Reduce waste • Increase recycling • Improve energy efficiency • Adopt renewable energy
Health & Safety	<ul style="list-style-type: none"> • Employee health and safety protection • Incentives for third-party certifications 	<ul style="list-style-type: none"> • Medical clinic • Fire brigade • Reporting hotlines 	<ul style="list-style-type: none"> • Prevent health and safety emergencies
Corruption	<ul style="list-style-type: none"> • Anti-corruption standards and policies 	<ul style="list-style-type: none"> • Hotlines • Information on reporting corruption 	<ul style="list-style-type: none"> • Build capacity to detect and avoid corrupt business practices
Economic linkages	<ul style="list-style-type: none"> • Employer support for staff training and development 	<ul style="list-style-type: none"> • Assistance with local sourcing 	<ul style="list-style-type: none"> • Identify and upgrade local suppliers

Source: UNCTAD (2015b).

The turnaround of unsuccessful SEZs requires a timely diagnosis of the factors impeding success and targeted action to address them. This is especially critical if there has been a significant level of public investment to develop zone facilities (box IV.16).

Apart from factors directly related to SEZs' location, design and management, contextual considerations are also critical for SEZs' success. Proximity to large markets is an important driver for zone performance (Frick et al., 2019), and traditional advantages attracting FDI to the broader economy – in particular a pool of adequately skilled and relatively low-cost labour – remain key determinants of zone success.

Yet high competition for investment among neighbouring countries is listed by investment promotion agencies (IPAs) as the top challenge for SEZs (figure IV.20). Infrastructure support to investors and the domestic presence of capable suppliers outside the zones are also top concerns, more important than incentives packages, the cost of labour or strategic concerns such as zone specialization.

Policy debates on SEZs and what makes them successful have generally focused on three key considerations, however: the need for strategic focus; appropriate regulatory frameworks and governance structures; and the value proposition for investors in the zone – the package of advantages that zones provide.

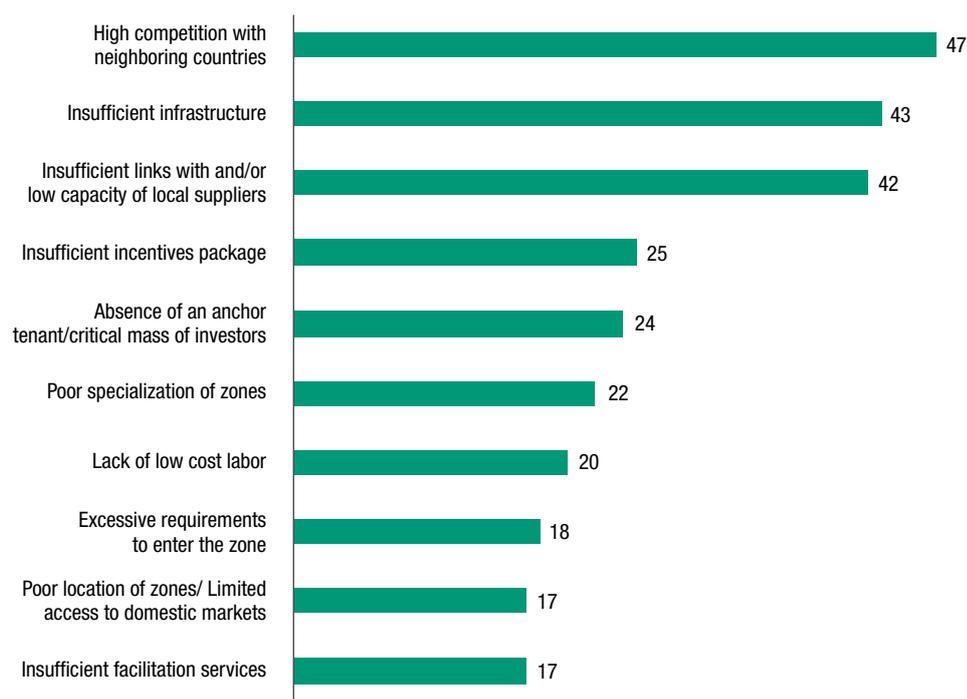
Strategic focus. Despite recent diversification efforts, most zone enterprises worldwide are engaged in labour-intensive, assembly-oriented activities such as apparel, textiles, and electrical and electronic goods. The degree of product specialization tends to be linked to the host country's level of industrial development, with the least developed countries generally hosting multi-activity non-specialized zones, and more developed economies focusing on industries and value chain segments that promote industrial upgrading.

Ghana has one of the more successful SEZ programmes in Africa today. Only four EPZs generated approximately \$1.25 billion of exports in 2018, of the country's estimated total of \$14 billion. The biggest and most successful SEZ is the flagship Tema free zone. Yet the programme, which was initiated in 1995, did not always perform well. In 2005, only \$105 million worth of exports could be attributed to the country's free zones, against imports of \$46 million (Angko, 2004). The Tema zone in particular was performing well below expectations, owing to problems with the developer, high vacancy rates and inactive tenants.

The Ghana Free Zones Board, aided by external experts, launched a three-pronged restructuring of the Tema zone. First of all, firms were clustered on the basis of industry to promote agglomeration economies. This entailed physically collocating firms in the same industry along with suppliers and providing a minimal level of services tailored to specific industry needs. For example, a technology incubator and a garment village were designated within the zone. Second, a renewed effort was undertaken to provide hard and soft infrastructure geared towards exports, including offices for customs, immigration, the environment and the Export Promotion Council. Finally, a multi-purpose industrial park was established within the zone, allowing local firms in but not offering them the incentives extended to export-oriented foreign affiliates. This promoted forward and backward linkages between local and foreign firms, improving both zone performance and spillover benefits to the local economy. Within a few years, the performance of the Tema zone improved significantly. World Bank assessments revealed that from June 2008 to June 2009, companies in the free zone generated \$281 million in exports and 2,085 jobs (Farole, 2010). Since then, the performance of the zone has steadily kept improving, and it is now considered a key component of the country's economic strategy and one of the few examples of SEZs done right in Africa.

Source: UNCTAD, based on information from Ghana Free Zones Board and the OECD.

Figure IV.20. Key challenges for SEZs according to national Investment Promotion Agencies (Percentage of respondents)



Source: UNCTAD Survey of Investment Promotion Agencies.

Note: UNCTAD's World Investment Prospects Survey 2019; respondents from 120 IPAs from 110 economies.

Some less developed countries have sought to attract high-tech investors into SEZs to leapfrog into higher value added activities and accelerate economic growth. Yet the viability of high-tech zones in less developed environments that lack key locational advantages for such activities – including sufficiently skilled resources, research institutions and the amenities to attract specialized foreign personnel – is questionable. For example, early zones in Bangladesh targeted high-tech firms but were unsuccessful; they started attracting significant investment only when the authorities allowed garment producers to invest (Farole and Akinci, 2011).

In fact, the fastest-growing SEZs in developing countries appear to be those with lower technological components (World Bank, 2017b). This reflects the difficulties that countries face when aiming to transition from low to higher value added industries.

Developing countries thus need to be careful in committing significant resources to building SEZs seeking to leapfrog directly into high-tech sectors; they may need to go through the stage of developing labour-intensive industries initially – in line with the SEZ development ladder discussed in section A – and then upgrade gradually, once more advanced industrial capabilities have been developed (Frick et al., 2019).

The strategic focus of zones and zone specialization are important to maximize the benefits of clustering. Firms co-located in zones benefit from network effects and economies of scale. Firms operating in the same or adjacent industries clearly have greater scope to collaborate, pool resources and share facilities than firms operating in unrelated industries. Larger SEZs have also been shown to perform better than smaller ones with less scope for cluster development (World Bank, 2017a).

Nevertheless, even multi-activity zones can extract some of the benefits of co-location. Clustering of the SEZ logistical function can enable firms in various industries with different peak production times to efficiently share warehouse space or to design shared transportation solutions. In addition, firms in different industries can still share common services in the zone. But specialized zones, whether by design or natural clustering, tend to show higher GVC participation, as well as higher and more sustained growth rates.

Regulatory framework and governance. The institutional framework and the degree of private sector involvement in zone development and management structure have often been linked to the success of zone programmes. An independent regulator or SEZ authority is considered a key factor in the success of zone programmes. The zone regulator should be shielded from political pressure and adequately funded to ensure the effective implementation of the programme (Farole and Kweka, 2011). The autonomy of the governing body, particularly in the context of an increasing number of private zones, is important to minimize conflicts of interest; zone authorities should preferably focus on regulatory functions, and not own, develop or operate zones (Cheng, 2019).

Most SEZs today are privately owned, developed and operated. About 60 per cent of modern SEZ laws establish the framework for private sector concessionaires. This contrasts with earlier zone programmes; in the 1980s and 1990s, less than a quarter of zones worldwide were privately owned. Outsourcing zone development to the private sector can greatly reduce the capital cost for governments, as well as some of the risks involved. In smaller zones, private developers tend to be more frugal than the public sector in zone design and construction, with relatively little investment in warehousing, transport infrastructure and skeleton buildings, generating higher returns (Moberg, 2015). In large modern zones, private developers have supported the growth of specialized SEZs with customized facilities through proactive and targeted investment promotion and marketing.

Despite the apparent advantages of private sector involvement in zone development and operation, the type of zone management (i.e., public, private or PPP) has not been found to have a significant structural impact on zone performance (Frick et al., 2019). The most appropriate structure is likely to depend on country-specific policy and legislative framework, and on the type of SEZ that governments aim to develop. Some of the advantages of private sector zone development, including a better understanding of appropriate levels of investment and facilities best suited to the zone, can also be achieved by decentralizing zone governance, involving local or regional levels of government in management or oversight boards (Moberg, 2015).

A key aspect of the institutional and governance framework for SEZs should be regular monitoring and evaluation mechanisms. To date, few countries systematically assess the performance of zones, and even fewer have instated mechanisms to deal with underperformance. China has formulated detailed assessment criteria for certain types of zones, which are used to rank its SEZs. Similarly, the Russian Federation has established a comprehensive methodology to monitor and evaluate the performance of its SEZs. Consistent underperformers have been removed from the list of SEZs: 11 were closed between 2010 and 2017 (box IV.17).

Finally, good governance ensures that zones are not tainted by illegal trade. A number of zones have been considered by the World Customs Organization and the Organisation for Economic Cooperation and Development (OECD) as being at risk of enabling trafficking in counterfeit and contraband products. This concerns many products, especially luxury

Box IV.17. Monitoring and evaluation of SEZs in China and the Russian Federation

In *China*, the performance of both HTDZs and ETDZs is regularly evaluated. A 1996 Administrative Decree from the Ministry of Science and Technology requires a periodical evaluation of HTDZs. “Poorly managed and slowly developing zones” are ordered to rectify their performance within a time limit, failing which they lose their HTDZ status. The Evaluation Index System of 2013 includes four categories and 40 indicators, such as:

- Knowledge creation and technological innovation: education level of employees, R&D expenditure, number of R&D institutions and incubators, etc.
- Industrial upgrading and structural optimization capabilities: number of high-tech enterprises, ratio of services sector firms, intellectual property registration, number of listed companies, etc.
- Internationalization and participation in global competition: ratio of employees who received higher education overseas, ratio of foreign personnel, number of overseas branches, intellectual property registration overseas, etc.
- Sustainable development capability: ratio of employees with masters and doctoral degrees, growth rate of number of companies or tax revenues, amount of new investment, energy consumption, etc.

In 2016, the Ministry of Science and Technology started to evaluate the innovative capacity of HTDZs as an additional performance criterion.

The Ministry of Commerce has conducted an annual assessment of ETDZs since 2016. An exit system is applied to the five lowest-ranking ETDZs for two consecutive years. The assessment of ETDZs is based on five considerations, namely, industrial capacity, technological innovation, regional integration, environmental protection and administrative efficiency. In the five categories are 53 indicators, including traditional indicators such as industrial output, revenue, productivity, GDP, R&D expense, FDI inflows, value of foreign trade and number of listed companies, as well as sustainability-oriented indicators, such as numbers of vocational training institutions, consumption of energy and water, emission of sulphur dioxide, nitrogen oxides and ammonia nitrogen, and recycle rate of wastes. An online single-window approval system for investment facilitation is also an indicator for administrative efficiency. The Ministry of Commerce publishes the list of the top 30 zones and the names of the top 10 in the categories of industrial capacity, innovation, FDI and foreign trade, respectively.

In the *Russian Federation*, the Government monitors and evaluates SEZs of several kinds: industrial production, technology innovative, tourism and recreational, as well as ports. The law establishes six indicators of SEZ efficiency: investment attractiveness, business environment, infrastructure provision, availability of land resources, SEZ residents’ investment activity and information transparency of the SEZ website.

The evaluation is carried out annually and produces zone rankings along the criteria. The process has served mostly to create peer pressure on underperforming zones and the regional authorities of the area in which they are operating. Consistent underperformers have been removed from the list of SEZs and have been shut down. Using this mechanism, 11 zones were closed between 2010 and 2017 (Kuznetsov and Kuznetsova, 2019).

The revised resolution of 2018, having adopted a philosophy of broader impact assessment, adds four pillars for evaluation:

- Performance of residents of the SEZs
- Profitability of federal, subnational and local investment in engineering, transport, social, innovation and other infrastructure objectives of the SEZs
- Performance of the SEZs’ governing bodies
- Effectiveness of the planning for SEZ creation

These general indicators are constructed from 18 subindicators. The evaluation methodology is differentiated by type of zone.

Source: UNCTAD, based on various sources.

goods and cigarettes (manufactured in free zones and exported and sold without customs duties). The OECD has undertaken a reflection on free zones to promote good governance (OECD/EUIPO, 2018).

Value proposition. The overall value proposition of individual SEZs includes a host of locational advantages, only some of which are determined or can be influenced by government policy. Focusing on those that depend on active policy decisions, the first and most important feature is the choice of location. SEZ policies often specifically aim to promote the economic development of certain regions, for example areas with high levels of unemployment. At the same time, a strategic location close to key infrastructure hubs (e.g. ports and airports) and close to labour pools is fundamental to attracting investors into the zone.

Several studies have shown that closeness to ports or large cities is more likely to spur zone dynamism than locating an SEZ in more remote areas. In fact, in most developing countries with one or very few major urban agglomerations, the distance to the largest city is negatively correlated with zone performance, indicating that SEZs may not be the most effective tool for the development of remote or relatively poor regions (Frick et al., 2019).

The incentives offered in zones are generally considered a key element of the value proposition. Nevertheless, the use of generous incentives packages to offset locational disadvantages may be ineffective. Recent analyses find no correlation between fiscal incentives offered to investors and zone growth in terms of jobs and exports (Farole, 2011; Frick et al., 2019). Incentives on their own are therefore insufficient to explain zone performance. The lack of correlation may be caused in part by the increasing convergence of zone investment incentives and the lack of differentiation. Some variations in fiscal incentives exists, but only at the margin; most incentives packages include exemptions from import duties on machinery and inputs, as well as reductions in or exemptions from corporate and other local taxes.

More important than the incentives package on offer may be the facilitation of administrative procedures for businesses and investors in the zone through regulatory streamlining and one-stop shops or single windows. Failed zones or zone programmes that have struggled with effective implementation, such as in India, have generally been negatively affected by excessive bureaucracy (Moberg, 2015). A policy approach encouraging zones to compete on the basis of streamlined administration, adequate facilities and efficient services rather than on (relatively undifferentiated) incentives is considered a better predictor of success. Elements commonly prioritized in business and investment facilitation efforts include simplified investment approval processes and expatriate work permits, removal of requirements for import and export licenses, accelerated customs inspection procedures and automatic foreign exchange access. Single windows dedicated to individual SEZs, such as those for five zones in Viet Nam, can boost facilitation efforts.¹⁸

Infrastructure and services are key for zone success. The *raison d'être* for most zones in lower-income countries is to ease the infrastructure challenges in the country and to concentrate public investment in infrastructure in a limited geographical area. Infrastructure connections should ideally provide access to at least two transportation modes to allow for intermodality and sufficient connectivity. Commonly developed basic infrastructure services further include reliable utilities, telecommunication, and water and waste management installations. Non-infrastructure services are equally important. Dedicated customs offices and inspection units are a common feature of SEZs by definition, but other services may include security, human resources-related services, and catering or housing services, among others. Such services are an integral part of modern wide-area or township-like zones, which include residential and commercial areas on site.

D. TOWARDS A NEW GENERATION OF SEZs

Moving towards a new generation of SEZs requires absorbing lessons learned on the design, operations and impact management of zones; responding to the new challenges raised by the sustainable development imperative, digitalization and the new industrial revolution, and changing patterns of international production; and experimenting with new ideas, including SDG model zones.

The analysis in this chapter has shown that SEZs are ubiquitous. They are used by more than 140 economies around the world, including more than 70 per cent of developing countries and nearly all transition economies. Their number has grown rapidly in recent years, in parallel with and as part of the wave of newly adopted or updated industrial policies documented in *WIR18*. More than 500 SEZs are in the pipeline. This reflects countries' response to increasing competition for internationally mobile investment and their desire to seek relatively low-cost shortcuts to economic development and integration into international production networks.

Countries' approach to zone development varies along several dimensions: the number and physical dimensions of zones; the predominance of a few large zones, multiple free points, or combined schemes; the level of zone specialization; the design of zones as stand-alone industrial sites or integrated townships; and the degree of international cooperation. Many new types of zones are being developed that focus on industries such as high-tech, financial services, tourism and environmental performance.

At the same time, the basic value proposition of SEZs, especially the package of fiscal and regulatory advantages they offer, remains similar across zone programmes. They offer customs duties and tax relief, regulatory facilitation and streamlined administrative procedures. Competitive differentiation among both individual zones and types of zones is based more and more on the level of infrastructure support and services provided, making new zones more costly to set up and run.

The policy and institutional framework for SEZs across the majority of developing and transition economies is remarkably similar, with most adopting a dedicated law that sets out the framework enabling the development of SEZs and the investment conditions within zones. Actual zone operating conditions are determined by zone-level decrees and lower levels of government, as well as developers and management companies, which are more and more often private operators. Although SEZs are by definition an exception to the general policy regimes in the countries where they are located, the attractiveness of zones is still significantly influenced by more general (national) policy frameworks beyond direct legislation on SEZs, including trade and investment policies.

Relatively little evidence is being collected on the impact of this policy tool of such widespread and growing application. No systematic data exist on investment, export and employment generation in zones. Anecdotal evidence suggests that a limited number of large and high-performing zones, mostly in Asia, account for a sizeable share of SEZs' economic activity worldwide. SEZs can make a significant economic contribution in individual countries, but there are also numerous examples of zones that languish for long periods after their initial creation.

Few countries conduct comprehensive assessments of zone performance against costs, including initial investment expenditures and operating costs. Zones have the potential to provide development benefits beyond direct economic and financial gains, supporting economic transformation objectives, technology and skills development, and policy experimentation opportunities. These development benefits can justify public investment in zones. The financial and fiscal viability of zones, however, is important for long-term sustainability. Equally important is the social and environmental performance of zones, which can cause negative externalities but can also make positive contributions.

The critical success factors for SEZs identified in the previous section emphasize the importance of gradual specialization and evolution along the SEZ development ladder, as well as active efforts to reap the benefits of co-location and clustering in zones. They highlight the potential benefits of private zone development – within appropriate regulatory parameters – including lower cost and lower risk for zone construction and management, as well as access to international expertise and marketing. Critical success factors also highlight the importance of locational choices, infrastructure and services provided in the zone, and business and investment facilitation features.

1. Lessons learned from past experience

The findings in the earlier sections of this chapter can be synthesized in a number of lessons learned about the design of SEZ programmes, the operation of SEZs and the optimization of the development impact of SEZs (table IV.17).

a. SEZ programme design

Critical in the design of SEZ programmes is their *dynamic integration in the country's long-term development strategy*. SEZs are not a static policy tool; the development ladder that emerged from the empirical analysis in this chapter shows that different stages of development require different forms of SEZs. As countries develop, it is important to continuously assess the extent to which SEZs are fit for purpose and to adapt zone programmes to evolving contexts and development objectives. This has significant implications. Adjusting SEZ programmes requires that the programmes have built-in flexibility and that long-term SEZ policy be taken into consideration when approaching international trade and investment commitments.

Table IV.17. Lessons learned from SEZ experience	
Areas	Lessons learned
Programme design	<ul style="list-style-type: none"> • Integrate SEZs dynamically in development strategy • Complement existing competitive advantages • Take into account the national investment climate and governance capabilities • Design zones to be self-financing
Operations	<ul style="list-style-type: none"> • Get the basics right: business facilitation, infrastructure, labour pool • Promote clusters and linkages • Ensure strong institutions and good governance • Coordinated investment promotion
Development impact	<ul style="list-style-type: none"> • Set clear goals and performance metrics for economic and ESG contributions • Conduct effective monitoring and evaluation, with consequence management • Maximize synergies between institutions and levels of government

Source: UNCTAD.

SEZ programmes should aim to *complement existing competitive advantages and build dynamic capabilities* based on sustainable sources of competitiveness. Designing and building zones that require industrial and technological infrastructure and skills not yet available in the economy is likely to lead to zone failures. These failures can be expensive in terms of both capital and time. SEZs can modify but not nullify traditional locational determinants of investment. Competitiveness can be built around, for example, natural resources, strategic geographies or the workforce. The long-term sustainability of these sources of competitiveness depends on building up dynamic capabilities through, for example, industrial upgrading in resource value chains, improved connectivity of strategic geographies and skills development of the workforce.

The success of SEZ policies is *closely entwined with the national economy, the national investment climate and the governance capacities of relevant national and local authorities*. SEZs are not an end in themselves; they need to provide an impulse to the industrial development of the economy and yield benefits beyond their confined geographical area. Conversely, the successful development of SEZs depends on the parallel development of the surrounding economy. Just as SEZs should not be developed as isolated economic enclaves, SEZ policies should not be developed in isolation from the economy's broader policy framework. In other words, SEZ policies should be coherent with trade and investment policies, and with business and fiscal regulatory frameworks beyond the zones. Finally, effective zone governance by, and coordination between national and local authorities, developers and operating entities is key to gaining – and maintaining – investors' trust in the zone and is a precondition for zone success.

Finally, *zone programmes should be designed to ensure cost recovery*. Zone objectives may well extend to the development of long-term dynamic capabilities, industrial upgrading, and skills and technology dissemination. But the financial viability of zones is fundamental for their long-term sustainability. Long-term economic development contributions are uncertain and difficult to predict; if SEZs' immediate economic contributions, including their fiscal contributions, rents and services fees, are insufficient to cover zone costs, their fiscal impact will be increasingly difficult to justify. The risk of negative fiscal impacts is higher in programmes that allow existing domestic firms to convert to zone status – thereby eroding the tax base – without significant investment in new productive capacity.

b. SEZ operations

SEZ performance depends on an *attractive business environment, including good infrastructure, an adequately skilled labour force and efficient services*. Although fiscal incentives and subsidies are important to attract investors, zones can be developed successfully without excessive reliance on incentives. In contrast, primary reasons for the failure of many unsuccessful programmes are weak governance, complex procedures, and insufficient infrastructure and services. Effective zone development often relies on pragmatically resolving mundane problems ranging from slow connection of businesses to utilities to a lack of public transport links for workers living outside the zone. Priority services depend on zone context, objectives and investor profiles. For example, being able to provide effective security services can be a key competitive advantage in zones with extensive warehousing and logistics operations.

The attractiveness of SEZs for investors is further enhanced by the synergies and economies of scale that zones can deliver through the *promotion of clusters and linkages with the local economy*. Vertically specialized zones have a greater scope for synergies, but multi-activity zones can also promote cost-sharing arrangements, e.g. for warehousing and transportation, and shared services. Within large multi-activity zones, smart co-location

strategies can bring industries with greater scope for collaboration physically closer together. Matchmaking programmes and training initiatives for local SMEs outside the zone stimulate linkages that are important not only for SEZs' broader economic impact but also for their long-term prospects.

Well-designed legal and regulatory frameworks and institutions, as well as good governance, are vital to the success of an SEZ. The enabling legal infrastructure of an SEZ (national SEZ laws, in most cases) should be sufficiently stable to ensure consistent, transparent and predictable implementation of SEZ policy. Also, SEZ operating procedures should be practical and responsive to the needs of investors. The legal infrastructure should set out SEZ investment rules, institutional arrangements, fiscal incentives and tax administration, licensing and regulation of business activities, trade facilitation and customs control, and dispute settlement mechanisms. The effectiveness of the SEZ authority responsible for the enforcement of the legal framework will make or break an SEZ programme. Independent agencies under a board of directors including both public and private sector representatives have the better track record. Finally, good governance and the rule of law, including effective anti-corruption procedures, are crucial.

Coordinated promotion efforts between SEZ authorities, developers and IPAs are important for an effective approach to potential investors. The institutional set-up and the role of IPAs vary between countries. In most cases, IPAs do not distinguish their activities for SEZs from their other investment promotion efforts. A joint effort could lead to targeted initiatives for SEZs; it would have the advantage of more effective linkages with investment facilitation efforts in the rest of the economy; and it would integrate SEZs more seamlessly into national investment promotion strategies. Clearly assigned roles are important, separating responsibilities for promotion efforts, approval processes, the granting of incentives, and the monitoring of adherence to zone policies.

c. Optimizing development impact

Maximizing SEZs' positive development impact starts with the *establishment of clear goals for SEZ performance, economic contributions, labour rights, and social and environmental standards.* Many SEZ programmes are set up with broad objectives for investment, export and employment contributions. But maximizing long-term contributions to productive capacity and industrial development, as well as technology and skills, requires granular targets for aspects such as capital expenditures, skill levels, training and local content. Such targets are needed in order to design incentives schemes and active clustering support, investment promotion, facilitation, matchmaking and linkages programmes.

Clear goals are also a prerequisite for the development and implementation of *effective monitoring and evaluation mechanisms.* The SEZ sustainable development impact assessment (or "profit and loss statement") developed in section C can provide guidance on key evaluation areas. The monitoring process and the scope and modalities for corrective action are equally important. Such "consequence management" can be incorporated at programme level where SEZs are managed predominantly by public entities. They can be incorporated in contracts where SEZs are developed and operated privately. Programmes should include safeguards to ensure that SEZs remain aligned with development strategies.

Finally, the coherence of different policy areas – as remarked above – and *synergy creation between different parts of government at national and subnational levels* are key to achieving the desired impact of SEZs. As an extension of good governance, this requires effective coordination mechanisms for the multiple ministries and agencies involved in the regulation of SEZs.

d. Systemic and strategic considerations

Beyond the practical lessons learned about SEZ design, operation and impact optimization, current trends in the development of SEZs point to a number of systemic and strategic considerations – or notes of caution – for policymakers.

First, the proliferation of SEZs around the world, driven in large part by competitive pressures in a tightening market for internationally mobile investment in industrial capacity, raises concerns about a “race to the bottom” – with low taxation and relaxation of regulations and standards applicable to (predominantly international) investors.

The global consensus on the need for sustainable development should act as a brake on the downward slope. Still, the implications for development could be far-reaching. As most countries implement zone programmes that include the full spectrum of investment promotion levers, pre-existing investment determinants tend to prevail, and the traditional disadvantages of those countries most in need of investment for industrial development continue to be a barrier. Furthermore, competitive differentiation for efficiency-seeking investment increases the pressure to build ever more costly higher-specification zones and to provide subsidized services – again putting the LDCs at a disadvantage.

In addition, zones that attract a very large proportion of manufacturing investment in some developing countries can turn into enclaves of internationally mobile economic activity. That raises concerns for the level playing field relative to domestic firms and the local labour force – especially in large integrated zones that include townships or residential areas. This risk presents a policy trade-off that needs to be considered carefully: zones can help lift the incomes of part of the population but will not benefit all; they may even affect groups of the population negatively, such as those dependent on the informal sector. However, such outcomes need to be weighed against the need – especially for poor countries – to mobilize investment and to use SEZs as a stepping stone towards broader development, with zones potentially acting as gateways to GVCs and creating spillover, crowding-in and demonstration effects.

The zone development ladder presented earlier in the chapter addresses these concerns in part. It suggests that lower-cost zones, associated with a frugal approach to zone development and management, may be an option for lower-income countries. Limiting subsidized services and incentives, while making fiscal incentives temporary and dependent on sustainable development contributions, will further help limit the “dual economy” risks. Doing so would leave trade and investment facilitation levers as the only constant and lasting zone advantages.

But policymakers can question more generally the need to combine virtually all investment promotion levers in SEZs. Under certain circumstances and for certain types of investment, individual levers are often sufficient. Many common development or investment constraints can be addressed by alternative policy options applied throughout the economy rather than in confined areas. For example, common industrial parks (without special regimes) could be an appropriate policy option if the key constraint to industrial development is limited access to land or inadequate infrastructure. Similarly, targeted incentives that leave investors to decide on the most advantageous location in the country may be as effective as zones, if attracting investment in specific economic activities is a key objective. Even the facilitation of customs procedures for trade-dependent activities can be offered through alternative regulatory options, such as bonded warehouse programmes or duty drawback schemes. Individual constraints on development or investment attraction rarely justify the creation of an SEZ programme. SEZs can be the preferred option when multiple constraints apply and when alternatives are not feasible or too difficult to implement. This is often the case in low-income countries.

Alternatives to zones have the advantage of favouring national reforms rather than reforms limited to confined zones, thereby avoiding multiple regimes for trade, investment and taxation. Of course, SEZs do not necessarily stand in the way of national reforms. Early adopters of zones in Asia have deliberately used zones to introduce national reforms gradually in a dual-track approach that slowly exposed the rest of the economy. Still, the ultimate goal remains the extension of reforms (and their positive effects) to the broader economy.

Finally, the examples in previous sections of zone programmes that adjust to changing circumstances and of turnarounds of struggling zone programmes show that policymakers need to have a “Plan B”. They need options for re-orienting their strategic approach, reforming zone regulations and repackaging zone benefits when zones fail to deliver on objectives.

2. A forward-looking perspective

The need for strategic re-orientation, reform and re-packaging may become increasingly acute with the evolution of the three key challenges highlighted in the introduction to this chapter: the sustainable development imperative, the new industrial revolution and the digital economy, and changing patterns of international production and GVCs. Table IV.18 provides an overview of possible policy responses to these three challenges.

The *sustainable development agenda* increasingly drives MNEs’ strategic decisions and operations, which should be reflected in the value proposition that SEZs and IPAs market to investors. Laxer social and environmental rules or controls are not a viable long-term competitive advantage to attract investment in zones. On the contrary, they can lead to zone failure when the SEZ becomes associated with labour or human rights abuses, projecting a negative image that discourages investment. Shared services related to sustainability, such as common health and safety services, waste management installations and renewable energy sources will become increasingly important. SEZs that market their environmental performance (ecozones) are already emerging (UNCTAD, 2016), and the enforcement

Table IV.18. Overview of possible policy responses to emerging challenges

Policies/standards	Sustainable development imperative	New industrial revolution and the digital economy	Changing patterns of international production
Strategic reorientation	<ul style="list-style-type: none"> Integrate sustainable development indicators in SEZ programme design Explore new SEZ models focused on incubating business activities that promote sustainable development 	<ul style="list-style-type: none"> Modernize SEZ service provision by integrating digital technologies Promote investment in business activities of digital firms Partner with global platform providers to enhance SEZ competitiveness 	<ul style="list-style-type: none"> Focus specialized SEZs on services and manufacturing activities in line with global industrial restructuring Link SEZ development to regional integration, including through new international cooperation models
Regulatory reform	<ul style="list-style-type: none"> Establish, monitor and enforce ESG performance indicators for SEZ investors Promote global standards in SEZs 	<ul style="list-style-type: none"> Consider the interaction between the policy framework for SEZs and the national regulatory regime for the digital economy 	<ul style="list-style-type: none"> Adapt facilitation and regulations to new forms of investment (non-equity modes of international production) Anticipate shifts in international rules and trade preferences, and regional integration efforts
Repackaging of the value proposition	<ul style="list-style-type: none"> Provide supporting services and training programmes in ESG factors Reorient incentive schemes towards sustainable development contributions 	<ul style="list-style-type: none"> Provide adequate digital infrastructure within zones Facilitate digital start-ups through focused clustering and linkages programmes Adjust HRD programmes to include digital skills 	<ul style="list-style-type: none"> Incentivize upgrading and diversify exports Strengthen entrepreneurship policies and mobilize dynamic local entrepreneurs to catalyze FDI in SEZs Provide on demand or shared manufacturing, design or testing spaces or services

Source: UNCTAD.

SEZs play a pivotal role in Ethiopia's industrial development strategy and its Climate-Resilient Green Economy strategy, which entails the mitigation of both excessive emissions and unsustainable use of natural resources. The country has announced plans to build 30 industrial parks by 2025 to boost manufacturing output from 5 to 20 per cent of GDP. Five public industrial parks are already in operation, and six more are under construction. Government outlays so far amount to approximately \$1.3 billion. Private investors are also being encouraged to develop parks, either independently or through PPPs. Currently, three private parks are operational, benefiting from similar incentives as the publicly owned sites.

The flagship Hawassa Eco-Industrial park is being developed as a model of the Climate-Resilient Green Growth strategy. The park is focused on the textile and apparel industry and houses a number of global manufacturers, including American luxury conglomerate PVH Corporation, which own brands such as Tommy Hilfiger and Calvin Klein. The government has installed a state-of-the-art zero-liquid-discharge common-effluent treatment plant, which enables the cleaning and recycling of 90 per cent of the water in the park and minimizes its impact on surrounding soil salinity, groundwater and river bodies. In addition, the zone is served entirely by renewable hydropower and has energy-efficient appliances such as LED lights installed in premises. In 2018, only the second complete year of its operation, the Hawassa Industrial Park reported exports of a little under \$50 million (of the total exports from industrial parks of \$100 million), a number which is set to grow in the coming years. This is significant, considering that total exports from Ethiopia are less than \$3 billion, and the contribution of the country's consumer goods to total exports has historically been low (12.5 per cent in 2016).

Ethiopia's experience illustrates the potential value of environmentally sustainable zones to international investors. During the design of the Hawassa Park, the Government invited potential investors to provide input for design and construction, so that the park met the latest international standards. Many of its innovative elements, particularly those related to environmental and safety standards, were inputs provided by PVH, the largest manufacturing foreign investor in Ethiopia to date (World Bank, 2017b).

Source: UNCTAD, based on information from Industrial Parks Development Corporation of Ethiopia and Federal Democratic Republic of Ethiopia (2011).

and active promotion of high environmental, social and governance (ESG) standards will increasingly become a feature of SEZs (box IV.18).

Fiscal incentives conditional not only on employment, investment or export performance, but also on a range of social and environmental indicators have the potential to become a key tool for driving SEZs' ESG performance and sustainable development impact. Realizing this potential will require zone programmes to include ESG indicators and adequate monitoring capacity. Ultimately, new SEZ models could evolve to promote investment focusing on sustainable development contributions. Such zones could specialize in, for example, manufacturing activities in renewable energy or innovative products that offer low-cost solutions to social and environmental problems in low-income countries.

The *new industrial revolution* – the adoption across industries of digital technologies, advanced robotics, 3-D printing, big data and the internet of things – is changing manufacturing industries. The declining importance of labour costs as a locational determinant for investment will have fundamental implications for SEZs. SEZ development programmes will need to adapt their value propositions to include access to skilled resources, high levels of data connectivity and relevant technology service providers, potentially through partnerships with platform providers. Digital service provision by SEZ operators, e.g. through online single windows for administrative procedures, will become an increasingly important signal to potential investors. At the strategic level, SEZs may have new opportunities to target digital firms and orient their strategic strengths in logistics facilitation towards the distribution activities of e-commerce firms. SEZs could follow the incubator model and promote clustering and linkages with local digital start-ups within and outside their confines, transforming SEZs in Digital Innovation Hubs. To pursue such opportunities and see new SEZ models succeed, national digital policy – e.g. privacy legislation, data storage and security – will become an area to integrate with the SEZ regulatory and institutional framework.

Changing patterns of international production and GVCs, as overseas operations shift towards intangible and asset-light forms, risk making the traditional physical production advantages offered by SEZs less relevant. This trend is likely to result in increasing numbers of zones specializing in services, on the one hand, and smaller-scale manufacturing (e.g. digital twins, see *WIR17*), on the other. Both developments can potentially lead to higher technology and intellectual property content in SEZ production, requiring SEZ incentives to foster contributions to industrial upgrading and skills development. Smaller-scale manufacturing investments could provide opportunities for enhanced linkages with firms outside SEZs. Changing patterns in international production are also driven by policy factors. MNEs constantly shift GVCs in response to new trade barriers or changes in preferential market access. The return of protectionist tendencies, slow progress in international trade policymaking, and new regional trade and investment agreements can thus significantly affect SEZ competitiveness. The trend towards more regional rather than multilateral economic cooperation is likely to give further impetus to the development of regional zones, cross-border zones and other forms of international cooperation zones.

3. SDG model zones

This chapter has documented the emergence of a host of new SEZ models with innovations in their strategic focus (e.g. high-tech, financial services, tourism), in their design (e.g. integrated township models), in their governance (e.g. international cooperation models) and in their operations (e.g. new shared ESG-related services).

The sustainable development imperative described in section C is arguably the most urgent challenge facing policymakers, zone programme developers and zone managers today. The policy responses flagged above, taken together, provide the direction that existing SEZs are likely to take. These responses can be adapted and adopted in most current SEZ programmes worldwide.

The 2030 agenda to achieve the United Nations SDGs could provide an opportunity for the development of an entirely new type of SEZ: the SDG model zone. Conceptually, such zones would be built around three key elements:

- A strategic focus on attracting investment in “SDG-relevant” activities
- The highest levels of ESG standards and compliance
- Promoting inclusive growth through linkages and spillovers

ESG compliance, as well as linkages and spillovers, are of course among the objectives of most existing zones. The review of SEZs’ performance, however, has shown that much more can be done. Table IV.19 provides an overview of policy options for the creation of SDG model zones.

SDG model zones could *adopt the highest international standards, set the benchmark and act as catalysts* for improvements across all zones through innovation and experimentation with new approaches. SDG model zones could, for example, be designed for zero emissions and minimum waste (aspirational targets that would require complex, closed-circle designs). They could strive to achieve (and publish results on) ESG targets that are not commonly included in SEZ performance evaluations; for example, a gender-equality benchmark or the measurement of zone contributions to public revenues.

SDG model zones could *provide services to control and support the ESG performance of firms operating in the zone*. Such services could include inspection services on health and safety standards, as well as training and financial support to facilitate improvements, implement best practices and obtain third-party certifications. The same could apply to

Table IV.19.

Illustrative list of policy options for the creation of SDG model zones

Policy option	Policy objectives	Focus	Promotion/facilitation
SDG investment strategy	<ul style="list-style-type: none"> Catalyze SDG implementation Incubate pro-SDG business activities 	<ul style="list-style-type: none"> Sustainable agriculture, food security and nutrition Basic infrastructure, utilities, water and sanitation services Health care and essential medicines Renewable energy and climate change mitigation Education 	<ul style="list-style-type: none"> Target SDG sectors and incubate SDG activities Reorient incentive schemes towards SDG contributions Prepare a pipeline of SDG projects Facilitate impact investment and social entrepreneurs Cooperate with development partners
ESG standards compliance	<ul style="list-style-type: none"> Promote sustainable processes in production and services Enhance CSR and good governance 	<ul style="list-style-type: none"> Aspirational goals: zero emissions and minimum waste Highest labour, health and safety standards Gender-equality benchmark Measurement of zone contributions to public revenues 	<ul style="list-style-type: none"> Services in the zone to facilitate the implementation of standards Inspection of standards compliance and exchange of best practices Investors agree to codes of conduct and reporting on ESG performance
Inclusive growth via linkages and spillovers	<ul style="list-style-type: none"> Shift from enclaved zones to models that facilitate backward and forward linkages Spillovers of SDG best practice to the rest of the country 	<ul style="list-style-type: none"> Renewable energy installations that also supply outside the zone Waste management plant with capacity beyond the zone Amenities and services (health care, housing and education) that benefit the wider community 	<ul style="list-style-type: none"> Strengthen entrepreneurship policies Mobilize local entrepreneurs to catalyze FDI and promote MNEs suppliers Broaden incentive schemes to support local supplier development

Source: UNCTAD.

environmental performance, with services ranging from consultancy to identification of recycling opportunities and implementation of solutions for the reduction of waste, emissions and energy use.

SDG model zones could offer facilities with benefits for the broader community, such as renewable energy installations that serve the zone but also feed the grid (or supply outside the zone), waste management plants with additional capacity or other utilities with benefits beyond the zone (e.g. water treatment). They could also offer amenities and services that would benefit the broader community, including residential areas and social housing, health care and education facilities, recreational areas and other services (e.g. fire services).

SDG model zones would explicitly and demonstrably operate under the *highest standards of governance*. They would involve a broad range of stakeholder groups, allowing for the generation of new ideas for initiatives that would benefit the local community, the broader economy or the environment. For example, they could facilitate women's employment in the zones, instating anti-discrimination rules, providing child care infrastructure, protection and training, and promoting women entrepreneurship (UNCTAD, 2014). Such zones could be developed by involving specific investor groups with a stake in sustainable development, ensuring continuous monitoring of, and reporting on, ESG performance (e.g. through gender equality audits). Companies operating in the zone could voluntarily sign up to customized codes of conduct, making the SDG model zone a partnership between authorities, zone developers and zone investors. Alternatively, access to SEZ benefits could be subject to initial and continuing certification of ESG performance.

Operating at such high standards, SDG model zones would effectively transform the race to the bottom into a race to the top – making sustainable development impact a new locational advantage.

The more complex of the three elements of the SDG model zone concept is the *strategic focus on attracting investment in SDG-relevant sectors*. The 2014 *World Investment Report*

on Investing in the SDGs listed 10 priority SDG-relevant sectors. (The report, published on the eve of the formulation of the SDGs, estimated total investment needs in these sectors, leaving an annual investment gap of \$2.5 trillion; this has informed deliberations in the Addis Ababa Agenda on financing for development.) These sectors, broadly including basic infrastructure, water and sanitation, energy, climate change mitigation and food security, as well as health and education, are not natural candidates for investment promotion in SEZs in their current conception.

SEZ benefits, including customs duties and tax relief, facilitation services and infrastructure support, are geared towards the promotion of internationally mobile investment in the production of mostly tradeable goods and services. SDG-relevant sectors are, of course, mostly untradeable services. Moreover, the contribution to sustainable development of investments in SDG-relevant sectors is, in most cases, highly dependent on the location of the invested asset being close to the populations that need access to the relevant infrastructure and services. For many SDG-relevant sectors, targeted (non-zone-based) incentives and facilitation efforts are the more appropriate investment promotion tools.

The SDG model zone is feasible. The international pool of private capital seeking opportunities to invest for both financial return and positive social and environmental impact is rapidly increasing. The number of impact investors has risen from hundreds to thousands. The value of impact investment assets under management is currently estimated at \$500 billion.¹⁹ The number of social entrepreneurs has also been growing exponentially over the past decade. There are signs that this sector will continue to grow. The challenge is for the developing countries and particularly LDCs to cultivate these impact investors and social entrepreneurs.

The proliferation of new SEZ types has included zones geared towards economic activities other than internationally mobile ones. These activities might include investments by local SMEs or initiatives pursuing economic development goals more closely aligned with the SDGs, such as boosting employment in impoverished areas. Such zones – including enterprise zones in the United States and the United Kingdom, and urban free zones in France – may not meet all the commonly used SEZ criteria. They may or may not involve a separate customs area or provide relief from corporate income taxes, but they are zone-based development tools nonetheless.

Furthermore, SDG model zones in low-income countries can be developed in collaboration with donors from advanced economies and through South-South cooperation mechanisms. Successful cases of international cooperation on SEZ development can provide a model. International development agencies, including multilateral and regional development banks, can also play a catalytic role by providing technical assistance and bridging the knowledge gaps in zone establishment and operation, as well as impact assessment.

SDG model zones could follow a pattern similar to that of more traditional SEZs, with specialized zones, a customized set of incentives and a location appropriate to their focus, which may or may not rely on proximity to major infrastructure hubs. Alternatively, SDG model zones could combine a traditional SEZ approach targeting internationally mobile investment with part of the perimeter dedicated to impact investment and social entrepreneurs in SDG sectors. A practical extension would be to use the subzone model developed in the United States, where SEZs combine a delimited geographical area as the core with associated subzones in surrounding locations more suited to a particular economic activity, but where such activities benefit from the same regulatory advantages as the core zone.

* * *

Some 500 SEZs are in the pipeline for development in the coming years, according to the survey carried out for this report. These new SEZs will face a global context for zone development that is quite different from that of previous waves. The trade policy environment no longer favours export-led development strategies to the same extent. Technology trends in industry are threatening to erode the key competitive advantage that the vast majority of SEZs rely upon: low labour costs. And sustainability trends no longer allow regulators to take a hands-off approach to operations in SEZs – in the name of avoiding hassling investors – but instead force them to actively pursue and market high ESG performance levels.

The concluding section of this chapter has drawn lessons from past experience, provided a forward-looking perspective and floated a pioneering idea in the form of SDG model zones. Together, the lessons learned and the policy options for future directions can help policymakers to revitalize and upgrade existing zones where needed and to avoid the pitfalls of the past while preparing for the future when developing new zones.

The process of modernizing zones and building SDG Model Zones can benefit from a global exchange of experience and good practices. Also, with more and more zones being developed through international partnerships, a global platform that brings together financing partners, SEZ developers, host countries, IPAs and outward investment promotion agencies can accelerate the transition towards sustainable-development-oriented zones. UNCTAD can play a leading role in establishing such a platform in connection with its World Investment Forum, and in supporting partnerships through its policy advice, technical assistance and training programmes. **The key objective should be to make SEZs work for the SDGs: from privileged enclaves to widespread benefits.**

NOTES

- ¹ For a detailed discussion of definitions and terms used across countries, see Bost (2019).
- ² The numbers on employment and firms are based on figures from the Asociación Zonas Francas de las Américas. Original data exclude some industrial parks counted as SEZs but include single-enterprise free points in the Dominican Republic and Colombia that are not counted as SEZs.
- ³ The new administration in Mexico announced a policy reversal on SEZs in April 2019, with the intention to close the zones under development since 2017.
- ⁴ In the earthquake on 12 January 2010, a number of apparel factories based in and around Port-au-Prince were heavily damaged, including the collapse of one major apparel factory that employed nearly 4,000 workers. As a result, the U.S. Congress passed the Haiti Economic Lift Program (HELP) Act. The bill extends the Caribbean Basin Trade Partnership Act (CBTPA) and the Haitian Hemispheric Opportunity through Partnership Encouragement Act (HOPE) through September 30, 2025.
- ⁵ The privileges of zones in the Ukraine were withdrawn in the mid-2000s, and the zones were formally closed in 2016.
- ⁶ Singapore Economic Development Board 1995, quoted in Pereira (2003: 28).
- ⁷ See “Establishing Russian Industrial Zone in Egypt comes into force”, Egypt Today, 1 February 2019, www.egypttoday.com.
- ⁸ Based on China-Singapore Suzhou Industrial Park Administrative Committee, www.sipac.gov.cn.
- ⁹ The SCM Agreement divides subsidies into “actionable” and “prohibited” subsidies.
- ¹⁰ If such treatment sought to benefit SEZ companies only, then it would fall outside of the definition of general infrastructure. See Article 1.1(a)(1)(iii) of the SCM Agreement.
- ¹¹ In some RTAs, the rules of origin prohibit the use of duty-drawback systems for certain materials (e.g. those imported in the SEZ country and used in the production of a good intended to receive preferential treatment when exported to the RTA partner country).
- ¹² Footnote 1 to the SCM Agreement. According to the Panel Report, EU – PET (Pakistan), paras. 7.36 and 7.37, excess remissions under duty-drawback schemes (government forgoes revenue or money that is due to it) will be subject to SCM rules. See also the respective Appellate Body Report (WT/DS486/AB/R).
- ¹³ In 2007, the General Council adopted procedures for the extension of the phase-out period under Article 27.4 of the SCM Agreement (WTO, G/SCM/W/546/Rev.8.). Members with extensions were required to provide transparency notifications for the phase-out period. The decision to grant extensions lies with the SCM Committee.
- ¹⁴ Article 27.2(a) in conjunction with Annex VII(a) of the SCM Agreement.
- ¹⁵ Article 5 of the TRIMs Agreement provides for notification and transitional arrangements related to measures for TRIMs inconsistent with the Agreement. Developed-country members had two years, developing-country members had five years and LDC members had seven years to eliminate any measures not consistent with the TRIMs Agreement. The Hong Kong Ministerial Conference extended this deadline to 2020 for new TRIMs-inconsistent measures for LDCs.
- ¹⁶ The decision in DS 348 ended with a mutually agreed settlement and in DS 366 with an unappealed panel report adopted by the WTO Dispute Settlement Body.
- ¹⁷ Extrapolated for current numbers of SEZs from estimates in FIAS (2008) and ILO (2017).
- ¹⁸ The online single window for SEZs in Viet Nam is accessible from the national site, <https://vietnam.eregulations.org/>, built with the support of UNCTAD’s business facilitation programme.
- ¹⁹ As reported by the Global Impact Investment Network, theGIIN.org.