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Rejuvenating SEZs through Internationalization: A Case Study of Chinese Domestic and International SEZs

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Abstract: China's special economic zones have been hailed as a flagship of her policy on 'opening up' to the outside world, as well as the China-led global Belt and Road Initiative. In this paper, we conceptualize the internationalization of Chinese SEZs, and frame the genealogy and underpinning dynamics of China's international SEZs, both domestically and overseas. The paper critically probes the underlying logics of three parallel international developments of Chinese SEZs: (1) capital-oriented land expansion in the form of international SEZs combining both 'bring in' and 'going out', especially since BRI; (2) different industrial landscapes at various timelines and sites; (3) variegated transnational SEZs governance, bilateral central governments governance, marketized state or entrepreneurship state, or private ventures. We contribute to the SEZ land literature by delivering a novel framework which encompasses variegated internationalization trends among China's vast domestic and overseas SEZs. These internationalization trajectories in turn contour and entrench global variegated capitalism.

Keywords: SEZs; internationalization; BRI; China; land studies



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1. Introduction

The global prevalence of special economic zones (hereafter SEZs), including industrial zones, free trade zones, scientific parks, and high-tech development zones, implicit industrial and urbanized land form, etc., has gained scholarly attention for decades. Since the 1960s, more than 5400 SEZs have been internationally established in 147 countries to boost investment, trade, innovation, and economies [1]. Especially, SEZs have been hailed as a flagship exemplar of China's post-1980s policy on 'opening up' to the outside world, as well as experimental governance for tunneling foreign capital into industrial land accumulation. Consequently, this article theoretically and empirically illustrates the agency of internationalization by engaging with the theorization and practicalities of establishing China's domestic and overseas SEZs.

China's President Xi's Central and Southeastern Asian tours in 2013 were a debut linchpin of the globally ambitious BRI [2]. According to the BRI Visions and Actions document (National Development Reform Commission, Ministry of Foreign Affairs, Beijing, China), the BRI envisions a global connectivity network through five priorities: policy coordination, infrastructure connectivity, unimpeded trade, financial integration, and person-to-person bonding, which has since been grounded by a wide array of spatial imaginary extensions that stretch across six development corridors, SEZs, as well as transnational connectivity projects (e.g., ports, railways, and highways). On the one hand, China's overall rhetorical conceptualization of the BRI is an alternative cooperative platform toward "inclusive globalization" [3], or bilateral "win-win" discourse. On the other hand, the BRI has spurred international attention in the lens of geopolitical and geoeconomics competition [4] or project-scale interpretation [5]. However, it is urgent to ground the multifaceted dynamics

of Chinese SEZs under the umbrella term of BRI, to challenge simplistic depictions of Chinese overseas SEZs as copies of ‘successful’ domestic industrial parks or as global land predators spurred by capital purposes in the lens of geopolitics. To the best of our knowledge, there is still lack of panoramic depiction of the internationalization of Chinese SEZs, especially since the BRI, apart from some place-based case studies of Chinese global SEZs [6]. Thus, we seek to contribute to BRI scholarship by digging into the conceptualization, contextualization, and features of China’s international SEZs, theoretically and practically, removing boundaries between domestic and overseas settings with various rationales from the BRI and other sources.

In theory, mixed policy and spatial infrastructural interventions, in the form of SEZs, are aimed at regional industrialization and urbanization across time and space in the context of economic neo-liberalization [7]. These incremental land changes caused by SEZs over the last several decades have had profound, transformative effects on the economic, social, and environmental relations across both developed and developing countries [8]. In tandem with the global rise of SEZs, China’s opening-up-oriented economic development is co-produced by capital accumulation strategies both on the ‘inside’ (the domestic restructuring of SOEs and macroeconomic strategies) as well as the ‘outside’ (the global search for new markets and corresponding foreign demand for financial capital) [9]. Thus, in this paper, we coin this trend the internationalization of Chinese SEZs, featuring by threefold, global capital-oriented land expansions, different industrial landscapes, and variegated transnational SEZs governances, all of which will be detailed in the following section. In this sense, China’s domestic and overseas SEZs are an exception since the inauguration in 2013 of the Belt and Road Initiative (BRI) and its widespread implementation in the following years. The BRI has resulted in an upsurge in China’s overseas SEZs and witnessed the updated internationalization of the Chinese domestic SEZ boom, serving as a practical way of promoting inclusive globalization by inventing new forms of international cooperation between China and the local host countries [10].

This paper contributes to a broader research agenda on the land transformation via global capital accumulation and circulation through theoretically and empirically examining the internationalization of SEZs. To be specific, it highlights the underlying land capital logics of internationalized SEZs: capital-oriented land expansion in the form of international SEZs; different industrial landscapes at various timelines and sites; as well as variegated transnational SEZ governance, combining bilateral central governments governance, marketized state or entrepreneurship state, and private ventures. Against the broader implications of China’s global presence through China’s domestic and overseas transnational SEZs, this paper also theoretically and empirically examines the conceptualization, genealogy, and dynamics of China’s internationalized SEZs. The next section outlines the theoretical framework for the empirical analyses of Chinese international SEZs beyond the BRI. Section 3 briefly describes the research method. Section 4 contextualizes upon the policy and praxis genealogy of international SEZs in China and the BRI. Section 5 features Chinese domestic and overseas internationalized SEZs in detail. Finally, the issues and challenges, as well as the theoretical implications of observations upon Chinese and BRI SEZs, which invariably enrich the policy and praxis mobilities in China-led global BRI, are presented.

2. Conceptualizing the Internationalization of Chinese SEZs

In this paper, we coined the internationalization trend of domestic and overseas Chinese SEZs, the internationalization of Chinese SEZs. The term of internationalization emerged mostly in the context of the rapid and profound global rise of transnational firms since the early 1990s, which could be defined as the state, firms, or individuals gradually expanded across countries to compete and operate abroad [11]. This paper critically probes the underlying logics of three parallel international developments of Chinese SEZs: the spatial fix of global capital flows which emerged in the form of international SEZs combining both ‘bring in’ and ‘going out’, especially since the BRI. This trend of Chinese

internationalized SEZs features different industrial landscapes at various timelines and sites. The internationalized SEZs also attend to variegated transnational governances, such as bilateral central governments governance, marketized state or entrepreneurship state, or private ventures.

Firstly, the article suggests that the internationalization of Chinese SEZs is driven by capital-oriented land expansions combining both domestic international SEZs to anchor growing inward-FDI and overseas SEZs featured by firms' 'going out'. These phenomena are concatenated in China's broader aim to secure domestic economic security and expand global effects [9]. Echoed by Harvey's 'spatial fix', overseas SEZs implicitly serve as a materialization carrier for the growing accumulation and circulation of financial capital to 'fix' the global spatio-temporal "displacement" of transnational capital transfers [12]. By comparison, hundreds of Chinese domestic SEZs were customized and awarded preferential policies which boosted their position for neoliberalism economic reform in experimental fashions, along with deregulation and liberalization, while drawing global foreign direct investment (FDI), encouraging trade performance, and fueling economic growth [13].

Secondly, SEZs mostly anchored manufacturing firms and hence casted different industrial and urban landscapes, as well as fostered the efficiency and productivity of land development. Additionally, agriculture corporations and producer service ventures have been focused upon within Chinese SEZs at various timelines among both domestic and overseas sites [10,14]. Especially across East and Southeast Asia, SEZs are either enclosed in bigger master-planned urban developments, or transformed into industrial-science parks, export processing zones (EPZs), etc., in various forms to embedded into the global production network. In this regard, SEZs are key sites of urban-industrial nexus [6], spurring manufacturing potentials and improvising the rise of urbanized regions [15]. Beyond Asia, various industrial and urban landscapes of Chinese SEZs along the BRI countries are still underexplored.

Thirdly, this paper also highlights variegated agents of the internationalization of Chinese SEZs, including state-led governance, provincial marketized state or entrepreneurship state, as well as private ventures (Figure 1). Specifically, most scholars paid attention to the dominant position of Chinese state and state-owned enterprises (SOEs) in the process of international offshoring of Chinese firms. However, under the neoliberal opening-up context, the Chinese state has experienced a process of decentered and fragmented internationalization that is featured by entrepreneurial statehood rationale [16]. Seemingly, Chinese provincial or urban state governments have been granted greater managerial autonomy to engage more in land management through combining both SEZs and foreign capital flows. Moreover, it is de facto that inexperienced private Chinese investors dominate most manufacturing investment and industrial zone development in Africa and beyond [6].

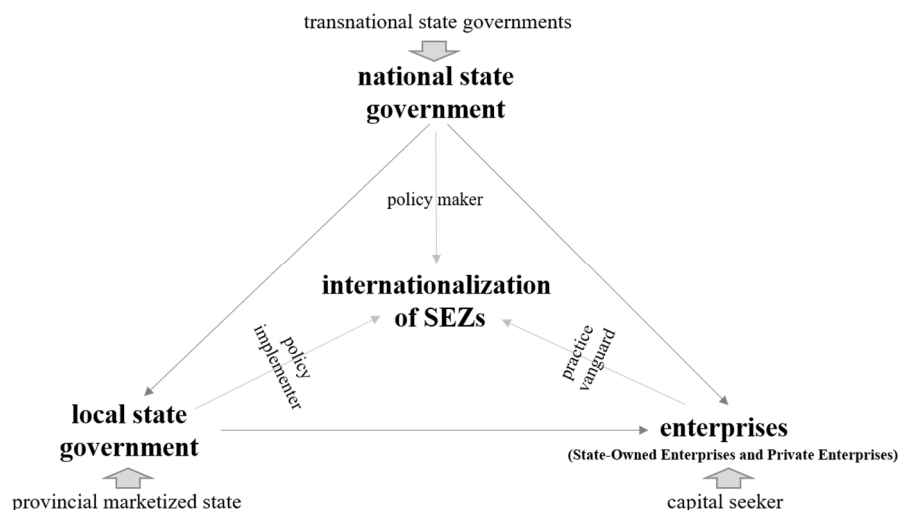


Figure 1. Main actors of the internationalization of Chinese SEZs.

In summary, there is a curious fissure between the theoretical scholarships on SEZs and variegated governance landscapes of SEZs along the BRI. This paper seeks to address this lacuna by uncovering any nuanced corroborate between both the BRI ambitions of the Chinese government and its symbiotic relationships with corporate giants. According to the Visions and Actions document (National Development Reform Commission, Ministry of Foreign Affairs, China), the BRI draws on Chinese characteristics and attaches great importance to the willing participation of the host country such that mutual advantages (including benefits to local residents and local and national development) accrue from formation of the transnational SEZs and from enhancement of the resulting interconnectivities [10,17]. There are, however, noticeable differences between China's overseas SEZs and China's domestic counterparts [10]. Different industrial ventures, including both state-owned enterprises and private companies, develop in various transnational contexts, and the broader regional implications of the surges in Chinese industrial investment in the form of transnational SEZs are under-explored [18].

In the BRI case study that follows, we contextualize upon the genealogy of Chinese international SEZs from China's opening policy up to the recent BRI. We then analyze the internationalization trend of the Chinese domestic and overseas SEZs through three inter-related domains: investment sources, industrial types, and governance categories. Finally, we follow this study with further discussions that call for the combination of both comprehensive and context-detailed case studies upon international SEZs along the BRI, before concluding remarks.

3. Methodology

This study adopted a clear research framework on the internationalization of SEZs and panoramic cases through a mixed methods approach with separate qualitative and quantitative phases. Firstly, we created a database of all Chinese domestic international-cooperative SEZs and overseas SEZs in this study. They were enriched by collecting and detailing properties of each SEZs through web crawler from the Ministry of Commerce, the Federation of Industry and Commerce, and some other websites. Secondly, we visualized all Chinese international SEZs through an Arcgis model, point by point. Thirdly, the qualitative methods are applied to complement quantitative data and together they provide a panoramic, broader, and deeper analysis of this core research framework.

The paper draws on the authors' roles as consultants in national planning of SEZs engaging with SEZ-related Chinese state departments, such as the National Development and Reform Commission of China, China's Ministry of Commerce, the China Development Bank, etc. We also gathered first-hand data during several field work visits (from 2014 to 2019) to typical SEZs in China and Southeast Asia, such as the Thai-China Rayong Industrial Park and Long Giang Industrial Park in Vietnam. The authors conducted 15 in-depth, semi-structured interviews with managers, staff, and residents of these SEZs to better understand the geo-histories of Chinese internationalized domestic and overseas SEZs. It is acknowledged that quantitative analysis, through detailed data and field investigations combined with semi-structured interviews, will make this study relatively objective, neutralizing some of the author's subjective judgments.

4. Contextualizing upon the Genealogy of Chinese International SEZs beyond BRI

Chinese international SEZs were uncommon until the mid-1970s, in the context of regime transformation featured by 'opening up'. In this section, we wish to contextualize upon the genealogy of Chinese international SEZs beyond the BRI. In doing so, we can understand the debut and growth trajectory of Chinese internationalized SEZs in the broader context of global prevalence of China's SEZ reform and opening up. The internationalization timeline of China's SZE falls roughly into three stages, namely, the initial stage, since the 1990s, the exploration and development stage, from 2006 onward, and the rapid growth stage, since 2013.

4.1. 1990–2006: *The Initial Stage in the Context of China's Regime Reform and Opening Up Policy*

Although China's political-economic reform era dates back to the late 1970s as a process of both 'opening up' to the outside world and 'bringing in' foreign investment and expertise [16], in this subsection we wish to highlight the burgeoning phase of the internationalization of China's SZEs since the 1990s onward. In its infancy, China's reform and opening-up has been deepening, and the reform of the market economy system has injected new impetus into China's economic development through combining both the 'going global' and 'bringing in' strategies, by utilizing both domestic and foreign markets and resources, and actively engaging in regional economic cooperation and the global multilateral trading system. In this context, the pace at which China attracts foreign investment and domestic investment has been accelerating. In parallel with this, China's SEZs are also gradually becoming internationalized, among which are overseas economic and trade cooperation zones (hereinafter referred to as OETCZ) and domestic international cooperation parks (hereinafter referred to as DICP) loom large.

On the one hand, Chinese enterprise has expanded itself through investing overseas and spatially territorizing in the form of overseas SEZs since the 1990s. A salient example can be found in Southeast Asia. In 1992, China Electric Import & Export Co., Ltd. and Ho Chi Minh City Industrial Zone Development Corporation jointly invested and operated the industrial zone project, the Vietnam Linh Trung Processing Zone, near the capital, Ho Chi Minh City. This was targeted as a flagship project of Chinese 'going global' policy by Chinese Ministry of Commerce. Since then, it has witnessed the debut of Chinese firms and SEZs at a global scale. However, there is a scarce amount of OETCZ data, as shown in Figure 1. Of note is that besides myriads of Chinese state-owned enterprises doing business overseas, some private firms have embarked on business 'going out', in search of international competitiveness, seeking more global capital as well as embedding in overseas niche markets. Admittedly, far from reporting negatively on overall foreign investment scale in this period, developmental spillovers have been scarcely observed in the literature [14].

On the other hand, SEZs serve as an important component of a country's foreign economic policy, combining both 'going out' and 'opening up', and are also important examples of place-based policies that create local economic hubs, potentially helping to generate growth, employment, and industrial development in the surrounding areas [19]. China's evidence is no exception in this sense. Since the 1990s, Chinese state governments have established international cooperation SEZs in China with other countries to 'policy mobility' of developed industrial experiences, attracting agencies of international SEZs from developed countries, and anchoring manufacturing firms in the name of Sino-foreign cooperation. Tellingly, China has shown tremendous obsessions in the 'Singapore model' through 'bringing in' SEZs and transnational knowledge transfer [20]. In 1992, then Minister Mentor Lee Kuan Yew of Singapore led a delegation to visit China and expressed the intention of the Sino-Singapore cooperation to build up an industrial park. Since then, the two countries have conducted many consultations on cooperation matters and finally pinpointed Suzhou as the anchoring site. Two years later, the Suzhou Industrial Park, an inter-governmental cooperation flagship project between China and Singapore, was officially approved by the bilateral State Councils. It was the first DICP established in China and heralded as "an important window of China's reform and opening-up" and "a paradigmatic archetype of international cooperation". In the same year, another China-Singapore Cooperative SEZ, Wuxi-Singapore Industrial Park, jointly built by Wuxi Xinfu Group Co., Ltd. and Sembcorp Group of Singapore, was launched, marking the first phase of Chinese international SEZs by bringing in foreign, relatively advanced SEZs and channeling FDI. Although the number and the scale of DICP during this phase is small, Chinese evidence from the Suzhou industrial park, and the Wuxi-Singapore Industrial Park, respectively as state-led DICPs and enterprise-led DICPs, has laid a solid foundation for further advancing waves of international SEZs.

4.2. 2006–2013: The Accelerating Stage Featured by the Opening Economy

China's accession to the WTO in the 21st century marked the commencement of a gradual shift from a policy-based opening up to an institutional opening up for the purpose of really starting the establishment of an open economic system with a profound "institutional" connotation [21]. We note that China's economic development performance had been characterized by high-speed growth through channeling FDI into mainland markets in the context of an open political-economic system, when a series of policies and regulations upon the opening economy, such as the "Decision by the Chinese State Council on the Investment System Reform" (2006), "Interim Provisions on Guiding the Direction of Foreign Investment" (2002), and the "Catalogue of Industries for Guiding Foreign Investment" (2007) were outlined most clearly in this new phase, to expand the scope of foreign direct investments and niche foreign markets. Following that, the internationalization of China's SEZs has entered a new phase of accelerating development.

The landmark of this phase dated back to 2006, when the Ministry of Commerce officially issued policies and measures to encourage Chinese enterprises to build up overseas industrial parks, and named them as "Overseas Economic and Trade Cooperation Zones" (OETCZ). As an emerging sub-regional spatial cooperation mode, OETCZ investors endeavored to attract more enterprises to invest and set up factories in host countries in this way. At the 2006 Summit of the Forum on China-Africa Cooperation (FOCAC), then Chinese President Hu Jintao announced that the Chinese state would build up three to five OETCZ in Africa within the next three years. The endorsements of the Chinese national state dramatically stimulated the enthusiasm of enterprises to 'going out' overseas. In November 2006, Haier Group and Pakistan RUBA Group jointly built Pakistan "Haier-Ruba Economic Zone", which became the first OETCZ granted by the Chinese Ministry of Commerce. Since then, more than 50 overseas industrial zones, including the Thai-Chinese Rayong Industrial Zone [22], Sihanoukville Special Economic Zone, etc., burgeoned during this period, and 14 of them were authorized as national-level OETCZs. Indeed, whereas the number of overseas SEZs increased significantly to 61 by the end of 2012, positive local spillovers could also be observed (Zheng et al., 2016), witnessing the development with the China-foreign cooperation.

Concurrently, since development of these pioneering DICPs, such as the China-Singapore Suzhou Industrial Park, China further advanced international cooperation with Singapore and other countries to jointly build up more SEZs and industrial parks, aiming to transfer the "Singapore model" policy [23]. Meanwhile, provincial and municipal governments, multi-national corporations, and foreign states served as proactive agencies in exploring international cooperation. It is noted that the number of provincial-level DICPs had gradually increased during this phase. For example, Singapore's Ministry of Trade and Industry and Jiangsu Provincial government jointly promoted the construction of China-Singapore Nanjing Ecological Science and Technology Island in 2008 and Japan External Trade Organization (JETRO, Tokyo, Japan), and Danyang Municipal Government jointly promoted the construction of Japan (Danyang, Zhenjiang) Auto Parts Industrial Park. Among these various modes of SEZs, the DICPs focus on both attracting foreign investment and Chinese enterprises' global searching as a response to economic globalization [24]. In 2010, the first batch of international cooperation ecological parks were launched: a number of international cooperation ecological parks such as China-Finland (Beijing, China) Ecological Valley and China-Austria Sutong Ecological Park were launched, becoming one of the important types of DICPs in China. During this period, the number of DICPs in China increased from 4 at the end of 2005 to 24 at the end of 2012. All in all, the types of DICPs were constantly diversified, and the cooperate countries were gradually expanding during this phase.

4.3. 2013 to Present: Booming Stage Led by BRI

The 2010s onward have witnessed not only the rise of China and her presence worldwide, but also her narratives and materialization through the umbrella policy toolkit of the

Belt and Road Initiative (BRI). In particular, the BRI, proposed in 2013, advocates inclusive globalization and is a titanic global enterprise envisioned to deliver international public goods to the world, building up common prosperity with a shared future for mankind [25]. Against this background, China has actively strengthened exchanges and cooperation with other countries and regions, especially those along the BRI. More and more OETCZs and DICPs have sprung up since the BRI [26]. The number of international SEZs increased from 61 at the end of 2012 to 156 at the end of 2019, with an average annual growth rate of 14.4%. Meanwhile, the scale and quality of SEZs have also been improved significantly, and a number of overseas SEZs with brand operation and strong driving capacity have been developed. For example, the Thai-Chinese Rayong Industrial Zone have channeled more than 150 companies up to 2021, with a total investment of \$3.9 billion in Thailand and a total output value of \$16 billion, as well as employing more than 30,000 Thai employees. This industrial park served as China's flagship industrial park project and spearheads local spillover effects in Thailand [27].

In comparison, China has successively issued corresponding policies during this phase to encourage DICP development. The policies of the Chinese Ministry of Commerce were prioritized, supporting the high-level construction of international cooperation zones among myriad national economic and technological development zones (ETDZ), to boost international exchanges and cooperation in the name of the BRI. Besides the proactive Chinese state government, many provincial and municipal state governments also engaged in constructing international SEZs within their administrative boundary. Nowhere was more active than the coastal Zhejiang province, an important pillar area along the Yangtze River Economic Belt. Zhejiang province clearly listed 'building up an international cooperation park' as the government's municipal target in 2016. Anhui Province had also set out the goal of building up 20 high-level DICPs within the province by 2025, and strived to have at least one benchmarking DICP in each municipal city. Driven by various favorable policies, the number of DICPs in China has shown an explosive growth trend, reaching 158 by the beginning of 2021 (Figure 2). The cooperation countries have gradually expanded globally and mainly clustered along the BRI, which will be discussed in the next section.

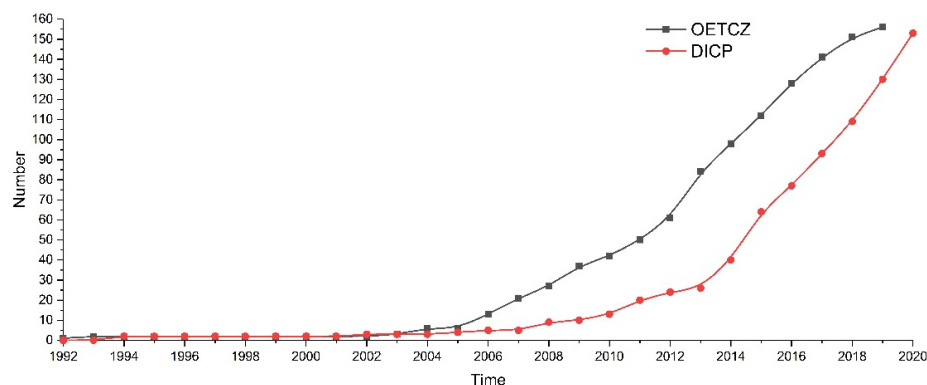


Figure 2. The number of OETCZs and DICPs since 1990. (OETCZ: overseas economic and trade cooperation zone; DICP: domestic international cooperation park).

5. Characterizing the Internationalization of the Chinese Domestical and Overseas SEZs

We have detailed the trajectory of the Chinese domestic international-cooperation and overseas SEZs in the last section. In what follows, we illustrate with much evidence the way in which these three drivers impel the internationalization of the Chinese SEZs.

5.1. Cooperative Destination Countries: Mainly Emerging Economies

In this subsection, the cooperative destination countries with Chinese enterprises will be scrutinized in the forms of the OETCZs and DICPs. As for the OETCZs, needless to say, most of them are anchored along the Belt and Road Initiatives (BRI) countries. As Song et al., (2018) has argued, "Overseas Economic and Trade Cooperation Zones" (OETCZs) serve

as cooperative platforms to advance the trade and investment cooperation under the umbrella term of the BRI. Among the 156 OETCZs, 139 are located in countries that have signed memorandums of understanding (MoU) to jointly advance the construction of the ambitious BRI. As shown in Table 1, Southeast Asia, embraced as the largest trade partner with China in 2021 and ancient “maritime silk road”, is the quintessential destination region with the most concentrated assemblage of China’s overseas cooperative industrial zones. Indonesia, Cambodia, and Vietnam host most OETCZs with China in Southeast Asia. In total, 44 of the 156 OETCZs are located in Southeast Asia. In addition, Europe, as the connective terminus between the Eurasian continent and the node of the Western expansion of the “BRI”, has formed a cluster of China’s OETCZs, mainly in Belarus, Russia, and Hungary, but also other countries. Of note is that most cooperative countries with China are emerging economies, accounting for about 50% of the total number of OETCZs, followed by developing countries and then least-developed countries, and there is the least cooperation with developed countries.

Table 1. Top five counterpart countries cooperating with China in the form of OETCZs and DICPs.

OETCZ		DICP	
Cooperative Countries	Amount	Cooperative Countries	Amount
Russia	33	Germany	33
Indonesia	14	Japan	24
Cambodia	9	Korea	14
Vietnam	7	France	11
India	5	Singapore	9

In comparison, the map of DICPs within China, as shown in Figure 3 show a completely different landscape. Among the 156 DICPs, 26 countries and regions come from Northeast Asia, such as Japan, South Korea, and developed European countries. Among all countries, Germany has the largest number (33), accounting for more than 20% of the total DICPs. Japan and South Korea have 24 and 14 DICPs with China respectively, followed by France, Singapore, Israel, Italy, and other countries. In addition, it is rare that cooperation in the form of DICPs in China come with such emerging economies and developing countries as Russia, India, Thailand, Ukraine, etc. In general, in the process of internationalization of China’s SEZs, the countries of cooperation are gradually expanding and becoming more and more extensive. The OETCZs focus mainly on cooperation with emerging economies, while the niche counterparts of DICPs within China mainly come from relatively developed countries.

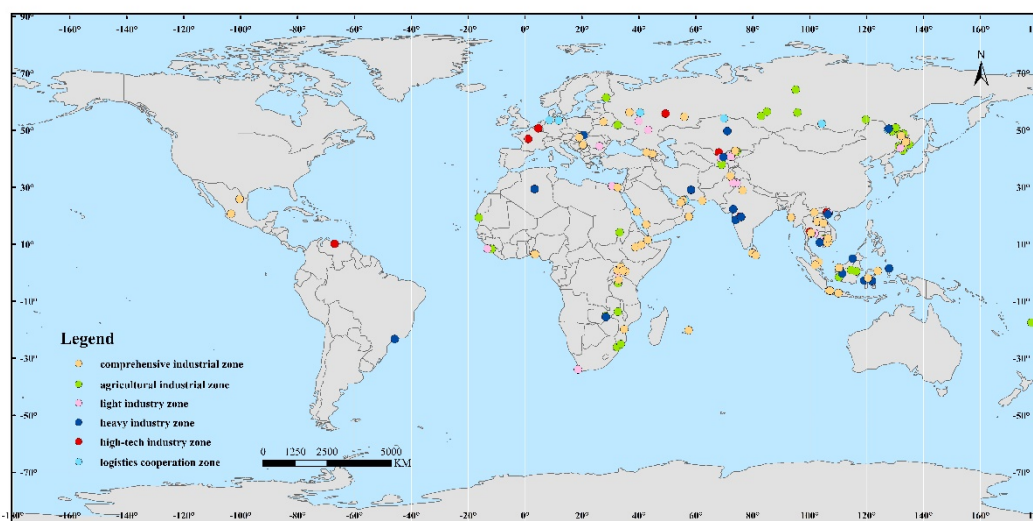


Figure 3. The types of OETCZs.

5.2. Construction and Management Modalities: Mostly Enterprise-Led and Government-Led

The internationalization of SEZ in China is jointly promoted by multiscale actors. As for the construction and management mode, China's OETCZs and DICPs share a significant duality of transnational agencies compared with traditional development zones or industrial parks. Chinese and foreign bilateral governments or enterprises establish cooperative relations through signing the memorandum of cooperation to jointly promote the construction of the cooperative industrial zone, which might enjoy bilateral policy preferences. Specifically, it falls into three types: national state government-led, local state government-led, and enterprise-led [22]. Among the 156 OETCZs, 25 zones are featured by the national state government-led, which were proposed or established by bilateral national state governments. For instance, the Thailand–China Rayong Industrial Park. In 2006, the then Chinese President Hu Jintao proposed the idea of building an OETCZ, and the Thai government responded positively. Holley Group subsequently applied for the qualification for investment and construction of the Sino-Thailand Cooperation Zone from the national bidding. After a systematic inspection by the Ministry of Commerce, Holley Group obtained the qualification to build the OETCZ. Finally, under the guidance of the Chinese and Thai governments, Holley Group and Amata Group decided to jointly build an industrial Park [27]. Among all zones, 27 zones are local state government-led zones, which are co-built by provincial or municipal governments in cooperation with foreign government counterparts. For example, the China–Belgium Science and technology park, co-built by Hubei Province of China and The Walloon region of Belgium, is China's largest investment project in Belgium. In stark contrast to the first two types, most of the OETCZs should be classified as enterprise-led. Some Chinese state-owned or private enterprises proactively engage in global business, collaborating with foreign state governments or enterprises, and have built up myriad industrial parks abroad. For example, in 2010, Chery Automobile Co., Ltd. signed a cooperation framework agreement with the Sao Paulo state government to build up a Chery Industrial Park in Jacarey, Sao Paulo state, making Chery the first Chinese automobile manufacturer to invest and build a factory in Brazil. These cases are not random, and the amount of the OETCZs featured by the enterprise-led is 104.

Compared with the OETCZs dominated by enterprises, the DICPs in China are more endorsed by the transnational state governments or local state governments. Forty of the 158 zones are state-led: these industrial zones were signed by the bilateral national leaders or approved by the State Council, the National Development and Reform Commission, and the Ministry of Industry and Information Technology in China or counterpart government abroad. A salient case can be found in Beijing in 2012, when then Chinese Minister of Commerce Chen Deming and Swiss Federal Councilor and Minister of Economic Affairs Johann Schneider Ammann signed a Memorandum of Understanding on the Joint Establishment of the Sino-Swiss Zhenjiang Eco-Industrial Park in Beijing, which was co-built up by the Chinese Ministry of Commerce and the Swiss Federal Department of Economic Affairs. Local state governments, provincial, or municipal governments play a leading role when they collaborate to build up the OETCZ, whose amount reaches 96. For example, the Commerce Department of Henan Province and the Administrative Committee of Zhengzhou Aviation Port Zone signed an agreement with the Investment Promotion Agency of The Walloon Region of Belgium to jointly build a China–Belgium economic and trade cooperation demonstration park in Zhengzhou city, Henan province in 2014. In addition, 15 of the total OETCZs are enterprise-led, which were often established by enterprises coming from bilateral countries, aiming at both boosting bilateral trade and advancing scientific research institutes. For example, Wuxi Xinfu Group Co., Ltd. and Sembcorp Group of Singapore jointly established Wuxi Singapore Industrial Park Investment Co., Ltd., responsible for the development and operation of Wuxi-Singapore Industrial Park in Wuxi city, Jiangsu Province. In general, the internationalization of China's SEZs is jointly promoted by multiple agents, encompassing the national state government, local government, as well as enterprises. OETCZs are mostly constructed by enterprises, while most DICPs are promoted by the national and local state governments.

5.3. Industrial Types: Variegated Industries with Insufficient High-Tech Industries

In terms of industrial types, China's OETCZs can be roughly divided into six categories: comprehensive industrial zone, agricultural industrial zone, light industry zone, heavy industry zone, high-tech industry zone, and logistics cooperation zone (Figure 3) [22]. Among them, comprehensive industrial zones account for the highest proportion, accounting for 35 percent of the total zones. Such zones usually contain multiple leading industries including heavy industries such as chemical and machinery manufacturing, light industries such as electronics and food, and some service industries. It is followed by such specified industrial zones, as agricultural industrial zones, light industry zones and heavy industry zones, which accounted for 26%, 14%, and 13% of the total, respectively. The share of high-tech industrial zones and logistics cooperation zones among the total OETCZs is the smallest, each accounting for 6% of the total. High-tech industrial zones emerged as an anchor to attract high-end technical enterprises, including biomedicine, high-end manufacturing, computer and other industries; logistics cooperation zones are mainly targeted to advance transnational trade and logistics industry. On the whole, the leading industries of China's OETCZs are diverse, from the primary industries to some advanced high-tech industries.

A report on SEZs by the World Bank [28], lays out a typology that includes four types of Chinese international cooperation SEZs: industrial parks, comprehensive new towns, ecological towns, and trade and logistics zones (Figure 4). Thus, we follow this typology by categorizing China's DICPs into these four modes and specify each one in detail in this subsection. Industrial parks account for 74% of the total DICPs. Of note is that these DICPs are mostly anchored in existing de facto SEZs, such as 'National High and New Technology Industrial Park', decorated in the name of 'international cooperative zone' as DICPs. Thus, this model was also named 'zone within the zone' [27], by combining 'bringing in' foreign R&D flows and industrial enterprises, mainly in equipment manufacturing, electronic information, auto parts, and other manufacturing industries. The share of comprehensive new towns accounts for 13% of the total DICPs. These comprehensive new towns are tasked to renew the urban core and channel high-tech services industries. Thus, the leading industries of comprehensive new towns are more extensive, including not only the manufacturing industries such as the automobile industry and intelligent manufacturing, but also modern service industries such as animation games and creative industries. The transnational cooperation within these SEZs takes on various forms, from initial planning, design, ushering in of enterprises, management, and operation. The share of ecological new towns accounts for 12% of the total. They are eco-friendly-oriented zones or ecological new towns, also named eco-city, and are planned and developed according to the internationally advanced eco-city. One salient example is the China–Singapore Tianjin Ecocity, which was hailed as an exemplar ecological pilot project. The cooperation field between bilateral countries embodied in ecological new towns is mainly in planning and design. The eco-city program initially proposed several development objectives: environmental protection, social and economic benefit, low ecological footprint, water and flood management, agricultural production, energy issues and emission reduction, waste management, accessibility, transport, and modern service industry [29]. There are only two trade logistics zones among the four categories of DICPs. They are mostly located in China's coastal port regions which enjoy preferential policies and feature an opening up economy. The cooperation field between bilateral countries covers mainly a bilateral free-cross-border trade policy toolkit. Such SEZs mainly develop the processing and trading of bulk production materials, logistics and warehousing, and foreign trade. In general, compared with OETCZs, it is safe to conclude that DICPs in China feature a variety in terms of industrial types with a higher proportion of high-tech industries [30].

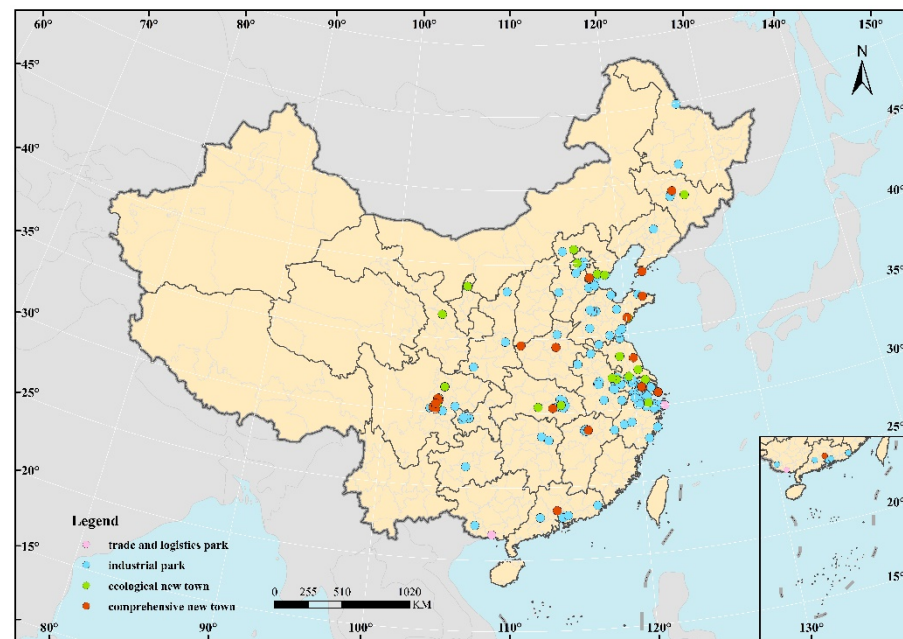


Figure 4. The types of DICPs.

6. Discussion and Conclusions

This paper contributes to a broader research agenda on the land transformation via global capital accumulation and circulation through theoretically and empirically examining the internationalization of SEZs, evidenced by China's case. We conceptualize and contextualize upon the genealogy of Chinese international SEZs (both domestic and overseas) beyond BRI. It highlights the underlying land capital logistics of internationalized SEZs: capital-oriented land expansion in the form of international SEZs, different industrial landscapes at various timeline and sites, and variegated transnational SEZs governance, combing bilateral central governments governance, marketized state or entrepreneurship state, and private ventures. Regarding the third-mentioned aspect, instead of simplistically depicting China's authoritarian state and top-down land regime upon SEZs, the paper also sheds light on the various Chinese actors/policies in SEZ emergence, which is, to date, a rather underexplored issue among a vast amount of land scholarships. Thus, the internationalization of SEZ frameworks is helpful for delivering a panoramic view of the emerging ambiguities of processes and multi-feature landscapes of internationalized SEZs at different levels of governance.

As shown in our case study, China's SEZs have developed rapidly since the reform and opening up in the 1980s, with diversified types, enhanced strength, and improved openness becoming a model of China's opening-up policy. The internationalization of China's SEZs has roughly experienced the initial stage since the 1990s, the exploratory development stage after 2006, and the rapid growth stage after 2013. Since the 1990s, the market economic system reform has created conditions for the internationalization of SEZs. With the deepening of "going out" and "bringing in" strategies, China has been accelerating the pace of attracting foreign investment, and this foreign investment and some early OETCZs and DICPs have begun to be established. After 2006, with the encouragement and support of the national and local governments, OETCZs became an emerging sub-regional cooperation model recognized by the state. More and more enterprises have gone abroad to build OETCZs, and DICPs have become an important platform for many provinces and cities to carry out international cooperation. Since the "Belt and Road initiative" debut in 2013, China actively has strengthened exchanges and cooperation with other countries and regions, especially the regions along the BRI. More and more overseas economic and trade cooperation zones and domestic international cooperation zones have been developed. The

internationalization of the SEZs and the construction of the BRI constitute each other and jointly promote China's global engagement.

OETCZs and DICPs explicitly embody the internationalization of China's SEZs. During the process of internationalization, these two types of SEZs show obvious characteristics in terms of cooperation countries, development modes, and industrial types. The cooperation of China's SEZs is extensive and gradually expanding, among which the OETCZs mainly focus on cooperation with emerging economies, while the DICPs mainly focus on cooperation with developed countries. The internationalization of China's special economic zones is jointly promoted by the national government, local government, and enterprises. Among them, OETCZs are more dominated by enterprises, but DICPs are mainly promoted by the national government and local governments. China's OETCZs can be roughly divided into six categories: comprehensive industrial zone, agricultural industrial zone, light industry zone, heavy industry zone, high-tech industry zone, and logistics cooperation zone. The typology of DICPs can be laid out as four types: industrial park, ecological new town, trade and logistics park, and comprehensive new town. Different park types develop different main industries, but in general the current industrial types of these two SEZs are still relatively low-skill, and should be developed in a more advanced direction in the future.

SEZs serve as an important part of China's "progressive" reform, and are also an important demonstration of China's economic development, reform and opening up in the past 40 to 50 years. Different types of SEZs are endowed with different functional positioning and policy orientation, while China's OETCZs and DICPs undertake the mission of international exchanges and cooperation. In the process of internationalization, OETCZs and DICPs are gradually embedded in local networks and global production networks, and have gradually become the carrier of inter-connections between local, national, and global multi-scale factors, advancing China's reform and opening up the "Belt and Road initiative" as well as inclusive globalization. Above all, it delivers a heuristic device that uncovers the multi-scalar agencies of internationalized SEZs, like the Chinese state, i.e., a reflexive and effervescent entity that constantly addresses mutating politico-economic realities within a variegated capitalist system. However, it is arguable that there are a lot of challenges concerning the internationalization of China's SEZs, for instance, still a low level of land use, low-value industrial structure, and poorly efficient management system. In the future, grounded scientific planning, nuanced risk warning prevention, and more balanced sustainable path of Chinese internationalized SEZs, especially in the context of post COVID-19 pandemic and ambiguous geopolitical rivalry are urgently needed. Additionally, more case studies along the BRI or those domestically concerning Chinese internationalized SEZs will enrich both research scholarship and BRI praxis, which require further scrutinization, both discursively and practically.

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