

Suzhou industrial park and its role in the belt and road initiative: the great stone industrial park in Belarus

María José Haro Sly

*Silk Road School, Renmin University of China, Beijing, China and
Sociology, Johns Hopkins University, Baltimore, Maryland, USA*

Abstract

Purpose – In recent years, the People's Republic of China has made remarkable progress in science and technology. The Chinese industry is competing for leadership in cutting-edge technologies such as 5G, robotics, artificial intelligence, aerospace and green energy. This article aims to analyze: What role do industrial parks, especially Suzhou Industrial Park, play in upgrading technology to encourage independent innovation and economic development? How SIP is related to the Belt and Road Initiative?

Design/methodology/approach – This research summarizes China's most important scientific and technological reforms and policies and in particular the Torch Program. In addition, it develops a case study of the Suzhou Industrial Park (SIP) by analyzing documents, bibliography and presenting data. It ends with a case study of the role of SIP in the Belt and Road Initiative analyzing the Great Stone Park in Belarus.

Findings – This article highlights that: China's experience clearly shows that the "visible hand" of the State plays a very important role in economic development and technological catch-up. All of them are implemented from a strategy linking the national objectives with the local ones, this is done from a top-down perspective. As an important aspect of economic and social development, China's experience in promoting indigenous innovation in science and technology provides a relevant example for developing countries.

Research limitations/implications – There are few academic literature on Great Stone Industrial Park.

Practical implications – The international cooperation of the SIP with the technology parks throughout the BRI-countries provides relevant information to deepen collaboration in this field and could contribute to closing the technological gap in developing countries.

Originality/value – The role of the SIP in the Belt and Road initiative is an under research topic. There is few bibliography discussing the impacts of the cooperation in science and technology in the framework of the BRI.

Keywords China, Science and technology policy, BRI

Paper type Research paper

Introduction

Despite this intrinsic inequality in the global system that hinders a better distribution of STI capabilities among different countries, the PRC has been one of the last successful countries not only to boost its economy but also to establish an innovation system that allows it to reach and even lead technologies independently.

Since 1978, a series of state-controlled reforms in the areas of agriculture, industry, defense and science and technology as key aspects of development have been implemented in the



Asian country. The scale of the spectacular economic growth and development of the PRC has no precedent in modern history, China has not only surpassed economic powers as Japan and Germany, but it disputes the first leading economic power with the United States. Moreover, in 2013, PRC proclaimed a new investment strategy, setting the priority for the export of capital and foreign investment that promote a new path for international development. This initiative named “One Belt – One Road”, “New Silk Road” or “Belt and Road Initiative” suggests the creation of a series of corridors linking mainland China with Europe by rail and road through Central Asia, Russia and Turkey. It also counts with a “Sea Silk Road” connecting the shipping routes of the South–East Coast of China with the ports of Europe, Africa, Southeast Asia and Latin America. It is one of the most ambitious infrastructure projects ever conceived, it is expected to cost more than \$1tn (Kuo & Kommenda, 2018). It is planned that one of the transport branches will pass through Belarus (Huschcha & Gribov, 2018). According to the Ministry of Science and Technology of China (MOST, 2016)

(. . .) the advancement on the initiative requires deeper S&T innovation cooperation. China and countries along the Belt and Road share many similarities in development conditions and demands, and face common challenges in such areas as population, healthcare and security. That means we must strengthen collaborative research to jointly break bottlenecks encountered, share our S&T expertise and experience in innovation-driven development to switch to innovation-driven growth model and seek common prosperity and sustainable development.

Successive five year plans promoted the goals and orientation of the development. In that line, the Torch Program began with the mission of stimulating the construction of Industrial Parks (IP) for promoting STI. China now has more than 1,500 national or provincial industrial parks, including 169 High Tech parks (Shi, Tian, & Chen, 2012). They represent approximately 12% of China’s GDP and 18% of exports (Appelbaum, Cong, Xueying, Parker & Simon, 2018). Among those IP, the case of the SIP denotes an important example: it ranks first in several rankings (Xinhua, 2018; Li, 2019; Suzhou Industrial Park, 2019b), and SIP’s international development platform is a key institution for innovation under the BRI. Thus the SIP case is a relevant example for study because it succeeded to adopt management and technology transfer from Singapore, promote indigenous innovation, generate spin-off from research to production and now it is exporting its fruitful experience to other regions in China and BRI countries.

This paper hypothesizes that China is “exporting” or “transferring” its know-how on innovation model and management (as Singapore made with China) to Belarus because it is a strategic dot in the network of the Belt and Road Initiative connecting China to Europe. However, the success of this transfer would be conditioned to Belarusian capacity to absorb and sustained this innovation model. For this, Belarus should apply indigenous innovation policies in line with the development of Great Stone Industrial Park.

Conceptual framework

The **dependency theories** or the **world-system approach** describe the relation of core and peripheral countries and the increasing technological gap among developed and developing nations. For Juma, GittaDisenso & Bruce (2005) “The usual response to this challenge has been to call for technology transfers from industrialized to developing countries on concessionary terms and to relax intellectual property laws, particularly in the context of multilateral institutions”. For Vernengo (2006), the relationship of dependence is rooted in the periphery’s inability to develop the process of technological innovation autonomously and dynamically, since the center controls the System that generates the technology. For the author, foreign capital only transfers technologies in a limited way and

does not contribute to increasing the capacities to develop innovation processes by themselves in the recipient countries.

Second, the **Latin American studies of STI**, [Sabato & Botana \(1986\)](#) and [Varsavsky \(1974\)](#) that developed the idea of the “Triangle of Innovation” and the “national styles”. The thesis of the innovation triangle is that the creative potential and economic development in a knowledge economy lies in the generation of the links between the university, the industry and the coordination of the government. Further, some authors advanced giving greater complexity by developing the concept of National Innovation System, which served to public policies and international organizations like the OECD ([Freeman, 1995](#); [Nelson, 1993](#)).

There is a consensus that geographical proximity enhances the spillover of tacit knowledge, **Regional innovation systems** literature ([Asheim & Gretler, 2006](#); [Chaminade & Vang, 2009](#)) emphasize the localized nature of most interactions. In their book, [Castells & Hall \(1994\)](#) describe “Technopoles” by analyzing the different cases of science parks, science cities, national technopolis that was being implemented in the 1980s and 1990s. However, [Rodriguez-Pose & Hardy \(2014\)](#) contest the idea that IP are a panacea for the transition to development since many of them have not created the expected outputs in developing countries.

The **studies of the Asian development case** [Amsden \(2001\)](#), [Castells & Hall \(1994\)](#) [Rath \(1994\)](#), [Fu, Pietrobelli, & Soete \(2011\)](#) analyzed the “Asian miracle”. The authors studied the industrial and scientific policies, the development strategies, the role of technological transfers and the drivers for this technological catch-up. Besides, [Fu et al. \(2011\)](#) stated that there is no evidence indicating significant positive technological transfer from transnational companies on the local firms. These authors stated that “Without indigenous innovation, the income gap between developed and developing countries can never be closed”. The Asian development cases give light to questioning the neoliberal faith in the market as the main actor in the development of cutting edge technologies. [Mazzucato \(2012\)](#) contributed to this discussion providing insightful data and examples showing how the key actor for promoting the process of innovation and technological catch up in developed and developing countries was the State – the **Entrepreneurial State**. This framework is particularly important in the analysis of the Chinese case, which constitutes a paradox in economic and development studies thanks to its government planning and coordination.

According to [Ye, Li, Zheng & Zhu \(2020\)](#) China’s domestic industrial parks focus on high and new technologies, while overseas industrial parks are mainly concentrated in the traditional advantageous industries that have been saturated in China’s domestic market, such as low-end manufacturing and primary processing of agricultural products. Due to the differences with host countries in politics, economy, culture, society and other aspects, there are connections and differences between the construction modes of national-level overseas industrial parks along the B&R and domestic development zones of China. This also produced different developmental patterns of industrial parks. The interesting point of this paper is that the Great Stone Tech-Park is centered on innovation in hard and soft high technologies.

Summary of STI policy in China

The STI of China has evolved at different stages since the founding of the People’s Republic in 1949. This process can be divided into two fundamental phases pre and post Reform for the economic opening up (Pre-1978 and Post-1978) having 1978 as the turning point. The reform of the S&T policy has taken an incremental approach, characterized by a progressively deeper understanding of policies, systemic transformation and institutional innovation ([Haro, 2020](#); [Haro Sly & Liaudat, 2021](#)). [Table 1](#) summarizes the key policies.

	Program	Starting year	Objective
Pre-reform (1949–1977)	<i>1st and 2nd Five-Year Plan (FYP)</i> Planned economy (1949–1966)	1949	China was relying on the Soviet experience Focus on heavy industry Promoted health, agriculture, and defense The major achievement was the project to dispose of the atomic bomb
	<i>3rd, 4th, and 5th FYP</i> Cultural revolution (1966 to 1976)	1966	The educational and scientific area was severely affected by political persecution of intellectuals and the closure of universities. However, some authors as Chunjuan & Brock (2012) , Hung (2015) , Shneider (1981) rescued positive aspects including a large, healthy, and educated rural surplus labor force and an extensive network of state-owned capital
The experimental phase (1978–85)	<i>6th FYP (1981–1985)</i> National key technology R&D program State key laboratory program	1984	Foster key technologies to upgrade traditional industries and create new ones Support selected laboratories in universities, research institutes and firms
The systemic reform phase (1985–95)	<i>7th FYP (1986–1990)</i> National high-technology R&D program (863 program) Spark program Torch program	1986	Foster China's overall innovation capacity in high-tech sectors and enhance its international competitiveness
		1986	Support technology transfer to rural area and promote development of agriculture based on S&T achievements
		1988	Support development of high-tech sectors by setting up S&T industrial parks and incubators
Deeping reform phase (1996–2006)	<i>8th FYP (1991–1995)</i> The project 211 <i>9th FYP (1996–2000)</i> Project 985 National knowledge innovation program The '973' plan	1993	Support 100 Chinese universities to develop into research-intensive, world-class centers of learning
		1996	Development of world-class Chinese universities
		1997	Support the Chinese academy of sciences to transform into research centers of international excellence
Indigenous innovation (2006–2015)	<i>10th FYP (2001–2005)</i> Agricultural S&T transfer fund <i>11th FYP (2006–2010)</i> <i>12th FYP (2011–2015)</i> Medium and long term plan for science and technology	2002	Support basic research Foster the development of S&T achievements in agriculture and the diffusion of agricultural technologies
		2006	Indigenous innovation
Innovation-driven development phase Internationalization	<i>13th FYP (2016–2020)</i> Made in China Belt and road initiative	2015	From imitator to innovator
		2013	Globalization of Chinese S&T – New international development under the BRI

Note(s): Elaborated by the author

Table 1.
List of major S&T policies from 1949 to 2015

Torch program

Linked to the Technopoles idea of [Castells & Hall \(1994\)](#), the Torch Program is a guidance program for developing high tech industries in China. The Torch Program, under China's Ministry of Science and Technology (MOST), was created in 1988 to "develop high-tech industries by promoting the commercialization of S&T achievements, the industrialization of R&D results, and the internationalization of high-tech industries" ([Appelbaum et al., 2018](#)). It has three major instruments: the science and technology industrial parks, the technology-based business incubators and the Innovation Fund for Technology-based SMEs ([Chinese Embassy in Ireland, n.d.](#)).

The high-tech industrial development zones are based on intelligence-intensive and open environment. They are concentrated/regional zones established with the purpose of transforming the achievements of science and technology into practical productive forces. They optimize local soft and hard environments, orienting themselves toward national and foreign markets and developing new industries. Particular attention has been paid to the fact that financial support is an important means for the government to help the industry and this would include assistance for the construction of incubator infrastructure and support with special funds. The Torch Program manifests strong elements of institutional experimentation and decentralized policies ([Heilmann et al., 2013](#)).

Over the last four decades, China's industrial park development has evolved through four development periods: Experimentation and exploration period; Rapid growth period; Scientific development period and Innovation and upgrading period ([UNIDO, 2019](#)). China has various types of parks that differ in administration level, scale/scope and target industries as described in [Table 2](#). Suzhou Industrial Park is a National Economic and Technological Development Zone. It has gained a national eco-industrial demonstration park status because of its exceptional economic, social, environmental and technological performance ([UNIDO, 2019](#)). SIP is one of the few parks that are binational (China-Singapore) and it is playing an important role in the expansion of its experience to West China and BRI countries.

Suzhou industrial park

SIP is one of the most innovative High-Tech parks in China. Over the years, the SIP has taken the initiative to act in accordance with China's national strategies as well as attract global innovative resources, which made it one of the most vigorous and efficient areas in the country ([Zhu, 2018](#)). The SIP was founded in 1994 thanks to the high-level cooperation between Singaporean and Chinese governments. The context of its foundation laid in Deng Xiaoping's Southern Tour in 1992 where he made a distinctive remark "There is a good social order in Singapore (...) We should draw from their experience, and do better than them" (Selected Works of [Deng, 1983](#)).

By the time, Singapore's development state strategy was a successful case, the government implemented an FDI-oriented model, 84% of all investments in Singapore were "foreign" and 16% were "local" commitments ([Pereira, 2004](#)). Although the strategy was highly FDI-oriented, the coordinating role of the state was important and Singapore made great advances in public housing, education and social welfare. Since then, Singapore becomes Beijing's top overseas training ground, with more than 50,000 Chinese officials and cadres having flocked to the city on study trips and training programs since the mid-1990s.

SIP was a unique inter-governmental project, it was a vehicle to transfer Singapore's software in public administration to its Chinese counterparts ([Pereira, 2004](#)). The Singapore consortium originally had a 65% share in the park, while a Chinese consortium held the

No	Type	Description	Example
1	National new area	A comprehensive functional area that fulfills the major strategies of national development and reform and opening up	Pudong new area of Shanghai, etc.
2	Special economic zone	A designated area that has adopted special policies, which is more open and flexible in terms of economic activities related to foreign countries than other parts of China	Shenzhen, Zhuhai, Xiamen, etc.
3	Pilot free trade zone	A special economic area within China's territory, focusing on institutional innovation and ensuring that such innovation is replicable and scalable. It is the forerunner in speeding up the transformation of government functions, exploring systems and institutional innovation, promoting investment and trade facilitation, etc.	China (Shanghai) pilot free trade zone, China (Guangdong) pilot free trade zone, China (Tianjin) pilot free trade zone, etc.
4	National economic and technological development zone	It is an area which has clear geographic boundaries within coastal cities and some inland cities, focused on improving infrastructure and creating an investment environment that is in line with international standards. By introducing new industries and technologies it has become a special area for the development of foreign economic cooperation and for trade in the cities and their surrounding areas	<i>Suzhou industrial park</i> Guangzhou economic and technological development zone, etc.
5	National high- tech industrial development zone	Such a zone is a national science and technology industrial park approved by the state council of China to accommodate knowledge- intensive industries. Making full use of open environmental conditions and domestic science and technology, such parks fully absorb foreign advanced scientific and technological resources, funds and management tools	Nanjing high-tech industrial development zone, etc.
6	Special customs Supervision zone	A region established within China to implement specific economic functions by closed supervision, is given a special function and policy that promotes the transfer of international industries and creates linkages between domestic and international markets	Beijing Tianzhu free trade zone, etc.
7	Border economic cooperation zone	An area for a border city in China to develop border trade and process exports	Dandong border economic cooperation zone, etc.

(continued)

Table 2.
Major types of industrial parks in China

No	Type	Description	Example
8	National Tourist resort	A national Tourist resort is located within a well-defined geographic boundary. It allows for the construction of ancillary facilities and should be built in areas that feature abundant tourism resources and attract a large number of tourists	Taihu national Tourist resort zone in Wuxi city, etc.

Table 2.

Source(s): UNIDO (2019)

remaining 35%. Mr. Zhao Zhisong president of SIP expressed “SIP was planned with a really high systematic and forward-looking standard. We spent 30 million RMB on planning itself. That was unbelievable at that time. We made sure that the planning would not be outdated in 50 years” (Yang, 2018). The foremost principle guiding the development of this township was that it had to be a private driven entity, with direct access to national government support. It was crucial to develop this joint venture company, in order to create the Park on a commercial basis.

Hard and software transfer

According to Lye (2015), the hardware development of SIP refers primarily to the physical development or tangibles of the industrial park that includes the construction of factories and other buildings, the laying of roads and other public infrastructure and amenities. The software transfer largely refers to the intangibles such as having the right mindset, the right attitudes and even value systems of the leaders and officials in handling any issue or problem encountered in the process of developing the SIP. The software aspect, which is a defining feature of the SIP and differentiates it from most other industrial parks in China.

Although most of the time, more advanced countries do not transfer their hard and soft skills in cooperation, Singapore transfer is explained because of the country mid-term development. Singapore’s FDI oriented-model was successful because of the country’s high-quality infrastructure and relatively low cost in terms of labor. Once, Singapore achieved a certain level, costs were higher and many industrial transnational corporations were seeking to move operations out of Singapore (since other Asian countries have cheaper production costs). Singapore would transfer hardware and software to China to effectively attract international investors, they saw this pattern as an opportunity since major countries in Asia were lacking infrastructure and pro-business management. On the other hand, Singapore has access to China’s growing market (Pereira, 2004).

The Singapore government formulated the “regionalization program” within its national development strategy known as the “Strategic Economic Plan”. The key knowledge transfer objective of the program was to impart tacit knowledge associated with the Singapore way of doing business and managing industrial parks and try to apply it to the Chinese context in change of getting some revenues for this process. It was a complex process of adapting the Singaporean way of doing business to the Suzhou context. According to Inkpen & Wang (2006) knowledge shared by Singapore with SIP covered three aspects: (1) planning, development and marketing of a modern township (e.g. urban planning, infrastructure, land development and housing development); (2) economic management and social administration of a township (e.g. economic development strategy, labor management, customs, provident fund system, FDI attraction); and (3) honest and

transparent government, the legal system and spiritual civilization (e.g. education, culture, labor unions).

Singapore was like a “guarantor” putting the brand, the managerial business and planning skills, the high-quality infrastructure and services and social capital that allowed FDI in SIP. China learned from this experience and took advantage of the learning Singapore’s shortcuts for leading with FDI. With these shortcuts, China overcame all the disadvantages that FDI generates for developing countries.

Asian financial crises and Singapore’s disengagement of the majority of CSSDC

The success of the park was fundamental in its economic achievements, it has always been the top destination for foreign investors, not just within the city of Suzhou but within the state of Jiangsu as well, even during the “difficult times” of the Asian financial crisis (1997–1999), many companies agreed with the high-quality standards of the infrastructure (Pereira, 2007).

However, after the first implementation of the program, some problems appeared. First, the domestic political structure in China is wide bigger and more complex than form a smaller country like Singapore. Singaporean government understood that once negotiating with Beijing the agreements were done, but the Suzhou Municipality has other plans, as for example creating the Suzhou New District (SND), another development zone competing with SIP (Pereira, 2007; Han, 2008; Lye & Wong, 2019). According to Pereira (2002) price differential between the SIP and the SND was around 25% in 1999. The knowledge acquired in the process of the SIP benefited the region and particularly Suzhou New District. By 2001, the Singaporean government abruptly disengaged from the Suzhou Industrial Park in 2001 and the investment relation inverted to 65% for the Chinese side and 35% for Singaporean.

Chinese took the lead and promote indigenous innovation

By 2001, China assumed the major responsibility of the project. This phase coincided with the period in which the PRC was included in the World Trade Organization. Few years after that, China became the main world exporter. This new phase of the SIP is described as “accelerated development”. According to Min & Ding (2016, p. 3), SIP implemented the strategy of “big development, big construction and big investment”, thus enterprises funded by Europe, USA, Japan, South Korea and Taiwan quickly entered the park”.

However, the strategy was FDI-oriented according to Wei, Yuqi & Wen (2009) it was still a satellite district dominated by TNCs and external organizations. The most serious challenges to Suzhou’s development are the lack of top-ranked research institutions, which are required for R&D.

FDI most of the time does not transfer technologies. Appelbaum *et al.* (2018, p. 177) state “Unfortunately, while foreign investment did bring jobs to China, especially along with the 14 cities on the PRC’s east coast to start with, and it did generate badly needed foreign exchange, it did not bring the large-scale visible technology transfer the Chinese government had hoped for”.

The same pattern occurred in SIP, as described by Zeng (2013), SIP experienced a heavy reliance on foreign investment and it provided limited local spillover effects. FDI has played a critical role in the success of SIP, helping it to become a high-tech enclave. However, knowledge spillovers and learning effects in the local economy have been limited. Despite some supply and skills linkages with the local industries, foreign firms operating in SIP often have their own preferred global supply networks and tend to keep key technological activities in their home countries. A dozen foreign R&D centers only served as product or process development facilities for Chinese markets.

For changing this pattern, Suzhou established the Dushu Lake Higher Education Town within the STI District. There are 30 colleges and universities among them Liverpool, Warwick, Limerick, the National University of Singapore, the Hong Kong University of Science and Technology, and Dayton University from Ohio, Sino-French Institute jointly with the Renmin University of China. The Education District counts with 78 thousand students. There are also important research institutes as the Suzhou Research Institute, a research arm of National University of Singapore, Oxford Suzhou Centre for Advanced Research (Oxford's first overseas physical science and engineering research facility) and Chinese Academy of Sciences' Suzhou Institute of Nano-tech and Nano-bionics which owns the world's largest multifunctional nanoscience and nanotech research platform Nano-X (Suzhou Industrial Park, 2019c).

Mr. Zhao stated that "in its early state focused on bringing in foreign companies, mainly the global top 500 enterprises. But from 2004 we started to have a new plan for our further development, including biomedicine, nano cloud computing, and artificial intelligence in recent years. After years of practice now our biomedicine sector and nano-tech sector are in a leading position nationwide. For cutting-edge industries, SIP always thinks ahead of current trends doing distribution in advance. Only with all these efforts, we can remain in the front line" (In Yang, 2018). Thus, SIP changes the strategy to promote indigenous innovations and to switch from "made in Suzhou" to "created in Suzhou".

According to Zeng (2013, p. 1), SIP was successful in establishing a highly conducive business environment, including sound legal, regulatory and incentive regimes, including a "one-stop-shop" service center, which provides a streamlined and more transparent approach on registration, licensing, permits, taxation, immigration and customs clearance, etc. The Government of Suzhou also gives special tax incentives and refunds for specific new and high-tech sectors.

Rocketing development

To understand the importance of SIP for the economic development of Suzhou Municipality and how it became a reference in China for promoting technological innovation, some data are presented. Figure 1 shows the GDP of the SIP from 2002 starting at 4 Billion RMB to 257 in 2018 (USD 36,7 billion), which constitutes 14% of the Suzhou Municipality GDP in 2018. In the same figure, in yellow are the bars of FDI per year, since 2005 FDI attraction has been

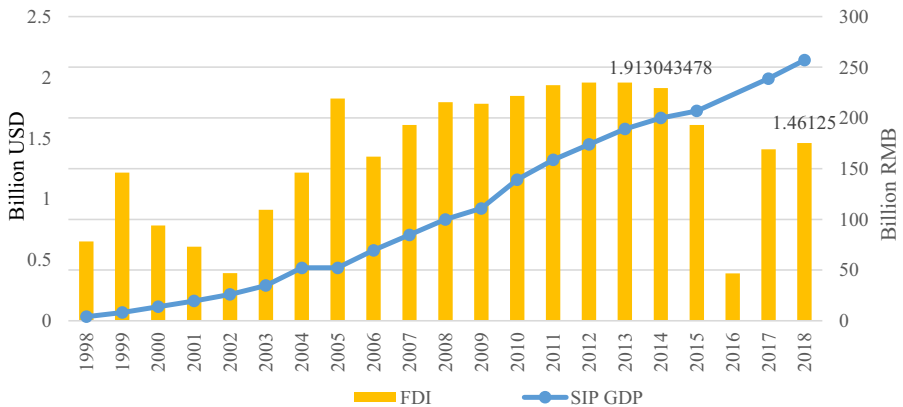


Figure 1.
SIP GDP (RMB) and
FDI (USD)

Source(s): Elaborated by the author based on the Suzhou Statistic Yearbooks (2003-2019)

particularly successful achieving near USD 2 billion per year, falling in 2016 and recovering in 2017 and 2018 with USD 1,4 billion.

Figure 2 illustrates the number of new companies settled in SIP per year, duplicating from 2002 to 2005 (200–400) and duplicating again in 2009 and 2010 achieving near one thousand new companies. Since 2012, the numbers remain the same in the following years with near 800. The total profit of the companies has increased dramatically over the period. In 2002, the profit was RMB 0,2 billion and in 2018 it accomplished almost RMB 4 billion (USD 571 million), which means 20 folds more.

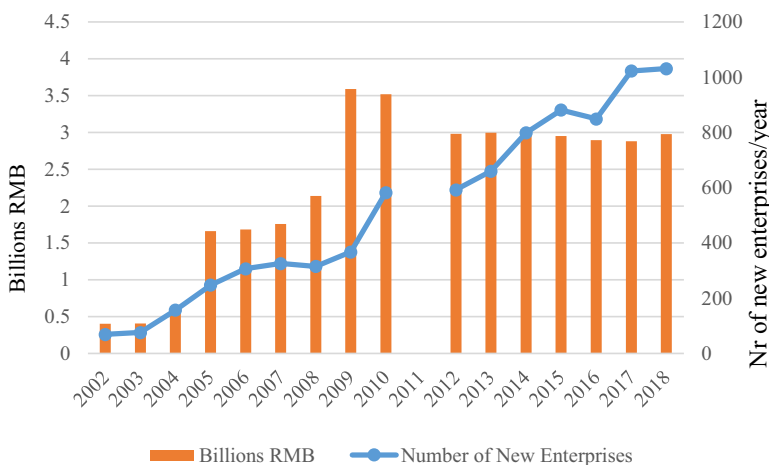
SIP exports increased tremendously since China entered to the WTO. In 2009, because of the financial crisis it declined and restarted the growth rate in 2010. In 2018, SIP exports achieved its peak, exporting USD 46.4 billion. Moreover, Figure 3 shows the percentage of SIP exports in Suzhou Municipality exports (20%/year).

To have a more comprehensive idea about the SIP innovation capacities and economic dynamism, Table 3 presents some indicators as GDP, income, exports, number of enterprises, FDI, people engaged in R&D and patent application. It is remarkable that SIP's Gross expenditure in R&D (GERD) is 3.5%, surpassing the national average GERD in all of the largest economies of the world (Japan 3.2%; Germany 3%; the US 2.7%, and even the Chinese 2.1%). This is in line with the strategy of indigenous development. SIP counts with near 300 thousand people engaged in R&D activities and apply more than 22 thousand patents/year.

Going out strategy and the belt and road initiative

In 2007/2008, when the global financial crises occurred, Chinese enterprises should change their global strategy since the developed countries start having financial problems and decreasing their consumption rates. The new strategy was also focused on including the Emerging Markets in the developing world. Since 2013, the last phase of development of the SIP is linked to the Belt and Road Initiative.

When the labor and land cost increased in the region, they start opening mini-SIP branches in other districts in West China (Wong & Lye, 2020). This policy is considered as a



Source(s): Elaborated by the author based on the Suzhou Statistic Yearbooks (2003-2019)

Figure 2.
Number of new founded enterprises per year at SIP and total profits

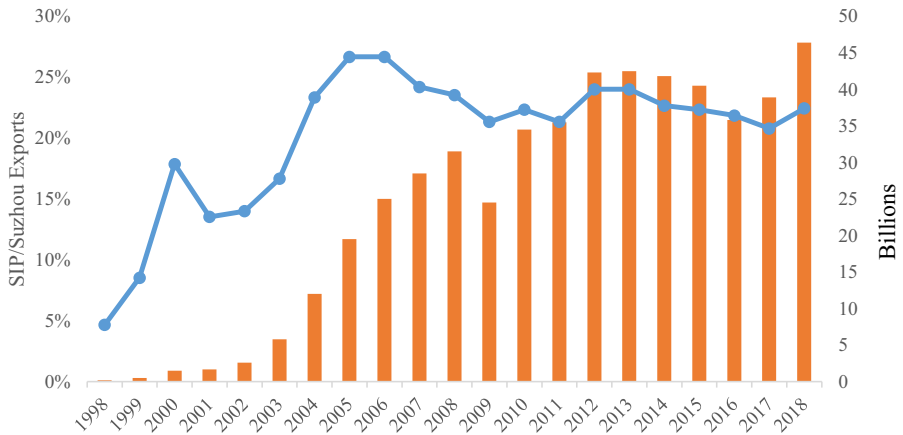


Figure 3.
SIP exports and SIP share in Suzhou's total exports (1998–2018)

Source(s): Elaborated by the author based on the Suzhou Statistic Yearbooks (2003–2019)

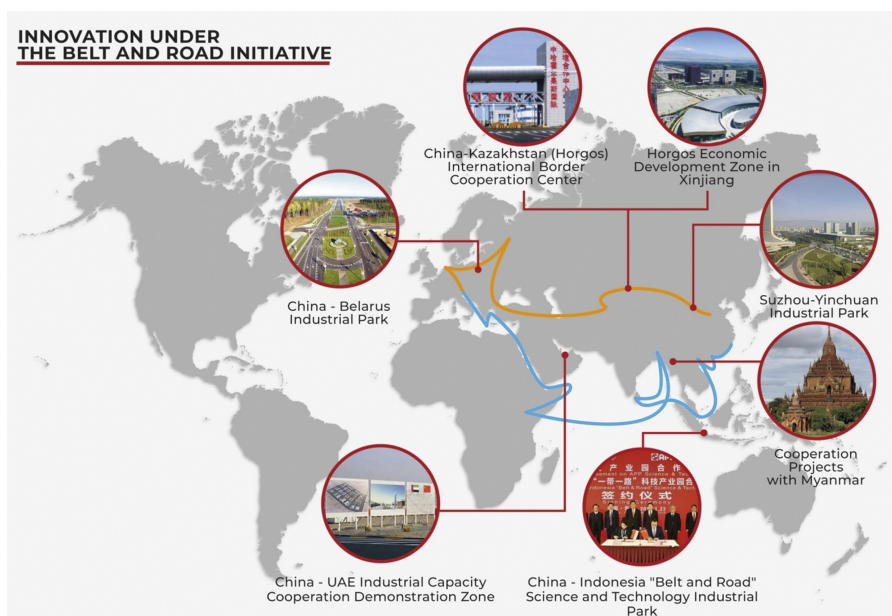
Table 3.
Suzhou Industrial Park Science and Technology key indicators (2019)

	Suzhou industrial park
GDP (billion USD)	36.7
Income (billion USD)	72.8
Exports (billion USD)	191
Number of enterprises	2,834
Profits (billion USD)	5.52
FDI (billion USD)	1.46
Gross expenditure in R&D % GDP	3.5%
People engaged in R&D	291,027
Patent application	22,506

Source(s): Elaborated by the author based on the [Suzhou Statistical Yearbook \(2019\)](#) and [China Statistical Yearbook \(2019\)](#)

“Domestic going out” – they transferred some enterprises to the middle and western part of China, accounting 11 Parks. This process is linked to SIP own transformation and upgrading since lower-end or less competitive industries are phased out to other localities. This policy was successful and it started to be extended to BRI countries. SIP is opening abroad industrial parks in Belarus, Abu Dhabi and Kazakhstan. In cooperation with Singapore and Suzhou, there is a plan to build an Industrial Park in Myanmar and they are discussing to open one in Indonesia (Haro Sly, 2020). For the scope of this article the case of the Great Stone High Tech Park in Belarus will be developed in the further section.

SIP in cooperation with Singapore counts with a national demonstration platform for foreign investment services. It promotes four functions which consist of cooperation strengthening public service, talent training, investments and financing services, international services. They share the experience of SIP and its enlightenment to China’s construction of overseas industrial parks. Provide research on the development model of the international capacity cooperation park. It is also an overseas investment services platform for business from China and Singapore to invest in BRI countries. They also provide training courses from officials from BRI countries.



Source(s): Elaborated by the author based on SIPAC Demonstration Zone, Haro Sly (2020)

China–Belarus great stone industrial park

At the end of 2010, during a meeting of the leaders of the two states – Belarus and China – they voiced the idea of creating a platform to foster Chinese and Belarusian investments, technologies and competencies. According to Vaytekhovskiy, Deputy General Director of the “Great Stone Industrial Park” (GSIP), this time a lot of questions arose: who will implement it, at whose expense will this “banquet” be, how to choose the format of cooperation, where to place this platform. And why not choose one of the already functioning economic zones for this and try to implement this idea there? (Probusiness, 2020). All these issues were tackled by a working group at the Ministry of Economy and under the lead of the Deputy Prime Minister of Belarus, who was responsible for the development of Chinese–Belarusian relations.

Same as SIP, the GSIP development strategy was created on the vision of what it should become in 30–40 years. In 2012, the Industrial Park Development Company was established and in 2015 they started to create the infrastructure. More than \$ 450 million has been invested in the park.

Thus, the China–Belarus industrial park is a territorial entity with an area of 112 sq km with a special legal status conducive to doing business. According to Min and Ding (2016) they learned from Suzhou Industrial Park experience in many aspects starting on choosing the right location. The Park is located 25 km from Minsk, the capital of the Republic of Belarus. Although, there was nothing there – only a swamp and a forest – it is a strategic dot in the network of the Belt and Road Initiative connecting China to Europe crossing Central Asia and Russia (Probusiness, 2020). It is near to the international airport, railway lines and the Berlin–Moscow transnational highway.

The shareholdings of the Sino-Belarus Industrial Park Development Inc. were initially 68% shares by China (SIP is part of this consortium) and 32% by Belarus. Since 2018, there is also a German company, Duisburger Hafen AG (Duisport) as shareholder (Probusiness, 2020).

By making additional investments and entering into cooperation agreements, Duisport is building a rail terminal (including a logistics area) in GSIP. It has the following partners: China Merchants China-Belarus, the Belarus state-owned railway and the Swiss company Hupac. The 80-ha logistics parcel will include a 30-ha bimodal terminal with an initial annual handling capacity of 180,000 standard containers (TEU), which can be increased up to 500,000 TEU. The other 50 ha will be used for attracting logistics companies. With this investment, the transport time between Duisport and the various destinations in China are supposed to be reduced from the current 14 to 10 days.

The construction itself is only partially run by Chinese companies. The general contractor for the infrastructure is the Chinese corporation CAMCE, yet 60–65% of the construction works in GSIP is carried out by Belarusian companies, mainly from the Minsk region. Therefore, the investment into the project – over 420 million dollars – forms the revenue of primarily Belarusian companies (BelarusFeed, 2019).

GSIP has formed a separate and independent state administration body which carries out “one station” administrative end-to-end investor servicing (Great Stone Industrial Park, 2019). In the case of Great Stone Industrial Park, the tax policy to attract investment is as follow (see Table 4):

According to New York Times report (Higgins, 2019), the “low cost of labor in Belarus, where average salaries are around \$500 a month compared with \$2,000 or more in the European Union, easily made up for the burden of tariffs and offered foreign companies a big incentive to set up export-oriented factories in his country”. Only the first stage of development of Great Stone will have hired 10,000 to 12,000 employees. Nearly all jobs will offer higher wages compared to the country’s average. Even now there is a demand for related services in the park. It all contributes to new jobs with competitive wages. Overall, the park will employ around 150,000–200,000 people (BelarusFeed, 2019).

Great Stone will be a modern international eco-city with an emphasis on high-tech and competitive innovation productions with high export potential. Any company regardless of country of capital origin can act as a resident of the industrial park. In 2016, some critics arose, according to the Deutsche Welle

the Belarusian economist Sergei Chaly did not see the prospects in the GSIP that are drawn by officials. He believes that “the politeness of the Chinese does not allow us to say that they generally do not need a park for the production of goods in Belarus” (. . .) “Belarus has nothing to offer China - there are neither the latest technologies, nor high-quality investment projects, in which the Chinese are ready to invest,” says Chaly. And Chinese firms, he said, do not need to locate the production of an innovative product abroad, “since they have plenty of their own free hands and their own huge areas” (DW, 2016).

By 2020, the park has 68 companies from 16 countries among them China, Singapore Belarus, Germany, but also Israel and the USA. Examples of the major companies investing there are

10+ policy	Income tax: 0% for 10 years, 50% till 2062
Land tax	0% until 2062
Immovable property tax	0% until 2062
Customs VAT and taxes	0% for the goods imported to start the project 0% if exported outside the Eurasian economic union (EEU)
Dividend tax	% For 5 years after the income is declared
Payments to social security fund	35% of the national average
VAT	Is return from budget

Table 4.
Tax policy of the great
stone industrial park

Source(s): Great Stone Industrial Park (2019)

Huawei and ZTE (Great Stone Industrial Park, 2019; Belta, 2020a, b). According to the Chinese Ambassador in Belarus, Xie Xiaoyong, the total investment until 2020 accounted for more than \$1.2 billion (Belta, 2020a, b).

Inside the park, there is the China–Belarus innovation center for the commercialization of science and technology achievements. The innovation center counts with several platforms and incubators which combines industrial, financial and research activities. A demonstration trading platform for STI achievements; for international scientific and technical cooperation, for intermediate testing and small-scale production in the framework of R&D projects. Some of the facilities offer six-months free offices, start-up training courses, stock investments and different R&D and commercialization training (Great Stone Industrial Park, 2019).

In the framework of the innovation center, it was created the project “ISKRA” to support the development of Belarusian technological micro-enterprises, founders of research and development results, and young entrepreneurs. Assistance in attracting new industries to the China-Belarus Industrial Park. The financing is for R&D projects with the possibility of commercialization and goes up to 500,000 USD. It is granted only if the production of goods is carried out on the territory Belarus. The participant Investors are: Great Stone Industrial Park Development Company, China Merchants SINO-BLR Capital management limited, Eurasia Foundation, Belarusian Innovative Foundation, Bank BelVEB, Da Vinci Capital Management limited (Great Stone Industrial Park, 2019).

According to Deputy Head of the Belarus President Administration Dmitry Krutoi the industrial park performed well in 2020.

The results are good against the rest of the economy: \$75 million in exports, \$300 million in investment, almost 1,000 new jobs, and the average wage at Br2.500. The park has been set up to implement projects mainly of the fifth and sixth technological waves, the latest developments and innovations (Belta, 2020a).

Moreover, even in the context of pandemic, the revenue of residents of the Chinese-Belarusian Industrial Park Great Stone in 2020 increased by 3.2 times compared to 2019, to Br188.9 million (Belta, 2020b).

The priority areas for the park are engineering, electronics and telecommunications, biotechnology, pharmaceuticals, new materials, logistics, e-commerce, big data storage and processing (Belta, 2020a, b). For example, some companies want to scale and need to build new laboratories and all the infrastructure of local treatment facilities. When they install into the park, they already have the high-quality infrastructure and an innovative system. An example of this was the Belarusian company “Assomedica”. It had a production site near Minsk, but they faced the fact that they did not have enough electricity and space. It transferred to Great Stone Park, where it rented 4.5 thousand m². Now the company works in 3 shifts and has scaled twice in terms of production. Thus, the park provides opportunities for new and even existing companies that plan to escalate and expand (Probusiness, 2020).

It is early to evaluate the scale of the impact of the SIP cooperation in the Great Stone Park, if it is improving Belarusian innovation system, generating true development and helping to close the technological gap. Further studies on the success of the investment and promotion of science and technology will be needed. However, this short overlook provides some important information and data on how it is developing.

Final remarks

China is one of the few developing countries to promote indigenous innovation and be successful in ascending in the world structure passing from a peripheral situation to dispute the lead with the major economic world power, the United States. Fostering the connection of the “Sabato Triangle” they promote the key connections between

government, research institutions and industries generating a strong national innovation system which was a key aspect for Chinese development. China understood pretty well the necessity to coordinate by the State the emergence of an innovative ecosystem in which a market-orientation and public strategic goals drive the technological catching up, China become so an Entrepreneurial State.

Regional policies creating industrial and technological parks contributed to developing “Technopoles”. Contrary to major developing countries, China was successful coordinating and implementing technological parks, studying the particularities for these examples constitutes an important learning for Global South nations.

Thanks to the Torch Program, technology parks have played a key role in the development of China. Suzhou Industrial Park has crystalized the aim of the national goal as putting the knowledge economy as the motor of the development process. The top-down approach for generating high-tech industrial parks in key and strategic localization was important to regional strategy. If many regions developed, the nation develops.

Chinese leaders identified Singapore as the model, they did not copy it, instead they appropriated and adapted to the Chinese context. They learned from Singapore how to orient science and technology to the market needs and attract industries with tradition in this area that allow Chinese companies to learn from their experiences and its tacit way of doing business.

Thanks to Singaporean cooperation, Chinese officials at SIP understood the innovation eco-system as a whole connected model, in which hardware and software are key aspects for its success. SIP is also orienting its plans toward the Chinese national strategy for overcoming the pure FDI-oriented model to the indigenous innovation one, thus it is investing hardly in R&D, promoting incubators, attracting key research institutions and universities. As Singapore needed to “go out” in the 1990s, SIP is going West in China and “out” to the world with projects related to the BRI. China is “exporting” or “transferring” its know-how on innovation model and management (as Singapore made with China) to Belarus because it is a strategic dot in the network of the Belt and Road Initiative connecting China to Europe.

It is yet early to define if the Great Stone in Belarus would have the same success as SIP. By now, it is possible to see that: (1) companies from different countries are investing there (near 70 companies invested 1.2 billion USD). (2) Innovation is going on, and companies were successful in the escalation. Some double their sizes and business (ex. Assomedica). (3) Belarusian construction companies benefited from the investment of GSIP (65% of the construction was by national companies). (4) The transport time between Duisport and China is supposed to be reduced from 14 to 10 days. This achievement is in line with one of the main goals of the BRI. (5) Even in the pandemic GSIP increased its exports and employment, attracted new FDI.

Further studies on the outcome of STI under the BRI are required. However, the success of this transfer would be conditioned to Belarusian capacity to absorb and sustained this innovation model. For this, Belarus should apply indigenous innovation policies in line with the development of Great Stone Industrial Park. Learning from this experience will be important for improving the cooperation with China in STI in countries from the Global South. The international cooperation transfer from Singapore has created successful outputs in China, if this experience can generate similar outputs in other regions, the cooperation can multiply benefits closing the technological gaps in pursuit of “creating a community of shared future”.

References

- Amnsden, A. (2001). *The Rise of “the rest”: Challenges to the West from Late-industrializing Economies*. Oxford: Oxford University Press.

- Appelbaum, R.P., Cong, C., Xueying, H., Parker, R., & Simon, D. (2018). *Innovation in China: Challenging the Global Science and Technology System*. New York, NY: John Wiley & Sons.
- Asheim, B.T., & Gertler, M.S. (2006). The geography of innovation: Regional innovation systems. In Fagerberg, J., & Mowery, D.C. (eds.), *The Oxford Handbook of Innovation*. Oxford: Oxford University Press.
- BelarusFeed (2019). *What is Great Stone? Belarus-China Biggest Project Explained in 10 Q&As*. BelarusFeed. available at: <https://belarusfeed.com/great-stone-industrial-park-faqs/>.
- Belta (2020a). *Committed investments in Great Stone Park Estimated at \$1.2 Billion*. Belta. available at: <https://eng.belta.by/economics/view/committed-investments-in-great-stone-park-estimated-at-12-billion-136144-2020/>.
- BELTA (2020b). *Выручка резидентов “Великого камня” в январе-сентябре выросла в 3,4 раза до Br126,2 млн*. Belta. available at: <https://www.belta.by/economics/view/vyruчка-rezidentov-velikogo-kamnja-v-janvare-sentjabre-vyroslo-v-34-raza-do-br1262-mln-416031-2020/>.
- Castells, M., & Hall, P. (1994). *Technopoles of the World: The Making of 21st Century Industrial Complexes*, (1st ed.). London: Routledge.
- Chaminade, C., & Vang, J. (2009). Globalisation of knowledge production and regional innovation policy: Supporting specialized hubs in the Bangalore software industry. *Research Policy*. Elsevier. 37(10), 1684–1696. available at: <https://ideas.repec.org/a/eee/respol/v37y2008i10p1684-1696.html>.
- Chinese Embassy in Ireland (n.d.). *High Tech Research and Development (863) Programme*, Retrieved from <http://ie.china-embassy.org/eng/ScienceTech/ScienceandTechnologyDevelopmentProgrammes/t112844.htm>.
- China Statistical Yearbook (2019). Retrieved from <http://www.stats.gov.cn/tjsj/ndsj/2019/indexeh.htm>.
- Chunjuan, N., & Brock, D. (2012). *Mr. Science and Chairman Mao's Cultural Revolution: Science and Technology in Modern China* (1st ed.). Lanham: Lexington Books.
- Deng, X. (1983). The selected works of Deng Xiaoping «Modern day contributions to Marxism-Leninism. available at: <https://dengxiaopingworks.wordpress.com/> (accessed 25 April 2020).
- Deutsche Welle (2016). *Deutsche Welle Проект ‘Великий камень’ или белорусские ‘Нью-Васюки’*. available at: <https://www.dw.com/ru/%D0%BF%D1%80%D0%BE%D0%B5%D0%BA%D1%82.%D0%B2%D0%B5%D0%BB%D0%B8%D0%BA%D0%B8%D0%B9.%D0%BA%D0%B0%D0%BC%D0%B5%D0%BD%D1%8C.%D0%B8%D0%BB%D0%B8.%D0%B1%D0%B5%D0%BB%D0%BE%D1%80%D1%83%D1%81%D1%81%D0%BA%D0%B8%D0%B5.%D0%BD%D1%8C%D1%8E-%D0%B2%D0%B0%D1%81%D1%8E%D0%BA%D0%B8/a-19361469>.
- Freeman, C. (1995). The ‘National System of Innovation’ in historical perspective. *Cambridge Journal of Economics*, 19(1), 5–24.
- Fu, X., Pietrobelli, C., & Soete, L. (2011). The role of foreign technology and indigenous innovation in the emerging economies: Technological change and catching-up. *World Development*, 39(7), 1204–1212.
- Great Stone Industrial Park (2019). <https://industrialpark.by/en/home.html> [Accessed 25 April 2020].
- Han, M. (2008). *The China-Singapore Suzhou Industrial Park: Can the Singapore Model of Development Be Exported*. Dissertation. (Master in International Affairs). National University of Singapore, available at: <https://scholarbank.nus.edu.sg/handle/10635/16090>.
- Haro Sly, M.J. (2020). *Science and Technology Policy for Indigenous Innovation in China: The Case of the Suzhou Industrial Park*. Dissertation. (Master in political science and LLM). (unpublished). Silk Road School. Renmin University of China.
- Haro Sly, M.J. & Liaudat, S. (2021). ¿Qué podemos aprender de China en política científica y tecnológica? *Ciencia, Tecnología y Política*. 2(5), available at: <https://revistas.unlp.edu.ar/CTyP/>.

- Heilmann, S., Shih, L., & Hofem, A. (2013). National planning and local technology zones: Experimental governance in China's Torch programme. *The China Quarterly*, 216(1 December), 896–919. doi: [10.1017/S0305741013001057](https://doi.org/10.1017/S0305741013001057).
- Higgins, A. (2019). Shunned by west and wary of Russia, Belarus gets help from China. *The New York Times*, 20(July). available at: <https://www.nytimes.com/2019/07/20/world/europe/china-belarus-battery-protests.html>.
- Hung, H. (2015). *The China boom: Why China will not Rule the World*. New York, NY: Columbia University Press.
- Hushcha, P.V., & Gribov, A.V. (2018). The current state and prospects of economic cooperation between Belarus and China. *Экономика и банки: научно-практический Журнал*, (2), 72–80.
- Inkpen, A.C., & Wang, P. (2006). An examination of collaboration and knowledge transfer: China–Singapore Suzhou industrial park. *Journal of Management Studies*, 43(4), 779–811. doi: [10.1111/j.1467-6486.2006.00611.x](https://doi.org/10.1111/j.1467-6486.2006.00611.x).
- Juma, C., GittaDisenso, C. A., & Bruce, A. (2005). Forging new technology alliances: The role of south-south cooperation. *The Cooperation South Journal*, 57–71. Retrieved from <https://www.belfercenter.org/publication/forging-new-technology-alliances-role-south-south-cooperation>.
- Kuo, L., & Kommenda, N. (2018). What is China's Belt and road initiative?. *The Guardian*. available at: <http://www.theguardian.com/cities/ng-interactive/2018/jul/30/what-china-belt-road-initiative-silk-road-explainer>.
- Li, Y. (2019). Suzhou industrial park celebrates 25 years. *China Daily*, 12(April). available at: http://www.chinadaily.com.cn/cndy/2019-04/12/content_37457505.htm.
- Lye, L. F. (2015). Suzhou industrial park: More than just a commercial undertaking. In *Singapore-China Relations, 105–30. World Scientific Series on Singapore's 50 Years of Nation-Building*. World Scientific. doi: [10.1142/9789814713566_0006](https://doi.org/10.1142/9789814713566_0006).
- Mazzucato, M. (2012). *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*. London . New York, NY: Anthem Press.
- Min, Z., & Ding, Y. (2016). Forty years of China's reform and opening policy: Innovative transformation of Suzhou industrial park and its connection with the one Belt and one road initiative. *Global Economic Observer: Nicolae Titulescu University of Bucharest, Faculty of Economic Sciences; Institute for World Economy of the Romanian Academy*, 6(2 December), 212–225.
- Ministry of Science and Technology (MOST) (2016). *Belt and Road Initiative and International Science & Technology Cooperation Ministry of Science and Technology (MOST)*. Beijing: MOST, Department of International Cooperation. Newsletter Nr, 19.
- Nelson, R. (1993). *National Innovation systems: A Comparative Analysis* (New ed.). New York, NY: Oxford University Press.
- Pereira, A. (2004). State entrepreneurship and regional development: Singapore's industrial parks in Batam and Suzhou. *Entrepreneurship & Regional Development*, 16(2), 129–44. doi: [10.1080/08985620410001677844](https://doi.org/10.1080/08985620410001677844).
- Pereira, A. (2002). The Suzhou industrial park project (1994–2001): The failure of a development strategy. *Asian Journal of Political Science*, 10(1 December), 122–42. doi: [10.1080/02185370208434213](https://doi.org/10.1080/02185370208434213).
- Pereira, A. (2007). Transnational state entrepreneurship? Assessing Singapore's Suzhou industrial park project (1994–2004). *Asia Pacific Viewpoint*, 48(3), 287–98. doi: [10.1111/j.1467-8373.2007.00348.x](https://doi.org/10.1111/j.1467-8373.2007.00348.x).
- Probusiness (2020). *Какие Возможности Для Бизнеса Дает Индустриальный Парк «Великий Камень»*. Probusiness. available at: <https://probusiness.io/management/6524-kakie-vozmozhnosti-dlya-biznesa-daet-industrialnyy-park-velikiy-kamen.html>.
- Rath, A. (1994). Technology transfer and diffusion. In Salomon, J., Sagasti, F., & Sachs, C. (Eds.), *The Uncertain Quest: Science, Technology, and Development*. The United Nations University.

- available at: <http://archive.unu.edu/unupress/unupbooks/uu09ue/uu09ue0y.htm#1%20technology%20transfer%20and%20diffusion>.
- Rodriguez-Pose, A., & Hardy, D. (2014). Technology and industrial parks in emerging countries: Panacea or pipedream?. *SpringerBriefs in Regional Science*, Springer International Publishing, 1. doi: [10.1007/978-3-319-07992-9](https://doi.org/10.1007/978-3-319-07992-9).
- Sabato, J.A., & Botana, N. (1986). *La ciencia y la tecnología en el desarrollo futuro de America Latina*. Buenos Aires: Revista de la Integración, Year 1, (3), 15-36.
- Schneider, L.A. (1981). Science, technology and China's four modernizations. *Technology in Society*, 3(3), 291–303. doi: [10.1016/0160-791X\(81\)90001-4](https://doi.org/10.1016/0160-791X(81)90001-4).
- Shi, H., Tian, J., & Chen, L. (2012). China's quest for eco-industrial parks, part II. *Journal of Industrial Ecology*, 16(3), 290–292. doi: [10.1111/j.1530-9290.2012.00505.x](https://doi.org/10.1111/j.1530-9290.2012.00505.x).
- Suzhou Industrial Park. News-Media Focus (2019b). SIP ranks first among global times' 'most attractive industrial parks for investment, available at: http://www.sipac.gov.cn/english/Topstory/201912/t20191231_1085987.htm.
- Suzhou Industrial Park. News-Media Focus (2019c). SIP: A cluster of top-notch businesses and research institutes, available at: http://www.sipac.gov.cn/english/categoryreport/IndustriesAndEnterprises/201904/t20190412_1015077.htm.
- Suzhou Statistical Yearbook (2019). *统计年鉴 - 苏州市人民政府*, Suzhou. Retrieved from https://www.suzhou.gov.cn/szsrnzf/tjnj/nav_list.shtml.
- United Nations Industrial Development Organization (UNIDO) and Chinese Academy of International Trade and Economic Cooperation (CAITEC) (2019). *Experiences and Best Practices of Industrial Park Development in the People's Republic of China*. Vienna: UNIDO.
- Varsavsky, O. (1974). *Estilos tecnológicos: Propuestas para la selección de tecnologías bajo racionalidad socialista*. Buenos Aires: Ediciones Periferia.
- Vernengo, M. (2006). Technology, finance, and dependency: Latin American radical political economy in retrospect. *Review of Radical Political Economics*, 38(4), 551–568.
- Wei, Y.D., Yuqi, L., & Wen, C. (2009). *Globalizing Regional Development in Sunan, China: Does Suzhou Industrial Park fit a Neo-marshallian District Model?*. SSRN Scholarly Paper. Rochester, New York, NY: Social Science Research Network. available at: <https://papers.ssrn.com/abstract=1559210>.
- Wong, J., & Lye, L.F. (2019). *Suzhou Industrial Park: Achievements, Challenges And Prospects*. Singapore: World Scientific, 1-160.
- Xinhua (2018). *Suzhou Industrial Park Top Performer in Key Benchmarks*. available at: http://www.xinhuanet.com/english/2018-09/19/c_137479564_2.htm.
- Yang, R. (2018). How did Suzhou industrial park become the most competitive economic zone in China?. *Dialogue - CGTN*. available at: <https://www.youtube.com/watch?v=auC9-cBqmco>.
- Ye, C., Li, S., & LiangZhu, Z.X. (2020). A comparison and case analysis between domestic and overseas industrial parks of China since the Belt and road initiative. *Journal of Geographical Sciences*, 30(8), 1266–82, doi: [10.1007/s11442-020-1781-0](https://doi.org/10.1007/s11442-020-1781-0).
- Zeng, Z. D. (2013). *Suzhou Industrial Park – Integrating Drivers of Competitiveness to Boost Global Value Chain Participation*. World Development Bank, We Forum, available at: http://www3.weforum.org/docs/Manufacturing_Our_Future_2016/Case_Study_15.pdf.
- Zhu, G. (2018). Suzhou industrial park top performer in key benchmarks. *Xinhua*. available at: http://www.xinhuanet.com/english/2018-09/19/c_137479564_3.htm.

About the author

María José Haro Sly (武琪) graduated in Sociology and Political Science from the Federal University for the Integration of Latin America (UNILA, Brazil), Master in International Relations at the Federal University of Santa Catarina (UFSC, Brazil), and LLM in Contemporary China Studies from the Silk Road School of Renmin University of China (人大). She is Ph.D. candidate in Sociology at the Johns

REGE
28,4

Hopkins University. She was granted scholarships by the European Union, DAAD (Germany), CAPES (Brazil), and Renmin University. She works at Executive Coordination of the Program Exporting Knowledge at the Ministry of Science, Technology, and Innovation of Argentina. She has written scientific articles for Nature, Routledge, UNESCO and the Chinese Academy of Social Sciences. María José Haro Sly can be contacted at: mharosl1@jhu.edu

334

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgroupublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com