Creating an Environment for Enterprise: The Singapore Experience in East Asia

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ABSTRACT

The inherent confinements of a small city-state, and the lack of natural resources, have constantly been the impetus behind Singapore's drive towards innovation, creativity, and enterprise beyond national boundaries. This paper focuses on Regionalization 2000 (R2000), an attempt to form strategic alliances between regional states to capitalise upon each country's strengths and expertise. Such collective competitiveness, it is reasoned, will create an environment for local and Singapore-based multinationals to expand regionally, unrestrained by Singapore's geographic limitations. Discussion centres on the dynamics, development and performance of the Singapore's industrial-township projects in Indonesia, China and Vietnam. The paper finds that the strategic intent of R2000 remains unfulfilled, with various lessons to be drawn upon, and serves a reminder that failure to acknowledge the predominance of socio-political realities will stymie the propulsion of powerful ideas towards fruition.

Key words: Regionalization - Industrial Parks - Singapore - East Asia.

INTRODUCTION

The dynamism of Asia-Pacific economies, in the early 1990s, opened up investment opportunities, and markets, which few governments or businesses could afford to ignore. These developments presented Singapore with unique opportunities to develop its external economy (or, in local parlance, the `second wing'). The strategic intent of Singapore's regionalization drive was to create economic space for local and Singapore-based multinationals to redistribute resource-dependent operations, and to upgrade their operations in Singapore to higher-end activities which require the city-state's unique set of competencies. This transborder cluster development approach allows regional sites to leverage on each others' resources, technology and markets; importantly, this variant of the `shakkei' or collective competitiveness approach would ensure that the development of regional economies, and sites, leads to positive complementary growth for Singapore (Singapore Economic Development Board, 1993, 1995a, 1995b).

The cut-and-thrust of the regionalization program is the establishment of industrial townships in the region to create a `Singapore-styled' business environment in emerging economies for local and Singapore-based MNCs (Perry and Yeoh, 2000). The Singapore Inc. approach is adopted. The Singapore government, in this instance, takes the initiative to identify, and develop, sites in the region, and to use these Singapore-developed sites as locations to access resources and markets. These regional sites, when developed, will enhance Singapore's own competitiveness as a high-value investment site with strategic linkages with the region, as well as the competitiveness of Singapore-based companies that redistribute their resource-dependent operations to these sites. Concurrently, Singapore lends its competitive strengths (e.g. core competencies in industrial infrastructural development and management) to these regional sites to enhance their competitiveness. The China-Singapore Suzhou Industrial Park (CS-SIP) in China's Jiangsu Province illustrates this strategic initiative.

In other instances, the Singapore government takes on the role of a `business architect' and `knowledge arbitrageur' (Economic Development Board, 1995:42), identifies business opportunities, and brings together the private sector and commercial segments of the public sector in Singapore, as well as foreign companies with specific competencies, to undertake large-scale investment projects in the region. Batamindo Industrial Park (BIP) and Bintan Industrial Estate (BIE), Bintan Beach International Resort, Karimun Industrial Complex in Indonesia, the Wuxi-Singapore Industrial Park in China (WSIP), the Vietnam-Singapore Industrial Park (VSIP) and the Bangalore IT Park in India are examples of this mode of regionalization.

The paper presents case studies of Singapore's largest, and most advanced industrial-township projects in Indonesia, China and Vietnam. The discussion commences with further background to the regionalization program, followed by an account of the origins and progress of the case study parks, and the surrounding regulation and investment flows affecting the viability of these projects. The parks are then evaluated in terms of their progress in attracting investment, their contributions to the strategic objectives associated with the individual park, as well as to the Singapore's broader regionalization initiative. The final part of the paper considers the implications of these experiences for Singapore's regionalization program, as well as the city-state's competitive positioning in relation to the emerging economies of East Asia.

GOING REGIONAL …

From early days, Singapore recognised that it must be plugged into the global economy. Lack of natural resources made it an imperative for the city-sate to develop the ability to leverage global resources for economic growth. In 1989, as Singapore emerged from a recession, the Strategic Economic Plan recommended the strengthening of the domestic economy, and at the same time, recognised the importance of developing a strong external economy. In short, Singapore had to promote outward investments into the region and beyond. The first response was a largely unsuccessful attempt to accelerate international business linkages. Over 1989-1991, over $1.2 billion was invested under an international direct investment program mainly through equity in North American and European companies to build joint ventures with Singapore companies (Caplen and Ng, 1990). The program was designed to accelerate access to overseas markets and technology but it proved ineffective, partly because of the weakness of the Singaporean partners (Balakrishnan, 1990; Kanai, 1993). The change from internationalisation to regionalization was endorsed by the Committee to Promote Enterprise Overseas, set up in 1993. It observed that the high growth and liberalisation of foreign investment controls amongst the countries of East Asia offered Singapore a promising investment destination (Singapore Ministry of Finance, 1993).

As mentioned, the regionalization strategy comprised state-led infrastructure projects and a range of incentives and regulatory innovations designed to assist private companies and individuals move overseas[1]. The state's role in the township developments is threefold. First, senior politicians[2] negotiate the institutional framework for the project which typically involves pursuit of special investment conditions and participation from government-linked agencies in the host location. From Singapore's perspective, host government participation is sought to help obtain priority and protection for the project. Second, Singapore government agencies and government-linked companies (GLCs) are the prime investors in the infrastructure and real estate development, usually in a `government-selected' consortia. The prominence of government agencies and GLCs reflects the scale and long pay-back periods for infrastructure, which may make the investment unattractive to private companies alone. The third role played by the state is in the marketing and promotion of the parks. As well as the

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[1] A summary of the regionalization incentive schemes may be gleaned from the Singapore Economic Development Board, *Singapore Investment News, Regionalization Supplement*, May 1993.

[2] The stress on exploiting personal ties accords with business practice preferred by the linked communities of `overseas Chinese' (Redding, 1990, Yeung, 1997, Brown, 1998), which Singapore made use of in its industrial parks in Indonesia and China.

internationalisation of Singapore companies, the parks are heavily promoted to foreign multinationals in Singapore[3]. The Singapore Economic Development Board takes on this role as part of its broader strategy for encouraging foreign MNCs to make Singapore their regional support and headquarters location. The ideal is that low value activities are relocated to one of Singapore's overseas parks alongside expansion of high value regional support activities in Singapore (Figure 1). In this manner, dovetailed environments and support conducive for both local and foreign enterprises to venture abroad, expand their businesses and advance up the value chain were engendered.

THE INDONESIAN PARKS

The parks on the neighbouring Riau islands of Batam and Bintan were the first of Singapore's overseas industrial parks. Batamindo Industrial Park (BIP) was opened in 1992 with Bintan Industrial Estate (BIE) opened in 1994. The design of the parks is broadly identical. Both were envisaged as self contained environments with their communication and business linkages through Singapore rather than through Indonesia. BIP, for example, had its own power supply, water treatment plant, sewerage system, telecommunications facilities, commercial centre complete with a market, shops, a bank, restaurants, supermarkets, a mosque and a 24 hour medical centre. Labor was recruited from outside Batam. Outside the estate, Batamindo Executive Village provided accommodation and recreation facilities for professional staff. The park had its own shipping and warehouse provider offering freight transportation to and from Singapore. BIE replicates BIP's design and organisational attributes, with the additional feature of having its own port and direct ferry connection to Singapore.

Batamindo Industrial Park

[3] The political economy of Singapore's regionalization program is succinctly summarised Yeung (1998).

The projects on Batam and Bintan were joint ventures between government-linked companies (GLCs) from Singapore and Indonesia. Singapore participation was through two GLCs: Singapore Technologies Industrial Corporation (now SembCorp Industries) and Jurong Town Corporation, Singapore's main industrial infrastructure builder. The Indonesian partner was Salim Group, one of Indonesia's major conglomerates with close links to senior politicians, and privileged access to major investment projects in the Riau island (Hill, 1996). Salim provided a guarantee of priority with respect to regulatory controls and government permissions. The Singapore contributors took control of the design, physical development and management of the estate. This division of responsibilities put Singapore at the front of the marketing, to exploit its links to foreign MNCs in Singapore, and its reputation for service reliability and efficiency.

Batam had been the subject of possible joint Singapore-Indonesia investment projects since Indonesia had started to promote Batam's economic development in the 1970s. It took until the late 1980s for mutual agreement to be rendered at a time when Singapore's priority was additional production space and Indonesia was prepared to extend foreign investment concessions to kick start Batam's development (Perry, 1991; Yeoh et al., 1991). Foreign companies in Batam were exempted from the need to devolve a share of ownership to Indonesian partners, and the island's duty free status was amended to facilitate a proportion of output to be exported to other parts of Indonesia. Investment risks were reduced by allowing foreign companies to manage industrial estates, providing the opportunity for the Singapore government-linked companies to set up the joint venture to develop and manage BIP.

Singapore's vision of the role of Batam differed from the Indonesian ambition to create a diversified modern metropolis comparable to Singapore. As reflected in the design of BIP, Singapore's economic planners envisaged Batam as a relocation point for low value assembly activity (Liew, 1990). However, after Indonesia's own efforts to promote Batam had brought few results, there was a willingness to compromise development objectives, especially as BIP promised to lever other investment under the larger growth triangle initiative for which it became the key flagship project (Perry, 1991; Yeoh, 1993; Peachy et al., 1998).

BIP, the eighth industrial estate to be authorised by the Batam Industrial Development Authority, was the first to bring significant industrial activity to Batam. The first tenants arrived in 1991, mainly branches of American, European and Japanese multinationals already operating in Singapore including AT&T, Philips, Sumitomo, Smith Corona, Seagate, Sanyo and Thomson (Yeoh et al., 1992). The provision of ready built factories for lease was an asset, allowing quick occupation and minimal commitment. As well, the Singapore Economic Development Board (SEDB) was active in encouraging leading MNCs in Singapore to use the Park. These companies had much to gain from cooperation with the EDB because taxation concessions in Singapore are allocated on a case by case basis and companies perceive advantage in being supportive of government programs (Perry, 1995).

By June 2002, there were 88 companies and 66,000 workers in the Park (Table 1A). Table 1B shows the tenant profile. The initial area reserved for the park (500 hectares) has been fully committed. An industrial township has successfully been developed, but the limitations that have also emerged need attention:

a) The scale and character of development have not influenced the restructuring of the Singapore economy nor proven to be as attractive to local companies and foreign MNCs as intended. The initial promotion of BIP had talked about it making a significant contribution to the upgrading of the Singapore economy by managing the outflow of MNC investment and stimulating Singapore's role as a regional headquarters. In reality, however, it was the Japanese who were more positive towards the concept, illustrated by the fact that the Park has since become a Japanese electronics manufacturing enclave. In June 2002, 42 of the tenants were Japanese companies with Singapore the next largest concentration (24), while Europe (15) and the USA (7) has a comparatively low presence. This nationality profile has been pronounced from the outset. Batam has filled a niche for the development of Japanese production networks in Southeast Asia (Hatch and Yamamura, 1996). The vulnerability to a withdrawal of Japanese investments, and the limited linkages to the Singapore economy are issues to mull over.

b) The development strategy envisaged a self-contained project with minimal dependency on the surrounding environment. In practice, the island's reputation as a boom economy has overwhelmed Batam. Almost half of the island's population, which has more than tripled since 1990, are new migrants living in illegal squatter housing, and 50,000 illegal houses are reportedly scattered throughout the island (The Straits Times, October 6, 2001). Attracted by their lower cost and avoidance of accommodation responsibilities, around half of BIP's labor force now resides outside the Park. These developments have introduced to the Park the tensions and social problems of squatter settlements. With these perceived problems and related industrial relations issues, new investments have stalled, and expansion plans of BIP's existing tenants put on hold. There is a challenge to maintain, or even increase, the investment value of BIP, without a shift of resources to meet the needs of the local community.

c) The Park's competitiveness has been eroded with the mushrooming of 13 other industrial parks, some within close proximity. A few of the competitor parks, backed by prominent Indonesian politicians, are rapidly developing to match BIP standards. Panbil Industrial Park, for instance, is located directly opposite BIP, and offers similar factories at competitive rentals. The premium placed on the Park's one-stop support service, and self-sufficient operating environment, is increasingly called into question.

Bintan Industrial Estate

Bintan Island is located 50km southeast of Singapore. The willingness of Indonesian authorities to facilitate the BIE project was one of the positive spin-offs of BIP for Singapore. Singapore government agencies were able to secure a coastal site for the BIE project, and to reserve a 4000-hectare site to be developed over a decade or more. Another indicator was the duty free status accorded to BIE, which was not extended to Bintan as a whole. BIE has an on-site integrated terminal to handle customs, immigration, quarantine and port clearance to expedite the shipment of raw materials and finished goods. More interestingly, while BIE is subject to provincial administration, it had been allocated staff from regulatory agencies to facilitate the formulaic one-stop approval process. Low land prices has enabled factory rents to be 25 to 50 per cent lower than BIP, and BIE's wage levels are also below Batam.

BIE's initial marketing targeted textiles and garments, furniture and other wood processing activities. Of the first 11 tenants that commenced operations, eight were garment manufacturers. The attractiveness of the estate to garment manufacturers was enhanced by access to Singapore's export quota under the multi-fibre agreement. Access to this quota has since been lost, and a change in marketing emphasis was required as wood processing never took off. Electronics has been added to the marketing priorities since September 1997. Subsequently, there has been a modest growth in investment, from 23 tenants in 1996, to a total of 34 operating and committed occupants claimed in January 1999. Of these, 70 percent are Singapore companies (mostly garment manufacturers) with 6 Japanese electronics firms accounting for over half the remaining occupants.

Of the 4,000 hectares available to BIE, 110 hectares had been developed at a cost of US$113 million. Compared with the ultimate workforce originally expected to be in the order of 130,000, by 1997 there were only 4,500 employed. In 1997, revised employment projections targeted a workforce of 12,000 by 2001. This would be around 20 percent of the employment achieved in BIP over a similar time scale, despite BIE being earmarked for labor-intensive industries. The project was subsequently downsized to a 500-hectare development. As at June 2002, BIE has 35 tenants and 13,000 workers (Table 2A). The tenant profile is shown in Table 2B.

Even with the increase in occupancy, the intention to develop a 500-hectare township appears unrealistic, with limited value-add towards Singapore's enterprise initiative. To begin with, the BIE project was ill-timed. BIE was launched at the same time as Singapore's other flagship projects in China and Vietnam. By then, interest had already shifted to the perceived availability of other lucrative options in these emerging markets, and the added attractions of their large domestic markets. BIE is thus faced with a 'chicken and egg' dilemma. Without the benefits of increased occupancy, it is difficult to attract investors, due to the limited supporting environment, high freight charges and difficulties in recruiting qualified labor, but where without more occupants it is hard to improve the operating environment. For the present, BIE is neither a significant contributor to the restructuring of the Singapore economy, or a commercially viable project (Perry and Yeoh, 2000).

Land ownership has become a major contentious issue, as land acquired by the Salim Group for joint venture projects such as BIE has come under question by regional legislators and local farmers. The financial disputes with local villagers and mob protests in Bintan have introduced further uncertainties into the long-term viability of BIE. In January 2000, an estimated 1000 villagers stormed into BIE and shut down its power generators. Although the Indonesian authorities intervened, several companies had already threatened to pull out their investments. In February 2000, the Salim Group was prosecuted for alleged illegal land appropriation. The irony is that these developments occurred just a month after

Singapore's Prime Minister Goh Chok Tong unveiled a S$1.2 billion assistance package (including a S$400 million regionalization finance scheme) for Indonesia, while leading a 60-member business delegation to Jakarta to explore investment opportunities in Indonesia[4].

BIP and BIE Revisited …

Ownership changes at BIP and BIE have brought about uncertainties. The Parks' privileged access to senior politicians and policy-makers in Indonesia has been diminished with the `change' of ownership in BIP (and BIE). The Indonesian Bank Restructuring Agency has reportedly offered to sell the Salim Group's stakes in all the Riau projects – estimated to be worth S$500 million – in a packaged deal (The Business Times, August 28, 2001). Further restructuring have taken place, with the three main stakeholders now being SCI, Ascendas (a JTC-linked company) and the Indonesian government. The Parks' reputation as investment enclaves has also not been left unscathed by political developments in the aftermath of the Asian financial crisis, the September 11 attacks in the United States and more recently, the Bali bomb blasts. In addition, the negative press reports on active terrorist cells within the region serve little to quell potential investors' lack of confidence or innate risk-aversion attitudes. New investment commitments to BIP have taken a dive, and investments in BIE have trickled to a halt. While it is too early to assess the financial repercussions, the Parks could do without the added uncertainties.

Regional autonomy laws (nos. 22 and 25 of 1999), introduced by the Habibie government, have added longer-term uncertainties to the Parks' operating environment. Officially implemented in 2001, foreign companies, including Singapore GLCs, now have to deal with the provincial and sub-provincial

[4] More recently, security at BIE has been heightened following the Bali bomb blasts. An inter-ministerial ceremony (scheduled for October 18, 2002) to mark the expansion of BIE was cancelled, while prospective tenants have reportedly postponed their site visits `indefinitely'.

(district) governments much more intensively than they did during the Soeharto era. Our on-site interviews[5] with executives and tenants, in both BIP and BIE, have alluded to this new development. Preliminary evidence points to a more complex regulatory environment for foreign companies.

In perspective, the development of the two industrial parks has contributed to the economic development of the Riau islands. These two flagship projects, with Singapore management and marketing, brought in new standards to the otherwise risky business environment there. This is evidenced by the redistribution manufacturing activities from Singapore into BIP and BIE. However, recent political and social upheavals have significantly undermined the efforts put in. The ongoing challenges confronting these Parks cannot be met by the efforts of only one partner.

THE CHINESE PARKS

In physical design, the two main industrial townships in China, at Suzhou and Wuxi, follow the pattern of BIP and BIE. The administrative context is, however, different. In BIP and BIE, the Indonesian partner was a private company whereas in China, the Singapore investors work with government agencies. The complexity of the administrative and regularity environment in China was also decidedly different. In Indonesia's political system of the early 1990s, the endorsement from senior politicians provided a degree of administrative certainty further strengthened by the political patronage of the main commercial partner in the projects. In China, the projects had to contend with multiple tiers of government administration and the competition between these tiers during a time of economic and political change. The motivation for the projects in China was also more diffused than in the case of Indonesia. In the latter case, the primarily concern had been to promote the restructuring of the Singapore economy, and exploit the complementarity of neighbouring economies (Yeoh et al., 1991; Perry, 1991; Toh and Low, 1993; Kumar and Siddique, 1994; Peachey et al., 1998; Grundy-Warr, et al.,

[5] Interviews in BIP and BIE were conducted in July and September 2002, respectively.

1999). The Suzhou project has had a political objective to demonstrate the strength of the 'Singapore development model' and its transferability to other Asian environments. Wuxi has narrower objectives based on the perception that Singapore agencies have an advantage in real estate development in China because of their links to western business, and access to Chinese business and political networks.

China-Singapore Suzhou Industrial Park

CS-SIP was Singapore's most controversial overseas township project and China's largest joint venture measured both in its total estimated project cost (US$20 billion) and land size (70,000 hectares). CS-SIP was conceived as a balanced community, home to a workforce of 360,000 and a total population of 600,000. As well as providing the full range of urban facilities for its resident population of workers, managers, administrators, expatriates and their families, it was also to be the new commercial centre for the existing city of Suzhou as well as a commercial centre serving the surrounding area. The ambition for CS-SIP reflected the goal of developing a township on a scale to test in China the effectiveness of the Singapore approach to social and economic development. This goal was encouraged by China's former premier Deng Xiaoping who, it has been said, regarded Singapore as 'a capitalist version of the communist dream'. In 1992, Deng promoted the idea of learning from Singapore as a way of avoiding the environment problems and social disorder that concerned him in southern China. As Deng put it:

> "Singapore enjoys good social order and is well managed. We could tap on their expertise and learn *how to manage better than them* (our emphasis)." – cited in (Kraar, 1996:4).

Taking these remarks as an invitation, Singapore's leaders offered to bring their know-how into China, if they could get a free hand to demonstrate it. Singapore's Senior Minister Lee Kuan Yew personally took charge of the formalization of the idea into the development of CS-SIP (Cartier, 1995). The development of CS-SIP was sanctioned by China's State Council on February 11, 1994 and three landmark agreements were signed in Beijing on February 26, 1994. The Park was formally launched on May 12, 1994.

The Singapore model, as applied to CS-SIP, encompasses methods for attracting and developing the commitment of foreign companies[6]. It also involves the delivery of social and welfare services to support an efficient and co-operative workforce and a work-orientated community. Attributes thought to attain these conditions include welfare provision (encompassing housing, medical and retirement needs) self-funded through compulsory employee and employer contributions, high quality infrastructure, strict pollution control, service reliability, 'one stop' non-corrupt decision-making, minimum entry or performance regulation and transparent financial charges. To bring these attributes to CS-SIP required a large-scale project to facilitate institutional innovation, autonomy from aspects of local government control and investment in administrative practice or, as it has become known, 'software development' (SIPAC, 1998).

CS-SIP was developed by a joint venture between a consortium of Chinese and Singapore-based investors known as the China-Singapore Suzhou Industrial Park Development Company (CSSD). The Chinese consortium had a 35 percent stake in CSSD shared amongst 12 organizations, mainly national state-owned enterprises together with Suzhou city and Jiangsu province (in which Suzhou is located) investment companies. The Singapore consortium had a 65 percent stake in CSSD shared amongst 24 organizations, mainly Singapore government-linked agencies and companies, including EDB Investment and JTC International, as well as two organizations that also participated in other parks - SembCorp Industries and the Salim Group (through a subsidiary, KMP China Investments). The two consortia retain their separate identity and responsibilities with projects taken up by participants according to their expertise and agreed roles. The work of CSSD was overseen by a specially created

[6] The then Suzhou Mayor, Zhang Xin Sheng, readily acknowledges that Suzhou is borrowing Singapore's credibility with multinationals, and it's management skills "so that a latecomer can catch up" (cited in Kraar, 1996:4).

local authority, the Suzhou Industrial Park Administrative Committee (SIPAC). Inter-governmental interest remained through a joint steering council co-chaired China's Vice-premier Li Lanqing and Singapore's Deputy Prime Minister Lee Hsien Loong.

CS-SIP was launched amidst great fanfare. Singapore's optimism about the project was encouraged by a series of advantages secured at the outset of the project. CS-SIP is located in Jiangsu province, which was selected in the early 1990s for accelerated economic development to offset the concentration of foreign investment in the SEZs (Yang, 1997). The township was afforded preferential policies, comparable to those in China's Special Economic Zones. Its unique status as an inter-governmental development initiative was believed to add security against the political risks of investing in China. From Singapore's perspective, this `mutual' sharing of ideas, knowledge and know-how was also perceived as a stepping stone for Singapore business to venture into the rapidly developing and immense China market.

Since the inception of CS-SIP, limits to each of the advantages obtained have become apparent. The significance of the inter-governmental endorsement of the project has been reduced by the influence that municipal and provincial administrators have over the project and their interest in competing projects. The special status of CS-SIP was reflected in the creation of a new local government authority (SIPAC) to administer the development, but the impact of the investment incentives allocated to SIPAC were diluted by their replication amongst other development zones in the province. Moreover, a concession granted to SIPAC enabling it to retain all development revenue during its first ten years has been a reason for local administrators to favour projects providing revenue to the municipality. For the Suzhou municipal government, profit-making was the top priority[7].

[7] This was largely an outcome of `fiscal politics' in an era of decentralization and local autonomy (Hsing, 1998).

From Singapore's perspective, the government had staked its reputation on the project. Profitability, though important, was not the most important concern. Rather, it was the credibility of the `Singapore-way' of township development and management which had to be guarded at all cost. The subtle, yet crucial difference, in objectives was translated into perception differences, protracted conflicts and project delays. Singapore's frustration has been greatest over the limited progress of housing and commercial projects. By end-1998, there were only around 1,000 residents in the township and a total workforce of 6,000. The slow rate of development represented a financial loss to the Singapore consortium, which has principally funded the initial land development and infrastructure facilities. As well, there were costs faced by Singaporean investors in executive housing, retail and other services that were encouraged to set up in the township in expectations of the project's rapid development. Singaporean investors reportedly lost US$77 million over seven years of operations.

This competition was heightened by CS-SIP being the second industrial zone to open for foreign investment within the Suzhou municipality. The Suzhou New District (SND) commenced in 1989, long before the proposal to establish CS-SIP, and it continues to be favoured for commercial and housing development as well as investments by foreign investors (The Straits Times, May 14, 1999). The SND is also a project affiliated to the Suzhou municipal government, and given the same official status as CS-SIP by local authorities, despite the rhetoric from Beijing to Jiangsu officials and Suzhou's mayor that CS-SIP is the `priority of all priorities'. In addition, the Suzhou authorities were exploiting Singapore's marketing efforts and re-directing investors to SND.[8]

There had also been difficulty in retaining the software advantages within CS-SIP. Administrative distinctiveness has been weakened by the diffusion of practices to other industrial zones. Thus, the 'one

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[8] For instance, it was reported that Suzhou's vice-mayor, Wang Jinhua, told potential investors in Germany in 1997 that they should invest directly in China without Singapore's help, and that all of Jiangsu's resources would go to SND, not CS-SIP (The Straits Times, January 15, 1998). For more examples of how local authorities circumvent rules and regulations imposed by the central government, see Hsing (1998).

-stop service' has been replicated in the Suzhou New District, which now claims to match CS-SIP's capacity for rapid decision making, including the ability to process business licence applications in 10 working days. Moreover, the province's wealth means that it has comparatively high standards of infrastructure and environmental control. This reduces the scope for CS-SIP to differentiate itself through its physical design and management as was achieved in Indonesia.

By mid-1998, it was claimed that projects with a total potential value of US$3.4 billion had been attracted, including 88 manufacturing operations with an average project value of US$30 million. While the value of manufacturing investment had been close to target, the overall rate of progress of the project had not met Singapore's expectations especially with respect to residential and commercial development. The extent of Singapore's disappointment was indicated by Senior Minister Lee Kuan Yew's public questioning of the commitment of the Chinese partners to the project[9] (The Straits Times, 5 December 1997).

The 1997 Asian financial crisis provided a context where withdrawal has become easier to justify, and in June 1999, it was announced that Singapore would reduce its involvement in the project and transfer majority ownership of CSSD to the Chinese consortium from 2001 (The Straits Times, June 30, 1999). By then, CS-SIP had attracted 133 projects. More than 91 international firms had started operations, and 14,000 jobs created. These investments have provided a basis from which the township could take off. In January 2001, the Singapore consortium reduced its stake in CS-SIP to 35%. Official estimates stated that Singapore's investment in CS-SIP amounted to only US$147 million (The Straits Times, August 4, 1999); the political cost in the suggestion that Singapore was naive in perceiving that it would obtain a special status in China, may well be more significant (The Economist, January 3, 1998).

[9] The tussle between the central and provincial governments over CS-SIP is best captured in the comments of Singapore's Senior Minister that "[w] hen dealing with the Chinese bureaucracy at the middle and local levels, one needs not only patience but also determination, so as not to deflect from an objective both sides have agreed upon at the Beijing level" (cited in The Straits Times, April 7, 1998).

Interestingly, investments began to pour in thereafter, with profits of US$7.5 million expected in 2001, the first time since the Park's inception (The Straits Times, January 19, 2001). CSSD recorded a profit of US$7.5 million at year end. By June 2001, the Park had attracted 193 investment projects worth over US$5.1 billion. Growth continues into 2002, with contracted investments reaching US $13.2 billion, with 3 investment projects surpassing US$1 billion each. The Park has since become a foreign investment hub linked to Fortune 500 companies. CSSD has plans to be listed by 2004 as well as to build an international standards high-tech park. Plans are in the pipeline for the completion of the second and third phase of the transportation network and other infrastructure developments within the Park.

CS-SIP has experienced greater development challenges than anticipated at the project's outset, but the value of industrial investment attracted has provided a basis from which the township can grow. The profile of investment indicates that CS-SIP has attracted comparatively high value projects, and that it has attracted a relatively high proportion of American and European investors. This suggests that the Singapore involvement has carried some weight with those investors that are most at risk from administrative uncertainties, but it is against the larger diplomatic objectives pursued by the Singapore government that CS-SIP will ultimately be judged..

Wuxi Singapore Industrial Park

WSIP was instigated purely as a real estate development with the potential to cover up to 1000 hectares also making it a smaller project than CS-SIP. The Park is located in the Jiangsu Province, 130 km away from Shanghai and 80 km northwest of Suzhou. Wuxi has an urban population of 4.3 million population, with a per capita income of around US$2000 which is one of the highest amongst Chinese cities. The Park was been designated a national high technology development zone as part of the Torch Program initiated in 1988. This status defines WSIP's focus on electronics and electrical, computer and computer peripherals, control systems and instrumentation, precision engineering, telecommunications components, medical and healthcare products, automotive and aerospace components, and supporting industries.

The basic taxation incentives available to foreign investors match those in CS-SIP, including the possibility of a total of 5 years of corporate tax exemption followed by 5 years of reduced tax. WSIP was designed for wholly foreign-owned investment and, similar to CS-SIP, there has been an emphasis on instigating a 'one-stop' administrative service to manage approvals and documentation in setting up a new enterprise. The park is situated on the edge of Wuxi's urban district, but has been designed with its own service facilities, dormitory accommodation and executive village.

WSIP markets itself based on its strategic location, quality service in management, as well as first-rate infrastructure, telecommunications and transportation networks. WSIP started as 70 percent Singapore-owned joint venture with the remaining 30 percent taken up by Wuxi's municipal government. The Singapore consortium is led by SembCorp Industries (SCI), with the other principal investors being Temasek Holdings (the Singapore government's main investment holding company) and the Salim/KMP Group. Wuxi municipal authority has interests in other industrial estates[10], but Singapore officials say these are not direct competitors as only WSIP is designed exclusively for wholly foreign-owned ventures. Moreover, in contrast to Suzhou, Wuxi municipality is the sole Chinese partner involved in the project compared with the multiple parties involved in CS-SIP. Lower land costs are a further advantage over CS-SIP. And, unlike CS-SIP, WSIP was negotiated directly with the Wuxi

[10] For example, the One Zone-Five Parks-One College initiative (which includes the Wuxi Software Park, Science & Technology Industrial Park, Machinery & Electronics Industrial Park, Huayang Science & Technology Park, and Wuxi Information Technology College) as well as Wuxi University Science & Technology Park.

authorities[11], and this direct involvement has minimized the polarization between the higher echelons of Chinese government and the provincial government.

Development of WSIP commenced in 1994, and the administration building officially opened in 1996. WSIP's key investors are mainly MNCs with operations in Singapore, including Siemens Components, Seagate Technology, Sumitomo Electric and Matsushita Refrigeration. The assistance from Singapore's Economic Development Board in bringing the first tenants to the Park is acknowledged. Exports from WSIP were valued at US$1 billion in 2001, and employment stood at 16,000. The total investment attracted has, nonetheless, been below that attracted to CS-SIP[12]. WSIP's investment profile is relatively low value-added, with a large share of Asian investments (Table 3).

From a total of US$450 million investment committed in 1996 and 6,000 jobs at the end of 1996, investor interest has slowed. Immediate prospects for growth are focused on the possible expansion of the initial investors. Higher taxation and duties on imported capital equipment, introduced in 1996, have been a challenge to maintaining investor interest in the types of technology-intensive activities that the Park is designed for. Concessions in this taxation regime were introduced in 1998, but this benefit has been overtaken by the uncertainties arising from Asia's economic crisis.

WSIP has been developed to its second phase, covering an area of 235 hectares. However, WSIP has yet to attain to achieve economic viability. The Park has been operating below its break-even point, chalking up losses of S$3.8 million and S$4.3 million in 1998 and 1999, respectively, and only

[11] A Singapore government source attributes the difficulties to the fact that CS-SIP is essentially a central government project: "Suhou is very much a Beijing-Singapore affair, so the co-operation between Singapore and the municipality has not been as smooth as in Wuxi, which is a project between Singapore Technologies and the municipality."

[12] CS-SIP's government connections have tilted the scale for the large companies. Korea's Samsung, for example, had considered setting up shop in Wuxi, which has the most developed semi-conductor industry in China, but opted for CS-SIP as "Wuxi was not backed as strongly by the two governments" (cited in Asia Week, June 21, 1996).

managed to trim its losses to S$2.8 million in 2000. In mid-2002, the SCI-led consortium signed an agreement to pare its stake in the loss-making WSIP. The transfer of shareholding and management control would, according SCI officials, result in better "alignment of interests and improve the operating efficiency of the park" (The Straits Times, May 14, 2002). SCI has provided for an extraordinary loss of S$48.3 million for its loans to the Park, and will reduce its stake from 70 percent to 49 percent from 2003. SCI also expressed its ultimate interest in divesting its entire interest in WSIP, which it considers to be its `non-core business'.

Interestingly, and not unlike CS-SIP, the Chinese partners have recently announced plans to develop the third phase of the project, which will double the Park's size. It is envisaged that, by granting the Chinese a larger interest in WSIP, the Park's performance will turn around in 2002. Suffice to say, even though WSIP has not experienced serious administrative difficulties with the local bureaucracy, the handing over to Chinese management mirrors the outcome of CS-SIP.

Suzhou and Wuxi Considered …

Singapore has provided valuable skills and expertise in the construction, management, marketing and operating of the industrial parks in CS-SIP and WSIP. Unlike Indonesia, there is no political or social instability which hindered the success of the parks. However, problems are caused by the lack of chemistry at the local level with the local administrators. Despite this, the two parks have successfully acquired much expertise, and the parks retained the Singapore styled efficiency image. Once the Singapore handed over the ownership of CS-SIP over to the Chinese partners, the major hindrance to the success of the parks, i.e. the difference in values between the two partners, was removed and the park was able to churn out a healthy profit. This reflected the effectiveness of the Singapore-styled setup and management of the parks, albeit ironically, since it surfaced only after the Singapore partners handed over the ownership of the park.

VIETNAM-SINGAPORE INDUSTRIAL PARK

The Vietnam-Singapore Industrial Park (VSIP) is Singapore's flagship investment project in Vietnam. The plan was first mooted in March 1994 by the then Vietnamese Prime Minister, Vo Van Kiet, and Singapore's Prime Minister, Goh Chok Tong. The lessons learned from the Chinese parks are put to play in VSIP. To prevent the difficulties encountered in the Suzhou `experiment', greater care has been taken to foster stronger collaboration with local authorities. A consortium led by Singapore's SembCorp Industries[13], and Becamex, a state-owned enterprise of the Binh Duong Province People's Committee, was formed to spearhead the project. Becamex holds a 49 percent stake in the project. In addition, a Management Board[14] was set up, chaired by the Vice Chairman of the Binh Duong Province People's Committee to ensure greater participation by the local authorities, and to pre-empt VSIP from being perceived as a partnership forced upon by the central government. Despite the comparatively heavy local involvement in the operations in VSIP, as compared to the Indonesian and Chinese parks, the physical design of the park followed the original concept, and the operation, such as customer relations and marketing, are handled by the Singapore subsidiary, SembParks Management.

The 1,000-hectare Park is located in Binh Duong Province, 17 km north of Ho Chi Minh city. It is within a 40-minute drive from the international airport and seaports. The Singapore-styled industrial park concept was replicated in VSIP. A self-contained park with prepared land plots, and ready-built factories, as well as Singapore-style management expertise and infrastructure support, VSIP provides a `hassle-free', one-stop service to it tenants. VSIP boasts an on-site customs unit, which allows customs procedures and documentation to be done within the Park, as well as customs inspections within

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[13] Other members of the consortium include Temasek Holdings, JTC International, UOL Overseas Investments, Salim's KMP Group, LKN Construction, and MC Development Asia.

[14] The Board, with representatives from the ministries of Trade, Finance and Interior, as well as the General Customs Department oversees the issue of investment licenses, import/export permits, and construction permits.

tenant's factories. A working population of 200,000 is available within a 15-km radius from the Park, ensuring a ready pool of low-cost labor.

Even before the launch of VSIP in May 1995, a total of 13 international companies with investments worth US$80 million reportedly indicated their interest in the Park (Asian Review, 1996). The role of Singapore's EDB was acknowledged. By end-1998, VSIP attracted US$370 million in investments and 27 manufacturing tenants, and despite the difficult environment post-1997, cumulative investment commitments topped US$400 million from 33 companies in 1999. To-date, the Park has attracted over US$500 million in investments from 64 tenants, of which 53 are operating tenants. Most of the tenants are from Singapore (15), Japan (13), and Taiwan (12), reflecting the importance of Asian MNCs in the Park's tenant mix. The sector mix range from textiles, to electronics and pharmaceuticals (Table 4). This diverse mix of tenants indicates that VSIP, unlike the Indonesian parks, does not target specific industries. VSIP has a list of `priority' industries, which adheres closely to the official list of preferred industries[15].

The S$9.5 million Vietnam-Singapore Technical Training Centre (VSTTC) was established in 1998. Japanese instruments maker, Mitutoyo, and Festo, a German company contributed S$300,000 worth of equipment to the centre. This three-way project between the Singapore and Vietnam governments and VSIP rolled out its first batch of graduates in mechanical and electrical maintenance in 1999. More than 90 percent of the graduates find employment in VSIP.

Despite initial optimism over VSIP, profits have yet to be realised. This is largely due to competition from several neighboring industrial parks, some of which are located next to VSIP. These newer, albeit smaller, industrial parks may not match the infrastructure and facilities provided by VSIP, but they

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[15] Details are given in Circular No. 8, List of Encouraged, Limited and Prohibited Industries in Export Processing Zones and High-Technology Industrial Zones, issued on July 29, 1997.

compete on price, charging only a fraction of VSIP's `packaged' fees. The Park initially relied on its excellent infrastructural facilities and support services to hold on to its tenants. However, tight market conditions have forced some VSIP tenants to seek cheaper alternatives. Industrial-park developers from Japan, Taiwan and Korea, experienced and street-savvy, have given VSIP cause for concern.

The 'special' support from the local authorities also proved to be less significant than initially thought. Improvements on infrastructural projects have translated into higher toll charges and miscellaneous fees, all of which, added to the tenants' operating costs. In addition, despite the keen interest from the Vietnamese in welcoming Singapore investments, and transfers of technology and skills, some tensions have risen owing to Singapore's 'control' and management of VSIP. Anecdotal evidence[16] suggests that VSIP may face similar problems as in CS-SIP, albeit at a different degree.

On a broader front, bureaucratic red-tape and corruption remain endemic. There is some way to go in the transition from mainly state-run to privately managed conditions. Transparency International, a global counter-corruption watchdog, ranks Vietnam as the second most corrupt country in South-East Asia (after Indonesia). The Vietnamese government itself recently estimated that light-fingered bureaucrats creamed off at least 20% of the infrastructure spending (The Economist, September 14, 2002). On a positive note, the government has reportedly taken measures[17] to reduce avenues for corruption, and the 2001 Business Risk Consultancy survey reveals that expatriates feels more comfortable in the business environment as compared to the previous year.

The mix of `targeted' industries, and the style of park management and operations, indicate that Singapore intends for the Vietnamese partners to have more control. Unlike BIP or BIE, where the

[16] On-site interviews with VSIP executives and tenants were conducted in August 2002.
[17] Examples include the elimination of licensing fees on foreign representative offices in 1999, and towards the end of 2001, foreign firms no longer need to hire through local agencies.

focus on electronics and other light industries complements Singapore's economic development, VSIP holds no such objective. This, together with the training centre VSTTC, indicate that Singapore's aim is to aid its less developed ASEAN partner develop its economy by enhancing the local business environment, improving its skills and infrastructure, to complement its advantage of abundant land and labor. However, recent global events, together with intense market competition and the inherent problems of corruption, work in tandem to hinder the effectiveness of Singapore's strategy.

CONCLUSION

Precise objectives for the regionalization program, against which its progress might be judged, are not released, but it is clear that the starting ambition was large. Industrial estates were started in China, India, Indonesia, Philippines, Thailand and Vietnam with possible projects identified in Cambodia and Burma (Tan, 1995; Kwok, 1996). In 1995, it was announced that up to 30 percent of Singapore's reserves would be gradually invested in regional economies to build up the city-state's external economy (SEDB, 1995a:3), and to participate in the region's growth. Notwithstanding the progress thus far (Table 5), this ambition is unlikely to be realised.

In the case of Indonesia, the raison d'etre for the projects seems to have overestimated the attractiveness of low cost production environments for multinational companies (Yeoh et al., 2000). BIP has increasingly become a Japanese investment enclave, while Bintan has struggled to gain investment momentum. The Vietnamese experience is increasingly similar to that of BIP's, where the economics of competition have called into question the premium attached to Singapore's industrial-investment enclaves. Recent developments suggest that VSIP may go the way of the Suzhou-Wuxi projects.

In the case of China, the projects were expected to benefit from the ability of Singapore's Chinese elites to obtain a special status through their ethnic allegiance and dual connections to overseas Chinese and western business networks (Asian Review, 1996; Yeung, 1997). The Suzhou-Wuxi experience suggests that, while there is an interest in learning from Singapore, local officials wish to deal directly with foreign investors. This outcome accords with the assessment of observers that China tends increasingly not to view overseas Chinese as preferred investors, or joint venture partners (Harding, 1995; PERC, 1997).

For the projects in Indonesia and China, but less obvious in Vietnam, the reliance on personal ties rather than transparent contracts has had advantages and disadvantages. In the Indonesian projects, the reliance on the Salim Group has been necessary in the context of the Indonesian system of 'crony capitalism' fostered by then President Soeharto. The end of the Soeharto era, and pressure from the IMF and western governments for financial transparency, has not immediately severed Salim's political or commercial influence. Salim has been forced to commence a major restructuring to stem financial losses, and to search for new avenues of investment outside Indonesia (The Straits Times, April 24, 2001). A longer-term uncertainty remains, associated with the perceived weaknesses in the political leadership, the challenges in the administrative and regulatory environment, and the continued resentment of Chinese-owned businesses amongst segments of Indonesian *pribumi* community (Godement, 1998). The limits of ethnic affiliation for economic integration have been exposed in the China projects. Singapore's claims of a special ability to build connections with mainland China have overlooked the extent to which there are multiple competing groups within a common ethnic group. In the Suzhou-Wuxi experiment, the limits of relying on personal ties have been most immediately encountered, where inter-government endorsement at the top has proved insufficient to secure equal commitment in the lower tiers of government. The claims that Singapore's politicians have achieved a special 'guanxi' (relationship) with China appear misplaced. The cultural divide was nonchalantly pointed out by Suzhou's mayor:

"In our cooperation in the past five years, that we have an MOU to solve our problems is because of the cultural differences in the two countries, and the different understanding of the items in the documents …"

- Chen Deming (quoted in The Straits Times, June 30, 1999).

It is overly simplistic to imagine that ethnic commonality will bring political leverage, and with it, economic advantage.

In summary, the practical significance here is that Singapore's overseas parks tend to exist as investment enclaves within a disjointed economic and policy environment. They are linked to transnational investment networks, business elites and specific government commitments. The positive aspect of this is that the parks can be sites of investment privilege, in respect of their regulatory controls, infrastructure quality and status with public and private agencies. The weakness is that the privileges obtained are vulnerable to changes in political allegiance, and the infrastructure efficiency is at risk from the uncontrolled broader environment in which the parks are located. The experience of the `Singapore clones' in the Indonesia, China and Vietnam illustrate this.

On the regionalization strategy per se, an outright judgement of failure or success may not be appropriate, given their mixed economic and political objectives. Official commitment to the projects remains[18], as is the acceptance of an extended time horizon to meet targets. All the same, this study has shown that the initial optimism with which the regionalization initiative was unveiled has *not* been justified, that development assumptions have proved to be misplaced, and that Singapore's `vision' - to create an environment for enterprise – has been unfulfilled. The power of ideas, without cognizance of socio-political realities, has its limits.

[18] Source: Straits Times, July 2, 1999. Singapore's International Advisory Council has endorsed this policy directive, and negotiations are at an advanced stage to develop Singapore-styled industrial parks in Shanghai and Beijing.

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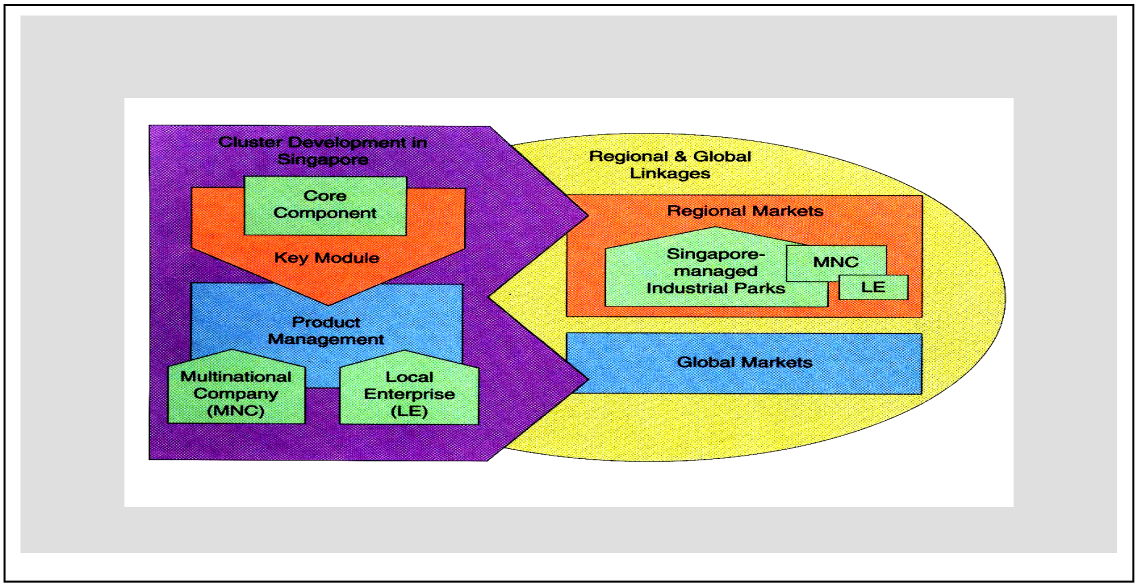
TABLES AND FIGURES

Figure 1: Transborder Cluster Development Illustrated



Source: Singapore Economic Development Board, *Singapore Unlimited*, 1995.

Table 1A: Batamindo Industrial Park - Operational Statistics (as at June 2002)

General Information	
Investment by Developer	US$ 470 million
Committed Tenants	88
Area Taken Up	500 hectares
Investment by Tenants	> US$1 billion
Export Value	> US$2 billion
No. of Employees	66,000

Tenants by Country of Origin			
Japan	42	Finland	1
Singapore	25	Sweden	1
USA	7	Denmark	1
Germany	3	Holland	1
France	2	Australia	2
Switzerland	2	Malaysia	1

Source: SembCorp Industries (http://www.sembcorp.com.sg).

Table 1B: Batamindo Industrial Park - Tenant Profile by Country of Origin & Sector

	Electronics	Electrical	Plastic Molding	Precision Parts	Packaging	Pharmaceuticals	Medical	Support	Others	*Total*
Japan	21	8	2	7	2	1	-	-	1	42
Singapore	8	-	7	3	3	-	-	1	3	25
USA	6	-	-	-	-	-	-	-	1	7
Europe	5	3	-	-	-	1	1	-	1	11
Other Asian Countries	-	-	1	-	1	1	-	-	-	3
Total	40	11	10	10	6	3	1	1	6	88

Source: Batamindo Industrial Park, *Tenant List*, June 2002.

Table 2A: Bintan Industrial Estate - Operational Statistics (as at June 2002)

General Information	
Investment by Developer Committed Tenants Area Taken Up Investment by Tenants Export Value No. of Employees	US$113 million 35 110 hectares > US$105 million > US$283 million 13,000

Workers' Profile			
Age Education Gender Marital Status	18 to 30 years Senior High (12 years of education) 80% Female; 20% Male Single	Religious Mix Labor Source	70% Muslims 22% Christians 8% Others Bintan, Batam, islands in the Riau province Java & Sumatra

Source: SembCorp Industries (http://www.sembcorp.com.sg).

Table 2B: Bintan Industrial Estate - Tenant Profile by Country of Origin & Sector

	Electronics	Garment	Supporting	Precision	Precast	Total
Singapore	5	13	3	1	1	23
Japan	6	-	-	-	-	6
USA	2	-	-	-	-	2
Others	2	1	1	-	-	4
Total	15	14	4	1	1	35

Source: Bintan Industrial Estate, *Tenants List,* June 2002.

Table 3: Wuxi-Singapore Industrial Park

General Information	
Scale of Development	500 hectares
Developed Area	235 hectares
Total Investment Value	US$ 872 million
Confirmed Tenants	55
Operating Tenants	45
Area Taken Up	115,842 m^2 + 88ha
Investment by Tenants	> US$1 billion
Export Value	US$1 billion
No. of Employees	15,000

Tenants by Country of Origin (% Distribution)			
Japan	28	Singapore	16
Europe	25	China	5
USA	24	Korea	2

Tenants by Industry (% Distribution)			
Precision parts	27	Chemical	7
Electronics	27	Mechanical & Light	4
Electrical	13	Logistics	2
Supporting	9	Software	2

Source: SembCorp Industries (http://www.sembcorp.com.sg).

Table 4: Vietnam-Singapore Industrial Park - Tenant Profile by Country of Origin & Sector

	Electronics	Food/Related	Light Industries	Pharmaceuticals/ Health Care	Consumer Goods	Logistics/ Supporting	Parts & Components	Building/ Specialty Materials	Total
Singapore	2	4	3	-	2	1	-	3	15
Japan	4	-	-	1	1	2	4	1	13
Taiwan	-	-	3	-	4	2	1	2	12
Malaysia	-	-	2	-	1	2	-	1	6
Other Asian Countries	-	1	3	2	-	1	1	-	8
US & Europe	1	1	2	3	1	1	-	1	10
Total	7	6	13	6	9	9	6	8	64

Source: SembParks Management Pte Ltd, *VSIP Tenants List*, August 2002.

Table 5: Summary Statistics of Singapore's Industrial Parks in Indonesia, China and Vietnam

Batamindo Industrial Park (as at June 2002)		Bintan Industrial Estate (as at June 2002)	
Scale of project	500 ha	Scale of project (Initial plan: 4000 ha)	500 ha
Investment commitment	US$470m	Investment commitment	US$113m
No. of investors	88	No. of investors	35
Total employment	66,000	Total employment	13,000

China-Singapore Suzhou Industrial Park (as at June 2001)		Wuxi-Singapore Industrial Park (as at May 2002)	
Scale of project	7,000 ha	Scale of project	1,000 ha
Investment commitment (updated, April 2002)	US$13bn	Investment commitment	US$600m
No. of investors	193	No. of investors	50
Total employment	25,000	Total employment	16,000

Vietnam-Singapore Industrial Park (as at December 2001)	
Scale of project	1,000 ha
Investment commitment	US$400m
No. of investors	64
Total employment	7,000

Sources: Singapore Economic Development Board (Annual Reports) & SembParks Management (Fact Sheets).