



The political economy of transnational corporations: a study of the regionalization of Singaporean firms

HENRY WAI-CHUNG YEUNG

Department of Geography, National University of Singapore, 10 Kent Ridge Crescent, Singapore, 119260, Singapore

ABSTRACT. This paper is concerned with the role of the state in promoting the cross-border operations of business firms from Singapore. It argues that the regionalization of Singaporean firms is essentially a state-led phenomenon because of two countervailing forces: (1) the heavy involvement of the state in the domestic economy; and (2) the relative lack of private entrepreneurship in Singapore. The paper begins with a theoretical review of the role of the state in the political economy of international business. A collusion-and-rivalry framework is established to analyze the case of Singapore. This is then followed by a brief analysis of the trends and patterns of outward foreign direct investment (FDI) and transnational corporations (TNCs) from Singapore over the past two decades. The penultimate section examines the nature and extent in which the 'entrepreneurial state' in Singapore has directly and indirectly involved in the regionalization of Singaporean TNCs. Three key issues emerge for detail analysis: (1) the historical underdevelopment of indigenous entrepreneurship; (2) the role of the state as entrepreneurs; and (3) the role of the state in changing the comparative advantage of regionalization through various incentive schemes. Some implications for theoretical development in international business studies and policy making in Singapore are offered in the concluding section. © 1998 Elsevier Science Ltd. All rights reserved

Introduction

The existing theorization of the relationships between nation states and transnational corporations (TNCs) is inadequate. Most international business studies have assumed a 'hollowed' state which serves merely as a political institution to regulate TNC activities. Its role in the globalization of national firms is deemed negative and counter-productive (see Vernon, 1977; Poynter, 1985; Eden and Potter, 1993). According to this view, TNCs exist to circumvent and take advantage of spatial differences in state regulations (Dicken, 1992a; Dunning, 1993a; UNCTAD, 1996). Similarly, most studies in international political economy have overlooked the role of firms (e.g. Gilpin, 1987; Young, 1996). The formation of global political regimes is conceptualized as a negotiated outcome of rivalry among superpowers. There is no role for firms in assisting the state to legitimize its political cause and to expand its hegemony beyond the domestic political platform.

This paper serves to fill this gap between 'state-less' international business studies and 'firm-less' studies in international political economy. As the world is moving into the new millennium, the dynamic relationships between states and firms have become a crucial problem in our understanding of the changing global economy (Stopford and Strange, 1991; Dunning, 1993b; Dicken, 1994; Strange, 1994; Hirst and Thompson, 1996; see also Amin, 1997). It is no longer sufficient just to examine whether the state is related to firm activities. We must also examine how some countries have become more successful through appropriate state involvement in the globalization of their firm activities. We need to situate globalization, a multi-dimensional process of global transformation, within the context of state-TNC relationships and explain the relationship of globalizing processes to specific places at different geographical scales and how these various scales interrelate.¹ Specifically, this paper aims to identify and discuss the role of the state in promoting the transnational operations of business firms from a small city-state—Singapore. The state in Singapore has always been hailed as the hallmark of 'developmental state' which plays an integral role in domestic economic development processes (Rodan, 1989; Tan, 1994; Huff, 1995). Some researchers have also examined the state's effort in attracting foreign TNCs to assist Singapore's industrialization program (Hughes and Sing, 1969; Yoshihara, 1976; Chia, 1985, 1993; Mirza, 1986; Ho, 1993, 1994; Perry, 1992, 1995). There is, however, relatively little attention paid to the role of the state in the regionalization of Singaporean firms (Kanai, 1993; Régnier, 1993).²

Singapore's regionalization effort was officially launched in early 1993. This paper argues that the state in Singapore has not only created favorable conditions for this regionalization effort, but also taken key initiatives to ensure its success. Since its separation from Malaysia and independence in 1965, the state has been relying on foreign capital to expedite the industrialization process. The island economy took off rapidly in the late 1960s throughout to the mid-1980s when global economic recession hit Singapore seriously. Singapore experienced its first negative growth in 1985. The state began to realize the vulnerability of the domestic economy and the absence of indigenous entrepreneurship as a result of the deep penetration of foreign capital and the spectacular presence of state-owned enterprises. Various state policies in the earlier phases of industrialization had created a situation in which private entrepreneurship was indirectly discouraged. In order to promote the growth of indigenous private companies, the state decided in early 1993 to build an external dimension to the domestic economy by encouraging both state-owned and private sector enterprises to regionalize their operations. In doing so, the state believed that the resultant economic structure would be much more resilient in times of recessions. An external economy would also reduce the dependence of Singapore on foreign capital and overseas markets for long-term economic survival. There is, however, an apparent contradiction in this regionalization drive because the real private entrepreneur is missing. The state has therefore assumed its role as an 'entrepreneur' in the regionalization process through its government-linked corporations and institutional support provided by state agencies and key politicians.

The paper is divided into three major sections. First, it examines the theoretical context of the political economy of TNCs and proposes a collusion-and-rivalry framework through which the case of Singapore's regionalization drive can be analyzed. Second, it offers a brief overview of the Singapore economy and its extent of transnationalization prior to

¹ I thank Peter Dicken for this important point.

² For other general studies of outward investment from Singapore, see Lim and Teoh (1986); Lee (1994); Lu and Zhu (1995); Pang (1995) and Tan (1995).

the regionalization drive in 1993. In the final section, the role of the state in promoting outward investment from Singapore is discussed. Three key issues emerge for a detail analysis: (1) the historical underdevelopment of indigenous entrepreneurship; (2) the role of the 'entrepreneurial state'; and (3) the role of the state in changing the comparative advantage of regionalization through various investment incentive schemes. Some implications for theoretical development in international business studies and policy making in Singapore are offered in the concluding section.

The political economy of transnational corporations: towards a synthesis

The role of the nation state has been a key problematic in the theorization of TNCs and their global operations. Two streams of theoretical literature can be identified in the study of the relationships between nation states and TNCs: (1) mainstream neoclassical economics and (2) radical political economy (Pitelis, 1991). There is, however, a general lack of consensus on the role of the nation state between these two schools of thought. This difference arises primarily because of their different conceptualization of the nature of the state and the economic system.

Mainstream *neoclassical economics* is concerned with explaining the existence of market failures and the subsequent emergence of firms or hierarchies (Williamson, 1975, 1985, 1996). Market failures exist when the market mechanism fails to perform its role as the 'invisible hand' in the allocation of resources according to certain tastes and preferences by both consumers and producers. The lack of a clear definition of property rights and the existence of imperfect information are examples of market failures. These market failures will increase the transaction costs of production when individual producers are engaged in a large number of arm's-length market transactions. Instead of relying on individual producers based on the market mechanism, producers may respond to higher transaction costs by internalizing production within the firm. Historically, market failure has been one of the key explanations of the emergence of national firms and the so-called 'managerial capitalism' (Chandler, 1977, 1990). When this process of internalization takes place across national boundaries, the firm is transformed from a nationally based firm to a transnational corporation (Buckley and Casson, 1976; Dunning, 1988, 1993a; Caves, 1996).

What then is the role of the nation state in this neoclassical explanation of the *raison d'être* of TNCs? Accordingly, the existence of the state is a potential source of market failure that compels national firms to enter international production. There are two ways through which the state can create market failures. First, the regulatory activities of the state epitomize market failures because these activities tend to prohibit the efficient allocation of resources through the market mechanism. For example, the industrial policy of a particular country may be biased against certain sectors while benefiting others. The existence of firms is partially explained by the regulatory activities of the nation state. Neoclassical economists argue that these market failures can be effectively 'corrected' by removing the regulatory power of the nation state and the establishment of the 'free market' principles. The deregulation of the marketplace throughout Europe in the 1980s is a case in point.

Second, the state can create market failures by participating directly in economic activities through public enterprises and other means of direct market interventions. Direct state interventions in the domestic economy are often seen as counter-productive because these activities do not coincide with the profit maximization objectives of private capitalist institutions. In the context of TNCs and their global operations, the activities of

nation states often pose as obstacles to their international production. A host country state may impose certain restrictions on the participation of foreign firms in the domestic economy. It may forbid foreign firms to invest in specific sectors and/or firms. It may also nationalize the domestic operations of some foreign firms to attain its nationalistic goals. For example, two giant British plantation enterprises in Malaysia, Guthrie and Sime Darby, were taken over by the Malaysian Government in the early 1970s because of growing nationalism (Jesudason, 1989). These direct state interventions may significantly shape the spatial strategies and outcome of TNC activities.

The radical *political economy perspective* conceptualizes the nation state as a capitalist institution whose existence ensures the reproduction of the capitalist mode of production (see also Sayer, 1995). The capital logic school of international political economy, for instance, views the state as a collaborator of capitalists (Palloix, 1975, 1977; Pitelis, 1991; Ietto-Gillies, 1992). The state is seen as possessing a certain degree of autonomy and helping *capital* to achieve its aims. This is possible because the internationalization of capital is a contradictory process in which there is a continuous tension between homogenization and differentiation (Picciotto, 1991). The emergence of TNCs is partially attributed to the existence of national protectionist regulations. Capital internationalizes itself via TNCs to accumulate further and fulfil its self-expansionary mission. On the one hand, capital, as represented by TNCs, needs a system of nation states to defend its global interests. Pitelis (1991:144) notes that 'all transnational capital, state functionaries and labor have some interest in the persistence of the nation state'. On the other hand, the growing internationalization of capital tends to increase the relative power of TNCs vis-a-vis nation states. By virtue of their global presence, TNCs want to take advantage of their global scanning capabilities in exploiting spatial differences that transcend national boundaries. The internationalization of capital further reproduces uneven development within countries (e.g. different regions) and between countries (e.g. different levels of development). Hymer (1970); Hymer (1972) has labelled this phenomenon 'the law of uneven development'. The inherent contradiction in the internationalization of capital process, according to Hymer, works against the objectives of nation states and results in continual instability and crises in the global economic system. This contradiction eventually leads to the collapse of capitalism.

This paper is informed by these two epistemologically and theoretically very different, and often contradictory, perspectives. Though it is almost impossible to synthesize these two fundamentally different perspectives, it is useful to point out some possible middle-grounds that serve as a framework for analyzing the role of the state in the regionalization of Singaporean firms. Pitelis (1991); Pitelis (1993) (also Dicken, 1992b) has proposed a *collusion-and-rivalry framework* that appears to be useful in analyzing the changing relationships between states and TNCs. Nation states are conceived as relatively autonomous institutions in the framework. The framework focuses on the relative advantages of different institutional arrangements in explaining the actual or potential coexistence of nation states and TNCs. Collusion here refers to the mutual dependence and induced cooperation between the state and the TNC. Rivalry, as opposed to conflict, exists because both states and TNCs share the common objective of raising the global surplus of capital by exploiting the benefits from the division of labor and team work. The framework suggests that the state-TNC relationship reflects their extent of collusion and rivalry. In other words, we would expect the state-TNC relationship to vary over time according to different configurations of their collusion and rivalry. The state-TNC relationship may also depend on their *domestic strength* (strong or weak states) and *geographical scales* (large or small states). These different types of state-TNC relationships within the collusion-rivalry framework are summarized in *Table 1*.

Table 1. A typology of state-TNC relationships within the collusion-rivalry framework

<i>Spatial scales</i>	<i>Domestic strength of state</i>	
	<i>Strong</i>	<i>Weak</i>
Large state	<ul style="list-style-type: none"> ● no collusion ● rivalry with foreign capital ● e.g. the United States 	<ul style="list-style-type: none"> ● collusion with domestic capital ● no rivalry ● e.g. Russia
Small state	<ul style="list-style-type: none"> ● collusion with domestic capital ● rivalry with foreign capital ● e.g. Singapore 	<ul style="list-style-type: none"> ● collusion with domestic and foreign capital ● no rivalry ● e.g. Spain

Because its existence depends on its legitimating ability in terms of the exploitation and creation of nationalism, a weak nation state needs capital (e.g. TNCs) to sustain growth and development through continuous investment and reproduction of capital. It may collude with domestic and foreign capital (represented by TNCs) to sustain national competitive advantage in the global economy (e.g. Singapore). If it fails to attract investment from capitalists, the weak state will face a legitimacy crisis which may culminate in the eventual decline of its power and hegemony. If it wins the support and cooperation of capitalists, the state may survive the erosion of its hegemonic power. Subject to its ability in resolving the legitimacy crisis, the state may regain its power and authority through an appropriate configuration of collusion and partnership with capitalist institutions (e.g. TNCs). Its competitive position vis-a-vis other states can also be enhanced through incorporating transnational capital in its national development. TNCs, on the other hand, need a system of nation states for them to exploit comparative difference in national labor and to play off nation states against each other (Pitelis, 1991).

Not all states, however, are capable of resolving their legitimization crisis through collusion with capital. The question of *spatial scales* is also important in the analysis of firm-state relationships (see *Table 1*). It is argued elsewhere in the small state literature that small states tend to be more corporatist and able to exercise control over their industrial policies and economic initiatives (e.g. Katzenstein, 1985). Applied to the collusion-and-rivalry framework, it can be postulated that smaller states, particularly those Asian 'developmental states', are more able to collude with capital to further economic development and national competitive strategies which in turn facilitate their political legitimization. The smaller spatial scale of their political territory enables them to contain the demands of different segments of the society and to exercise stronger political will in advancing their legitimization strategies. Individuals and institutions in these small states tend to be more realistic in their assessments of the constraints and vulnerability of small size. They concede more political power to the state, as a 'guardian', in protecting their collective interests. Large states (e.g. the US), however, may find it more difficult to collude with capital because of the complex bargaining processes and power relations among diverse interest groups and political parties. The situation is made more complicated if a large state colludes with foreign capital because this can be seen as selling out national interests to benefit a particular political party (e.g. the recent controversy over the financial contribution of some Indonesian businessmen to the Clinton Administration in the US). The recent influx of Japanese investment in the US, for instance, has led to heated debates about whether the state is losing its grasp of global forces (see Julius, 1990; Reich, 1991).

The ability of a large state in advancing certain economic objectives with the collusion of capital is therefore hampered by too much conflict and negotiation among domestic interest groups.

A strong state, on the other hand, is not obliged to collude with international capitalist institutions, particularly when transnational capital begins to threaten its autonomy and hegemony. Such a threat may arise from the demands of transnational capital to expose the conflicting class nature of the state which contributes to the diminishing legitimizing ability of the state. The state may also face increasing demands from interest groups from within the domestic economy. The potential for *rivalry* between the state and foreign TNCs becomes real. A strong state may perceive foreign TNCs as rivals to its grip on political power and legitimacy (see *Table 1*). It may limit the participation of foreign firms in state-sponsored collaborative ventures (Reich, 1991; Dicken, 1994). In both the US and Europe, the state has explicitly excluded foreign firms with operations in these economies from participating in high-tech collaboration projects. In the European Community, the British computer manufacturer, ICL, was expelled from the Joint European Submicron Silicon (JESSI) after it was acquired by Fujitsu, a Japanese TNC (see Angel, 1994 for the situation in the US). Alternatively, a strong state may impose stringent requirements on the local operations of foreign TNCs (Stopford and Strange, 1991). Such restrictions may result in very different spatial outcomes because of the inherent geographical bias in international production. For example, the Single European Market was inaugurated in 1992 to raise the international competitiveness of the European Community members in view of severe global competition. The potential sight of a 'Fortress Europe', nevertheless, led to major changes in the spatial strategies and outcomes of Japanese automobile manufacturers in Europe (Dicken, 1992a, 1992c). Britain and Spain stood to gain from this spatial re-organization of Japanese automobile production facilities in Europe (see also Lagendijk and van der Knaap, 1993, 1995).

Over time, even a strong state may face a legitimation crisis when its existing economic development strategies have run out of steam in an era of accelerated globalization and global competition. It must search for an alternative 'institutional fix' to reproduce and sustain the capital accumulation process before it is too late. For example, many of today's older industrialized countries are suffering from decline in their industrial competitiveness which has been translated into prolonged economic stagnation, massive unemployment and so on. They increasingly need an 'institutional fix' championed, for example, by Thatcherism in the UK and Reganism in the US. In Britain, such a 'fix' reflects an ongoing political struggle between labor interests and business demands. The pro-business Thatcher government decided to adopt a neoliberal stance towards economic liberalization and market privatization (see Peck and Tickell, 1994a, 1994b, 1995).

In other countries, the state may choose alternative development strategies to compete in the global economy. The Asian Newly Industrialized Economies (NIEs), for instance, have chosen to nurture their 'national champions' in order to secure a place in global competition (Wade, 1990; Henderson and Appelbaum, 1992; Fitzgerald, 1994; Yeung, 1994a; Brohman, 1996). After three decades of intensive industrialization effort, these Asian NIEs begin to experience the limits to growth and turn to the global economy as their hinterland for markets and sites of production. The state seeks partnership with domestic capital to extend the economy across national boundaries in order to legitimize further the role of a strong state in economic development. Through strategic industrial policies and selective involvement, the state provides such an institutional foundation for the globalization of national firms that 'a TNC's domestic environment remains fundamentally important to how it operates, notwithstanding the global extent of some

firms' operations' (Dicken, 1994: 117). Emerging TNCs have very much become a product of their local embeddedness in the institutional context of their home countries (Dicken and Thrift, 1992; Yeung, 1994b, 1997). In recent years, for example, the Singapore Government has been very active in promoting the outward investment of its national firms. This regionalization drive occurs when the state has become significantly stronger than three decades ago and when the domestic economy has been much more saturated. Before applying the collusion-and-rivalry framework to examine specifically the role of the state in this regionalization drive of Singapore firms, it is perhaps helpful to offer an overview of the Singapore economy and the nature and extent of its outward investment.

The Singapore economy and the regionalization of Singaporean firms: an overview

There is no doubt that Singapore has undergone an unprecedented economic transformation over the past three decades. *Table 2* presents some macro-economic indicators of the Singapore economy since 1960. From an entrepot predominantly oriented toward commerce and services in the late 1950s, Singapore has been transformed into a dual economy specializing in high value-added manufacturing activities and international financial and business services (Ho, 1993, 1994; Huff, 1995). It also poses as a leading center for transport and communications in Asia. Over this period of three decades, Singapore has achieved an impressive record of economic development. What is interesting in *Table 2* is the growing high savings ratios. The figures indicate that in the course of its history of economic development, Singaporeans generally save more out of their rising income. This phenomenon is important, as evident later, because it provides a critical source of capital for the outward expansion of Singaporean firms. As explained in the next section, foreign investment has been one of the vital pillars of Singapore's industrialization since its independence in 1965. The high investment ratio is a clear indication of the

Table 2. Singapore's macro-economic indicators, 1960-1992 (in percentage)

<i>Indicators</i>	<i>1960-66</i>	<i>1960-69</i>	<i>1970-79</i>	<i>1980-92</i>
Annual real GDP growth rate	5.7	8.0	8.3	6.7
Annual inflation rate	1.1	1.1	5.8	2.4
Savings ratio (over GDP)	6.7	11.5	28.8	42.7
Investment ratio (over GDP)	17.5	20.7	40.5	41.3
Foreign investment (% of GFCF)	—	—	22.1	26.3

	<i>1960</i>	<i>1969</i>	<i>1979</i>	<i>1992</i>
Gross domestic product (\$m)	5059	10 730	26 285	64 771
Agriculture and quarrying	3.8	2.7	1.5	0.4
Manufacturing	16.6	23.2	29.4	27.6
Construction and utilities	7.0	10.7	9.1	8.9
Commerce	24.6	22.9	19.4	18.2
Transport and communications	8.8	7.2	11.6	14.7
Financial and business services	14.0	16.5	18.9	26.1
Other services	19.6	15.7	12.2	10.2

Source: Huff (1995, Tables 1, 2 and 6).

strong attraction of the Singaporean economy as a favorable location for foreign investment throughout the preceding three decades.³

Historically, foreign direct investment (FDI) from Singapore was small compared to other forms of investments (e.g. portfolio investment).⁴ Singaporean firms had neither the financial strength nor any firm-specific advantage to extend their operations abroad. Since the mid-1970s, however, a centrifugal tendency in the Singapore economy has surfaced. Singaporean firms are now investing in other parts of the world in the form of FDI. The Department of Statistics (1991) estimates that at the end of 1976, FDI from Singapore was slightly above S\$1 billion. As shown in *Table 3*, this figure had grown to S\$1.7 billion by 1981, S\$2.6 billion by 1986 and S\$21.2 billion by 1993. As Singapore moved into the 1990s, the state began to recognize the importance of an 'external wing' to its increasingly saturated domestic economy. The state has taken many direct and indirect measures to make sure domestic capital will not overtly concentrate in the domestic market at the expense of potential gain by participating in the regional market boom. *Table 3* also shows that the geographical distribution of FDI from Singapore is highly uneven and biased towards intra-regional flows. A very significant proportion of Singapore's FDI is located within the Asian region throughout the 1980s and 1990s. In 1981, as much as 77 percent of total FDI from Singapore was in Asian countries. In fact, Malaysia alone took up some 60 percent of total FDI from Singapore in the same year. This spatial pattern changes gradually over time as Singapore investment diversifies into other Asian and non-Asian countries.

The ownership of outward FDI from Singapore is rather complex and different from other NIEs. Because of heavy foreign presence in its domestic economy, it is clear in *Table 4* that a large proportion of Singapore's FDI originates from companies majority- or wholly-owned by foreign firms having operations in Singapore (see also Low *et al.*, forthcoming). During the 1980s, wholly- or majority-local-owned companies in Singapore accounted for more than half of total outward FDI. By the 1990s, however, this observation is no longer applicable when rapid industrial restructuring within Singapore has stimulated a drastic process of relocation to destinations elsewhere in the region. Foreign-owned companies in Singapore have now spearheaded the regionalization process. In 1993, they accounted for more than 56 percent of total FDI from Singapore.

Data on the industrial origin of Singapore's FDI were incomplete and unavailable until a recent publication by the Department of Statistics (1996). It is found that the extent of overseas operations differs significantly across various industrial sectors. Between 1992 and 1993, financial and manufacturing firms were the two major investors from Singapore. At the end of 1993, they accounted for S\$15.7 billion (74 percent) of total direct equity investment abroad (Department of Statistics, 1996: 19). *Table 5* gives an impression of the industrial origin of foreign equity investment from Singapore. It is noted that foreign investment by construction and manufacturing companies increased sharply by 88 percent

³ It must be emphasized here, however, that the nature of this attraction has changed significantly over this period primarily because of state-induced competitive advantages (see Mirza, 1986; Rodan, 1989).

⁴ The transnational operations of Singaporean firms, in fact, have occurred much earlier than those captured in official statistics. Khong Guan Biscuit Factory, for example, was engaged in biscuits manufacturing in Indonesia during the 1950s (Chan and Chiang, 1994: 108ff). Similar examples of Singaporean manufacturers abroad were Ho Rih Hua's operation in Thailand and Lau Ing Woon's brothers spread into Southeast Asian countries (Chan and Chiang, 1994: 272-75).

Table 3. Outward direct investment from Singapore by country, 1981-1993 (in \$million)

Country	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Asian countries	1289.9	1586.7	1662.4	1805.2	1721.4	1836.5	1908.5	1963.6	1968.4	7013.3	7401.5	9209.3	11480.0
ASEAN	1078.5	1233.7	1241.7	1341.4	1133.3	1155.8	1180.5	1216.0	1138.4	3567.1	3995.6	4896.7	5933.8
Brunei	3.7	6.0	9.0	49.1	52.9	50.0	54.2	57.4	56.6	66.2	69.4	88.5	91.2
Indonesia	39.5	39.7	44.4	56.3	65.0	67.7	58.6	59.8	53.3	224.8	267.3	328.1	517.3
Malaysia	1006.9	1162.3	1162.6	1209.1	971.8	985.6	1008.4	1030.8	971.6	2790.1	3121.1	3916.5	4656.7
Philippines	18.4	16.1	17.6	17.6	22.4	22.5	14.3	22.5	22.8	97.7	89.7	106.3	230.6
Thailand	10.0	9.6	8.1	9.3	21.2	30.0	45.0	45.5	34.1	388.4	448.1	457.4	438.1
Hong Kong	181.8	316.7	357.4	391.3	460.7	497.9	539.9	545.2	581.4	2266.2	2368.6	3051.1	4025.6
Japan	0.3	0.4	0.6	0.7	5.0	6.0	16.1	16.7	33.9	51.8	73.5	75.8	109.4
China	—	—	—	—	57.6	93.8	101.4	79.1	47.4	239.7	220.0	282.6	444.1
South Korea	—	—	—	—	—	—	—	14.8	15.9	—	—	—	—
Taiwan	12.9	14.8	24.9	27.1	32.9	37.8	26.0	54.3	86.0	494.8	287.0	349.5	354.5
Others	16.2	21.1	37.8	44.7	31.9	45.2	44.6	37.5	65.4	393.7	456.7	553.6	612.7
European countries	50.7	58.0	57.7	71.5	89.3	167.2	358.2	303.4	203.4	1095.4	1397.6	1480.2	1549.7
Netherlands	0.8	0.8	12.2	10.6	12.0	13.8	165.4	111.4	-94.3	656.3	549.6	525.5	467.1
United Kingdom	49.7	57.2	43.1	43.9	45.9	81.8	48.3	49.3	50.4	300.4	322.3	351.0	360.6
Germany	—	—	—	—	—	—	8.6	8.6	23.4	—	—	—	—
Others	0.2	—	2.4	17.0	31.4	71.6	135.9	134.1	223.9	138.6	525.8	603.7	722.0
New Zealand	—	—	—	—	—	—	—	—	—	1358.5	1387.3	1332.6	1493.8
Canada	—	—	11.5	11.5	17.6	17.6	17.6	29.0	73.4	—	—	—	—
United States	31.8	44.3	47.5	54.4	66.1	65.4	69.3	107.7	160.0	689.7	1303.9	1589.5	1755.1
Other countries n.e.c.	242.9	307.3	332.6	324.7	185.9	335.4	390.1	424.1	400.2	2934.3	3123.6	3493.1	4587.4
Total	1677.7	2086.9	2233.1	2399.3	2257.2	2597.7	2961.5	2993.9	2943.7	13621.7	15183.8	17741.3	21240.2

Note: data from 1990-1993 refer to direct equity investment. Direct investment abroad refers to the amount of paid-up shares of overseas subsidiaries and associates held by companies in Singapore. Direct equity investment refers to direct investment plus the reserves of the overseas subsidiaries and associates attributable to these companies. For overseas branches, the net amount due to the local parent companies is taken as an approximation of the magnitude of direct investment.

Sources: Department of Statistics (1991), *Singapore's Investment Abroad, 1976-1989*, DOS, Singapore. Department of Statistics (1996), *Singapore's Investment Abroad, 1990-1993*, DOS, Singapore.

Table 4. Outward direct investment from Singapore by ownership, 1981-1993 (in S\$ million)

Ownership of companies	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Wholly-local owned	298.2	302.8	350.4	328.7	709.9	742.4	772.1	713.1	603.9	2538.9	3279.4	3692.5	4556.4
Majority-local owned	580.1	796.0	875.6	1066.5	962.2	1111.1	1064.3	1185.7	1350.0	4408.9	3837.9	4443.5	4699.2
Wholly-foreign owned	292.9	379.7	526.0	552.5	384.2	546.6	742.3	711.4	651.4	5347.9	6556.0	7907.6	10053.3
Majority-foreign owned	506.5	608.4	481.1	451.8	200.9	197.5	382.8	383.7	338.4	1326.1	1510.5	1697.7	1931.3
Total	1677.7	2086.9	2233.1	2399.3	2257.2	2597.6	2961.5	2993.9	2943.7	13621.8	15183.8	17741.3	21240.2

Note: data from 1990-1993 refer to direct equity investment. Direct investment abroad refers to the amount of paid-up shares of overseas subsidiaries and associates held by companies in Singapore. Direct equity investment refers to direct investment plus the reserves of the overseas subsidiaries and associates attributable to these companies. For overseas branches, the net amount due to the local parent companies is taken as an approximation of the magnitude of direct investment.

Sources: Department of Statistics (1991), *Singapore's Investment Abroad, 1976-1989*, DOS, Singapore. Department of Statistics (1996), *Singapore's Investment Abroad, 1990-1993*, DOS, Singapore.

Table 5. Foreign equity investment of Singaporean firms by industrial origin and activity abroad, 1992-1993 (in S\$millions)

<i>Industrial sectors</i>	<i>1992</i>	<i>1993</i>	<i>Annual change (%)</i>
<i>Industrial origin</i>			
Manufacturing	4545.5	6752.7	48.6
Construction	326.4	614.0	88.1
Commerce	1361.9	1220.7	-10.4
Transport	421.8	504.7	19.7
Financial	8194.6	8945.6	9.2
Real estate	1391.0	1692.8	21.7
Business services	1469.1	1481.3	0.8
Others	31.0	28.4	-8.4
Total	17 741.3	21 240.2	19.7
<i>Activity abroad</i>			
Manufacturing	3760.1	4612.7	22.7
Construction	130.2	199.3	53.1
Commerce	1967.1	2067.8	5.1
Transport	289.8	322.0	11.1
Financial	9752.7	11 723.1	20.2
Real estate	962.9	1294.8	34.5
Business services	595.3	766.9	28.8
Others	283.4	253.6	-10.5
Total	17 741.3	21 240.2	19.7

Source: Department of Statistics (1996) (Table 8).

and 49 percent respectively during the period. Foreign investment by companies from the service sector grew at much slower rates.

The role of the state in promoting outward investment from Singapore

Using the collusion-and-rivalry framework developed in the theoretical section, it is possible to analyze the ways in which the small state in Singapore has directly and indirectly involved in the regionalization of Singapore TNCs. Arguably during its early phase of nation-building, the weak and small state had to collude with foreign capital to achieve rapid economic growth and therefore to legitimize its domestic political hegemony (see *Table 1*). One side effect of this early reliance on foreign capital manifests itself in the underdevelopment of indigenous entrepreneurship. The level of foreign investment by indigenous capital during this period was also low. Since the late 1980s, however, the state has begun to realize the limits of capital accumulation *within* Singapore and the need to expand its spatial reach in search of new sites for continuous capital accumulation. The state faces increasingly competition and rivalry with foreign capital because of the availability of more favorable investment locations in nearby countries. The state has therefore chosen to take up the initiatives to regionalize Singaporean firms by direct and indirect means.

This state-driven regionalization process is deemed necessary for two reasons. First, the underdevelopment of indigenous entrepreneurship in Singapore has hindered the growth of outward investment led by domestic firms. It also explains why despite the state's involvement in directing the domestic economy (market failures in neoclassical economics sense), relatively few domestic firms take production across national boundaries. Second,

given its gradual strengthening over time, the state has sufficient political legitimacy and economic resources to take up the role as 'entrepreneurs' in the regionalization process. The state can not only drive the regionalization process through its government-linked corporations (GLCs) and their transnational activities, but also offer various incentive schemes to assist domestic firms in gaining a place in the regional and global marketplace. The corporatist state is thus transformed into an 'entrepreneurial state'. This involvement of the state in regionalization is analyzed in the following sections: (1) the historical underdevelopment of indigenous entrepreneurship; (2) the role of the state as 'entrepreneurs' and (3) the role of investment incentive schemes in changing the comparative advantage of regionalization.

Historical underdevelopment of indigenous entrepreneurship

The Singapore economy was very dependent on entrepot trade for basic livelihood and employment under the British Administration. Trade alone accounted for up to one-third of the GDP at factor cost in 1957 (Rodan, 1989: 48). The development of manufacturing industries became the top priority to the newly elected Peoples' Action Party (PAP) in the immediate post-1959 period. The PAP's manifesto explained that only through the promotion of manufacturing industries could Singapore's existing and prospective unemployment be addressed. The PAP was apparently aware of the fundamental political, social and economic implications of unemployment and the remedy for it.

The Singapore economy inherited by the PAP from the British Administration, however, was weak in industrial bourgeoisie and lacked any significant manufacturing base. Indigenous entrepreneurship was not strong enough financially to shoulder the huge burden of industrializing Singapore. Moreover, the PAP-ruled state was suspicious of indigenous capitalists for fear of their pro-Communist and pro-China attitudes (McVey, 1992; Menkhoff, 1993). Régnier (1993:308) perceptively points out that for social, economic and political reasons, 'Lee Kuan Yew (leader of PAP and Prime Minister) deliberately neglected and even distrusted the developmental capacity of local Chinese entrepreneurs, infant though they might have been in the early 1960s'. The resource-deficient small state subsequently chose to rely on foreign capital to gain quick economic growth in order to legitimize its political domination. Although impressive economic records were achieved in the following three decades, indigenous entrepreneurship and domestic capital were rather disadvantaged and not given sufficient room to grow. Rather, foreign capital was given a privileged place to grow in the Singapore economy.

In 1961, the Economic Development Board (EDB) of Singapore was established as a one-stop investment promotion agency to assist foreign firms in their operations in Singapore. Ever since then, the Board has played a key role in shaping the Singapore economy through its efforts to solve the unemployment problems, promote investment, train manpower and develop the industrial sector (Low *et al.*, 1993). It must be emphasized, however, that not until recently, the main concern of the Board has been with attracting foreign firms to invest in Singapore. Generous incentive schemes were offered to foreign firms to compensate for the lack of competitive advantage in Singapore during its early phase of industrialization (e.g. the Economic Expansion Incentives Act and the Pioneer Industries Ordinance). The establishment of the Jurong Town Corporation (JTC) in 1968 provided another boost to the state's strategy of relying on foreign capital. The JTC was primarily responsible for the construction and management of industrial estates, the first of which was located in the Jurong area. These industrial estates were intended to provide low cost production sites for foreign manufacturing firms. Together, both statutory boards

have worked hard to attract a large inflow of foreign investment into Singapore throughout the past three decades.

Other than creating institutional structures, the state also employed other measures to make Singapore more attractive to foreign investment because 'as an NIE operating in a turbulent world with many manufacturing location options, [Singapore] can survive successfully only if state intervention structures local and regional conditions to fit the requirements of international capital' (Ho, 1994: 48). First, the state regulated the labor market by disciplining the labor force with the Trade Union (Amendment) Bill in 1966 and the Employment Act in 1968 and the Industrial Relations (Amendment) Act (Rodan, 1989; Huff, 1995). These labor market regulations resulted in the creation of a highly disciplined and depoliticized labor force in Singapore, allowing its smooth entry into the periphery role of the emerging new international division of labor spearheaded by global TNCs.

Second, the state took up a heavy responsibility for the provision of public infrastructure through major state-owned enterprises. Many state-controlled statutory boards were established to provide for the nation its roads, electricity, transport and communication services. State-owned enterprises spun off from these statutory boards sowed the seeds for the domination of government-linked corporations (GLCs) in the regionalization drive during recent years. In fact, public investment in the industrial sector started as early as 1963 when seven public enterprises in manufacturing were established: Sugar Industry of Singapore Ltd., National Grain Elevator Ltd., Singapore Textile Industries Ltd., United Industrial Corporation Ltd., Singapore Polymer Corporation Pte Ltd., Jurong Shipyard Ltd. and Ceramics (M) Pte Ltd. (Rodan, 1989: Table 3.2). Most of these enterprises were established to respond to perceived large domestic markets. Rodan (1989:77) argues that this trend reflected 'the government's thinking that the question of industrial structure should not be left solely to the market—especially given the absence of a domestic industrial bourgeoisie of any consequence'. By 1983, the state had directly invested in 58 diverse companies with a total paid-up capital of S\$2.9 billion. These companies in turn wholly or partially owned some 490 firms in Singapore (Huff, 1995: 1428). Some of these large state-owned enterprises have grown significantly since then and become today's major GLCs spearheading the regionalization of Singapore's economy (e.g. the Keppel Group, the Sembawang Group and Temasek Holdings).

The establishment of the Central Provident Fund Board was also intended to provide long-term security to its members and to initiate a compulsory national saving scheme to finance national development plans. From an initial rate of contribution at 5 percent of gross monthly salaries, the CPF rates rose steadily over time to 25 percent just before the 1985 recession and subsequently decreased to about 15–20 percent. As shown in *Table 2*, the savings ratios to GDP in Singapore grew substantially from only 6.7 percent during the 1960–1966 period to 28.8 percent during the 1970–1979 period and 42.7 percent during the 1980–1992 period. The effect of this state-enforced savings is manifested in the channelling of a large share of potential investment capital from the private capital market to the CPF Board, making it very difficult for private entrepreneurs to obtain the necessary capital for domestic and overseas expansion. Put in this perspective, some researchers argue that the saving–investment process of Singapore has 'crowded out' local Chinese entrepreneurship (e.g. Tan, 1991).

As an assessment of the importance of foreign capital in Singapore's economy, *Table 2* shows that foreign investment contributed to some 22 percent and 26 percent of the gross domestic fixed capital formation during the 1970–1979 and 1980–1992 periods respectively. This ratio of foreign investment to GFCF is certainly one of the highest among

the Asian NIEs. *Figure 1* also plots the net investment commitments in Singapore's manufacturing sector for the preceding two decades. It is clear that foreign investment commitments in Singapore's manufacturing sector have grown tremendously from S\$169 million in 1974 to S\$4.3 billion in 1994, representing almost 26-fold jump in a period of two decades (see also Ramstetter, 1996). This surge in foreign investment became much more drastic in the post-1985 period when Japanese investment supplemented inflows from leading investors in the US, UK, the Netherlands and Germany. Local capital, still a relatively significant component in 1974 at S\$123 million, had become much less conspicuous by 1994. It took up merely 25 percent of the net investment commitments in Singapore's manufacturing sector. Notably a large proportion of this local manufacturing investment came from the GLCs and their various subsidiaries. The role of indigenous private enterprises in Singapore's industrialization is therefore rather limited. It is also difficult to expect this economically marginal group of local private enterprises to spearhead the regionalization of the Singapore economy. On the other hand, Singapore's dependence on foreign capital for industrialization has generated sufficient momentum for these very foreign firms to participate actively in the regionalization effort (see *Table 4*). Foreign-owned companies in Singapore accounted for over half of total equity investment from Singapore in 1993.

To sum up, the state was committed to rapid industrialization and economic development with the assistance of rapid influx of foreign investment. To achieve such objectives within a short period of time, the state had to focus on policies favorable to attracting foreign capital. It was apparently unavoidable that interest groups, particularly the Chinese business elites, were excluded in the political process. Huff (1995:1431) notes that the state's 'decision to rely for economic development on MNEs (multinational enterprises) and state-owned enterprises allowed Singapore's local business elite largely to be excluded from the decision-making process'. This process of exclusion not only handicapped the development of indigenous entrepreneurship, but also partially accounted for the late entry of Singaporean firms in the regional and global marketplaces. Instead, the state has recently taken a leading role in the regionalization drive. If the private sector cannot provide the necessary capital and entrepreneurial skills, the state will do so without any hesitation.

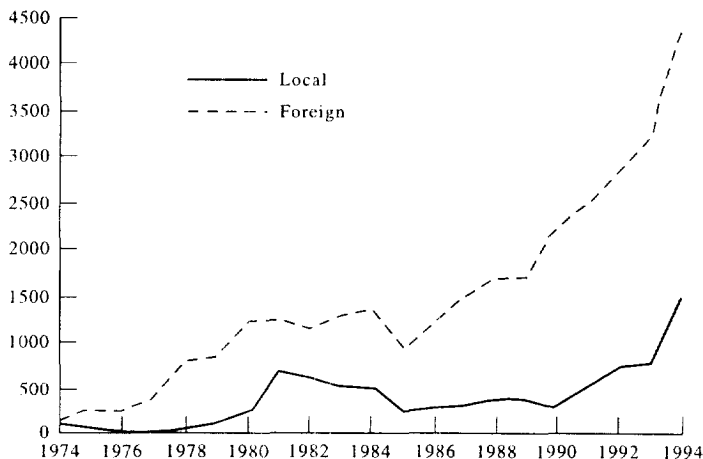


Figure 1. Net investment commitments in Singapore's manufacturing sector, 1974-1994 (in S\$ millions). Source: Department of Statistics (various years), *Yearbook of Statistics*, DOS, Singapore.

The role of the state as entrepreneurs

By the late 1980s, the PAP-dominated state had become much stronger politically and economically. The domestic economy had experienced unprecedented growth for several decades. As the global economy is becoming more competitive, Singapore begins to realize that heavy reliance on foreign TNCs is no longer useful to attaining its long-term strategic goals. Foreign TNCs do come and go, particularly when the world is becoming more 'borderless' (Ohmae, 1990). It is necessary to respond to this new global competition by developing its indigenous economic capabilities which can tap into growth potential in other countries. One of such strategies is to regionalize its firms to capture the booming regional market, spearheaded by state-owned enterprises. Kanai (1993:41) notes that 'no matter what Singapore does in terms of business promotion policy, it is an unavoidable fact of modern economic life that Singapore will face keener competition from its neighbors as a center for regional manufacturing or service industry operations. So it would seem better for Singapore to promote the outward regional expansion of its own private sector, and in the process capture for itself some of the benefits of the region's dynamic development'. The collusion-and-rivalry perspective developed earlier contends that state intervention can be a form of entrepreneurial activity through which domestic firms are brought into the regional and global marketplace. A strong state can become an 'entrepreneur' exercising its capabilities in accordance with its national developmental priorities and political ideology. It can rival with existing TNCs for a greater share in the regional and global economic pie.

This is the case of Singapore in the past decade. The mid-1980s saw one of the most serious recessions in its entire history primarily because of global downturn. In what became the blueprint for Singapore's economic development in the late 1980s and 1990s, the report by the Economic Committee in 1986 recognized the vulnerability of Singapore's economy because of its over-dependence on foreign capital and the lack of indigenous entrepreneurship. In 1989, the Singapore-Indonesia-Malaysia Growth Triangle idea was proposed by the then Deputy Prime Minister Goh Chok Tong in response to drastic industrial restructuring within Singapore and perceived complementarity among the three countries (Perry, 1991; Toh and Low, 1993; Ho, 1994; Ho and So, 1997). The idea seems to be based on three premises about industrial location and regional integration: (1) that the decentralization of industry to the immediate region will retain greater economic linkages back to Singapore than where decentralization is widely dispersed; (2) that TNCs have well defined location preferences that can be satisfied by the growth triangle and (3) that facilitating the process of decentralization will simultaneously assist the upgrading of the activities left behind (Perry, 1991: 143). In technical areas, labor and land constraints in Singapore require the relocation of low value-added and labor-intensive production processes to Johor, Malaysia or Riau, Indonesia. Only high value-added manufacturing activities remain in Singapore. In terms of the division of labor by sector, Singapore plays a more important role in services as the regional headquarters (RHQs) for TNCs operating simultaneously in all three locations (see Dicken and Kirkpatrick, 1991; Perry, 1992, 1995). The emergence of a regional division of labor is clear here when all three countries contain different comparative advantages and, therefore, play different economic roles in this regional interdependence.

The growth triangle strategy, however, was deemed unable to revolve the dilemma of vulnerability and deep penetration of the domestic economy by foreign capital. This fear of long-term limits to growth was later transformed into the official argument for building an

'external wing' to Singapore's economy in the early 1990s.⁵ An explicit strategy of regionalization was called for by the state in order to grow local firms domestically and internationally. Senior Minister Lee Kuan Yew announced in January 1993 that the state was taking new initiatives to generate a bigger pool of local entrepreneurs and to building up the 'external wing' of the Singapore economy (see Régnier, 1993). This national strategic thrust is known as Singapore's 'Regionalization 2000'. SM Lee proposes that:

We can change our orientation. We can alter our social climate to become more encouraging and supportive of enterprise and innovation. We can enthuse a younger generation with the thrill and the rewards of building an external dimension to Singapore. We can and we will spread our wings into the region and then into the wider world (quoted in EDB, 1993).

SM Lee mooted this idea because most advanced industrialized countries have globalized their national firms to tap into resources, talents and markets in the global economy. The idea is to develop Singapore into a global city with total business capabilities so that Singapore can be not only an attractive manufacturing investment location for global TNCs, but also an ideal springboard to the Asian Pacific region for these TNCs wishing to venture into the region (EDB, 1995). The Prime Minister, Goh Chok Tong, made it clear that '[g]oing regional is part of our long-term strategy to stay ahead. It is to make our national economy bigger, our companies stronger and some of them multi-national' (reprinted in *Speeches*, May–June 1993: 15). An external economy can improve Singapore's economic structure in two ways (Ministry of Finance, 1993a: 14). First, it generates business and economies of scale for companies in Singapore, making the domestic economy more productive. Second, it allows Singaporean firms to contribute to and benefit from the rapid growth of the countries in the region. Singapore needs not depend so heavily on developed countries for growth and markets.

However sound this idea of regionalization is, the extent of Singapore's outward investment was relatively limited before the early 1990s. As shown in the earlier section, Singapore's FDI in the 1980s was quite limited and very biased towards a few major geographical destinations. Compared to other advanced industrialized countries, the proportion of Singapore's FDI to its GNP is small. For example, Singapore's FDI reached 16 percent of GNP in 1991, compared to 30 percent for Switzerland, 36 percent for the Netherlands and 23 percent for the UK (Ministry of Finance, 1993a: 20). In 1990, only 2 293 (6 percent) of 36 573 companies in Singapore had regionalized their operations (Ministry of Finance, 1993a: 70). Even among the Asian NIEs, Singapore compared very unfavorably in terms of its extent of transnational operations.⁶ Moreover, the earlier section also shows that foreign firms in Singapore account for more than 50 percent of outward investment from Singapore in recent years. The role of private sector investment is rather dismal at this beginning phase of regionalization.

⁵ In fact, the state's explicit encouragement of outward investment started immediately after the recession of the mid-1980s (Kanai, 1993). Investment measures, however, initially emphasized the globalization of Singaporean firms into Europe and North America in order to promote a shift to higher value-added activities. They were ineffective because few Singaporean firms were capable of securing a market place in these advanced industrialized countries. For example, both Yeo Hiap Seng Ltd. (a major local food manufacturer) and Singapore Technologies (a state-owned enterprise) had bitter experience in the US (see Kanai, 1993). It was not until the early 1990s that the focus of the state was shifted to regionalization instead of globalization.

⁶ See Yeung (1994c); Yeung (1995); Yeung (1996) for the case of TNCs from Hong Kong and Yeung (1994a) for the case of TNCs from Asian NIEs in general.

The historical underdevelopment of indigenous entrepreneurship in the private sector has convinced the state that the regionalization drive cannot be effectively taken up by private sector initiatives only. The state has to take up the role and the risks of spearheading regionalization in two specific ways: (1) the regionalization of government-linked corporations (GLCs) and companies set up by statutory boards and (2) 'political entrepreneurship' through which the state opens up overseas business opportunities for private capitalists and negotiates the institutional framework for such opportunities to be tapped by these Singaporean firms. In the first place, instead of relying on indigenous entrepreneurs, the state has internalized potential entrepreneurs into state-owned enterprises. This unique approach to economic development and enterprising has proven successful in its peculiar historical context. Since the mid-1980s, the state has begun to privatize its state-owned enterprises to allow for greater private sector participation and more entrepreneurial activities. In this regard, many large state-owned enterprises are now listed in the Stock Exchange of Singapore (e.g. Singapore Airlines, Keppel Corporation, Sembawang Holdings and so on). Singapore Airlines, as one of the most successful local corporations, constituted as much as 5 percent of Singapore's GDP in its peak. These former state-owned enterprises have since been known as government-linked corporations (GLCs) because the state still retains significant influence over their management control. Today, the public sector and GLCs account for about 60 percent of Singapore's GDP (Ministry of Finance, 1993a: 39). These GLCs have become one of the primary instruments through which the state inaugurates the regionalization drive.

In principles, the state's involvement in regionalization through GLCs and other companies set up by statutory boards should be run on a commercial basis. With their specialized expertise and commercial experience, these GLCs and companies of statutory boards can partner with private sector companies and even take the lead in large projects. The state, however, should not take on a greater proportion of the risk than what the private sector investors of the project are prepared to take. The GLCs and companies of statutory boards are prepared to take the lead only in large infrastructural projects. In most other projects, the private sector entrepreneurs are expected to bear the primary risks and take on the majority stakes. *Figure 2* shows, for example, that a number of major investments by Singapore companies in the PRC come from the GLCs.

GLCs are managed under four state-owned holding companies—Temasek Holdings, Singapore Technologies Holdings, MinCom Holdings and MND Holdings. Together with statutory boards, these GLCs serve as partners to private sector companies in overseas ventures by selling their expertise to the private sector; forming joint ventures and consortia and leading in large infrastructural projects (Ministry of Finance, 1993a: 42–43). First, a private company is often unable to undertake an overseas project because of its lack of expertise for some parts of the project. GLCs and statutory board companies may often have the requisite expertise which can be sold to the private sector. Second, the sale of expertise brings limited benefits to the GLCs or statutory board companies. They can make greater use of public sector capabilities by entering into consortia or joint ventures with private sector companies. This form of state participation in the regionalization drive involves equity stakes in the ventures. The state becomes therefore an 'quasi-entrepreneur'. Third, for large infrastructural projects which require substantial investments and expertise and resources, the GLCs and statutory board companies are ideally endowed with these expertise and resources. Most of these projects also have long gestation and pay-back periods which are unattractive to private sector capital. The state can thus play a leading role by holding majority equity stake in the joint ventures. Here the state becomes a full entrepreneur in its own right.

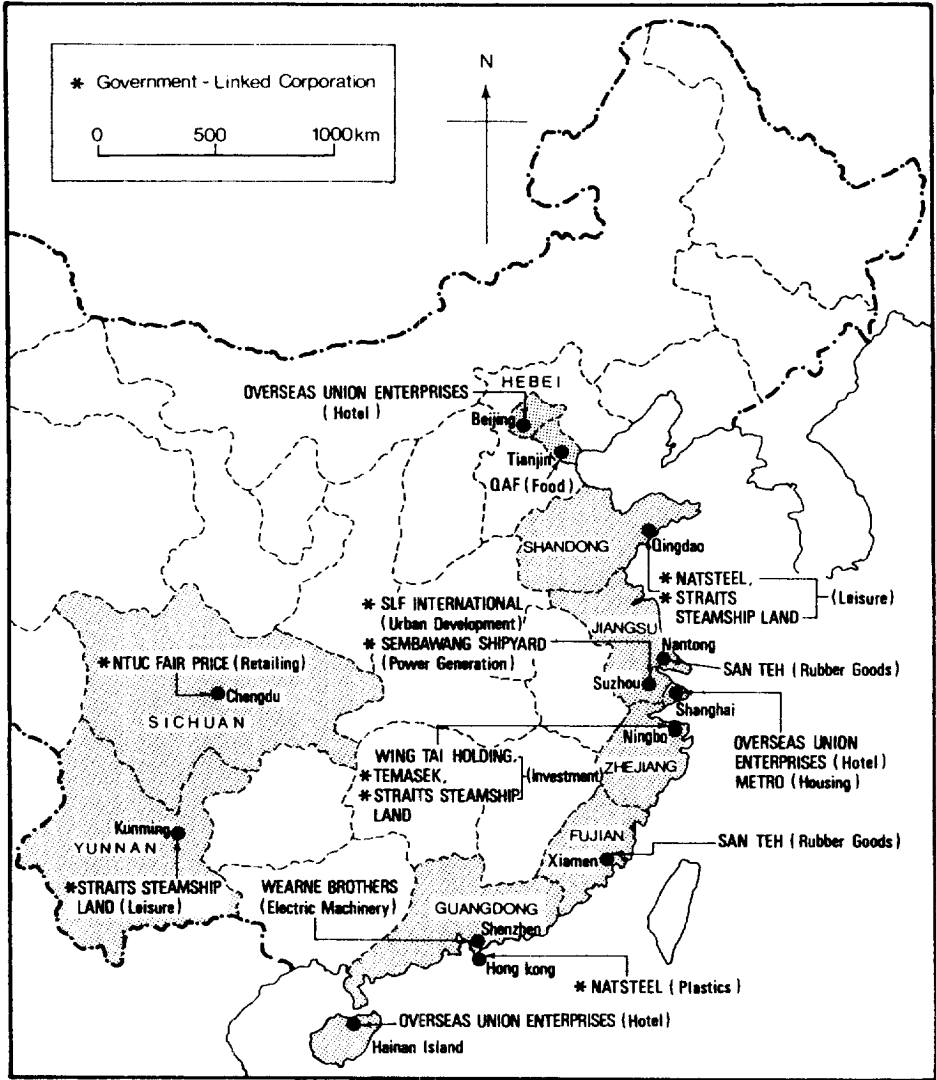


Figure 2. Major investments by government-linked corporations from Singapore in the Peoples' Republic of China. Source: adapted from Kanai (1993) p. 38.

The case of Keppel Corporation is useful to illustrate how the state acts as an 'entrepreneur' through the regionalization of its GLCs. Keppel Shipyard Pte Ltd was incorporated in 1968, as a separate ship repairing operation from the Port of Singapore Authority, to form a wholly state-owned enterprise. From a modest beginning, it has grown into one of the largest and most widely diversified industrial conglomerates in Singapore, including 9 public listed companies and over 140 active subsidiaries (Low *et al.*, 1993: 459-65). It has a total asset of more than S\$6 billion and employs about 9 000 people. It was ranked among Top 50 companies in Asia by Nomura Research Institute in 1990. The principal activities of the Keppel Group include ship repair, shipbuilding, property, banking and financial services, shipping and transportation, telecommunications and engineering.

In May 1994, Keppel led a consortium of 19 Singapore companies to form the Singapore-Suzhou Township Development Company (SSTDC). This idea of developing a township and bringing Singapore style of economic management to the PRC was first mooted by the former Prime Minister Lee Kuan Yew when he met China's senior leader Den Xiaoping during his visit to Singapore over 10 years ago (Tan, 1995: 64). After a long period of discussion, the State Council of the PRC approved this innovative concept. Numerous top level official visits were exchanged between the two countries to identify a suitable site. Suzhou in the Jiangsu province of the PRC was finally chosen after a state visit led by Singapore's Prime Minister, Goh Chok Tong, his deputies and other top officials. On 26 February 1994, the Singapore Government, represented by SM Lee, signed an agreement with PRC Vice Premier Li Lanqing to transfer 'software' to Suzhou. This 'software' comprises economic development and public administration expertise. It involves the state taking the lead to develop industrial township in the PRC (EDB, 1995: 20-21). The SSTDC is a S\$75 million joint venture between the Singapore consortium and their counterpart comprising 11 Chinese companies mainly from Suzhou. It will develop an industrial township covering an area of approximately 70 square kilometers. The total cost of the township is estimated to be S\$30 billion and it takes about 20-30 years to complete. When fully developed, the township will be able to support a population of 600 000 and provide employment for more than 360 000 people. In November 1994, three consortia led by Keppel Group were set up to develop utility plants in the township. It includes a massive S\$4.5 billion power plant with a generating capacity equal to almost all the electricity consumed in Singapore in 1993.⁷

This case study shows how the state in Singapore has tried to lead the regionalization drive by taking direct equity stake in large infrastructural development projects in the region and by employing inter-state relationships to raise the profile and image of its investment projects. This latter approach to regionalization is termed 'political entrepreneurship' which refers to the involvement of key politicians in opening up business opportunities for state-owned and private enterprises. For example, Singapore's investment in the PRC increased substantially after October 1990 when diplomatic relations between the two countries were established and the Singapore Government made it a top priority to encourage Singapore companies to venture abroad (Lu and Zhu, 1995; Weidenbaum and Hughes, 1996). Senior officials from Singapore made a number of visits to the PRC in recent years to enhance the goodwill and improve the *guanxi* (relationships) between the two countries. Senior Minister Lee himself visited many sites in the PRC to build connections with local governments and officials and to pave way personally for Singaporean firms, whether GLCs or private companies. A state visit by Prime Minister Goh Chok Tong in 1993 further strengthened the business ties with the PRC at the state level. The Suzhou township project, for example, is a commercial proposal riding on congenial inter-state relationships. In this way, the state serves as a facilitator for overseas ventures of both GLCs and private sector companies. Today, some 15 state agencies are involved in the regionalization effort (see *Table 6*). Their projects are mostly related to infrastructural developments located in Asia.

⁷ The Singapore Government and its GLCs are also actively involved in developing other industrial park and township projects such as Wuxi-Singapore Industrial Park and Qingdao Warehousing Project in the PRC, Sentosa City Township and Bangalore IT Park in India (Tan, 1995) and Batamindo Industrial Park and Bintan Industrial Estate in Indonesia (EDB, 1995).

Table 6. Agencies of the Singapore State in the regionalization effort

<i>Agency</i>	<i>Profile of expertise</i>	<i>Country of projects</i>
Civil Aviation Authority of Singapore	<ul style="list-style-type: none"> ● feasibility studies ● planning and design ● management consultancy ● systems acquisition ● operation plans and procedures, training 	China, Philippines, Maldives, Pakistan, Fiji
Commercial and Industrial Security Corporation	<ul style="list-style-type: none"> ● training programs ● design, integration and installation of security systems, central alarm monitoring ● service and maintenance ● key installation security and industrial, commercial and banking security ● special projects 	Indonesia
Construction Industry Development Board	<ul style="list-style-type: none"> ● construction quality ● advancement system ● quality management systems ● training, skills certification 	Hong Kong, Brunei, Taipei
Housing and Development Board	<ul style="list-style-type: none"> ● master planning and urban design ● architectural design ● structural engineering ● civil engineering and infrastructural design ● CAD and drafting ● coastal engineering and reclamation ● project management, estate management ● upgrading and retrofitting 	China, Indonesia, Vietnam
Jurong Town Corporation	<ul style="list-style-type: none"> ● industrial parks and towns ● renewal and redevelopment ● integrated land infrastructure ● port operation and marine base ● land reclamation and marine structures ● architecture and industrial building construction ● clean rooms and R&D labs ● geotechnical investigation, testing, instrumentation ● surveying and mapping services ● golf courses and management 	Indonesia, China, Philippines, Thailand, Vietnam, Kenya, North Africa
Mass Rapid Transit Corporation	<ul style="list-style-type: none"> ● planning, design, procurement, construction, training, operation ● railway maintenance 	—

continued over page

Table 6. Continued

<i>Agency</i>	<i>Profile of expertise</i>	<i>Country of projects</i>
Ministry of Environment	<ul style="list-style-type: none"> ● sewerage system, solid waste management, pollution control, drainage system ● environmental health ● quarantine and epidemiology 	Indonesia, Malaysia, China, Vietnam
National Computer Board	<ul style="list-style-type: none"> ● computerization, software development standards and methodologies ● software quality management ● contracts and facilities management ● system development life-cycle management ● IT applications, feasibility study and consultancy 	—
National Productivity Board	<ul style="list-style-type: none"> ● management consultancy ● campaigns, training ● administration and research 	Botswana, China, ASEAN, Mauritius
Port of Singapore Authority	<ul style="list-style-type: none"> ● terminal operations ● engineering and marine services ● commercial services ● information services ● port administration 	Indonesia, Italy, Mauritius, Brunei, China, Philippines, Sri Lanka, West Germany
Public Utilities Board	<ul style="list-style-type: none"> ● thermal power plants ● urban and rural electrification ● water supply schemes ● electrical consultancy, contracting and engineering services 	Indonesia, Brunei, China, Vietnam, Philippines, Sri Lanka
Public Work Department	<ul style="list-style-type: none"> ● architecture and engineering services ● development and management ● specialist services ● geotechnical and structural ● roads and transportation ● building, conservation, retrofitting 	China, Philippines, Fiji
Singapore Institute of Standards and Industrial Research	<ul style="list-style-type: none"> ● testing and inspection ● calibration, certification ● design and development ● technology transfer, R&D ● consultancy and training 	Malaysia, Sri Lanka, Philippines
Singapore Telecom	<ul style="list-style-type: none"> ● infrastructural planning ● international leased circuits ● information systems ● ISDN, mobile communication ● satellite communication ● corporate switched telecom network systems 	Saudi Arabia, China, Qatar, Columbia, Japan, Kuwait, Fiji, Zimbabwe, Thailand, Philippines, Brunei, Mauritius, Indonesia, Taiwan, Germany, Madagascar, Marshall Island

continued over page

Table 6. Continued

<i>Agency</i>	<i>Profile of expertise</i>	<i>Country of projects</i>
Urban Redevelopment Authority	<ul style="list-style-type: none"> ● planning, urban design ● development control ● architecture, conservation ● project services, land management, R&D 	Brunei, China

Source: EDB (1993).

Incentive schemes: changing the comparative advantage of regionalization

Though the state in Singapore has taken the lead in the regionalization drive through GLCs and 'political entrepreneurs', it does recognize the long-term goal of the private sector as the leading force behind regionalization. The main obstacle to realizing such a goal is the underdevelopment of private entrepreneurship in Singapore. In order to promote private entrepreneurship, the state has been offering help to private companies in Singapore through various incentive schemes. In doing so, the state has artificially changed the comparative advantage of regionalization vis-a-vis domestic investment. Some Singaporean companies are lured into regionalization to take advantage of the state's incentive schemes. But they may not be aware of the full costs of regionalization since these incentives have changed its comparative advantage to make it favorable to these companies. The long-term viability of nurturing entrepreneurship through such incentive schemes is therefore questionable. The Ministry of Finance (1993b) final report pays serious attention to the intangible dimension of entrepreneurship and the difference between owner entrepreneurs and manager entrepreneurs.

Small and medium enterprises (SMEs) have been the backbone of many advanced industrialized countries. Among the Asian NIEs, Hong Kong has the most developed network of SMEs that flourish together with the influx of foreign capital (see Redding, 1994). These SMEs from Hong Kong have also extensively engaged in transnational operations in the PRC and Southeast Asian region (see Yeung, forthcoming). Based on this principle, the state in Singapore recently aims to nurture SMEs into national firms capable of penetrating foreign markets and establishing transnational operation. In fact, the EDB has been assisting local SMEs almost ever since Singapore's independence in 1965. It is not until the 1985 recession, however, that the state fully recognized the importance of SMEs in surviving economic recessions. Policy initiatives in the post-1985 period were much more concrete than before. In 1986, the EDB initiated the Local Industry Upgrading Program (LIUP). The SME Master Plan was published in 1989 and the revised Local Enterprise Finance Scheme was announced in 1992. The most important document, however, is the Strategic Economic Plan published in 1991 in which the state sees locally grown TNCs as one of the strategic tools to achieve a fully developed country status by the turn of the century.

In practice, the state has developed through the EDB a wide array of assistance schemes and programs to accelerate the development of local enterprises at every stage of growth—from cradle to maturity (see *Table 7*). By 1993, there were over 60 such schemes and programs addressing a broad spectrum of business needs (EDB, 1993). The state's target is to nurture 100 such SMEs into major players in the regional economy. First, the Local Enterprise Finance Scheme (LEFS) provides low cost loans

Table 7. Assistance schemes and programs from the Economic Development Board of Singapore by 1993

<i>Start-up</i>	<i>Growth</i>	<i>Expansion</i>	<i>Going overseas</i>
Local Enterprise Computerization Program	ISO 9000 Certification	Automation Leasing Scheme	Business Development Scheme
Local Enterprise Finance Scheme	Local Enterprise Finance Scheme	Brand Development Assistance Scheme	Double Deduction for Overseas Investment Development Expenditure
Product Development Assistance Scheme	Local Enterprise Technical Assistance Scheme	Franchise Development Assistance Scheme	Franchise Development Assistance Scheme
R&D Incubator Program	Local Industry Upgrading Program	ISO 9000 Certification	Local Enterprise Finance Scheme (Overseas)
Skills Development Fund	Market and Investment Development Assistance Scheme	Local Enterprise Computerization Program	Local Industry Upgrading Program
Venture Capital	Product Development Assistance Scheme	Local Enterprise Finance Scheme	Market and Investment Development Assistance Scheme
	Pioneer Status/Investment Allowance	Local Enterprise Technical Assistance Scheme	Overseas Enterprise Incentive/Overseas Investment Incentive
	Skills Development Fund	Local Industry Upgrading Program	
	Software Development Assistance Scheme	Market and Investment Development Assistance Scheme	
	Venture Capital	Pioneer Status/Investment Allowance	
	Product Development Assistance Scheme		
	Skills Development Fund		
	Software Development Assistance Scheme		
	Total Business Plan	Venture Capital	

Source: EDB (1993).

for the purchase of equipment and industrial facilities needed for overseas operations. Second, a number of tax incentives are offered to encourage local enterprises to invest abroad (e.g. the Double Reduction for Overseas Investment Development Expenditure). Third, the Regionalization Training Scheme (RTS) provides training passes for a core group of key operators, supervisors and engineers to receive training in Singapore. Companies may apply for a grant from EDB to defray the cost of the Foreign Workers' Levy incurred during their stay in Singapore. Fourth, to establish an overseas presence

successfully, local companies often need to develop an understanding of host operating environment and the range of business opportunities available. They can do so by participating in study missions organized by industry associations or government agencies such as EDB or TDB.

Conclusion

This paper starts with an overview of the theoretical perspectives in our understanding of the political economy of transnational corporations. While neoclassical economic analysis is inadequate because of its under-estimation of the state's direct involvement in transnational operations, the radical political economy perspective tends to overplay the collusive relationship between the state and the capitalist. The paper therefore adopts a collusion-and-rivalry framework that transcends the market failure argument and the capital logic analysis. Under this framework, the state is given significant autonomy in its evolving relationships with transnational capital. These relationships evolve over time in their historically and geographically specific contexts. When the state is weak at specific historical moments, the framework argues that the state will collaborate with transnational capital to legitimize its very political existence. When the state becomes stronger over time, however, the framework predicts that the state will rival with transnational capital in order to accrue more benefits and values to its domestic firms. The ability of the state to collude with or rival TNCs is also dependent on the spatial scales of its territory, in favor of smaller states.

Applied to the case of Singapore, the paper has shown that the acceleration of Singapore's outward investment is a relatively recent phenomenon. It is also an outcome of the state's regionalization drive. During its early phase of industrialization, the weak state in Singapore invited foreign capital to assist its economic take-off which was subsequently used by the state to legitimize its own political hegemony. Over time, however, the state has become much more powerful politically and economically. After the recession in the mid-1980s, it began to realize the long-term danger of over-dependence on foreign capital. The state has therefore initiated a massive program to regionalize the Singapore economy since the late 1980s. Regionalization, as perceived by the state, can reduce Singapore's dependence on foreign capital in the long run and provide a useful platform for developing indigenous corporate capabilities. The historical underdevelopment of indigenous entrepreneurship, a result of the weak state's conscious distancing from the Chinese business elites, has convinced the 'entrepreneurial state' that a successful regionalization drive must be first initiated by the state through its government-linked corporations and 'political entrepreneurship'. Moreover, the state has provided various incentive schemes to change the comparative advantage of regionalization. These schemes are designed specifically to assist SMEs which have difficulties of access to capital and management expertise.

What then are the implications of this paper for theoretical development in international business studies and policy making in Singapore? First, the role of the state in international business is increasingly important in today's global economy (cf. Ohmae, 1995). As this paper has shown, it is no longer a passive player in the globalization of economic activities, but rather an active institution capable of participating directly in this globalization process, changing the comparative advantage of investment locations and mapping the political geography of global investment flows. In the field of entrepreneurship (see Kao, 1995), however, the state has never been given any recognition for its 'entrepreneurial' tendencies. It is perhaps time for a comprehensive theorization of the state as an

'entrepreneur' in its own right. In today's changing global economy, institutions (e.g. the state) and capital are mutually reinforcing and competing at the same time. In order to understand the nature of TNCs and their cross-border activities, it is imperative to bring the state back in international business studies (e.g. Stopford and Strange, 1991; Eden and Potter, 1993; Dicken, 1994, 1995).

Second, this paper has raised some important policy implications for Singapore. The main issue here is whether a state-driven regionalization can be sustained on a long-term basis. In a recent speech, Senior Minister Lee noted that in the past, Singapore had succeeded by attracting foreign TNCs to invest in Singapore to 'kick-start' its industrialization process. The same recipe, however, may not be useful to the future Singapore economy. He explained that 'how well we do [in future] depends on how many entrepreneurs or wealth creators we have in our midst' (quoted in *The Straits Times*, 11 July 1996). Singapore needs many more entrepreneurs to take up the opportunities and challenges that come with regionalization. Promoting entrepreneurship in the midst of a state-driven economy dependent heavily on foreign capital is proven a difficult task. Régnier (1993:213) explains that 'very few Singaporeans of the younger generation identify themselves today with the Overseas Chinese aim of being one's own boss... Singapore governmental agencies may provide the best assistance, but with very scarce results, if local entrepreneurs are deprived of the basic mentality and willingness to go for adventure and risk-taking abroad'.

In most developed countries throughout the world (e.g. the US, UK and Germany), outward investment from domestic firms has been driven by private entrepreneurs. Even in Japan, outward investment remains largely a corporate matter although large Japanese firms have received favorable assistance from the Ministry of International Trade and Industry (MITI) in the form of cheap loans, tax reduction and so on. In Singapore, the state has not only played a very important role as the promoter of outward investment by Singaporean firms, but also served as an 'entrepreneur' in its own right. This dual nature of the state and its interaction with indigenous entrepreneurship can work both ways. On the one hand, if the state's policy overshadows the private sector in regionalization (e.g. by internalizing brilliant small-business entrepreneurs), indigenous entrepreneurship may be affected and the outcomes may not be very favorable to the long-term growth of the Singapore economy. On the other hand, given the unique configuration of state-firm relationships in Singapore, a joint effort between the state and private entrepreneurs may ensure the sustainable growth of the Singapore economy through capturing value-added activities outside Singapore. The challenge to Singapore's regionalization is how to reconcile these contradictions embedded in nurturing indigenous entrepreneurship, which is often in-born, and the leading role of the 'entrepreneurial state' in the domestic economy. Resolving such contradictions, as it stands, provides the key to the long-term success of Singapore's economy.

Acknowledgement

I would like to thank Ho Kong Chong, Linda Low and two anonymous referees for very helpful comments on earlier versions of this paper. The paper is part of a larger research project on the regionalization of transnational corporations from Singapore funded by the National University of Singapore Academic Research Grants (RP 960045). None of these individuals and institutions, however, shall be blamed for any error or mistake contained in this paper. Thanks also to Mrs. Lee Li Kheng for drawing Figure 2.

References

- Amin, A. (1997) Placing Globalisation. *Paper Presented at the RGS-IBG Annual Conference*, Exeter, 7-9 January 1997.
- Angel, D. P. (1994) *Restructuring for Innovation: The Remaking of the US Semiconductor Industry*. The Guilford Press, New York.
- Brohman, J. (1996) Postwar development in the Asian NICs: does the neoliberal model fit reality?. *Economic Geography* 72, 107-130.
- Buckley, P. J. and Casson, M. (1976) *The Future of the Multinational Enterprise*. Macmillan, London.
- Caves, R. E. (1996) *Multinational Enterprise and Economic Analysis*, 2nd edn. Cambridge University Press. Cambridge.
- Chan, K. B. and Chiang, S.-N. C. (1994) *Stepping Out: The Making of Chinese Entrepreneurs*. Simon and Schuster, Singapore.
- Chandler, A. D. (1977) *The Visible Hand*. Harvard University Press, Cambridge, MA.
- Chandler, A. D. (1990) *Scale and Scope: The Dynamics of Industrial Capitalism*. Harvard University Press. Cambridge, MA.
- Chia, S. Y. (1985) The role of foreign trade and investment in the development of Singapore. In *Foreign Trade and Investment: Economic Development in the Newly Industrializing Asian Countries*, ed. W. Galenson. pp. 259-97. University of Wisconsin Press, Madison.
- Chia, S. Y. (1993) Foreign direct investment in the Singapore economy. In *Evolution of Asia-Pacific Economies: International Trade and Direct Investment*, eds. Ippai Yamazawa and Fu-Chen Lo, pp. 183-232. Asian and Pacific Development Centre, Kuala Lumpur.
- Department of Statistics (1991) *Singapore's Investment Abroad, 1976-1989*. DOS, Singapore.
- Department of Statistics (1996) *Singapore's Investment Abroad, 1990-1993*. DOS, Singapore.
- Dicken, P. (1992) International production in a volatile regulatory environment: the influence of national regulatory policies on the spatial strategies of transnational corporations. *Geoforum* 23, 303-316.
- Dicken, P. (1992b) *Global Shift: The Internationalization of Economic Activity*, 2nd edn. Paul Chapman. London.
- Dicken, P. (1992) Europe 1992 and strategic change in the international automobile industry. *Environment and Planning A* 24, 11-32.
- Dicken, P. (1994) Global-local tensions: firms and states in the global space-economy. *Economic Geography* 70, 101-128.
- Dicken, P. (1995) How the world works. *Review of International Political Economy* 2, 197-204.
- Dicken, P. and Kirkpatrick, C. (1991) Services-led development in ASEAN: transnational regional headquarters in Singapore. *The Pacific Review* 4, 174-184.
- Dicken, P. and Thrift, N. (1992) The organization of production and the production of organization: why business enterprises matter in the study of geographical industrialization. *Transactions, Institute of British Geographer* 17, 279-291.
- Dunning, J. H. (1988) *Explaining International Production*. Unwin Hyman, London.
- Dunning, J. H. (1993a) *Multinational Enterprises and the Global Economy*. Addison Wesley, Reading, MA.
- Dunning, J. H. (1993b) *The Globalization of Business*. Routledge, London.
- Economic Development Board, Singapore (1993) *Growing with Enterprise: A National Report*. EDB, Singapore.
- Economic Development Board, Singapore (1995) *Regionalisation 2000: Singapore Unlimited*. EDB, Singapore.
- Eden, L. and Potter, E. H. eds. (1993) *Multinationals in the Global Political Economy*. St. Martin's Press, New York.
- Fitzgerald, R. (1994) *The State and Economic Development: Lessons from the Far East*. Frank Cass, London.
- Gilpin, R. (1987) *The Political Economy of International Relations*. Princeton University Press, Princeton.
- Henderson, J. and Appelbaum, R. P. eds. (1992) *States and Development in the Asian Pacific Rim*. Sage, Newbury Park, CA.
- Hirst, P. and Thompson, G. (1996) *Globalization in Question: The International Economy and the Possibilities of Governance*. Polity, Cambridge.
- Ho, K. C. (1993) Industrial restructuring and the dynamics of city-state adjustments. *Environment and Planning A* 25, 47-62.
- Ho, K. C. (1994) Industrial restructuring, the Singapore city-state, and the regional division of labour. *Environment and Planning A* 26, 33-51.
- Ho, K. C. and So, A. (1997) Semi-periphery and borderland integration: Singapore and Hong Kong experiences. *Political Geography* 16, 241-259.
- Huff, W. G. (1995) The developmental state, government, and Singapore's economic development since 1960. *World Development* 23, 1421-1438.

- Hughes, H. and Sing, Y.-P. eds. (1969) *Foreign Investment and Industrialization in Singapore*. University of Wisconsin, Madison.
- Hymer, S. H. (1970) The efficiency (contradictions) of multinational corporations. *American Economic Review* 70, 441–448.
- Hymer, S. H. (1972) The multinational corporation and the law of uneven development. In *Economics and World Order from the 1970s to the 1990s*, ed. J. N. Bhagwati. pp. 113–40. Free Press, New York.
- Ietto-Gillies, G. (1992) *International Production: Trends, Theories, Effects*. Polity Press, Cambridge.
- Jesudason, J. V. (1989) *Ethnicity and the Economy: The State, Chinese Business and Multinationals in Malaysia*. Oxford University Press, Singapore.
- Julius, D. (1990) *Global Companies and Public Policy: The Growing Challenge of Foreign Direct Investment*. Pinter, London.
- Kanai, T. (1993) Singapore's new focus on regional business expansion. *NRI Quarterly* 2, 18–41.
- Kao, R. W.Y. (1995) *Entrepreneurship: A Wealth-Creation and Value-Adding Process*. Prentice Hall, New York.
- Katzenstein, P. J. (1985) *Small States in World Markets: Industrial Policy in Europe*. Cornell University Press, Ithaca, NY.
- Legendijk, A. and van der Knaap, G. A. (1993) Foreign involvement in the Spanish automobile industry: internalising versus networking. *Environment and Planning A* 25, 1663–1676.
- Legendijk, A. and van der Knaap, G. A. (1995) The impact of foreign investments in the automobile industry on local economic development in Spain. *Area* 27, 335–346.
- Lee, T. Y. (1994) *Overseas Investment: Experience of Singapore Manufacturing Companies*. McGraw-Hill, Singapore.
- Lim, M.-H. and Teoh, K.-F. (1986) Singapore corporations go transnational. *Journal of South East Asian Studies* 17, 336–365.
- Low, L., Ramstetter, E. D. and Yeung, Henry W.-C. (forthcoming) Accounting for outward direct investment from Hong Kong and Singapore: who controls what? In *Geography and Ownership as Bases for Economic Accounting* eds. R. E. Baldwin and J. D. Richardson. University of Chicago Press, Chicago.
- Low, L., Toh, M. H., Soon, T. W., Tan, K. Y. and Hughes, H. (1993) *Challenge and Response: Thirty Years of the Economic Development Board*. Times Academic Press, Singapore.
- Lu, D. and Zhu, G. (1995) Singapore direct investment in China: features and implications. *ASEAN Economic Bulletin* 12, 53–63.
- McVey, R. (1992) The materialization of the Southeast Asian entrepreneur. In *Southeast Asian Capitalists*, ed. R. McVey, pp. 7–33. Cornell University Southeast Asia Program, Ithaca.
- Menkhoff, T. (1993) *Trade Routes, Trust and Trading Networks—Chinese Small Enterprises in Singapore*. Verlag Breitenback Publishers, Saarbrücken, Germany.
- Ministry of Finance (1993a) *Interim Report of the Committee to Promote Enterprise Overseas*. MOF, Singapore.
- Ministry of Finance (1993b) *Final Report of the Committee to Promote Enterprise Overseas*. MOF, Singapore.
- Mirza, H. (1986) *Multinationals and the Growth of the Singapore Economy*. Croom Helm, London.
- Ohmae, K. (1990) *The Borderless World: Power and Strategy in the Interlinked Economy*. Collins, London.
- Ohmae, K. (1995) *The End of the Nation State: The Rise of Regional Economies*. Harper Collins, London.
- Palloix, C. (1975) The internationalisation of capital and the circuit of social capital. In *International Firms and Modern Imperialism: Selected Readings*, ed. Hugo Radice, pp. 63–88. Penguin, Harmondsworth.
- Palloix, C. (1977) The self-expansion of capital on a world scale. *Review of Radical Political Economics* 9, 1–28.
- Pang, E. F. (1995) Staying global and going regional: Singapore's inward and outward direct investments. In *The New Wave of Foreign Direct Investment in Asia*, pp. 111–29. Nomura Research Institute and Institute of Southeast Asian Studies, Singapore.
- Peck, J. A. and Tickell, A. T. (1994) Jungle law breaks out: neoliberalism and global-local disorder. *Area* 26, 317–326.
- Peck, J. A. and Tickell, A. T. (1994b) Searching for a new institutional fix: the after-Fordist crisis and the global-local disorder. In *Post-Fordism: A Reader*, ed. Ash Amin, pp. 280–315. Basil Blackwell, Oxford.
- Peck, J. A. and Tickell, A. T. (1995) The social regulation of uneven development: 'regulatory deficit', England's South East and the collapse of Thatcherism. *Environment and Planning A* 27, 15–40.
- Perry, M. (1991) The Singapore growth triangle. *Singapore Journal of Tropical Geography* 12, 138–151.
- Perry, M. (1992) Promoting corporate control in Singapore. *Regional Studies* 26, 289–294.
- Perry, M. (1995) New corporate structures, regional offices and Singapore's new economic directions. *Singapore Journal of Tropical Geography* 16, 181–196.
- Picciotto, S. (1991) The internationalisation of the state. *Capital and Class* 43, 43–63.
- Pitelis, C. N. (1991) Beyond the nation-state? The transnational firm and the nation-state. *Capital and Class* 43, 131–152.

- Pitelis, C. N. (1993) Transnationals, international organization and deindustrialization. *Organization Studies* 14, 527-548.
- Poynter, T. A. (1985), *Multinational Enterprises and Government Intervention*. Croom Helm, London.
- Ramstetter, E. D. (1996) Characteristics of Singapore's manufacturing establishments by nationality of ownership. In *Projects for Asian Industrializing Region (V)*, eds. Mitsuru Toida and Daisuke Hiratsuka, pp. 179-225. Institute of Developing Economies, Tokyo.
- Redding, S. G. (1994) Competitive advantage in the context of Hong Kong. *Journal of Far Eastern Business* 1, 71-89.
- Régnier, P. (1993) Spreading Singapore's wings worldwide: a review of traditional and new investment strategies. *The Pacific Review* 6, 305-312.
- Reich, R. B. (1991) *The Work of Nations: Preparing Ourselves for 21st Century Capitalism*. Vintage Books, New York.
- Rodan, G. (1989) *The Political Economy of Singapore's Industrialization: National State and International Capital*. Macmillan, London.
- Sayer, A. (1995) *Radical Political Economy: A Critique*. Basil Blackwell, Oxford.
- Speeches*, May-June 1993, Singapore.
- Stopford, J. and Strange, S. (1991) *Rival States, Rival Firms: Competition for World Market Shares*. Cambridge University Press, Cambridge.
- Strange, S. (1994) *States and Markets*, 2nd edn. Pinter, London.
- Tan, C. H. (1995) *Venturing Overseas: Singapore's External Wing*. McGraw-Hill, Singapore.
- Tan, H. (1991) State capitalism, multi-national corporations and Chinese entrepreneurship in Singapore. In *Business Networks and Economic Development in East and South East Asia*, ed. G. G. Hamilton, pp. 201-16. Centre of Asian Studies, University of Hong Kong, Hong Kong.
- Tan, K. Y. (1994) Economic development and the state: lessons from Singapore. In *The State and Economic Development: Lessons from the Far East*, ed. R. Fitzgerald, pp. 55-75. Frank Cass, London.
- The Straits Times*, 11 July 1996, Singapore.
- Toh, M. H. and Low, L. eds. (1993) *Regional Cooperation and Growth Triangles in ASEAN*. Times Academic Press, Singapore.
- UNCTAD (1996) *Transnational Corporations and World Development*. International Thomson Business Press, London.
- Vernon, R. (1977) *Storm Over the Multinationals*. Harvard University Press, Cambridge, MA.
- Wade, R. (1990) *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*. Princeton University Press, Princeton.
- Weidenbaum, M. and Hughes, S. (1996) *The Bamboo Network: How Expatriate Chinese Entrepreneurs Are Creating a New Economic Superpower in Asia*. The Free Press, New York.
- Williamson, O. E. (1975) *Markets and Hierarchies: Analysis and Antitrust Implications*. Free Press, New York.
- Williamson, O. E. (1985) *The Economic Institution of Capitalism*. Free Press, New York.
- Williamson, O. E. (1996) *The Mechanisms of Governance*. Oxford University Press, New York.
- Yeung, H. Wai-chung (1994a) Transnational corporations from Asian developing countries: their characteristics and competitive edge. *Journal of Asian Business* 10, 17-58.
- Yeung, H. Wai-chung (1994b) Critical reviews of geographical perspectives on business organisations and the organisation of production: towards a network approach. *Progress in Human Geography* 18, 460-90.
- Yeung, H. Wai-chung (1994c) Hong Kong firms in the ASEAN region: transnational corporations and foreign direct investment. *Environment and Planning A* 26, 1931-56.
- Yeung, H. Wai-chung (1995) The geography of Hong Kong transnational corporations in the ASEAN region. *Area* 27, 318-34.
- Yeung, H. Wai-chung (1996) The historical geography of Hong Kong investments in the ASEAN region. *Singapore Journal of Tropical Geography* 17, 66-82.
- Yeung, H. Wai-chung (1997) The social-spatial constitution of business organisations: a geographical perspective. *Organization* 4.
- Yeung, H. Wai-chung (forthcoming) *Transnational Corporations and Business Networks: Hong Kong Firms in the ASEAN Region*. Routledge, London.
- Yoshihara, K. (1976) *Foreign Investment and Domestic Response: A Study of Singapore's Industrialization*. Eastern University Press, Singapore.
- Young, O. R. (Ed.) (1996) *The International Political Economy and International Institutions*. Edward Elgar, Cheltenham.