

## One Response from the South: Singapore's Efforts at Developing Hub Functions\*

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### 1. Introduction

The story of industrial development in Asia is by now very well documented. The phenomenal growth in the Asia Pacific region started in the 1950s (Japan and later, Hong Kong) and 1960s (Taiwan, Korea, and Singapore). American and European multinational companies, seeking cheaper production sites, played an important role in linking the East Asian economies being into the global economy via manufacturing either through direct production or via subcontracting (Froebel, Heinrichs and Kreye, 1980). The electronics industry, being light and high value-added, was particularly amenable to this internationalisation of production in East and Southeast Asia (Scott, 1987; Henderson, 1989). In Japan and

Korea, state policies not only targeted industries, but local companies as well, enabled favoured local companies to become industrial conglomerates with competitive export strategies (Steers, Shin and Ungson, 1989: 19; Gereffi, 1990; Koo and Kim, 1992: 128, 136-137; Hart, 1992: 41-45). The case of Taiwan and Hong Kong saw smaller but more nimble local companies prospering through subcontracting arrangements in garments, electronics and toy industries (Hsiao, 1994: 79-80; Chiu and Lui, 1995). The late 1970s saw increasing regionalisation of economic activities. The strong yen pushed Japan to increase its production network within East and Southeast. The Asian "Dragons", after two decades of rapid growth is now investing its surplus as well restructuring operations into neighbouring countries. While foreign direct investment continued into the Asian NIEs, it started fanning out into neighbouring countries like Malaysia

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and Thailand, as well as China and more recently, Vietnam and Indonesia (Hong, 1987; Herschede, 1991; Lim and Pang, 1991). A hierarchical cluster analysis using bilateral trade flows revealed the dominance of Japan in East and Southeast Asia, and Singapore in Southeast Asia (Amelung, 1992). The research done by Tachiki (1996) of the Sakura Institute of Research shows how the establishment of Japanese regional headquarters in the region tends to follow the pattern of foreign direct investment. As production and sales grow regional headquarters are established to coordinate various activities (Tachiki, 1996: 22-24).

Noyelle (1985: 3) points out that the internationalisation of production is followed by an expansion of producer services (accounting, legal counsel, management consulting, etc) developing as support service to multinational corporations. Moreover, the expansion of services has also given rise to an international division of services (Coffey, 1996). Thus expansion of production chains into Asia is followed by an expansion of producer services. The work on Japanese service multinationals by Edglington and Haga (1998: 163-164) shows how service companies linked with manufacturing firms within the same enterprise groups (keiretsu) expanded their investments in the Pacific Rim in activities such as banking and

warehousing with subsequent investments by non-keiretsu Japanese service multinationals diversifying into the construction and tourism industries. Similarly, Rimmer's (1996) detailed analysis showed the growth and significance of transport and communications within the Asia Pacific region, as intra Asia trade increasingly links East with Southeast Asia, with transport and communication hubs in the major cities Tokyo, Hong Kong, and Singapore articulating economic activity. Edglington and Haga's (1998: 170-173) analysis of city hierarchy rankings based on the number of Japanese service multinationals based on Pacific Rim cities between 1985 and 1995 indicated the continued dominance of Hong Kong and Singapore, but also showed the emergence of Shanghai and Beijing in China, Ho Chi Minh city in Vietnam and Bangkok in Thailand, as these economies became increasingly linked to the global economy.

The rise of per capita incomes have also resulted in the growth of consumer markets in tandem with the rise of the middle class in Asia (Hsiao, 1993; Robison and Goodman, 1996). Thus, alongside the significance of Asia as a production site exist the growing potential of Asia as a emerging market for an increasing array of consumer durables and luxury items (Chua, 1998; Young, 1999). This, in turn, fuels the demand for services

related to advertising, marketing and sales. The growth of new markets form another basis for the creation of regional headquarters, as firms wanting to establish a sales and marketing presence in emerging markets choose a base to establish what Bosman and de Smidt (1992) terms a "beachhead function" or Lasserre (1996) calls a "scouting" function. Lasserre (1996: 31) points to the need for establishing regional centres as in order to station managers to grasp swiftly the rapidly changing context of emerging and rapidly growing markets.

From the perspective of governments, there is by now a large American literature on the rising economic activism of local states in looking overseas to attract foreign investment as a response to increased global competition for foreign investment. Part of this drive is also a result of the disenchantment of local states with the ineffectiveness of federal governments (Soldatos, 1990: 41). Expanding state capabilities and the increased realisation that exports, direct foreign investment, tourism are crucial to the state's economic viability have added to this activism (Fry, 1990: 120-121). As a result, scholars point to the rise of city-states and the need for cities to move away from housekeeping functions to take on entrepreneurial functions. As Eisenger (1989; 9) argues, there is a need for the state to "identify, evaluate,

anticipate and even help develop and create markets for private producers to exploit, aided if necessary by government as subsidizer or co-investor". Governments in Southeast Asia, particularly Singapore and Malaysia, have particularly been proactive in attempting to secure more foreign direct investments as a means of sustaining the growth of their national economies.

The objective of this paper is to show specifically, using the case of Singapore, how this interplay between economic regionalisation, corporate strategies and government action is being played out. This is achieved by examining the policies of the Singapore government with regards to their selective attraction of industries and corporate activity as the economic advantages of producing in Singapore changes and by examining the regional strategies of multinationals by reproducing case interviews of American and Japanese multinationals with regard to their regional strategy in Southeast Asia.

## 2. One Response from the South: Singapore Efforts at Developing Hub Functions

Singapore's efforts at developing hub functions has to be understood at two levels: in terms of a path-dependent logic where the development of policy

initiatives can be understood in terms of the context of previous stages. Secondly, the relative success of hub functions in Singapore is also the outcome of the gradual build up of an enhanced urbanization economy of place that is the result of past policy initiatives.

The industrialization strategy adopted by Singapore was different from that of Taiwan, South Korea in that it was based on an explicit strategy of attracting foreign multinational companies. This strategy was linked to a belief that local capital, which was largely been involved with commerce, was unable to make the transition to industrial production:

The major impediment to the flow of domestic capital into industrial development is the lack of industrial know-how among the owners of capital. Much of the capital accumulation is the result of trading activities. The experiences and calculations of successful traders are not generally suitable for industrial decision commercial capital is accustomed to short period risks or quick profits with high rates of profit expectations. Such capital is not easily adapted to industrial investments which require careful long term planning, and very often give often moderate steady profits"

(Singapore Development Plan, 1961: 17)

The influential United Nations-

Winsemius mission which was tasked with the objective of providing a report of the assessment of the country's economic future was also skeptical, noting the general lack of managerial and technical know-how inhibiting local efforts at industrialization. Its position with regard to the role of foreign capital is clear from the following comment:

"we believe, however, that if the investment climate is created and given the necessary incentives, as recommended in this report, foreign participants will move in more quickly to the manufacturing activities than domestic entrepreneurs" (United Nations, 1961: 66)

The views expressed in these two documents laid the foundation of Singapore's economic policy for the next three decades: the reliance on foreign multinationals to drive Singapore's industrial economy and the use of incentives to attract these companies. By implication, this approach resulted in the development of a set of agencies tasked with the role of growing Singapore's industrial economy in line with the requirements of manufacturing capital: the Economic Development Board with investment promotion, Jurong Town Corporation with the development of industrial estates; institutions to manage savings (Central Provident Fund) and provide

industrial financing (Development Bank of Singapore) and institutions to facilitate the training of labour for the industrial workforce (Vocational and Industrial Training Board to general vocational education and the Skills Development Fund for on-the-job training). There is even a mechanism for the moderation of wage rates, the National Wages Council.

A division of labor had clearly been established. Unlike the case of Japan and Korea, the role of the state action in Singapore in the 1960s and 1970s has not been to encourage the formation of local manufacturing companies, but to build domestic manufacturing capacity by creating conditions attractive for the entry of foreign multinationals using Singapore as an export platform for markets in the West.

The launching of Singapore's industrialization programme in the 1960s coincided with the movement of industrial production away from the First World. This internationalization of production was triggered by rising wages in industrialized countries and facilitated by the erosion of international regulatory arrangements that supported post-war production and trade (Froebel, Heinrichs, and Kreye, 1980; Rich and Linge, 1991). Mirza (1986) estimated that in 1975, 48.6% of the foreign direct investment in Asia ended up in Singapore. The rapid growth of the manufacturing

sector in the seventies quickly soaked up the surplus labor. The unemployment rate fell steadily from 6% in 1970 to under 4% in 1977 and by the late 1970s, Singapore had achieved full employment. The 1980s, labor and issues connected with labor (job hopping, foreign workers, shift work, parttime work, extending the retirement age, wage costs and productivity etc.) became concerns for both companies and government.

An active landuse planning effort (especially in urban renewal, public housing and land reclamation) in Singapore has allowed for reasonable supplies of land for various uses and has kept price changes in check. For industrial land in particular, the promotion of industrialization has resulted in the systematic conversion of land into industrial uses by the government. This has resulted in a 359% increase in industrial land and a 40% increase in warehouse land between 1967 and 1982 (Ministry of National Development, 1983). However, given the small size of Singapore and despite of extensive land reclamation which has added 5% to the main island's land area between 1967 and 1982, landuse conversion, and increasing landuse density, the inherent small size of the island implies that there is less land available for new developments of any kind and inevitable increases in land cost.

The growing size of Singapore's

foreign reserves and the need to maintain a strong dollar in order to develop the financial sector also meant high export prices for Singapore manufacturers. There have been suggestions (e.g. Bryant, 1989) that the strong dollar contributed in an important way to the 1985-86 recession.

The emergence of new growth centers of production (e.g. Malaysia, Thailand, Indonesia, China in the Asia Pacific region alone) and emerging areas (e.g. Vietnam) has brought with it increasing competition among manufacturers of products and among governments offering sites for production. State economic planners have come to realize that the presence of these low cost competitors mean that Singapore cannot compete with them solely on cost considerations alone. Moreover, the tight domestic land and labor situations create a zero-sum situation where the promotion of one area (industry or sector) may imply the withdrawing or restriction of resources from another. The high wage policy initiated in the late 1970s has this intended effect of redistributing workers from labor intensive and low value added industries to more productive uses (see Rodan, 1989, chapter 5).

This, then is the environment of the 1990s, and manufacturers in Singapore must constantly adjust to this rapidly changing environment or face serious problems in the near future. More

importantly, the increasingly tight labor market has meant for foreign and local capital alike, that the days of using Singapore as a low cost production site is over and that new corporate strategies need to be found. For the state, as the cushion of low cost production gets steadily deflated, the pressure is on finding new ways of sustaining the growth of the economy.

With multinationals relocating production operations to new production sites in the immediate sub-region, thrust of state economic policy from the mid 1980s was the realization that Singapore needed to move beyond manufacturing and production to services and to develop incentives in such a way as develop Singapore as a base for strategic control, innovation and key operations (MTI, 1986, 1991). The operational headquarter strategy, formulated in 1986 represents a key component of this goal by enticing MNCs to set up and run their regional functions out of Singapore (Dicken and Kirpatrick, 1991; Perry, 1992).

### 3. Growing Regional Functions from Singapore: Industry Dynamics, Firm Strategy and Government Policy

Since the inception of the OHQ programme in 1986, the relative

success of the Republic's efforts at attracting regional functions can be gauged from Langdale's (1992) early assessment for Australia's Department of Industry, Technology and Commerce, Avenell's (1996) study of five cities as potential RHQ centers for Southeast Asia, Edglington and Higa's (1998) study of Japanese multinationals, Lassere's (1996) study based on an INSEAD survey of European multinationals, ) along with a number of publications by local researchers (Perry, Poon and Yeung 1997; Yeung, 1998; Ho, 1998; Perry, Yueng and Poon, forthcoming). From these studies, and also from my own research, the key players in the attraction of regional functions in the Asia Pacific are Hong Kong, Singapore and Sydney. It is however extremely difficult to say which of the three cities is ahead in the competition or is most successful. Judging from numbers alone, the Hong Kong Industry Department claims to have 924 regional headquarters and 1606 regional offices in 1997. The Singapore government does not release its RHQ data, but Perry's research team, which examined local business directories and followed up with checking contact addresses in 1997 found about 270 in Singapore. The list I received from Invest Australia has, as of June 1999, 440 companies for Australia of which about 60% are in Sydney.

The number of companies alone is

not a reliable estimate of "success". The Hong Kong data, for example, is based on an annual mail survey with the usual self-administered and non-response problems associated with surveys. Moreover, the definition of regional headquarters and offices is sufficiently vague that many firms which claim to be regional headquarters and offices are actually local companies with production operations in China and a small sales and administration office in Hong Kong. I found similar cases in Australia.

Thus, given these difficulties, I will, in this section, draw from my case interviews with multinationals with RHQs in Singapore, illustrate how companies use locations (specifically the amenities found in these locations) in the performance of various regional functions. It is important to point out that that corporate strategy must be understood within a specific industry dynamic which is different for various industries. I also hope to show how state policy initiatives in the attraction of regional functions have different impacts for different industries.

#### 1) Scale and Support (Electronics)

By the 1980s, Southeast Asia has emerged as one to the major producers of electronics products and components, particularly in semiconductors, where Malaysia, Philippines

and Singapore dominant. The geographical pattern on MNC investments in consumer electronics shows a heavy concentration in Singapore, followed by Malaysia and then Thailand. The pattern is similar in industrial electronics (see Tables 8, 9 and 10 UNCTC, 1987). Natarajan and Tan's (1992) survey of 570 Singapore-based MNC companies found that (1) the 128 that had operations in Malaysia and Thailand were mainly in electronics industries; (2) MNCs adopted what Natarajan and Tan termed a "decanting approach, transferring product lines from Singapore into these countries when higher costs in Singapore made production unprofitable (3) the Singapore operation remained as the technical support center, because of managerial and technical experience already acquired and residing in Singapore.

As detailed in Ho (1998), the case of Matsushita this pattern of corporate restructuring out of Singapore into the neighbouring region. Matsushita has 41 sales and production subsidiaries in Southeast Asia. Matsushita use their RHQ not as a regional control device, since this function is managed within the individual product divisions, but as production support to Southeast Asian affiliates. This includes an electronic ordering system as a clearing house for orders of components and finished products. The RHQ also

maintains a foreign currency division to provide lending and acts as a consultant for forex purchases.

Does government policy in Singapore play a role in such regional functions? Given the kind of corporate restructuring in the electronics industry, the decision to have Singapore's RHQ policy with its accompanying benefits probably hasten the process for companies thinking of moving their labour intensive processes into Malaysia, Indonesia and Thailand, and these companies have responded to incentives by keeping and upgrading their administrative functions. In the process, these functions are kept within a RHQ setting that involves supporting regional affiliates.

It should be emphasized that these companies are responding to rising costs and emerging regional opportunities. As company presence is built up in a particular country, the pressure to host regional functions in that country also builds up. As one Matsushita executive pointed out:

"A lot of our customers are in Malaysia customers complain (that the distance is) quite far from Malaysia to Singapore. In order to provide a better service to them we have set up an office there to be close to them they are going independent.. before they report to us" (interviewed in Singapore on 23rd October 1996)

While this illustration refers to the



formation of sales support, my interviews with company officials indicated the same pressures of distance and the scale built up in Malaysia (Matsushita has 17 subsidiaries in Malaysia) is leading to the build up of administrative functions in Kuala Lumpur, Malaysia's capital. Thus, the "decanting process" the Natarajan and Tan (1992) refers to for the production process can be pushed further, namely, the tendency for administrative functions to follow production and sales. Matsushita had already transferred one of its most senior executives to oversee corporate affairs in Malaysia. His task is to oversee the transfer of the regional training function from Singapore to Malaysia.

## 2) Emerging Markets (Regional Broadcasting)

By the late 1980s, Southeast and East Asia had grown a middle class capable of supporting pay television. Hong Kong was originally the favoured location of the industry because the early development of the film industry had meant an available pool of technical and creative personnel, as well as a set of supporting industry services. The managing director of Media Asia, a Hong Kong production and distribution company pointed out that "you can't just go to a school and clone 14 different TV producers. Most

Asian markets lag behind Hong Kong by nearly two decades" (reported in *Asiaweek*, November 8, 1996).

The story of how Singapore lured away broadcasters from Hong Kong is a typical push-pull episode with governments as a key player. By the mid 1990s, China had already indicated that Xinhua, the state news agency, will control distribution of foreign financial and business news. The prospect of China exerting strong censorship on the local media made regional broadcasters consider alternative locations. The process of consulting China itself resulted in delays. James So, the Hong Kong Secretary for Recreation and Culture admitted that "the only drawback for broadcasters just coming here is that we have to consult China.. that can be a process. Some of the international broadcasters want to come in right away" (reported in *Asia Wall Street Journal*, Oct 31 1994). Broadcasters expressed frustrations of this delay. The Managing Editor of *Asia Business News*, one of the companies which migrated to Singapore pointed out that "Getting a license (in Hong Kong) to uplink looked like it was going to be difficult, if not impossible-certainly for the short term (reported in *Advertising Age*, Feb 20 1995).

In contrast, the Singapore government acted to develop a set of initiatives to attract regional broadcasters. This involved a number of significant

actions besides the granting of tax incentives in the period of 1993-1995:

- The liberalisation of satellite uplink and downlinks in 1995. ST Teleport was the first company to be licensed to operate and provide the facility to users, while Disney was the first to have its own private up and down link license.
- 5 year broadcasting (uplink) licenses were granted fairly easily and rapid startup of between 4 to 6 months
- Help in the development of trained personnel in creative and technical fields
- Related businesses were also being attracted, including graphics, pre and post production work, teletxt data and audio services
- A home pay TV market was grown by government spending to wire up Singaporean households for cable

I think the story of Hong Kong versus Singapore in the business of growing a broadcast industry is best summed up in the comment of one broadcaster reported in the South China Morning Post ( Aug 28, 1994):

"The Hong Kong government said it wanted our business, and to be honest everyone would rather be here than Singapore. But when I dealt with the Government, I got the feeling they were not really interested in getting the business they were not prepared to

push on our behalf".

The above comment also illustrate a contrast with the earlier case. While the case of electronics is one where expanding economies and new production sites drove corporate strategy, with government policies and incentives being discounted, the case of broadcasting in Asia, is one where policies made the difference. The comment produced above clearly showed that Hong Kong had the first mover advantage in the region and at the time when companies were assessing their regional strategies, was still the favoured location. It was the politics in Hong Kong and the policies in Singapore that decided the outcome.

### 3) Cargo Hubs versus Transshipment Centers (Air Delivery)

"Singapore is wrong geographically. It is too far south to be a hub for Asia" (UPS Regional Vice President for Asia Pacific, Charles Adams, reported in Business Times, 22 April 1996.

All cities are victims of its geography, and going by the comments of the UPS executive, Singapore has already lost out in the cargo hub competition. The story of how Taipei won the UPS Asia hub and Manila the DHL hub is told in Ho (1998). The point is that for air

express delivery, the central point between Asia and the United States and Europe lies north of Singapore. Singapore ends up being a transshipment point to collect from the sub-region and forward to Manila or Taipei. Even this function is being eroded, as Kuala Lumpur, is emerging as a competitor. Malaysia's growing economy has meant separate flights to the hub (interview with UPS, 25 November 1996). UPS and DHL both have regional offices in Singapore for the region, these as administrative units that have very different locational considerations from distribution and collection points. At this level too, Kuala Lumpur has managed to pull the DHL IT function from Singapore (interview with DHL, 19 May 1997).

#### 4) Data Processing Functions (Financial Services and Online Information)

Of the four industries in this study, this particular regional function is the most footloose. Driven primarily by the cost of telecommunications, the reliability of infrastructure and the availability of IT personnel, data hubs are the backroom function that can be located anywhere as long as these conditions are met. Government incentives, in this instance, will provide make a big difference. As the case regional manager of SITA (an air transport reservations company) who was

involved in the move from Hong Kong to Singapore in 1990 points out,

"we did work very closely with EDB, Economic Development Board and we had some preferential conditions in order to set up the regional office here we had other offers"

Interviewer: "so I guess for an outfit like SITA, because it has offices all over the place, the cost of relocation is actually quite minimal,

Manager: (interjects) "it is"

Interviewer: "because you have a front office there already, it is a question of building up your hardware, and getting your lines and getting the agreements with the local PTTs"

Manager: that's right, yes, that's what it is we can move tomorrow"

Interviewer: "we can move tomorrow!"  
(both laughs)  
(interviewed 8 November 1996).

The incentives in question included tax breaks and, more importantly, land at a preferential rate compared to Hong Kong where rental rates were increasing rapidly. A more impressive example is the Citibank US \$60 million data processing hub facility in Singapore whose regional reach covers 14 Asian countries and it handles 20,000 card applications a month. Incentives however only matter as the

"hook" which pulls in these functions. The following comment of Citibank's Asia Pacific IT director is worrying for government officials who think that this facility will stay in Singapore :

"where data will reside is a technical issue, it is a trade off between the cost of bandwidth, and the cost of processing... today, it makes sense to do it in Singapore, but there is no guarantee that in 10 years time, we process, as we are doing today, for Taiwan, Australia, Turkey, Japan, out of Singapore. We will process where it makes sense" (interviewed on 31 October 1996).

#### 4. Conclusion: Corporate Strategy and Government Policy

The one response from the South suggests that emerging economies, with the pull of its growing markets and the attractiveness of lower cost production sites, will sway location strategies of multinational companies operating in Asia. This process will work to attract production and services functions away from established centers like Singapore and Hong Kong. In the post crisis era, it is naive to think that states policy matter absolutely as the East Asian developmental states literature had initially suggested. My paper has however shown that government policy can, in some, instances, attract

new regional functions by (a) hastening an already visible spatial industrial dynamic (the case of electronics); (b) by growing a location type of agglomeration effects by attracting enough companies to create critical mass and also by attracting associated services (the case of broadcasting); and (c) in the case of more footloose activities, through the provision of strong incentives (the case of data hubs).

#### Notes

- 1) Avenell (1996: 15) claims 300 RHQs in 1996 while the Allen Consulting Group, which wrote the report that formed the basis for the Australian RHQ policy estimated 250+ RHQs in 1994.

#### References

- Amelung, T., 1992, "Regionalisation of Trade in the Asia Pacific: A Statistical Analysis", *Asean Economic Bulletin*, 9, pp.133-148.
- Avenell, S., 1996, "The Competition for Corporate Regional Headquarters" *Asia Research Centre Working Paper* 67, Murdoch University, Australia.
- Bosman, J. de Smidt M., 1993, "The Geographical Formation of International Management Centres in Europe" *Urban Studies*, 30, pp.967-980.
- Bryant, R. C., 1989, "The Evolution of Singapore as a Financial Center" in K. S. Sandhu and P. Wheatley, (ed.), *Management of Success: the Moulding of Modern Singapore*, Singapore, Institute of Southeast Asian Studies.
- Chiu, S. W. K. and Lui T. L., 1995, "Hong Kong: Unorganized Industrialism", in G. L. Clark and W. B. Kim, (Eds.), *Asian NIEs and the Global Economy*, Baltimore: John Hopkins, pp.85-112.
- Chua, Beng Huat, 1998, "World Cities, Globalisation and the Spread of Consumerism: a View from Singapore", *Urban Studies*, 35,

- pp.981-1000.
- Coffey, W. J., 1996, "The 'Newer' International Division of Labour", in P. W. Daniels and W. F. Lever (Eds.), *The Global Economy in Transition* Essex : Longman.
- Dicken, P. Kirpatrick, C., 1991, "Services-led Development in ASEAN: Transnational Regional Headquarters in Singapore", *Pacific Review*, 4, pp.174-184.
- Eisenger, P. K., 1988, *The Rise of the Entrepreneurial State*, University of Wisconsin Press: Madison, Wisconsin.
- Edgington, D.W. and Haga H., "Japanese Service Sector Multinationals and the Hierarchy of Pacific Rim cities", *Asia Pacific Viewpoint*, 39, pp.161-178.
- Frobel F., Heinrichs J. Kreye O., 1980, *The New International Division of Labour*, Cambridge: Cambridge University Press.
- Fry, E. H., 1990, "State and Local Government in the International Arena", *Annals, AAPSS*, 509, pp.118-127.
- Fukushima, S., 1996 "Regional Operation Center Strategy in East Asia under the Globalizing Economy," Research Paper NLI Research Institute BAPPENAS Joint Research.
- Gereffi, G., 1990, "Big Business and the State", in G. Gereffi and D. L., Wyman (Eds.), *Manufacturing Miracles*, Princeton, N. J: Princeton University Press, pp.90-109.
- Hart, J. A., 1992, *Rival Capitalists: International Competitiveness in United States, Japan, and Western Europe*, Ithaca, New York: Cornell University Press.
- Henderson, J., 1989, *The Globalisation of High Technology Production*, London: Routledge.
- Herschede, F., 1991, "Competition among ASEAN, China, and the East Asian NICs", *ASEAN Economic Bulletin*, 7, pp.290-306.
- Ho, K. C., 1998, "Corporate Regional Functions in Asia Pacific", *Asia Pacific Viewpoint*, 39, pp.179-178
- Hong, M. S., 1987, "Competition between NICs and ASEAN, East Asia", *International Review of Economic, Political and Social Development*, 4, pp.130-144.
- Hsaio, M. H. H., 1993, *Discovery of the Middle Classes in East Asia*, Taipei: Academia Sinica.
- \_\_\_\_\_, 1994, "The State and Business Relations in Taiwan", in R. Fitzgerald (Ed.), *The State and Economic Development: Lessons from the Far East*, Singapore, Toppan: pp. 76-97.
- Koo, H., and Kim, E. M., 1992, "The Developmental State and Capital Accumulation in South Korea," in R. P. Appelbaum and J. Henderson (Eds.), *States and Development in the Asian Pacific Rim*, Newbury Park: Sage, pp.121-149.
- Langdale, J., 1992, "Regional Administrative Headquarters and Telecommunications Hubs: Australia and the Asia Pacific region," DITAC Service Industries Research Program Report No. 5.
- Lasserre P., 1996, "Regional Headquarters: The Spearhead for Asia Pacific Markets" *Long Range Planning*, 29, pp.30-37.
- Lim, Linda C. Y. and Pang E. F., 1991, *Foreign Direct Investment and Industrialisation*, Paris: OECD.
- Mirza, H., 1986, *Multinationals and the Growth of the Singapore Economy*, London: Croon Helm.
- Natarajan, S. and Tan J. M., 1992, *The Impact of MNC Investments in Malaysia, Singapore and Thailand*, Singapore: Institute of Southeast Asian Studies.
- Noyelle, T. J., 1985, *New Technologies and Services: Impacts on Cities and Jobs*, Institute for Urban Studies Monograph No. 5, Maryland: University of Maryland.
- Perry, M., 1992, "Promoting Corporate Control in Singapore," *Regional Studies*, 26, pp.289-294.
- Perry, M., Poon J. and Yueng H., 1997 "Competition for Corporate Control Within East Asia: Evidence from Singapore" Unpublished Conference Paper, Singapore.
- \_\_\_\_\_, forthcoming, "Regional Office Mobility: The Case of Corporate Control in Singapore and Hong Kong," *Geoforum*.
- Rich D. C. and G. J. R. Linge, 1991, "The State and Industrial Change", in D. C. Rich and G. J. R. Linge (eds.), *The State and the Spatial Management of Industrial Change*, London: Routledge.
- Rimmer, P., 1996, "International Transport and Communications Interactions Between Pacific Asia's Emerging World Cities," in F. C. Lo and Y. M. Yeung (Eds.), *Emerging World Cities in Pacific Asia*, United Nations Press, Tokyo: pp.17-47.
- Robison, R. and Goodman D. S. G., 1996, *The New Rich in Asia*, London: Routledge.
- Rodan, G., 1989, *The Political Economy of Singapore's Industrialisation*, London: Macmillan.
- Scott, A. J., 1987, "The Semiconductor Industry in Southeast Asia: Organisation, Location and the International Division of Labour," *Regional Studies*, 21, pp.143-160.
- Singapore Ministry of National Development, 1983, 1982 *Land and Building Use*, Singapore: Singapore National Printers.

- Singapore Ministry of Trade and Industry, 1986, *The Singapore Economy: new Directions*, Singapore: Singapore National Printers.
- \_\_\_\_\_, 1991, *The Strategic Economic Plan: Towards a Developed Nation*, Singapore: Singapore National Printers.
- Soldatos, P., 1990, "An Explanatory Framework for the Study of Federated States as Foreign-policy Actors", in H. J. Michelmann and P. Soldatos (eds.), *Federalism and International Relations: The Role of Subnational Units*, Oxford: Clarendon Press, pp.34-53.
- Steers, R. M., Shin, Y. K., and Ungson, G. R., 1989, *The Chaebol: Korea's New Industrial Giant*, New York: Harper.
- Tachiki, D. S., 1996, "Corporate Investment Strategies for the Pacific Region: Some Evolving Changes in Japanese FDI," Research paper, Tokyo: Sakura Institute of Research.
- UNCTC, 1987, *Transnational Corporations and the Electronics Industries of the ASEAN Economies*, United Nations Centre on Transnational Corporations, New York: United Nations.
- Young, K., 1999, "Consumption, Social Differentiation and Self-definition of the New Rich in Industrializing Southeast Asia", in M. Pinches (Ed.), *Culture and Privilege in Capitalist Asia*, London: Routledge, pp. 56-85.
- Yeung, H., 1998, "Competing for Transnational Corporations? The Regional Operations of Foreign Firms in Hong Kong and Singapore", in I. G. Cook, M. A. Doel, R. Y. F. Li and Y. J. Wang (Eds.), *Dynamic Asia: Business, Trade and Economic Development in Pacific Asia*, Aldershot: Ashgate.

## ABSTRACT

As Asia becomes increasingly integrated economically, opportunity exists for major cities to host hub functions, particularly in managing financial flows, as bases to coordinate regional production networks, and as staging points for the penetration of new markets. The paper argues for a path-dependent logic to understanding the efforts of the Singapore State in hosting hub functions. As a city-state without a national economic hinterland, Singapore's response to increasing business costs and regional competition has been to create a set of policies designed to encourage multinational companies to keep administrative control functions in Singapore while moving the more labour and land intensive production functions to nearby Malaysia and Indonesia. An understanding of the competition among cities in the Asia Pacific for hub functions must also take into account corporate strategy within particular industry dynamics. The second half of the paper provides a number of case studies to show this interplay between corporate strategy, industry dynamic and government policy.

## Newspapers and News Magazines

- Advertising Age*, February 20, 1995 "Singapore Attracts Media Despite Rules".
- Asian Wall Street Journal*, October 31, 1994 "Broadcast Boom".
- Asiaweek*, November 8, 1996 "Satellite TV: Asia's No Pushover: In the Fight for the Region's Television Audiences, the Satellite Giants are Meeting Tough Resistance".
- Business Times Singapore*, April 22, 1996 "UPS to Group Operations in S'pore Under one Roof".
- South China Morning Post*, August 28, 1994 "Another Satellite Network Snubs Territory for Singapore".