

**Positioning Singapore in the global economy:  
a study of political and economic processes**

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## **ABSTRACT**

### **Positioning Singapore in the global economy: a study of political and economic processes (David Shaw)**

This study seeks to understand the significance of political decision-making and economic processes in the establishment of Singapore as an Asian 'economic miracle'. Throughout the study, illustrative passages drawn from three case studies conducted in different sectors of the economy - the port, banking and the biomedical sciences - are used to throw light on matters such as the contribution of statutory boards and government-linked companies, privatisation, the role of foreign MNCs and direct investment, and the challenges facing local start-up companies.

Singapore's linkages with the outside world are put in context through exploration of a theoretical framework comprising globalisation, regionalism and the world city concept. The treatment of these is questioning as well as descriptive, and also includes a substantial literature review. The main body of the thesis investigates five main factors that, in the author's view, influence the nature of Singapore's integration in the global economy. The first, often glossed over, is the enduring vulnerability of the city-state, both in economic and security terms. Second are the various means of state control of, and intervention in, the economy. Third is the actual interface of Singapore and the global economy, and the approaches taken to the opportunities and dangers involved. The fourth and fifth factors - the growth of a knowledge-based economy and a refreshed and more urgent programme of regionalisation - represent the latest efforts to re-make the economy in order that Singapore remains competitive in a changing world. Following the conclusions to be drawn from the research project, the final chapter is given over to discussion about the future, highlighting the need for changes of mindset on the part of both government and governed, and closing with a proposal regarding the future direction of world-city research.

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## Abbreviations and Conventions

### Abbreviations

<b>ACD</b>	Asia Cooperation Dialogue
<b>ACU</b>	Asian Currency Unit
<b>AFTA</b>	ASEAN Free Trade Area
<b>ANZUS</b>	Australia-New Zealand-USA Pact
<b>APEC</b>	Asia-Pacific Economic Cooperation
<b>ARF</b>	ASEAN Regional Forum
<b>ASEAN</b>	Association of Southeast Asian Nations
<b>ASEM</b>	Asia-Europe meeting
<b>ATM</b>	automated teller machine
<b>BD</b>	Becton Dickinson
<b>CACM</b>	Central American Common Market
<b>CARICOM</b>	Caribbean Common Market
<b>CEFTA</b>	Central European Free Trade Agreement
<b>CEO</b>	chief executive officer
<b>CENTO</b>	Central Treaty Organization
<b>CIS</b>	Commonwealth of Independent States
<b>CMEA/</b>	
<b>COMECON</b>	Council for Mutual Economic Assistance
<b>COMESA</b>	Common Market of Eastern and Southern Africa
<b>CPF</b>	Central Provident Fund
<b>CRO</b>	contract research organisation
<b>CSC</b>	Committee on Singapore's Competitiveness
<b>DBS</b>	Development Bank of Singapore
<b>DHA</b>	Drug Houses of Australia
<b>EAEC</b>	East Asian Economic Caucus
<b>EC</b>	European Community
<b>EDB</b>	Economic Development Board
<b>EEA</b>	European Economic Area
<b>EEC</b>	European Economic Community
<b>EFTA</b>	European Free Trade Association
<b>EIU</b>	<i>Economist Intelligence Unit</i>
<b>EOI</b>	Export-oriented industrialisation
<b>ESCAP</b>	Economic Commission for Asia and the Pacific
<b>EU</b>	European Union
<b>FDI</b>	foreign direct investment
<b>FQB</b>	full qualifying bank
<b>FT</b>	freight tonnes
<b>FTA</b>	free trade agreement
<b>GaWC</b>	Globalization and World Cities (Research Group and Network)
<b>GATT</b>	General Agreement on Tariffs and Trade
<b>GDP</b>	gross domestic product
<b>GLC</b>	Government-linked company
<b>GNP</b>	gross national product
<b>GSK</b>	GlaxoSmithKline
<b>GSP</b>	General System of Preferences

<b>HDB</b>	Housing Development Board
<b>HPH</b>	Hutchison Port Holdings
<b>HSA</b>	Health Sciences Authority
<b>IGO</b>	inter-governmental organization
<b>IMA</b>	Institute of Molecular Agrobiology
<b>IMF</b>	International Monetary Fund
<b>IMCB</b>	Institute of Molecular and Cell Biology
<b>IMO</b>	International Maritime Organisation
<b>IPO</b>	initial public offer
<b>ISC</b>	Imperial Shipping Committee
<b>ISI</b>	Import-substitution industrialisation
<b>ISO</b>	International Standards Organisation
<b>IT</b>	information technology
<b>JTC</b>	Jurong Town Corporation
<b>LAIA</b>	Latin American Integration Association
<b>LDC</b>	least-developed country
<b>MAS</b>	Monetary Authority of Singapore
<b>MD</b>	managing director
<b>MERCOSUR</b>	Common Market of the South (Argentina, Brazil, Paraguay, Uruguay)
<b>MFN</b>	most-favoured nation
<b>MITA</b>	Ministry of Information, Communications and The Arts
<b>MNC</b>	multinational company
<b>MP</b>	Member of Parliament
<b>MPA</b>	Maritime & Port Authority of Singapore
<b>MRT</b>	mass rapid transport
<b>MSD</b>	Merck Sharp & Dohme
<b>MTI</b>	Ministry of Trade & Industry
<b>NAFTA</b>	North American Free Trade Area
<b>NAM</b>	Non-aligned Movement
<b>NGO</b>	non-governmental organisation
<b>NIC</b>	new industrialising country
<b>NIDL</b>	new international division of labour
<b>NPL</b>	non-performing loan
<b>NSTB</b>	National Science & Technology Board
<b>NTU</b>	Nanyang Technological University
<b>NUS</b>	National University of Singapore
<b>OAS</b>	Organization of American States
<b>OAU</b>	Organization of African Unity
<b>OCBC</b>	Oversea-Chinese Banking Corporation
<b>OECD</b>	Organization of Economic Cooperation and Development
<b>OPEC</b>	Organization of Petroleum Exporting Countries
<b>OUB</b>	Overseas Union Bank
<b>PAP</b>	People's Action Party
<b>PBH</b>	pharmaceuticals, biotechnology and healthcare
<b>Perc</b>	Political and Economic Consultancy
<b>POSBank</b>	Post Office Savings Bank
<b>PSA</b>	Port of Singapore Authority
<b>PTP</b>	Port of Tanjung Pelepas
<b>PUB</b>	Public Utilities Board
<b>QFB</b>	qualifying full bank

<b>RIA</b>	regional integration arrangement/agreement
<b>ROE</b>	return on equity
<b>SAARC</b>	South Asian Association for Regional Co-operation
<b>SADC</b>	South African Development Community
<b>SAPI</b>	Singapore Association of Pharmaceutical Industries
<b>SEATO</b>	South-East Asia Treaty Organization
<b>SHB</b>	Singapore Harbour Board
<b>SIJORI</b>	Singapore-Johor-Riau Growth Triangle
<b>SMEs</b>	small- and medium-sized enterprises
<b>SMI</b>	Siemens Medical Instruments
<b>SOE</b>	state-owned enterprise
<b>S&amp;P</b>	Standard & Poor's
<b>SPARTECA</b>	South Pacific Regional Trade and Economic Agreement
<b>STV</b>	Singapore Technologies Ventures
<b>TAS</b>	Telecommunication Authority of Singapore
<b>TEU</b>	twenty-foot equivalent unit
<b>TLC</b>	Temasek-linked company
<b>TNC</b>	transnational company
<b>UN</b>	United Nations
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>UNESCAP</b>	United Nations Economic and Social Commission for Asia and the Pacific
<b>UOB</b>	United Overseas Bank
<b>WAEMU</b>	West African Economic and Monetary Union
<b>WEU</b>	Western European Union
<b>WPEZ</b>	West Pacific Economic Zone
<b>WTO</b>	World Trade Organisation

## Conventions

1. Use of the \$ sign denotes the Singapore Dollar, unless otherwise indicated.
2. In the Footnotes, reference to the *Straits Times* and *Business Times* covers both daily and weekend editions of these Singapore newspapers.

Where a *Straits Times* references is taken from its web site (*Straits Times Interactive*: <http://straitstimes.asia1.com.sg>) this is shown as *Straits Times (I)*.

Where a *Business Times* reference is taken from its web site (*Business Times Online*: <http://business-times.asia1.com.sg>) this is shown as *Business Times (O)*.

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## *Chapter One*

### **Introduction**

*“To a certain extent, Singapore’s fortune is always intertwined with the global economy. But one distinctive feature of Singapore’s national competitiveness is that it is very much a city (in a territorial sense) coupled with a strong state (in an institutional sense); a state with powers far beyond those of any local state. Unparalleled in the Asian region, this city-state has relied heavily upon developmentalism to legitimise its political power and control (Yeung and Olds 1998). The state’s choice to pursue the strategy of global reach has been relatively uncontested, in part because the state has generated a political discourse of survivalism and ruthless competition; a discourse currently propagated in association with most discourses on globalisation. The state has constructed a view of geographical space that implies the deferral of political options to the global scale. In effect, the (contested) discourse of globalisation ‘itself has become a political force, helping to create the institutional realities it purportedly merely describes’ (Piven 1995, 8)” (Yeung 2000a, 11).*

#### **1.1 Background**

This thesis has had a lengthy gestation period, dating back to my graduation from the University of Birmingham in 1960. I thought then of moving on to a research degree - the proposed topic of the townscapes of the West Midlands conurbation has now the feel of a by-gone age - but instead became an Education Officer in the Royal Air Force. The start of an enduring fascination with Singapore came with a posting there in the years immediately prior to the British military withdrawal in 1971. During my time in the newly-independent state I became particularly interested in the nature and origins of Singapore’s plural society, and found time to delve into research on the patterns of migration since 1819. My contact with the University of Singapore was informal, but I was fortunate in

gaining the advice and encouragement of Professor Ooi Jin Bee, then Head of the Department of Geography. The work was incomplete when I had to return to the UK, and I was unable to follow it through without recourse to information and documents only accessible in Singapore. However, a keen interest in the progress of the city-state stayed with me during the succeeding years, and it was particularly pleasing, therefore, to be involved in work through the 1990s that took me back to the Asia-Pacific region.

During that decade my duties involved travel to most countries in the region - Laos, Cambodia and North Korea were the exceptions - and on a regular basis to Singapore. The strides that the country had made over two decades were astonishing and stimulating, so much so that shortly after retirement my thoughts turned to the idea of renewing contact with both my *alma mater* and Singapore, in the form of a research project. The training programme that dominated my first year of registration in the School of Geography at the University of Birmingham, was invaluable in helping realign my geographical sights and focus on the most appropriate and rewarding form my work on Singapore could take. Any idea of refreshing the work on migration was soon discarded, and my attention drawn instead to the present-day 'miracle' that is Singapore, to the decision-making processes responsible for the city-state's economic achievements, and to its perceived status as a world city. I was particularly intrigued by questions concerning not just Singapore's ability to sustain economic growth and health in an increasingly uncertain world economy and unstable region, but also the very existence of the world's one remaining city-state.

One of the joys of researching Singapore is to be able to retrace the thoughts of its leaders, and in particular those of the 'first-generation founding fathers' like Lee Kuan Yew, Goh Keng Swee and Sinnathamby Rajaratnam. The latter, a former Foreign Minister, made a speech on 14 December 1975 and, because that day was a Sunday, decided to adopt the style of a sermon. Using as his text a quotation by H.L. Menken, Rajaratnam developed the argument that what Singapore would need in the years ahead was a 'pragmatic idealism'. The Menken quotation ran: 'The idealist is one who, upon discovering that a rose smells better than a cabbage concludes that it will also make better soup'. Rajaratnam saw the need for both 'rose-sniffers' and 'soup-makers', and ended his sermon in typically forthright fashion:

“Can Singapore survive? I think it can and base this on its demonstrated capacity for survival in crisis after crisis. Many have been the times when the prophets of doom predicted the inevitable collapse of an island which they believe should not only survive but also had no sound reasons for independent existence. Nevertheless, it exists and persists. It does so because it deliberately set out to be a global city, accepting the risks and rewards that go with this role. It has made itself a part of a global structure of things within which it develops national and regional interests. It will cease to exist only when the global structure itself collapses. But then when that happens then everything collapses - the rose-sniffers, the soup-makers and everybody”.  
(Rajaratnam 1976, 25-32)

## *1.2 Aims*

A thread running through the pages that follow consists of the all-important ‘how’ and ‘why’ questions missing from many descriptive tracts on Singapore’s development. These questions are so important to an understanding of the decision-making processes that have shaped the Singapore economy. And in turn, they give rise to questions about other, more general, but no less significant issues. Just how vulnerable is the city-state in an increasingly competitive global economy, and in an uncertain and unstable regional setting? Could the slow pace of political reform prove an obstacle to the future growth of entrepreneurial activity? And could there come a time when Singapore - without natural resources, domestic hinterland and sizeable population – will experience increasing difficulty in re-making itself to cater for the latest movement or trend in global economic activity?

Based on such considerations and questions, the twin aims of this thesis are to assess:

- the role and efficacy of the political and economic decision-making processes that have positioned Singapore in the global economy; and
- whether Singapore’s future economic strength and sustainability depends more on integration with regional (Asia Pacific) than global markets.

## *1.3 Approach and methodology*

Sandhu and Wheatley (1989) edited what is arguably the defining work on the first two decades of Singapore’s post-independence development. Their weighty book was the

outcome of a five-year project undertaken by the Institute of Southeast Asian Studies (ISEAS) and contains contributions from 56 academics, drawn from Singapore, the US, Australia and Europe. A decade on, with Southeast Asia reeling from the 1997 Asian financial crisis, the Institute of Policy Studies (IPS), a public policy think-tank, produced a less voluminous but significant follow-up to the work of Sandhu and Wheatley. The contributions assembled by Arun and Lee (1998) are an interesting reflection of Singapore's increasingly evident need for a periodic 're-imagining' or 're-inventing' of the economy in order to maintain the city-state's relevance and competitiveness. Whilst the Arun and Lee book is concerned, as the title states, with 're-engineering success', the earlier ISEAS publication sought to describe how success had been managed and, in the process, moulded Singapore into what elsewhere has been termed the 'Asian miracle'.

This thesis holds no pretensions to comparison with the ISEAS and IPS volumes, but arguably can claim to augment them in two ways: first, through original scholarship, as evidenced (a), in sections of the port and banking case studies and the totality of that involving the biomedical sciences, and (b) in some aspects of the use and interpretation of material contained in official documents and press reports; and second, through the emphasis on what I would call the 'spatial dimension' of Singapore's development, in the form of its positioning within local, regional and global space.

The gathering of information in support of the aims of the thesis took the following forms:

- Study of texts, many only available to view in Singapore.
- Extraction of data, mainly from government papers, reports and speeches, the proceedings of Parliament, and company reports.
- Detailed study of the Singapore Press on a daily basis over a two-year period.
- Semi-structured interviews with a select number of key individuals in both the public and private sectors.
- Conduct of three case studies, drawn from different sectors of the economy and with distinct structures and developmental histories.

The rationale for the choice of case study stemmed from a desire, first, to highlight actions and policies relevant to Singapore's economic *modus operandi*; and second, to produce studies strong on original research and interpretation. The three areas of study chosen were felt to illustrate much that is important about the way the PAP Government has controlled and developed the economy:

1. *The Port of Singapore Authority (PSA), now PSA Corporation.* Apart from the romance of its historical development, the port today may be regarded as the focal point of Singapore's hub status within Southeast Asia. It also has an immense physical presence close to the city's financial and business districts. Major ports tend to be treated as highly important national assets, and so it is hardly surprising that the Singapore Government has maintained unbroken control of port development and the agencies involved.
2. *The Development Bank of Singapore (DBS), now DBS Bank.* Whilst the PSA grew from a structure (the Singapore Harbour Board) in existence when the city-state assumed self-government in 1959, the Development Bank was set up by government in 1968 with the express purpose of financing growth opportunities in what was then a weak manufacturing sector. Over the years the Bank has broadened and expanded its activities, and played a high-profile role in the development of Singapore as a regional and international financial centre. The main contrast with PSA Corporation is that whereas that organisation operated as a statutory board for over three decades and remains today a 100 percent state-owned enterprise (SOE), DBS Bank was from the first a public-private operation and government-linked company (GLC), in which government currently holds a 30 percent stake.
3. *The biomedical sciences sector.* In contrast to the PSA and Development Bank, which were both cultivated as 'champions' of the domestic economy, and in their differing ways illustrate and inform Singapore's development over nearly four decades, the biomedical sciences have been at the core of efforts over the past decade to promote a knowledge-based economy, seen both as a 'must' in the twenty-first century and as a safety valve for the increasing pressure being exerted on Singapore's traditional export industries. This is the latest – and possibly most important – of Singapore's

strategies to maintain competitiveness in the changing global economy and gain the international recognition it craves as a 'global city of distinction'. The biomedical sciences are envisaged as forming the 'fourth pillar' (after electronics, engineering and chemicals) of the economy, and differ from the other two studies in their close association with the on-going debate about the need to encourage entrepreneurs in an inherently risk-averse society.

Although conducted as three, separate case studies, I have not assembled the facts and views on each in discreet chapters, but instead incorporated the relevant information from each study within the chapters that develop the main themes associated with positioning Singapore in the global economy. I elaborate on this in section 1.5.

### *1.4 Problems encountered*

Fieldwork in Singapore was undertaken in two phases,<sup>1</sup> comprising a total of some five and a half months. Although I was offered facilities at the Department of Geography, National University of Singapore (NUS), I was able to work, with the benefit of telephone and internet access, from the Civil Service Club where I stayed. This, together with a first-class, dependable public transport system, meant that my research was not hindered by any logistical difficulties. I did, however, encounter two problems in respect of the gathering of information and opinion.

- The gathering of data proved an uncertain process. On the one hand, the NUS libraries, and those of the PSA Corporation, Maritime and Port Authority, and DBS Bank were accessible and invaluable resource centres – particularly so in the case of the Singapore-Malaysia Collection in the NUS Central Library. On the other, the same could not be said of most government ministries and certain of their agencies. Enquiries tended to be met with a guarded or defensive response, and more often than not I was unable to obtain the information I sought. Individuals tried to be helpful, but generally were either unable to give access, or simply had no knowledge where or whether the requested data might be found. Ministry web sites

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<sup>1</sup> Phase I: 4 September-15 December 2000; Phase II: 1 May-30 June 2001

generally - and rightly - are more geared to the needs of the public than the detailed requirements of researchers. The control and release of information is patently under tight control, producing an odd dichotomy between an apparent openness and – on close examination – the highly selective nature of what information is made readily accessible.

- Soon after my arrival in Singapore I received a friendly warning from Professor Henry W.C. Yeung that my plans to interview ministers and other senior figures in the administration might be overly optimistic. So it proved. All overtures to seek such meetings were politely turned aside. There were occasions when I was accorded a meeting with relatively junior civil servants, but little was gained because these people were either not sufficiently knowledgeable, or simply unwilling to risk the release of anything other than the most basic information. There was no such reluctance within the private sector where senior executives, almost without exception, were happy to engage in mainly on-the-record discussion.

I should stress that neither of these difficulties, or problems, proved to be seriously damaging. Regarding material I felt to be especially significant, it simply took me a lot longer to track it down, or to uncover acceptable alternatives. As far as the views of ministers are concerned, I had to be satisfied with the information contained in frequent press releases and speeches. On balance, these were problems that generated irritation rather than serious disruption to the progress of my research.

### *1.5 Structure*

The thesis is in two parts. The first, comprising three chapters, deals with the theoretical framework within which Singapore exists and seeks to thrive as a tiny city-state; incorporated within this analysis is a substantial literature review. The six chapters of Part II represent an assessment of the main issues involved in Singapore's engagement with, and positioning in, the global economy.

**Part I** explores three collections of discourses that form the backdrop to Singapore's efforts to position itself to best effect in the shifting currents and flows of international economic activity. **Chapter Two** addresses globalisation - essentially as an economic process – first

wrestling with attempts at definition and then assessing the historical development of the process and how it differs from internationalisation. This is followed by consideration of what are probably the two most contentious issues in any debate about globalisation: the role of the nation-state and the concept of a global 'end-state'. The chapter concludes with thoughts on the future direction of globalisation. **Chapter Three** moves down in scale to consider the 'new regionalism'. Again, I felt it important to review the antecedents of modern movements, prior to analysis of the forms of regional integration and growth of free-trade agreements. The role and relevance of regionalism in a world committed to a multilateral trading system is explored, together with the view that regional movements will continue to act as important building blocks for moves to establish a more stable and prosperous world. Finally in Part I, **Chapter Four** interrogates the concept of world, or global, cities and the part they play in a global economy. A distinction is drawn between world cities, mega-cities and global city-regions. Finally, the current state of world city research is considered, and questions raised about the value of the hierarchical approach.

**Part II** opens by highlighting certain matters that underpin or impinge upon the development of post-independence Singapore. **Chapter Five** looks first at the whole question of Singapore's vulnerability, with the emphasis on security.<sup>2</sup> The legacy of the British colonial power cannot be ignored, and this is placed both in general context, and with specific reference to the case studies involving the port and banking sector. Attention is also drawn to late- and post-colonial developments that led to establishment of a biomedical sciences sector, the third of the case studies. **Chapters Six and Seven** go to the heart of the basic question, noted earlier, about the ways and means deployed, and problems encountered, during construction of the Singapore 'success story'. **Chapter Six** is devoted to the nature and extent of government intervention in the economy, with consideration given first, to the government stress on attracting both foreign direct investment (FDI) and multinational companies (MNCs) to Singapore. Examples of MNCs, in the shape of GlaxoSmithKline, Siemens and Becton Dickinson are drawn from the biomedical sciences sector of the economy. At home, the hand of the state is shown most clearly in the workings of statutory boards, SOEs, and GLCs. The development of the PSA (statutory board) and DBS (government-linked company) are used as exemplars. The action of the Development Bank in purchasing the Post Office Savings Bank (POSBank) is also shown

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<sup>2</sup> Economic vulnerability, which is arguably of equal if not greater importance, forms part of discussion in later chapters, and Chapter Seven in particular.

as evidence of the government's propensity for a blatant disregard of fair practice when driving the economy according to its own self-serving agenda. And the chairmanship of the Bank is also used to illustrate how a small group of people in, or close to, government tend to play musical chairs with key posts in the economy. **Chapter Seven** investigates Singapore's response to globalisation, laying particular stress on the pragmatic nature of policy-making. Separate investigation of the development of PSA and DBS shows how government has developed them as two of the Republic's 'champions'. Finally, the latest response to globalisation, the creation of a knowledge-based economy, is illustrated by the growth of the biomedical sciences as the putative fourth pillar of the economy.

**Chapter Eight** considers Singapore's strategy for the growth of a knowledge-based economy, deemed essential both from the point of view of developing high-tech niches and high value-added activities, and that of attracting the foreign investment and talent required to establish Singapore as the regional hub in areas such as IT and biotechnology. To the fore of these moves are the biotechnology, healthcare and research elements of the biomedical sciences, and examples are drawn from the case study in order to understand the processes that are at work. Among the most important needs of knowledge-based industry is a conducive working environment and ease of contact between all the parties involved. As the last sections of the chapter show, Singapore has sought to achieve this through the building of science parks adjacent to the main educational and medical establishments, and is currently involved in developing the Buona Vista site to house R&D organisations engaged in IT, media and biotechnology.

Production of a knowledge-based economy is one method by which Singapore hopes to 're-make' the economy; the other is through encouragement of people and companies to 'go regional' and augment the domestic economy with a vibrant 'external wing'. As **Chapter Nine** shows, this is particularly relevant at a time when, with Singapore's traditional manufacturing sector under severe pressure, immense opportunities are opening up in China, India and – more tentatively – ASEAN. PSA Corporation and DBS Bank are shown to be successful examples of companies seeking to maximise global and regional reach respectively.

In **Chapter Ten**, an attempt is made to draw the conclusions of the study under eight statements or questions, three from the theory chapters and five from those about the

positioning of Singapore in the global economy, whilst the final one takes the form of an assessment of the approach and methodology deployed in the research project.

Part III is concerned with key aspects of the future positioning of Singapore in the global economy, and **Chapter Eleven** pulls together five issues that will impact on Singapore's performance and standing in the international arena. Consideration is given first to domestic matters – social cohesion, and use of land and water – that have considerable bearing on economic performance and the Republic's aim to be a 'global city of distinction'. Current initiatives linked to the 're-making' of the economy and government's retreat from the front-line of economic activity are scrutinised, and questions raised about the pace of liberalisation of the financial services sector. Discussion of regionalism revolves around the growing interest in regional movements and free-trade agreements in Asia Pacific, and the not insignificant part played by Singapore in fostering these developments. In the closing section there is a flashback to Singapore's early and unequivocal determination to become a global (world) city, coupled with a proposal for the future of world city research.

## *Part I*

### **Theoretical framework**

*“(T)he debate about globalization is not simply an academic one. It is also a political debate about the profound transformations going on in the world today. At stake are questions about the ethical and institutional principles which might or should structure the organization of human affairs and the future form of world order (see Held and McGrew, 2000). These questions need to be thought through against a backdrop of change. Irrespective of how it is interpreted exactly, the local, national, regional and global now intermingle in new and complex ways. To this extent there is a more uncertain and risk-laden environment for citizens and governments – an environment in which new kinds of actors and structures shape, constrain and enable political life. This creates new opportunities and possibilities, as well as the potential for new dangers and risks. The political terrain is being reilluminated. (Held 2000, 177)*

## ***Chapter Two***

### **Globalisation: an overview**

*“Globalization has become a fashionable concept in the social sciences, a core dictum in the prescriptions of management gurus, and a catch phrase for journalists and politicians of every stripe. It is widely asserted that we live in an era in which the greater part of social life is determined by global processes, in which national cultures, national economies and national borders are dissolving. Central to this perception is the notion of a rapid and recent process of economic globalization. A truly global economy is claimed to have emerged or to be in the process of emerging, in which distinct national economies and, therefore, domestic strategies of national economic management are increasingly irrelevant. The world economy has internationalized in its basic dynamics, it is dominated by uncontrollable market forces, and it has as its principal economic actors and major agents of change truly transnational corporations that owe allegiance to no nation- state and locate wherever on the globe market advantage dictates (Hirst and Thompson 1999, 1).*

#### ***2.1 Introduction***

Globalisation is today the subject of debate, much of it heated and overblown, in both academic and political circles. It raises more questions than answers, and attracts the attention and involvement of most states around the world, but none more so than Singapore which, with its total lack of natural resources and small population, is heavily dependent on the trends and health of economic movements beyond its borders. From its first day of independence, Singapore has looked to the outside world for security, support

and the means of developing its economy. The process of globalisation is thus of huge and material interest to Singapore, and one which has been instrumental in assisting a small city-state to evolve from the fragile early days of independence into the 'miracle' that is today's Singapore. It also poses its dangers, and these I examine in Chapter Seven.

There is general agreement among social scientists that what we now term 'globalisation' has antecedents dating back several centuries. Harvey (2000, 21) suggests "as far back as 1492 if not before", and few would argue against locating the beginnings of globalisation within a 20-30 year period bridging the fifteenth and sixteenth centuries. This was when Spain and Portugal, the two great powers of early European expansion, defined their respective spheres of influence on opposite sides of the world: the Treaty of Tordesillas (1494) laid down a dividing line 370 miles west of the Cape Verde Islands, while the Treaty of Saragossa (1529) drew a line 17 degrees west of the Moluccas. Harvey is one who takes the voyage of Columbus to the Americas as his reference point, but it is arguable that a more defining moment came in 1522, when Juan Sebastian del Cano sailed the *Victoria* into Seville harbour, having circumnavigated the world and so completed the voyage started by Magellan.

The 'internationalisation' of trade and commerce may have started in earnest some five centuries ago, but according to the Oxford English Dictionary the first use of the word 'globalisation' appeared in *The Spectator* in 1962.<sup>1</sup> According to the author of the article, Charles A. Cerami, the US was concerned about Britain's impending entry into the Common Market and the latter's conversion into a "global goliath". The Americans, observed Cerami, "after so long privately chiding the French for their fear of *mondialisation*...are struck by the thought that globalisation is, indeed, a staggering concept". Since then, and particularly since 1989 and the 'fall of socialism', there has been a huge amount written on the subject, produced by all branches of the social and political sciences and from all wings of political discourse. For those who venture deep into the literature there is the danger of drowning in a Sargasso Sea of hyperbole and conflicting viewpoints.

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<sup>1</sup> *The Spectator* (5 October 1962, 495) 'The US eyes Greater Europe'

How, it might be asked, can the one phenomenon or process be responsible for producing a 'borderless world' and 'end of the nation-state' (Ohmae 1990 and 1995), and bringing about the 'end of geography' (O'Brien 1992), yet amount to no more than 'globaloney' (Petras 1999), and be depicted in a New York Times article, quoted by Harvey (2000, 61) as a 'brakeless train wreaking havoc'? Harvey's attacks on globalisation are underpinned by his opposition to capitalism (Harvey 1995), in contrast to most writers who, whatever their attitude to globalisation, do not contest the continuing evolution of the capitalist system. There are indeed many interpretations of globalisation, and the concept remains difficult to define, a point well made by Allen and Thompson (1997, 213) when they observe wryly that, "those who lament the absence of an agreed, secure definition of globalisation are likely to remain in a state of despondency".

Despite the many discourses on globalisation, it has no grounded theory. It has all the attributes and confusions of a postmodern thesis (which it is), seeking both meaning and direction. We all know what it is, but when pressed find difficulty in articulating our thoughts. If it is the sum of its parts (multinational companies [MNCs],<sup>2</sup> Nike sportswear, the Internet and so on), then these are much easier to come to terms with than the whole. It is hardly surprising, therefore, that Held *et al.* (1999a, 1) have concerns about globalisation, "... the big idea... in danger of becoming, if it has not already become, the cliché of our time". One reason for this is the tendency to use the word 'globalisation' in a general, all-encompassing way. However, the form the process takes is in fact much narrower than casual use would indicate. As Massey (1997, 8) says, "there can never be 'globalisation in general'", since the process of increasing interconnectedness is bounded and driven by particular power relations and controlled by "particular power trajectories". For Massey, therefore, globalisation as we are now experiencing it is clearly marked with neo-liberal, free-market tags; in her words it is "a globalisation of the right". Without doubt globalisation is a problematic concept, but given its emphasis on space and place, it

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<sup>2</sup> Based in a particular nation-state, the MNC operates across borders; it differs from the transnational company (TNC) in that the latter, often described as 'footloose', also operates across borders but lacks a defined base in, and association with, a particular nation-state. Using this definition, there would appear to be few TNCs in existence, whilst the importance of MNCs may be drawn from their 20 per cent share in world output and 70 per cent share of global trade. It is apparent in the literature that many authors make no distinction between TNC and MNC, and use one or other acronym to describe the same entity.

is central to geographical study and, in the case of this thesis, to an understanding of Singapore's positioning in the modern world economy.

I have taken particular care in this chapter to avoid what Low and Barnett (2000, 59) see as a trap that geographers can fall into in their studies of globalisation, i.e., an inadequate recognition of the central role of historicism:

“In an eagerness to assert the centrality of space, spatiality, locality, territory, place, context, scale - ‘the geographical’ - geographers can easily reproduce two problematic assumptions. First, that geography has a special privilege when it comes to the sophisticated appreciation of such matters. Second, that these are always the most important or pressing issues at stake. The responses of geographers to the proliferation of discussions of globalisation have tended to consist primarily of implicit or explicit disciplinary assertions of the importance of considering geographical difference and more carefully theorising space. This form of response only helps reproduce the impression that the world has become or is becoming a single, highly integrated space which exists on a temporal plane of world simultaneity.”

Low and Barnett's final sentence points to a battlefield that is central to the warring factions involved in current debate about globalisation, and which will be a thread running through the rest of this chapter. In order to bring some structure and focus to the numerous, and frequently contentious views of the academy, globalisation is considered under what I identify as the five main areas of debate: first, the problems of definition; second, antecedents and their significance; third, the characteristics of ‘modern’ globalisation; fourth, hyperglobalists and the ‘death of the nation-state’; and finally, the question of globalisation's ‘inevitability’.

Two points of clarification are required. First, although globalisation takes several forms (economic, cultural and political), what follows concentrates on economic globalisation, not only because it tends to be the trigger for other forms, but also because, through debate about integration of the world economy, and the role of regional groupings, states and world/global cities within that economy, it is central to this study of Singapore. Second, globalisation discourses and use of the word ‘globalisation’ relate almost exclusively to the phenomenon or process of the past two decades, but in order to avoid clumsy qualifications

in the pages that follow, the word is also used when referring to the precursors of modern globalisation, except when use of the term ‘internationalisation’ is appropriate.

## 2.2 Problems of definition

The literature generally supports the view of Allen & Thompson (1997) that agreement on a ‘secure’ definition of globalisation is unattainable. Indeed, there is no evidence that scholars have been particularly concerned about reaching any such agreement. Instead, the term globalisation “circulates through various institutions and is used and interpreted by different audiences and interests in quite different ways” (Low & Barnett 2000, 54). Allowance must also be made for what is a major problematic: i.e., that given the uneven development of both the character and outcomes of modern globalisation and compelling evidence for the cyclical nature of the advance of capitalism, it is hard to envisage the future of the global economy with any confidence. It is the sceptical view of Thompson (2000) that we should regard the whole enterprise with ‘serious suspicion’. He supports the thesis that the world is less globalised now than it was prior to the First World War, and that what we are experiencing is ‘internationalisation’ rather than ‘globalisation’. His warning is unambiguous: “Beware of the strong globalization thesis!” (2000, 123). Some, such as Hobsbaum (2000b), whilst not holding to the views of boosters<sup>3</sup> like Ohmae (1990, 1995) who believe that the process of globalisation is leading inexorably to a global end-state, do think in terms of a ‘constant transformation’ theory. Cochrane and Pain (2000) describe this as the ‘transformationalist approach’ to globalisation, the mid-path between the extremes of what they term the ‘globalist’ and ‘traditionalist’ approaches. Current discourses, however, generally carry a more sophisticated appreciation of the nuances of the globalisation process than was the case in the early writings of the hyperglobalists in the 1980s (see Held *et al.* 1999a).

One attempt to define globalisation in terms seemingly capable of being taken as a common basis of understanding by the range of interested parties is given by Held *et al.* (1999a, 2):

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<sup>3</sup> ‘Boosters’, also known as ‘hyperglobalists’: zealous adherents to the concept of globalisation, interpreting it as an immutable process, including *inter alia* the demise of the nation-state as a global actor. At the other end of the spectrum of opinion are the ‘hypercritics’.

“Globalization may be thought of initially as the widening, deepening and speeding up of worldwide interconnectedness in all aspects of contemporary social life, from the cultural to the criminal, the financial to the spiritual.”

However, the obstacles that such an apparently sound definition runs into are strewn throughout the literature. According to Lee & Kim (1995, 3-4), the difficulty in establishing a clear definition of globalisation arises “because it involves a complex array of changes in socio-economic systems on a global scale with far-reaching implications. The meaning of globalisation varies according to the objectives of inquiry”. This approach is shared by Dalby (1998, 308), who regards globalisation as a term which is “heavily contested with numerous interpretations being brought to bear...”. An even more pessimistic view is given by Fagan & Le Heron (1994, 265), who claim that globalisation “is now such a loose term [Robertson 1992] that the usefulness it promised to geographers and sociologists for much of the 1980s is in danger”. Narrowing the focus of study gives little help, for as Bryson *et al.* (1999) point out, even when viewed solely as an economic process, “the term has attracted multiple meanings”. Ó Tuathail *et al.* (1998, 2) agree about the differing interpretations of globalisation, observing that in the “differential and uneven process of transition from an international economy to an imaginary unified global economy, ‘globalization’ is a flexible concept for flexible times...”.

It is thus only too apparent that coming to terms with globalisation - “a pervasively unsettling process” (Clark 1998, 479) - has proved particularly problematic, and nowhere is this more marked than in the international relations field. The role of the nation-state is fundamental to IR theory, but the contradictions of state potency and state redundancy, inherent in the globalisation debate, have given rise to uncertainties. Clark (1998, 498) tentatively observes: “Globalization as concept is in too embryonic a stage of development to substitute as a viable theory of International Relations”. Strange (1996, vii) puts it more brutally, identifying globalisation as the worst of a “string of vague and woolly words”, that are employed in abortive efforts to describe change in the international political economy. She is dismissive of a term that “can refer to anything from the Internet to a hamburger”, and more often than not “is a polite euphemism for the continuing Americanisation of consumer tastes and cultural practices”.

Table 2.1 Selected definitions of globalisation

"The classical image of globalization is, of course, the global supply oligopolist which has a low level of territorialization and a high degree of hierarchical control over its inputs and markets on a worldwide basis" (Cox 1997, 38, drawing from Hymer 1976).

"Globalization as a concept refers both to the compression of the world and the intensification of consciousness of the world as a whole... both concrete global interdependence and consciousness of the global whole in the twentieth century" (Robertson 1992, 8).

"We can therefore define globalization as: A social process in which the constraints of geography on social and cultural arrangements recede and in which people become increasingly aware that they are receding" (Waters 1995, 3).

"... globalization can be defined as processes or changes in which geographically dispersed economic activities are functionally integrated into a global economic system of complementarity and interdependence" (Lee & Kim 1995, 4).

"...that set of processes by which the world is rapidly being integrated into one economic space via increased international trade, the internationalization of production and financial markets, the internationalization of a commodity culture promoted by an increasingly networked telecommunications system" (Gibson-Graham 1996, 1)

"The accelerating process of globalization... may be defined as the interconnectedness of capital, production, services, ideas and culture on a worldwide basis" (Yeung Y M 1998, 475).

"Globalization can be thought of as a process (or set of processes) which embodies a transformation in the spatial organization of social relations and transactions – assessed in terms of their extensity, intensity, velocity and impact – generating transcontinental or interregional flows and networks of activity, interaction, and the exercise of power" (Held *et al.* 1999a, 16).

Despite the difficulties, there have been numerous attempts to take definition of globalisation beyond the baseline offered by Held *et al.*, and a selection is shown in Table 2.1. All these definitions are partial, reflecting the segment of the academy from which they originate. Held and his fellow authors are drawn from the fields of political science, international relations, sociology and economics; Cox, Lee, Kim and Yeung are geographers; whilst Robertson and Waters are both sociologists. What the quotations do reveal are the different forms that globalisation takes – economic, social, cultural and moral. All are responses to space-time compression and a reflection (albeit an uneven

one) of society's rapidly growing awareness of the systemic nature of the world we inhabit. The Held *et al.* definition in Table 2.1 is revealing; it comes from the same text as their 'initial' offering (see page 17), but their expansion and qualification of the original wording almost certainly means that it would no longer be an acceptable definition of globalisation to many who might concur with the 'base-line' wording. The same problem of multiple interpretations occurs when the focus is exclusively on economic globalisation. Allen & Thompson (1997, 213) point out that although the image of economic globalisation has become generally associated with trans-border activity and ease of global movement for firms, currencies and commodities, "different referents have been drawn upon to pin down the meaning of 'globalisation'".

Foremost among the features of the base-line statement by Held *et al.* - apart from its clarity - is its reflection of Hobsbaum's 'constant transformation' thesis, the placing of spatiality at the heart of the process, and the recognition of the plurality of globalisation, a point frequently ignored in favour of a narrow economic approach (Albrow 1996). It is certainly a sound base from which to explore the current debate on globalisation, a debate that all too often has been coloured by the polarised views put forward. At one end of the spectrum boosters like Ohmae think only in terms of a globalised end-state, either already in existence or soon to be. The tenor of current analysis within the academy, however, rejects such views, with the fiercest of opponents dismissing them as 'globaloney', an expression which, for Petras (1999, 21) "most precisely captures the vacuous, tendentious and tautological arguments put forth by globalist theorists".

This is not solely because of their failure to allow for any doubt about the future direction or *processes* of globalisation, but also, and equally important, because the boosters are seen to be employing globalisation as an ideology, which then may be used for economic or political gain. Certainly, it is a message which, easily understood and persuasive, appeals to many in the worlds of business and politics. Even stern critics like Hirst & Thompson (1999, 1) admit, "this image is so powerful that it has mesmerized analysts and captured political imaginations".<sup>4</sup> In the latter context, of course, it is also the great let-out: everything can be blamed on the uncontrollable force called globalisation.

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<sup>4</sup> The image to which they refer is the quotation at the opening of this chapter.

### 2.3 Antecedents of modern globalisation

It is arguable that the first circumnavigation of the world in 1522 did open the door for exploration and trade on a global scale. Much of the world at that time, however, remained unexplored and trade involving movement over long distances was in its infancy. During the remainder of the sixteenth century, nonetheless, Europeans made their mark around the globe to such an extent that, in the words of Lechner and Boli (2000, 1), “commercially and culturally, the modern world system already existed nearly five centuries ago”.<sup>5</sup> Without doubt there has been a sequential, albeit interrupted, development towards globalisation over this extended period, with the colonial powers as key players in the creation of transborder mobility of labour and capital (Kohno *et al.* 2000, 3). It is equally true that, over this same period, related discourses have been imbued generally with Western or Eurocentric interpretations. This problematic is evident today, for example, in the sometimes fractious relationship between world bodies and developing countries such as Malaysia, and was most apparent when the IMF attempted to impose ‘solutions’ on that country following the 1997 Asian financial crisis.

A key period in the advance towards globalisation was the second half of the nineteenth century, which brought the full flowering of the industrial revolution and attendant arrival of the steamship, transcontinental railroad and telegraph, a rapid increase in world trade, and a number of mass (generally unimpeded) migration movements.<sup>6</sup> The end of the century also heralded, “after 400 years of European spatial expansion” (Ó Tuathail 1996, 27), what Halford Mackinder termed the post-Columbian age, the period when, with “the outline of the map of the world . . . completed with approximate accuracy”, geography would turn to “the purpose of intensive survey and philosophic synthesis” (Mackinder 1904, 421). In what could be interpreted as a presaging of globalisation during his now famous address to the Royal Geographical Society, Mackinder (422) observed:

“From the present time forth, in the post-Columbian age, we shall again have to deal with a closed political system, and none the less that it will be one of

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<sup>5</sup> Wallerstein’s world systems analysis suggests that the evolution of the modern world as a systemic whole – i.e., the capitalist world economy – took place roughly between 1500 and 1900.

<sup>6</sup> As an essentially colonial, or imperial, project it also achieved what Lenin (1915) famously interpreted as ‘the highest form of capitalism’.

world-wide scope. Every explosion of social forces, instead of being dissipated in a surrounding circuit of unknown space and barbaric chaos, will be sharply re-echoed from the far side of the globe, and weak elements in the political and economic organism of the world will be shattered in consequence”

Another who identifies the development of globalisation over a 500-year period is Waters (1995). He acknowledges that his is, by definition, a Western European discourse, since “Western European societies and their derivations and mimics are the source and leading edge of globalisation” (1995, 160). In what he describes as the ‘early modern’ period between the sixteenth and nineteenth centuries, Waters (160) identifies the emergence of capitalism as the critical shift. Capitalism, and its dependence on ‘spatial fixes’ is also at the heart of Harvey’s examination of globalisation. “Time and time again,” he says (2000, 54), “it has turned to geographical reorganisation (both expansion and intensification) as a partial solution to its crises and impasses” His thesis is that capitalism builds and rebuilds a geography in its own image. Given this pattern of building, tearing down and reconfiguring, he interprets modern globalisation simply as “a new phase of exactly the same underlying process of the capitalist production of space” (2000, 54).

Harvey approaches his subject from the standpoint of a Marxist geographer; Waters from that of a sociologist. The latter’s analysis echoes those of Thomas Hobbes (1668), midway through the seventeenth century, and in modern times, Michel Foucault, whose discourses on ‘tactics and strategies of power’ and ‘control of territories and organizations of domains’ are central to his analyses (Livingstone 1992, 341). Waters’ exposition also lays stress on the period so clearly signposted by Ó Tuathail and Mackinder. For him, the second half of the nineteenth century saw workers’ discontent with the conditions of their employment posing a major threat to the progress of capitalism. As a result, with the state taking control of both economy and culture:

“The economy was corporatized, governed within a political relationship between managers, unions and state officials. Culture was harnessed to the service of the state by the development of national traditions and the subordination of ethnic minorities. The main globalizing trend was the internationalizing of state action under the development of such phenomena as colonization, alliances, diplomacy, world wars, hegemons, and superpowers. Capitalism, as economic practice and culture, was carried to many parts of the globe under hegemonic sponsorship . . .” (Waters 1995, 160).

Time-space compression was accelerating during this period, a trend neatly illustrated by Hobsbaum (2000a, 55) who estimates that, had Phileas Fogg undertaken his 80-day journey around the world just 24 years earlier (in 1848), it would have taken him at least 11 months, “not counting time spent in port”. As Hobsbaum also notes (2000a, 53), “the net which linked the various regions of the world was visibly tightening”. Excellent summaries of this process, leading to the production of a truly global economy, may be found in Corbridge (1997) and Leyshon (1992). This was the first age of globalisation, as summed up by Ikenberry (2000, 145):

“A century ago the world entered the first age of globalization. Trade and investment spread rapidly around the world, spurred by revolutions in communication and production technologies and a stable gold standard. Behind the scenes stood Great Britain - pre-eminent in manufacturing, finance and naval power - which championed free trade throughout the Victorian era, beginning with the celebrated repeal of its protectionist Corn Laws in 1846. A succession of British governments pursued agreements to lower tariffs; London banks put capital to productive use abroad; and the Royal Navy ensured open access to world markets and resources. The result was an unprecedented flow of goods, capital and people - and the rise of the first truly open world economy”.

There are some who suggest that the world was more globalised a century ago than it is today. Examples such as the ease of passport-free travel, large-scale and largely unchecked migrations, and fixed exchange rates are used to support their case. However, although the extent of integration was impressive, there was nothing like the trade in services and among MNCs, nor the extensive capital markets that exist today (Micklethwait & Wooldridge 2000, 5).

Britain’s fall from power was brought about by a crippling World War (1914-1918) and the inability to exercise control of the system after the crash of the world’s major economies at the close of the 1920s. What followed was a period of free-for-all, when nations such as the United States, Germany and Japan sought to build up their economic strength. To a large extent this was achieved by protectionist practices and, in the case of Germany and Japan, through territorial expansion. The world economy was “wracked by predatory economic and political mercantilism and the absence of international economic co-operation” (Corbridge 1997, 123).

All this changed when the United States emerged from World War II as an economic power head and shoulders above all other nations. It was this clear advantage and the political power it inspired, together with a willingness on the part of the US to break with isolationist policies and embrace internationalism, that produced the Bretton Woods agreements in 1944 and the advent of what Corbridge (1997, 124) considers “the golden age of capitalism”, and Waters the third phase of globalisation. It had taken over four centuries to reach this state, but the world capitalist economy was developing in a way that was to have huge implications for, *inter alia*, the role of the nation state, the growth and power of MNCs, the part to be played by regional integration schemes, citizens’ awareness of their rights and responsibilities weighed against universal standards, and the emergence of an urban form to be given the appellation ‘world cities’. Bretton Woods was the kick-start for an advanced form of internationalisation, which, by the 1970s, was evolving into what we now imagine as economic globalisation. The term may be of relatively recent origin, but it is, nonetheless, what Harvey (2000, 54), as has already been noted, describes as “the same underlying process of the capitalist production of space”.

A persuasive discourse, pursued strongly by Harvey and to a lesser degree by Waters, asserts that the progress of capitalist expansion is essentially cyclical in nature. This raises questions about the modern phase of globalisation and the claims of hyperglobalists regarding the inevitability of the process. Petras (1999, 13) is another who rejects the interpretation of globalisation as a linear process, claiming instead that the international flows of capital, goods and technology have been halted for long periods. He lists one such period as that between the late-eighteenth century and mid-nineteenth century, when protectionism and an emphasis on developing domestic industries greatly reduced the importance of global flows as drivers of accumulation; another, more recent, spanned the twentieth century’s two World Wars and the intervening Great Depression.

However, despite the evidently cyclical nature of globalisation’s progress over the past five centuries caused, *inter alia*, by wars, market crises and changing state policies, Hobsbaüm (2000b, 61) regards it as “a constant, *permanent* transformation” (my emphasis). This transformation has assumed a fresh impetus in the last decade. It is important to understand, however, that in its current form, globalisation is quite distinct from its

predecessors. It is a much more complex and advanced form of the internationalisation that emerged from the industrialisation which developed in Europe in the eighteenth century (Dicken 1998, 1). Three main features of modern globalisation distinguish it from the processes of the late-nineteenth century (Kaplinsky 2001, 14). First, the 'reach' of today's global processes, in terms of numbers of countries and people affected, is much wider; second, whereas earlier globalisation primarily involved flows of people, finance and goods, late-twentieth century globalisation also embraced the global spread of ideas, views and ideology; and third, whilst late-nineteenth century trade mainly involved finished products, the pace and dynamism of today's global production mean that it typically involves centres in a number of countries and resultant complex patterns of co-ordination and distribution.

#### *2.4 Emergence of modern globalisation*

Towards the end of World War II it was evident that the US, through its foreign, military and commercial policies (Harvey 2000, 69), would hold the key to economic growth and recovery around the world and particularly in Europe. Following the 1944 Bretton Woods Agreement, in a world underpinned by the US economy and the US dollar, this was facilitated largely by the International Bank for Reconstruction and Development (The World Bank), the International Monetary Fund, GATT, the Marshall Plan and, from 1957, by the European Economic Community. The new financial environment proved attractive to US firms such as Ford, General Motors, IBM, ITT and Exxon, which were also assisted in their expansionary aims by new communication technologies and systems of corporate management and accounting (Corbridge 1997, 124).

The period through to the 1970s - Waters' (1995) third phase of globalisation - was characterised by internationalisation rather than globalisation (Agnew & Corbridge 1995, 23), and the absence of a "truly global market in currencies" (Corbridge 1997, 125). The production facilities of US multinationals and European and Japanese firms were geared to the needs of their national markets and so the sites of MNC headquarters tended to remain within home territory. At this stage, according to Corbridge (1997, 125), "few multinationals had become transnational or global corporations; rather, they were vehicles

for the further internationalization of trade and private capital flows, particularly between Europe, Japan and the United States".<sup>7</sup> It was, indeed, a period of internationalisation as distinct from globalisation. What differentiates the two is the systemic nature of globalisation, "a complex of inter-related processes", as Dicken (1998, 5) puts it. He also offers a clear statement of what is involved in the shift from internationalisation to globalisation:

*"Internationalization processes* involve the simple extension of economic activities across national boundaries. It is, essentially, a *quantitative* process which leads to a more extensive geographical pattern of economic activity.

*Globalization processes* are *qualitatively* different from internationalization processes. They involve not merely the geographical extension of economic activity across national boundaries but also – and more importantly – the functional integration of such internationally dispersed activities".  
(Dickin 1998, 5)

There are some, particularly among political scientists (Jones 1999; Thompson 2000; Weiss 1998), who suggest that 'progressive internationalisation' has yet to develop into globalisation. Echoing Dicken's classification, Jones (1999, 365) notes the steady advance of economic internationalisation, but leaves in the air the question of how and when globalisation will take over: "The point at which these essentially quantitative developments generate, individually or in combination, a qualitative change in world affairs remains uncertain".

The relative order of the 1950s and 1960s was rudely interrupted in the succeeding decade - promoted by the United Nations as the 'development decade'. In fact, the 1970s witnessed, *inter alia*, the demise of the exchange rate linking the US dollar with gold, a rapidly worsening balance of payments deficit for the US, a world-wide inflationary tendency, the trebling of oil prices following the Arab-Israeli War, and the growth of a loan culture to the developing countries (paralleled, ironically, by the failure of both official and private investment to support the UN's aim for development). It was also the period when nation-states began to realise that the operations of other actors, such as MNCs and international

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<sup>7</sup> Corbridge illustrates the confusion that can occur through use of the terms 'multinational' and 'transnational'. He is not distinguishing between two forms of company, but the differing scales of operation of multinational companies.

organisations like the World Bank, were having an increasing and significant impact on national economic decision-making. It also witnessed the Singapore Government's shift to export oriented industrialisation (EOI), integration in the global economy and the real beginnings of the Singapore 'success story'.

By the early 1980s rampant inflation in the US, UK and many developing countries was the precursor of world recession. Not surprisingly, the loan culture brought its own disturbing consequences, with receiving countries incapable of servicing debt repayments. Corbridge (1997, 129) interprets this failure as a double-edged sword for the globalisation project:

'The international debt crisis...clearly dented an earlier tendency to construct a global economy. At the same time, though, it has also perversely encouraged a global economy in which the Japanese economy and a globalization of new financial markets and information technologies figure much more prominently'.

Japan's regeneration was reflected in the fact that by the close of the 1980s, it had become the underwriter of huge overseas borrowings entered into by the US in its effort to maintain a booming domestic economy. With the unified Germany joining Japan as a major economic node, the pair rivalling but not matching the US, the move towards globalisation had produced by the late 1980s an embryonic form of what has been described as the 'triad' or 'tripolar' world economy. Other key features contributing to globalisation as the 1980s came to a close were the widespread expansion of service industries (primarily banking, insurance, accounting, advertising and tourism), round-the-clock trading in world markets, and the emergence of global IT and telecommunications systems. But was this globalisation? Referring to Corbridge (1997, 131) again:

"The removal of exchange controls and financial deregulation in the early 1980s means that a global capital market now exists more clearly than ever before. Even powerful countries like the United States, Germany and Japan must adapt their economic political ambitions to an international world economy. In this new world, power is rapidly being devolved to the markets and to the IMF and the World Bank (in the case of many developing and ex-Socialist economies). True economic globalization may be in its infancy, but it is apparent nonetheless".

Corbridge's final sentence is a blend of caution and confidence, in stark contrast to discourses emanating from those Dicken (1997, 159) designates either as 'boosters' (mainly the heads of TNCs and management gurus such as Ohmae (1995)), or 'hypercritics' (including Gordon (1988), Kagarlitsky (2000), Cox (1992), Hirst & Thompson (1996)) and Weiss (1998).

A significant feature of the emerging globalisation of the economy was, and remains to this day, its unevenness - an attribute that is interpreted by some as proof of the absence of true globalisation. In part this uneven development is due to the variable effect of what Hobsbaum (2000b, 62) calls technical obstacles (e.g. the abolition of time and distance) in the development of globalisation, but of equal importance must be those 'political' obstacles produced by national regulations and legislation (Kawamoto 1998). The outcome, undoubtedly, is that globalisation continues to develop unevenly in its different forms within a world which already exhibits huge differences in wealth, resources and opportunity (Sassen 1998). This 'uneven' world is also, according to Herod *et al.* (1998), an 'unruly' one. It is the world of the 'Genesis discourse', Jowitt's (1992) successor term for the long-standing but, by the late 1980s, no longer appropriate, 'Joshua discourse'. Thrift (1998, 32) encapsulates the change in graphic fashion:

"It is a view of the world in which 'borders are no longer of fundamental importance; territorial, ideological and issue boundaries are attenuated, unclear, and confusing' [Jowitt 1992, 307]. It is a view of the world in which knowledge has become an archipelago of islands of epistemic stability in a sea of disorder, fluctuations, noise, randomness and chaos. Whereas in the Joshua discourse order is the rule and disorder is the exception, in the Genesis discourse disorder is the rule and order the exception and, as a result, 'what becomes more interesting are the transitions and bifurcations, the long fringes, edges, verges, rims, brims, auras, crenellates, confines ... all the shores that lead from one to another, from the sea of disorder to the coral reefs of order' [Latour 1987, 94-5]".

Harvey, for whom globalisation is "...a geopolitical crusade waged largely by the United States" (2000, 68), is another who identifies great unevenness in the developing global economy, resulting in large sectors of the world's population being excluded from the process of capital accumulation. He also holds the view that, to date, the qualitative transformations envisaged by Dicken, and involved in the move from internationalisation to

globalisation, have been of limited effect. He thus arrives at the interesting proposal (2000, 68) that it might be appropriate to have a shift in language from 'globalisation' to 'uneven geographical development'. By drawing out what is arguably the most significant feature of the globalisation process, Harvey has in fact produced a better definition of modern globalisation than most currently in circulation.

### *2.5 The 'death of the nation-state' and the 'end of geography'*

Central to debate about globalisation is the very existence of the nation-state. It has already been noted that in the 1970s states were waking up to the increasing influence of MNCs, the World Bank, WTO and other players on their economic performance and decision-making processes. By the mid-1990s it had become fashionable among some politicians and many industry heavyweights, encouraged by Ohmae and other management gurus, to talk of a future with marginalised, if not extinct, nation-states. This discourse has given rise to some extravagant claims, including one by Prakash (2001, 561) that, "...cyberspace (is) the defining negation of the Westphalian territoriality". The most effective attack against the hyperglobalists' case, however, is that made by Hirst and Thompson (1999). If there is a weakness in their analysis it is, as Perraton (2001, 681) suggests, that in their pre-occupation with demolishing the hyperglobalists' arguments they have failed to acknowledge the full extent of the changes that have occurred through globalisation.

Apart from the fact that the exaggerated claims of the hyperglobalists do not stand up to close examination, their views on the nation-state are particularly misleading, for if the nation-state is under threat it is not just from globalisation. There are other processes at work, including "...internationalization, the emergence of new polities such as the European Union, the reconfiguration of world trade into gigantic trading blocs, the rise of the communications global village, destatism and privatization, regionalism, the merger mania among megacorporations, (and) global environmental problems" (Baker 2000, 1). In fact, all of these processes are enmeshed systemically with globalisation, and so are all part of the same 'threat'. Linked to the discourse that strongly favours globalisation as both inevitable and unstoppable, this threat will, say the boosters, produce an inexorable withering away of the nation-state, leaving only a global end-state.

Most analysts do not deny that there has already been some reduction, or at least change of emphasis, in the power of the state. But they question the 'inevitability' argument and prefer, instead, to investigate the ways the nation-state is responding to the challenges and threats of globalisation. As Dicken (1997, 87) states, "it is no longer accurate to conceive of the world economy as being made up simply of nation-states in interaction with one another and being the primary regulators of the world economic system". Interestingly, Dicken does not follow a well-worn path and attribute the decline of state power to the burgeoning influence of MNCs and TNCs; he prefers to think instead of a partnership between nation-state and company, with each pursuing their specific objectives, but also needing each other. "(This) relationship...is at once both co-operative and competing, both supportive and conflictual" (Dicken 1997, 88). Dicken concludes his survey of TNCs and nation-states by suggesting that regional economic blocs provide a stage of opportunity and protection on which both states *and* TNCs can flourish. This is happening in Asia Pacific and is a point I return to in Chapter Nine.

Weiss (1999) maintains that nation-states must change if they wish to maintain their sovereignty within the international community. But she also stresses (1999, 88) continuing state power over the nature of any such change:

"The lesson may be that states can be increasingly dual creatures; exercising their cooperative (international) aspect, as well as their more traditional self-interested side as circumstances require. That of course is the critical point. Over the long haul, much depends on the fruits of cooperation. States will cooperate as long as the welfare benefits of doing so outweigh the sovereignty costs. It would be unwise to expect states willy nilly to abandon self-interest or sacrifice national welfare on behalf of interdependence".

That nation-states will continue to rule their territory, in other words exert their sovereignty, is not in doubt; what is changing in both shape and form is nation-states' *capacity* to rule (Held 2000, 173). Such comment is in line with the 'middle way' that most analysts suggest is appropriate for nation-states to adopt in the face of globalisation. It presupposes that *states do have a choice*. A further important consideration, according to Dicken (1997, 87), is that TNCs are not a homogeneous group; they are "enormously varied in size, structures and strategies", and as socially produced organisations they vary from one country to another. They are not, as some imagine, *the* controllers of the global

economy. Nonetheless, although nation states can wield considerable power within today's uncertain world, there are times when they appear too hesitant or inhibited to do so. The uneven approach to global warming is a regrettable example of such political lethargy. In the build-up to the WTO round of trade talks in Seattle this 'nation-state inertia' was highlighted in a leader in *The Economist*:<sup>8</sup>

"America and Europe urgently need to show more commitment to free trade. Mike Moore, the WTO's pugnacious new boss, has started the long fight to win over the sceptics on globalisation. But he cannot succeed without governments' help. All too often they appease protectionists rather than confront them... Globalisation is not irreversible. Unless governments come out fighting for free trade in Seattle and beyond, the huge gains it has brought could be lost".

The changed circumstances that globalisation has forced the nation-state to address, are far removed from those prevailing in the middle of Hobsbaum's 'short century' (1914-1991) when there was "very little that the state did not control" (Hobsbaum 2000b, 32). Interestingly, however, one of Hobsbaum's recurring themes is that globalisation has had little impact in the political sphere – unlike those involving the economy, environment or popular culture. Having made the point that the UN's power to act comes from its members, he presses home the continuing significance of the nation-state in today's world:

"(It) is certain that nation-states cannot be ignored, and you cannot examine the world as though they did not exist or were not important, because in politics nothing exists besides them. The possibility of a single global authority carrying out an effective political and military role is currently nonexistent" (Hobsbaum 2000b, 43).

This is a theme also developed by Peck and Tickell (1994) in their exploration of the global-local disorder that they claim characteristic of the world after 1989 and the 'downfall' of socialism. Whilst suggesting that the nation-state may become 'hollowed out' and outflanked by both the global and the local (1994, 317), they do not foresee either supra-national or sub-national regulatory systems as providing an answer to the problems of an unruly world. Instead, they argue for some 'filling in' of the nation-state in order to stabilise regulatory relations ranging from the local to the global. National and global co-

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<sup>8</sup> *The Economist* (27 November 1999)

ordination, they say, is the action that will produce answers to the problems raised by uneven development (1994, 325).

Anderson (1995, 80-1) neatly juxtaposes globalisation and the nation-state through the observation that, while states on the one hand remain responsible for the debt crisis in the third world, . . . and “while the virtually instantaneous worldwide nature of the 1987 crisis dramatically illustrates the globalization of finance, the resolution of the crisis (also) bears eloquent testimony to the continuing importance of states”. But just how important are they? Given the complexities of the globalisation debate this defies a straightforward response. However, the two extracts that follow are by way of partial answer. One is cautiously hopeful about the role of the state in a rapidly changing global world; the other altogether more pessimistic about the way that state power is slipping away. First, Albrow (1996, 183), while recognising that there are pitfalls along the way, sees a promising path ahead:

“Broadly, in the context of globality and with the development of the global state, we can envisage the nation-state coming to terms with a position of modest subsidiarity. The institutional developments which matter will take place across its boundaries, while the framework for people’s lives will conform less and less to purely national definitions. As far as political leaders of nation-state governments are concerned, the choice will be between summoning up old identities, with all the risks that involves, or concentrating on the competence needed to manage advancing social technology”.

Ó Tuathail *et al.* (1998, 1), on the other hand, identify “a *fin de millenaire* world that is relentlessly compressed and restlessly dynamic, while also spectacularly riven and dangerously fragmented”:

“Just as Halford Mackinder (1904) proclaimed a ‘post-Columbian epoch’ of closed global space at the beginning of the twentieth century, so might one be tempted to proclaim at century’s end the emergence of an ‘unruly epoch’ of ungovernable, turbulent and disorderly global space. Caught in the maelstrom of the processes which are rewriting the rules of world order are the old masters of global space, the state formations that have historically divided territories and organized economies, ruled sovereignly over populations and corporations, disciplined subjects, and consolidated identities. Absolute rulers no more, the slipping power of states threatens the advent of an unruly world, a world no longer amenable to the state-centric ruling systems and disciplining institutions of the past”.

The importance which Castells, Ikenberry and most other commentators attach to the work and leadership of the nation-state would appear to indicate that it is neither dead nor about to die. Signs of mortality are usually perceived by the hyperglobalists in the process of financial integration, the relative ease of electronic movement of money across borders, and the 24-hour banking system operating through London, New York and Tokyo. That this gives rise to the end of geography, as O'Brien (1992) suggests, is an unsupported leap in reasoning that typifies much of ultraglobalist discourse. In fact, study of O'Brien's text suggests that in light of the qualifications he introduces, what the book title lacks is a concluding question mark. Perhaps his most telling qualification is that "for many observers (the) seamless prospect (of a global financial market) is somewhat utopian, at least in terms of its attainability as opposed to desirability" (1992, 99). Elsewhere he asserts that "geography will remain one of the most powerful, evocative and obvious reference points" for locational decision making in the financial world. It is hardly the stuff of the 'end' of geography.

## *2.6 Globalisation: inevitable or contingent?*

The future of the nation-state within the complex transformation process that is globalisation is a matter open to a range of generally cogent and persuasive interpretations. Among those endeavouring to make sense of globalisation, Agnew & Corbridge (1995, 129) express doubts as to whether "territorial states are any longer the world's dominant economic actors". Even the US territorial economy, they suggest, "is now hostage to an international economic system that American hegemony did so much to unleash after 1945". Use of the word 'hostage' is interesting, for it appears to indicate that the US is up against something over which it has no control, and which has 'captured' it. However, a deterministic stance towards globalisation does not stand up to examination; as a socially-constructed mix of processes globalisation *must* be open to change - even reversal. Jones (1999) separates the determinism that pervades certain studies of globalisation into two forms. One is typified by the concept of economic developments following a predictable linear path, which is altered only through the action of a characteristic already present in the developmental system. Jones (1999, 360) counters this by citing the "profound redirection" of trade, investment and so on during the twentieth century's two World Wars. The second

form of determinism is related to technology and innovation. As Jones continues, “many contemporary discussions of globalization embrace a form of technical determinism, in which a number of potentially critical innovations are deemed to have inevitable consequences for the global political economy”. It is not difficult to contest such a simplistic view, given the proven record of technical innovation to take unexpected turns, and the recurring tendency of certain countries or organisations to hijack technology for destructive purposes.

The normative nature of much globalisation discourse certainly does result in it being “...routinely offered up as an irresistible process to which there are no alternatives”...and forming “...a modern view of history as the movement of world integration towards a single end-state” (Low & Barnett 2000, 56). One who finds a yawning gap between the rhetoric of the boosters/hyperglobalists and the realities of the global economy is Petras (1999). His liking for the term ‘globaloney’ has already been noted, and he identifies a mismatch between the more extreme claims made on behalf of globalisation and “its meagre explanatory power” (1999, 4). Like Low & Barnett he looks to history to help analyse the present state of internationalisation/globalisation and notes that the record of inevitability in connection with particular political-economic processes is a poor one. What is happening in the global economy, says Petras (1999, 20), is characterised by contingency, not inevitability. Gibson-Graham (1996, 2), in her thought-provoking interrogation of globalisation,<sup>9</sup> comes to much the same conclusion about commentaries on the subject: “Fuelled by the ‘fall of socialism’ in 1989, references are rampant to the inevitability of capitalist penetration and the naturalness of capitalist domination”. The conclusion that McGrew (1995, 51) draws from the complexity of what is emerging, is that it is impossible to determine what is going on:

“Globalization is associated simultaneously with the persistence of the nation-state, the emergence of a distinctive form of global politics and governance, and the beginnings of a re-ordering of international political space. It might be argued therefore that the contemporary world order is best described as bifurcated: on the one hand there is the persistence of the states system and on

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<sup>9</sup> Gibson-Graham’s article expands on the concept of ‘globalisation as penetration’ and uses as a basis of comparison work on the act of rape by Sharon Marcus. One flaw in her analysis arises from attempts to demonstrate the benefits of globalisation (and of rape), but it is an unusual and provocative attempt to address the nature of, and responses to, globalisation.

the other hand, a growing plurality of authority structures and overlapping loyalties which represent an emerging global society. Such a bifurcated order embodies many possible future end-states: from an increasingly fragmented and conflictual world to the formation of the world's first global civilization."

The perception, common to many developing and under-developed countries, of globalisation as a tool of US hegemony (Park 2000, 14; Harvey 2000, 68), forms a fundamental stumbling block for those who seek to promote the inevitability of globalisation. The obstacle takes many forms, ranging from non-cooperation in the work of world bodies such as the WTO, to the terrorist attacks on 11 September 2000 on New York and the Pentagon. Within the academy, however, the main problem for the more extreme proponents of globalisation appears to be self-inflicted: it is the damage to their credibility that arises from exaggerated claims, either of the globalisation of world production or the decline in the power of the state (Dodds 1998, 595). Despite this, belief in the inevitability of globalisation remains strong within some political circles. Kelly (1999, 383) draws on the words of three political leaders - Jean Chrétien (Canada), Tony Blair (UK) and Fidel Ramos (Philippines) - to show how deeply-rooted this inevitability, with all its attendant threats/benefits (to be deployed as the occasion demands), has become in national and international political discourse. He recounts (1999, 384) how Southeast Asian nations placed globalisation at the heart of the 1997-98 economic crisis, with the result that, "the global economy has been portrayed as a tidal wave that must be harnessed and ridden (Singapore), a disembodied force that must be resisted (Indonesia), or a set of powerful agents<sup>10</sup> who can be held accountable for economic decline (Malaysia)". Singapore's positive stance only serves to highlight the rather negative approach of the other two countries.

Reading between the lines of these mixed metaphors it is all too easy to pull out the words 'Western economic imperialism', a condition which, for many developing countries, is there to be 'harnessed and ridden', but available for the apportioning of blame should things go wrong. The result is the attribution of a solidity, or reality, to the processes of globalisation that some dispute. Kagarlitsky (2000) and others on the left of the political

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<sup>10</sup> These included the financier George Soros who, according to Prime Minister Mahathir bin Mohamed, was bent on some form of revenge following the admission of Myanmar to ASEAN (Micklethwait & Wooldridge 2000, xvii).

spectrum do so in the interests of organised labour, fearing what Piven (1995, 109) describes as globalisation's "unlimited options for capital exit, whether through the relocation of production, or accelerated trade, or through worker replacement, or through capital mobility". Others think there may be cracks in the globalisation edifice, which "is not as secure as some of its neo-liberal proponents maintain" (Agnew & Corbridge 1995, 217), or that at the very least, "we may have become dazzled by the rhetoric of globalization" (Daniels 2001, 322). The different stances of the boosters and the hypercritics are shown in Table 2.2, which suggests that the view of a fragmented world has no more validity than that of a global world; reality is somewhere between the two extremes. But where exactly, and what stage has it reached?

**Table 2.2 Globalisation protagonists: boosters versus hypercritics**

<i>Global world of the boosters</i>	<i>Fragmented world of the hypercritics</i>
Globalisation an irresistible force moving rapidly towards a total global economy	Integration now less significant than during late nineteenth century
Nation-state becoming irrelevant	Nation-state retaining its power
Capital and investment flowing freely across boundaries	Capital and investment remain based in places
Time and space made irrelevant by technological advances	World retains the features of uneven and unequal development
Moving towards total equality of opportunity and access	Increasing marginalisation of the underdeveloped world and of the poor everywhere
Growing power of world bodies (UN, World Bank, WTO, IMF)	Main thrust toward formation of regional blocs
Growing internationalisation and power of TNCs and MNCs	HQ locations of TNCs and MNCs in nation-states of prime importance

There is one certainty: although we may not yet have a fully global economy, it will be a "central part of the development agenda for the early decades of the twenty-first century" (Daniels 2001, 324). However, it remains impossible to predict with any confidence the

transformations through which the world is progressing. Dicken and Hobsbaum, articulate representatives of those adopting a more neutral and reflective approach to the study of the global economy, do not dispute that globalisation is *in process*. The title of Dicken's key text, *Global Shift*, now in its third edition, underlines his position that "something is happening out there" (1998, 1), and Hobsbaum (2000b, 61) is unswerving in his view of globalisation as a permanent constant transformation:

"It is not at all clear, therefore, at what stage we can say it has reached its final destination and can be considered complete. This is principally because it essentially involves expanding across a globe that is by its very nature varied geographically, climatically and historically. This reality imposes certain limitations on the unification of the entire planet. However, we are all agreed that globalization, and especially the globalized economy, has made such spectacular progress that today you couldn't talk of an international division of labour as we did before the seventies."

There can be little doubt that we live in an uncertain and unstable world, one in which it is impossible to look ahead with any certainty. The bifurcated order referred to by McGrew (1995, 51) could lead to any number of end-states. It is arguable, however, that despite the increasing mobility of capital, the apparent ability of MNCs to go and do as they please, the free flow of information, technology and people, and the existence of a so-called 'borderless' world, the ability to exercise considerable power at local, regional and global levels still resides with the nation-state.

The various scales of space in our 'unruly' world are now intertwined. We do not live in a world where only the global matters; social activity within continental, regional, national and local spaces all help shape globalisation, and in turn are influenced by the processes of globalisation. Luke & Ó Tuathail (1998) use the term "flowmations" to describe what Ó Tuathail *et al.* (1998, 19) call "the criss-crossing of scalar levels by inter-linked relations of power, flows of goods, services, information, money and people". It is these crossings which have given new meaning to 'local' and 'global' and usage of the term 'glocalization', attributed to both Robertson (1992) and Swyngedouw (1992) but, according to Albrow (1996, 93), with its roots in Japanese marketing parlance.

Robertson interprets glocalisation as the localisation of the global, but as Albrow (1996, 93) asks, “what kind of globalization does not have local impact?” The follow-up question is obvious: in today’s interconnected world, what *local* action of any significance does not have global impact? Clear illustrations are provided by the localisation of the headquarters of MNCs, centres of production, and financial markets. Scale, therefore, has taken on new meaning:

‘The hypermodern pulverization of time and space, the transformations of everyday life and the still accelerating globalization of commodification and commodified relations junk geographical scales we have taken too long for granted as fixed, stable and frozen moments, as static containers that organize and regulate life, and render our existence apparently transparent and intelligible’ (Swyngedouw 1997, 168).

As has already been noted, however, changes including those articulated by Swyngedouw are not happening in an ordered environment. The unruly world is for Strange (1996, 199) a “ramshackle assembly of conflicting sources of authority”, of which the nation-state is but one. The resultant problems for the individual concerning authority, allegiance, loyalty and identity represent, she maintains, the ‘Pinnocchio problem’: the strings attaching us firmly to the nation-state have gone and we now have to select between competing and shifting authorities, allegiances and so on. In this globalising world, in the aftermath of the Cold War and amidst the apparent triumph of the market economy, there is for Strange a “new absence of absolutes”.

## 2.7 Conclusion: whither globalisation in the twenty-first century?

There can be little doubt not only that an uneven process of economic, cultural and political globalisation *is* happening, but also that the current ‘new world *disorder*’ represents a critical stage of development. How globalisation evolves in the years ahead will have far-reaching effects for world stability and prosperity. Micklethwait and Wooldridge (2000) interpret the last quarter of the twentieth century as the period of the ‘rise’ of globalisation and ‘remaking’ of the borderless world, following the ‘fall’ of globalisation over the previous seventy five years. In common with Harvey, Waters and others they believe in the lessons of history and wonder whether world leaders will have learnt anything this time

round: the decisions made in the aftermath of the First World War produced the Great Depression and led to a second world conflict; decisions after the Second World War, on the other hand, resulted in decades of increasing prosperity and opportunity. Now, a decade after the ending of the Cold War, today's leaders must determine how globalisation can be harnessed to plough the twin furrows of prosperity and equality around the world. It is an enormous task, but one that may be made a little easier as the result of an unexpected development. This is that there are some small signs, particularly in the US, that the anti-globalisation movement has lost some of its shape and motivation, following the terrorist attacks of 11 September 2001 and the agreement reached two months later in Doha for the start of a new trade round to lead through to January 2005.

There are, however, many who remain unconvinced about the continuing advance of globalisation, some who are openly hostile to the often exaggerated claims of global theorists, and others who, while confident that globalisation *per se* will continue to prosper, find the present circumstances "both glorious and frightening" (Hutton and Giddens 2001, 213). Their view is echoed by Gibson-Graham (1996, 1): "Heralded as a 'reality' by both the Right and the Left, globalization is greeted on the one hand with celebration and admiration, on the other with foreboding and dismay". This Janian characteristic is also noted by Jones (2000, 266), who describes globalisation as a compelling contemporary issue that "crystallizes the current divisions between celebration and despair, between dispassionate analysis and committed critique and, most importantly, between the 'haves' and 'have nots' of the global system". Attention was drawn earlier to this latter point, which is highly significant in terms of the ammunition it gives to those who question the veracity of claims concerning the extent of global integration. The United Nations figures in the following extract, quoted by Held (2000, 174), are a telling endorsement of Harvey's 'uneven geographical development':

"...1.3 billion persons, that is 22 percent of the world's population, lives [sic] below the poverty line....As a consequence of such severe poverty, 841 million persons (14 percent) are totally malnourished; 880 million (15 percent) are without access to health services; one billion (17 percent) are without adequate shelter; 1.3 billion (22 percent) are without access to safe drinking water; two billion (33 percent) are without electricity; and 2.6 billion (43 percent) are without access to sanitation."

The big question facing world leaders (the nation-states), MNCs and international organisations must be whether the process of globalisation can be regulated in a manner which will accentuate forces for good, while eradicating or at least reducing the equally potent forces that threaten the well-being of hundreds of millions both within and outwith the globalisation 'loop'. Micklethwait and Wooldridge (2000) go to some lengths to detail the problems and drawbacks of globalisation, but conclude unequivocally that the winners far outnumber the losers. The very fact that there are losers, however, must surely make it all the more important that politicians participate in positive dialogue with anti-globalisation movements in order to gain full understanding of the concerns of the discontents. Castells (1997, 109) believes that they may already be too late, for "these...movements spreading throughout the world, are ending the neo-liberal fantasy of creating a new global economy independent of society by using computer architecture". What Castells wants is for rejection of globalisation to be turned into new forms of social control over global capitalism and for this to be firmly in the hands of the state:

"The ability, or inability, of the state to cope with the conflicting logics of global capitalism, identity-based social movements, and defensive movements from workers and consumers, will largely condition the future of society in the twenty-first century" (Castells 1997, 109).

Ikenberry (1998) also pinpoints the future dangers that will arise if governments fail to govern markets effectively. He seeks a return to basics, to the philosophy behind the creation of an open world economy *qua* post-Bretton Woods; and he identifies a key role for those countries that have benefited most from this open economy. It is this, he says, that should "lead the debate on how the world community can master globalisation in order to make it stable and secure for the people who are only now experiencing it for the first time" (1998, 13). The concept that globalisation may well further strengthen those nation-states responsible for its development, and thus reinforce "their capacity to regulate its ongoing impact", is a theme also taken up by Woods (2000, 17). It does appear, therefore, that there is general agreement on the need for a new philosophy to both understand and direct the process of globalisation and that, for Ikenberry, Woods and others, the nation-state will remain a central actor in future developments. However, it is possible to read into what is happening - a constant transformation? - the likelihood that the scale of the task of controlling and directing globalisation is moving, or has already moved, beyond the

capacity of individual nation-states. This is the conclusion reached by Hutton and Giddens (2001) who cannot envisage the answers coming from either neo-liberalism, the existing framework of nation-states, or socialism's "utopian internationalism". They expound (2001, 217) an 'internationalist third way', underpinned by "new systems of international democracy and accountability", operating through a strengthened United Nations. It is no longer appropriate, say Hutton and Giddens, to think that the movements for democracy, liberty and justice which were led by nation-states in capitalism's glory days of the eighteenth and nineteenth centuries can be replicated in the twenty-first century. These movements, they conclude, "now have to be reproduced globally. Nothing less will do" (2001, 223).

## Chapter Three

### Regionalism in a globalising world

*“Following the decline in theory and practice in the 1970s, regionalism both revived and changed dramatically in the 1980s and has gained strength in the 1990s. Regionalism today is emerging as a potent force in the globalization process. If globalization is understood to mean the compression of the time and space aspects of social relations, then regionalism may be regarded as but one component of globalization. In this sense, regionalism is a chapter of globalization. But regionalism may also be a response or challenge to globalization” (Mittelman 1996, 189).*

#### 3.1 Introduction

The word regionalism embraces two quite distinct considerations of regions and regional activity. Both, however, are intimately connected to the process of globalisation. The *Dictionary of Human Geography* (Johnston *et al.* 1994, 517), in defining regionalism, pays particular attention to the distinction:

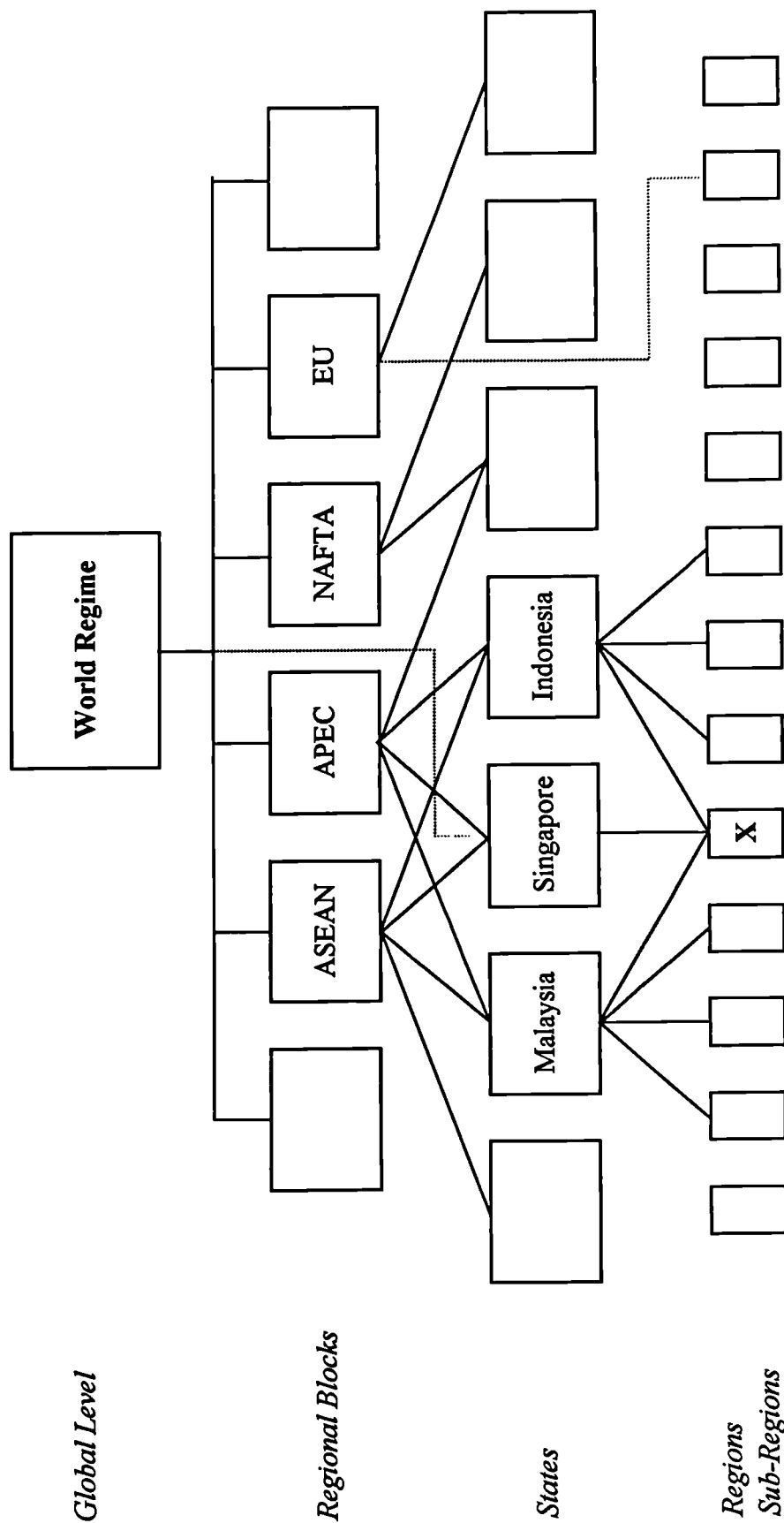
*“A movement which seeks to politicize the territorial predicaments of its regions with the aim of protecting or furthering its regional interests. An important distinction should be drawn between **functional regionalism**, in which the state is responsible for regional demarcation, such as administrative and planning regions, and a **regional movement** with feelings of collective identity that are rooted in an officially defined region but emanate from a grassroots identity, although its politicization can often be strengthened by such an arrangement”.*

Within geographical studies, functional regionalism reached a climax during the two decades following the Second World War, when geography was much concerned with 'aerial differentiation', and when human and physical studies combined in a holistic approach to 'natural' regions, which usually lay within state boundaries but occasionally overlapped from one state to another. This approach was sidelined by the excitement of the quantitative revolution in the 1960s and 1970s, but the increased pace of globalisation in the 1980s brought the region once more under the spotlight. "Something funny happened in the early 1980s", observes Storper (1997, 3), when pointing out that this was the time when many mainstream social scientists in the West 'rediscovered' the region. Knox and Agnew (1998, 393) refer to the "reassertion of the local in the age of the global", and suggest that one of the ironies of the shrinking world is that "small differences in economic characteristics and cultural practices have taken on greater significance", and led *inter alia* to a tendency to devolution of political decision making. The point is reinforced by Storper (1997, 4), for it is his belief that after more than a decade of scrutiny and debate, "there is good reason for including the region as an essential level of economic coordination in capitalism".<sup>1</sup> Functional regionalism – which is what Storper, Knox and Agnew are referring to – is therefore a key factor in the globalisation debate.

However, functional regionalism interpreted in this way can be of only passing interest in an analysis that seeks to piece together the theoretical framework underpinning Singapore's positioning in the global economy. As an island city-state with an area of only 683 square kilometres, city, state and region are effectively one and the same. There is no regional structure within the state, since the tentacles of the city stretch to all parts of the island and there is central political control of all development within the territory. Functional regionalism, as defined by Johnston *et al* 1994), and equating to what Mittelman (1996, 192) terms 'microregional patterns', therefore has no direct relevance to the unique place and space that is Singapore, and its consideration does not form part of this chapter. From here on, whenever the term regionalism is employed it refers to regional *movements*, in the form of regional integration arrangements (RIAs), transnational sub-regions (see Figure 3.1), or bilateral trade arrangements. Economic activity is most often summoned up as the basis of regional integration movements, but political and cultural

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<sup>1</sup> A good insight into the 'new regionalism' is provided by Padup (1988), Sayer (1989), Johnston *et al* (1990), Thrift (1991), Storper (1997), and Knox and Agnew (1998).



**Figure 3.1** Segment of an emerging global hierarchy of political and economic relations

Note: Sub-region X = Singapore-Johor-Riau Growth Triangle

Source : after Scott (1998, Fig. 8.1)

interests are also involved, especially in the construction of regional alliances. These are reviewed in the pages that follow, together with the economic, or trade-driven, forms of regionalism classified by Mittelman (1996) on three scales: the microregional (already noted), subregional and macroregional. The last-mentioned comprises those RIAs forming blocs, ranging from the EU and NAFTA to lesser, but important groupings such as ASEAN and MERCOSUR. Subregional patterns, according to Mittelman, transcend political boundaries, but do not necessarily encompass the total area of the states involved. The growth triangles of the Asia Pacific are examples of the sub-regional scale of regionalism.

A useful framework within which to study regionalism, and specifically the development of regional trading blocs, is provided by Brook (1995). He classifies the “overarching set of ideas” under the most commonly discussed schools of thought – intergovernmentalism, functionalism and transnationalism:

- *Intergovernmentalism.* This school identifies states as being at the heart of RIAs and of greater relevance and importance than moves towards a supranational position.
- *Functionalism.* Adherents believe that the very act of integration leads to action at the supranational level and the accompanying decline in the political power of the state.
- *Transnationalism.* This school rejects the simplistic extremism of both intergovernmentalism and functionalism, and identifies instead a multi-centred, ‘borderless’ world.

The links with the globalisation issues raised in Chapter Two are obvious. Equally so is the observation that these approaches to regionalism are neither mutually exclusive nor static; they are present in varying degrees in most RIAs, but illustrated most clearly in the EU. Brook believes that of the three frameworks, “evidence points to the growing impact of transnational forces on the state system” (1995, 137). This is arguably true, but it does not necessarily deny the enduring quality of the state system – still a major element in the global economy at the start of the twenty-first century, and at the heart of all regional movements.

Regarding the concept of regional movements, the most tightly drawn definition of regionalism is to be found in the *Dictionary of Trade Policy Terms*:<sup>2</sup> “(Regionalism is) actions by governments to liberalize or facilitate trade on a regional basis, sometimes through free-trade areas or customs unions”. This sits more easily with the geographers’ interpretation (Johnston *et al.* 1994) than with one from the field of political science (Fawcett 1995, 11). The latter cites Nye’s broad definition of an international region – “a limited number of states linked together by a geographical relationship and by a degree of mutual interdependence” (Nye 1968, vii) - in arriving at her definition of regionalism as “the formation of interstate groupings on the basis of regions”. Her basic formulation suffers in comparison with that of Johnston *et al.* (1994) which, in stressing grassroots identity, patently envisages regional movements as arising from much more than groupings of states on the basis of regions. A good example is provided by the former Council for Mutual Economic Assistance (CMEA) which, although primarily a regional grouping of the Soviet Union and East European states, also reached out to include socialist systems in Cuba, Korea and Mongolia. In their seminal work, the political scientists Gamble and Payne (1996) do stress, nonetheless, both the statist and geographical dimensions of regionalism, which they conceive of as “a state-led or states-led project designed to reorganise a particular regional space along defined economic and political lines” (1996, 2). Their ground-breaking work did much to clarify the nature of the ‘new regionalism’ that emerged in the late 1980s, by highlighting the complete break from its precursors and from the embrace of the ‘hegemonic-stability thesis’ and the ‘culs-de-sac’ of neo-realist and neo-liberal interpretations of the international political economy (1996, 6).

Clearly, in a discussion of regionalism, the word ‘regional’ has developed meanings beyond the purely geographical. Within the international political economy and universal organisations such as the UN and the WTO, institutions classified as regional organisations include NATO, APEC and even the Commonwealth. Nye’s solution (1987, 8) is to distinguish between regional organisations “which restrict their membership, in principle and in practice, on the basis of geographical contiguity”, and quasi-regional organisations “whose membership has a geographical area of concern, but which include non-regional members”. Bennett (1995, 230) is another who interprets regionalism through the medium of the regional organisation, defined as “a segment of the world bound together by a

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<sup>2</sup> WTO website, [www.wto.org](http://www.wto.org) (regionalism gateway), accessed on 2 February 2002.

common set of objectives based on geographical, social, cultural, economic, or political ties and possessing a formal structure provided for in formal intergovernmental agreements". Whereas Nye seems overly concerned with the detail, Bennett allows for a variety of regional arrangements to fall under the one banner of regionalism. Singapore illustrates the point: its involvement in regionalism ranges from membership of ASEAN, ARF, AFTA and APEC, through extension of its economic space in the Johor-Singapore-Riau Growth Triangle, to the setting up of bilateral trade agreements with New Zealand, US, Japan and others. It may be argued that whether these arrangements are regional or quasi-regional is of little account compared with the reasons for their establishment and significance of their outcomes.

The main concern of this chapter is with regional movements during the past two decades, movements that are commonly described as the 'new regionalism'. However, before exploring the theory and practice of new regionalism, I seek to give shape to the earlier forms of regionalism, highlighting the pattern of development during the Cold War period. The latter part of the chapter is taken up with assessment of the relationship between regionalism and multilateralism, and thoughts on the future of regionalism. Regionalism, in all its forms, is highly significant for Singapore as it seeks constantly to fill niches in the regional and global economy; and as will be seen in Chapters Nine and Eleven, regionalism is playing an increasingly important role in Asia Pacific's economic development, both in terms of challenges and opportunities for the whole region and impact on the WTO's multilateral aims for world trade.

### *3.2 Stirrings of regionalism*

The chronological development of regionalism appears in some ways to parallel that of globalisation. The fundamental difference, however, is that whereas the development of internationalisation/globalisation, despite its unevenness, has been a movement towards global integration, regionalism comprises any number of separate, sub-global movements, with a far from unified set of objectives, and with interests focussed on particular regions. Regionalism may, or may not, lead to a truly globalised world.

The first semblance of anything approaching regional integration came as part of colonial activity in the latter half of the nineteenth century and the first half of the twentieth century. The Anglo-French accord of 1860 was, according to Mistry (1996, 11), the 'genesis' of regional movements in Europe itself. Elsewhere, in South and Southeast Asia, parts of Africa, the Middle East and the Caribbean, the British and French developed forms of regional movements which, although including countries that were not necessarily contiguous, did have features such as "monetary unions, common currencies, common fiscal administration, customs unions...and the like" (Mistry 1996, 11), which would be associated today with regional integration.<sup>3</sup> The original Anglo-French accord "blossomed into dozens of bilateral accords, resulting effectively in a multilateral arrangement (in 1908 Britain had most-favoured-nation [MFN] arrangements with 46 countries, Germany with 30 countries, and France with 20)" (de Melo and Panagariya 1992a, 11). Certainly, considerable benefits were derived from the discrimination in both trade and investment that was exercised by the colonial powers. Hirst and Thompson (1999, 31) claim that the colonial system augmented the biases to trade between the colonial powers and their colonies by between two and four times what would otherwise have been the case. This, of course, is in support of their thesis that the world economy pre-1914 was more open and integrated than is the case today. However, it might be better to consider these colonial arrangements as an axiomatic outcome of a Europe-centred world order (Wallace 1995, 207) rather than as examples of *bona fide* RIAs. One such example may be found, nevertheless, in the arrangements during the period 1880 to 1945 which produced the co-prosperity sphere between Japan and its colonial appendages, Korea and Formosa. The United States provides another interesting case, but one open to question: was it, between 1820 and 1920, a highly successful example of an RIA that produced full economic and political union, or should it be viewed more prosaically as a federation gradually amalgamating its assorted parts? Analysts generally favour the latter interpretation.

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<sup>3</sup> Regional movements that are economically driven involve a process of integration. Mistry (1996), writing for the Netherlands-based Forum on Debt and Development (FONDAD), employs the acronym RIA when referring to such 'regional integration arrangements'. Both the WTO and the OECD refer variously to 'regional integration agreements', 'regional trade agreements' and 'regional integration arrangements'. Panagariya (1999), a self-styled multilateralist, deploys the terms 'regional arrangement' (RA), 'free trade area' (FTA) and 'customs union' (CU), but in common with many economists prefers 'preferential trade area' (PTA) in place of FTA in order to demonstrate the discriminatory nature of such agreements. He gives no reason for his dislike of the significant term 'integration'. In the interests of simplicity and clarity, use of the term RIA in this chapter covers all the above descriptions of the same process, or outcome.

As explained in Chapter Two, the period 1914-1945, with its World Wars, protectionism, and Great Depression, witnessed severe setbacks to the advance of internationalisation. Progressively, through the inter-war period, the League of Nations proved ineffectual in either providing political cohesion and stability or controlling tariff escalation and rampant protectionism. Multilateralism was a lost cause in the 1930s when 'beggar-my-neighbour' trade practices were the rule (Gibb 1994, 3). These uncertain and unruly times also brought a loosening of the reins held by the European colonial powers and a concomitant weakening of their regional interests. However, the status of these arrangements must be kept in perspective. They were, at best, 'incomplete' RIAs, born out of Eurocentric attitudes and actions, and this is undoubtedly why there is little inclination in the literature to dwell on regionalism prior to 1945. An exception, for reasons already noted, is the work of Hirst and Thompson, who posit regionalism in the 1930s as being "probably at its height" (1999, 31). The more generally accepted view is summed up by Fawcett (1995, 11), when she arrives at the conclusion that, "if formal organization, at the regional as opposed to the international level, is to be the yardstick by which we measure the onset of regionalism it is difficult to place its real origins much before 1945".

### *3.3 Regional movements during the Cold war*

The ending of World War II brought with it a determination among nations to learn from the mistakes of the inter-war years and the horrors of the war itself. A new global organisation, the United Nations, was created in 1945 in order to guarantee the peace and stability that had proved beyond the capabilities of the League of Nations. Liberalisation of the world trading system was also widely regarded as the preferred alternative to the fragmentation and protectionism that had led to the Great Depression and, arguably, the Second World War. The mood among many policy-makers during the 1940s was in favour of a move away from a discredited universalism towards "practicable and workable regionalism" (Nye 1968, vii). Most importantly, it was this thinking that resulted in the ambivalence present in both the UN Charter and the General Agreement on Tariffs and Trade (GATT), and meant that the roles of both the UN and GATT were pivotal for the development of regionalism in the post-war period.

### 3.3.1 *The United Nations: issues of peace and security*

It is highly significant that recognition of a role for regionalism was enshrined in the UN Charter, enacted on 24 October 1945. However, since moves to recognise the role of regional agencies in economic and social affairs were defeated, the Charter's references to regionalism were limited to concerns with peace and security. Article 33(1) of Chapter VI states that in seeking settlement of any dispute, the parties should when appropriate, "resort to regional agencies or arrangements". This message is endorsed by Article 52 (1-3) in Chapter VIII, which confirms that members belonging to regional agencies or arrangements must attempt to settle disputes through such organisations before referring matters to the Security Council. Henrikson (1995, 126) interprets these provisions of the Charter as giving regional entities the necessary 'elbow room' to act as the "institutional forum of first instance" in dealing with local disputes. Finally, an important extension of the regionalism principle appears in Article 51 of Chapter VII: this allows individual or collective (regional) self-defence in the event of attack, prior to any measures that may be taken at the behest of the Security Council. Thus, although there is no question about the UN's overarching authority in matters of international peace and security, there is clear and unambiguous recognition of the part that may be played by 'regional agencies and arrangements'. The intention, quite clearly, was to "establish a flexible framework within which existing and future regional agencies and the United Nations might function together harmoniously..." (Wilcox 1965, 792).

Despite the elbowroom and legitimacy awarded by the UN Charter, an initial assumption might be that there would be little call for regional movements following the Second World War. The failed idealism of the inter-war period had been replaced in international relations philosophy by the state-centred power politics of the realists. To the realists, whether policy-making and action happened under an international or a regional umbrella was of little concern; the important thing was for the nation-state to have full control of its own territory and sovereignty (Fawcett 1995, 13). Thus, in the early years of a fledgling, uncertain UN, it was soon apparent to nation-states that the formation of regional security pacts might form the best approach to world peace. In the early years of the Cold War there emerged a number of regional defence pacts,<sup>4</sup> established as intergovernmental

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<sup>4</sup> Arab League (1945); OAS (1948); NATO (1949); ANZUS (1951); WEU, CENTO, and SEATO (1954); Warsaw Pact (1955); OAU (1963); ASEAN (1967)

organisations (IGOs), and with the twin aims of guaranteeing state security and a balance of power in the new bi-polar world controlled militarily by the US and the Soviet Union. Some of these pacts were established, and have remained, with defence and solidarity as their overwhelming *raison d'être*, and may be classified as 'alliances', while the others have developed over time to become 'multipurpose organisations' (Bennett 1995, 237).

*a. Alliances*

- NATO, WEU, ANZUS and the Warsaw Pact were regional security movements that retained their military focus throughout the Cold War. The first three have continued in similar guise to the present day, but the military and political aspects of the Warsaw Pact were closed down in 1991, following the collapse of the Soviet Union.
- CENTO and SEATO were two regional organisations built up by former colonial and extra-regional powers to halt any potential advance by Soviet power into the world's two 'shatterbelts'.<sup>5</sup> Their inherent weakness was soon exposed by growing local independence movements, and by states anxious to have charge of their own affairs.

*b. Multipurpose organisations*

- ASEAN was introduced in 1967, effectively replacing SEATO (disbanded in 1976) and acting as an indigenous solidarity pact in the face of the perceived threat of the Vietnam-Soviet alliance. ASEAN subsequently broadened its scope, particularly in economic matters, and this is referred to later in the chapter, and more fully in Chapter Nine.
- The OAS, with a membership comprising all 35 countries of the Americas, has developed from its original security role, and its efforts to build for the future took on a new impetus following the end of the Cold War. American regionalism is rooted in events of some 120 years ago; not the

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<sup>5</sup> A term introduced by Saul B Cohen in the early 1960s, and defined as "large, strategically-located region(s)...occupied by a number of conflicting states and...caught between the conflicting interests of the Great Powers" (Cohen 1973, 251). Cohen was clearly influenced by Mackinder's heartland theory, and describes the shatterbelts as dividing "the Trade-Dependent Maritime from the Eurasian Continental geostrategic regions" (1973, 85). This interpretation of shatterbelts became irrelevant in 1989, following the collapse of the Soviet Union, but the basic concept of the shatterbelt remains only too evident in, e.g., the Middle East.

Monroe Doctrine (1823) but the efforts of Simon Bolivar in 1826 to promote an association of states in the Western Hemisphere.

- The Arab League's efforts to construct political unity during the Cold War suffered as the result of conflicts of interest amongst its members, and the presence of the state of Israel at the heart of the region. Nonetheless, since the 1950s there have been moves to coordinate economic activity within the Arab world, and some members play an important role within OPEC. Apart from trade, and a joint defence treaty dating from 1950, the League's priorities have concentrated on education, finance, law and foreign policy;
- The OAU has for nearly forty years sought to promote unity and solidarity among African countries – all of which are members, with the exception of Morocco. Primary concerns lie with the defence of territorial integrity and independence, promotion of international cooperation, and the raising of living standards.

All the evidence points to the success of the UN and its agencies in assisting regional economic and social development as part of a global remit. The handling of regional alliances, however, has not been so effective, due primarily to the fact that such organisations, “by stressing the hostility between groups of states, tend to retard the attainment of some of the cooperative aims of universal organizations” (Bennett 1995, 263). Alliances are also prey to hegemonic tendencies, and the OAS provides an excellent illustration: as a multipurpose organisation, its economic and social activities are in tune with those of the UN; but as an alliance it has operated as little more than an extension of US foreign and military policy.

### ***3.3.2 GATT, trade liberalisation and the early growth of RIAs***

The primary objective of the General Agreement on Tariffs and Trade, which became operative on 1 January 1948, was global trade liberalisation. The principle of multilateralism is enshrined in Article 1(1), with its commitment through the concept of MFN (most-favoured nation) treatment to non-discrimination in trade between all signatories to the Agreement. It would appear, therefore, that there should have been no call for regional arrangements under the GATT rules. However, the same pragmatism that was evident in the framing of the UN Charter also had an important part to play in the

structuring of the GATT. The key to permission for the establishment of RIAs is paragraph 5 of Article 24 of the GATT, which states that the Agreement does not prevent “as between the territories of contracting parties the formation of a customs union or of a free-trade area or the adoption of an interim agreement necessary for the formation of a customs union or of a free-trade area”. Thus, as Gibb (1994, 15) puts it, “regional trading blocs, despite epitomising the very principle of discrimination, are indeed GATT-consistent”. There are, naturally, qualifications to the permission granted in Article 24, and a succinct summary of these is given by Mistry (1996, 67):

“...GATT permits RIAs under Article 24 as long as: (a) other GATT members are notified of their details; (b) they do not raise trade barriers against other GATT members; (c) such arrangements embrace substantially all trade between the regional members; and (d) RIA partners are committed to reducing barriers to intra-regional trade along a specified schedule within a reasonable time span”.

The pragmatism that led to the acceptance and inclusion of RIAs within rules intended to promote multilateralism, appears to have been driven by three, related considerations:

- The presence of RIAs could “provide a complementary, practical and possibly, in some areas, faster route...” towards the goal of global trade liberalisation (Mistry 1996, 68);
- Trade liberalisation negotiated *within* RIAs might well facilitate eventual global agreement;
- Progress towards global agreement on non-discriminatory trade rules through negotiation with some 140 states might be more easily achieved if those negotiations were with a relatively small number of RIAs representing those states.

Despite the open door provided by Article 24, there were few early notifications of RIAs to the GATT – only one in the 1940s and four in the 1950s – but the pace picked up in the following two decades, during which 66 RIAs were registered. Table 3.1 shows that the most intense activity was in the 1960s – involving mainly developing countries – and the 1970s, when the European Economic Community was particularly active. The Table shows that the overall loss of RIAs between 1945 and 1989 was over 63 per cent, whilst in

the period up to 1969 the survival rate barely reached 17 per cent. However, it is important to understand that these figures do not necessarily reflect a failure of regionalism *per se*, since many were superseded or modified. Nonetheless, the disparity between expectation and performance during the first phase of regionalism is stark. What Nye (1968, v) reported as being talked of as “the next big step forward in international cooperation” proved, with the exception of Europe, to mimic more the faltering steps and tumbles of a toddler.

**Table 3.1 Regional integration agreements, 1945-1989**

	<i>Number of RIAs notified to the GATT (a)</i>	<i>Number in (a) associated with the EEC</i>	<i>Number in (a) still in force in September 2001</i>
<b>1945-1949</b>	1	-	-
<b>1950-1959</b>	4	1	1
<b>1960-1969</b>	19	6	3
<b>1970-1979</b>	47	30	18
<b>1980-1989</b>	11	5	8
<b>Total</b>	<b>82</b>	<b>42</b>	<b>30</b>

*Sources:* WTO (1995, Appendix Table 1); *www.wto.org* (regionalism gateway) accessed 2 February 2002

Despite the positive approach to regionalism demonstrated by both the UN and GATT, it is not surprising that the first decade following World War II produced only two bilateral RIAs (South Africa/Southern Rhodesia and El Salvador/Nicaragua). The world's major economies were recovering from a debilitating conflict and, as has already been noted, the emphasis was on regional arrangements in the form of defence alliances. Loose forms of RIAs were re-established by colonial powers such as Britain and France - for example in Malaya/Singapore and Indo-China - but as Mistry (1996, 14) notes, these operated more as sources of income for “metropolitan investors in imperial countries”, than for the benefit of the indigenous populations. None of these arrangements was formally notified to the GATT. The exploitation they typified, however, did generate another form of regionalism during the 1960s and 1970s (Fawcett 1995, 14). This arose in the Third World and was a

response to adverse effects of the East-West conflict, and the exploitative-dependency nature of North/South relations. The torch was carried by such agencies as the Non-Aligned Movement (NAM) and the Group of 77 (G-77)

The real kick-start to regional economic integration movements was provided in 1958, by the formation of the European Economic Community (EEC), and boosted by that of the European Free Trade Association two years later. The EEC was the outcome not only of the desire to rebuild Europe, but also of US determination to strengthen the region and form a bulwark against any Soviet threat. The success of both the Marshall Plan (1947) and the European Coal and Steel Community (1951) was central to the decision to establish the EEC under the Treaty of Rome in 1957 (Brook 1995, 119). The growth in numbers of RIAs in the subsequent four decades has been dominated by actions both within Western Europe and between that region and other parts of the world. Following the initiatives in Europe, many developing countries sought to conclude RIAs, but with only limited success. Their aim was to provide protected markets within which indigenous emerging industries would start to export before full exposure to world competition, but regional export substitution turned out to be no more successful than in individual states (de Melo and Panagariya 1992a, 1). The WTO (1995, 27) suggests three reasons for this failure of regional integration amongst developing countries: (a) the problem of matching regional integration with inward-oriented development policies; (b) pressures from competing importers; and (c) the weak external environment in the 1970s and early 1980s. Robson (1993, 334), referring specifically to Africa, attributes failure to generate trade expansion or faster growth to the “protectionist and inward-looking bias of most arrangements...(and) badly chosen sequencing, instruments and structures”. This last point is one also stressed by Bhagwati (1991, 70), who blames selection of industries through bureaucratic negotiation rather than the use of pricing as the reason for the failure of developing nations to establish customs unions and free-trade agreements (FTAs). As he characteristically explains, they put “the cart before the horse (so) killing the forward motion”.

There were, of course, exceptions to the general pattern of failure. Prominent among early agreements still in force in September 2001 were two customs unions, the Central American Common Market (CACM, dating from 1961), and the Caribbean Community

(CARICOM, established in 1974). Other survivors include arrangements made under the GATT's 1979 Enabling Clause, intended to assist developing countries. In the main these set out as preferential trade arrangements, including the Bangkok Agreement (1976), ASEAN (1978), the Latin American Integration Association (LAIA, 1980), the South Pacific Regional Trade and Economic Agreement (SPARTECA, 1981), the Gulf Cooperation Council Agreement (1983), and the Andean Group (a customs union, 1988). Despite the emergence of these regional arrangements, the general trend during the Cold War period was for trade regions to grow in size and reduce in number. That is the conclusion reached by Poon (1997), who identifies global trade in 1965 as being "fragmented among eight discernible clusters", with a reduction to five regions (US, Germany, UK, USSR and Japan) by 1990.

There can be little doubt that the development of regionalism between 1945 and 1989 – the period which produced 'first generation' RIAs, and may be thought of as the time of the 'old regionalism' – was not assisted by the underlying hostile nature of international affairs. But although the disappointments were many, particularly in Africa, the progress made in Western Europe did demonstrate the potential for regional integration. For some, however, that potential was not always reflected in the EC's performance. In 1975, Haas (cited by Kahler 1997, 37) gave this disparaging assessment:

"...regional integration in Western Europe has disappointed everybody: there is no federation, the nation-state behaves as if it were both obstinate and obsolete, and what once appeared to be a distinctive 'supranational' style looks more like a huge regional bureaucratic appendage to an intergovernmental conference in permanent session".

As it transpired, however, certain events and trends in the 1980s were the catalysts for an upsurge of interest in regionalism, or what rapidly became known as the 'new regionalism'. The following section demonstrates how two of these events – the further development of the EC and the demise of the Soviet Union – were the catalysts for a further reduction of Poon's five regions to three mega-regions, based on the core states of the US, Germany and Japan.

### 3.4 The 'new regionalism'

During the 1990s a spate of publications announced the arrival of a 'new regionalism' (see Gamble & Payne 1996; Ethier 1998a). There is, of course, nothing new about regionalism *per se*, but what the nomenclature denoted was that the 'new regionalism' was different from its predecessor(s). The brief extracts below give a sense both of the impact of the new regionalism and its close links with world politics, globalisation and the global economy:

"The period since the late 1980s has witnessed a resurgence of regionalism in world politics" (Fawcett & Hurrell 1995, 1);

"Regionalism today is emerging as a potent force in the globalization process" (Mittelman 1996, 190);

"The rapid spread of regionalism...the most important recent development in the global trade system" (Baldwin 1997, 865);

"Once again, regionalism is afoot" (Ethier 1998a, 1149).

Regional movements usually involve the integration of nation-states for political (mainly security) or economic purposes (see Whalley 1998). It is the latter to which use of the term 'new regionalism' usually refers.

It is reasonable to presume that the new regionalism, which began to take shape in the latter half of the 1980s, would learn from the lessons of the first, generally unsuccessful, phase of regionalism. However, as Robson (1993, 335) points out, this could only be so if the international and domestic contexts were sufficiently similar. This was not the case, and Robson offers three crucial differences to demonstrate why: (a) the tendency from the mid-1980s for developing countries, particularly in Latin America and Africa, to be more outward-looking and sympathetic to the idea of trade liberalisation; (b) the existence, and example, of the EEC; and (c) an openness to processes of integration. The OECD view is that regionalism movements, particularly since the ending of the Cold War, have played an important role in the "search for a new international political and economic order which (has gone) beyond trade considerations into the realm of 'high politics'" (OECD 1995, 87). De Melo and Panagariya (1992b, 37) also view new regionalism as "sharply different"

from the early phase and, whilst echoing Robson, assert that “the United States is no longer exclusively committed to multilateralism and is actively pursuing regionalism”, to the extent that its ultimate goal is “a hemispheric free trade agreement”. The timing of this switch of US policy is open to question. It is quite likely that a weakening of the multilateral commitment had been taking place over more than two decades. This is certainly the view of Baldwin (1997) and Nye (1968). The latter reports that in the late 1960s – before the growth of American frustration with the EC’s lukewarm approach to GATT talks – regionalism was apparently being talked about as “a cornerstone of American foreign policy” (Nye 1968, vi). However, irrespective of the date of this change in American policy, these differences do demonstrate why there is no close correlation between the two phases of regionalism. What they do not explain is *why* a strong interest in regionalism surfaced in the late 1980s and early 1990s. Ethier (1998a) draws attention to the absence of investigation of this fundamental question which, as he says, “has simply been treated as exogenous”. What follows is an attempt to assess why regionalism has re-emerged over the past two decades, through consideration of the impact of three major events or processes – globalisation, the example of Europe, and the end of the Cold War – all quite different from anything that was happening in the earlier phase of regionalism. Although not necessarily linked, the constituents of these events and processes acted with what Baldwin (1997) interprets as a ‘domino effect’, leading to the emergence of the new regionalism.

#### **3.4.1 Globalisation and other global trends**

I dealt with the effects of the quickening pace of globalisation from the mid-1980s in the previous chapter. A parallel movement, that of the consolidation of successive multilateral trade negotiations, was producing a much more advanced form of trade liberalisation than had been present during the earlier days of both the GATT and regional movements. The idea that states have been ‘powerless spectators’ in these processes is refuted by Michalak and Gibb (1997), who claim that one of states’ responses to globalisation has been a shift in commitment from the principles of multilateral trade to the practicalities of regional integration. They go so far as to pronounce that “regionalism and not globalisation is emerging as the main path to achieving the goal of global free trade” (1997, 274). This appears to deny the close correlation between regionalisation and globalisation, seen, for instance, in the strategies of MNCs. Companies tend to establish strong national and

regional bases, before venturing into global activity, and in this sense regionalism may be interpreted as a stepping stone to globalisation (OECD 1995, 88). The benefits of trade liberalisation have encouraged a new outward-orientated approach in many developing countries, and prompted the search for partnerships in order to compete for access to prized Western markets. Another, substantial factor in favour of moves towards regionalism was the unease generated by the lengthy and uncertain Uruguay Round of the GATT discussions.<sup>6</sup> During this period (1986-1994) there were also signs that the global economy might be in the process of coalescing around a 'triad' of economic blocs, in North America, Europe and Japan, suggesting the possible marginalisation of many developing countries. Contributing to this mindset was an apparent decline in the 'solidarity' of the Third World. Fawcett (1995, 26) suggests that this assisted the development of regional arrangements, and she cites Gilpin who, in 1987, pronounced that 'the Third World no longer exists as a meaningful identity'.

What is undoubtedly true is that all these factors, together with the considerable differences in economic and political strength between the developing countries, have given encouragement to the establishment of groupings of states with similar, or matching, objectives. It is in this context, for instance, that Fawcett refers to the "plethora of mini-groupings" in Latin America. A further aspect of the impact of global trends on the resurgence of regionalism concerns the role of democratic governance. Whilst there is no case to be made for democracy as a 'must' for the success of regional movements, there is evidence that it can help. On the one hand, its absence is seen as one of the reasons for the failure of the Warsaw Pact and COMECON to develop any real commitment to regional cohesion; on the other, its strong presence within the EU has affected styles of governance in Spain, Portugal and Greece since their entry, and may be expected to have an even greater impact on East European states when, as expected, they become EU members in 2004. Finally, as Ethier (1992a, 1150) stresses, globalisation has generated a huge increase in foreign direct investment, which in turn has assisted the growth of regionalism.

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<sup>6</sup> The Canadian Prime Minister, Brian Mulroney, talking in 1989 soon after completion of the US-Canadian FTA, suggested that what was at stake in the Uruguay Round was "the future of economic multilateralism" (Mulroney 1990). The fact that he thought "the continuing problems of yesterday, the unsolved issues of today and, most importantly, the opportunities of tomorrow" would be resolved on schedule the following year simply underscores the major difficulties in achieving a 'successful' outcome to the Uruguay Round, some five years later.

### ***3.4.2 The European role model***

When the EC determined in the mid-1980s on a move in 1992 to a single market, it was brought home to countries around the world that there was a pressing need to review their own positions within a rapidly changing global economy. In the case of the US, it was a combination of the widening and deepening of EC integration and Europe's less than enthusiastic support for a succession of multilateral trade negotiations that led to US entry into RIAs with Israel and Canada, and the eventual establishment of NAFTA in 1994 (Panagariya 1999, 481). The advanced and sophisticated arrangements of the European Community obviously cannot be replicated overnight in other parts of the world, but the European 'idea', which has been in a state of constant evolution since 1951, does offer in its 'staged' approach encouragement for putative or shallower regional arrangements (Hurrell 1995). Among the regional movements that have been influenced by the EC's strategies are ASEAN, MERCOSUR, the Arab Maghreb Union and the Commonwealth of Independent States (CIS), all of which are committed – on paper – to the introduction of common markets. It would be wrong, however, to interpret these and other regional movements simply as the boosting of earlier arrangements under the influence of the European example; there is also a strong reactive mood to the threat of marginalisation posed by the emergence of three major economic blocs (the triad), and the possibility of one or more of them adopting a 'fortress' mentality regarding trade with each other or with the rest of the world. The possibility of the EU or NAFTA acting in such a way must produce shudders around the world. Perhaps the best example of regional response may be seen in Southeast Asia, not just in ASEAN's moves to establish the ARF and AFTA, but also in the efforts of Mahathir bin Mohamad, Malaysia's PM, to set up an East Asian Economic Caucus (EAEC), a sub-group within APEC, but without the overpowering presence of the US.

### ***3.4.3 The end of the Cold War***

Despite the significant increase in the number of regional movements during the latter part of the 1980s, for reasons already elaborated, it was the end of the Cold War, and of a bipolar world with all its accompanying alliances and constrictions, that had a huge bearing on the opening up of opportunities for regional co-operation. This trend was assisted, ironically, by the fact that the UN found itself extremely hard-pressed in the absence of the 'certainties' of a world effectively controlled by the two great powers. With regard to

Table 3.2 Regional trade agreements notified to GATT/WTO, 1990-2001 and in force as of September 2001

<i>Regional Trade Agreement</i>	<i>Intra-regional agreements</i>	<i>Rest of Europe</i>	<i>Former Soviet Union</i>	<i>North America</i>	<i>South America</i>	<i>Middle East</i>	<i>Africa</i>	<i>Total agreements</i>
EC/EU	-	18	3	1	1	2	3	28
EFTA	-	9	3	1	1	2	1	17
Rest of Europe	20	-	14	-	-	5	-	39
Former Soviet Union	13	4	-	-	-	-	-	17
North America	1	-	-	-	1	2	-	4
South America	1	-	-	1	-	1	-	3
Southeast Asia/Oceania	4	-	-	-	-	-	-	4
Middle East	-	1	-	-	-	-	-	1
Africa	2	-	-	-	-	-	-	2
South Asia	1	-	-	-	-	-	-	1
<b>Totals</b>	<b>42</b>	<b>32</b>	<b>20</b>	<b>3</b>	<b>3</b>	<b>12</b>	<b>4</b>	<b>116</b>

Note: The regions listed on the left provide the first-mentioned states in inter-regional agreements

Source: [www.wto.org](http://www.wto.org) (regionalism gateway) accessed 2 February 2002)

states, Agnew and Corbridge (1995, 155) see trading blocs as the chosen route in the pursuit of primacy: "In this construction the main actors are world-regional blocs (and dominant states within them) attempting to create territorial 'monopolies' through geographical accretion and market integration". All of which, say Michalak and Gibb (1997, 274), confirms the historic role of states in structuring trade activity, and is a potent illustration of "the state's powerful and ongoing leverage". States have undoubtedly been the driving force behind the shift towards a tripolar world economy, just as they will be if the eventual outcome is a bipolar arrangement, "with a greater Europe on one side and a 'Pacific World' (the US, Japan and the Pacific Rim) on the other" (Agnew and Corbridge 1995, 155). This sits comfortably with the prognosis that the twenty-first century will be the 'Pacific Century'.

A comparison of Tables 3.1 and 3.2 underscores the scale of the increase in RIA activity during the period of the new regionalism. Of the 146 RIAs in force as of September 2001, only 30 belong to the period 1945-1989; the remaining 116 pertain to activity since 1990. Table 3.2 also reveals interesting conclusions about new regionalism:

- More than one third of RIAs are intra-regional, a reflection of perceived needs for integration and consolidation within regions. This is particularly evident in the activity of states from Eastern Europe and the former Soviet Union;
- With regard to inter-regional agreements, Europe (i.e. EC/EU, EFTA and the Rest of Europe) has played the lead role in 64 out of 74 RIAs;
- Europe's efforts to create trade links with the former Soviet Union (20 RIAs) stand out, as do those of the EC/EU to bolster growth and stability in Eastern Europe and the Baltic states (the majority of 18 RIAs);
- Apart from Europe and the former Soviet Union, the Middle East appears to be the next most active region. However, the 13 RIAs involve only either Israel (11) or the Palestinian Authority (2).

In numerical terms, the 116 RIAs in Tables 3.2 and 3.3 are dominated by bilateral agreements. Included within the intra-regional agreements, however, are a number of significant blocs, embracing countries intent on breaking down trade barriers within

**Table 3.3 Regional trade agreements in force September 2001**

	<i>Intra-regional agreements</i>		<i>Inter-regional agreements</i>	
	<i>Number</i>	<i>%</i>	<i>Number<sup>a</sup></i>	<i>%</i>
EC/EU	-		28	18.9
EFTA	-		17	11.5
Rest of Europe	20	47.6	51	34.5
<b>Europe (total)</b>	<b>20</b>	<b>47.6</b>	<b>96</b>	<b>64.9</b>
<b>Former Soviet Union</b>	<b>13</b>	<b>30.9</b>	<b>24</b>	<b>16.2</b>
<b>North America</b>	<b>1</b>	<b>2.4</b>	<b>6</b>	<b>4.0</b>
<b>South America</b>	<b>1</b>	<b>2.4</b>	<b>5</b>	<b>3.4</b>
<b>Southeast Asia/Oceania</b>	<b>4</b>	<b>9.5</b>	<b>-</b>	<b>-</b>
<b>Middle East</b>	<b>-</b>	<b>-</b>	<b>13</b>	<b>8.8</b>
<b>Africa</b>	<b>2</b>	<b>4.8</b>	<b>4</b>	<b>2.7</b>
<b>South Asia</b>	<b>1</b>	<b>2.4</b>	<b>-</b>	<b>-</b>
<b>Total</b>	<b>42</b>	<b>100.0</b>	<b>148</b>	<b>100.0</b>

<sup>a</sup> The total figure is double the number of inter-regional agreements shown in Table 3.2 (i.e. 116-42) in order to allow for the bilateral nature of these agreements

Source: WTO [www.wto.org](http://www.wto.org) (regionalism gateway) accessed 2 February 2002

specific regions, or groupings. Whether these RIAs assist or impede the cause of multilateralism espoused by the WTO is something I investigate in the section that follows. Regarding the bloc agreements, Table 3.4 shows them as occurring throughout the developed and developing world. That regionalism is a powerful process cannot be denied, and as the process deepens the greater will be the imperative for regional movements to nurture political and cultural goals. Within a gradual move to multilateralism, there seems likely to be a key role for trade blocs in constructing new forms of international governance and economic integration (Michalak and Gibb 1997, 275).

**Table 3.4 Bloc RIAs within the new regionalism**

<i>Region/Agreement</i>	<i>Date In force</i>	<i>Number of Participating states</i>
<b>Europe</b>		
Central European Free Trade Agreement (CEFTA)	1993	4
European Economic Area (EEA)	1994	18
<b>Former Soviet Union</b>		
Commonwealth of Independent States (CIS)	1994	12
<b>North America</b>		
North American Free Trade Area (NAFTA)	1994	3
<b>South America</b>		
Common Market of the South (MERCOSUR)	1991	4
<b>Southeast Asia/Oceania</b>		
ASEAN Free Trade Area (AFTA)	1992	10
<b>Africa</b>		
West African Economic & Monetary Union (WAEMU)	1994	8
Common Market of Eastern & Southern Africa (COMESA)	1994	20
<b>South Asia</b>		
SAARC Preferential Trade Agreement	1995	7

*Sources:* WTO 1995, Appendix Table 1; [www.wto.org](http://www.wto.org) (regionalism gateway), accessed on 2 February 2002; [www.imf.org](http://www.imf.org) (Directory of Economic, Commodity and Development Organizations), accessed 23 February 2002

### ***3.5 The regionalism-multilateralism debate***

Both the UN and the WTO take care not to suggest that regionalism is in conflict with the universal aims of their respective organisations. Given that both have made specific allowance for regionalism within their regulatory frameworks, this should cause no surprise. It is apparent, however, that regionalism does pose problems for the world bodies; the question is, how serious are these problems and do they threaten the globalising processes represented in the work of the UN and WTO? At a major conference held in April 1992, organised by the World Bank and the Centre for Economic and Policy Research, participants were unable to agree on whether or not regionalism would help or hinder multilateralism. Prominent at that conference were two recognised world experts,

Jagdish Bhagwati and Paul Krugman, the former championing the 'regionalism is good in principle, but bad in practice' school of thought, and the latter representing the reverse viewpoint (de Melo and Panagariya 1992b, 37). A decade on, little has changed: there remains no *correct* route to a world of free trade, although regionalism, an 'intermediate way-station' (Mistry 1999, 150), is on the path favoured by most states.

### ***3.5.1 Regionalism: good in principle, bad in practice***

The philosophical stance that Bhagwati takes on regionalism as represented in trade arrangements may also be applied to regional alliances. Furthermore, the likelihood of success for regional economic blocs is also enhanced if they are underpinned by a "powerful, parallel security organization" (Fawcett 1995, 33). In this respect, the EU stands out, for, as Fawcett continues, "no other region in the world has been able to rely on an institution of the calibre of NATO". Yet regionalism's interface with the UN remains an uneasy one, due first, to the ways in which regional entities have dealt with local conflicts (the Balkans and Middle East, for example), and second, to the fact that the possibility of regional conflict has become both more dangerous and more likely since the ending of the balance of power between the US and the Soviet Union. Without the relative stability given by the stand-off between overarching great powers, regional alliances have become less cohesive and more fragile in the face of a burgeoning array of religious, ethnic and nationalist disputes. In addition, there is the danger to regional organisations caused by tendencies to hegemonic aspirations among their members (Fawcett 1995, 32). The examples and possibilities are obvious, and include the roles played by the US in the OAS, India in SAARC, South Africa in SADC, and (looking ahead) either Japan or China in Asia Pacific (Mittelman 1966). The security, or alliance, aspect of regionalism is thus a mix of uncertainty and disappointing performance in the post-Cold War world. Even the largest and strongest organisation, NATO, has had difficulty acting with the necessary speed and unity of purpose when the occasion has demanded.

In the case of regionalism under the GATT rules, it is arguable that it is not so much regionalism that is 'good in principle, bad in practice', but the rules themselves that are flawed and open to abuse. This is highly relevant given that, despite regular violation of its rules, the GATT "has never censured a single agreement as being incompatible with its standards" (de Melo and Panagariya 1992a, 11). This failure of enforcement has resulted

in a loose interpretation of the rules by most RIAs, and has prompted free-trade purists like Bhagwati and Panagariya to conclude that regionalism is more likely to lead to fragmentation of the world trading system than its ultimate unification and liberalisation.

The opponents of regionalism identify a number of concerns:

- Historically, RIAs have tended to be inward-looking (memories of the beggar-my-neighbour policies of the 1930s still loom large in many minds). This informs views about the possibility of large blocs like the EU adopting a 'fortress' mentality.
- There is potential for non-tariff barriers to be deployed, not only between partners within an RIA, but also against outsiders. Research, cited by Panagariya (1999, 492), demonstrates that once an RIA achieves a certain level of membership, the addition of more members reduces both effectiveness and welfare.
- Given that trade blocs tend to be driven by their strongest members, entry for smaller, weaker countries may involve agreement to arrangements that are against their national interests (e.g., Mexico in NAFTA). The alternative to agreeing certain 'unequal' arrangements is marginalisation or exclusion – an unattractive scenario in a world increasingly dominated by regional trade blocs.
- It is claimed that regionalism moves at a slower pace and less efficiently than multilateralism (de Melo and Panagariya 1992b, 38). Supporters of this view, such as Bhagwati, point to the more than four decades it took the EU to move to a single market.
- Regionalism's perceived success stories do not always stand up to examination. Serious doubts have been raised, for instance, about MERCOSUR's ability and political will to follow through plans for a 'common market of the South' (Preusse 2001).

### ***3.5.2 Regionalism: bad in principle, good in practice***

Krugman's thesis, expressed at the 1992 World Bank conference and reported by de Melo and Panagariya (1992b, 38), is that regionalism is bad in principle because it allows for the establishment of a small number of large blocs, and the adoption of 'fortress' policies

which facilitate free trade between bloc members, but erect barriers to free trade between blocs. Crucially, however, Krugman believes that opponents exaggerate the degree to which blocs generate trade diversion and that, in any event, a decreasing number of trade blocs/RIAs will lead to co-operation rather than conflict.

Supporters of regionalism have responded to criticism of the time it takes RIAs to develop free-trade policies, by pointing out the problems involved in following the WTO route to global trade liberalisation. Under the WTO's rigid entry requirements it took China nearly 15 years of negotiation before membership was agreed in November 2001, whilst the obstacles placed in the path of former state-controlled (socialist) economies means that two ASEAN members, Cambodia and Vietnam, still languish in the queue to join the WTO.<sup>7</sup> As a result, and like other 'least developed countries' (LDCs), they are being denied MFN status in international trade, the opportunity to export local products, and the benefits of foreign direct investment. Critics of the slow progress of WTO negotiations include the UN agencies, ESCAP and UNCTAD, which have pointed to the need for greater flexibility in the handling of individual applications, and have objected to the 'WTO-plus' obligations that place more onerous requirements on aspiring members than those expected of existing members. Given these circumstances it is hardly surprising that countries seek safety and opportunity within RIAs. Nonetheless, key questions remain open and contested, a situation not helped, say Schiff and Winters (1998), by the absence of sufficiently rigorous analysis of the regionalism process. As a result, the key question remains: will regionalism "slow or even derail multilateralism...(and might it) leave out many of the world's poorer countries?"<sup>8</sup> The OECD, a firm supporter of regionalism, is in no doubt as to the answer: "Regional integration agreements have contributed to a faster and greater degree of world trade liberalisation...(and) the benefits of regional liberalisation measures are, in some instances, automatically extended to third country suppliers" (OECD 1995, 89). The view of those who favour the WTO route to the liberalisation of world trade, but who also understand the reasons for, and attraction of, regional movements is expressed simply by Laird (1999, 1199):

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<sup>7</sup> *Asia Times* (22 February 2002) 'WTO's door still closed to poorer Asia-Pacific countries'.

<sup>8</sup> *The Economist* (2 December 2000, 33) 'Responsible regionalism'.

“The challenge to the WTO system is to deliver a level of market access that is as good as or better than that available through regional agreements”

### 3.6 *Regionalism: where now?*

The defenders of regionalism “derive most of their support from the day-to-day perceptions of national policy...(and in so doing)...actually tend to strengthen a global structure otherwise condemned to impotence”. These words (Haas 1958, 440) were written at a time when the UN and GATT were struggling to provide realistic visions of world political and economic order. More than 40 years on these struggles continue and, in terms of world trade, parallel movements of multilateralism and regionalism still exist. The good news for multilateralism is that, more than seven years after completion of the Uruguay Round, the ninth round of talks on global trade liberalisation (the Doha Round) has commenced. At the same time states continue to seek opportunities and economic security within a variety of RIAs.

One interpretation of the many and varied moves into RIAs is that it is the process of globalisation that has opened up opportunities for states to “control at the regional level what they have increasingly failed to manage at the national and multilateral levels” (Gibb and Michalak 1994, 251). This may be a plausible assessment of the regional dimension, but it arguably undervalues the strength and staying power of states. It was, of course, written at a time when the multilateral project, in the shape of the Uruguay Round, appeared to be faltering, and when much attention was also being given to the opinions of Ohmae and other like-minded gurus. Talk of the ‘decline’ of the state misinterprets what is happening. That there are changes in state power is undeniable, but these changes “have not to do with diminution but with reconstitution of power around the consolidation of domestic and international linkages” (Weiss 1998, 209). A similar assessment is made by Dicken (1998) and Amin and Thrift (1997) who, whilst recognising that there has been a ceding of some power upwards to supranational bodies such as the EU, and downwards to local bodies and businesses, see a continuing, significant role for the state in the global economy, as a regulator of economic activity at the national, regional and multilateral geographical scales. Dicken does not dispute that compared with nation-states in their pomp in the eighteenth and nineteenth centuries, today’s states have certain reduced

capabilities, a greater permeability, and are subject to the process of 'hollowing out'; but they remain, in his view, "important building blocks in the global economy" (1998, 113).

Whether regionalism will prove to be the saviour of multilateralism is therefore a moot point, but at least there are signs that a more thoughtful discourse is replacing the traditionally conflictual debates. The strength of regional movements, their number and variety and, most important, the evolving (imperfect and not necessarily transferable) template that is the EU, all render obsolete the functional realism that was being promoted in the late 1960s (Mitrany 1968). Against the evidence at the time, Mitrany was one who still held to the concept that the best way to a new world order would be through the "shedding (of) national functions and pooling authority in them" in a range of international organisations. Others, like Ohmae, have continued to develop versions of this theme but, as was shown in Chapter Two, to limited effect. The over-riding question today, however, is whether the emergence of a small number of mega trading blocs will lead to inward-looking, defensive trade strategies, or simply form the final building blocks in the creation of global free trade.

A compelling case for the latter route is developed by Vernon (1996), who cites political and commercial reasons for there being limits on the power of regional blocs. First, he argues that, "as long as the member countries of a regional block retain their separate national identities and pursue their independent political objectives, the centrifugal political forces operating on these blocks are likely to be fairly strong" (1996, 626). Whether regional blocs increase or decrease their membership, says Vernon, the forces will reduce their power "to carve up global markets into protected sanctuaries against international competition". He also identifies a key role for MNCs in their "propensity...to move outward beyond their regions...sometimes into added regions, sometimes through crosshauling between regions, even if punctuated at times by retreats and sell-offs of portions of the network" (1996, 631). Vernon's analysis has particular relevance for the Asia Pacific, which many conclude will complete, together with the EU and NAFTA, a triad of world economic blocs. In Chapter Eleven I explore the flurry of current moves towards RIAs in Asia Pacific, springing mainly from the existing structure of ASEAN. An East Asia, or Asia Pacific, trade bloc is fast emerging as a distinct possibility within the next ten or so years. Such optimism also emanates from Hodder (1994, 249) who, whilst

not denying the claims of those who interpret multilateralism and regionalism as working in concert towards a multilateral end, postulates a world “dominated in due course by the pragmatic, outward-looking, non-integrated, liberalised and essentially multilateral economies of the western rim of the Pacific”.

What we see today, therefore, is multilateralism and regionalism working generally in harmony to achieve global free trade. It is as predicted by Cox (1987, 7), when he envisaged the compatibility of regional and global movements in a post-hegemonic world. Nearly all the WTO's 140 members are party to one or more RIAs, and some to 10 or more.<sup>9</sup> Considered separately, each GATT round may have gained only limited success, but cumulatively they have prodded states towards greater recognition of the benefits of liberalisation. In this respect the sceptics have been proved wrong: GATT(WTO) is not dead, as Thurow incautiously pronounced it to be in 1988 (Bhagwati 1991, 7), and after completion of the Uruguay Round and commencement of the Doha Round at the start of 2002, it can no longer be referred to as the ‘General Agreement to Talk and Talk’, or even ‘GATTZILLA’ (Bhagwati 1997, 13). The signs are that the process of ‘open’ regionalism is also bringing down barriers to trade within regions, whilst not raising external tariffs (Gamble and Payne 1996, 251). The occasional step backwards, such as the March 2002 decision by the US to erect barriers on steel imports, is now a high-profile event. A major step forward, favoured among others by Baldwin (1997), could be an increased emphasis on North-South arrangements, in order to open up markets to developing countries and elevate their strategies beyond those of import substitution. One outcome of such an approach, of course, could be the consolidation of a tripolar (or even bipolar) structure to world trade. In this scenario, NAFTA would link with the Caribbean and South America; the EU would be the core of a region embracing the Middle East, Africa and the territories of the former Soviet Union; and an Asia Pacific/South Asia grouping would grow around Japan or – more likely - China. Poon *et al.* (2000, 440), however, dispute claims that there is an inexorable move towards a ‘triadized world’. Their research into trade patterns and FDI flows suggests that “economic flows have become more versatile, resulting in the hard distance of absolute space being replaced by flow-based economies, such that agglomeration economies may be exploited through scattered locations in geographic

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<sup>9</sup> [www.wto.org](http://www.wto.org) (regionalism: facts and figures) accessed 2 February 2002.

space". This certainly fits with Brook's (1995) view of transnationalism, and questions the generally-accepted wisdom on the 'triad of blocs' theory.

The emergence of regional economic blocs, according to Dicken (1998, 101), has been of the utmost significance for the world economic system in recent decades, but Ethier (1998b) is not alone in viewing such major trade blocs as operating hand-in-hand with protectionism. If this is not to become a serious problem the continued development and success of the 'European idea', as manifest in the work of the EC/EU, could be crucial. There is certainly a case to be made for the lessons garnered from one major regional common market to be translated ultimately into a global common market. Some question whether this is either achievable or likely: Micklethwait and Wooldridge (2000, 291), for example, are even more concerned than Ethier about the negative aspects of regional mega-blocs. They point to the fortress tendency of the EU (7 per cent of the EU's GDP in 1999 – i.e., US\$600 billion – spent in order to keep out cheaper goods), and to the threat to liberty itself that they associate with protectionist action. The creation of regional fortresses, say Micklethwait and Wooldridge (2000, 292):

"...would also exacerbate all that is worst in each region. The European political class would get more self-important, and the European welfare state more unwieldy. The United States would become isolationist. The poorer parts of the world – particularly Africa – would lose massively, as barriers to the world's markets would condemn them to stagnation. And the sight of the rich world patrolling those barriers would exacerbate political antagonisms".

It should also be noted that promoting the EU as the template for successful RIAs has Eurocentric overtones, an attitude that Hettne (1999, 23) feels must be addressed and resolved "before a step towards a pluralistic world order can be taken". Other RIAs, in fact, have tended to steer clear of the style of 'pooled sovereignty' adopted in Brussels (Held *et al.* 1999, 76). Amongst the countries of East and Southeast Asia in particular, inter-governmental collaboration has taken a consensual form rather than the legalistic approach favoured in the West (Ravenhill 1998, 267).

## ***Chapter Four***

### **World cities in a global economy**

*"The urban world is dominated by a small number of centres that are the command and control points for global capitalism, the world's dominant economic system. Such centres are distinguished not by their size or their status as capital cities of large countries, but by the range and extent of their economic power. They are the locations for the key individuals, institutions and organisations which manage, manipulate, dictate and determine the formation and reproduction of capitalism across the world. These attributes give such cities a disproportionate and exceptional importance so that they occupy dominant positions in the global urban hierarchy. So pre-eminent is their status and so powerful and pervasive are their influences that they merit designation as world cities" (Clark 1996, 137).*

#### **4.1 Introduction**

Consideration was given in the previous two chapters to the changing role of the state and the problematics of scale and space within the processes of globalisation. There is a view that as the traditional powers of the state have waned, so increasing importance has become attached to certain 'world cities' which oil the wheels of globalisation, and specifically economic globalisation. These cities, "...one of the most striking outcomes of (the) new phase of globalization" (Knox 1996, 125), are regarded as the nodal points of the 'flowmations' in the global economy and are the subject of what follows in this chapter. First, I take a brief look at the historical development of the world city, followed by description and interrogation of world city research through the work of a number of 'pioneers'. A form of urban agglomeration beyond the world city, that of the global city-

region, is then considered. The final section takes the form of a critique of the state of current research on world cities.

World cities are not a new phenomenon. Indeed, “ever since the evolution of a world-system in the sixteenth century, certain cities have played key roles in organizing space beyond their own national boundaries” (Knox 1996, 125). It is possible to go even further back in time, when major urban centres - in the form of city-states - were the focal points of the early civilisations of Sumeria, Phoenicia and Greece. Thus, in their day, and in their geographical context, Tyre and Corinth were world cities. Western scholars tend to posit Europe during the Middle Ages as the period when the city-state, represented, *inter alia*, by Dubrovnik,<sup>1</sup> Genoa and Venice, was at the height of development and achievement. It is arguable, however, that these three centres stood out within a Europe which in general operated on the periphery of the more sophisticated Muslim trading systems controlled from such great cities as Baghdad and Cairo (McGee 1991, 335). An interesting study and explanation of the development of world cities in Europe since medieval times is provided by Taylor (1995). He follows the story through from the early Middle Ages, when city-states abounded and generally held the strings of both military and economic power within a world of kingdoms and assorted smaller polities such as duchies and bishoprics. This world came under threat as kingdoms gradually gave way to the ‘war-machines’ that were embryonic states; ultimately, even the likes of such powerful city-states as Genoa, Antwerp and Venice were destroyed by the raw power of the states emerging in Spain, France and England. The fall of the Venetian republic at the close of the eighteenth century brought an end to the long-standing form of city-state.<sup>2</sup>

Major cities in the late eighteenth and early nineteenth centuries were essentially the product of either the industrial revolution in England or the political revolution in France. However, there is a suggestion, articulated by Gottmann (1989, 62), that towards the end of the eighteenth century the term ‘world city’ was actually coined by Goethe to place in context the cultural supremacy of Rome and Paris. Manchester was the first of the great industrial cities to have undisputed world stature, but by the end of the nineteenth century

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<sup>1</sup> Dubrovnik has been imagined as a ‘maritime city-state’ (Carter 1972, 549), a description which fits well with present-day Singapore.

<sup>2</sup> The republic was overthrown by Napoleon in 1797, just 22 years prior to Raffles’ landing on the island of Singapore.

the major world cities were those most closely linked to the growth and power of the nation-state. According to Taylor (1995, 55): "To the degree that there was any world hierarchy it was a political one that simply reflected the state hierarchy in Europe: (1) London, Berlin; (2) Paris, Vienna, St Petersburg; (3) Rome". It may also be seen as the manifestation of colonial power, particularly in the case of London, Paris and Berlin, which were "the centres of their respective empires, controlling half the globe between them" (Hamnett 1995, 107).

London and these others may have held the dominant positions, but they were not alone, for cities - in effect large and important towns - had for centuries been growing and multiplying around the world. However, the arrival from amongst the large number of urban centres around the globe of a world-city economic hierarchy had to await Taylor's 'demise of territoriality' (what I envisage as the changing functions of the state), together with the move from internationalisation to globalisation and the growth of a global economy. As has been noted in previous chapters, these trends did not have a major impact until the late 1970s and early 1980s, due in no small part to the continuation of the state as a war-machine and 'political power container' (Giddens' description, cited by Taylor 1995, 55) through and well beyond two world wars. It is within this timescale that Hall (1966) made the first serious attempt to develop and interpret a world-city concept. Before moving to consideration of the work of Hall and other pioneers of world city research, however, some clarification of terminology is required.

#### ***4.2 World cities, global cities and mega-cities***

Neither size nor population is the determinant of world-city status. Undoubtedly, to have world-city status an urban centre must have a 'critical mass', but as Singapore demonstrates, this can be relatively small (4 million) in terms of population. Confusion can arise through use of terms such as 'mega-cities', a classification based solely on population. The term mega-city was introduced in a United Nations study published in 1991, and intended to embrace the 28 cities which, it was estimated, would have populations in excess of 8 million by 2000. Unfortunately, this was only one of several numerical interpretations of the mega-city, megalopolis or giant city, a fact that prompted the UN in 1991 to suggest the need for an agreed terminology. The UN now refers to

‘urban agglomerations’ rather than mega-cities (Table 4.1). When compared with Hall’s list (Table 4.2), the extent of the urban explosion in the developing world is self-evident. However, these cities need to be put in context (Yeung 1997, 95):

“In the new global environment that has fostered the growth of mega-cities in developing countries, a new class of cities – world cities or global cities – has come to the fore. Some of them may be demographic giants, hence mega-cities, but they are world cities of their own value and importance, principally because of the functions they perform in the new global economy. World cities are control or command centres in the network of similar cities around the world; they are often headquarters of TNCs, financial centres, transport and telecommunications hubs, and tourist meccas”.

**Table 4.1 The world’s 30 largest urban agglomerations ranked by population size (million) for the year 2010**

Tokyo	27,093
São Paulo	20,514
Mumbai	20,455
Mexico City	19,694
Dhaka	19,393
Delhi	18,215
New York	17,551
Calcutta	15,452
Jakarta	15,341
Los Angeles	14,154
Karachi	13,871
Lagos	13,627
Shanghai	12,944
Buenos Aires	12,844
Metro Manila	11,618
Rio de Janeiro	11,342
Beijing	11,099
Osaka	11,013
Cairo	10,767
Istanbul	10,722
Seoul	9,888
Paris	9,828
Tianjin	9,716
Bangkok	8,937
Lima	8,843
Bogota	8,334
Moscow	8,141
Kinshasa	7,899
Teheran	7,669
Hong Kong	7,659

Source: UN, World Urbanization Prospects – the 2001 Revision  
[www.un.org/esa/population](http://www.un.org/esa/population) accessed 2 April 2002

Yeung's emphasis on 'control and command centres' parallels that of Sassen (1991; 1994) and others, although a contradiction creeps in later in his paper when he refers to *mega-cities* as "becoming a dominant force in directing global processes and shaping the global economy" (1997, 102). Elsewhere, Yeung's interpretation remains in tune with Sassen. He stresses how the global economy has changed over the last two decades, due to: (a) the decline in importance of primary resources; (b) the switch in emphasis from labour-intensive to knowledge-intensive forms of production; (c) the ever-increasing importance of transnational capital, and particularly of foreign direct investment; and (d) "a new era of telecommunications, information technology and widened opportunity". All this, he says, has brought about the internationalisation of urban life, with "a borderless economy (characterising) the new global economy in which world cities have risen to play their pivotal roles" (Yeung 1997, 95).

The literature does reveal broad agreement among scholars on the concept of the world/global city, and the features and functions that mark out such cities from other urban centres. However, clarification of the use of the words 'world' and 'global' is appropriate at this stage. The main attribute of the term 'world city' is that it is all-embracing, and less pejorative than 'global city' which, whilst apt when used in conjunction with London, New York and Tokyo (see Sassen 1991), sits less comfortably with other cities, even though they may have strong links with the process of globalisation. Wrestling with terminology can produce clumsy solutions: for instance, Hall (1998) has 'world cities' in the title of his contribution to Lo and Yeung's *Globalization and the world of large cities*, but he refers throughout the text to 'global' and 'sub-global' cities. It may be argued, of course, that use of the global connotation is appropriate in an age of globalisation, whereas world cities belong more properly to the age of internationalisation. However, as was made evident in Chapter Two, the process of globalisation is far from being either complete or truly global. To award the global cachet to cities other than the 'big three' is therefore somewhat presumptuous. My preference, therefore, is to use 'world cities' as an all-encompassing term, except when reference to the literature - or to the 'big three' - requires use of the prefix 'global'.

### ***4.3 Pioneers of world-city research***

The best route to an understanding of the role of world cities in the global economy is by way of a chronological study of the work of a small number of scholars. These pioneers of world-city research – Hall, Hymer, Cohen, Friedmann, Wolff, Sassen and Castells – have been responsible for developing and refining the concept over three decades, and for providing an informative and interpretative framework that is central to most world-city research and discourse in the past decade.

#### ***4.3.1 Hall and the first world-city construct***

The seminal first edition in 1966 of Hall's *The World Cities* is generally regarded as the starting point for research on "certain great cities, in which a quite disproportionate part of the world's most important business is conducted" (Hall 1966, 7), but Patrick Geddes, a renowned botanist and enthusiastic town planner, was the first to use the term 'world cities'. This was in 1915, when Geddes (1949) was seeking an explanation for the "continuing and even accelerated growth (of Britain's metropolitan regions) since the revolutions in transport and industry of the first half of the nineteenth century" (Hall 1966, 22). Geddes' initial assumption was that with industry now free to locate wherever it wished, the result would be decentralisation. However, "the new technology and the industry it created were almost the obverse of those of the first industrial age" (1966, 24). Hall thought the answer lay in the changing nature of financial operations in the 1860s and 1870s, and in particular the rise of the joint-stock company to take over control of companies from the traditional individual and family businesses. This was the shift in capitalist organisation, described by Marx and others as that from early capitalism to high or finance capitalism (Hall 1966, 25). It was accompanied by a huge surge of employment within white-collar occupations, which grew up around the neotechnic financial institutions based in the metropolitan regions. According to Hall (1966, 27):

"The growth of white-collar occupations of all kinds, then, is without doubt the most important single explanation for the growth of the world cities in the period since 1850".

Hall's analysis reveals an appreciation of the structure and workings of the world city only rendered problematic by the arrival of late-twentieth century globalisation and its

**Table 4.2 The world's metropolitan areas, 1960-1961**

New York-		
Northeastern New Jersey	1960	14,759,000
Tokyo – Yokohama	1960	13,628,000
London	1961	11,547,000
Rhine – Ruhr	1961	10,419,000
Moscow	1959	7,884,000
Paris	1962	7,810,000
Osaka – Kobe	1960	7,608,000
Shanghai	*1957	6,900,000
Chicago –		
Northwestern Indiana	1960	6,794,000
Buenos Aires	1960	6,763,000
Los Angeles –		
Long Beach	1960	6,743,000
Calcutta	1961	6,243,000
Peking	*1958	5,420,000
Mexico City	1960	4,816,000
Bombay	1961	4,698,000
Rio de Janeiro	1960	4,692,000
São Paulo	1960	4,369,000
Philadelphia	1960	4,343,000
Berlin	1960-61	4,154,000
Randstad Holland	1963	3,937,000
Detroit	1960	3,762,000
Leningrad	1959	3,579,000
Cairo	**1960	3,500,000
Hong Kong	1961	3,133,000

\* official estimate

\*\* in part involves estimate by author

Source: Hall (1966, 11)

attendant heightened perception of 'global cities' (Sassen 1991) and their interrelationship (Beaverstock et al. 1999; Taylor 2000). Hall sought to distinguish world cities from 'other great centres of population and wealth' by highlighting certain of their attributes:

- they were major centres of political power, with all the organisations and institutions usually associated with seats of government;
- they formed the nation's trading centre - often in the form of a great port - dominating the import/export trade;

- they tended to be the focus of road and rail networks, and the sites of great international airports; and
- they housed the national centres for the banking, finance and insurance sectors.

He singles out government and trade as the main determinants of world city status. In their wake came a range of professional talent in the form of medical and legal services, institutions for tertiary education and advanced research, and national libraries and museums. Hall (1966, 8), in explaining the grouping of major publishers, national newspapers and radio and television networks, presages the 'telematic' age when he asserts that "the world cities have become the places where information is gathered and disseminated". He concludes with the claim that world cities contain "a significant proportion of the richest members of the community", enabling them to attract luxury industries and shops, great department stores, specialised shops and a flourishing entertainment industry.

Hall's work was a major breakthrough, not least because the nuances of his classification reveal a clear recognition that population *alone* cannot be the measure of world cities. However, although he was the first to identify the political, economic and social characteristics of the world city, he did not have access to data that would have enabled comparisons between cities. He had to resort to a list of what he termed "the world's metropolitan areas" (1966, 11) arranged according to population (Table 4.2). Commenting on the detail in the table, Hall (1966, 9) adds an important caveat, one similar to Yeung's (see page 76) and a reflection of Hall's astute interpretation of the world city construct:

"Not all these are world cities: even among the real giants, urban complexes like Osaka-Kobe, Chicago or Los Angeles have a regional, not a national or international significance. And conversely, some of the complexes near the foot of the table - like the Dutch Randstad - play a world role as centres of trade, of finance, of culture, which is far greater than the mere total of population might indicate".

#### **4.3.2 *Hymer: a world dominated by transnational companies***

Hall was followed by the economist Hymer (1972) who, working during a period when the approach to the study of world cities was dominated by "cosmopolitan characteristics and

the multinational corporate economy” (Beaverstock *et al.* 1999, 446), heralded the advances of Cohen, Friedmann and Wolff. Hymer placed most emphasis on the location of TNC headquarters, on which basis he identified New York, London, Paris, Bonn and Tokyo as the top five world cities. The main interest in Hymer’s work lies in his comparison of the international division of labour with that within the TNC, and his “model of a world being created in the image of the TNC” was widely accepted (Dicken 1998, 238). Given the huge changes wrought by globalisation in the three decades that have elapsed since Hymer was developing his thoughts, it is hardly surprising, says Dicken (238), that he “grossly oversimplifies the complexity of the modern global organization of economic activity”.

#### **4.3.3 *Cohen and the international division of labour***

The new international division of labour (NIDL) was a matter that came under the close scrutiny of social scientists in the 1970s and 1980s. Cohen (1981, 287) takes a particular interest in the effect of NIDL on “corporations, financial institutions, national economies (in both the developed and developing world) and the world’s urban centres”. He emphasises (1981, 288): (a) the changes taking place within large corporations, in terms of both structure and decision-making; (b) the fact that this culture of change is the outcome, to a large degree, of the NIDL; (c) the growing need of large corporations for access to specialist services from firms in the banking, legal and accounting sectors; and (d) the resultant emergence of “a series of global cities...[which] act as centres of corporate control and coordination for the new international system”. In effect, therefore, Cohen’s view of world cities is as the coordinators and controllers of the NIDL.

Cohen’s efforts to determine ‘what makes a world city’ take him a significant step beyond Hall. His assertion that, “only a place with a wide range of international business institutions can be truly called a world city” (1981, 302), leads him to compare (in the US) the foreign and domestic sales of *Fortune* 500 companies and the foreign and domestic bank deposits of the top 300 banks. He concludes from the results that only New York and San Francisco among US cities qualify for designation as global cities in terms of *both* corporate and banking businesses. Cohen builds on these findings through analysis of the location of corporate headquarters and corporate services, and discovers that, “an extremely limited number of cities act as world centers of business and corporate services”

(1981, 305). New York and San Francisco again emerge as the key international centres, and their financial institutions and corporate services attracted “even the international activities of firms headquartered outside these cities” (1981, 305). This clearly conflicts with Hymer’s emphasis on the location of TNC headquarters as a key feature of world cities; instead, suggests Cohen, ease of access to an agglomeration of quality services is more important than being situated alongside them.

Cohen does not enter into detailed investigation of an actual hierarchy of world cities. What he does claim (1981, 307) is that if the same approach to studying US cities were deployed elsewhere, “a different group of cities might be called ‘world cities’ than those selected by Hall”. He then rather spoils his case by using the location of TNC headquarters as an indicator of the world-city status of London, Tokyo, Osaka, Paris and others. However the value of his contribution is beyond dispute. As Hamnett (1995, 111) says, in drawing comparison with the subsequent, much-lauded work of Friedmann and Wolff:

“Cohen’s analysis, with its focus on the concentration of commercial services in global cities and the role they play for major companies, could be said to take us further than Friedmann and Wolff’s analysis, in that he provides a clearer and more developed view of the mechanisms whereby concentration of business services in world cities helps to co-ordinate and control the global economy”.

#### **4.3.4 *Friedmann’s hypothesis***

Friedmann and Wolff (1982) produced a ground-breaking paper in which, whilst acknowledging the work of Cohen, they identify the lack of research into “the reciprocal relationship between the cities and the global economy” (1982, 332). As they point out (1982, 331), “for the first time, we can begin to see linkages across the different worlds – first, second and third; north and south; core and periphery...”. Their approach was Eurocentric, a feature that has remained the norm, apart from the injection in recent years of certain empirical studies by Asian scholars (see, e.g., Lo & Yeung 1998; Yeoh 1999; Yeung 2000a). However, the real significance of Friedmann and Wolff’s project is that it opened the door to discourse on the world city concept, and particularly the tendency for world cities to become ‘dual’ cities, with ever more apparent divisions along economic, racial and class lines (Soja 2000; Marcuse and Kempen 2000). By the early 1980s the

study of cities was thus linked for the first time to changes taking place within the world economy, and specifically those wrought by the development of the new international division of labour.

**Table 4.3 Synopsis of Friedmann's world city hypothesis**

<b>I</b>	The form and extent of a city's integration with the world economy, and the functions assigned to the city in the new spatial division of labour, will be decisive for any structural changes occurring within it.
<b>II</b>	Key cities throughout the world are used by global capital as 'basing points' in the spatial organisation and articulation of production and markets. The resulting linkages make it possible to arrange world cities into a complex spatial hierarchy.
<b>III</b>	The global control functions of world cities are directly reflected in the structure and dynamics of their production sectors and employment.
<b>IV</b>	World cities are major sites for the concentration and accumulation of international capital.
<b>V</b>	World cities are points of destination for large numbers of both domestic and/or international migrants.
<b>VI</b>	World city formation brings into focus the major contradictions of industrial capitalism - among them spatial and class polarisation.
<b>VII</b>	World city growth generates social costs at rates that tend to exceed the fiscal capacity of the state.

*Source:* after Friedmann (1986, 70-79)

Friedmann followed up the research framework he and Wolff had proposed with the development of his world city hypothesis (Friedmann 1986), a response to the need, as he saw it, for a "spatial perspective on an economy which seems increasingly oblivious to national boundaries" (1986, 69). He stressed that the hypothesis was not intended as a theory, but simply as a framework for research and political enquiry. Although noting the significance of historical, political and cultural factors in the development of cities which had become what he termed the 'basing points' for global capital, Friedmann felt that the 'economic variable' had to be the key to understanding and explanation. He defines the city as "a spatially integrated economic and social system at a given location or metropolitan region" (1986, 70). The hypothesis he established is summarised in Table 4.3. Hugely significant at the time, it is today open to interpretation as "little more than an elucidation of the obvious" (Soja 2000, 221).

Friedmann's hierarchy (Table 4.4), compiled in accord with Thesis II of his hypothesis, has some obvious omissions. These occur because he deliberately ignores areas that, in the case of India and China, were "only weakly integrated into the world market economy", and in the case of the centrally-planned economies of the Soviet bloc, were "not part of the capitalist world system" (Friedmann 1986, 72). The World Bank was the source of the criteria for his identification of 'core countries'. The selection criteria for a place in the

**Table 4.4** Friedmann's world city hierarchy

	<i>Primary</i>		<i>Secondary</i>	
	<i>Core countries</i>	<i>Semi-peripheral countries</i>	<i>Core countries</i>	<i>Semi-peripheral countries</i>
<b>Americas</b>	New York*** Los Angeles*** Chicago**	São Paulo***		Buenos Aires*** Rio de Janeiro*** Mexico City*** Caracas*
<b>Europe</b>	London*** Paris** Rotterdam* Frankfurt* Zurich*		Brussels* Milan* Vienna* Madrid*	
<b>Asia</b>	Tokyo***	Singapore*		Hong Kong** Manila** Bangkok** Seoul** Taipei*
<b>Australia</b>			Sydney*	
<b>Africa</b>				Johannesburg*

\*\*\* 10-20 million \*\* 5-10 million \* 1-5 million

Source: after Friedmann (1986, 72)

hierarchy are problematic, not least because, as Friedmann (1986, 71) accepts, "the data to verify it [the hierarchy] are still lacking". In this sense it may be argued that his thesis shows little advance in terms of objectivity and order on Hall's work some two decades earlier. The selection criteria are partial, and include: major financial centre; headquarters for TNCs (including regional headquarters); international institutions;

rapid growth of business services sector; important manufacturing centre; major transportation node; and population size. There are two major criticisms of these indicators: first, the undue importance attributed to the 'dominance' of TNCs within the international capitalist system, and second, the deterministic role attributed to capital. According to Friedmann, says Hamnett (1995, 111), "world cities...are seen merely as a manifestation of the dominant role of transnational capital". Furthermore, as Short and Kim (1999, 24) point out: "In Friedmann's work, as with many other researchers, world cities are very much pre-defined. Data are found to confirm their world-city status rather than their status being defined by criteria". In the interests of balance and fairness it should also be noted that Friedmann himself, writing a decade after producing his hypothesis (1995, 40), does admit that there has been no closing of a critical gap in the knowledge: "...we do not have clear-cut, agreed criteria that would allow us to validate world city claims unambiguously for any but the top cities in the hierarchy".

As was the case with Hall's population figures, Friedmann's also apply to metropolitan regions. He sets the lower end of the scale, however, at one million, thus allowing for the inclusion of small, but globally significant cities such as the burgeoning Singapore. Friedmann's hierarchy, however, is short on explanation. Answers to 'how' and 'why' questions are notable by their absence. No effort is made to explain *how* world cities control the linkages which are integrating the global economy, or to suggest *why* TNCs site their headquarters in one place or another. "At worst", observes Hamnett (1995, 111), "it could be said that Friedmann and Wolff have taken a list of major cities around the world and simply designated them as world cities".<sup>3</sup> Viewed with the benefit of hindsight, the weaknesses of Friedmann's 1986 hierarchy are clear. It is not just that there is no empirical *comparison* of world cities (the data were still absent), but that the criteria are employed in a partial way. As Friedmann himself states (1986, 72), "not all criteria were used in every case, but several criteria had to be satisfied before a city could be identified as a world city of a particular rank". In addition, as was the case with Hymer's work, the hierarchy places undue emphasis on the role and power of TNCs. According to Allen (1999, 192-3):

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<sup>3</sup> The world city hierarchy developed by Friedmann (1986) does not appear in the 1982 paper of Friedmann & Wolff. The latter do give a list of 'world-cities-in-the-making' (1982, 310) and admit that "to label them as world cities is a matter of convenience. In each and every instance, *their specific role must be determined through empirical research*" (my emphasis).

“Much of the thinking behind this rank order of cities rested squarely on the assumption that economic power is something that is lodged in the headquarters of transnational organizations . . . (concentrated) . . . in a few cities worldwide. These cities stood at the apex of corporate and financial hierarchies and, without too much reflection, a hierarchical list of world cities soon fell into place”.

Friedmann’s hypothesis certainly represents a significant marker on the route towards a true understanding and interpretation of world cities, and of the relationships between cities. However, having played down what he was trying to achieve, and having made clear the lack of appropriate data, he cannot resist producing a hierarchy that suffers from the very inadequacies his paper warns against. Despite this, his hierarchy is a considerable advance on earlier ‘lists’ of cities, based on population. His 1986 publication is frequently referred to as a ‘seminal’ work, even by those like Beaverstock *et al.* (1999 & 2000a) who draw attention to its deficiencies. What is beyond question is that Friedmann produced an “appealing and compelling framework” for world city development (Knox 1996, 124) at a time when social scientists were seeking understanding of both the new form of globalisation and the new regionalism. An interesting comment on this comes from Korff, writing just one year after publication of the hypothesis. His concern was that it could lose its utility unless there was a move away from “describing and measuring the structure of the urban system” towards exploration of “the processes that shape it” (1987, 491). Korff thought that the proper way to seek to identify a ‘world system’ was to “start with the city and its role within the region (or regions)” (1987, 491). Friedmann subsequently confirmed his full agreement with the latter point. In fact, largely as a result of the work of Cohen and Friedmann, there was an increasing attention in the early 1980s to the ways in which certain cities were ‘directly connected’ to the global economy (Friedmann 1986, 70). The scholar who made, and is still making, a major impact in this field of study is Sassen.

#### 4.3.5 Sassen and the ‘global city’

The kernel of Sassen’s later definitive work on global cities (1991;1994) is to be found in her comparative study of New York and Los Angeles (1988), where she states that “major world centers have become the loci for new forms of concentration of economic growth and the associated new forms of economic inequality (1988, 168). Sassen took Friedmann’s work (and specifically his second and third theses – see Table 4.3) onto a higher plane and, through her use of the term ‘global city’, identified the nature of a new

form of 'world city', one whose role and characteristics are integral to the globalisation process. Adopting a more focussed approach than either Cohen or Friedmann, Sassen identified New York, London, Tokyo and other cities as "strategic locations capable of exercising control over an increasingly global world...because such cities represent an agglomeration of specialist activities...not because (they) have a concentration of multinationals headquarters" (Allen 1999, 194). Whereas Friedmann and Cohen placed great emphasis on the siting of TNC headquarters in world cities, Sassen, without taking anything away from the strategic importance of these headquarters, does not regard them as either necessary or key fixtures in global cities.<sup>4</sup> Rather, she sees the producer services as both benefiting and needing a city location, and it is the agglomeration of these services which has become such a feature of world cities (2000, 84).

What sets world cities apart is the way they are embedded in the global economy; and Sassen's stress on the importance of the clustering of producer services has similarities with what Amin and Thrift (1997) describe as 'institutional thickness'. What they call "the accumulation of collective capabilities leading to their progressive institutionalization" can include assets in both hard and soft institutionalised forms which, in totality, produce "locally generated cultures serving as a base for economic activity and economic innovation (1997, 154). It is because world cities have key functions lying outside the purely economic that additions to Friedmann's list of seven indicators have been suggested - including telecommunications, the quality of life, international affairs and cultural centrality, and the destination points for immigration (Short and Kim 1999, 24). However, the bottom line is that the *links that bind* world cities to the process of globalisation are essentially economic.

In her masterly study of New York, London and Tokyo (1991), Sassen uses these three prime examples of the global city to expand upon and test her theories, starting from the premise (1991, 5) that "the more globalized the economy becomes, the higher the agglomeration of central functions in a relatively few sites, that is the global cities". She thinks of global cities as strategic spaces "where global processes materialize in national territories and global dynamics use national institutional arrangements" (1998, 478). She

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<sup>4</sup> Sassen's view is supported by the number of MNC headquarters now sited away from global cities - and even from cities per se (e.g., Microsoft [Redmond, Washington] and Nike [Beaverton, Oregon])

also notes (1991, 3), that the “complex duality (of the) spatially dispersed, yet globally integrated organization of economic activity...has created a new strategic role for major cities”. These are constantly recurring themes in Sassen’s writing. According to Hamnett (1995, 117), her work:

“...does not simply reflect a shift in emphasis from corporate headquarters to financial and business services; rather it reflects a major shift in the economic base and rationale of global cities themselves – away from transnational corporations and towards advanced service products. Whereas in the 1950s and 1960s such activities existed to service the needs of large corporations based in these cities, they now have a global importance in their own right as key industries”.

Sassen (1991, 4) maintains that, although major cities have always been involved in international trade and banking, their role within the global economy has brought four new functions as:

- command centres;
- locations for finance and special services (the ‘things’ a global city makes);
- sites of production, including innovation, in these new leading industries (replacements for manufacturing in global cities); and
- markets for the services and innovations produced.

This is all a long way from Hall and Friedmann, but it is a persuasive theory. What rings especially true is the conclusion that relates to the tendency, as part of the globalisation process, for both the organisation and siting of the work process to become fragmented. “It is”, says Sassen (1991, 10), “this very ‘global assembly line’ that creates the need for increased centralization and complexity of management, control and planning”. Sassen, does not, however, restrict her interest to the part played by the global city in the world economy. She sees equal importance in looking inwards, to assess the impact on economic, political and social processes *within* the city (e.g. the creation of the ‘dual’ city), and the degree to which the relationship between state and city is changed as a result of the latter being firmly embedded in the world economy. In her *Cities in a world economy* (1994; 2000), Sassen reinforces and broadens the theories she explored in her earlier study of New York, London and Tokyo. To the overriding command and control function of the

global city she adds two more functions (2000, 22): “(1) cities are postindustrial production sites for the leading industries of this period - finance and specialized services - and (2) cities are transnational marketplaces where firms and governments from all over the world can buy financial instruments and specialized services”.

Two intriguing themes emerge from the 1994 publication, themes of particular relevance for the future development of world cities. First, Sassen imagines the world city as becoming increasingly detached from its traditional geographical moorings. “Cities that are strategic sites in the global economy tend, in part, to disconnect from their region” (1994, 52). She also identifies the “erosion of the role of the government in the world economy” (1994, 19). Acceptance of these premises certainly makes possible her clear statement of the direction in which world cities could go (1994, 76): “At the global level, a key dynamic explaining the place of major cities in the world economy is that they concentrate the infrastructure and the servicing that produce a capability for global control” Statements like this have, on occasion, led to Sassen being carelessly bracketed with a booster like Kenichi Ohmae. There is nothing in Sassen’s work, however, to suggest that she envisages the *demise* (as distinct from changing powers and interests) of the state.

The second theme is pertinent to current research being undertaken by the *Globalization and World Cities Study Group* at Loughborough University (see Section 4.5.2), where Taylor and Beaverstock have developed a line of research that chimes with Sassen’s proposition (1994, 50) that, “if...in addition to competing with each other, global cities are also the sites where transnational processes with multiple locations occur, then we can begin to explore the possibility of a systemic dynamic binding these cities”. Sassen follows this up by referring to the interactions uncovered in her study of New York, London and Tokyo, and suggests that “in addition to the central place functions performed by these cities in the global economy...(they) relate to one another in distinct systemic ways” (1994, 50). This seems to imply the existence of flows of skills, services and information between world cities and lends further credence to the concept of a ‘capability’ for global control. It also explains Sassen’s recurring insistence that “there is no such entity as a single global city” (see, for example, 2000, 4), a statement that encapsulates the difference between the world cities of today and those of the imperial past, when “a single world city (was) at the top of a system” (1998a, 213). The global city today, asserts

Sassen, “is a function of the global grid of transactions, one site for processes which are global because they have multiple locations in multiple countries” (1998a, 213).

#### ***4.3.6 Castells and the ‘space of flows’***

Hall, Cohen, Wolff, Friedmann and Sassen, pioneers of the concept of the world/global city, all thought in terms of the city as a discreet site, a place within which power resides and from which (in Sassen’s terms) control and command functions operate. Manuel Castells takes what Allen (1999, 199) describes as “a more mobile conception of power”. For Castells (1996, 386), “the global city is not a place, but a process”. He analyses the ways in which the new telecommunications and information technology have broken down distance barriers and produced a ‘space of flows’ around the globe, thus making numerous locations around the world immediately and simultaneously accessible. Unlike Sassen, who identifies similar flows but places the stress on the accumulation of the technical expertise and personnel in specific places – the global cities – Castells identifies power in the flows themselves, and in their capacity to co-ordinate centres around the world. It is through this system, according to Castells, that the world cities come to their importance, for they control and operate the system of flows. Knox (1996, 125) concurs: “World cities [today] are concerned less with the deployment of imperial power and the orchestration of trade and more with the organization of the ‘space of flows’”.

Whilst most scholars acknowledge the value of Castells’ espousal of an ‘informational mode of development’, some have problems with the path(s) his thinking follows. Friedmann (1995, 28) finds Castells “transfixed by ‘high-tech’”, and Soja (2000, 215) has a serious difficulty with Castells’ tendency to “represent the opposing power of the space of flows [as against that of the space of places] as forebodingly overwhelming”. But for Soja this is something that can be discussed and worked through; overall, he gives a ringing endorsement for Castells’ “extraordinarily far-ranging reconstitution of contemporary and spatial theory” (2000, 212). Storper (1997) also admires the ambitious nature of the work on the ‘informational city’ and the space of flows, but contests the notion that the emerging global economy is about a homogenous space of flows. It is instead, he says, “a complex meeting of new kinds of globalized flows and new kinds of territorial economies. Castells’ theory takes one side of this complex process and elevates it into a highly misleading metaphor for the whole” (1997, 239). However, Castells’ work

is both interesting and challenging; as Allen (1999, 202), comparing the Sassen and Castells discourses, concludes:

“Where the two accounts radically diverge...is over the source of the economic power and influence of global cities. For Castells, power is concentrated in the networked space of flows, whereas for Sassen it is concentrated in those groups who exercise the command-and-control functions embedded in global cities.

In other words, it comes back to the question of whether the networks themselves ‘generate’ cities as sites of power through their interconnections *or* whether cities ‘run’ the networks through their concentration of resources and expertise”.

It is arguably misleading to view the two approaches as mutually exclusive, and I suspect that detailed study of individual cities reveals elements of both in their matrices of power. Singapore is a case in point, as is made clear in Part II.

#### *4.4 Global city-regions*

There now exists a new dimension to the work of Friedmann, Sassen and Castells. This is the study of ‘global city-regions’ which, it is argued (Scott et al. 1999, 2), “have emerged of late years as a new and critically important kind of geographic and institutional phenomenon on the world stage”. At the Global City-Regions Conference, held at UCLA in October 1999, the conference theme paper ‘Global city-regions’ was presented by an impressive quartet: Scott, Agnew, Soja and Storper. Their thesis is that globalisation has reactivated the significance of city-regions to the extent that “the city in the narrowest sense is less an appropriate or viable unit of local social organization than city-regions or regional networks of cities”. They see evidence of this trend (1999, 2):

“in the forms of consolidation that are beginning to occur as adjacent units of local political organization (provinces, Länder, counties, metropolitan areas, municipalities, departements and so on) search for region-wide coalitions as a means of dealing with the threats and the opportunities of globalization”

Regionalism, indeed, occupies a pivotal role in the discussion. Alongside the new actors and processes of globalisation (international financial institutions, multi-nation blocs, and the transformation of sovereign states and national economies), a “resurgence of region-

based forms of economic and political organization, with the clearest expression of this tendency being found in certain large global city-regions" is clearly identified (Scott *et al.* 1999, 3). However, the nature of the difference between the world/global city and the global city-region is not made. An obvious inference is that the latter is bigger, and Shanghai and the Pearl River Delta are given as extreme examples of "polycentric or multi-clustered agglomerations" (1999, 7), each with a population in excess of 30 million. The paper continues (1999, 7), "...in virtually all global city-regions there has been a rapid growth of outer cities and edge cities, as formerly peripheral or rural areas far from old downtown cores have developed into urban centers in their own right". Much of the discussion is in line with Sassen's interpretation of the global city. The added dimension of the 'region' comes about largely through the growth of satellite centres where sites of production and innovation are in close proximity to their associates, competitors and sources of specialised labour. What is new is that whereas Sassen envisages the global city as having the 'capability for global control', Scott *et al.* (1999, 7) clearly see global city-regions (essentially in the developed world) as functioning "increasingly as the regional motors of the global economy, that is, in dynamic local networks of economic relationships caught up in more extended world-wide webs of inter-regional competition and exchange".

It would appear, therefore, that the global city-region concept is Sassen and Castells conflated and writ large. The implication is that, in economic terms at least, global city-regions could take over much that is currently handled by the state. But this is still some way off, as the authors caution (1999, 9):

"The expanded city-region functions as a vital platform of competitive advantage and generative growth in the global economy, but at the same time this regional world of production often rests upon institutional structures of governance and planning that are inadequate to maintain effective social order, not to mention continued economic health. The creation of new and responsive frameworks of regional governance capable of sustaining economic development, instigating a sense of cooperative regional identity, and promoting innovative ways of achieving regional democracy and economic fair play is the great challenge for the future".

#### **4.5 *Current state of world city research***

##### **4.5.1 *The hierarchy problematic***

The word 'hierarchy' continues to exert an undue influence on world city research. Since Friedmann's work first attracted attention in the mid-1980s, there have been a number of attempts both to identify world cities and to rank them in some sort of order (Beaverstock *et al.* 1999, Tables 1 & 2). In fact, a number of those who have cited lists of cities in their research would appear to have fallen under the 'hierarchy spell'. Unfortunately, extended lists or hierarchies are fraught with problems, inviting as they do the interpretation and subsequent reification of partial information. In addition, the impossibility of agreeing a definitive list of attributions (of the world city), contested interpretation of the data, and the fact that both the data and the attributes of individual cities change over time, raise real questions about the purpose and value of hierarchies of world cities. Interestingly, although Keeling (1995) is one of those quoted in Beaverstock *et al.*'s tables, he is at pains in his study of the role of air transport in shaping world cities, to reject the establishment of a hierarchy (1995, 119):

"The purpose of analysing the global airline network is not to define a rigid rank order of world cities. Hierarchies of world city connectivity are dynamic, fluid, and extremely plastic. A city's position in the network rises and falls depending on myriad factors, including supply and demand, government regulation, the influence of emerging regional trade blocs, historical inertia, local circumstances, and changing perceptions of place. Rather, by taking a snapshot of the network in space and time, the analysis suggests that certain cities control and dominate flow throughout the network".

Short *et al* (1996) draw attention to the problem of developing cohesive arguments about the changing pattern of the world city hierarchy and its relationship to the process of globalisation, given the absence of "an agreed upon and widely used set of data" (1996, 698). This is, as they call it, 'the dirty little secret of world cities research'. Knox (1995, 9) is another with doubts about the hierarchical approach: "...the very nature of the contemporary world system (with the flexibility of corporations within global networks and the warpage of new telecommunications media constantly revising the role of 'lower-order' world cities) means that a hierarchical classification of world cities is less and less satisfactory". In Knox's view, thinking in terms of functional classifications offers a

**Table 4.5 Spatial articulations: 30 world cities**

<b>1</b>	<b>Global financial articulations</b>
#	London* A (also national articulation)
#	New York A
#	Tokyo* A (also multinational articulation: SE Asia)
<b>2</b>	<b>Multinational articulations</b>
#	Miami C (Caribbean, Latin America)
#	Los Angeles A (Pacific Rim)
#	Frankfurt C (western Europe)
#	Amsterdam C or Randstad B
	Singapore* C (SE Asia)
<b>3</b>	<b>Important national articulations (1989 GDP &gt;\$200 billion)</b>
#	Paris* B
#	Zurich C
	Madrid* C
	Mexico City* A
	São Paulo A
	Seoul* A
#	Sydney B
<b>4</b>	<b>Subnational/regional articulations</b>
	Osaka/Kobe (Kansai region) B
#	San Francisco C
#	Seattle C
#	Houston C
#	Chicago B
#	Boston C
#	Vancouver C
#	Toronto C
	Montreal C
	Hong Kong (Pearl river delta) B
#	Milan C
	Lyon C
	Barcelona C
#	Munich C
#	Düsseldorf-Cologne-Essen-Dortmund (Rhine-Ruhr region) B

Population (1980s) A: 10-20 million B: 5-10 million C: 1-5 million

\* national capital

# major immigration target

Source: Friedmann 1995, Table 2.1

better option. When, as an illustrative example, he classifies cities according to three major functions (transnational business, international affairs and cultural centrality), the results are revealing (1995, 10). Tokyo, New York, London, Paris and Brussels are in a league of their own (Brussels mainly because of the large number of NGOs and IGOs associated with the presence of the European Commission), but the remaining cities are bunched together, arguably rendering any attempt to create a hierarchy a difficult, if not pointless exercise. Friedmann has a different view. A decade on from his 1986 ground-breaking paper he says (1995, 23), “*we have to agree (my emphasis) that these regional cities – the commanding nodules of the global system – can be arranged into a hierarchy of spatial articulations, roughly in accord with the economic power they command*” (see Table 4.5). The pattern is very much as it was in 1986: London, New York and Tokyo are easy, but “after that the going becomes more contentious because we lack unambiguous criteria for assigning particular cities to a specific place in the global system” (1995, 23). Friedmann immediately follows this up with a genuine insight into the problem of the hierarchical approach, effectively echoing the reservations expressed by Keeling:

“But establishing such a hierarchy once and for all may, in any event, be a futile undertaking. The world economy is too volatile to allow us to fix a stable hierarchy for any but relatively short stretches of time. Assigning hierarchical rank may therefore be a less compelling exercise than *recognizing the existence of differences in rank without further specification and, based on this rough notion, investigating the articulations of particular world cities with each other*” (my emphasis)

#### 4.5.2 A new metageography?

Work is in progress at Loughborough University (Beaverstock *et al.* 1999, 2000a and 2000b; Taylor 2000) under the banner of the Globalization and World Cities (GaWC) Research Group and Network. The starting point for the Group is in what they see as “a paradox in the literature on world cities, ... (that) while the essence of world cities is their relations to one another, this has not been a major component of world city literature” (Beaverstock *et al.* 2000a, 45). Taylor (2000, 12) expresses the same concern, from a different standpoint: “It is indicative of the poverty of global empirical research that there is no generally agreed roster of world cities”. The temptation here is to suggest that, given the hype now attached to the world city concept, the competition between cities (often with strong government backing) desperate to acquire or gain enhanced city status, and the fact

that what is being looked at is a moving target, seriously reduces the likelihood of any agreement on a world city roster. To borrow Friedmann's words, it could be a futile undertaking.

Taylor (2000) used the 1999 Annual Political Geography Lecture of the AAG to set out the GaWC stall. Detailed explanation of the research project is to be found in Beaverstock *et al* (1999, 2000a and 2000b) and Taylor (2000). In essence, in an effort to kick-start the elusive roster of world cities, an inventory has been constructed, based upon levels of the advanced producer services which Taylor (2000, 52) identifies as "exhibit(ing) the critical distinguishing characteristics of global cities", and which Sassen (1991, 126) claims give certain cities "a specific role in the current phase of the world economy". The services selected are accountancy, advertising, banking/finance and law. Differing criteria are used for each of the services in order to measure the presence of 69 firms in 263 cities. What emerges is a roster of 122 cities with differing levels of 'world city-ness' (Taylor 2000, 14). The very precision of the roster (Table 4.6) raises far more questions than answers: does Seoul really have greater world city-ness than Washington?; and does reality attach to Seattle no more than 'some evidence' of world city-ness? As Douglass (2000, 45) points out:

"In the end the long list of more than 120 possible world cities classified into tiers based on strength of available evidence remains a set of informal conjectures supported by rather partial data".

Douglass was joined by Shapiro (2000) and Varsanyi (2000) in comment on Taylor's 1999 lecture. All are generally complimentary regarding the innovative nature of the research project, but have reservations. Douglass (2000, 44) observes that "a number of substantial problems are encountered...when trying to capture the space-economy of global capitalism through the location of corporate headquarters, producer services and subsidiaries". He is in error in quoting the location of TNC headquarters as one of Taylor's measures, but has a point when identifying the problems involved in untangling the affiliates of TNCs and the failure to "capture how accumulation is now accomplished through non-equity control of value-added networks"(2000, 44).

**Table 4.6 The GaWC inventory of world cities**

<b>A. ALPHA WORLD CITIES</b>	
12	London, Paris, New York, Tokyo
10	Chicago, Frankfurt, Hong Kong, Los Angeles, Milan, Singapore
<b>B. BETA WORLD CITIES</b>	
9	San Francisco, Sydney, Toronto, Zurich
8	Brussels, Madrid, Mexico City, São Paulo
7	Moscow, Seoul
<b>C GAMMA WORLD CITIES</b>	
6	Amsterdam, Boston, Caracas, Dallas, Düsseldorf, Geneva, Houston, Jakarta, Johannesburg, Melbourne, Osaka, Prague, Santiago, Taipei, Washington
5	Bangkok, Beijing, Montreal, Rome, Shanghai, Stockholm, Warsaw
4	Atlanta, Barcelona, Berlin, Buenos Aires, Budapest, Copenhagen, Hamburg, Istanbul, Kuala Lumpur, Manila, Miami, Minneapolis, Munich
<b>D EVIDENCE OF WORLD CITY FORMATION</b>	
<i>Di Relatively strong evidence</i>	
3	Athens, Auckland, Dublin, Helsinki, Luxembourg, Lyon, Mumbai, New Delhi, Philadelphia, Rio de Janeiro, Tel Aviv, Vienna
<i>Dii Some evidence</i>	
2	Abu Dhabi, Almaty, Birmingham, Bogota, Bratislava, Brisbane, Bucharest, Cairo, Cleveland, Cologne, Detroit, Dubai, Ho Chi Minh City, Kiev, Lima, Lisbon, Manchester, Montevideo, Oslo, Rotterdam, Riyadh, Seattle, Stuttgart, The Hague, Vancouver
<i>Diii Minimal evidence</i>	
1	Adelaide, Antwerp, Aarhus, Baltimore, Bangalore, Bologna, Brazilia, Calgary, Cape Town, Colombo, Columbus, Dresden, Edinburgh, Genoa, Glasgow, Gothenburg, Guangzhou, Hanoi, Kansas City, Leeds, Lille, Marseille, Richmond, St Petersburg, Tashkent, Tehran, Tijuana, Turin, Utrecht, Wellington
<i>Cities are ordered in terms of world city-ness with values ranging from 1 to 12</i>	
<i>Definitions: World city-ness values were produced by scoring 3 for prime centre status, 2 for major centre status, and 1 for minor centre status</i>	

Source: Beaverstock *et al.* 1999, Table 7

It is Shapiro's view (2000, 40) that "the data ought to be rendered in the form of matrices" and then, through the "theory of directed graphs", made suitable for analysis. Taylor (2000, 52) indicates that such work is in hand. (As already noted, Knox has also demonstrated the possible value of matrices). My main concern is that the hierarchy revealed in Table 4.6 encourages, through its very specificity, the placing of individual

cities at levels of importance within the global economy. I question whether this should rank as a prime objective of world city research. Taylor, Beaverstock and others rightly regard Friedmann's 1986 hierarchy as flawed because it is based on the *attributes* of cities rather than their *interrelationships*. But might not an understanding of these relationships be best achieved via the 'bottom-up' approach advocated by Varsanyi? Such an approach, she suggests (2000, 35-36), would be:

"...less concerned with developing adequate criteria for determining if a city is a world city, and more concerned with how various political and economic interests within a city are captured by the world city allure and attempt to either maintain their place in the hierarchy of urban competition, or join the ranks and become world cities in their own right. In other words, what happens in these cities 'on the ground' in their attempts to participate in the trans-state space of flows?"

Varsanyi cites her study of the public transport system in Los Angeles in support of her thesis, and this is taken aboard by Taylor (2000, 52), who endorses the 'bottom-up' approach, and also notes the important role of national governments in the promotion of world cities, a point made firmly by Douglass (2000, 45). The problems encountered are well illustrated by Knox (1996, 125). He attempts to define a 'global urban system', comprised of tiers of cities based on their functional linkage with the global economy. Whilst the second tier (after London, New York and Tokyo) consists – quite objectively – of world cities such as Singapore, "with influence over large regions of the world system", the criteria for the lower tiers are far looser and hence difficult to justify. The fifth tier, for instance, comprises "places where an imaginative and aggressive local leadership has sought to carve out distinctive niches in the global market plan" (1996, 125). Without doubt, such places do belong to a global urban system, but to classify them within a world city hierarchy smacks, to borrow the words of White (1998, 491) of "a degenerative theoretical move".

#### **4.5.3 *Concluding thoughts***

The problems associated with attempts to produce hierarchies of world cities are partly explained by the dynamic nature of an evolving world system. Any one hierarchy can only be a snapshot in time, as well as requiring close scrutiny of the inevitably partial data used in its construction. The real importance of world cities lies not in their ranking(s), but

rather in their respective locations in, and interaction with, the spider's web of the world-city system. A large number of urban centres occupy positions on the web, ranging from small towns to Sassen's three global giants, with a complex feeder system linking in to those cities – the world cities – that are situated at major intersections on the web. These are “the *local* points that *global* processes are said to take their starting point” (Hamnett 1995, 125).

Research on world cities can thus offer an “important window into the geography of global capitalism” (Brenner 1998, 29). Brenner's interpretation of the changes in spatial scales wrought by globalisation is that the state scale, far from being eroded, is being “rearticulated and reterritorialised in relation to both sub- and supra-state scales” (1998, 1). Such a view fits comfortably with those of Friedmann who, it should not be forgotten, intended his hypothesis as *a starting point for political enquiry*. He anticipated that there would be “significant differences among those cities that have become the ‘basing points’ for global capital” (1986, 69). Whilst accepting that all attempts at explanation would depend greatly on the ‘economic variable’, he also saw considerable value in the study of individual cities through their “historical past, national policies, and cultural influences” (1986, 69). Apart from some notable exceptions, such as Sassen (London, New York and Tokyo), and Soja (Los Angeles), this aspect of world city research has received too little attention.<sup>5</sup> Ward (1995) identifies the failure to concentrate on administration and governance as a glaring omission in the world-city research paradigm. Like Sassen, he sets store in the significance of the ‘voice’ of each world city, which reveals much about their positioning in the global economy and interaction with other focal points on the spider's web of the world urban network.

This, after all, is what marks out the world city. They may be involved in the world political and economic systems through their location within states, but their major connections are through the “direct and frequent contact with one another through the

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<sup>5</sup> The GaWC website carries, at the latest count, 80 project bulletins (papers) that have been submitted for publication in journals. Ten recognised or putative world cities are the subjects of nine of the papers. The remaining 70 papers deal with a wide range of material pertinent to study of world cities; contributors include J V Beaverstock, N Brenner, P Hall, R J Johnston, P L Knox, S Sassen, A J Scott, J R Short and P J Taylor. The relative paucity of empirical studies of individual cities must rank as a disappointment for what is an excellent project.

various city-to-city flows" (Smith and Timberlake 1995, 81). This is so much so in the case of the complex inter-relationships of the producer services sectors that, according to Daniels and Lever (1996, 364), world cities have effectively become "unhinged" from their national system of urban places. Operating as the command and control centres of the space of flows they are the drivers of the global economy. World cities – small and large – have thus become "critical in a million ways" to the globalisation project (Massey 2000, 136). In the context of this thesis, therefore, the importance of Singapore's 'world city-ness' is not so much demonstrated by its status as one of the GaWC network's Alpha cities, and the fact that it 'outranks' such as Sydney, Seoul, Taipei, Bangkok, Beijing and Shanghai, but must lie in answers to questions about the *why* and *how* of Singapore's positioning in the global economy. The final word on the matter goes appropriately to a Singapore geographer (Yeoh 1999, 613):

"The fact that the term 'global city' is increasingly accepted as common currency does not necessarily imply theoretical rigour; instead, the metaphorical hubris, with which the term is often invested, signals the need to knuckle down to making real sense of what has been frequently called the 'new sensibility' informing urban futures".

## *Part II*

### **Positioning Singapore in the global economy**

*"On the morning of August 9<sup>th</sup> 1965, I was in my office in Fullerton Building brooding over the enormous problems facing the country and the Government. The problems of the future loomed in awesome and intimidating proportions. Here we were, an island trading outpost, with its economic hinterland in other countries, a vulnerable arrangement as confrontation had shown. Our token water we drank had to be mostly imported. We had no natural resources other than a diligent and enterprising people."*

(Dr Goh Keng Swee in his 1970 Budget Statement)<sup>1</sup>

*"We have ended the twentieth century on a high note. We are on the way to becoming a nation where there was none before. Our people are well educated, and able to make a good living. We have created a role for ourselves as a regional hub in Asia, and as a productive node in the global economy. Our economy is developing an external wing, to overcome the constraints of our small population and island. Year by year we have climbed up the economic ladder. With per capita income of \$40,000 and universal home ownership, Singaporeans today are among the better off in the world."*

(Prime Minister Goh Chok Tong's National Day Message 2000)<sup>2</sup>

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<sup>1</sup> Parliamentary Debates, Official Report vol 28, col 481

<sup>2</sup> Singapore Government Press Release <http://internet.gov.sg/data/sprinter> accessed 8 August 2000.

## *Chapter Five*

### **Vulnerability, survival and the colonial legacy**

*“If Singapore is an exceptional state in terms of its economic performance, it is also such a state in the way in which the spectre of worst-case disasters arising from an innate vulnerability hovers perpetually over the island in the perception of its political leaders” (Leifer 2000, 9).*

#### **5.1 Introduction**

This thesis is concerned with the mechanics of political and economic developments in post-independence Singapore, and particularly with the period of accelerated change from the mid-1980s. However, although Singapore came into being as a city-state on 9 August 1965, it has neither forgotten nor ignored its history under two colonial powers over a period of 144 years. Singapore’s development since 1819 has been examined by a number of scholars (see in particular Ooi and Chiang (1969); Turnbull (1989); Sandhu and Wheatley (1989); Chew and Lee (1991); Regnier (1992); Huff (1997)), and its continuing relevance is emphasised by Ho (2000, 13), who observes that the island’s early political history “casts a long shadow on present-day policy decisions”.

The purpose of this chapter is to touch briefly on four aspects of the long shadow of the past that are particularly relevant to this study, and are set out below. The first is an unremitting presence in the political, economic and social life of Singapore; the other three are by way of background to the three case studies that illustrate the themes of the chapters that follow:

- *Singapore's innate vulnerability.* This feeling is ingrained in the national psyche, and an issue that for 37 years has been deployed regularly by the People's Action Party (PAP) leadership in its efforts to promote feelings of nationhood, strengthen commitment to the economic project of the developmental state, and assist in legitimising the PAP's total hold on power.
- *The colonial port.* As the heart of the "global city of international trade" (Chin 1999, 18) the port, arguably, *is* Singapore. The colonial power's Singapore Harbour Board (SHB) has evolved into PSA Corporation, an MNC and one of the city-state's major 'champions'.
- *The colonial banking sector.* The Development Bank of Singapore took root in what was already a well-established colonial banking sector.
- *Forerunners of the biomedical sciences.* Compared with the port and banking, the biomedical sciences were late arrivals to the Singapore economy. However, some of the building blocks for this sector were in place prior to independence and in the years of export-oriented industrialisation (EOI) in the 1970s and 1980s. Because the biomedical sciences are inextricably linked with the move in the 1990s towards a knowledge-based economy, the background developments covered in this chapter extend beyond 1965 and through to the late 1980s.

### *5.2 An enduring vulnerability: the emphasis on survival*

Superlatives and impressive statistics are not in short supply when it comes to describing the making of Singapore, and it never ceases to surprise that this 'miracle', this 'Asian tiger', is a tiny city-state with a population (including non-residents) of just over four million. Yet it is today one of the most successful countries in the world when measured against such yardsticks as competitiveness, attraction for business, corruption, transparency of government policy and the use of information technology (IMD 2002). Despite all its successes, however, Singapore is a country that still does not feel completely at ease with itself. This is largely because, since separation from Malaysia, the process of development has been underpinned by one unchanging imperative – survival. In his masterly study of Singapore's foreign policy, Leifer (2000, 1) suggests that it has been "predicated on

countering an innate vulnerability”, and that the fragility and vulnerability present at separation from Malaysia on 9 August 1965, have “served to justify a state-led philosophy of ‘survival’ that has never been fully relinquished” (Leifer 2000, 4).

Seah (1980, 144) similarly observes that, “the concern for survival has been the major underpinning of Singapore ever since...1965”. Certainly, for those who assumed power that year, the sense of vulnerability was palpable. According to Leifer (2000, 6), a triumvirate comprising Lee Kuan Yew, Sinnathamby Rajaratnam (Foreign Minister) and Goh Keng Swee (Minister for Finance and Defence Minister) “set the parameters for policy on the basis of a shared view of the predicament of the miniscule state”. From the start, Singapore’s leaders were aware that for a tiny state with a prized strategic location, a key to survival would be a balance-of-power policy, with the aim of ensuring that global and major regional powers would have “a continued stake in the existence of a viable and independent Singapore” (Wu 1972, 3). That policy served the city-state well throughout the Cold War and is of no less importance in the Asia Pacific today, given the uncertainties of US policy, the protracted economic difficulties being experienced by Japan, and the huge emerging power that is China.<sup>1</sup>

Over the years, the People’s Action Party (PAP) leadership has regularly taken to comparing Singapore with Switzerland - hence the aspiration for the financial centre to become the ‘Zurich of the East’ - and a minister, George Yeo (quoted by Bellows 1990, 209), followed this trend when suggesting a causal link between vulnerability and the pursuit of excellence: “Like the Swiss people, it may be our destiny to be forever insecure, and for that insecurity, it drives us excessively to excel”. A problem with the ‘survival philosophy’, so central to the thinking of the first generation of Singapore’s leaders, is that it does not appear to dominate the thinking of young Singaporeans today, in the way it did their parents and grandparents. This was illustrated in an interview given in the mid-1990s by the former Foreign Minister, Sinnathamby Rajaratnam (Chew 1996, 157). He likened Lee Kuan Yew to Moses in his efforts to lead the people of Singapore for 30 to 40 years through the hardships of the desert. He (Lee) knew where the Promised Land was, but

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<sup>1</sup> Lee Kuan Yew has made regular pronouncements about China as an emerging power. He recently suggested that by 2050, China will have a GDP approaching that of the US. *Business Times*[O] (22 May 2002) ‘China to challenge US economy by 2050, says SM Lee’.

wanted first to make the people tough. “But we live in a Garden of Eden”, protests Chew. “That’s the problem”, observes Rajaratnam wryly.

Back in 1965, however, as Lee states in the second volume of his memoirs (2000, 25), Singapore was embarking on “a journey along an unmarked road to an unknown destination”. Lee and his close associates were much affected by the cruelty of the Japanese occupation between 1942 and 1945, and influenced, too, by the lessons from 141 years of British rule. There thus immediately developed within the new leadership, “...a realization that in a crisis Singapore must rely upon its own resources, and a determination to ensure that the island would never again be occupied and exploited by others” (Thio 1991, 111). Singapore’s separation from Malaysia on 9 August 1965 brought an end to Lee Kuan Yew’s dream of a ‘Malaysian Malaysia’ and left the PAP leadership with the difficult – or as many thought at the time, impossible – task of enabling the survival of the fledgling state. Overnight, Singapore had been cut adrift from its immediate hinterland, and had no natural resources with which to build an economy. The differing attitudes of the two leaders to the trauma of the event are revealing. Tunku Abdul Rahman, the Malaysian Prime Minister, was both patronising and dismissive: in his view, Malaysia was in control of the situation, and Singapore would have to accept its inferior status or face consequences that could include cutting off the water supply from Johor.<sup>2</sup> Lee Kuan Yew, in the first volume of his memoirs (1998, 663), describes how the Tunku even spoke in terms of the new sovereign state having to consult Malaysia regarding its dealings with foreign governments. This was an attitude guaranteed to raise the ire and strengthen the determination of Singapore’s leadership, which had already shown its mettle in dealings with the British colonial power and the communists, and now had no intention of bowing to the ‘inevitable’ futility of efforts to turn Singapore into a viable state.

The challenge was enormous. Singapore was faced with an independence it had never sought, the loss of its Malaysian hinterland, Indonesia’s continuing policy of ‘Confrontation’, a declining entrepôt trade, and a diminishing strategic role within Britain’s fading empire. However, once he had overcome his initial grief at the separation, and what he regarded as a lost opportunity for all the peoples of Malaysia and Singapore,

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<sup>2</sup> This remains a disputed issue, with Malaysia patently unhappy with pricing arrangements that date back to a 1961 agreement. Renewal dates of this agreement fall due in 2011 and 2061, and the implications are discussed in Chapter Ten.

Lee Kuan Yew sought to inspire Singaporeans to 'achieve the impossible'. In a speech in Sembawang just over a month into independence, he likened Singapore to a local delicacy, the durian fruit, which Malaysia had tried to squeeze, but in so doing had hurt its hand and thrown away the durian. However, said Lee, "inside the durian is a very useful ingredient, high protein... And we will progress" (Han *et al.* 1998, 311). Symbolic of his rallying calls was this prophetic statement in the same speech: "Over 100 years ago, this was a mud-flat, swamp. Today it is a modern city. Ten years from now, this will be a metropolis. Never fear!"

From the point of view of Singapore's vulnerability within the Southeast Asian 'shatterbelt', and amidst fears of a communist 'domino effect' resulting from the struggle in Vietnam, it is of immense significance that within two years of independence, Singapore was not alone in its fight for stability, security and survival. The Association of Southeast Asian Nations (ASEAN) was formed on 8 August 1967, with the initial formal aims of (a) accelerating economic growth, social progress and cultural development in the region, and (b) promoting regional peace and stability.<sup>3</sup> More to the point it was, according to Foreign Minister Rajaratnam (quoted in Drysdale 1984, 402), "a forestalling of a Great Power manipulation and Balkanisation". Equally significant was the fact that ASEAN brought together Indonesia, Malaysia, Philippines, Singapore and Thailand in what has proved an enduring - and in the developing world of the 1960s, rare - example of regionalism. It may be argued, naturally, that ASEAN's staying power owes much to an open and informal approach to the handling of policies generally, and to differences between members in particular, when the principle of non-interference in one another's internal affairs is the rule. The organisation's speed of action, however, has not always been to Singapore's satisfaction, but its very survival, expansion and increasingly confident voice are closely linked to the Republic's own development. In this respect, Rogers (1972, 176) makes two pertinent observations: first, Singapore considered economic development the best defence against outside interference, and second, links with other ASEAN countries were looked on as prerequisites for political stability and economic prosperity.

Singapore's swift progress rendered it ineligible for UN economic aid as early as 1972, the same time as defence and internal security were accounting for around 30 percent of the

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<sup>3</sup> [www.asean.or.id/history/overview](http://www.asean.or.id/history/overview) accessed 14 December 1999

annual budget. This high figure was largely in response to the final withdrawal of British forces in 1971 - for the latter generated 12.7 percent of GDP and employed 20 percent of the workforce - but it may also be regarded as an indication of Singapore's fierce determination to protect its territory and sovereignty from attack from potentially hostile neighbours. Some of the hostility from its Muslim neighbours was undoubtedly due to the fact that Singapore looked to Israel for assistance and advice on the development of its defence force. What is of most interest here is that the link with Israel illustrates a facet of the PAP-state's pragmatic approach to problem solving that still prevails today: i.e., a readiness to seek the views and assistance of outsiders in addressing matters pertinent to the country's development.

Some of the threats to Singapore's very existence have been, and are, only too real, not least due to its presence as a 'little red dot'<sup>4</sup> in the midst of the 230 million-strong Malay world of Indonesia and Malaysia. Economically, the city-state has survived world crises during the 1970s, 1980s and 1990s and the Asian financial crisis of 1997. The most serious impact of all, however, has been inflicted by the severe world recession at the turn of the twentieth century. While there is no gainsaying these external threats to Singapore's security and economic well-being, equally evident is the highly effective manner in which the PAP have used external threats as a means of motivating and controlling civil society, and of cementing the Party's legitimacy. The ideology of 'survivalism', according to Brown (1998, 39), was espoused by the PAP in 1965 because at that time there was no nation-state in either an economic or a cultural sense, and no "myths of national identity". Brown continues: "They [the PAP] sought legitimacy by inculcating a siege mentality in which it was precisely the lack of state power and of national cohesion which made political acquiescence by civil society so imperative".

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<sup>4</sup> This dismissive reference to Singapore was made by the former Indonesian President, B.J. Habibie, when he took offence that aid offered by Singapore to help Indonesia's recovery from the Asian financial crisis, had certain strings attached. Asserting that Indonesia was 'the regional giant', he said that Singapore was nothing more than a 'little red dot' (*Straits Times*[1] (16 January 2001) 'Gus Dur and Singapore: is all forgiven?').

### **5.3 Growth of a colonial entrepôt**

#### **5.3.1 Introduction**

Approaching end-2001, Singapore could boast (since 1986) of having the world's busiest port; of being involved in a constant tussle with Hong Kong for top place in the world container league; having the world's top bunkering port, the world's third largest oil refining centre, and the seventh largest merchant fleet in the world. Some 400 shipping lines with links to over 700 ports worldwide call at Singapore; a ship arrives or departs every two to three minutes; more than 141,000 vessels arrived in 2000; some 46,000 TEUs (twenty-foot equivalent units) are handled daily; at any one time, as many as 800 ships and 100,000 containers are in port; and in 1999 cruise liners made nearly 1,400 calls at Singapore's Cruise centre on the harbour front. There are many more, equally impressive, statistics which can be employed to reinforce Singapore's position as *the* major hub for port and maritime activities in Southeast Asia, and a key link in the global transport and logistics chain.

The significance of the latter role derives from the fact that in the increasingly integrated global economy, more than 90 percent of transportation is carried by ship.<sup>5</sup> Given the linkage between sea and land and air transport, it is not surprising that the Singapore government allocates a high priority to its transport and logistics sector, and that it has in the PSA Corporation and Singapore Airlines major world players in their respective fields. It is also noteworthy that their impact has not been restricted to the Singapore economy, for a study conducted by the National University in 1997 demonstrated that:

“...Singapore's transportation infrastructure, namely its efficient airport and seaport, has facilitated the growth and economic development in the Southeast Asia region....Singapore's infrastructure facilities have increased the domestic capital productivity of ASEAN economies, thereby enabling greater economic growth and development with the same capital stock.” (Chen 2000, 2)

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<sup>5</sup> According to Pronk (1992, 38), the International Maritime Organisation (IMO) has identified transport by ship as accounting for 80 to 85 percent of world trade in goods. Questions arise, however, as to what is being measured. In a more recent study, Stevens (1999, 43) produces a figure of 82 percent with reference to world trade in tons; however, using the (arguably) more meaningful measure of world trade in tons per kilometre, he concludes that 94 percent is carried by ship.

Within Singapore itself, the maritime sector (prior to the 2001 recession) contributed about three percent of GDP, employed more than 24,000 people and generated an annual turnover of some \$10 billion (Chin 1999, 18).

The harbour has been at the heart of Singapore's development since 1819 and, by the time of independence, and prior to the impact of import-substitution industrialisation (ISI), entrepôt trade was contributing up to 19 percent of GDP (McClellan 1971, 185). Writing soon after independence, the eminent historian, K.G. Tregonning (1969, 17) referred to the harbour's "strong beat", which had "pushed life into the multifarious institutions associated with it". Twenty years later Chia (1989, 334), an expert in Southeast Asian maritime matters, concluded that, "the well-being and fortunes of Singapore lie largely with the development and success of its port". Indeed, it is no surprise that as the nation and its economy have gone from strength to strength, so has the role and importance of the port become of ever-increasing significance. In Chia's words (1989, 334) it has developed into "the portal to the global economic system on which the country is so dependent for its continued prosperity". Stevens (1999, 261), in a more recent analysis, supports the view that, taken together with many allied activities such as distribution and processing, the port "was and is the prime government instrument to help Singapore become an international power".

### ***5.3.2 The colonial legacy***

It is not my purpose here to chronicle in all its aspects the development of the port of Singapore from Sir Stamford Raffles' landing on the Singapore River on 29 January 1819 to the emergence of the Republic of Singapore as an independent sovereign state on 9 August 1965. It is important, however, to place the development of the harbour and its infrastructure in context. As Chia (1989, 314) suggests: "...tracing the development of the port system becomes an exercise in understanding the island's development". However, most of the key texts (e.g. Chew & Lee 1991; Huff 1997; Ooi & Chiang 1969; Regnier 1992; Turnbull 1989) view the development of the port largely through the medium of trade and have little if anything to say about the port, or harbour, itself. Nowhere in the literature is there a comprehensive analysis of the port's spatial and structural development between 1819 and 1965.

It is sometimes taken for granted that the success of Singapore's colonial port was the natural outcome of a favoured geographical position. That success, however, cannot be explained solely from a deterministic standpoint. Put simply, the Riau islands, like Singapore, lay on the trade route from Europe and India to East Asia as it passed round the southern tip of the Malay peninsula and they, too, possessed safe and deepwater harbours. That Raffles determined to establish his settlement on Singapore island was the outcome of the British-Dutch power struggle rather than a calculated choice between Riau and Singapore. Indeed, as Raffles searched for a base from which to control the Straits of Malacca, top of his list of options were Riau, Johore and the Aceh coast of eastern Sumatra. As his frustration grew, it was clear in a letter to a friend dated 12 December 1818 (Moore & Moore 1969, 16) that he was willing to consider other options: "...I much fear that the Dutch have hardly left us an inch of ground to stand upon...(and) you must not be surprised if my next letter to you is dated from the site of the ancient city of Singapura".

Raffles quickly established Singapore as a free port, with the intention that it would "eventually destroy the spell of Dutch monopoly; and what Malta is in the West, that may Singapore become in the East" (Raffles, S 1830, 377). As Wong (1978, 56) stresses, the free port concept was "completely alien to the economic doctrines and practices of Western and indigenous leaders in Asia". Not only that, but in Wong's words again (1978, 58): "(By) the time the Straits Settlements became a Crown Colony in 1867 the free-port status of Singapore had already long been erected into an inviolable sacrosanct doctrine, which no colonial governor would have infringed with impunity".

There may have been an element of chance in the initial establishment of the settlement, but little was left to accident in its subsequent development. As the landmark 1957 report of a Commission of Inquiry<sup>6</sup> stressed (Legislative Assembly 1957, 6): "To these natural advantages the industry and hard work of the people of Singapore have added man-made port facilities, modern transit methods and handling equipment. Natural and mechanical resources have together produced cargo transport facilities in a competitive form and have, as a result, encouraged the development of an unusually healthy and extensive entrepôt trade". Wong (1978, 81) is equally clear about Singapore's "one great asset, its

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<sup>6</sup> Generally known as 'The Millbourn Report', after the Commission's chairman, Sir Eric Millbourn.

enterprising merchants, both east and west”, who had developed a structure of trade in Southeast Asia that “no other port could supplant”. The Chinese commercial diaspora, operating in a colonial enclave dedicated to free trade and uninhibited *laissez faire*, played a key role in making Singapore the premier port in Southeast Asia before the Second World War (Wong 1978, 84). But there were other major factors in Singapore’s port development: the arrival of steamships in the 1850s; opening of the Suez Canal in 1869; and exploitation of Malayan tin from the 1870s and rubber during the First World War.

The juxtaposition of Malayan tin and rubber and the already established port of Singapore actually became of much greater significance than the positioning of the latter on the East-West trade route. Wong Lin Ken, reported by McClellan (1971, 180), lends support to this view when he notes that the China trade’s domination of the Singapore entrepôt was of limited duration. Tregonning, in his seminal work (1967, 1), stresses the role of government as perhaps the chief among the reasons enabling Singapore to flourish as a port, not least because it brought something rare in the region at that time, “a modicum of law and order”. There is also evidence of the Government’s concern for the development of port facilities, although the pace does not really pick up until the final quarter of the nineteenth century. Despite the various developments, the main activities of the port were still conducted offshore, in the Roads, with local traffic handling the ships at anchor and loading or unloading goods either at the riverside godowns or the Telok Ayer waterfront immediately to the west of the entrance to the Singapore river.

Such was the situation at the start of the twentieth century, when a critical memorandum (Chamber of Commerce 1904) gave an interesting insight into official plans for harbour improvements, and the opposition of the Chamber of Commerce to certain of the proposed changes. Whatever the latter’s motives, it became swiftly evident that both government and public were unhappy with the way the port was being developed. The reported view of the public was that they were dissatisfied with the facilities provided by the Tanjong Pagar Dock Company – and the New Harbour Dock Company with which it had amalgamated in 1899 – on the grounds that they were “obsolete and insufficiently extensive” (Singapore Harbour Board 1959, 5). In 1905 the Tanjong Pagar Dock Company which, according to Chia (1989, 318), had come “to dominate the port operation and shipping business in Singapore”, was expropriated by government, following rejection of the funding the Dock Company claimed was necessary for harbour improvements. The Company was replaced

by the Tanjong Pagar Dock Board. "After this decision," says Huff (1997, 139), "the provision of port facilities was never again a major issue in Singapore". The Dock Board continued with the expansion of facilities in Keppel Harbour until 1913, when the Singapore Harbour Board (SHB) was established as a statutory board, with express instructions from the Secretary of State for the Colonies that business was to be "conducted...on strictly commercial principles" (SHB 1959, 4). One year later the offshore mole was completed, creating not only protection for local craft from the northeast monsoon, but also separating the Inner and Outer Roads.

Wong (1978, 69) is in no doubt as to the significant part played by the SHB: "(Its) far-sighted harbour improvement construction programmes contributed substantially to Singapore's continued position as a premier Southeast Asian port in the inter-war years". Of even greater significance was the 1929 Report of the Imperial Shipping Committee (ISC), chaired by that doyen of imperial geography, Sir Halford Mackinder. At that time the SHB only controlled activity on land (Trimmer 1929, 7), and the Committee turned its attention to the disadvantageous position of the Board, which had to rely solely on the performance and pricing of its "equipment, facilities and services to attract trade" (Trimmer 1929, 7), whilst shipping always had the choice in the free port to work in the Roads without payment of any port dues or charges (other than lighterage fees). Trimmer (Chairman, General Manager and Chief Engineer of the SHB) was concerned that any increase in SHB charges could simply move trade from the wharves to the Roads.

The Committee produced a detailed physical description of the port, and noted an important aspect of transshipment: this was the clear separation between imported and exported goods. The incoming manufactured goods, intended for wide distribution, were handled generally at the wharves, while the loading of local produce and raw materials was usually undertaken by local craft, or lighters, in the Roads. As the Committee confirmed (ISC 1929, para.9), this meant that, "...ocean-going vessels go as a rule to the wharf on their eastward voyage but anchor in the Roads on their westward voyage". The ever-increasing export trade, mainly of tin and rubber, had brought about an increase in the import of manufactured goods, and increased congestion in all parts of the port. The Committee agreed with the evidence submitted by Trimmer when it concluded (ISC 1929, para.13) that there were delays in the handling of ships at the wharves, and although there was not yet a major problem, "there will be serious congestion at the wharves within a few

years". Huff (1997, 132) claims that serious congestion had been a problem as early as 1917, brought about by the shortage of merchant shipping during World War II and the resultant build-up of produce in Singapore.

The Mackinder Committee determined on a staged approach to improving the harbour, an approach that would ease the immediate situation, not result in increased costs, and provide for future needs. Its schemes, claimed the Committee (ISC 1929, para.21), "...should provide sufficient wharfage to meet the needs of the port for a considerable number of years". Increased revenue would obviate any need to increase port charges, and so lessen the risk of losing trade to other ports in the region. The Committee was deeply conscious of this threat from Malayan and other ports, and made it the first point in their summary of conclusions. It is a threat that has never quite gone away and, as is noted later, has resurfaced in a potent form at the start of the twenty-first century.

Development and improvements continued throughout the 1930s and maintained Singapore's status as a world-class port. However, the War in the Pacific (1941-1945) and the Japanese occupation of Singapore (1942-1945) brought severe setbacks to the port: "...about 70% of the warehouses in Keppel Harbour suffered damage from bombing raids and much of the machinery and equipment in the dockyards fell into a state of disrepair. Port waters became encumbered with sunken craft and maintenance of port installations and ancillary facilities came to a standstill" (Maritime Museum). Thus the SHB had much to do in terms of renewal and investment when it resumed control in 1946. Chia (1989, 318) observes that the state of labour relations and management were matters requiring no less attention than the rebuilding of the port. The success of the SHB's efforts in achieving a rapid post-war build-up, and the establishment of Singapore as the fifth busiest port in the world after Rotterdam, New York, London and Kobe, was noted by the 1957 Commission of Inquiry, which refers to the return of "a pattern of trade similar to that which Singapore enjoyed in pre-war days" (Legislative Assembly 1957, para.4). The Commission also drew attention to the growth of a considerable trade in oil (in addition to the bunkering facility) and the re-establishment of Singapore's reputation as a passenger port. But despite the obvious success of the port's regeneration, the 1957 Report made clear that the time was ripe for a thorough investigation – prior to impending legislative changes and their possible effect on the activities of the port – to determine how the port's structure and management could help Singapore in maintaining and improving its trade.

There is little doubt that measured by the standards of the late-1950s, Singapore had an extensive and busy port. The main points made in the Commission's report (Legislative Assembly 1957, paras.7-31) were:

- There had been little change in the handling of cargo since the 1929 Report, the larger deep-sea vessels tending to use the wharves, leaving the smaller, local (i.e. regional) craft to anchor in the Roads. A 1956 survey had revealed that some 51 percent of import cargo and 34 percent of exports were dealt with in the Roads.
- The SHB wharves comprised about two and a half miles of quays, capable of handling twenty-two ocean ships and five coasters simultaneously. There was considerable pressure on these facilities, causing problems in alerting incoming ships about berth availability.
- The SHB was responsible for administration of the wharves and their associated warehouses and equipment, the Telok Ayer Basin and the Dockyard and ship repair facilities. However, this responsibility stretched only 300 feet to sea from the wharf frontage.
- The Roads and Singapore River were the responsibility of the Master Attendant. It was the view of the Commission that activity in the Roads was mainly responsible for the port's status as the major entrepôt port of Southeast Asia.
- The Inner and Outer Roads were separated by a mile-long detached mole. Dredging of the Inner Roads was an occasional requirement, while the deep-water anchorage of the Outer Roads was moved to the western end of Keppel Harbour during the northeast monsoon.
- The Singapore River, described as a sluggish tidal stream, dealt with a considerable amount of cargo, mainly through the movement of lighters to and from ships in the Outer Roads and the numerous godowns along the quays which stretched up to two and a half miles from the river mouth. Tidal movement brought two problems: lighters had difficulties in working at low tide because of widespread siltation; at high tide low bridges caused similar disruption for those boats needing to progress up river.

The division of responsibility between the Master Attendant and the Singapore Harbour Board was deemed by the Commission (Legislative Assembly 1957, para.30) to result in “a lack of cohesion and unity in the many facilities”. It expressed surprise that such a situation could prevail in “one of the major ports of the world”, and declared that future prosperity would depend upon the port being run as a proper commercial business, operating “in line with established international practice” (para.33). The message, quite clearly, was that reliance on the port’s superb natural advantages would no longer be sufficient in a changing and more competitive world. The Commission therefore recommended the setting up of a self-financing Singapore Port Authority to take responsibility for the whole of the port area and all contingent operations.

### *5.4 Early banking developments*

#### *5.4.1 Introduction*

The banking and financial services in Singapore are of considerable relevance in any attempt to interpret the rise of the city-state to world-city status. During the late-1960s a central tenet of government thinking was a determination to establish an international financial centre and assist a newly-created local bank - The Development Bank of Singapore (DBS) - towards a position of regional supremacy. The Development Bank, or DBS Bank as it has been called since 1982, is undoubtedly one of the city-state’s success stories and a highly visible manifestation of Singapore as world city. But before examining the rise of DBS Bank and its quest to be ‘a regional bank with global reach’,<sup>7</sup> it is first important to understand the nature, and scale, of the banking system in the period prior to independence.

#### *5.4.2 Emergence of a pre-independence banking sector*

When self-government came in 1959, it was immediately accepted that given the determination of neighbouring states to handle an increased proportion of their own trade, Singapore’s main economic activity, the entrepôt trade, would stagnate (Ow 1986, 229). This was the main rationale behind the push for industrialisation. The PAP’s 1959 election manifesto listed four advantages and four weaknesses of the industrial strategy. On the positive side were Singapore’s resourceful and enterprising people; a central geographical

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<sup>7</sup> DBS Annual Report (1997, 1)

position and excellent sea communications; the existence of a considerable amount of both public and private capital; and the presence in the region of relatively large markets. The major weaknesses were Singapore's free-port status, perceived as actually working against efforts to industrialise; the lack of free access to the markets of the Federation of Malaya; a shortage of skilled workers; and the fact that the (mainly Chinese) entrepreneurs were more inclined towards trade than manufacturing (Tan & Ow 1982, 280). To this last point may be added the fact that the industrial strategy required a range of skills, technical as well as entrepreneurial, that would not necessarily have been present within Singapore's trading community. One undoubted benefit of the entrepôt trade, however, did derive from the fact that, under the umbrella of the colonial administration, a healthy banking system had developed (Geiger 1973, 183).

Following the founding of Singapore in 1819, banks were first established in 1840 with the setting up of a branch of the Bank of Calcutta, but there were a number of failures, mainly due to unwise speculation. Successes came, however, in the second half of the nineteenth century when branches of foreign banks were established - the Mercantile Bank (1856), followed by the Chartered Bank (1861), and the Hong Kong and Shanghai Banking Corporation (1877). The Kwong Yik Bank (1903) was the first local bank, but it went into financial difficulties and was liquidated in 1913. The turn of the century marked a period of vigorous trading through Singapore, with imports of manufactured goods and exports of tin and rubber. The entrepôt role developed in importance and stimulated growth in banking, trade and finance (Lee 1987, 2). Successful entrants into the banking scene were the Four Seas Communications Bank (1906), the Chinese Commercial Bank (1912), the Ho Hong Bank (1917) and the Oversea-Chinese Bank (1919). Following the Great Depression these last three amalgamated in 1932 to form the Oversea-Chinese Banking Corporation (OCBC), now one of Singapore's three remaining local banks.<sup>8</sup> The local banks brought a new dimension to the banking sector of an Empire staple port. In such locations European banks' main objective was to finance the export trade, but the Singapore Chinese broke with this tradition through their introduction of deposit banks, mainly to serve the Chinese merchant community. A number, "reversing the European pattern, set up international branches with the head office in the staple port" (Huff 1997, 19).

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<sup>8</sup> The other two are DBS Bank and the United Overseas Bank (UOB). The emergence of the 'big three' is the outcome of the 1999-2003 liberalisation programme, which is discussed in Chapter Nine.

Expansion of the banking sector – particularly in the form of local Singapore Chinese banks – continued beyond World War II, and the arrival of the Overseas Union Bank (OUB) in 1947, to join OCBC and the United Overseas Bank (UOB - incorporated in 1935), meant that three of the four biggest banks in post-independence Singapore were then in place. The main focus of their activities continued to be with rubber entrepreneurs, and so the risks were high. Nonetheless, with Chinese and European banks remaining “more complementary than competitive”,<sup>9</sup> they together constituted “what could be regarded as a modern financial sector”<sup>10</sup> (Huff 1997, 289).

## 5.5 Precursors of the biomedical sciences

### 5.5.1 Introduction

There has been a *pharmaceutical industry* in Singapore for more than 50 years, although it had no real substance until the building of Glaxo's first factory in 1982. As Singapore followed progress in this field in the West, and also increased the pace of development towards its own knowledge economy, the 1980s brought a growing interest in *biotechnology*. In the early 1990s, both biotechnology and the pharmaceutical industry became incorporated in a broader concept, the *life sciences*. Through the second half of the 1990s the life sciences were eventually taken to comprise the pharmaceutical, medical device, biotechnology and healthcare services sectors and were chosen by government for development into the ‘fourth pillar’ of the economy (the other three, existing pillars being the electronics, engineering and chemical industries). Reference is still made today to the term life sciences, but it is increasingly replaced by one of arguably greater transparency and meaning, the *biomedical sciences*. This is the term that is used in the pages that follow, unless there is specific reason (e.g., with reference to published material and quotations) to use the term life sciences. Although there is still some confusion as a result of varying usage in press reports and releases, ministerial speeches and official documents, a firm indication of official thinking may be deduced from the title change of the EDB's *Life Sciences Directory 2000* to the *Biomedical Sciences Directory 2001*.

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<sup>9</sup> Generally, the Chinese relied on British banks for foreign exchange transactions, while the British in turn received deposits from the Chinese banks, these being surplus reserves arising from deposits collected from the Chinese community (Price Waterhouse, 1976).

<sup>10</sup> An indicator of the limited development of international banking at that time is given by figures for the United States: in 1959 only seven of that country's banks operated overseas through fewer than 100 branch offices (Huff 1997, 39).

### **5.5.2 *Roots of the growth of the biomedical sciences***

Following the deep recession in 1985, the following year was “a watershed...in Singapore’s economic history....For many Singaporeans the recession was an awakening to economic realities”. These were the words of Dr Richard Hu, Minister for Finance, during his Budget Statement of 4 March 1987,<sup>11</sup> and they marked the significance of the publication of the Report of the Economic Committee, headed by Lee Hsien Loong (Ministry of Trade & Industry 1986). “The Report contained no overt reference to either a knowledge economy or the life sciences, but there can be no doubt as to the change of emphasis, away from what was essentially a production base to the exploitation of growth niches, including those involving high-value, low-volume, performance-sensitive products. The Economic Committee did not list possible niches, but instead stressed the importance of being able to spot and exploit promising new trends and growth opportunities. Within the proposed investment incentive package there was emphasis on the need to increase R&D activity and the numbers of qualified engineers and technicians required to help attract high-tech companies to Singapore. A key theme of the Report was the determination to upgrade the economy, stemming from the recognition that “Singapore has reached a developed country’s income level before having become a developed economy” (Ministry of Trade & Industry 1986, 10). The Report, through its call to arms to industry and the educational establishment, proved highly effective in preparing the ground for the blossoming of knowledge-based activities within an economy in need of new niche developments.

The seriousness with which government viewed the development of biotechnology in the Republic was apparent in a series of actions - which reveal the National University of Singapore (NUS) as a key catalyst - during the latter part of the 1980s:

- The establishment in 1987 of the Institute of Molecular & Cell Biology (IMCB) at the NUS, with the objective of producing people able to contribute to R&D in biotechnology.
- Increased encouragement at NUS and technical institutes for students to pursue careers in biotechnology and related industries.

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<sup>11</sup> Parliamentary Debates, Official Report vol 47, col 82

- A deliberate policy of welcoming foreign professionals to boost the number and quality of those working in the biotechnology sector.
- Government financial support for collaborative work between companies and NUS.
- The Economic Development Board's establishment in 1988 of the National Biotechnology Programme (driven by a National Biotechnology Committee), to bring a structured approach to the promotion and development of biotechnology, and generate economic benefits.
- Incentive schemes to attract leading international companies to Singapore, encourage local companies to diversify into biotechnology, and promote partnerships and collaborations between local and foreign companies.

These points were made in a speech by Professor Lim Pin, Vice-Chancellor of NUS, at a 1988 conference on the development of biotechnology in the Pacific Rim, and specifically in three NICs – Singapore, South Korea and Taiwan. No doubt conscious of the presence of representatives of the US Department of Commerce and US Trade & Development, Programme, Professor Lim (1988, 6) was suitably upbeat about prospects in the three countries:

“(They) have dynamic economies with strong growth rates, coupled with the advantage of strongly science-based education systems and highly trainable and adaptable workforces. Biotechnology has been identified as a priority sector for industrial development as their economies are being restructured from labour-intensive traditional manufacturing to higher value-added and knowledge-intensive activities”.

These were worthy sentiments, but placed in realistic perspective by the subsequent comments of Dr Robert Yuan, Senior Advisor in Biotechnology to the US Department of Commerce. He suggested that visions might remain no more than that if the governments of the three NICs did not take certain actions. In particular he stressed the importance of developing a sound infrastructure and regulatory framework in order to attract foreign talent. His suggestions, based on experience of the American market, were highly pertinent for Singapore as it stood on the verge of what, to the city-state, was new territory:

- Collaborative R&D would only happen if government built up, and gave long-term support to, research establishments.
- US companies were unlikely to risk their technologies and capital in the region if there continued to be minimal protection of intellectual property rights and no harmonisation of the regulatory system.
- US biotechnology companies and investors would need to be persuaded of the opportunities in the Asia Pacific region (Yuan 1988).

To its credit, the Singapore Government, in the shape of the National Biotechnology Committee, did tackle this action list – with varying degrees of success – during the 1990s. Not surprisingly, those problems arising from protection of intellectual property and regulatory harmonisation have yet to be fully resolved. The Committee's overall approach was to identify a five-pronged strategy (the 1990 Biotechnology Master Plan) which effectively brought order and purpose to the previously uncoordinated activities of the 1980s. Following government approval of the strategy, the Singapore Biochemical Society reported in 1991 that this would “form the basis for promoting biotechnology development in Singapore. These (strategies) are geared towards enhancing developments in technology, manpower, industry and infrastructure, as well as bringing about greater national awareness and interest in biotechnology” (Teoh 1991, 4). The scene was set for biomedical sciences to be at the forefront of the government's push towards a knowledge-based economy.

### *5.6 Footnote on the colonial legacy*

By their very nature, colonial enterprises tended to be driven by the needs of the metropolitan authorities. Lee (1989, 40) is all too close to the mark when he asserts that, “the British in Singapore measured success by the amount of trade secured and the amount of roads paved”. Indeed, the port was developed to serve the trading and military interests of Empire, but little was achieved ‘behind the shop front’, as the 1957 Commission of Inquiry made clear. The banking sector, too, was established to service the requirements of European (and Chinese) merchants, and as such was narrowly based. However, there can be little doubt that both port and banking sector provided sound platforms from which the PAP Government was able to launch efforts to develop a healthy and sustainable economy.

One significant outcome of British 'exploitation' of Singapore is that there was no development of an industrial bourgeoisie. According to Huff (1999), this was a telling reason for the post-independence move to a 'hard' developmental state, with a total commitment to economic growth. It was also why, from the very start, says Rodan (1997, 150), the state was forced to take control of efforts to industrialise. Aw (1991, 403) makes the same point, but also stresses the importance of inadequate development in other aspects of life on the island. The colonial legacy of "little economic growth, massive unemployment, wretched housing, and inadequate education", left the incoming PAP administration with little choice, he says, but to be more proactive and interventionist if it was to deliver its promises to the people. This tendency and its various manifestations are matters I pick up in the next chapter. But before doing so, I return to Lee who, whilst rightly critical of Britain's record in attending to the welfare of the population, does pay tribute to one particular legacy that has proved a bedrock of Singapore government and administration, and key to the quality and integrity of economic and social advances over the past four decades:

"...the British hegemony should not be assessed in solely material terms. One hundred and forty years or so of British rule have etched on the Singapore consciousness certain principles and values which have become part of the national ethos. Singapore today is a country where the responsibility of government is assumed as a sacred trust, where the prime minister sets the tone of public life as the colonial governor once did, where the rule of law prevails, where corruption and graft are serious offences, where Commissions of Enquiry are appointed when matters of national importance are at stake, where civic-mindedness is a living reality, and where the public love justice and fair play. It is this combination of the spiritual and tangible aspects of our colonial heritage that makes it such a power for good" (Lee 1989, 42).

## *Chapter Six*

### **The visible hand of the state**

*“While the forms of state intervention in Singapore may change, their essence remains: the manipulation of polity, society, and economy to build and maintain a peculiar, and peculiarly successful brand of state-dependent capitalism” (Lim 1983, 762)*

#### **6.1 An active, interventionist government**

Central to the globalisation process are the differing approaches adopted by nation-states in their ‘handling’ of capitalism. In the 1980s and 1990s, coincident with the accelerating pace of globalisation, it became almost *de rigeur* for Western nations and international organisations like GATT/WTO, to assert that the way to live with (and profit from) globalisation was through the free-market ideology espoused by neoliberals such as Margaret Thatcher and Ronald Reagan. It was cause for perturbation in the West, therefore, that the form of economic governance backing the remarkable growth of the Asian NICs was the highly ‘visible hand’ of the state. Yeung (2000b) makes a persuasive case for rejecting theories of the mutual exclusivity of neoliberalism and statism. “However free it is”, says Yeung (2000b, 138), “every market is the outcome of state action”, and so neoliberalism cannot take credit for everything that succeeds in the free market, but put the blame on the state for any failures. Yeung captures the argument in the following passage (2000b, 138):

“Neoliberalism ignores the inequality and uneven development inherent within capitalist accumulation. Markets are unable to address these structural imbalances precisely because they are inherent in the free-market system. The

role of the state then is to 'intervene' selectively and become market 'unfriendly' in that process. This is exactly what the developmental states of several Asian economies did in the past three decades: 'intervene' in the market in order to 'beat' the market. This 'embedded states' view rejects a conceptual separation between economy (in which the market is located) and state. The state thus has an indispensable role in promoting all spheres of market activities, including production, circulation and consumption. As such, it is no longer a question of choosing between neoliberalism and state intervention because the measurement of state role is not operationalized by its degree of intervention".

What is apparent in the pages that follow is that Singapore, driven it must be said mainly by necessity, adhered to the concept of the 'embedded state' from the early days of independence. In so doing it has demonstrated an all-important willingness to change the thrust and direction of state intervention in the economy in response to fluctuations in the global economy. As I discuss in Chapter Eleven, however, the very 'embeddedness' of the state in the economy can produce obstacles to progress in the form of vested interests, the tendency towards an over-cautious approach by the 'nanny' state, and an inadequate role for the citizen - especially the entrepreneur - in wealth creation.

Low's work on the political economy of a city-state carries the sub-title, 'government-made Singapore' (Low 1998). This underscores a breadth and depth of state intervention not found in Western democracies. At times, this has given rise to misunderstandings on both sides, with some in the West unable (or unwilling) to understand the rationale of the Republic's polity - including the Government's social contract with the people - and Singapore's leaders equally resolved not to allow on newsagents' shelves comment that they regard as unfair and damaging to the state. Lee Kuan Yew was reported as pronouncing in 1988 that he would not allow "the Western press to perform the principle function it does in the West - agenda setting" (Bellows 1989, 153). In Lee's terms, an American- or UK-style press freedom would wreak havoc in Singapore. Over the years, *Asiaweek*, the *Far Eastern Economic Review*, *Time*, the *Asian Wall Street Journal* and *The Economist* have all fallen foul of Singapore's hard line on what is deemed 'foreign interference'. Arguably, it is all part of the survival mindset, for there continue to be regular spats of a similar nature with the Malaysian press.

There are a number of interpretations of Singapore's style of governance, including 'soft authoritarianism' (Means 1996), 'communitarian' (Chua 1997), and 'illiberal democracy'

(Mutalib 2000). Huff (1999), in describing Singapore as a 'hard' developmental state, draws attention to its total commitment to economic development, the origin of which may be traced back to the colonial administration's failure to develop an industrial bourgeoisie. This fact, according to Rodan (1997, 150), meant that from the very start the state was forced to take control of efforts to industrialise. Aw (1991, 403) concurs, stating that the colonial legacy of "little economic growth, massive unemployment, wretched housing, and inadequate education", left the incoming PAP administration with little choice but to be more proactive and interventionist if it was to deliver its promises to the people. The outcome over four decades has been what Lim (1983, 761) describes as unique to Singapore: that is, "the confidence - some might say, arrogance - of a government which cannot believe that anything it decides to do will not succeed, since it always has". On the few occasions when all has not gone as planned - the misguided graduate mother priority scheme of the mid-1980s stands out - the government's empirical, pragmatic and practical approach has been able to effect a change of direction. As Lee Kuan Yew professed in a *New York Times* interview on 16 August 1995 (Chew 1996, 139): "The most we would try was three years. Then we cut our losses and changed. That's the story of the last 35 years, one of never-ending learning. What works and what doesn't work".

An early confirmation that Singapore's economy is run by a pro-active and interventionist government comes from Lim (1983). In a similar vein to Yeung, she believes that contrary to the view of free-marketeers, Singapore's economic success has been built not on an adherence to free-market principles, but on the policies and actions of an interventionist government. "State interventions," says Lim (1983, 757), "have given Singapore a competitive advantage in export manufacturing which it would not have if free-market forces alone prevailed". Government intervention in Singapore is indeed widespread, and not limited to the construction of a successful 'planned economy'. The state has also had a significant impact through its actions in such areas as the housing market and land development (Haila 1999), and population control (Saw 1999). But it is the hand of government in the economy, and specifically in its policies towards foreign direct investment (FDI), multinational companies (MNCs) statutory boards, state-owned enterprises (SOEs), and government-linked companies (GLCs), that has made the greatest impression.

Chiu, Ho and Lui (1998, 80) make a persuasive case that rejects the commonly held view of Singapore's 'miracle' as the result of transformation of the city-state's manufacturing sector into one of export production. At the heart of the miracle, they claim, is "the ability of the state to ensure the conditions of profitability for multinational capital through the various changes in Singapore's competitive conditions as a manufacturing site". Even before Singapore turned from ISI to export oriented industrialisation (EOI) in the late-1960s, the government had shown an acute awareness of the need for FDI to kick-start manufacturing activity. Between 1959 and 1966 capital expenditure attributable to foreign-controlled firms trebled and accounted for nearly two thirds of total capital expenditure (Chiu *et al.* 1998, 37). It was during the 1960s that key decisions taken by the newly-installed PAP Government produced an infrastructure for industrial development that has survived, with remarkably little amendment, to the present. Government's role, however, has come under increasing scrutiny from the private sector, and I discuss the implications for the future in Chapter Eleven.

In this remainder of this chapter I look at the two main ways in which the PAP Government has controlled and directed economic development. First, it has maintained an unflagging belief in the vital role of FDI and foreign MNCs as drivers of the economy; and second, it has made extensive use of statutory boards, SOEs and GLCs to set trends, develop niches, and generally ensure that desired outcomes are achieved. I draw upon case studies illustrating: (a) the part played by leading global companies in the growth of Singapore as a major production centre for pharmaceuticals and medical devices; (b) the significance of a pre-eminent statutory board/SOE – the port of Singapore Authority (PSA) – in the consolidation of Singapore as a major hub of world maritime trade; and (c) the use of a GLC, the Development Bank of Singapore, as a tool in the early industrialisation programme and as a leading component of the strategy to establish Singapore as an international financial centre.

## ***6.2 Foreign direct investment and multinational companies as drivers of growth***

Early attempts to attract foreign investors were successful not least because of the stable political environment Singapore provided within a region full of uncertainties. A decade into independence, in 1975, almost half of all FDI in Asia was destined for Singapore, a

remarkable figure given the size of the country. This influx of global finance assisted the growth of the financial and services sectors, and a concomitant facility to provide support and services for investors and MNCs alike. The latter were not welcomed solely for the part they could play in developing manufacturing output: government has consistently offered facilities and incentives for MNCs to set up regional headquarters or offices in Singapore. The result has been a key feature of Singapore's status as a world city, that of a dominant regional hub in Pacific Asia.

The state's 'hands-on' approach to the economy has meant not only direct assistance to foreign MNCs, but also a highly structured relationship between government, employers and unions, and a banking sector (epitomised by DBS Bank in its early years) closely involved in the financing of industry. The resultant package is attractive to foreign investors. The downside stems from the banks' preference to assist MNCs rather than local small- and medium-sized enterprises (SMEs). Government, increasingly aware of dissatisfaction among the smaller local private companies has, as part of its drive to produce Singaporean entrepreneurs, introduced forms of encouragement and support for SMEs. It also faces another problem, one associated with changes in the international division of labour. Many of the MNCs that moved to Singapore in the 1960s and 1970s did so largely as part of the developed world's urgent search for cost reductions. By the 1990s, however, Singapore (along with the other Asian NICs) had developed its own rising costs, making it less attractive to capital in search of cheap production locations. As I suggest later, a key purpose of Singapore's Growth Triangle is to offer attractive facilities for MNCs that require cheap land and labour. Retaining those MNCs already based in Singapore, and finding others to put down roots in the Republic rather than in developing countries, remains a top priority for the PAP Government. However, without denying the importance of this strategy to retain a small but strong production base (especially in electronics), the main thrust of Singapore's continuing efforts to attract MNCs must lie in the development of the knowledge economy and its association with higher value-added activity and the need for talented staff.

The DBS Bank neatly illustrates what can be achieved when government aspirations – and messages for the business community – are channelled through a GLC. When John Olds was hired in August 1998 as the DBS CEO, he was the first foreigner to fill such a post within the conservative banking sector. Within 12 months, he and his chairman, S.

Dhanabalan, had taken on 24 experienced bankers, including eight foreigners and several Singaporeans who had worked for foreign banks. The Bank's share price rose five-fold in the year, a sure reflection of the approval of market analysts and investors.<sup>1</sup> A sign of the changing times was also reflected in a late-2001 report from a team of leading government economists. Their analysis revealed that whereas in the period 1986-1990, foreign talent contributed 5.3 percent of the GDP growth rate, the figure for 1991-2000 was 36.9 percent. During the latter period the contribution of the local work force was 14.1 percent.<sup>2</sup> As might be expected, this influx of talent is paralleled by Singapore's continuing appeal to foreign investors and firms.

*The Economist Intelligence Unit* (EIU) reported at the end of 2000 that Singapore was the region's second most attractive investment site (after Hongkong); 30 percent of respondents in the EIU survey said that Singapore was their choice for regional headquarters (35 percent for Hongkong).<sup>3</sup> There are currently some 6,000 foreign companies based in Singapore, with half having regional responsibilities (in ASEAN, South Asia, Australasia and East Asia), and since 1986 the EDB has awarded official [regional] headquarters status to around 200 companies.

In the two sections that follow, I concentrate on three MNCs involved in high value-added production activities, so sought after by Singapore as it seeks progressively to shift the balance of its manufacturing sector away from basic forms of production and the associated cheap labour. Coming from the fields of pharmaceuticals and medical devices, these companies also form the heavyweight element of the growing biomedical sciences sector which government is pushing as the putative 'fourth pillar' of the economy. Increasingly, there is evidence of pharmaceutical companies linking up with educational establishments in R&D initiatives set to encourage recognition of Singapore as an Asia-Pacific hub for biomedical science research. The government's success in attracting global players in the pharmaceutical business is evident in performance figures<sup>4</sup> showing that seven of the top ten companies (in terms of worldwide sales) are present in Singapore (see Table 6.1).

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<sup>1</sup> *Straits Times* (15 August 1999) 'Foreign talent key to Singapore's future'

<sup>2</sup> *Straits Times* [I] (1 November 2001) 'Foreigners boosted economy by 37%'

<sup>3</sup> *Straits Times* [I] (9 January 2001) 'Singapore is No 2 in Asia: investment survey'

<sup>4</sup> *The Economist* (20 July 2002) 'Fitzer and Pharmacia: mating and waiting'

Table 6.1 The pharmaceutical products sector

<i>Company</i>	<i>Production of bulk actives/ intermediates (a)</i>	<i>Finished products (b)</i>	<i>Clinical development centres</i>	<i>Products &amp; Services (a) &amp; (b)</i>
Astra Zenica*			X	Pharmaceutical bulk actives
Aventis Pharma*	X	X		Pharmaceutical products
Beacons Chemicals		X		Pharmaceutical products/health food
Drug Houses of Australia (Asia)			X	Pharmaceutical bulk actives/antibiotics
GlaxoSmithKline*	X	X		Pharmaceutical products/contract packing
Integrated Contract Manufacturing				Antibiotic intermediates
Kaneka Singapore	X		X	
Lilly*-NUS Centre for Clinical Pharmacology				Products for dispensaries & clinics
Little Pharmaceutical Suppliers		X		Pharmaceutical products
Malaysia Chemist		X	X	
Merck				Pharmaceutical bulk actives
Merck Sharp & Dohme*	X			
Novo Nordisk Asia Pacific			X	Pharmaceutical bulk actives
Pfizer Asia Pacific*	X		X	
Pharmacia Singapore			X	Pharmaceutical bulk actives/steroids
Schering-Plough	X		X	Cough syrups
Senkon Medical & Health Products		X		
Serono Singapore			X	Pharmaceutical products – creams, syrups etc
Sunward Pharmaceutical		X		Generic products
Union Chemical & Pharmaceutical		X		Nutritional & pharmaceutical products
Wyeth-Ayerst *		X		

\* Ranked in top ten companies, based on worldwide sales

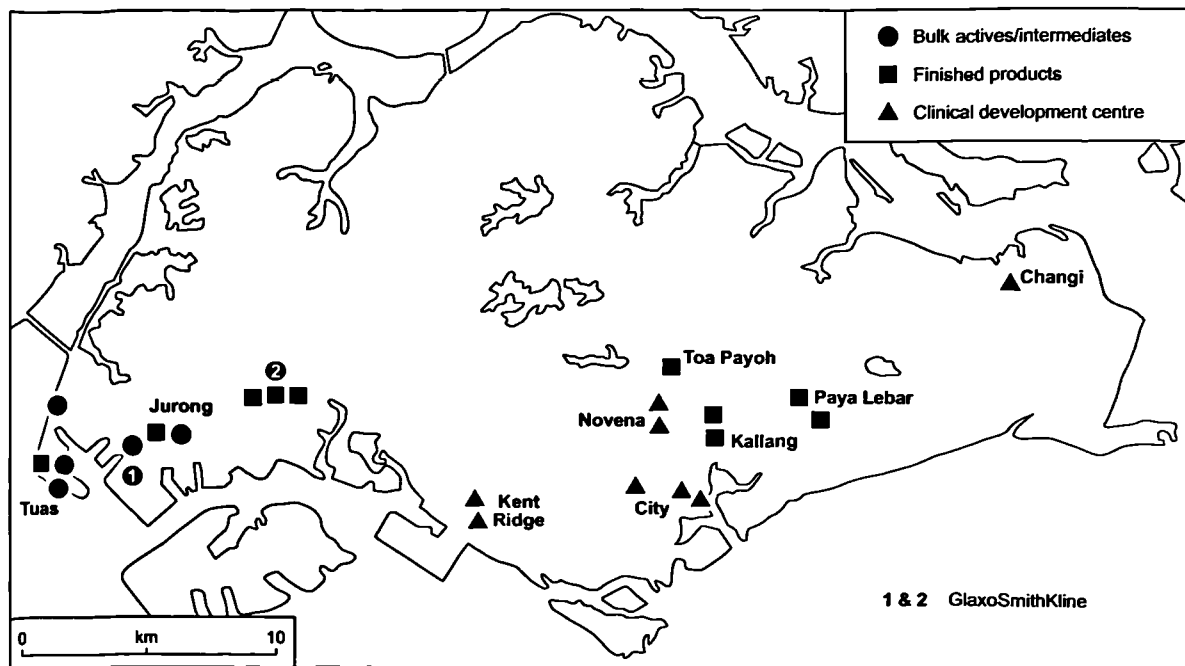
Source: Singapore Biomedical Sciences Directory 2001

**6.2.1 Pharmaceutical MNCs: GlaxoSmithKline leads the way**

Pharmaceutical companies underpin the Singapore Government's hopes and aspirations for the biomedical sector. Five MNCs – Pfizer, Schering-Plough, Wyeth-Aerst, Merck Sharp & Dohme, and GlaxoSmithKline (GSK) – have invested over \$3 billion in activities ranging from factory production of bulk actives to R&D ventures and support for academic institutions and students. Most of the action has taken place in the past decade, largely as a result of the government's push for development of the biomedical sciences. Glaxo was much earlier on the scene, having established an office in Singapore in 1948, but the pharmaceutical industry did not really take off until Glaxo opened its first factory in Jurong in 1982. Since then, the development of basic production of bulk actives and intermediates has been completely in the hands of foreign MNCs. These have built factories in the Tuas-Jurong area in the southwest corner of the island (see Figure 6.1), drawn there as the result of extensive land reclamation, the growth of Jurong Town and Port, government incentives and the attractions of the Tuas View Pharma Park. A glance at Table 6.1 is sufficient to reveal the dominant role of foreign MNCs in all three segments of the pharmaceuticals sector. Both GSK and Schering-Plough have clinical development centres, and are joined in this work by other MNCs such as Lilly, Merck and Novo-Nordisk. With the exception of Merck's facility at Changi International Logistics Centre, the clinical development centres are located either close to the city centre in dedicated office/laboratory blocks or within the NUS-National University Hospital-Science Park zone adjacent to Kent Ridge (Figure 6.1). Finished products are intended mainly for domestic and Southeast Asian markets, but heavyweight MNCs Drug Houses of Australia (DHA) and Wyeth-Aerst are among five companies drawn to the Tuas-Jurong area; the remainder are clustered to the northeast of the city.

It is arguable that what is now GSK was - in the previous forms of Glaxo, Beecham and Wellcome - the crucial driving force behind development of the pharmaceutical industry in Singapore. But before assessing GSK's role, it is important to remember the relatively late growth of a critical mass within the pharmaceutical sector. The fragile state of an embryonic pharmaceutical industry was evident in 1983, at a strategy meeting between the International Federation of Pharmaceutical Manufacturers Association and the Singapore Association of Pharmaceutical Industries (SAPI). Both were anxious to see Singapore as Asia's centre for the manufacture of high quality pharmaceutical products, but observed that there was little evidence of the necessary infrastructure. SAPI's president could not

have been more forthright: “Singapore now stands about alone in the world, in having no health regulation procedures for pharmaceutical products. The result is a plethora of cheap generic products, many of dubious quality, abounding in the market”.<sup>5</sup> It is against this background that the importance of Glaxo’s decision to build the Jurong facility in 1982 should be assessed.



**Figure 6.1 Distribution of factories and laboratories of pharmaceutical companies**  
Source: Singapore Biomedical Sciences Directory 2001

In 1987 two significant decisions gave welcome impetus to the pharmaceutical sector: first, the Health Ministry revealed that it would phase out its own drug facility<sup>6</sup> and invite tenders for a large range of medical items for local pharmaceutical companies; and second, drug registration became effective, so introducing quality control on both imports and exports.<sup>7</sup> The impact on local companies was immediate and positive, and reflected in a growing interest in opening up overseas markets, such as China and the US. By 1991,

<sup>5</sup> *Business Times* (8 December 1983) ‘Need to enhance pharmaceutical industry here’

<sup>6</sup> The Health Ministry operated a pharmaceutical facility in an old converted warehouse in the Alexandra district from 1950. Its main aim was to undercut proprietary patented drugs from commercial sources, and sell drugs to government hospitals and outpatient dispensaries. Concerns that this gave the wrong message to both foreign and local pharmaceutical companies were raised in Parliament (*Business Times* [16 May 1985] ‘Pharmaceutical factory will not affect privatisation’).

<sup>7</sup> *Straits Times* (18 August 1987) ‘Drug firms benefit from Ministry move’

pharmaceuticals were being described as one of the 'star' industries in Singapore's manufacturing sector.<sup>8</sup> However, R&D activity was at a low level, due largely to the fact that the synergy of the biomedical sciences, subsequently promoted so effectively by the EDB, had yet to emerge. The signs for the future, as indicated by the results of a detailed survey,<sup>9</sup> were nonetheless positive:

- The perception of Singapore as 'the best location for pharmaceutical companies to set up their regional headquarters', due to its financial and communications infrastructure and trained manpower.
- The view that Singapore had the most straightforward registration procedures for pharmaceutical products already registered in Europe, the US and Japan.

However, despite the vibrancy and optimism of local companies such as Tiger Balm Ltd, which in 1988 had declared its intention to become a pharmaceutical giant originating from Singapore,<sup>10</sup> the Government was aware that the future of pharmaceuticals in Singapore would depend on its ability to attract more world leaders to follow in Glaxo's footsteps and set up both manufacturing and regional headquarters. In this respect, Glaxo/GSK forms an interesting and informative case study.

Prior to Glaxo's introduction of the stomach ulcer drug Zantac in 1980-1981, the company was geared largely to UK and Commonwealth markets; its thinking was markedly Eurocentric. Zantac changed that, becoming the world's largest-selling prescription medicine and switching the company's marketing vision from the Eurocentric to the global. Glaxo built two factories to produce the bulk chemical compound Ranitidine Hydrochloride, the powder that its factories around the world make into Zantac in tablet and injectable forms. The first of the production factories was in Montrose, Scotland; the other commenced operations in Pioneer Sector I at Jurong in 1982. The latter decision undoubtedly owed much to the critical coincidence of a company, Glaxo, looking for a site suitable for expansion of its manufacturing capacity, and a country, Singapore, developing

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<sup>8</sup>*Business Times* (15 March 1991) 'Pharmaceuticals: R&D activities low in Singapore'

<sup>9</sup> Conducted by executive research firm Egon Zehnder International (*Straits Times* [18 March 1991] 'Singapore is the best site for headquarters of drug companies').

<sup>10</sup> *Business Times* (28 December 1988) 'Making medicine for the masses'

an interest in establishing a pharmaceutical industry. The Jurong project was the trigger for the company to be awarded pioneer industry status and benefit from attendant attractive tax breaks.

These factors alone cannot explain what Andrew Witty, GSK Senior Vice-President and Regional Director for Asia Pacific, describes as “a big, brave step”.<sup>11</sup> It is his view that, as is so often the case with such major business decisions, the personal factor was of paramount importance. Glaxo’s chairman, Sir Paul Girolami, who steered the company between 1975 and 1990, had a close affinity with Singapore and its leadership. Coupled with Girolami’s proven success as a risk-taker, Witty feels that this was probably the telling factor in the decision to invest in Singapore. Over the subsequent two decades the Glaxo group built on the ground-breaking move in 1982, and forged a close relationship with Singapore and its government. It came as little surprise, therefore, that when the EDB established its International Advisory Council for the biomedical sciences in 2000, the choice of chairman was Sir Richard Sykes, the chairman of GSK.

The unusually extended period of the Zantac patent (it did not expire until 1999) enabled Glaxo to upgrade the original facility at Jurong. Further, and substantial, indications of the company’s commitment to Singapore came in 1989.<sup>12</sup> First, it was announced that a new plant would be built on a site adjacent to the existing factory, to produce three new drugs which it was hoped would make good the anticipated loss in profits when Zantac went off-patent in 1999. The three drugs were Sumatriptan, for the relief of migraine; Salmeterol, for easing asthma; and Ondansetron, for reducing nausea and vomiting during cancer therapy. The second initiative, the setting up of a \$50 million trust fund, was to be administered by Glaxo and the EDB, and would concentrate on the development of human resources. A further \$50 million fund was awarded to IMCB, for the financing of research into brain diseases.

The building of the second major plant at Jurong was another milestone in what the *Business Times* described as “the forging of an enduring partnership between Glaxo and Singapore”.<sup>13</sup> In fact, by the time the second factory opened in 1993, Glaxo’s huge capital

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<sup>11</sup> Interview DS/AW (30 May 2001)

<sup>12</sup> *Business Times* (17 November 1989) ‘Glaxo to produce wonder drugs here’

<sup>13</sup> *Business Times* (4 June 1990) ‘Glaxo and Singapore forge enduring partnership’

and technical investment had brought to Singapore a primary manufacturing capability in the pharmaceutical field that few countries, even within the developed world, had managed to achieve. The catalyst for much of what had happened, Sir Paul Girolami, attributed Glaxo's long-term investment to "the positive economic environment and policies of the Singapore government (which had) made Glaxo feel very much 'at home' in Singapore".<sup>14</sup> He was later to award Singapore this resounding vote of confidence:

"The tax incentives do help but it's no point giving financial incentives if the basic economics, organisation or location aren't right....We recognised the tremendous technological developments that have taken place in Singapore. It was a natural choice. We did not look at alternatives".<sup>15</sup>

Nothing appears to have altered that view during the past decade, and it is one that, in differing ways, would be shared by other MNCs which have been drawn to Singapore. As Andrew Witty observes, big company decision makers like dealing with the Singapore government because "they act like a company, not a government".<sup>16</sup> In his experience, Singapore ministers and senior civil servants know what they want and enter easily into business-like discussions. It is clear that Witty, while not denying the importance of factors such as location and political stability in attracting businesses to Singapore, feels that the rational, company-oriented approach of government negotiators and decision makers carries considerable weight.

Capital investment by GSK in Singapore now totals some \$700 million, most of it in the two manufacturing facilities in Jurong, which produce antibiotics and the active pharmaceutical compounds for over ten GSK products destined for global markets.. The company also houses in Singapore one of six regional centres, in this case concentrating on the development of new treatments for diseases which have particular impact within Asia-Pacific, such as hepatitis B, asthma and stroke. The co-ordination of all GSK business activities in the region – which includes India and Australia – is conducted through the Asia Pacific Headquarters in Singapore. Given that the market in Singapore itself is small, this is another indication of the pull exerted by the island's infrastructure and supportive government. As one might expect, GSK's Regional Director for Asia-Pacific has no doubt

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<sup>14</sup> *Business Times* (4 June 1990) 'Glaxo and Singapore forge enduring partnership'

<sup>15</sup> *Straits Times* (26 May 1993) 'Pharmaceutical giants thriving here'

<sup>16</sup> Interview DS/AW (30 May 2001)

about either the quality or extent of the clinical work being done throughout the region – including China – under the strategic management provided from Singapore. Witty dismisses any suggestion that GSK might be biased towards Western markets at the expense of those in Asia, and supports this view by revealing that one in every two pills/injections/units sold by GSK globally is sold in India. He takes obvious pride in the fact that, when the top 100 drug companies in the world are assessed by value, GSK Asia-Pacific is ranked 16<sup>th</sup>, bigger even than Abbott Laboratories in the US. As the market leader in most aspects of the business in Asia-Pacific, GSK is twice the size of its nearest rival, Pfizer, and according to Witty it is also growing faster.<sup>17</sup>

Consideration of drug development and markets in Asia automatically gives rise to questions of costs and patents, both areas in which Western drug companies have struggled in the face of accusations from NGOs and the anti-globalisation lobby of self-serving practices. This is how Witty rationalises the costs issue: low-cost markets tend to be the norm in countries such as India, Vietnam and Indonesia, but the people there do not seek the ‘latest’ drugs, as is the case in the US and Europe. The result is that GSK sells, for example, effective and safe antibiotics that are no longer sold in the West, and does so at a fraction of their original cost. The real problem, he claims, is not the cost of the drugs, but the all too often inadequate local infrastructure to deal with their distribution. Witty feels that this state of affairs will continue until governments around the region take a more aggressive view of how to build an effective healthcare system. In common with many businessmen in Singapore, he is cautious about future prospects in China – where both costs and infrastructure are obstacles. Speaking in mid-2001, Witty envisaged no more than 200-250 million Chinese with sufficient income to consider the purchase of modern drugs; for the majority of the remaining 1.1 billion it is likely, he thinks, to be some considerable time before they can either afford or access GSK drugs.<sup>18</sup>

In the context of Singapore’s development of biomedical sciences the relative slowness with which the Chinese market might be opened up is not a serious setback. Drug

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<sup>17</sup> Pfizer’s acquisition of Pharmacia early in 2002 has been followed by speculation that GSK are to bid for the US company Eli Lilly, in order (presumably) to strengthen its premier position in the world pharmaceutical business (*Straits Times* [22 July 2002] ‘Glaxo may make \$99b bid for Eli Lilly’).

<sup>18</sup> Interview DS/AW (30 May 2001)

development does not produce quick-fix returns, and GSK is fully aware that establishing Singapore as a regional hub is a long-term business. It is also a process that, to be successful, requires the systemic approach being encouraged by the Singapore government. As Andrew Witty explains: “You hope that as you build, everything grows around you”.<sup>19</sup> Herein lies the importance of GSK for Singapore’s aspirations in the biomedical sciences field. The company has already been a key player in Singapore’s achievement in gaining a significant slice of primary-producing capability in pharmaceuticals. What the government now seeks is to absorb more of the pharmaceutical value chain in Singapore; and to do this they need GSK and others to continue to choose the island as a preferred choice for investment. The point was underscored by Philip Yeo of the EDB and NSTB, at the foundation-laying ceremony of GSK’s latest facility, which will support the manufacturing of some of the company’s respiratory products: “Your latest investment,” said Yeo, “will help strengthen Singapore’s role as a strategic manufacturing site for biomedical sciences companies”.<sup>20</sup>

Given the history and depth of GSK’s involvement in Singapore, Witty’s slant on the biomedical sciences as ‘the fourth pillar of the economy’ is instructive:

“We need to separate the two questions of ‘fourth’ and ‘pillar’. Philip (Yeo) is doing all the right things for the biomedical sciences to become a pillar of the economy; it will, however, take a long time. Whether or not something else comes in to be the *fourth* pillar, and it (the biomedical sciences) ends up as the fifth, sixth or sixteenth is another matter. But it will become a pillar. How and when depends on luck; it will need someone working with one of several hundred patents in Singapore to be lucky and discover the right drug. Then there will be an explosion of spin-offs and it will be a ‘big thing’”.<sup>21</sup>

In recent conversation with the *Far Eastern Economic Review*, Witty demonstrates an awareness that for local Singapore companies, the need to accommodate a combination of patience, risk-taking and (probable) failure, does not come easy: “Singapore isn’t famous for its tolerance of failure and high risk”.<sup>22</sup> The biomedical sciences and *kiasu* (see page 227) are not easy bedfellows. Quite obviously, however, there are already a good number

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<sup>19</sup> Interview DS/AW (30 May 2001)

<sup>20</sup> EDB Press Release (15 March 2001)

<sup>21</sup> Interview DS/AW (30 May 2001)

<sup>22</sup> *Far Eastern Economic Review* (15 November 2001) ‘Discovering drugs in Singapore’ [www.feer.com](http://www.feer.com) accessed 12 November 2001

of risk-takers, and they face an indeterminate period of evolution – perhaps between ten and 20 years - of the biomedical sciences sector. In sounding a cautionary note Witty cites the example of Glaxo's development of the first migraine drug: "It took 18 years work in the UK (from 1972), on the back of 100 years of evolution, and operating alongside universities with a 400-year history".<sup>23</sup> On a more positive note which must be of some comfort to the risk-takers, Witty's first-hand knowledge of the Asia-Pacific markets leads him to the conclusion that, although other countries like Taiwan and Hong Kong are keen to establish their own biomedical sciences sector, "only Singapore has really got its act together".<sup>24</sup>

That this is so owes much to government intervention. In 1993, at the opening of a Fisons chemical plant in Jurong, the Minister for Health gave notice of the Government's aim to develop Singapore into a leading centre for pharmaceuticals. In outlining a three-pronged approach involving close support of the companies, promotion of R&D activities and the development of skilled manpower, the Minister was reported as confirming that, "the Government will continue with its open and pro-active support for pharmaceutical firms".<sup>25</sup> At this stage there was no mention of a 'fourth pillar', but the attractiveness of what was becoming known as the 'Life Sciences' was increasingly in evidence. A big plus for government was the impressive value-added of the pharmaceutical sector, close to ten times higher than that for the manufacturing sector as a whole. The Government must also have recognised that its desire to increase R&D activity would lean heavily on the ability, and willingness, of global pharmaceutical companies to invest in this work. The number of investment incentives was impressive: an EDB publication (EDB 1992, 21) listed 10 in all, ranging from tax exemptions for pioneer status (awarded for innovative techniques of production), to tax relief for the siting in Singapore of an operational headquarters.

During the 1990s, the pharmaceutical industry was the 'big brother' to the youthful biotechnology businesses, and the latter were largely dependent on the former in turning bright ideas into real products.<sup>26</sup> Today, biotechnology companies do have more room for manoeuvre in their dealings with the pharmaceutical giants, but in Singapore the limits that

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<sup>23</sup> Interview DS/AW (30 May 2001)

<sup>24</sup> Interview DS/AW (30 May 2001)

<sup>25</sup> *Straits Times* (23 October 1993) 'Singapore to be developed into leading centre for doing R&D'

<sup>26</sup> *The Economist* (20 January 2001, 79)

a population of four million people imposes on the size of the local biotechnology sector, R&D activity and the pool of talent, mean that government will continue to woo major global players in the pharmaceutical industry.

### ***6.2.2 Medical devices: Siemens and BD make perfect partners for Singapore***

The medical device sector shares with pharmaceuticals the role of driver of growth in the biomedical sciences. Just as GSK was the pharmaceutical pioneer, in medical devices that part was played by the German MNC, Siemens, a company steeped in advanced technology across a number of fields, including healthcare. Siemens' global reach and achievements are impressive: it has interests in more than 190 countries and employs close to half a million people world-wide. In the year to September 2000, company researchers turned out 8,200 inventions, 5,280 new patent applications were filed - mainly in Germany and the US - and more than 120,000 patent rights were held by the company and its subsidiaries around the world.

Siemens' involvement in Singapore dates back to 1908, when the Siemens Brothers Dynamo Works was set up. Since then, it has been an important player in the economic and technological growth of Singapore, and of the Asia-Pacific region, within which it has established more than 60 companies and joint ventures, 20 plants and over 80 offices. Before the period of expansion post-World War II, the early efforts of the company to re-establish itself were handled mainly by agents and distributors. It was not until 1971-1972 that manufacturing took off, led initially by Singapore's meteoric rise in electronics, but followed in 1974 by the incorporation of Siemens Medical Instruments, a wholly-owned subsidiary of the German parent company and destined to emerge in the 1990s as a flagship of the medical equipment sector in Singapore. Today, Singapore is the strategic hub for Siemens businesses in 17 countries within a region stretching from Pakistan to Japan and New Zealand. In Singapore itself there are eight business units and, among the 11 business groups, two - Siemens Advanced Engineering and Siemens Medical Instruments (SMI) - are closely associated with the biomedical sciences sector.

Siemens pioneered the manufacture of hearing instruments in 1910 and today is the world leader. The current annual output of SMI is just under two million units, or 25 per cent of instruments sold world-wide, and in 1994 it became the designated 'centre of competence' for the manufacture of hearing instruments within the group. This endorsement of

Singapore as a business hub was also the first occasion that Siemens had established the headquarters of one of its strategic business units in Asia. However, the company does not operate a regional headquarters function in Singapore. Thomas Frischmuth, Managing Director of Siemens Advanced Engineering, describes the system of regional management and co-ordination as a two-dimensional matrix, with a clear separation of responsibilities: the various business groups, operating independent of one another, delegate certain parts of the development chain to countries; management within those countries then has the responsibility for carrying out the work. There are, says Frischmuth, quite a number of regional headquarters activities in Singapore, but they come under the umbrellas of the business groups, which simply 'host' these activities. The system operated by Siemens - that is, a flat management structure - is essentially the result of the great diversity of the various business groups.<sup>27</sup>

It is apparent that Thomas Frischmuth lays great store by the "transparency" that the Singapore government introduces into its business dealings. The information on incentives is particularly explicit – whether on the question of eligibility through such activities as R&D, manufacturing and the siting of regional headquarters, or in connection with assistance available through training, cash or tax breaks. In Singapore, he feels, "the secret is to be an organisation that keeps growing; they like that".<sup>28</sup> That the feeling is mutual is evidenced by Siemens' continuing growth, heavily influenced by Singapore's commitment to a deepening of the knowledge-based economy. According to Frischmuth, Siemens has been able to employ an increasing number of skilled local people (only about 70 out of a total workforce of 1,600 come from Germany and the US) and upgrade its manufacturing processes.

Siemens' local operations have extended to Batam Island in the Singapore-Johor-Riau Growth Triangle. There the company has taken advantage of the utilities and dedicated facilities in the industrial park, together with the supply of cheap labour. However, the sophistication of processes handled at the Batam facility is higher than might be expected, due to the presence of key managers from Singapore. Again, the recipe for success is a simple one: Singapore delivers what Siemens and other MNCs are looking for – a sound infrastructure, progressive thinking, attention to detail and a government which patently

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<sup>27</sup> Interview DS/TF (14 June 2001)

<sup>28</sup> Interview DS/TF (14 June 2001)

values their presence and reflects this through positive action. The closeness of the relationship Siemens has with Singapore is frequently expressed on formal occasions, and exemplified by the words of Dr Karl Baumann, chairman of Siemens Supervisory Board:

“Siemens AG has been in Singapore for almost a century and we have established several win-win partnerships here. Today, Singapore is a strategic hub for many of Siemens’ business entities in the region, due to her excellent location, infrastructure and highly skilled talent pool. I am confident that Singapore will continue to offer us many more opportunities in the years to come for growth and expansion. I foresee a long and successful partnership ahead”.<sup>29</sup>

A number of top companies have followed in Siemens’ footsteps, including Baxter (1983), Gould (1984), BD [Becton Dickinson] (1989) and Dornier (1994). They came to Singapore for a variety of reasons, but common to all appears to have been a need to explore markets away from those of Europe and the US, and the appeal of Singapore, not solely for its efficiency, developed infrastructure and skilled workforce, but also the high quality supporting industries so necessary for firms manufacturing medical devices. The building of Baxter Travenol’s factory in Woodlands in 1983, which specialised *inter alia* in dialysis equipment for home use, seems to have convinced government of the sector’s potential, and thus of the sense in further promotion and incentives. One year later, when Gould HB (a joint US-Japanese company) set up its facility to make medical accessories for use in the intensive care units of hospitals, it was awarded a generous 10-year tax holiday by the EDB.<sup>30</sup> The later decision by Dornier (a member of the Daimler-Benz Group) to locate in Singapore owed much to government’s belief in the benefits to be won from synergies in the high-tech economy. Crucial to Dornier’s involvement was its joint-venture partner, Singapore Technologies Ventures (STV), and the manufacturing facilities and skills of AMS Precision Engineering, one of STV’s subsidiaries. Dornier’s specialisation is in non-invasive therapy equipment for the treatment of kidney and gallbladder stones without surgery; the company has in the order of 25 percent of the world market share.<sup>31</sup>

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<sup>29</sup> Siemens Press Release (2 November 2001) [www.siemens.com/page](http://www.siemens.com/page) accessed 13 November 2001

<sup>30</sup> *Business Times* (27 December 1983) ‘Shot in the arm for local medical products industry’

<sup>31</sup> *Business Times* (19 May 1994) ‘STV and Daimler unit set up medical equipment venture’

An even bigger catch for the EDB than Baxter, Gould or Dornier was Becton Dickinson, now generally known as BD. Not only did BD make the switch from Hong Kong to Singapore, but double satisfaction was gained from the fact that the EDB had been wooing the company since the early 1970s.<sup>32</sup> Becton Dickinson is committed to seeking answers to problems with particular relevance in the Asia-Pacific region, as witnessed by the first two products it developed in Singapore – a unique catheter designed for the China market and a mass-vaccination device for developing countries.<sup>33</sup> The company's decision to relocate to Singapore and develop a substantial manufacturing facility was, according to James Wessel, its Asia Pacific Region president, influenced to a large degree by the ready access to a high level of skills in the manufacturing sector and the facility to make the special moulds required for BD equipment.<sup>34</sup> Becton Dickinson has factories in China, Korea, India and Pakistan, but only Korea comes close to Singapore's support capability in terms of tools and moulding skills. Wessel takes the view that this is a spin-off from the advanced electronics industry.

Regarding the Government's approach to MNCs, Wessel comes over as an effusive supporter. In his experience Singapore is a more user- and investment-friendly country than any other in Asia – and even Canada and the US. Government representatives take trouble, says Wessel, to ease procedures and reduce difficulties in a manner he has not witnessed elsewhere. Furthermore, he is impressed by the transparency of dealings with authority, and the absence of any sign of racial or religious intolerance or bias. That Wessel is not alone in these assessments is best supported by the annual reviews of the World Economic Forum and the World Competitiveness Yearbook. It is certainly the sort of ammunition the PAP requires to help promote its view of Singapore as a plural society at peace with itself. BD also provides an example of the Government's aim of developing synergies within the biomedical sciences and with the broader economy and academia. Negotiations are currently at an advanced stage between BD, Johns Hopkins University and the EDB, for the establishment of an incubator unit to be manned by around 10 top scientists BD hopes can be attracted to the project. Wessel stresses the way in which business, university and government are working together to produce the sort of breakthrough that is vital if Singapore is to become a major biomedical sciences hub. He

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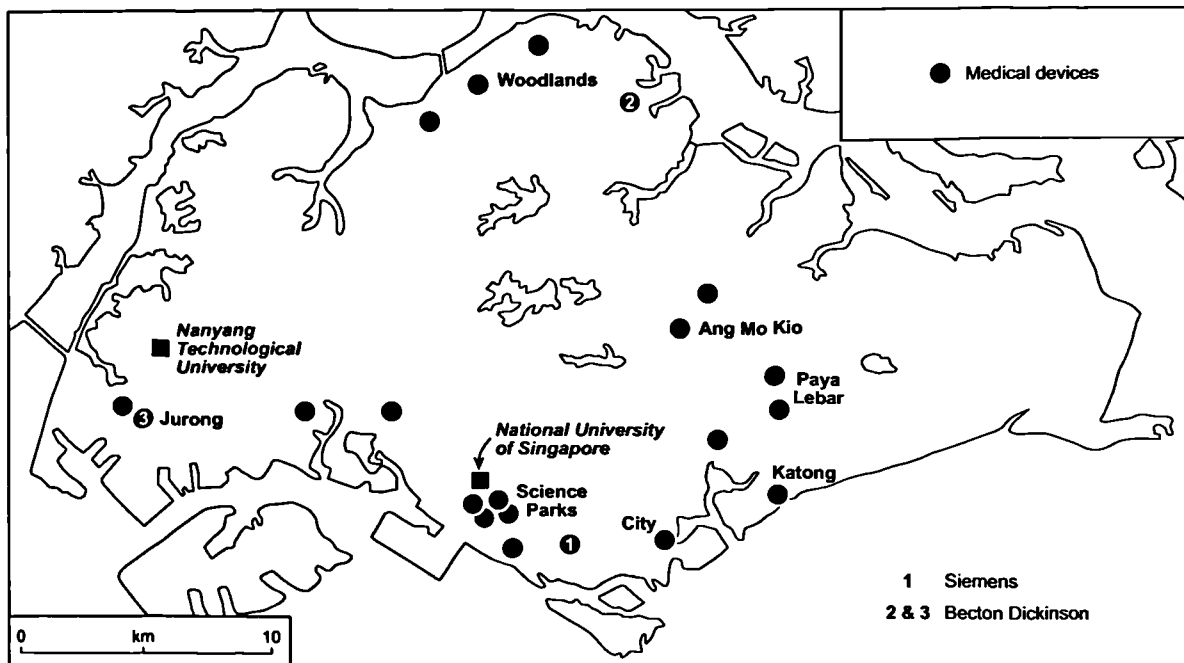
<sup>32</sup> *Business Times* (30 March 1987) 'Medical products company to build massive factory and office complex'

<sup>33</sup> [www.bio-singapore.com.bms](http://www.bio-singapore.com.bms) accessed 6 November 2001

<sup>34</sup> Interview DS/JW (18 June 2001)

shares with Witty and Frischmuth the caution about the 10- to 20-year timetable; like them he feels that Singapore is doing all the right things to make a breakthrough probable rather than merely possible.

A further significant reference made by Wessel was to the 100 or so people that BD has involved in R&D in Singapore. The research side is still limited, and most effort is in process and product development, but the very presence of this important work in Singapore, he says, is mainly attributable to government encouragement and funding; without these, he thinks it highly unlikely that the US headquarters would have agreed to the establishment of such a substantial unit in the Republic.



**Figure 6.2 Distribution of sites involved in manufacture and development of medical devices**

*Source:* Singapore Biomedical Sciences Directory 2001

Figure 6.2, which shows the distribution of sites involved with medical device production, research and development, reinforces two characteristics of the pharmaceutical distribution pattern in Figure 6.1. These are the concentrations within the southern Technology Corridor, stretching behind the port areas from west of the city centre to Tuas, and the commercial/industrial area to the northeast of the city centre. Table 6.2 lists the companies involved and shows that the foreign players have been joined by a number of local companies. The latter's survival is likely to depend on their success in finding niches in

the burgeoning market provided by three billion Asians. They also have more than a passing interest in the success of a number of ventures being undertaken under the auspices of the NUS and Nanyang Technological University (NTU). Central to this activity is the bringing together of engineers and experts in science and medicine to make “medical devices that are not only cheaper, but also smaller to fit the Asian physique”.<sup>35</sup>

**Table 6.2 The medical devices sector**

<i>Company</i>	<i>Primary products &amp; services</i>
<b>Applied Biosystems</b>	DNA thermal cyclers
<b>Baxter Healthcare</b>	Intravenous & blood administration sets
<b>Becton Dickinson</b>	Blood pressure monitoring kits/disposable syringes & needles
<b>Biosensors International</b>	Blood pressure monitoring kits/catheters
<b>Boston Scientific Asia Pacific</b>	Minimally invasive surgical products
<b>Dornier Asia Medical Systems</b>	Lithotripters
<b>Draeger SEA</b>	Anesthesia equipment
<b>Eutech Instruments</b>	Electrochemical instruments
<b>Igel Far East</b>	Contact lenses
<b>JMS Singapore</b>	Intravenous & blood administration sets
<b>Medtronic International</b>	Devices for chronic diseases
<b>Oculus Contact lens</b>	Contact lenses
<b>Rexam Medical Packaging</b>	Medical packaging
<b>Shimadzu (Asia Pacific)</b>	Medical & analytical equipment/product development
<b>Siemens Medical Instruments</b>	Hearing instruments
<b>Surgilance</b>	Safety lancet
<b>Sysmex Singapore</b>	Diagnostic systems & reagents
<b>Tyco Healthcare</b>	Disposable healthcare & electronic surgical products
<b>The West Pharmaceutical Services</b>	Vial closures/elastomeric products
<b>Volume Interactions</b>	Virtual reality medical systems

*Source:* Singapore Biomedical Sciences Directory 2001

<sup>35</sup> *Straits Times* (30 August 1999) ‘Engineers moving into research labs: Singapore eyes big market for medical devices’

The EDB is backing the efforts of the two universities and their research partners - the National University Hospital and Johns Hopkins University in the case of the NUS, and the Singapore General and other hospitals that have joined up with the NTU. The work in the universities, which crosses faculty boundaries, has spawned undergraduate and graduate courses and is playing a key role in manpower development for the biomedical sciences industry generally.

### ***6.3 Statutory boards, state-owned enterprises and government-linked companies***

Shee (1978, 197) claims that, “one of the unique features of Singapore’s economic structure is the direct involvement of state enterprises within the capitalist economic system”. Allowing for a certain amount of hyperbole - South Korea and Taiwan have both made considerable use of state-sponsored enterprises – it is certainly arguable that Singapore’s deployment of statutory boards, SOEs and GLCs has generally outperformed comparable efforts by its fellow Asian NICs. The juxtapositioning of this form of government intervention with its policy towards MNCs was neatly interpreted by one of the architects of post-independence prosperity, Goh Keng Swee, when, in conversation with Huff (1997, 320) he commented: “We imported entrepreneurs in the form of multinational corporations and the government itself became an entrepreneur in a big way”. Such a role, it should be noted, is not without risk, for government interventions in both developed and developing countries have often resulted in failure. Singapore has so far proved an exception and, according to Krause (1989, 436), the government has “successfully played a useful and far-reaching role in the economy”.

Singapore took over the ‘colonial inheritance’ of a number of statutory boards in 1959, including as was noted in Chapter Five one of the most successful, the Singapore Harbour Board. The main purpose of statutory boards within the colonial administration was to serve the needs of the metropolitan authority and they operated under heavily bureaucratic controls. Such methods were inappropriate for the rapid development of the newly independent state, which required numerous functions to be carried out on behalf of government in a manner not necessarily suited to the traditional *modus operandi* of the civil service. The features of the statutory board/public corporation which made it such an attractive vehicle for the PAP government were that:

- firm control could be exercised, first, through the terms of the enabling statute, and second, by retaining direct control in the hands of a responsible minister;
- it could achieve objectives not within the compass of the typical government department, and without the hindrance of bureaucratic restrictions;
- a large measure of autonomy could be expected to encourage flexibility, room to innovate and an efficient and profitable operation; and
- it could attract talented people from both public and private sectors.<sup>36</sup>

Control of the infrastructure, as it transpired, was exercised not just by statutory boards, but also through SOEs and GLCs.<sup>37</sup> These are the forms of organisation which Hanson (1959), in his classic work on public enterprises, respectively designates ‘public corporations’ and ‘state companies’. It is his view (1959, 337), that countries in the West tend to favour the use of the public corporation, “on the grounds that it provides just the right combination of commercial freedom and government control”. It is only too obvious, however, that the nature of the statutory board as a vehicle for development means there is always the danger of conflict between the needs for autonomy and control.

Chief among the challenges facing the PAP Government in 1959 were unemployment, a shortage of housing, and rapid population growth. In 1960 the rate of unemployment in the working age population had reached 13.5 percent, whilst between the census years of 1947 and 1957 the average annual rate of population increase was 4.3 percent (Tan and Ow 1982, 280). The government quickly determined to tackle the problems by means of statutory boards. Two new authorities, the Housing and Development Board (HDB) and the EDB were created in 1960 and 1961 respectively to tackle housing shortage and unemployment.<sup>38</sup> They were the templates for government activity in a raft of other areas. “In the ensuing years,” according to Chew and Lee (1991, 164), “to effect the transformation of the economy, to supplement and spur development, and to sustain the

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<sup>36</sup> A full list of the characteristics of the public corporation are contained in a 1954 UN publication, quoted by Hanson (1959, 339). The Singapore version follows the UN formula closely, particularly in terms of funding (self-financing) and employment (separate terms and conditions from those of civil servants).

<sup>37</sup> The term GLC is preferred to that of SOE in this study, the latter simply representing a totally government-owned GLC.

<sup>38</sup> The Singapore Family Planning and Population Board came later, in 1966.

growth of an enlarged industrial base, the Singapore Government played a uniquely dominant role in the economy and society". A measure of the early success of both HDB and the Population Board is that by 1989, some 87 percent of the population were in public housing, and population growth had been brought down to an annual rate of 1.3 percent. Examples of other early statutory boards were the Public Utilities Board (PUB), the Telecommunication Authority of Singapore (TAS) and Jurong Town Corporation (JTC). The Monetary Authority of Singapore (MAS) came later (in 1971) by which time, as is shown in later in this chapter, the EDB had spawned the Development Bank of Singapore, which was to become one of the most successful of the GLCs.

During the years of EOI, there was a proliferation of statutory boards (84 were extant in 1983) and of government directly-owned or jointly-owned companies financed by three major government holding companies: Temasek Holdings Pte. Ltd., MND (Ministry of National Development) Holdings Pte. Ltd. and Sheng-Li Holdings Company Pte. Ltd. By 1987 there were some 505 GLCs, although not all had a government ownership share of above 50 percent (Krause 1989, 442). The success of the statutory boards has resided not only in the substantial profits they contribute to government budget surpluses, but also in their solution of pressing economic and social problems, in such areas as unemployment, housing and transport. Closely linked to the bureaucracy, with ready access to the pool of talent developed by government, and frequently headed by leading figures from Singapore's political and managerial elite, it could be claimed that by the 1980s the statutory boards had "accelerated the implementation of all government policies" (Ho 2000, 147).

It is hardly surprising, therefore, that the Singapore Government should today still have 67 statutory bodies under its wing.<sup>39</sup> The PAP government shows little inclination to take its hand off the tiller of the economy, and is still perceived by its citizens as 'knowing best' about most things. What has made Singapore unusual is that the proliferation and retention of statutory boards has never been in danger of forming what Hanson (1959, 348) refers to as the "headless fourth branch of government". This is due in part to the high standards of integrity prevalent within government and the civil service. Equally important is the fact that although ultimate (and close) control is exercised by government, the day-to-day

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<sup>39</sup> [www.gov.sg/singov/statboards](http://www.gov.sg/singov/statboards) accessed 24 May 2002.

running of statutory boards is not part of the remit of ministers or senior civil servants. As Stevens (1999, 265), quoting Von Alten, concludes: “The public corporations in Singapore are managed and controlled by an exclusive network of technocrats”. All the evidence shows that this style of organisation was, and remains today, a key tool with which the Singapore government can drive and control the economy.

The following sections demonstrate how two of these public corporations have grown and operated under the wing of government. A key difference between the PSA and DBS Bank is that whereas the former enjoyed a virtual monopoly, the Bank, from the early point at which it determined to move into competitive commercial banking, has operated alongside and in direct competition with both local and foreign banks. The penultimate section in this chapter is therefore of particular significance, for it demonstrates how in order to strengthen its own particular banking champion, government engineered an uncontested takeover of the Post Office Savings Bank (POSBank). The final section, although drawn from the example of DBS Bank, shows clearly the movement of a tightly-knit group of top people around the ‘circuit’ of statutory boards and GLCs.

#### ***6.4 Statutory board par excellence: the Port of Singapore Authority***

##### ***6.4.1 Establishment of the PSA***

When Singapore attained self-rule on 3 June 1959, Lee Kuan Yew’s new government was swift to make a study of the port in 1960 with the intention of rationalising all its activities (Chia 1989, 319). Those involved had access to the excellent and forward-looking Millbourn Report, and it was made clear by the Deputy PM, Dr Toh Chin Chye, when seeking to introduce the Port of Singapore Authority Bill on 15 June 1963, that the draft Bill was the outcome of the Millbourn Report and framed in accord with its recommendations. At Second Reading on 19 December 1963, Dr Toh reported that a Cabinet Sub-Committee had further scrutinised the recommendations of the Millbourn Report and had agreed that these should be implemented, with the exception of a Dock Labour Corporation, which was not considered to be “either feasible or desirable in Singapore”.<sup>40</sup> In this respect the Government had already made clear that it considered the labour relations of a statutory body a matter to be dealt with under the Labour Ordinance.<sup>41</sup>

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<sup>40</sup> Legislative Assembly Debates, Official Report vol 22, col 976

<sup>41</sup> Legislative Assembly Debates, Official Report vol 20, col 1381

There was little doubt that, under self-rule, government intended to establish early and firm control of port operations. The main provisions of the Bill were:

- The establishment of a Corporation to be known as ‘The Port of Singapore Authority’ to take over the functions, assets and liabilities of the Singapore Harbour Board;
- The Dry Docks and Ship Repair sections of the Singapore Harbour Board to be separated from the Authority under a wholly-owned subsidiary company (to be called ‘The Singapore Drydocks and Engineering Company Limited’) as soon as practicable;
- The control of movement of shipping within port limits and the handling of explosives and dangerous goods to be transferred from the Master Attendant to the Port Master of the Port Authority; and
- The Pilot Board to be replaced by a Pilotage Committee to be appointed by the Port Authority, with pilots to be employed directly by the Authority.<sup>42</sup>

The Bill was duly passed on 19 December 1963, and received formal assent on 10 June 1964, while The Port of Singapore Authority Ordinance 1963 took effect on 1 April and 1 May 1964. The Ordinance laid out the details of the Port Authority’s duties, the main ones being:

- provision and maintenance of adequate and efficient port services and facilities in the Port;
- regulation and control of navigation within the limits of the Port and provision of pilotage services;
- promotion of the use, improvement and development of the Port; and
- the conduct of such other duties as required by the Ordinance.<sup>43</sup>

“The organizational change and the installation of a truly national body was a significant milestone in the history of the development of Singapore’s port”, noted Chia (1989, 319). It is certainly beyond dispute that with the introduction of a statutory board to run the port,

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<sup>42</sup> Legislative Assembly Debates, Official Report vol 22, col 976

<sup>43</sup> PSA Report & Accounts (1964, 5)

there came a period of rapid growth and commercial success that would convert the relatively narrow concept of a colonial staple port<sup>44</sup> into a port capable of handling the trade flows needed to fuel the nascent manufacturing economy. As Tregonning (1969, 17) put it, more eloquently: “The harbour is the heart of Singapore and its strong beat has pushed life into the multifarious institutions associated with it”. Between 1964 and 1997 when it was corporatised, the PSA proved to be a statutory board *par excellence*, building the port into the world’s busiest and also generating substantial profits. It became, without doubt, one of Singapore’s ‘champions’.

#### 6.4.2 *Growth of the Port 1965-1972 and the move to containerisation*

Development of the East Lagoon, to the west of the Telok Ayer Basin, was a major priority following independence, and it was reported in Parliament that reclamation was well under way as part of a \$50 million scheme to provide eight deep-water berths.<sup>45</sup> Both the PSA and Government were keen to ensure that as the volume of sea trade expanded, the port would be capable of providing the quickest possible turn-round for shipping. Towards this end, construction of the first deep-water berths at the East Lagoon began in 1966, with completion scheduled for 1969. At the same time as this work was in progress, however, a PSA special committee was also keeping close watch on early developments in containerisation taking place in the United States and Europe. The committee’s recommendations were accepted, and endorsed by a United Nations expert, and in January 1967 the PSA made public its intention to build a container complex at the East Lagoon. This was thought to be the best site, being close to the conventional facilities at the Keppel Wharves, near the city centre and financial district, and accessible westwards along the coast to Jurong’s growing industrial estate. The Port Authority had already assumed “its role in this latest intermodal movement of goods”,<sup>46</sup> by amending the plans for the East Lagoon so that the berthing and associated facilities could cater for container ships and their cargo. At this stage the ‘Container Complex’ was envisaged as having some 120 acres of land for warehousing and movement of containers, straight-line berths with a

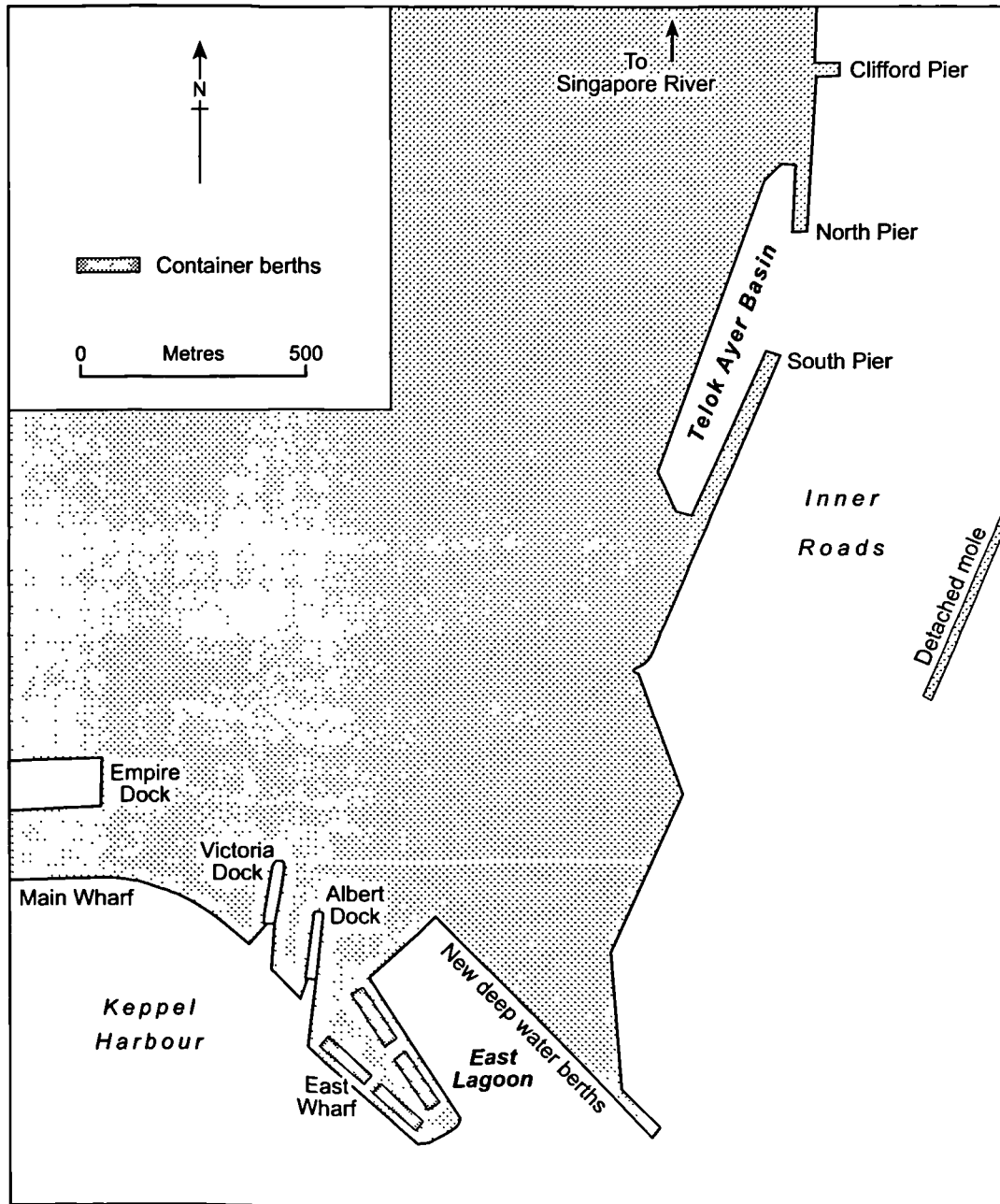
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<sup>44</sup> The concept of the staple port is developed by Huff (1997). It is his view that, prior to World War II, Singapore was a staple port rather than an entrepôt. In fact, the port did come to depend largely on three staples (palm oil, tin and rubber) from the Malay Peninsula; but with a changing world economy after the war, and the growing diversification of Singapore’s manufacturing sector post-1959, the trade in staples declined. Singapore’s entrepôt function, which operated in tandem with the more important staple port activity, is still evident today, but is now of secondary importance to the transshipment business.

<sup>45</sup> Addendum to the Presidential Address to the Republic’s First Parliament. Parliamentary Debates, Official Report vol 24, col 34

<sup>46</sup> PSA Report & Accounts (1966,5)

depth of 41ft alongside, special shore-based cranes operating the length of the wharves, and a dedicated 700ft wharf adjacent to the container berths where feeder container vessels could berth<sup>47</sup> (see Figure 6.3).



**Figure 6.3 East Lagoon container complex**  
*Source: PSA Annual Report 1966*

<sup>47</sup> PSA Report & Accounts (1966, 23-24)

The PSA's strategy had full government backing. The Deputy Prime Minister, Dr Toh Chin Chye, took the opportunity in a speech delivered early in 1967 to stress that "we in Singapore are sufficiently sophisticated and forward-looking to meet this challenge and adapt ourselves to changing circumstances".<sup>48</sup> His subsequent reference to containerisation as "a new problem" probably indicates that at the time he (and others) viewed the new development in shipping as something that had first and foremost to be 'dealt with' rather than exploited. These were early and uncertain days, both politically and economically, and even the PSA talked in terms of "the *inevitable* utilisation" (my italics) of Singapore as a container port in Southeast Asia, stating that the port "must be prepared to face the new situation".<sup>49</sup>

The Port Authority had gained experience in the new form of trade before the first two container berths were completed. Shipping lines at the forefront of the transport revolution such as APL and Maersk, were carrying containers without awaiting the construction of dedicated facilities at ports of call. The PSA's cranes and mechanical handling equipment managed to deal with 3,100 containers in 1967, including the 20ft containers that were starting to arrive in small numbers.<sup>50</sup> A year later the Authority, claiming that completion of the Container Complex at the East Lagoon was still scheduled for completion in 1971, released full details of its plans: a 250ft breakwater was being added to the straight-line container wharf to provide shelter during the monsoon; most of the reclamation and dredging work was completed; and the Container Terminal and associated facilities would extend over 60 acres, with space to marshall 5,700 TEUs and stack 1,200 TEUs behind the feeder berth.<sup>51</sup>

"Big boxes are coming", pronounced the *Straits Times* on 10 November 1969, warning at the same time that port procedures would be "turned upside down". In addition to the need for new port facilities and the implications for road and rail access to ports handling containers, the capital-intensive nature of the shipping side of containerisation would induce a constant search for the most economic use of vessels. This, the *Straits Times* noted, was already showing signs of resolution on the main trade routes between the

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<sup>48</sup> Speech on 'The prospects and challenges facing Singapore in 1967', reported in *Straits Times* (5 January 1967)

<sup>49</sup> *Straits Times* (2 March 1967) 'Work begins on site for \$70 million port complex'

<sup>50</sup> PSA Report & Accounts (1967,7)

<sup>51</sup> PSA Report & Accounts (1968,22)

developed nations, but it might take some time before a satisfactory balance could be achieved in container movements between Singapore and feeder ports such as those in the Indonesian archipelago.

An indication that the advantages of containerisation were gaining more general acceptance came in Parliament, when a question raised by the Member for Anson about the desirability of the PSA's involvement and investment was all but ignored.<sup>52</sup> However, although figures available in 1972 indicated that the productivity of a container ship could be as much as 30 times that for a conventional cargo vessel, some doubts did persist. On 23 June 1972, the day the first fully cellular container ship (the Scandutch liner *Nihon*) arrived at the Container Terminal, the *Straits Times* observed: "Containerisation is still a controversial issue: some shipowners, ports and traders feel that they have been forced to accept a development for which they are not yet ready". Given that containers of various sizes were used as early as the 1920s, it is arguable that only a World Depression and World War II had delayed their use in a standardised, intermodal form until 1967.<sup>53</sup> This delay did work to Singapore's advantage, however, for it gave the newly-elected PAP Government, in its search for swift industrial progress, space to plan for the growth of container trade through the 1970s. The quality and attention to detail of that planning were significant factors in enabling the PSA to obtain development loans from the World Bank (US\$15 million), the Asian Development Bank (US\$8.1 million) and the International Bank for Reconstruction and Development (US\$15 million).

In 1972 a total of 32 vessels (including 26 fully cellular container ships) worked at the Container Terminal, which handled 14,042 TEUs (see Table 6.3). The question now was whether Singapore, having entered the container age in advance of possible regional rivals, would consolidate its embryonic role as the regional container hub. The *Straits Times*, having readjusted its sights, was in no doubt: "Singapore's planners...proved they were forward looking when they decided to take the containerisation plunge six years ago – when the 'box technique' was still controversial. With this dynamism, there is every

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<sup>52</sup> Parliamentary Debates, Official Report vol.31, col 640

<sup>53</sup> The International Standards Organisation (ISO) agreement on container dimensions was signed in Moscow in June 1967.

reason to believe that Singapore's container age will bring new prosperity and progress".<sup>54</sup> The Presidential Address to Parliament later that year struck an equally positive note, claiming that investment in container developments in the East Lagoon represented a "quantum leap" for the PSA. Singapore, it concluded, would continue to be "the major port of call for the increasing number of container ships on the Europe-Far East run".<sup>55</sup>

**Table 6.3 Containers handled by  
Port of Singapore, 1967-1972**

<i>Year</i>	<i>Total</i>	<i>Description</i>
1967	3,100	container
1969	5,926	container
1970	8,779	container
1971	9,613	container
1972	14,042	TEU <sup>a</sup>

<sup>a</sup> Twenty-foot equivalent unit

Source: PSA Annual Report (various)

A more dispassionate comment on Singapore's performance in driving forward the development of port facilities for handling container vessels is provided by Chu and Chiu (1984). In their assessment of the part played by *laissez-faireism* in the development of the port of Hong Kong, they make the point that despite the over-cautious approach of the colonial power in granting permission, private firms in Hong Kong were able to convert their existing berths into purpose-built container terminals within two and a half years as against the six years (1966-1972) it took in Singapore. State ownership of Singapore's port facilities would appear to have produced a slower pace of development than that generated by private ownership operating under Hong Kong's *laissez faire* policy. However, it is possible to draw misleading conclusions from the comparison made by Chu and Chiu. It is easy to understand how, in the early days of conversion to containerisation, private enterprises in Hong Kong, with concern only for their own interests, were able to respond quickly. The PSA, in contrast, had the responsibilities of a

<sup>54</sup> *Straits Times* (24 June 1972) 'A chance seized'

<sup>55</sup> Parliamentary Debates, Official Report vol 32, col 26

statutory board for port development across a whole range of activities, with a concomitant reluctance to channel all its efforts and resources into a single project, however desirable.

#### **6.4.3 Port development 1973-1991**

Major developments during the period 1973-1991 may be considered under two main headings: the PSA's response to the growth of container traffic, and acceleration of the westward expansion of the port. In the early years of container traffic, policy in Singapore took the form of little more than a series of reflex responses to the rapid growth in the number of vessels calling at the port. No sooner was a plan for berth enhancement in operation, than there would be an announcement outlining new requirements and revealing an amended expansion plan. Developments ultimately produced a highly effective and efficient modern container port, but during this period they were essentially the outcome of reactive, rather than visionary, processes. This is not to suggest that the Authority simply made things up as it went along. But, in the company of many ports around the world in the 1970s and early 1980s, Singapore struggled to come to terms with the new requirements and explosive growth of the container business.

That the port was successful in these endeavours is demonstrated by its inexorable climb to become the world's premier container port in 1990. It is too easy to explain this away as the result of geographical position and the successful and relatively well-endowed port left behind by the colonial power. Crucial to port development was the political environment: first, as a result of all port management and operation coming under the separate, but co-ordinated, control of two statutory boards - PSA and Jurong Town Corporation (JTC); and second, the early consolidation of the PAP in power, enabling continuity of strategic thinking and decision making. This latter point is significant, for the ability of the PAP to plan ahead and assume that they would be in power when plans came to fruition made possible the integration of often conflicting short- and long-term planning. Even so, planning in the 1970s and the early 1980s was mainly about short-term responses to rapidly changing needs. Only in 1992, with the decision to build a 'mega-port' at Pasir Panjang (see Chapter Seven), did the PSA's policy-making change from one of 'constant catch-up' to a vision for the twenty-first century.

In the early years, however, both the PSA and its clients initially struggled to come to terms with the new method of handling cargo at the East Lagoon. All parties soon

discovered that just as important as the functioning of the container berths and their dockside cranes, was effective use of the marshalling, storage and distribution facilities to the rear of the berths. During the first half of 1974 containers were coming in at a faster rate than the Authority could handle and, in the words of importers and cargo handlers, its performance was “pathetic”.<sup>56</sup> But lessons were learnt, and the support and distribution facilities given a priority that continues to this day and is deemed one of the port’s success stories. As will be seen in Chapter Nine, it was the expertise and experience in both constructing *and* running the world’s busiest port that enabled PSA Corporation post-1997 to make a number of successful bids to develop container terminals around the world.

Throughout the 1970s and 1980s the building of container berths took place at the East Lagoon, which in 1982 was renamed the Tanjong Pagar Container Terminal. By the end of 1991, a year when 6.35 million TEUs were handled, a succession of conversions of conventional berths at East Lagoon and the adjacent Keppel Wharves had produced a total of nine main and four feeder container berths. The first signs of nervousness about port capacity surfaced as early as 1978, when the five container berths then operational handled 0.5 million TEUs, and the talk was of augmenting the planned conversions at Keppel Wharves with the building of container berths at Changi seaport. However, as the latter would only become operational in the late 1980s,<sup>57</sup> the plan was short-lived, being firmly rejected by the PSA early in 1979:

“A big seaport was originally planned at Changi to be integrated with the new international airport. The rapid growth of container cargo has dictated that the plan be changed. The period required for the Changi development is much too long, and the costs quite prohibitive. PSA must resort to more urgent and less costly measures to cater for immediate needs”.<sup>58</sup>

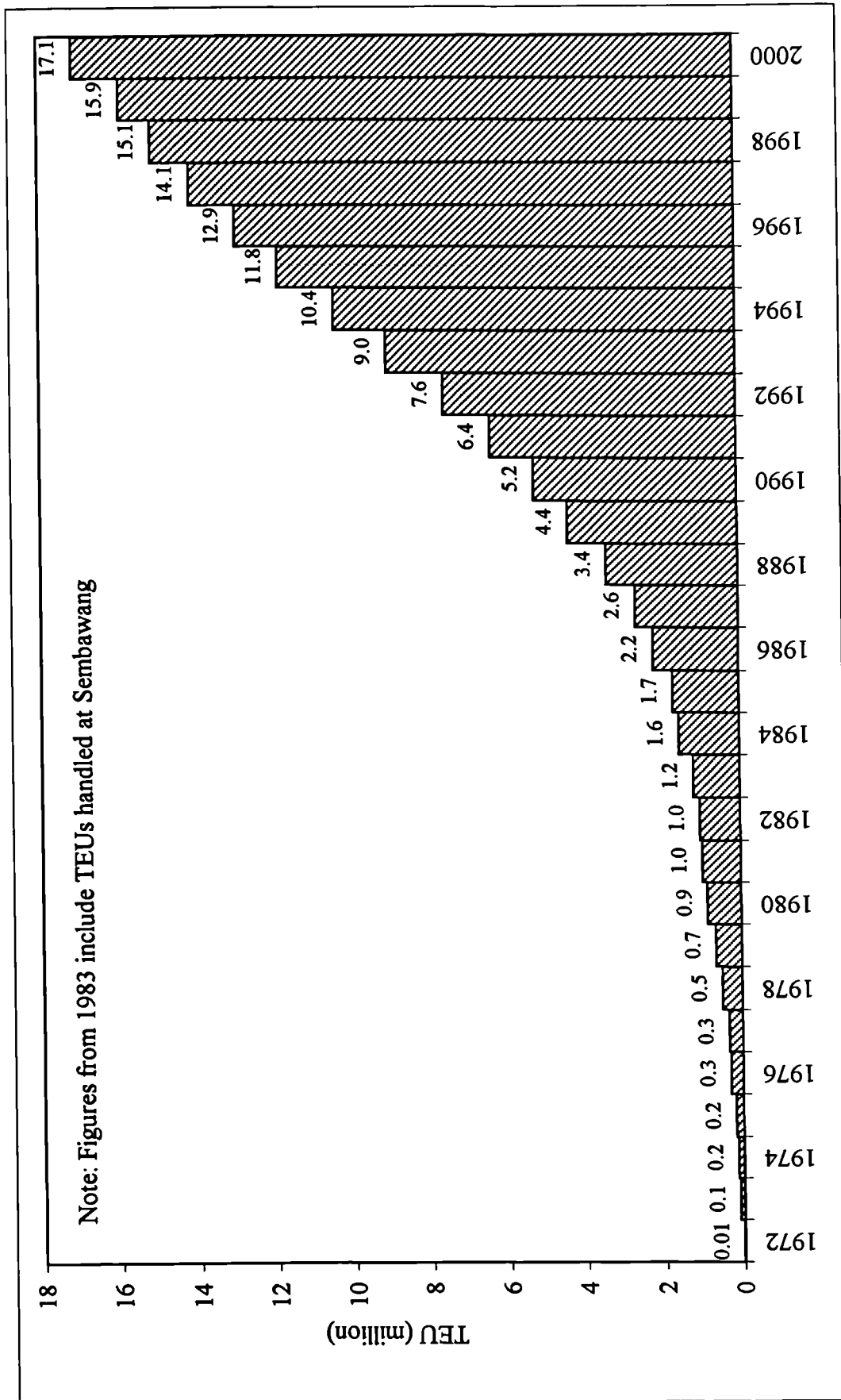
In the wake of rejection of the Changi plan came a more appropriate proposal: the development of Pulau Brani, with (initially) three container berths and a causeway linking the island to the Keppel Wharves. However, there was no apparent follow-up, and developments continued in the Keppel Wharves area, including conversion of the Albert and Victoria dry docks (see Figure 6.3). It was reported that these moves were based on an ‘incremental’ concept, reflecting the PSA’s “recently revised policy of catering to

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<sup>56</sup> *Straits Times* (16 January 1974) ‘Container cargo clearance by PSA “pathetic”’

<sup>57</sup> *Straits Times* (12 February 1978) ‘PSA builds two more container berths at the East Lagoon’

<sup>58</sup> PSA Annual Report (1978, 6)



**Figure 6.4** Singapore: total container throughput, 1972 - 2000

Sources: Annual Report (various) of Port of Singapore Authority, PSA Corporation and the Maritime & Port Authority

immediate needs”.<sup>59</sup> However, the fact that planning for optimum development of the East Lagoon and Keppel Wharves had not been thought through, was evident not only in the premature announcement about Pulau Brani, but also in reports that the PSA was considering building container berths at Pulau Damar Laut, opposite Jurong Port. It is patently obvious that in 1980, when the total of TEUs handled was *only* 0.87 million (see Figure 6.4), insufficient co-ordinated thought was given to the potential capacity of the existing terminal complex. To arrive at such a conclusion may appear surprising, for the generally held view today is of a port which in the modern period has marched forward with confidence and supreme efficiency. In reality, development of the container port in the 1970s and early 1980s appears more the outcome of a mixture of complacency and concern, with first one in the ascendancy and then the other.

Further evidence of the uncoordinated nature of the incremental approach came with worsening of the global economic recession in 1982, and subsequent report by the PSA’s chairman that the Authority had reassessed the development programme and found that “the conversion of the two conventional berths at Keppel Wharves into...container berths will be sufficient for the next five years”.<sup>60</sup> In this respect it is important to note that the Authority’s decision to defer building new facilities at either Pulau Brani or Pulau Damar Laut was in part soundly based on increased productivity, better machinery, automation and computerisation at the Tanjong Pagar Terminal.<sup>61</sup> The policy remained unchanged, and in 1985, with completion of the ninth container berth imminent, the PSA chairman observed that, “based on present cargo growth trends, there will be sufficient capacity in the Tanjong Pagar Container Terminal to meet anticipated demand until the 1990s”.<sup>62</sup>

What brought about the short-term, almost knee-jerk planning that afflicted the PSA, particularly between 1982 and 1985? Quite simply, it is possible that the Authority could not bring itself to believe that growth would continue at the levels prevalent in the container port’s first decade of operations. This would explain the decision to apply the brakes when, following a spectacular average annual increase in TEUs between 1974 and 1981 of 31.8 percent, growth fell to 5.1 per cent in 1982. But that was just one year;

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<sup>59</sup> *Business Times* (10 July 1980) ‘Two more container berths to be built’

<sup>60</sup> PSA Annual Report (1982, 4)

<sup>61</sup> *Business Times* (13 April 1983) ‘PSA shelves offshore container port plan’

<sup>62</sup> PSA Annual Report (1984, 4)

taken over five difficult years between 1982 and 1986, the average annual increase in TEUs handled still achieved a highly respectable 14.9 per cent – outperforming by some margin the Singapore economy as a whole.<sup>63</sup> The 1980s were, in fact, a period of rapid and impressive growth of the container port, brought about mainly by what the PSA retrospectively terms, “the pioneering of the hub and spoke container shipping concept in the region”.<sup>64</sup>

The PSA does appear to have been first in perceiving the potential of transshipment. According to the president of its Container Terminals Division, “(e)ven 20 years ago, most ports around the world focused solely on import and export cargoes. But Singapore, with its natural geographical advantage and its relatively small cargo base, had to do something different in order to grow. That is why we spent so much time and energy on the transshipment business”.<sup>65</sup> The transshipment concept was seen in the early days of containerisation as a means of increasing efficiency in the transport chain process, but it was the PSA which turned the idea into a business model for its operations in Southeast Asia. The success of the strategy is manifest today in two ways: first, transshipment accounts for over 90 per cent of PSA’s total cargo throughput (Ocean Shipping Consultants 1998, 176); and second, Singapore accounts for 30 per cent of world transshipment cargo. Thus, as Brookfield (1984, 71) asserts correctly, the development of the Port of Singapore has been based on ‘foreland’ rather than ‘hinterland’ considerations.

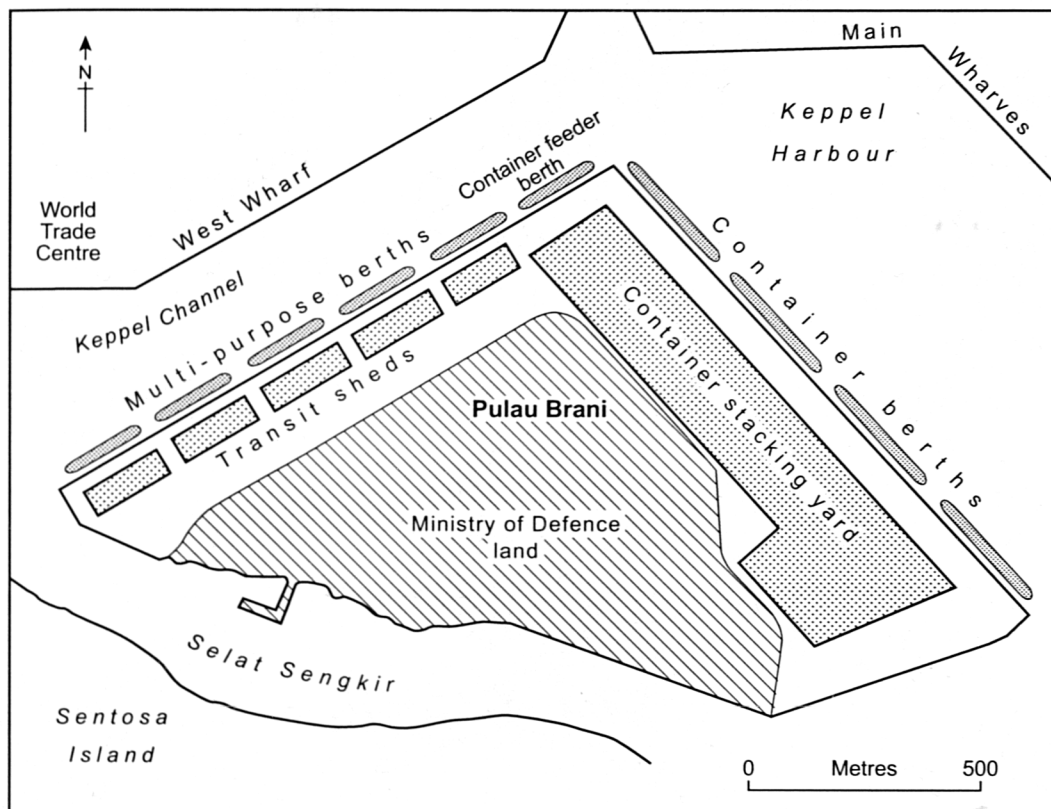
It was in keeping with the pattern of PSA strategic thinking that at the first sign of a recovery in the global economy, and only a few months after publication of a doleful 1985 Annual Report, the Pulau Brani scheme was returned to favour: “A billion-dollar container port is to be built on Pulau Brani to handle what the Port of Singapore Authority forecasts will be continued double-digit growth in container traffic into the 1990s”, trumpeted the *Business Times* on 29 August 1986. Pulau Brani was without doubt a better option than Pulau Damar Laut, the other location that had been considered by the PSA. The plan for 10 berths (five container and five multi-purpose) to be sited opposite and close to the existing berths and facilities at Tanjong Pagar and Keppel Wharves, meant that the synergy

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<sup>63</sup> The underlying strength of the rapidly growing Singapore economy is reflected by the figures for GDP (at current prices) which span the global economic recession. High levels of growth continued to 1984, when the figure was 8.2%. Growth slumped to –2.8% and 1.8% in 1985 and 1986 respectively, but the economy bounced back quickly, GDP rising to 8.8% in 1987.

<sup>64</sup> PSA Annual Report (1997, 16)

of the container port as a whole could be maintained (see Figure 6.5). This would not have been the case with Pulau Damar Laut. The main potential benefits were the ability to have a centralised container handling area and the ease of handling transshipment cargo. Construction was scheduled to start in 1989, and take up to four years to complete, according to the speed with which container traffic grew. The link with the mainland would be crucial, but in 1986 it had still to be decided whether this would take the form of a causeway or tunnel.



**Figure 6.5 Pulau Brani: the planned container terminal**

*Source: Business Times, 29 August 1986*

Progress was swift: ever-improving efficiency and mechanical and technological advances in the operation of the facilities at the Tanjong Pagar and Keppel Terminals meant that by 1990, Singapore had risen to be the world's premier container port. Some 5.22 million TEUs were handled that year, a total fast approaching the capacity of the two mainland

<sup>65</sup> Lloyds List Maritime Asia: PSA Supplement [www.psa.com.sg/mas](http://www.psa.com.sg/mas) accessed 21 April 2001).

terminals.<sup>66</sup> But building work at the Brani Terminal was ahead of schedule. As the PSA chairman reported, “the causeway linking the terminal to the mainland and the first container berths were completed in December (1990). The terminal with its nine berths (now to be five main and four feeder) will be fully completed by 1994. And within years after that, the new facilities are expected to reach their capacity. So the PSA has started planning for a new container terminal to meet the needs for 1996 and beyond”.<sup>67</sup>

Two years before, at the commencement of work on Brani, the official view had been that this was the terminal that would see PSA into the twenty-first century.<sup>68</sup> Yet shortly afterwards, the *Business Times* got wind of the Authority’s formal expression of interest in obtaining land in the Pasir Panjang area for the development of another container terminal.<sup>69</sup> It was becoming obvious that the PSA realised its existing facilities could be operating at full capacity as early as the mid-1990s. Amidst growing speculation, Tuas, a zone of mainly reclaimed land in the south western corner of the island, and adjacent to Jurong Port, was mentioned as a possible alternative to Pasir Panjang. Projections continued to be subject to revision, and in mid-1991 Communications Minister Mah Bow Tan, in confirming the need for a third container terminal, said that this was based on an anticipated growth of TEUs from around 6 million that year to 15 million TEUs at the end of the century.<sup>70</sup> The location of the new terminal had still to be decided, but it appeared that Pasir Panjang, Tuas and the Southern Islands (off Jurong) were all under consideration. The big question, seemingly not asked at the time, was whether the third terminal would turn out to be yet another short-term solution.

## 6.5 *A leading GLC: the Development Bank of Singapore*

### 6.5.1 *The Government’s role in early development of a banking sector*

Myrdal (quoted by Ow 1986, 224), claims that not only should an under-developed country have “an overall integrated national plan”, but there should be no half measures: “There is economy in the big push. Smaller efforts mean waste”. Those last two sentences could be

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<sup>66</sup> From 1983 the figures for TEUs include a small throughput at Sembawang, on the north coast. The reference here is to the Tanjong Pagar and Keppel terminals.

<sup>67</sup> PSA Annual Report (1991, 3)

<sup>68</sup> *Business Times* (4 April 1989) ‘Converting P Brani into a box terminal’

<sup>69</sup> *Business Times* (19 August 1989) ‘Third container port on drawing board: PSA’s plans may scuttle plan for waterfront park’

<sup>70</sup> *Straits Times* (28 August 1991) ‘PSA making plans for third container terminal: Mah’

regarded as a mantra of the Singapore Government over the years; and one key sector of the economy where it has been most evident is the financial services. According to Huff (1997, 342): “Financial services would not have become an engine of growth in Singapore’s economy in the absence of an activist government”. There is an important nuance to this: the Government, whilst having its hand firmly on the tiller at all times, was interventionist in a manner that at least stopped short of meddling in day-to-day affairs. The point is well made by Lee (1971) when referring to government loans totalling \$834 million, made by end-1968 to the HDB, PUB, JTC, DBS and others:

“(O)nly a financially strong government could have had so much funds to lend out for economic and social development. It was also a very sensible government which did not concentrate all its possible functions into the ‘government’ itself, meaning the executive arm which is in turn responsible to the legislature. By creating various statutory bodies and providing the capital funds for their expansion and operation, the Government enabled several important functions to be carried out with the minimum of interference from the legislature and from the slumps and booms of public finance. Executive control over these statutory bodies was still maintained through the appointment by the relevant government ministers of the members constituting the boards of these bodies; major decisions of these bodies also had to be referred to the government minister, but otherwise these bodies were free to perform their promotional, development and operational functions to their best capacity.” (Lee 1971, 91)

Huff (1997, 341) suggests that the advantageous situation prevailing at the time of independence – a combination of geographical location on the world’s main east-west communications network and the solid financial infrastructure established by the colonial power – “gave Singapore more freedom to ‘pick winners’ in financial services than in manufacturing”. Two prime examples of this were the decisions to establish DBS (to fund the much-needed emergent manufacturing sector) and an Asian dollar market. The latter move, taken after close consultation with international banks, was both inspired and brave and arguably set Singapore on the path to status as an international financial centre. It certainly did give Singapore a head start on other putative financial centres in the region and, given the subsequent unwavering commitment of government, has resulted in the city-state becoming the world’s fourth largest foreign exchange market (behind London, New York and Tokyo).

It is instructive at this point to look back at the 1972 Budget Speech of Hon Sui Sen. The aim and the language could not be clearer: “Banking (has) continued to grow along the lines of Government policy which is to encourage Swiss-type banking procedures as part of the overall programme of developing Singapore into a financial centre for Southeast Asia”.<sup>71</sup> After reviewing the rapid growth of banking institutions, deposits, loans and the Asian Dollar Market, The Minister for Finance went on to explain that the government’s plan was to develop Singapore as “a centre for brain services...and especially banking and financial services...(and to) bring international participation to our financial centre we have approved a number of licences for foreign banks in Singapore and will be liberalising our exchange controls further”.<sup>72</sup> Mention of this liberalisation process appears regularly in Budget Statements throughout the 1970s.

### ***6.5.2 Establishment of the Development Bank***

The EDB, the statutory board that gave birth to the Development Bank, continues to this day to play a vital part in Singapore’s economic development programme. Back in 1961 its remit was to promote investment, develop the industrial infrastructure and industrial facilities, and act as an industrial bank and guarantor for companies (Quah 1994, 5; Ow 1986, 229; Tan & Ow 1982, 281). By subsequent Singapore standards, progress was relatively slow during the initial period of ISI and the promotion and protection of fledgling industries. The average annual GDP growth between 1960 and 1965 was 5.5 percent which, says Quah (1994, 6), could be put down to the concentration of investment in the housing programme, failure to develop a common market with Malaysia, and the debilitating effects of Indonesia’s policy of confrontation. As industry’s sole source of long-term financing the EDB had a key role to play in boosting industrialisation. It soon became clear, however, that the Board was experiencing difficulties both as a result of its broad remit – encompassing developmental *and* financing roles – and its close links with government. On the one hand there was government’s natural desire and determination to reduce unemployment; on the other – and not always compatible – were the EDB’s efforts to develop the economy. Matters were not helped by the EDB’s lack of capital for long-term investments and its difficulties in extracting such capital from the commercial banks.

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<sup>71</sup> Parliamentary Debates, Official Report vol 31, col 509

<sup>72</sup> Parliamentary Debates, Official Report vol 31, col 518

The resolution of this dilemma was engineered by the establishment of an industrial development bank, DBS, and transfer of the EDB's loan portfolio to the new bank. DBS commenced operations on 1 September 1968, with a staff of 97 drawn from the EDB, and a chairman, Hon Sui Sen, one of Singapore's founding fathers and at that time chairman of the EDB. More about his career moves are revealed in section 6.6.2. The new bank was patently an extension of government apparatus. At start-up the government held 48.6 percent share ownership, commercial banks 25.9 percent and insurance and other financial institutions 7.6 percent, with the remaining 17.9 percent in the hands of other companies and members of the public. Business leaders and the major banks greeted the formal announcement on 1 October 1968 with expressions of wholehearted support and, in the case of the commercial banks, with the conviction that the business of DBS, being mainly concerned with medium- and long-term loans, would not conflict with their provision of short-term credits.<sup>73</sup> This was a view shared by Hon Sui Sen, but his words must also have given the banks cause to reflect on the future plans and development of the new business on the block:

“The Bank will also conduct certain commercial banking operations, mainly in supplementing working capital provided by existing commercial banks, and related banking transactions. At a later stage, it is also planned to provide credit for the export of Singapore-manufactured products and guaranteeing the payment of such exports. The bank will therefore have, in the long run, a very wide range of functions, which would not only be more suited to a small economy like Singapore's, but would also enable the bank to make attractive profits”.<sup>74</sup>

This was patently a government not simply involved in a strategy to produce rapid economic growth, but also determined to share profits – and risks – with backers from the private sector. Despite its introduction for the express purposes of stimulating economic activity, attracting foreign investors and assisting rapid industrialisation, DBS did have the opportunity from the start to function as a ‘normal’ bank, having been licensed to do so under the 1958 Banking Ordinance. That the government took this route, rather than registering the new bank by an Act of Parliament, appears to stem from its determination to attract private funding and so establish DBS as an organisation within the private sector, and not as a statutory board on the lines of the EDB (DBS 1988, 13). Reading between the

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<sup>73</sup> *Straits Times* (4 October 1968)

<sup>74</sup> *Straits Times* (2 October 1968)

lines it is reasonable to assume that the close relationship and trust between Government and leading players at DBS would have assisted the latter in pressing for use of the Banking Ordinance. What is beyond dispute is that DBS was not long in opening this particular window of opportunity.

A formal report on early progress was made by Dr Goh Keng Swee in his 1968 Budget Statement.<sup>75</sup> In addition to the financing of purely manufacturing undertakings, the Bank's financial scope was to be extended to tourist and estate projects, the latter linked to the urban renewal programme. Dr Goh confirmed the levels of loans taken over by DBS from the EDB: a sum of \$48.9 million already advanced to light industries and ship-breaking, and a further \$30 million of committed loans. Equity commitments made by the EDB, but with the paid-up capital not yet called, also became a DBS responsibility and accounted for a further commitment of \$8.5 million. Finally, guarantees to manufacturers for the purchase of plant and equipment were running at \$14.1 million and these, too, were now in DBS hands.

At start-up, said Dr Goh, DBS had a paid-up capital of \$100 million, together with the Government's commitment to the extension of further credit lines – initially \$30 million, and another \$50 million when required. The interest on these loans was to be at a rate of 4 percent per annum, and they were to be “used by the Bank to extend loans to industries at a rate of interest not exceeding 7 percent”. Lines of credit were also obtained from external sources, such as the Asian Development Bank and the World Bank. Tapping these sources had added value, given the Singapore Government's open approach to outside help and advice.<sup>76</sup> According to S. Dhanabalan (Vice-President of DBS between 1968 and 1971, and today the Bank's Chairman), “it was felt at that time that it would be very useful to have outside institutions looking into the Bank, making an assessment of the way we operate our loan procedures and our organisation. It was like an external audit of the Bank, and we wanted that kind of benefit” (DBS 1988, 15).

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<sup>75</sup> Parliamentary Debates, Official Report vol 28, cols 44-47

<sup>76</sup> Mention was made in Chapter Four about the invitation extended by the government to John Friedman in the 1980s to discuss the world city concept. Early examples of this ‘come and tell us how it is’ approach included, (1) work with DBS undertaken by Councillor Havlicek of the World Bank at the time of the First World Bank loan; and (2) the critical input of the United Nations survey mission headed by Dr Albert Winsemius in enabling the Government to launch a four-year economic development plan in 1961.

The early move of DBS into commercial banking may be attributed to two factors. First, it made sound business sense if, in handling the financing of its industrial clients, the Bank could also seek to deal with their associated short-term banking requirements. According to the DBS's own historical record (DBS 1988, 17), this was not a move intended to lead to head-on competition with the commercial banks; it was, quite simply, the natural outcome of the bank-client relationship and, of course, possession of that all-important full banking licence. Second, and arguably more significant, was the Government's stated wish to promote Singapore as a financial centre, and the consequent encouragement to foreign banks to put down roots in the city-state. Given the entrepreneurial and bullish style of the Bank's early leadership, it was inevitable that DBS would seek to join in the pursuit of clients and profits. In S. Dhanabalan's words (DBS 1988, 18):

"When we saw new commercial banks coming in and the potential in this area, we thought that it was only right that the commercial business that was being generated by our clients should be done by us. From there, of course, the next step was to extend pure working capital financing to others as well. We argued, in the face of criticism, that the new banks coming in would pose much greater competition to the [local] commercial banks than us....We decided we should be allowed to go into commercial banking".

Such airy confidence could only emanate from an organisation which, although in the private sector, maintained strong formal and informal ties with government. It was also an organisation headed by Hon Sui Sen, someone so respected and trusted by the PAP leadership that he would shortly be enticed into Parliament, to serve as Minister for Finance from 1970 until his death in 1983. Two years after his departure, DBS opened its first commercial branch in Jurong, adjacent to the industrial estates containing many of the Bank's early clients.

At the time, as may be seen from the statistics for 1965 and 1970 in Table 6.4, Singapore's financial sector was in a state of equilibrium. Only four new foreign banks had arrived during the five-year period – two full and two merchant banks – but a further eight had established representative offices in the city-state. Singapore was poised for the dramatic developments of the 1970s and 1980s.

### 6.5.3 *The Bank's first decade: growth and change*

Evidence of the speed with which DBS made its mark was revealed in the national press: "The Singapore Government's stake in industry took a giant leap in 1970. Through the long arm of the Development Bank of Singapore (DBS) government participation has penetrated almost every major sector in the local industrial scene, from food to textiles, from printing and publishing to petroleum....The story of the growing government financial interest in industry is basically the story of the expansion of the DBS".<sup>77</sup> This was the pattern in the years that followed until, in the 1977 DBS Annual Report, the Bank

**Table 6.4 Singapore's financial sector, 1965-2000**

<i>Institutions</i>	<i>1965</i>	<i>1970</i>	<i>1975</i>	<i>1980</i>	<i>1985</i>	<i>1990</i>	<i>1995</i>	<i>2000</i>
<b>Local Banks*</b>	10	11	13	13	13	13	12	8
<b>Foreign Banks</b>	24	26	57	84	116	128	128	129
<b>Full</b>	24	26	24	24	23	22	22	23
<b>Restricted</b>	-	-	12	13	14	14	14	16
<b>Offshore</b>	-	-	21	47	79	92	92	90
<b>Total Banks</b>	34	37	70	97	129	141	140	137
<b>Asian Currency Units (ACUs)</b>	-	16	66	115	174	199	209	189
<b>Merchant Banks</b>	-	2	21	37	55	68	77	59
<b>Representative Offices</b>	-	8	38	49	54	45	57	64
<b>Finance Companies</b>	96	36	36	34	34	28	23	13
<b>Discount Houses</b>	-	-	4	4	4	0	0	0
<b>Stockbroking Companies</b>					-	57	81	81
<b>Investment Advisers</b>					-	60	136	161
<b>International Money Brokers</b>	-	-	5	7	8	8	11	9
<b>Insurance Companies</b>	-	-	69	71	82	124	141	154

\* All local banks are full banks

*Source: MAS Annual Report (various years)*

<sup>77</sup> *Straits Times* (14 April 1971)

noted that its financing operation had reached a stage of consolidation, following the rapid rate of industrialisation achieved in the late 1960s and early 1970s. By the end of 1977, cumulative assistance by DBS to industrial development had risen to \$2.2 billion. By that time, too, the Bank was operating 11 full branches in Singapore and had opened its first full-service overseas branch in Tokyo. There would, said the Bank, be a “continuing policy of diversifying into retail banking to complement (our) development financing activities”.<sup>78</sup> The range of services provided in support of these activities was impressive:

- medium- and long-term loans for the acquisition of fixed assets;
- guarantees for individual equipment loans extended by suppliers or foreign institutions;
- a full range of commercial bank services including short-term working capital advances, raw material and stock financing, import/export financing, and performance and shipping guarantees;
- hire purchase financing and lease of machinery and equipment;
- participation in ordinary and preferential shares of industrial enterprises (note: rarely more than a 30 percent share);
- underwriting of share issues; and
- a full range of technical, managerial and consultant services covering advice and assistance at all stages in the planning and execution of a project.<sup>79</sup>

This was in the year when Hon Sui Sen, by this time Minister for Finance, felt compelled to inform Parliament that he had no responsibility for the day-to-day operations of the Bank, his only concern being to keep watch on its viability on account of the Government’s investment in the Bank.<sup>80</sup> Despite this disarming clarification, the hand of Government continued to be evident. It had been claimed that Government loans started to move away from concessionary rates as early as 1970, but as Hon Sui Sen told Parliament on 21 March 1977, DBS interest rates were more attractive than their competitors, being at that time in the range 8.0 to 8.5 percent as against the more usual 8.75 to 9.0 percent. Again, the government’s attitude towards DBS was most definitely proprietorial. The

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<sup>78</sup> DBS Annual Report (1977, 9)

<sup>79</sup> Information Brochure produced by DBS (1971)

<sup>80</sup> Parliamentary Debates, Official Report vol 30, cols 1432-1433

outcome, however, was productive and a successful element of the Government's overall strategy, for the deployment of loans at rates slightly below the commercial rate prompted an increased use of capital within the economy (Tan & Ow 1982, 306).

The increasing self-confidence of the Bank and a measure of its progress is apparent in the claim that "the Bank has grown rapidly within the space of ten years, to become the largest indigenous commercial bank in Singapore and ninth largest in ASEAN. This same period saw DBS diversifying from industrial financing to four other major areas of operations, namely, commercial and industrial banking, merchant banking, investment activities and real estate operations".<sup>81</sup> Particularly significant elsewhere in the same Report, is reference to the increasing share of funding going to the services sector, seen as being "in keeping with the Government's policy of broadening the economic base of Singapore by

**Table 6.5 Singapore: local banks at end-1979**

	<i>Year of Incorporation</i>	<i>Number of Branches</i>	<i>Assets** (\$ million)</i>
<b>Development Bank of Singapore</b>	1968	15	3,824.9
<b>Oversea-Chinese Banking Corp</b>	1932	18	3,711.1
<b>United Overseas Bank</b>	1935	25	3,177.6
<b>Overseas Union Bank</b>	1947	27	2,262.8
<b>Chung Khiaw Bank</b>	1947	15	1,432.0
<b>Tat Lee Bank</b>	1973	5	425.7
<b>Lee Wah Bank</b>	1920	3	423.4
<b>International Bank of Singapore</b>	1974	1	354.1
<b>Industrial &amp; Commercial Bank</b>	1954	8	331.1
<b>Asia Commercial Bank</b>	1959	5	327.7
<b>Far Eastern Bank</b>	1958	4	295.2
<b>Four Seas Communications Bank</b>	1906	3	290.1
<b>Bank of Singapore</b>	1954	3	75.9

\* Banks with ACUs    \*\* Excluding contra items

Sources: *Business Times* (2 June 1980 ; 11 August 1980)

<sup>81</sup> DBS Annual Report (1978, 4)

promoting the service industries and reflects the *importance of Singapore as an international financial and service centre* (my emphasis)".<sup>82</sup> This did not mean that DBS was deliberately moving away from the objectives originally set for it. There were two factors responsible for a reduced importance of development financing within the totality of the Bank's operations: first, during the 1970s it was increasingly apparent that development financing, on its own, could not provide all the services required by customers; and second, foreign and other local banks were increasingly competing for the provision of long-term money, thus bringing about a sharing of the financing burden. As far as DBS was concerned, the circumstances "were not entirely of its own making", and led to "the expansion of the Group's network; its active participation in merchant banking activities; expansion into international money markets which brought in its wake the opening of offices in Tokyo, New York and London; heavy involvement in property development...and other activities".<sup>83</sup> Despite this diversification the 1979 Annual Report does seek to reiterate the promise that the Bank would continue its role in promoting economic development in Singapore and "in contributing to the further development of Singapore as a major international financial centre".<sup>84</sup>

At the close of the 1970s, therefore, three related developments stand out: the emergence of DBS as the largest domestic bank (see Table 6.5); a move into a wide range of banking activities, without relinquishing its commitment to development financing; and the increasing tendency for politicians, commentators and professionals to think of Singapore in terms of an international financial centre. I return to this matter in Chapter Seven.

## **6.6 *The system at work: intervention and networking***

### **6.6.1 *The landmark purchase of POSBank***

There is no better example of the link between the government's plans for Singapore to become an international financial centre and the role of DBS as Singapore's leading bank, than the Bank's November 1998 purchase of the POSBank. The Government had for some time articulated its desire for there to be mergers among the local banks. This was a discourse mainly developed by Lee Hsien Loong, Deputy Prime Minister and Chairman of

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<sup>82</sup> DBS Annual Report (1978, 7)

<sup>83</sup> DBS Annual Report (1979, 5)

<sup>84</sup> DBS Annual Report (1979, 10)

MAS, and Dr Richard Hu, the Finance Minister. The rationale was straightforward, as outlined by Hu in an interview with the *Business Times*: “I would encourage banks to merge and get big as quickly as they can. You see in this increasingly integrated world of finance, the bigger you are, the more competitive you are. It must be so because if you are big with a large capital base, you have easier access to technology, IT, and more importantly you have easier access to talent. You can pay better for the best brains”.<sup>85</sup>

What comes through is a certain degree of frustration on the politicians’ part with the ‘over-cautious’ attitudes of the local banks. Despite the merger mania sweeping North America and Europe, and the world-wide trend for there to be fewer but bigger banks, the local Singapore banks had shown little enthusiasm for takeovers or mergers. In general, it is possible that the combination of government’s protective ‘separation fence’ and a prevalence of family ownership was to blame, but from the Government’s point of view there was a danger that efforts to forge ahead could be thwarted by the lack of local banking clout. There was the potent reminder, too, of the success of the Hongkong & Shanghai Banking Corporation in reaching out to the world – not just the region – and converting itself into HSBC Holdings, one of the biggest banks in the world, with shareholders’ funds some six times those of DBS.

The PAP Government determined in its traditionally pragmatic way, therefore, not to wait but to move matters along through institutions effectively under its control. DBS, the favoured bank, was given the opportunity to purchase POSBank for \$1.6 billion. There was no question of putting the sale out to tender, and no concern either to achieve the market price, which some analysts claimed would have been in excess of \$2 billion. The Government quite simply saw the merger/acquisition as part of its strategy for the development of Singapore as a financial centre.<sup>86</sup> As the *Business Times* reported. “Dr Hu said the government did not go for ‘best value’ and tender POSBank out to the best bidder as the merger did not start out with a commercial intent, but rather to build on the wish to develop a strong bank”.<sup>87</sup> Without doubt the two banks were complementary; it was, in the

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<sup>85</sup> *Business Times* (23-24 August 1997) ‘Banks should merge and grow quickly’

<sup>86</sup> The timing may also have been influenced by the matter of POSBank’s Y2k compliance. Differing opinions were expressed on the question of whether POSBank would have achieved the necessary compliance had it not come under the wing of DBS.

<sup>87</sup> *Business Times* (13 October 1998) ‘Bills to pave way for POSBank, DBS Bank merger passed’

words of John Olds, DBS CEO, a “dream” integration.<sup>88</sup> DBS would be assisted in its oft-repeated aim to be a regional bank with a global reach, whilst economies of scale and an improved infrastructure would provide POSBank customers (over 90 percent of Singapore’s adult population) with an improved and expanded service.

The merger has not been without its problems and disputes. In mid-1998, the selling price gave rise to a flutter of conflicting views in the opinion and letters columns of the press. The other major local banks, significantly, made no public comment about any ‘favoured treatment’ of DBS. It was left to the *Business Times* to point out that the price of \$1.6 billion represented 1.37 times the book value of the assets being taken over, a favourable arrangement when compared with the multipliers of 3 to 5 being applied in the case of contemporary US bank mergers.<sup>89</sup> The most sanguine among interested parties were minority DBS shareholders, who felt no pain, since the purchase was not in cash but in the form of 202.3 million preference shares which the Government confirmed it would not seek to sell for at least three years.

POSBank customers, however, have not found the integration with DBS easy. To the problems of adapting to a new electronic banking regime and coping with unwelcome fee increases, has been added the obvious irritation of extra charges and lengthy queues at many branches. The outcry has been such as to prompt debate in Parliament, but government has made it clear that it will not interfere with DBS’s control over its charging system. Some of the difficulties were only to be expected, given the special place that POSBank has in the minds of most Singaporeans. However, the merger did make good sense: POSBank had already achieved its original main objective – Singapore’s citizens had become among the best savers in the world – but, if left alone, was not expected to survive in the cut-throat and sophisticated world of internet banking. The mechanics of merger were always going to cause difficulties, although the programme of branch closures (the cause of those long queues) has been slowed in the light of customer protests. There were to have been 78 closures by end-2000; in the event, at the beginning of February 2001, some 59 branches (34 percent of those in service at the time of the merger) had been closed.<sup>90</sup> The closure programme may take longer than planned, but the rationalisation

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<sup>88</sup> *The Banker* (March 2000, 58)

<sup>89</sup> *Business Times* (26 July 1998) ‘DBS to buy POSBank for \$1.6b’

<sup>90</sup> *Business Times[O]* (3 February 2001) ‘59 of 173 DBS branches closed in streamlining’

which it represents, as DBS seeks to be lean and efficient and as its customers move into internet banking, makes sound sense.

What the acquisition of POSBank brought to DBS was higher capitalisation and the attendant room for greater risk-taking in the exploration of new opportunities in the Asia-Pacific region. The end-1997 figures which show the outcomes of the merger are in Table 6.6. According to an editorial in the *Business Times*: "The move to combine the two government-owned institutions has been motivated largely by the desire to create a superbank in Singapore to champion the Republic's role as a regional financial centre, in the same way that Singapore Airlines, for instance, has anchored the city's position as a major aviation hub".<sup>91</sup> A dream of Singapore having its own 'HSBC' may no longer be realistic, simply because of Singapore's relatively late arrival into global banking. The Hongkong and Shanghai Banking Corporation was already a 'world bank' in 1975, but took a further 20 years to reach pre-eminence, an achievement due in no small part to the bank being at the forefront of the move to global and regional mergers.

**Table 6.6 Implications of the DBS/POSBank merger, at end-1997**

	<i>Pre-merger</i>		<i>Post-merger</i>			
	<i>DBS</i>	<i>POSBank</i>	<i>DBS</i>	<i>OCBC</i>	<i>UOB</i>	<i>OUB</i>
<b>Shareholders' funds (\$m)</b>	7.2	2.2	9.4	6.4	5.3	4.0
<b>Total assets (\$m)</b>	65.2	28.3	93.5	57.4	49.4	38.9
<b>Global ranking:</b>						
<b>Shareholders' funds</b>	90	239	65	103	115	148
<b>Total assets</b>	170	281	129	180	204	238

*Source: Business Times (26 July 1998)*

However, DBS is clearly Singapore's 'champion' and will seek to maintain its domestic advantage, while forging new overseas joint ventures and alliances. It is always possible, of course, that DBS itself may become the object of a take-over bid. The former industrial development bank must now represent an attractive property, but although the

<sup>91</sup> *Business Times* (30 July 1998) 'Singapore's own superbank'

rules now do not prevent takeovers, government may not allow one in the case of DBS Bank. Nonetheless, much in the way that HSBC is now based in London, but has a major business and investment presence in Asia-Pacific, conducted from Hong Kong, DBS could offer considerable added value for an American or European major bank interested in a power base in the Asian region. This highlights, in passing, one of economic globalisation's obvious, but often ignored, features: that, despite all the sophisticated technology and the instant connections that can be made with any place on the planet, face-to-face involvement in banking and other producer services remains essential. And it is why, of course, the producer services have tended to concentrate in a relatively small number of nodal points in the global economy – i.e., the world cities.

DBS has reached an intriguing stage in its development and it will be particularly interesting to discover how it handles this question of size. On the one hand, size is an aid to the making of bigger deals and taking of bigger risks. In the words of the chairman of Travellers (which, with Citibank, created Citigroup, a top-ten world bank), "Size is important if you want to be a global player. When a problem happens, it's a pinprick rather than an explosion".<sup>92</sup> Taking the alternative view, smaller banks are often better performers in terms of efficiency and profitability. That this is because they are able to focus more clearly on less grandiose strategies is arguable; what cannot be denied is that large banks must have clear and well-executed strategies if they are not to become lost in a fog of their own making. In this respect, the core businesses of DBS and POSBank are so complementary that the enlargement should bring benefits far outweighing any of the initial teething problems.

### ***6.6.2 Political networking and empowerment in action***

Mention has already been made of the importance of the unassailable position of the PAP Government for long-term planning. Instead of following the pattern evident in many democracies in the developed world, where uncertainty about the outcome of elections tends to lead to decision-making that is both short-term and expedient, Singapore has been able to develop long-term plans which government feels sure it will be able to see through to fruition. This also applies to all-important matters concerned with human resources, and no more so than in the case of the post of Prime Minister. The prolonged hand-over from

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<sup>92</sup> *Business Times* (26 July 1998) 'Banking landscape takes on a new look: merger creates a "champion"'

Table 6.7 DBS Bank Chairmen

<i>Key posts held</i>	<i>Hon Sui Sen (1916-1983)</i>	<i>Howe Yoon Chong (1923-)</i>	<i>J. Y. Pillay (1934-)</i>	<i>Howe Yoon Chong (1923-)</i>	<i>Ngiam Tong Dow (1937-)</i>	<i>S. Dhanabalan (1937-)</i>
Prior to period as DBS Chairman	Civil Service Career Chairman EDB 1961-68	First CEO HDB in 1960	Civil Service Career MD MAS 1972- Chairman SIA 1972-	(see previous entry)	Civil Service career Chairman: Singapore Telephone Board 1971-73 Sentosa Development Board 1973-74 EDB 1975-81	EDB 1961-68 VP DBS 1968-70 Exec VP DBS 1970-78 MP 1976-97 Various ministerial posts from 1980 inc Nat'l Dev 1987-92 Trade & Ind 1992-94 Chairman Temasek Holdings 1996-
Period as DBS Chairman and other posts held	DBS President & Chairman 1968-70	DBS President & Chairman 1970-79 Chairman PSA 1970-79	DBS Chairman 1979-85 MD MAS Chairman SIA	DBS Chairman & CEO 1985-90 Dep Chairman EDB	DBS Chairman 1990-98	DBS Chairman 1998- Chairman Temasek Holdings 1998-
Following period as DBS Chairman	MP 1970-83 Minister for Finance 1970-83	Dep Chairman EDB 1979-94 MP 1979-84 Minister for Defence 1979-82 Minister for Health 1982-84	MD MAS - 1996 Chairman SIA - 1996 Chairman Temasek Holdings 1996-99 High Commissioner to UK/ Ambassador to Ireland 1996-99 Chairman Singapore Exchange 1999-	Dep Chairman EDB -1994 Chairman Gt Eastern Life Assurance 1992-	Chairman: HDB 1998- CPF Board 1998- 2001 Director Temasek Holdings	

*Sources:* Who's who in Singapore, 2000; DBS Annual Report (various)

Lee Kuan Yew to Goh Chok Tong, which at times must have been frustrating for the latter, did undoubtedly ensure 'seamless' government and, at the same time, demonstrated the solidarity, loyalty and integrity of the Singapore leadership. By early 2001, Goh Chok Tong's preferred successor (Lee Hsien Loong, Deputy Prime Minister and son of Lee Kuan Yew) was already at the heart of progress towards another seamless hand-over in 2007.

It was noted earlier in the chapter that a similar pattern may be seen in the running of ministries, statutory boards, and GLCs such as DBS. The time-scales for change are shorter, but the personnel involved belong to a tightly-knit body of politicians and civil servants who are so much part of the warp and weft of the political, economic and social fabric, that they appear able to move between posts with effortless ease. Not only that, but their moves around the system develop a reservoir of expertise to be tapped by the incumbents of the key posts. In the case of DBS chairmen this is demonstrated to full effect in Table 6.7. It shows the experience and expertise brought to the post by each chairman, and the position(s) of influence each held following his departure. By any standards it is a revealing picture, but one that is typical of how 'things get done' in Singapore. The five men who have served (one of them twice) as DBS chairman are patently out of the top political and administrative drawer, and people who could at all times be relied on, not only to understand government policies, but also for their commitment to the execution of those policies.

On occasion, the sheer weight of responsibility carried has been remarkable. For example, there is no need to look further than the period 1970-1979, when Howe Yoon Chong chaired both DBS and PSA, two major institutions central to Singapore's growth as a world city. All the evidence points to such an overlap not resulting from a shortage of talent, but more in order to maximise the benefits from having the economy run by a small group of trustworthy, highly informed, highly intelligent and mutually supportive individuals. The present chairman, S. Dhanabalen, is hugely influential, not just because of his wealth of experience in public office, but also because in his role as chairman of Temasek Holdings, the commercial arm of the Finance Ministry, he is clearly a major player in Singapore's economic development programmes, and in particular the current regionalisation programme (see Chapter Eleven).

It is appropriate here to make a final point about the leadership of DBS, and it concerns the appointment in 1998 of John Olds as CEO of the Bank. Olds, a former managing director of J.P. Morgan, was the first foreigner to be appointed by a local bank to the top management post. The *Business Times*, assessing the significance of such a move, reported the view of an observer close to the Bank: "They need someone who can play an entrepreneurial role at DBS, who can propel the bank forward and make it the HSBC of Singapore, a guy who has experience building up an international bank".<sup>93</sup> There being no Singaporean with these qualifications, DBS was demonstrating its endorsement of views expressed by the Prime Minister, to the effect that the best way to tackle the relentless competition faced by the city-state was to recruit foreign talent. In his role as a "self-confessed 'change catalyst'".<sup>94</sup> Olds remained for less than the anticipated three years, handing over to the head of personal banking on 22 January 2001. Although an internal appointment, the new CEO Philippe Paillart is not Singaporean, but a Frenchman. Olds has remained with DBS as a director, and from May 2001 has been special advisor to the chairman. Paillart's tenure appears to have had its difficulties, and he resigned on 30 June 2002. His replacement is Group president and chief operating officer Jackson Tai, another American and, like Olds, formerly with J.P.Morgan. The events of John Old's tenure reveal that he did achieve what he set out to do. To him goes the credit for turning DBS into a genuine regional bank (see Chapter Nine), and in his 30 months at the helm the Bank benefited from a four-fold rise in share values and a rise in stock from a 1998 low of \$3.39 to a January 2001 high of \$19.00.<sup>95</sup>

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<sup>93</sup> *Business Times* (21 May 1998) 'JP Morgan veteran to head DBS Bank'

<sup>94</sup> *Straits Times [I]* (22 January 2001) 'Paillart takes over as DBS chief exec officer'

<sup>95</sup> *Straits Times [I]* (22 January 2001) 'Paillart takes over as DBS chief exec officer'

## *Chapter Seven*

### **Facing up to the challenges and opportunities of integration in the global economy**

*“Academics have devoted the majority of their resources to abstraction and theorisation about what a global city is, how it relates to the modern world economy, what life is like within the global city, and what kind of regional networks might exist between global cities. Yet, as Douglass (2000) points out, there are many unanswered questions about issues such as how global cities have ‘come into being’, and what is the ‘role of the state and national economy’ in globalising cities” (Yeung 2000a, 4).*

#### **7.1 Introduction**

It may be argued that separation from Malaysia was the ‘making’ of Singapore. Certainly, that separation, together with Singapore’s small size and lack of resources, forced the new city-state to reach out in search of allies, markets, talent and investment. It would be wrong, however, to regard this interaction with the global (or as it then was, international) economy as a new experience. At all stages in its development since 1819, Singapore has been “part of global service capitalism...(and its) present stage of evolution...into a ‘world’ city is but the most recent phase of its... unfolding as a modern space” (Chua 1998, 985). This highlights a fundamental dichotomy, which springs from the fact that,

uniquely, city and state are one and the same where Singapore is concerned.<sup>1</sup> On the one hand, Singapore the world city is a regional 'control centre' within the global economy; on the other, the city-state's total integration into that economy makes it particularly vulnerable to changes that are beyond its control. As ever, the point is made both succinctly and graphically by Lee Kuan Yew (Chew 1996, 139):

"...unlike Australia which can fall back on its wheat, cattle and sheep, 'man-made' Singapore, which services the needs of the international community, is vulnerable to external conditions. If the world's needs change, either because of technological advances or shifts in political and security arrangements, Singapore will 'shrivel on the vine'. The moment it no longer fills a role, it will decline".

That this innate vulnerability remains even after four decades of almost unbroken high growth (see Figure 7.1) is not surprising, given Singapore's dependence on others. Problems have existed, and continue to exist, on several fronts. However, a feature of Singapore's economic development has been the ability to respond positively to the challenges and setbacks that are part and parcel of a marked dependence on the fluctuating currents of the global economy. In Chapter Six I considered one of Singapore's most significant engagements with the global economy, that of the pursuit of inward investment and foreign MNCs. In the sections that follow, the emphasis is on the generally adept way in which the PAP Government has not only identified and exploited niches in world export markets, but also responded to changes in those markets in an increasingly competitive environment. Patterns of development drawn from the case studies demonstrate how policies have been pursued within three quite different sectors of the economy.

## ***7.2 Responding to the challenge of changing circumstances and needs***

There can be no doubting the importance of security to the city-state, and Singapore's keen interest in the global balance of power and attendant room for manoeuvre within the region. Securing allies among the great powers has remained at the forefront of the

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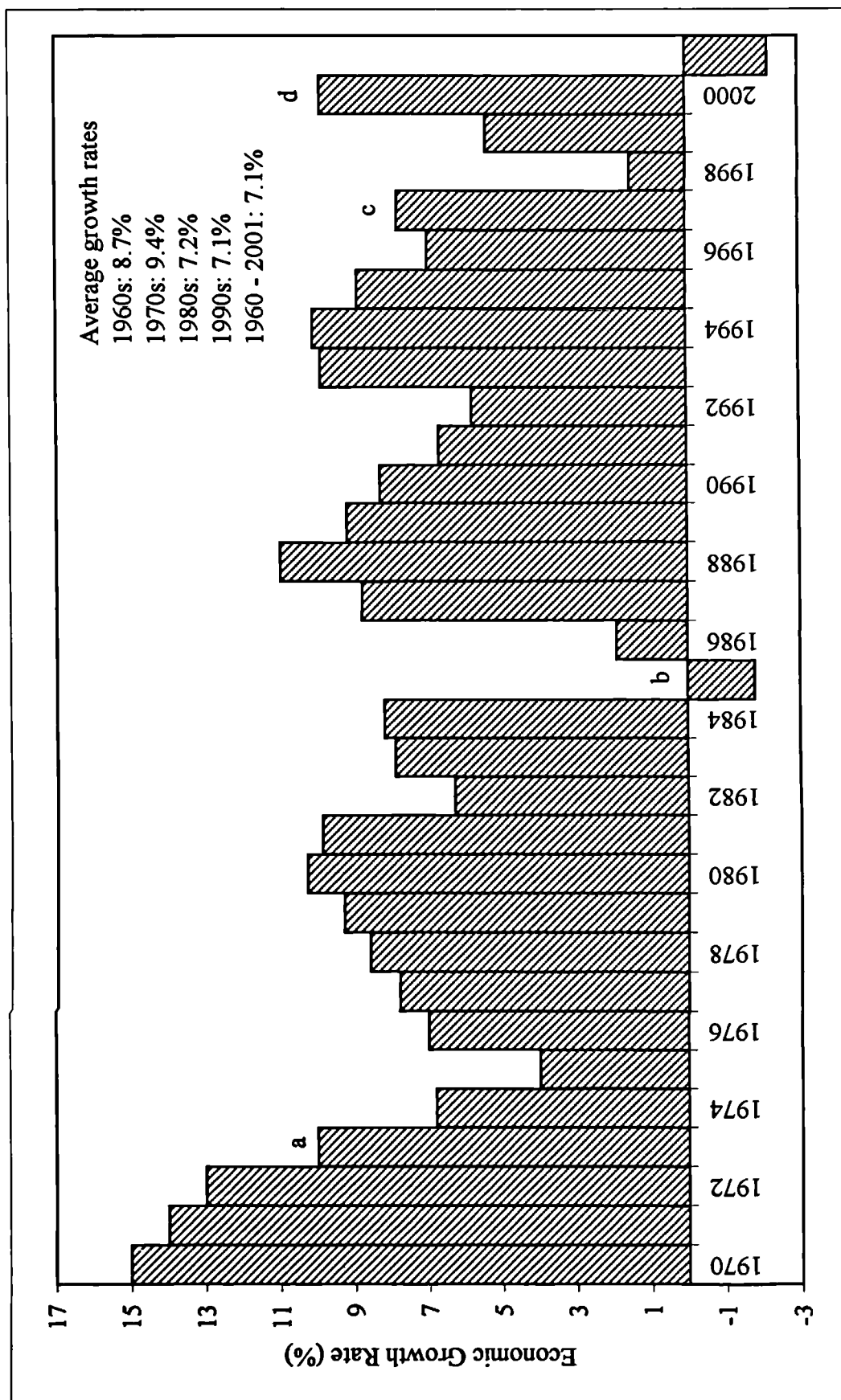
<sup>1</sup> Singapore's existence as a city-state is unique in today's world. Whilst it has been evolving as a world city since the nineteenth century, its standing as a city-state dates only from 1965. There is no basis, in my view, on which to bracket Singapore and Hong Kong (pre- or post-1997) as city-states, as do Chiu *et al.* (1998) in their otherwise highly instructive comparative study.

Republic's foreign policy since the 1960s, and it is one of two main ways by which Singapore seeks a safe and prosperous homeland. The other is through close economic integration with the major producing and trading nations, and with other cities that, like Singapore, sit astride the major flows of the global economy. The importance of this strategy cannot be over-emphasised, when it is understood how the 'tiny red dot' compares with its rivals in terms of territorial and human resources. Within the Asia Pacific, for instance, Shanghai's immediate hinterland houses the 300 million people of the Yangtse delta; similarly, Hong Kong looks out on 100 million people in the Pear River delta. But even such immense populations do not always provide the required reservoir of talent: California's Silicon Valley has direct access to 280 million US citizens, but a considerable tranche of the Valley's high technology talent comes from India, Taiwan and elsewhere. Weighed against examples like these, a Singapore that drew in on itself and looked askance at the hiring of foreign talent would not have survived. "If we stay in our little pond we will perish",<sup>2</sup> is one of Lee Kuan Yew's most strongly held, and repeated, mantras.

As has already been noted, Singapore's separation from Malaysia in 1965 brought a radical change to the city-state's relationship with the international economy. The process of change actually started in 1959, when the attainment of self-rule on 3 June brought a host of political and security problems requiring the urgent attention of Lee Kuan Yew and his PAP colleagues. In addition, they had to face up to the fact that Singapore could not hope to prosper if it maintained an undue reliance on the entrepôt trade. In a move demonstrating both farsightedness and sound common sense they therefore sought the advice of the United Nations Programme of Technical Assistance. The pragmatism displayed on this occasion (like that in seeking Israeli assistance with military training) has remained a major feature of government actions right up to the present time. Singapore has regularly shown itself ready to seek outside support or advice, and in this respect it has practised a remarkably open form of government. There is a view that outside 'experts' tend to be called in mainly to give credence to what the government already thinks or has decided to do. Friedmann (1995, 36) claims to have experienced this when invited to address the Singapore government in the late 1980s on the subject of world cities.

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<sup>2</sup> *Straits Times* (15 August 1999) 'Foreign talent key to Singapore's future'



**Figure 7.1 Singapore: economic growth rates, 1970 - 2001**

Notes: a - world oil crisis; b - world recession; c - Asian financial crisis; d - world recession

Source: Annual Budget Statement (various), Parliamentary Debates, Official Reports

However, in all three of the case studies that form part of this study, it does appear that the respective international advisory committees provide advice that questions, as well as supports, the strategies of government and its agencies.

The outcome of the work of the UN Industrial Survey Mission in 1961 was the Winsemius Report, so named after its Dutch leader,<sup>3</sup> and providing recommendations linked to the way forward for the Singapore economy. The two main problems addressed by the Mission were industrialisation and unemployment. Industrial development was an overwhelming requirement, for it was recognised that the entrepôt trade and banking, which had developed well under colonial rule, could not alone support an independent Singapore. A crash programme was required to alter the industrial landscape which, in 1957, presented a dispiriting picture. In that year: (a) only 12.9 percent of the workforce was employed in manufacturing; (b) the 'real' manufacturing industries (i.e. omitting processing and servicing) contributed to no more than 14 percent of GDP; (c) some 70 percent of industrial establishments employed fewer than 10 workers; and (d) an annual population increase of around 4 percent meant that 214,000 new jobs would need to be created by 1970 (United Nations 1961, ii).

As the Winsemius Report noted (United Nations 1961, iii): "During the last few years there has been a declining trend in the existing manufacturing industries. The reasons were: political uncertainty, the industrial promotion policy in the [Malayan] Federation, the instability (*sic*) of the Indonesian market, concern of investors over long-term political stability, and unfavourable industrial relations". Arguably the most pressing problem facing the new PAP government was political uncertainty (and unrest), and so it was perceived from the start that firm control of the political, economic and social life of the state was essential. In the economic sphere this meant that while every effort would be made to attract foreign MNCs, the industrial infrastructure had to be under government control. The balance then being sought is summed up by Rodan (1997, 151): "The Winsemius Report recommended a program of import substitution industrialisation (ISI),

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<sup>3</sup> The visit of Albert Winsemius in 1961 was what Lee Kuan Yew (1998, 347) describes as "the first of his many contributions that were to be crucial to Singapore's development....He was to play a major role in our later economic planning".

led by private capital investment, but involving an extensive role for the state in attracting and supporting that investment”.

It is important to recall the circumstances of the introduction of the ISI policy. The UN Report was only two years ahead of the union of Singapore and the Malay Federation, and came at a time when it was essential for Singapore's manufacturing industry to have the capability to access the opportunities of its Malaysian hinterland. Separation in 1965, however, removed that hinterland and rendered the ISI policy redundant. Singapore - again with the advice of Winsemius - therefore effected a sea change, turning to an EOI strategy in order to seek a literally life-sustaining engagement with the international economy. Critical to the success of this new policy were two statutory boards, the EDB and its 1968 offshoot, the Jurong Town Corporation (JTC), and one government-linked commercial bank, the DBS. The EDB operated both as a sales organisation and catalyst for establishing industrial organisations; JTC took on responsibility for the industrial estate and factories previously run by the EDB; whilst DBS was initially responsible for seed funding of both the export drive and emerging industrial players (Drysedale 1984, 405).

Singapore's economic transformation, from an entrepôt economy to ISI between 1959 and 1968; from ISI to EOI and the development of a 'total business hub' (1969-1992); and the latest phase of external expansion from 1993, has been well documented (see, for instance, Turnbull 1989; Chew and Lee 1991; Tremewan 1994; Huff 1997; Chiu et al. 1998; Low 1998). It is not my purpose here to dig over the already well-cultivated detail of Singapore's 'economic miracle', but to focus on government strategies and actions leading to the creation of that miracle.

For two decades, from independence until the major world recession in 1985, the Singapore economy was seemingly impervious to global difficulties and fluctuations. Even in the aftermath of the 1973 oil crisis, the GDP annual growth rate did not fall below 4.0 percent (see Figure 7.1), whilst the average growth rate between 1965 and 1984 was an impressive 9 percent. It was during this period of booming international trade<sup>4</sup> and record

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<sup>4</sup> There were, however, warning signs on the horizon. Whilst the average growth rate of the OECD countries in the 1960s was around 5 percent, it came down to 2.3 percent between 1980 and 1986 (Economic Development Board 1988a, 3).

levels of foreign investment that the Singapore Government was able to push through major social programmes, particularly in housing, education and wages, and to build the infrastructure necessary to attract foreign investment and MNCs in the manufacturing, finance and business sectors. According to Tremawan (1994, 33), the process was highly politicised: "Having developed the corporatist state to overcome its political rivals, the PAP-state was now able to exercise this executive power to achieve the social and economic goals of its alliance with foreign capital". Considerable progress had been made in moving away from a low-wage, low-skilled and low value-added economy to one based on higher skills and higher added-value.<sup>5</sup> In 1985, however, it had become apparent that external factors – principally low petroleum prices and a rapid decline in the US growth rate – were forcing Singapore into recession. Petroleum prices impacted directly on oil refining and petrochemical industries, and indirectly on the shipbuilding and ship repair industries, at that time responsible for 25 percent of Singapore's manufacturing output. The marked slowdown in the US economy had a particularly serious effect on the Republic's exports of computer peripherals and electronics.

The year 1985 therefore inspired a marked change in the Government's thinking about the city-state's relationship with the global economy. Hitherto, the sheer vibrancy of Singapore's economy had facilitated progress that was relatively unaffected by external problems. This time, however, things had changed. As the special Economic Committee set up to review the crisis and look to the future noted, "the period of easy growth is now over...international trade is no longer expanding as exuberantly as it used to, and worse, the trading environment is becoming increasingly hostile" (Ministry of Trade & Industry [MTI] 1986, 4). The Committee recognised that the recession was also due to internal factors: (a) excessive wage costs (the result of a flawed government strategy intended to increase productivity and deal with labour shortages) had reduced Singapore's competitiveness below that of other Asian NICs; (b) the construction boom, responsible for a dangerously large one third of economic growth each year had slowed (MTI 1986, 5); and (c) savings - at 42 percent of GDP the largest in the world – were responsible for low demand for domestic goods and services, and for there being more savings available than could be invested in the economy. These three factors, together with official

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<sup>5</sup> Parliamentary Debates, Official Report vol 47, col 419 (Budget Statement by Hu Tsu Tau, 7 March 1986)

recognition that the government had become too rigid in its handling of the economy, were matters that the Economic Committee declared should be priorities for action..

The Committee proposed a range of measures which, it maintained, would enable the resumption of growth by 1987, “provided the external factors, particularly the US economy, are favourable or at least neutral” (MTI 1986, 9). That the corrective actions were successful is evident in the 8.8 percent growth rate achieved in 1987. However, the Committee’s caution on external factors does suggest an underlying truth: i.e., that success would continue to depend to a worrying degree on events and trends in the global economy. In the words of Hu Tsu Tau in his 1986 Budget Statement, “we are the price taker in world markets”.<sup>6</sup> To its credit, the Economic Committee avoided the ‘head-in-the-sand’ approach of applying sticking plaster at home whilst hoping for continuation of the gains from the EOI policy that had generated the immense advances of the 1960s, 1970s and early 1980s. It is in this respect that paragraphs 54 and 61 of the Executive Summary are the most significant and far-reaching in the Report (MTI 1986, 11-12):

“54. By the 1990s, our present niche as merely an offshore production centre for the developed world will have been eroded. Even if we overcome protectionism, competition for this niche will intensify, as other NICs progress and encroach on us. We must find a new niche.”

“61. Singapore’s position in the global economy, therefore, is to be economically as developed as the West, and yet more competitive. Our future lies in being plugged into the international network of trade and communication, not in disconnecting ourselves in a vain effort to insulate Singapore from the influences and disturbances of the outside world.”

In a perverse way, the search for a way ahead was, and still is, aided by the fixed nature of Singapore’s most obvious disadvantages. Whatever solutions are found for economic growth and prosperity, it is a given that the answers will always be constrained by:

- size - although the highly important air and sea ports have been key beneficiaries of the addition of over 100 sq. km. to Singapore’s land area

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<sup>6</sup> Parliamentary Debates, Official Report vol 47, col 414

since 1960 (see Table 7.1), the 17.4 percent increase does nothing to alter the reality that Singapore is a tiny city-state;

- a small domestic market of four million people. (The Government's 2001 Concept Plan envisages a long-term population projection of 5.5 million);
- the fragility and uncertainties of the global trading system;
- negligible natural resources - Table 7.1 shows how, over four decades, the expansion from colonial port to an island-wide city-state has virtually eliminated an admittedly small output from agriculture, fishing and quarrying; and
- a relatively small pool of indigenous talent.

Against this backdrop it was the Government's aspiration to produce a developed nation by the 1990s, and to "move beyond a manufacturing and export base for international and domestic capital to a...position as a Total Business Centre" (van Grunsven 2000, 103). It intended to achieve this through four main strategies: (a) attract foreign business through a superior infrastructure rather than low costs; (b) coordinate value-added activities across the nation; (c) encourage, at the corporate level, a concentrated excellence in selected parts of the value chain, at home and abroad; and (d) maintain and enhance competitiveness. The EDB, as the lead statutory board, took responsibility for implementing government policy and, two years after the Economic Committee had reported, formulated in support of the Government's four strategies what it termed 'seven key new strategic thrusts' (Economic Development Board 1988a, 12). These may be summed up as follows:

1. Introduction of initiatives to assist companies (foreign and local) in developments within the region.
2. Development of the 'hub' concept, particularly with regard to the establishment of MNC headquarters (essentially regional) in Singapore.
3. Encouragement for companies to adopt a 'total business' approach – that is, engagement in R&D, technical support, marketing and regional management, as well as basic production.
4. Continuing enhancement of the services sector across the board and in tune with the standards of developed countries.

Table 7.1 Singapore: key indicators, 1960-2000<sup>a</sup>

	1960	1970	1980	1990	2000
Area (sq km)	581.5	586.4	617.8	633.0	682.7
Population ('000)	1,646	2,075	2,414	3,047	4,018
Annual change (%)	2.4	1.9	1.3	2.2	1.3
Resident population (%)	n/a	n/a	94.5	89.7	81.2
Unemployment rate (%)	4.9	6.0	3.0	1.4	3.5
GDP (\$m)	1,985	5,320	22,466	66,464	159,042
GNP (\$m)	2,189	5,861	24,047	68,230	n/a
Per capita GNP (\$)	1,330	2,825	9,623	19,849	38,445
Gross national savings (\$m)	-52	1,130	7,642	30,008	87,353
Trade – total (\$m)	7,555	12,290	92,797	205,012	470,001
Imports (\$m)	4,078	7,534	51,345	109,806	232,175
Exports (\$m)	3,477	4,756	41,452	95,206	237,826
Domestic (\$m)	217	1,832	25,805	62,754	135,938
Re-exports (\$m)	3,260	2,924	15,647	32,452	101,888
Foreign Direct Investment (\$m)	n/a	1,724	11,202	49,831	125,638
Equity Investment abroad (\$m)	n/a	n/a	<sup>b</sup> 1,678	13,622	52,918
Current a/c balance (\$m)	-245	-1,751	-3,376	5,659	37,576
Overall balance (\$m)	140	565	1,419	9,893	11,835
Vessel arrivals ('000)	n/a	34	27	60	145
Sea Cargo (FT'000)	11,900	43,534	80,963	187,789	325,591
Container throughput (TEU'000)	-	-	963	5,224	17,087
Aircraft landings ('000)	6	17	38	49	87
Tourist arrivals ('000)	90	522	2,562	5,323	7,691
Population in public housing (%)	9	n/a	n/a	87	86
Literacy rate (%)	n/a	n/a	n/a	89.1	92.5
Life expectancy (years)	n/a	n/a	n/a	75.3	78.0

Notes: <sup>a</sup> Dollar values are at current prices <sup>b</sup> – 1981 figure

Sources: Yearbook of Statistics Singapore (various) published by Department of Statistics; Singapore, 1965-1995 Statistical Highlights published by Ministry of Trade & Industry (1996)

5. Introduction of initiatives to assist companies (foreign and local) in developments within the region.
6. Selection of niche opportunities, to allow for economies of scale and enhancement of the depth and sophistication of industry.

7. Concentration on the development of technological capability in clearly defined areas, such as biotechnology, automation and information technology.

The EDB's approach was to focus on the provision of opportunities, facilities and training, bolstered by various financial incentives. On the face of it, this is an approach akin to that operating during the early days of ISI and the Winsemius Report: i.e., government creates the favourable environment, leaving business to decide what option(s) to take. However, this is too simplistic, for the reality, as was seen in Chapter Six, presents a much more complex picture, resulting from what can only be described as the incestuous relationship between government and business. Quite simply, Singapore "is governed by an elite whose members and interests span public and private spheres" (Hamilton-Hart 2000, 210).

The years between 1986 and 1991 were notable for the production of a range of strategies linked to the proposals of the Economic Committee. Critically, this was the period when talk of the twenty-first century being the 'Pacific century' and - post-1989 - of the removal of the perceived 'certainties' of the Cold War period, persuaded Singapore to seek greater engagement and integration with its region. Hu Tsu Tao made this clear in his 1992 Budget Statement, stressing that whilst the technology and markets of the industrialised countries must remain important to Singapore, "we should begin to balance our international outlook with a more regional one".<sup>7</sup> To put this in context and indicate the task facing government at this time, Singapore-based MNCs numbered 3,000 in 1991 and produced 71 percent of domestic exports, whilst their investment was almost four times that of local companies (Shee 1992, 121). I look at the 'regionalisation' programme in Chapter Nine, but note here that the need for the city-state's economic policies to be associated more closely with development of the region in particular, and Asia in general, is one of the key elements examined in the Government's Strategic Economic Plan (Ministry of Trade & Industry 1991). This document continued the work of the 1986 Economic Committee - and of plans dating back to the 1961 UN Mission - and purports to

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<sup>7</sup> Parliamentary Debates, Official Report vol 59, col 478

be the blueprint for development through to 2030. At the heart of the Strategic Economic Plan is the aim of making Singapore a developed country *in every sense*.

**Table 7.2 Percentage distribution of GDP by industry (using current market prices)**

	1960	1970	1980	1990	2000
Agriculture, Fishing & Quarrying	3.9	2.6	1.5	0.3	0.1
Manufacturing	11.7	20.1	28.0	25.8	25.1
Construction	3.5	6.8	6.2	5.1	5.8
Utilities	2.4	2.6	2.1	1.8	1.6
<b>Total Goods Producing Industries</b>	<b>21.5</b>	<b>32.1</b>	<b>37.8</b>	<b>33.0</b>	<b>32.6</b>
Commerce	33.0	27.4	20.8	18.0	18.5
Transport & Communications	13.6	10.6	13.5	12.5	10.7
Financial Services	} 14.2	4.7	8.0	10.3	12.1
Business services		9.0	8.5	11.6	12.4
Other Services	17.7	13.2	9.1	10.6	10.5
<b>Total Services Producing Industries</b>	<b>78.5</b>	<b>64.9</b>	<b>59.9</b>	<b>63.0</b>	<b>64.2</b>
Owner-Occupied dwellings	-	2.9	2.3	3.9	3.2

Notes: (1) Data for the year 2000 are preliminary. (2) Additions for taxes and duties on imports and deductions for imputed bank service charges have been omitted.

Sources: Ministry of State and Industry (1987, 102; 1999, 111; 2001, 101) Economic Survey of Singapore

One of the measures - albeit a crude one - that Singapore uses in order to assess progress towards this aim is GNP/GDP per capita.<sup>8</sup> In 1984, Goh Chok Tong's vision was that by 1999, Singapore would achieve the 1984 GNP per capita of Switzerland; in the Strategic Economic Plan (MTI 1991, 2), the aim is to achieve, on a moving target basis, the GNP per capita of the US by 2030 or the Netherlands by 2020. Figures for 1999 (IMD 2000, 356) show Singapore eighteenth in the world list, with a GDP per capita of US\$21,814; Switzerland is in second place (behind Luxembourg) with US\$36,071, the US is fifth

<sup>8</sup> One result of the increasing amount of business conducted abroad by Singapore companies is that official statistics tend to favour use of GNP per capita.

(US\$33,846) and the Netherlands thirteenth (US\$24,299). Singapore does rank above developed countries such as Canada, Australia, Italy, Israel, Spain and New Zealand, which occupy nineteenth to twenty-fourth places respectively, but it benefits considerably in comparison with these and other countries because of its lack of an agricultural hinterland and population.

The Strategic Economic Plan (MTI 1991, 42-44) does look beyond simple measures of development, and identifies four key elements involved in the push to become 'a developed country in every sense':

1. Maintaining strong economic growth over the next 20 to 30 years, but moving from an emphasis on cost differentials between Singapore and the developed countries to one of matching their capabilities, at least in certain important niche activities.
2. Building a sense of national pride, purpose and identity amongst all Singaporeans.
3. Matching the quality of life of other major world cities, in order that Singapore can both attract and retain talent.
4. Developing as a truly global city, networking with countries and companies on a global basis and reaching out both to neighbouring countries and to the wider world.

Points 2 and 3 are not the direct concern of this study, although the realisation of both is clearly linked to continuing economic prosperity, the cornerstone of the PAP's unbroken hold on power since 1959. The problem government has faced through the 1990s and into the twenty-first century is that, by their very nature, outcomes of the move towards a knowledge-based economy are medium- to long-term; there are no 'quick-fix' solutions, and so the economy must continue to depend for its underlying strength on established manufacturing industries, and particularly electronics. In this respect, exposure to a changing and uncertain global economy is thus little changed since the Economic Committee sought ways to turn things around in 1986. However, there has emerged a commitment to lessen this undue dependency through the development of a knowledge-

based economy – illustrated, for instance, by the push in the biomedical sciences sector (see Chapter Eight). Other strategies include increasing the value-added of existing industries, and encouraging Singapore companies and entrepreneurs to explore opportunities for the development of Singapore's 'external economy' in the region and elsewhere (see Chapter Nine). Both PSA Corporation and DBS Bank are prime examples of major GLCs seeking to expand overseas and bringing added value to the domestic economy.

### ***7.3 Responding to globalisation I: PSA and growth of a 'mega-port'***

#### ***7.3.1 Introduction***

The last decade has witnessed huge change, both in the operations of the port and of the PSA. Much of the change in port operations has been the result of upgrading of technical and other facilities, as Singapore has sought to maintain its competitive edge and the confidence and support of the international shipping community. Particular attention has been given to labour relations, vital to the successful use of computerisation and automation throughout port operations. Investment in information technology, and the diffusion of new methods and equipment to ports around the world, all contribute to maintaining and consolidating the Port of Singapore's status within the global maritime community. However, it is not my purpose here to elaborate on these trends and events. Rather, I consider it more relevant to concentrate on two issues that are both milestones of recent development, and also signposts to the future spheres of interest of the PSA and the port. These are, first, a further shift of the port westwards and construction of a fourth container terminal to handle traffic requirements deep into the twenty-first century; and second, the decision - accompanied by the establishment of a new statutory board (the Maritime & Port Authority of Singapore (MPA) - to move towards privatisation of the PSA.

#### ***7.3.2 Continuing westward expansion of the port***

The general cargo throughput for 1973 (see Table 7.3) is an indicator of the relative importance of the port's five gateways – Keppel Wharves, East Lagoon, Telok Ayer Basin, Sembawang and Jurong Port. Keppel Wharves, handling 47.2 percent of total cargo, dominated port activity and, with a further 27.2 percent and 9.9 percent passing through

the Telok Ayer Basin and East Lagoon respectively, the well-established Keppel Harbour port area handled nearly 85 percent of total general cargo. The remainder was taken up by Jurong Port (10.5 percent) and Sembawang (5.2 percent).

**Table 7.3 General and bulk cargo handled at Singapore port gateways**

1973	1989	<i>Million freight tonnes</i>		<i>% of total</i>	
		1973	1989	1973	1989
Keppel Wharves	Keppel Terminal	6.71	6.70	47.2	7.8
East Lagoon	Tanjong Pagar Terminal	1.41	65.00	9.9	75.7
Sembawang Port	Sembawang Terminal	0.73	1.43	5.2	1.7
Telok Ayer Basin		3.87	-	27.2	-
Jurong Port	Jurong Port	1.49	6.46	10.5	7.5
	Pasir Panjang Terminal	-	6.22	-	7.3
Totals		14.21	85.81	100.0	100.0

*Source:* PSA Annual Reports, 1973 and 1989

The shift of the focus of the port away from the Singapore River and into Keppel Harbour has already been noted. Two factors were responsible for a further move westwards of certain port facilities: first, the proximity of the Keppel Harbour area to the central business district, whilst bringing obvious benefits, also carried problems of scarcity of land for the vital marshalling, warehousing and distribution facilities; and second, the expansion of container facilities, at the expense of existing conventional berths at East Lagoon and Keppel Wharves, meant that new berths had to be found elsewhere to answer the ever-increasing demands of Singapore's trade. The PSA's solution was to develop what it termed "a major coastal port" at Pasir Panjang.<sup>9</sup> In all, some 88 hectares of foreshore were to be reclaimed, including 37 hectares for port development. Reclamation was three

<sup>9</sup> PSA Annual Report (1973, 19)

quarters complete by the end of 1973, and the plan was for 1,300m of wharf to accommodate coastal vessels and lighters (displaced mainly from Keppel Wharves and the Telok Ayer Basin), while 240,000 sq.m. of transit sheds and warehouses would lie to the rear of the wharves. Operations at Pasir Panjang commenced in November 1974, with the intention that by the late 1970s it would be the gateway for ocean-going and coastal vessels involved in the ASEAN trade in (mainly) rice, rubber and raw materials. The PSA, also anxious to maintain the lighterage trade, provided facilities – including extension of the protective breakwater – for lighters to moor and operate at Pasir Panjang. This information was reported to Parliament on 8 February 1977, and was the PSA's response to loss of the Telok Ayer Basin to development as the Marina Centre.<sup>10</sup> The opening up of Pasir Panjang represented a significant change in port operations, although mooring facilities for lighters were retained off the coast at the Telok Ayer Basin reclamation site, and a much reduced lighter activity did continue for several years in the Singapore River.

The development of the new gateway at Pasir Panjang, and the attention given to the provision of adequate feeder berths at the Container Terminal, may be viewed as evidence of the PSA's determination to consolidate its status as the 'pivotal' port for the region. Reporting that \$600 million would be spent to this end on port projects over a five-year period, the *Straits Times* explained – somewhat ingenuously – that this was all part of "sparing neighbouring countries from duplicating expensive port facilities".<sup>11</sup> The Authority itself viewed matters a little differently, explaining the earliest possible building of deep-water berths at Pasir Panjang as action necessary to attract conventional ocean-going vessels which, with the gathering pace of containerisation, were being "more confined to the coastal trade".<sup>12</sup>

Table 7.3 illustrates the shift in emphasis within the port between 1973 and 1989, Singapore's fourth consecutive year as the world's busiest port. The dominance of the container trade at Tanjong Pagar, is evident, as is the decline of the Telok Ayer Basin due to construction of the Marina Centre, and that of Keppel Wharves following conversion of conventional berths into container facilities within the overall Tanjong Pagar

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<sup>10</sup> Parliamentary Debates, Official Report Vol 36, col 32

<sup>11</sup> *Straits Times* (2 March 1977) '\$600m spent on port projects in next five years'

<sup>12</sup> PSA Annual Report (1977, 6)

complex. Equally clear is the impact of development to the west of the main port area, with the new port of Pasir Panjang and Jurong Port together accounting for 14.8 percent of cargo throughput by 1989. Total cargo at Jurong increased more than threefold between 1973 and 1989.

Jurong Port had begun operations in 1967, to provide facilities for industrialists attracted to the southwest corner of the island by Jurong Town Corporation as part of the Government's policy in the 1960s and 1970s to accelerate the industrialisation programme. By 1975 it was reported that with the assistance of a \$25 million loan from the Asian Development Bank, a major building programme would provide extensive transit sheds and warehouses, and straight-line wharves capable, initially, of mooring 10 ocean-going vessels at the same time.<sup>13</sup> Progress at the port was such that in 1988, government announced its intention to transform Jurong Port from an industrial port serving Jurong Industrial Estate into not just a regional bulk port, but a world-class bulk terminal.<sup>14</sup> An ambitious scheme linking the existing port by causeway with Pulau Damar Laut (no longer in the PSA's sights), more than doubling the size of the island and providing eight deep-water berths to add to the 12 already in operation, was estimated to cost \$530 million and take the port to at least the year 2000. A major benefit of the deep-water berths – here and at Pasir Panjang – was to be their role in providing the first port of call for very large vessels which, having discharged cargo and lightened their draft, could then call on other ports in the region with shallower drafts.<sup>15</sup>

Four developments stand out in this critical period, as Singapore sought to reinforce its status as both regional and world hub port. I have already looked at the three developments connected with increased and improved berthing facilities: the building of a container terminal at Pulau Brani; construction of a regional port for general cargo at Pasir Panjang; and the massive expansion at Jurong, aimed at establishing a major world port for both bulk and general cargo. To these must be added another feature of the march of the port westwards, that involving the growth of areas devoted to warehousing and distribution facilities. Attention has been drawn to the Keppel Distripark, built at the eastern end of the

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<sup>13</sup> *Straits Times* (15 March 1975) 'Bright future for Jurong Port'

<sup>14</sup> *Business Times* (7 July 1988)

<sup>15</sup> *Business Times* (3 April 1989) 'A big boost for Jurong Port'

port to service the Tanjong Pagar and Brani terminals. But, as the *Business Times* pointed out on 7 February 1990 this, and the Alexandra and Pasir Panjang Distriparks, were only parts of the “Singapore Distribelt – a 3,700 hectare distribution zone...(stretching) for about 20km from the eastern fringe of the Central Business District to the shipyards and engineering facilities of the Jurong industrial hub in the west....Over 36,000 vessels of more than 700 shipping lines link the Distribelt to 300 ports worldwide”.<sup>16</sup> Later the same year, both the PSA Chief Executive and the Minister for Communications highlighted the idea of the ‘distribelt’ when they referred to Singapore as a ‘global distriport’.<sup>17</sup> This was clear indication of the Port of Singapore’s intention to be a global, as well as regional, distribution centre. Included in the Distribelt were the petrochemical refineries and storage terminals of the Southern Islands, while running parallel on its north side was the Technology Corridor, comprising units and complexes of the electronics, engineering and R&D sectors. This corridor now includes many of the biomedical science companies and organisations that are discussed in Chapter Eight.

### 7.3.3 The Pasir Panjang ‘mega-port’

The *Business Times* ran an article on 23 May 1989 concerning the upgrading of distribution facilities at Pasir Panjang. There was no mention of the new port area being used for anything other than the conventional handling of cargo. However, it is apparent that projections of the capacities of the Tanjong Pagar and Brani terminals were forcing the PSA to realise that these terminals could be stretched to their limits by the mid-1990s – shortly after Brani was scheduled to start operations. Early the following year, at the same time as confirmation that two further deep-water berths and wharf extensions to accommodate ocean-going vessels and coastal ships and barges were to be built at Pasir Panjang, two areas – Pasir Panjang and Tuas – were being mooted as possible sites for a new container terminal.<sup>18</sup> Formal confirmation that there would be a new terminal did not materialise until August 1991 when, as the Brani causeway neared completion, the Acting

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<sup>16</sup> The year 1990 saw Singapore firmly established as the world’s busiest port, the top bunkering port in the world and, for the first time, overtaking its arch rival, Hong Kong, as the world’s busiest container port. PSA had also become a world leader in the use of information technology, e.g. as an aid to links with over 600 port users (PORTNET), radar control of all ship movements in port (CIMOS), and co-ordination of all operations within the container terminal (CITOS).

<sup>17</sup> Supplement to *Shipping & Transport News* (August 1990) ‘Building a nation: 25 years of achievement in Singapore’s shipping and transport industries’

<sup>18</sup> *Business Times* (4 January 1990) ‘Govt looking at Tuas as alternative site for third container port’

Minister for Communications, Mah Bow Tan, stated that, since additional container berths would be required by 1996, "plans for a new container terminal have therefore started".<sup>19</sup> There was no hint as to the location.

Early in 1992, a *Straits Times* interview<sup>20</sup> with the PSA's Executive Director was still unable to obtain word on the siting of the terminal. Earlier conjecture about the Southern Islands was by then academic, since JTC had embarked on an inspired \$6 billion reclamation programme to amalgamate the islands, and establish a world-class facility for the chemical industry. Pasir Panjang and Tuas therefore remained the preferred options, but the need for a decision was pressing, given the PSA's preference for some berths to be operational by 1995 or 1996. That decision came in May 1992, with Parliament's approval for the reclamation of 122 hectares of land off Pasir Panjang in order to commence the building of a container port that would "bring the Port one step closer to being a 'mega-port'".<sup>21</sup>

Details that emerged during 1992 emphasised both the immensity and extended development timetable of the new terminal. To be built in four phases over 30 years, it will have the capacity to handle some 36 million TEUs, more than three times what was then the combined capacity of the Tanjong Pagar, Keppel and Brani terminals.<sup>22</sup> Phase I alone was scheduled to cost \$2.3 billion, with three of the planned eight berths operational by 1997. Prime Minister Goh Chok Tong used the occasion of the opening of Brani Terminal on 22 October 1992 to stress the impact of the Pasir Panjang project and the PSA's success in winning approval for large-scale development of the western waterfront: "Singapore is now more than a world-class port, it is a global maritime hub".<sup>23</sup> Officials from the Communications Ministry and Authority, as well as the PSA, are in tune with such language, feeling that the port infrastructure and services will be ready to cater for the next generation of huge container ships, and so consolidate Singapore's global hub status.

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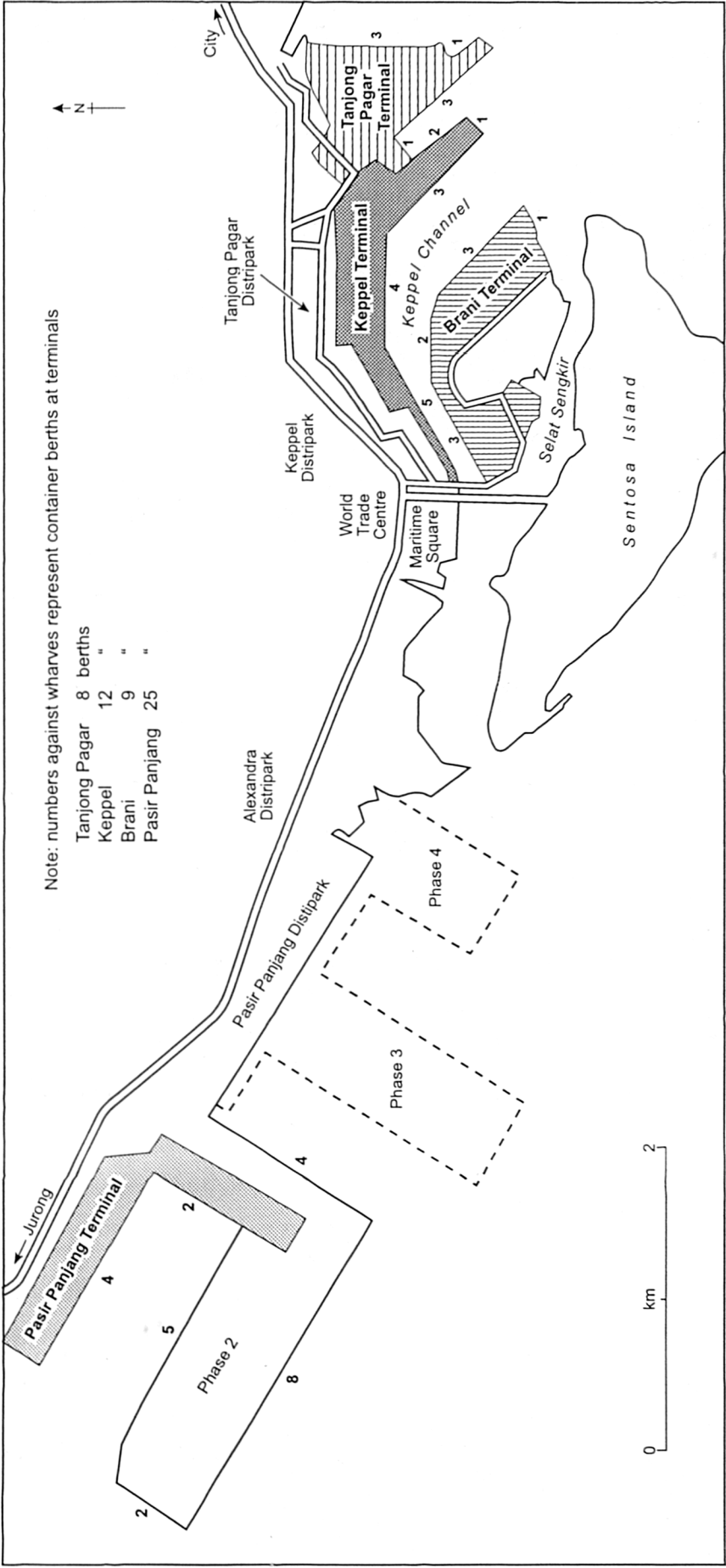
<sup>19</sup> *Business Times* (28 August 1991) 'PSA plans third container terminal'

<sup>20</sup> *Straits Times* (24 February 1992) 'Plans for third container terminal on the drawing board'

<sup>21</sup> PSA Annual Report (1992, 5)

<sup>22</sup> *Business Times* (23 October 1992) 'A mega-port by turn of century: Chok Tong'

<sup>23</sup> *Business Times* (23 October 1992) 'A mega-port by turn of century: Chok Tong'



**Figure 7.2 Singapore's container port plan**  
*Source: PSA Corporation Annual Report (2000, 60-61)*

In September 1997, Mah Bow Tan, the Minister for Communications, confirmed that Phases I and II of the project would cost around \$7 billion and add 26 berths to the 31 existing berths at the other three terminals. The first four berths would definitely be ready in 1998, followed by two more in 1999.<sup>24</sup> The latest information from the PSA indicates that there are 32 berths at the Tanjong Pagar/Keppel/Brani complex, and a further six (as planned) at Pasir Panjang, with this figure rising to 25 on completion of Phase II of the project.<sup>25</sup> Assuming that all four phases of development are completed, Pasir Panjang will have a total of 49 container berths. The projected capacity of over 36 million TEUs arises from the higher productivity (750,000 TEUs per berth per annum) that the PSA has achieved through state-of-the-art equipment, including the world's first remote-controlled bridge crane - which can stack containers nine high and 10 rows across - and post-panamax quay cranes with an outreach of 55 metres and able to handle new generation ships with as many as 18 rows of containers. The layout of the quays, with generous turning room, is intended to promote faster ship turnaround time and allow for the handling of container ships even larger than today's giants with their cargoes of 6,500 TEUs. The present shape of the container port and planned development of Pasir Panjang Terminal is shown in Figure 7.2. Details of the facilities of the four container terminals are at Table 7.4.

The stage would appear to be set for the PSA's container port to consist solely of the Pasir Panjang terminal. Such a major move westwards would certainly make the substantial and valuable land currently occupied by the Tanjong Pagar, Keppel and Brani terminals *available for further city centre expansion* and development. There appears to be no formal confirmation of this assumption, but officials spoken to were in little doubt that this is what will happen. They accept, too, that the projected doubling of Southeast Asian TEU throughput over the next 20 years, will probably be accompanied by a decrease in the PSA's share from the 50 per cent or more maintained through the 1990s, to something not much above 30 percent. The completed Pasir Panjang terminal would have no difficulty in handling this volume of cargo. In any case, the projected capacity of 36

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<sup>24</sup> Opening speech of the Terminal Operations Conference & Exhibition in Asia 1997, held on 16 September 1997 at the Westin Stamford Hotel, Singapore - <http://app.internet.gov.sg/data/sprinter/pr/archives>.

<sup>25</sup> PSA Annual Report (2000, 60-61)

million TEUs is capable of augmentation through increased productivity or even additional berths.

**Table 7.4 Facilities at PSA's container terminals**

<i>Terminal</i>	<i>Tanjong Pagar</i>	<i>Keppel</i>	<i>Brani</i>	<i>Pasir Panjang</i>	<i>Total</i>
<b>Area</b> (hectares)	80	96	79	84	339
<b>Draft</b> (metres)	11.0 to 14.8	9.6 to 14.6	12.0 to 15.0	15.0	n/a
<b>Berths</b>	6 main 2 feeder	4 main 10 feeder	5 main 4 feeder	6 main -	21 main 16 feeder
<b>Equipment*</b>					
<b>BC</b>	-	-	2	44	46
<b>QC</b>	29	36	29	24	118
<b>RMG</b>	-	13	5	15	33
<b>RTG</b>	95	106	105	-	306
<b>Ground slots</b> (TEU)	15,940	20,230	15,424	14,020	65,614

\*BC – Bridge Crane; QC – Quay Crane; RMG – Rail-Mounted Gantry;  
RTG – Rubber-Tyred Gantry Crane

*Source:* PSA Corporation Annual Report (2000, 38)

There seems little doubt that container ships will continue to grow in size and capacity. At an international maritime conference in Singapore on 29 October 2001, a Lloyds Register spokesman confirmed that it was technically feasible to build 15,000 TEU ships. Such vessels, he advised, would offer per-box savings, but travel at slower speeds; whether they were introduced and in what numbers would depend on justification for the volumes.<sup>26</sup> A move to 15,000 TEU ships would certainly involve ports in massive investment in gantry cranes and, for most, the provision of deeper berths (experts regard a draught of 14.5 metres as adequate for 12,000 TEU ships). An obvious outcome would be a further reduction in the number of global transshipment ports. Whilst the PSA's position should

<sup>26</sup> *Business Times [O]* (30 October 2001) '15,000-TEU ships technically possible'

be assured it is, in common with the bulk of the Singapore economy, suffering more than its competitors from the global recession. In 2001 the number of TEUs handled at the Singapore terminals was 15.5 million, down 8.9 percent on the previous record year. Performance by PSA worldwide held up remarkably well - mainly due to the continuing expansion of new projects - coming in at 19 million TEUs, only 3.2 percent below the figure for 2000. At the time of writing, PSA expects to meet its 2002 target of 17 million TEUs for the Singapore terminals.<sup>27</sup>

The benefits of improved technology and operating procedures within the port were only too evident in the figure of over 14 million TEUs handled at the Tanjong Pagar, Keppel and Brani terminals in 1997. Indeed, it is arguable that without these improvements, PSA would not have been able to achieve the seamless 'add-on' of the fourth terminal in 1998, being instead in deep trouble and unable to respond fully to the demands of the shipping companies. As it was, the 40 per cent increase in output of the Tanjong Pagar, Keppel and Brani terminals, on an original forecast of 10 million TEUs enabled Singapore to remain neck and neck with Hong Kong in the battle to be the world's premier container port (see Table 7.5). An apposite comment on the Pasir Panjang terminal was made by Prime Minister Goh Chok Tong at the official opening on 30 March 2000, when he observed that 'Pasir Panjang' in Malay means 'long beach'.<sup>28</sup> This neatly illustrates how the PAP Government, operating from a secure power base, having the confidence to think and plan long-term, and able to deploy highly professional statutory bodies such as the PSA, has been able to construct 99 percent of a truly 'mega-port' on reclaimed land fronting the 'long beach' of Goh's childhood. It is a reminder, too, of how Singapore, undaunted by a general shortage of land and specifically of land suitable for the construction of a major international airport and a massive container port, has added over 17 percent to its land area since 1960.

Because there can be no certainty that container activity will ride out the current global recession as strongly as it came through the 1997-1998 Asian Financial Crisis, the long-

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<sup>27</sup> *Straits Times* (19 January 2002) 'PSA's cargo volume down 8.9% on last year'

<sup>28</sup> Speech at the official opening of the Pasir Panjang Terminal.

<http://app.internet.gov.sg/data/sprinter/pr/archives>

term planning of the Pasir Panjang project makes good sense. By spreading development across four distinct phases the PSA has given itself the flexibility to amend the timetable, or even dispense with one or both of the final phases.

**Table 7.5 Port traffic league: total containers handled, 1985-1999 ('000 TEU)**

	<i>1985</i>	<i>1990</i>	<i>1995</i>	<i>1999</i>
<b>Hong Kong</b>	2,289	5,101	12,550	16,211
<b>Singapore</b>	1,699	5,223	11,846	15,945
<b>Kaohsiung</b>	1,901	2,352	5,053	6,985
<b>Rotterdam</b>	1,867	2,400	4,604	6,245
<b>Busan</b>	1,155	2,273	4,073	5,527
<b>Long Beach</b>	-	1,637	3,007	4,408
<b>Los Angeles</b>	1,104	2,116	2,491	4,354
<b>Shanghai</b>	-	456	1,196	4,206
<b>Hamburg</b>	911	1,506	2,895	3,750
<b>Antwerp</b>	991	1,549	2,329	3,614
<b>Dubai Ports</b>	-	916	2,073	2,845
<b>New York/New Jersey</b>	2,367	1,872	2,276	2,829
<b>Tokyo</b>	1,004	1,555	2,177	2,695
<b>Port Kelang</b>	245	497	1,134	2,550
<b>Gioia Tauro</b>	-	-	16	2,253
<b>Bremen Ports</b>	646	1,198	1,518	2,201
<b>Kobe</b>	1,857	2,389	1,464	2,176
<b>Yokohama</b>	1,327	1,648	2,757	2,173
<b>Manila</b>	482	1,036	1,690	2,147
<b>Tanjong Priok</b>	154	644	1,499	2,119
<b>San Juan</b>	940	1,381	1,640	2,090
<b>Algeciras - La Linea</b>	351	553	1,155	1,835
<b>Felixstowe</b>	-	988	1,344	1,784
<b>Laem Chabang</b>	-	-	-	1,756
<b>Colombo</b>	216	625	1,049	1,704
<b>Keelung</b>	116	1,841	2,165	1,666
<b>Oakland</b>	856	1,124	1,550	1,664
<b>Nagoya</b>	422	-	1,477	1,567
<b>Qingdao</b>	-	-	603	1,540
<b>Seattle</b>	-	-	1,479	1,490

*Source:* Institute of Shipping Economics & Logistics  
(1991, 350; 2000, 360)

#### **7.3.4 Corporatisation and privatisation: a loosening of the reins?**

In Chapter Six it was seen how statutory boards played a vital part in promoting and assisting Singapore's rapid economic growth and transformation from an entrepôt economy in the years following independence. But it was inevitable that the time would come when the growing threat from competitors within the global economy would render it disadvantageous for any one body to continue to handle both the provision of services and the regulation of an industry. By the late 1980s, therefore, government was already working on plans to convert certain statutory boards into corporations, hive off their regulatory duties to new, slim statutory boards and, at some point, privatise the corporations. The aim of this policy was threefold:

1. To render the corporations, which would be more focussed than the previous statutory boards, capable of providing more effective and efficient services. In a recent statement explaining the rationale behind corporatisation, Deputy Prime Minister Lee Hsien Loong made clear what the Government was expecting: "... (we) will be corporatising and eventually privatising functions within (the) statutory boards that are better performed by commercial entities.... It will make the statutory boards leaner and more agile, and focus their managements more sharply on their core functions of regulation and development".<sup>29</sup>
2. For Government to remain the "driver and director" of economic development, while using the private sector as the engine of growth (Stevens 1999, 266).
3. To offer the opportunity, on privatisation, for members of the public to own shares in successful, high-profile indigenous companies. The Government's intention is for at least 30 per cent of the adult population to own shares, and one way to achieve this is, in the words of Prime Minister Goh Chok Tong, "... to transfer directly to individuals more and more of the assets now managed by Government".<sup>30</sup>

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<sup>29</sup> *Straits Times* (16 November 2000) 'Corporate Singapore'

<sup>30</sup> *Business Times*[O] (17 August 1992) 'PSA to be listed as part of bid to widen share ownership'

Of the three giant organisations corporatised to date, only Singapore Telecom has reached the stage of privatisation.<sup>31</sup> This was achieved in 1993, the year after it became a corporation and, significantly, prior to regional and global economic upheaval. In the case of Singapore Power and PSA, however, the timing of their corporatisation (October 1995 and October 1997 respectively) has meant that plans for privatisation have been overtaken, first by the Asian financial crisis of 1997-1998, and currently by the severe global recession.

The Government's privatisation policy needs to be put in perspective. The 1990s witnessed a growing trend around the world for the commercialisation and privatisation of both ports and terminals. Of the large maritime nations only Japan resisted private investment from overseas, an outcome of its polity and philosophical approach to such matters. According to Drewry Shipping Consultants (1998, 35), a number of factors have contributed to the sea change in national policies towards the privatisation of ports, generally regarded as major strategic assets. They point to changes in the political climate, resulting *inter alia* from the break-up of the Soviet Union and embracing of the market economy by governments in South America and Asia; and, as key aspects of the growth of containerisation, they place special emphasis on the building of ever larger container ships, the need for these ships to be serviced by major transshipment hubs, and a linked requirement for there to be more and better container ports in support of the hubs. These last points have particular significance for developing countries, whose governments tend not to have the funding needed for major port projects. Ships and terminals require huge, recurring capital investment, and so the attraction of private participation is obvious. In this respect, Singapore is atypical of world container port development, since the plan to bring in private capital was not born out of financial necessity. This fits with the apparent

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<sup>31</sup> A special government committee, which reported in 1987, listed the PSA, Singapore Telecom, The Public Utilities Board (PUB) and the Civil Aviation Authority (CAAS) as deserving consideration for privatisation. The CAAS was ruled out in 1993 and, together with the PUB, is one of 67 statutory boards currently in existence. The latter is the regulatory rump left after Singapore Power was hived off as a corporation in 1995.

determination to retain government control of the port authority and, via Temasek Holdings, a controlling stake in terminal operation and ownership.<sup>32</sup>

Study of ports worldwide shows that there are no hard and fast rules about port functions and ownership. The port function matrix employed by Cass (1998, 39) suggests that ownership of the functions of port regulator, landowner and utility range from 100 percent public (e.g., Singapore) to 100 percent private (e.g., most British ports and Stockholm). He draws particular attention to the PSA's pre-1997 effectiveness and profitability, which was at odds with accepted wisdom regarding the link between port ownership and performance: "While the public model is arguably the most inefficient...it has also, paradoxically, proved to be one of the most efficient, as in Singapore" (Cass 1999, 39). A cautionary word on privatisation, offered during my discussion with a senior official of the Singapore Shipping Association, was to the effect that shipping lines have experienced difficulties with the quality of service provided by certain of the privatised ports. He singled out as examples some Australian and UK ports.

It was apparent from the outset that the Government's sole criterion when considering the privatisation of PSA was whether such a move would produce an organisation with a sharper competitive edge.<sup>33</sup> In 1995, a high-level government committee was formed to look into the procedures and timing of corporatisation and privatisation of the Authority. One question it was expected to address was whether a privatised PSA would remain as one entity or be divided into units, such as separate container terminals, with a view to promoting competition within the port. Progress was swift, with a Bill providing for the functions and powers of a Maritime and Port Authority (MPA)), the statutory board designated to take over the PSA's regulatory responsibilities, introduced in Parliament on 5 December 1995. During the passing of the Bill on 18 January 1996, the Communications Minister explained why establishment of the MPA was being undertaken

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<sup>32</sup> The seeds of privatisation were sown in the 1986 report of the Economic Committee. Set up to uncover the reasons for the slowdown in the economy in 1985-1986, it identified the performance of the global economy and errors at home with regard to wage increases. Privatisation was not the answer to either problem, but faced with criticism of its excessive intervention in the economy and the inferred link with a lack of entrepreneurship within local business, the Government determined on a programme of switching certain government assets to the private sector (see Chapter Nine, and Booth (1994)).

<sup>33</sup> *Business Times* (21 February 1992) 'Mah: privatisation of PSA will depend on competitive edge'

ahead of corporatisation of the PSA the following year: “(This)...will give it sufficient time to work out a good regulatory system as well as build up the necessary expertise and standing to regulate the post-corporatisation port industry”.<sup>34</sup> Regarding PSA itself, the Minister stressed the significant role the Port had played in enhancing the economic competitiveness of the region, and why it was vital to Singapore that the PSA, following corporatisation, built on its reputation for quality and consolidated its status as the region’s premier hub port:

“As a corporatised entity, PSA will have more flexibility to operate and invest in the region. And this together with private sector discipline and greater market orientation will sharpen PSA’s competitive edge as it faces growing regional competition in the container-handling business. Corporatisation will also put PSA in a stronger position to operate a hub port that will continue to contribute to the economic development of Singapore and the surrounding region”.<sup>35</sup>

The MPA, a self-funding body, was formed on 2 February 1996 by the merging of PSA’s regulatory departments, the National Maritime Board and the Marine Department. For the first time, all port functions were brought under the control of a single organisation. But apart from routine responsibilities such as the control of navigation in port waters, training seafarers and regulating their terms of employment, and licensing and regulating marine and port services, arguably the most important function of the MPA was ‘promotion of the use, improvement and development of the port’. Whilst PSA would be able to concentrate all its efforts on providing an effective and efficient service for its clients, MPA was expected not only to provide the best possible environment for PSA and other port operators (Jurong Port and Keppel Shipyard, for example), but also promote the port and *its advantages to the global maritime industry*. The PSA was clear about the direction it would move within the new environment: “PSA aims to be a global company in international port terminal investments, operations and management. Our strategic intent is to move from being a world-class port operator to a world-class corporation”.<sup>36</sup>

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<sup>34</sup> Parliamentary Debates, Official Report vol 65, col 462

<sup>35</sup> Parliamentary Debates, Official Report vol 65, col 462

<sup>36</sup> PSA Annual Report (1996, 2)

The 1990s brought increased competition and uncertainty to the container business. Mergers and acquisitions gave shipping lines greater bargaining power and an attendant expectation of greater flexibility from port managements, including provision of just-in-time solutions to vessel movements. The thoughts of giants such as Maersk turned to ownership of dedicated terminals at, or close by, the major transshipment hubs. According to Fleming (1997, 181), “there are (now) limits to ports’ powers to shape their own future”. He asserts that it is “the ‘megacarriers’, giant multi-modal enterprises like Maersk, Evergreen or CSX-SeaLand, (which) choose their own load centres....It is their perceptions, their decisions and their behaviours that matter. They can and do define strategic commercial locations as they see them”. Certainly, what cannot be denied is that matters associated with port success, such as site, situation, centrality and intermediacy, no longer hold sway quite the same as they once did. Thus for the PSA to grow in such an environment required a certain loosening of the reins held by Government, an encouragement towards greater flexibility and a more proactive approach towards customers. I comment on the tardiness of such moves in Chapter Nine.

The PSA was duly dissolved on 25 August 1997, but re-emerged on 1 October that year, complete with a new logo – intended to reflect the organisation’s global reach, a new tagline – ‘The World’s Port of Call’, and a new name – PSA Corporation. It was also *under new ownership, having become a wholly-owned subsidiary of Temasek Holdings*. Everything was going according to plan, and general opinion was that, just as had been the case with Singapore Telecom, flotation would not be long awaited. All decisions regarding privatisation are now Temasek Holdings’ responsibility, and specifically in the hands of S. Dhanabalan, the Temasek chairman and, as already noted, a politician and administrator of immense experience and influence. The initial privatisation, when it comes, is rumoured to be of no more than 20-25 per cent of the Corporation, leaving the remaining holding with Temasek Holdings. None of the Ministry or Authority officials I spoke with were willing to comment on the figures, but had no truck with the suggestion that there might, eventually, be a totally privatised PSA Corporation. It would appear that government intends keeping close control of the port through its agency, the MPA, and majority ownership of PSA Corporation. It is an approach that has a proven record for effectiveness, especially when applied to long-term development projects such as that at

Pasir Panjang. At the launch of the Corporation the government did underscore its determination to investigate the question of PSA monopoly, but stressed that the complexity of the issues would not allow for any headlong rush towards a flotation. The Communications Minister did clarify that, “the Government will make the decision (on monopoly) before the privatisation...so that potential investors will have a clear idea of the eventual local port industry structure”.<sup>37</sup> As was to be expected, officials I questioned on this matter were at pains to point out the benefits to customers of the present situation, with a single port operator able to co-ordinate the work of the various terminals and so ease the transfer of cargo and produce swift turnaround.

Between October 1997 and end-1998, PSA Corporation made all its preparations and was, in the words of its chairman, “ready for flotation”.<sup>38</sup> However, despite PSA’s continuing progress during 18 difficult months of the Asian financial crisis, the region’s stock markets were slow to recover and Temasek Holdings was not to be rushed. Its caution was only too evident in a statement late in 2000, when S.Dhanabalan gave a flotation later that year no more than a “50-50 chance”.<sup>39</sup> The same press report noted that bankers’ earlier optimism appeared to have ebbed away. According to one unnamed investment banker, the market did not look “very favourable for PSA now, the bad news doesn’t seem to be over”. The latest piece of ‘bad news’ had been an announcement by Maersk, the world’s largest shipping line and the originator annually of some 2 million TEUs for PSA terminals, that it was negotiating its own dedicated container terminal facility at Malaysia’s new port, Tanjung Pelepas, sited in Johor just across the water from Tuas.

Despite this gloomy news, however, PSA has retained its high credit ratings (AAA and Aa1) from Standard & Poor’s (S&P) and Moody’s. The return of some \$3 billion non-core property assets to Temasek Holdings in advance of flotation, and a resultant loss of income has had little effect on what S&P describes as a “robust business position” underpinned by “the substantial cash flow” from port operations.<sup>40</sup> As the century came to a close it was the general view that Temasek’s sale of 20-25 per cent of PSA Corporation

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<sup>37</sup> *Business Times* (1 October 1997) ‘PSA’s monopoly to be reviewed before listing’

<sup>38</sup> *Business Times* (12 May 1999) ‘PSA ready to list, waiting for Temasek’s go-ahead’

<sup>39</sup> *Straits Times* (27 September 2000) ‘PSA initial public offering may be put off to next year’

<sup>40</sup> *Straits Times* (8 December 2000) ‘Credit ratings remain strong’

would take place in May/June 2001. However, the slowdown in the global economy has brought a reassessment of the timetable. At the same time as TEU throughput dropped almost 9 percent in 2001, PSA's chairman, Dr Yeo Ning Hong, pronounced, "the IPO market is dead".<sup>41</sup> Support for this view, and an indicator of depressing times, comes from *The Economist*.<sup>42</sup>

"For investment bankers, life was already glum before the horror of September 11<sup>th</sup>. Since then, it has grown even bleaker, with the cancellation or postponement of several mergers and acquisitions. In the two weeks since the attack, 20 companies cancelled US\$15 billion-worth of mergers, according to Bloomberg, a financial-news company."

The latest reports from PSA Corporation would appear to indicate a relaxed attitude towards the timing of privatisation. One probable reason for this is that the planned IPO has never been seen as a fund-raising exercise. In the words of PSA's chief financial officer, "We have sufficient internal funding to fund our businesses, and shareholders are not in need of money".<sup>43</sup> As explained in Chapter Eleven, these 'well-cushioned' shareholders (Temasek Holdings) are currently wrestling with a major restructuring of GLCs intended to enhance Singapore's overseas performance, and so, given PSA's marked success in that area of activity, may well see no need to hasten privatisation until stock markets are fully recovered. The contrary view, one of particular significance for PSA's chances of expansion in China, is explained in Chapter Nine.

#### ***7.4 Responding to globalisation II: development of an international financial centre, with DBS Bank as its 'champion'***

##### ***7.4.1 The financial centre concept***

From the day the PAP took office in 1959, Gunnar Myrdal's espousal of the 'big push' philosophy was an approach close to its heart. Much early energy was necessarily taken up with the fights for survival and against the pro-communists, and Bryant (1989, 338) expounds the generally-held view that the political forces galvanising government in the

<sup>41</sup> *Business Times*[O] (16 July 2001) 'IPO no go for PSA: chairman'

<sup>42</sup> *The Economist* (29 September 2001, 84)

<sup>43</sup> *Straits Times*[I] (24 June 2002) 'IPO delay will not hurt PSA's reputation'

post-independence period were apprehension and insecurity.<sup>44</sup> The watershed came in the mid-1960s, with the effective withdrawal from the political barricades of the Barisan Socialis, and the resultant clean sweep by the PAP in the 1968 general elections (see Table 10.2). This paved the way in the 1970s for firm and decisive action by government, when a small, tightly-knit political elite, faced with minimal opposition, was able to restructure the Singapore economy and develop long-term plans for future development and prosperity.

An important outcome of Singapore having to 'think global' from the very start was that the city-state sought to make progress by concentrating efforts in a limited number of key activities – an approach which still holds true today. One of these activities was the banking and financial sector, which needed enlargement to cope with the industrialisation programme.<sup>45</sup> Singapore had set up the first Asian Dollar Market and a gold market in 1968, and two years later MAS, wholly owned and controlled by the Government, was brought in to orchestrate financial policies and planning. With DBS already proving a success as the motor of the economy, and the establishment in MAS of what was to all intents and purposes a central bank, Singapore was poised for a 'Myrdalian' push in the financial sector. Comment in the national press prior to the arrival of MAS was dismissive of the competition:<sup>46</sup>

"(Some) argue that Singapore is best placed of all the cities in Asia to become during the 1970s the focus for American and European financial interest in this part of the world – Hong Kong being too politically risky, Bangkok and Manila being too politically unstable and liable to run into balance of payments problems, and Tokyo as yet unwilling to step out of the protective cocoon of Japanese economic protectionism. Perhaps a more adventurous and farsighted attitude by the Finance Ministry at this stage could, in this view, ensure Singapore's place as a major financial centre in Asia. But a negative approach could see the opportunity slip away".<sup>47</sup>

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<sup>44</sup> Support for this interpretation is to be found in the second volume of Lee Kuan Yew's memoirs (Lee 2000, 19-25), where he identifies his main priorities on taking office as the gaining of international recognition for the new state, a defence capability in the light of impending British withdrawal, an effective system of law and order and development of the economy.

<sup>45</sup> Between 1962 and 1969, loans and advances made out by commercial banks increased by some 260 percent, with the share of the manufacturing sector rising from 12.0 percent in 1962 to 21.7 percent in 1969 (Lim & Ow 1971, 13).

<sup>46</sup> This narrow view remained fashionable into the 1980s, by which time Singapore and Hong Kong were operating as complementary *and* competitive financial centres, and Tokyo was showing signs of becoming the dominant financial centre in Asia.

<sup>47</sup> *Straits Times* (22 May 1970)

Not surprisingly, and as Lim & Ow (1971) note, Singapore's early efforts to establish a financial centre were unsophisticated when compared with the likes of London or Zurich. However, there could be no doubt of the need for such a centre in Southeast Asia, given the large amounts of Western capital that were flowing into the region. There was no doubt, either, about the solution: "For want of a better place and because of the worldwide attention that Singapore received for her political stability, efficient administration and remarkable economic performance, Singapore has been chosen to act as the 'Zurich of Asia'" (Lim & Ow 1971,15). It is not clear who did the choosing, either of Singapore or the extravagant title, but the logic was inescapable.

What transpired through the 1970s, and beyond, indicated that the Finance Ministry, represented by MAS,<sup>48</sup> had no intention of being negative. By early 1971, the *Straits Times* reported that, "leading bankers in the Republic are beginning to see this tiny island state shaping up to be the financial centre in the region".<sup>49</sup> Later that year the December issue of *Fortune Magazine* was positively glowing in its testimony: "Singapore is rapidly becoming the Switzerland of the Orient, a stable market for hard currencies and gold – with a precious respect for secrecy....Prime Minister Lee Kuan Yew's Government is giving the bankers a brand of cooperation unavailable elsewhere in Asia".<sup>50</sup> Government's willingness to liberalise regulations and so assist a more efficient banking system was clearly paying dividends for the strategy of making the Republic the banking and financial centre of Southeast Asia. The contribution of the financial sector to the city-state's GDP grew from 7.4 percent in 1960 to 10.5 percent in 1973 (Tan & Ow 1982, 299).

However, there were obstacles during the 1970s to the generally smooth progress towards international recognition of Singapore as a financial centre. With the exception of DBS, local banks were slow in picking up the challenge; indeed, there was talk in the press of them 'retarding' the progress of Singapore's economy, for, "while the Republic is aspiring and working toward the national goal of shaping Singapore into a financial centre, it is a pity to note that we have banks here which are neither progressive nor dynamic enough to contribute towards that goal. They are not only conservative but also backward in their

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<sup>48</sup> From its inception, the Chairman of MAS has been the Minister for Finance.

<sup>49</sup> *Straits Times* (7 February 1971)

<sup>50</sup> *Straits Times* (29 November 1971)

thinking”.<sup>51</sup> But if the local banks took the cautious route forward, including a lack of interest in venturing abroad, foreign banks responded with enthusiasm to Singapore’s banking opportunities, to the extent that the Republic’s claim to development as a financial hub was founded largely on their activities. By 1980 a further 60 foreign banks, the majority (47) of them offshore banks, were taking advantage of the regulatory environment provided by the Singapore Government (see Table 6.4).

When Singapore’s financial system emerged relatively unscathed from the mid-1970s world recession –so fully justifying *Fortune Magazine*’s 1971 assessment - a forum of local experts identified five main reasons for Singapore’s success as a financial centre.<sup>52</sup>

- political and economic stability, providing a climate of confidence for bankers;
- the flexible attitude of government in nurturing Singapore’s growth as a financial hub;
- financial expertise and infrastructure;
- support services provided by legal and accountancy firms; and
- the prevailing mood of encouragement for excellence.

There has been little attempt in the literature to explain why the growth of financial activity in Singapore was so rapid. Bryant (1989) is a notable exception, although his findings, while persuasive, are not conclusive. In identifying various non-policy causal factors producing financial growth – primarily local and regional economic activity and locational competitiveness – he suggests that they have varying degrees of importance, but that none on its own can explain Singapore’s growth as an international financial centre. Indeed, regional trade is actually an example of comparatively slow development. Again, according to Bryant (1989, 352), “if banking in Singapore had grown since 1968 merely at the pace of regional trade, it would have been on the order of only US\$15 billion in the mid-1980s - less than one-tenth of its actual size of US\$160 billion!” It is also his view that the factors which generate locational competitiveness, such as communications

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<sup>51</sup> *Straits Times* (8 February, 1976)

<sup>52</sup> *Straits Times* (4 November 1977) ‘Singapore proves it’s the financial hub’

technology, transportation facilities, support services, skilled labour and attractive housing accommodation, are invariably given too much weight and should be viewed rather as peripheral causal factors.

**Table 7.6 Singapore: banks by country of incorporation, 1979**

<i>Country</i>	<i>1969</i>	<i>1979</i>			
	<i>Total</i>	<i>Total</i>	<i>Full Banks</i>	<i>Restricted Banks</i>	<i>Offshore Banks</i>
<b>Australia</b>	-	2	-	-	2
<b>Brazil</b>	-	1	-	-	1
<b>Canada</b>	-	5	-	-	5
<b>CPR</b>	2	2	2	-	-
<b>France</b>	1	4	1	1	2
<b>FR Germany</b>	-	4	-	3	1
<b>Hong Kong</b>	3	3	3	-	-
<b>India</b>	4	5	4	-	1
<b>Indonesia</b>	1	1	1	-	-
<b>Italy</b>	-	1	-	1	-
<b>Japan</b>	2	10	2	2	6
<b>Korea</b>	-	1	-	1	-
<b>Malaysia</b>	4	4	4	-	-
<b>Netherlands</b>	1	2	1	-	1
<b>Pakistan</b>	-	1	-	1	-
<b>Philippines</b>	-	1	-	-	1
<b>Singapore</b>	11	13	13	-	-
<b>Spain</b>	-	1	-	-	1
<b>Switzerland</b>	-	3	-	1	2
<b>Taiwan</b>	-	1	-	1	-
<b>Thailand</b>	1	1	1	-	-
<b>UK</b>	1	7	1	1	5
<b>US</b>	3	21	4	1	16
<b>Total</b>	<b>34</b>	<b>94</b>	<b>37</b>	<b>13</b>	<b>44</b>

*Source: MAS Annual Report (various)*

We are left, therefore, with the policy inducements of government, factors which Bryant describes as being no more than “also influential”. On close inspection, however, they do

appear to be critical factors, reflecting as they do the determined, unequivocal approach of the PAP Government to 'getting things done'. In the financial sector in the 1970s and early 1980s the rapid growth of international banking received direct stimulation from a range of regulatory, tax and supervisory policies. Typical, too, of the period was the way in which encouragement of foreign banks was accompanied by protection for the domestic banks, a strategy achieved by the erection of what Bryant calls the "separation fence".<sup>53</sup> This policy was at variance with those of most Asian countries, which tended to be less welcoming to foreign banks and as a result 'pushed' many bankers into locating their Asian offices in Singapore. A further point of note is that the positive environment offered by Singapore helped European and North American banks to decide to run their Asian operations from within that continent rather than from what were often more restrictive financial regimes in the home country. By 1977 it was clear that world banking understood Singapore's advantages: 28 of the world's top 30 banks were represented in the city-state – 12 of them offshore banks, three merchant banks, four full-service banks, four restricted licences and five representative offices.<sup>54</sup>

Table 7.6 shows that at the end of the 1970s, the US, Japan and the UK were the leading banking countries operating in Singapore. The number of US banks is striking, representing as it does the need for US banks to service at first hand their clients in the shape of MNCs drawn by Singapore's advantages as a base for operations in Southeast Asia. It does appear on balance, therefore, that the actions and attitudes of government were decisive in the development of Singapore into an international financial centre. The utilisation of both internal and external factors showed both political acumen and an unflinching determination to pursue a chosen course of action. It was a perfect environment in which DBS, as a government-linked bank, could flourish.

#### **7.4.2 DBS: the consolidation phase**

In 1979, Government introduced a raft of policy measures intended to enhance Singapore's competitiveness in international markets and to drive what has been widely referred to as

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<sup>53</sup> Despite the progressive liberalisation of the financial sector, a form of separation fence still remains.

<sup>54</sup> *Business Times* (20 April 1977) '28 world banks are represented in S'pore'

Singapore's 'second industrial revolution'.<sup>55</sup> Moves to improve productivity, automation, R&D and training support were all appropriate tools with which to stimulate growth. The high wage policy, however, was a different matter. Used as a blunt instrument with which to persuade employers to deploy the labour force more cost-effectively, it was pitched too high and so backfired. The impact on the economy was serious: according to Quah (1994, 12) the policy was "one of the major domestic causes of the 1985 recession" – and recognised as such in the Economic Committee's 1986 Report. Nonetheless, the government's aim of developing Singapore into an international financial centre remained unchanged, mainly because the performance of the service sector as a whole (including trade) had remained so buoyant through the 1970s, providing 70 percent of GDP growth during the decade. Although promotion of the services sector was not undertaken at the expense of manufacturing, it had been recognised at an early stage that a tiny state with no natural resources and a small population would have to extract the maximum benefit from its prime geographical position within the burgeoning Southeast Asian region and as a nodal point in the world's air, sea and telecommunications networks.

Throughout the 1980s there are regular reminders of the Government's commitment to the financial centre concept. The 'activist' or 'interventionist' nature of this commitment was necessary, given Singapore's vulnerable position within the global economy. It was quite different from practices in the established global cities of London and New York, where major financial centres grew up simply and logically in order to meet the requirements of powerful domestic economies and global trading interests. Singapore's deliberate development of a financial centre was in response to the need for such a centre to provide the link between Western capital and the export-oriented economies of Southeast Asia. Singapore, having stolen the march on its potential competitors in the late 1960s, had no intention of relinquishing pole position. According to Goh Chok Tong, when making the 1980 Budget Statement: "In the Eighties we shall develop Singapore into a financial supermarket offering a wide and sophisticated range of financial services. We aim to develop Singapore into an International Fund Management Centre. We shall encourage

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<sup>55</sup> A term which may well have been originated by Garry Rodan. The 'first industrial revolution' was initiated by the change in strategy post-independence from ISI to EOI.

banks to improve their efficiency and productivity through greater computerisation and other forms of automation”.<sup>56</sup>

Not surprisingly, the state-sponsored DBS drew great encouragement from the government’s policy. Its Chairman, J.Y.M. Pillay, asserted that “the group can look back with satisfaction on its rapid evolution from a fledgling development financing institution to a universal bank, poised for expansion in the next decade not only within the confines of Singapore, but in the major financial and business centres of the world”.<sup>57</sup> His use of the term ‘universal bank’ was rather premature, given that *The Banker* had no place for DBS in its 1980 list of the world’s 500 largest commercial banks based on assets.<sup>58</sup> However, there was little to choose in 1980 between DBS, OCBC and UOB, and it was no surprise when, at the end of that year, DBS (104<sup>th</sup>) was placed ahead of all the other Singapore banks in the ranking list of the top 200 banks in the Asia-Pacific region.<sup>59</sup> *The Banker’s* ranking lists for 1979, 1980 and 1981 also show not only the closeness of the competition between the three Singapore banks, but also the brief time it took for DBS to open a gap between itself and UOB, and emerge as the Republic’s number one commercial bank in terms of assets (Table 7.7). The evidence leads to the conclusion that DBS was proving more alert than the other (family-owned) domestic banks to the challenges and opportunities provided by the steady influx of foreign banks.

This growth in the banking sector certainly helped maintain the dynamism of Singapore’s growth as a financial centre, in terms both of volume and the all-important up-grading of skills and sharpening of competition. As a result, prior to the world economic downturn in the mid-1980s, the government’s aim of creating an international financial centre had been realised: “Today”, reported the *Straits Times*, “(Singapore) is the fourth largest financial centre in the world, after London, New York and Hong Kong. It has more than 200 financial institutions,...each competing for a slice of the financial services pie, which

<sup>56</sup> Goh Chok Tong (5 March 1980) Parliamentary Debates, Official Report vol 39, col 618

<sup>57</sup> Taken from the 1980 DBS Annual Report, quoted in the *Straits Times* (16 April 1980)

<sup>58</sup> The Hongkong and Shanghai Banking Corporation (ranked 33), operating out of Hongkong, was a giant compared with other banks in ASEAN or the Asian NICs. Banks based in Seoul (7), Taipei (3), Jakarta (3), Kuala Lumpur (2), and Bangkok and Manila (one each) were all ranked above Singapore’s UOB in 389<sup>th</sup> place.

<sup>59</sup> *Business Times* (25 December 1980) ‘Eight Singapore banks in top 200 positions’

fortunately is getting larger all the time”.<sup>60</sup> The same article noted that 45 of the world’s top 50 banks were located in the city-state, and that DBS ranked 67<sup>th</sup> among Asia-Pacific banks. Nonetheless, the emphasis during the first half of the 1980s was essentially one of steady growth and consolidation: between 1981 and 1985, DBS raised its world ranking a modest 41 places to 287<sup>th</sup>.<sup>61</sup>

**Table 7.7 World rankings: Singapore’s ‘big four’ banks, 1979-1981**

	<i>DBS</i>	<i>OCBC</i>	<i>UOB</i>	<i>OUB</i>
<b>1979</b>	-	459	406	-
<b>1980</b>	-	476	389	-
<b>1981</b>	328	496	357	-

*Sources: The Banker* (June 1981);  
*Business Times* (2 September 1981);  
*Straits Times* (17 July 1982)

Both the financial centre and DBS, however, seemed to have acquired a momentum that was beyond dispute. Major reasons for this lay in factors which had not changed over fifteen years:

- an enlightened and far-sighted government;
- excellent communications and geographic location;
- a stable economic and political environment;
- a sound banking system;
- a minimum of restrictions on the movement of money;
- limited tax impediments;
- a respect for secrecy; and
- a strong supervisory body in MAS.

<sup>60</sup> *Straits Times* (9 August 1983) ‘The bottom line looks promising’

<sup>61</sup> Ahead of DBS were banks from Seoul (7), Taipei (4), and Hongkong, Kuala Lumpur, Jakarta and Bangkok (one each). (*The Banker* ‘Top 500’, July 1986 vol 136, 117-167)

As DBS continued through the 1980s to consolidate its leading domestic position, the financial environment within which it operated was subject to considerable change. First there was the international debt crisis and the Singapore Government's response; then, hard on its heels, came the deregulation of financial markets, including those in Japan and Australia; and finally, there was the Government's decision to remove DBS's special privileges and place it on an equal footing with the other domestic commercial banks. I look at the impact of each of these developments in turn.

### **7.4.3 *A changing financial environment***

The international debt crisis reinforced the government's policy of tight control of the banking sector. Prime Minister Lee Kuan Yew was certain, not only of the necessity for such control, but also that it would not hamper Singapore's aspirations regarding status as a financial centre.<sup>62</sup> The making of such a claim reflected the government's ability, based on its unassailable position, to think long-term and constructively. Hence DBS, as the government-sponsored bank, could also think positively, despite the effects of the crisis: "The proposals for 1986 are likely to remain adverse due to economic uncertainty, changing demands for the products of Singapore's industries, uncompetitive production costs and the difficult business environment in Southeast Asia. However, recent Singapore government initiatives, fiscal measures, tax concessions, efforts to improve productivity, and other regulatory changes should present new growth opportunities".<sup>63</sup> These opportunities were developed in the report of the Government's Economic Committee in 1986, which recycled Singapore's aim to become, within ten years, the Switzerland of Asia for risk management, and fund and capital markets. More important, however, was the perception of the opening of the Tokyo and Australian (Sydney) offshore markets as presenting opportunities for Singapore to become "a 24-hour global banking centre".<sup>64</sup>

The liberalisation of the Japanese markets in April 1985 and the attendant recognition that Tokyo had emerged as the premier Asian financial centre caused Singapore initial concerns. It also confirmed the need to be alert to structural changes in the world's financial markets if, as the Finance Minister put it, Singapore was to remain "relevant as a

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<sup>62</sup> *Business Times* (12 October 1984) 'Tight control of banking essential, says PM Lee'

<sup>63</sup> DBS Annual Report (1985, 5)

<sup>64</sup> *Business Times* (19 February 1986) 'Call to make Republic the Switzerland of Asia'

financial centre”.<sup>65</sup> What in fact transpired was that the emergence of Tokyo as a major world financial centre brought knock-on benefits for Singapore, Hong Kong and Sydney. Japanese corporations, now able to trade freely in the foreign exchange markets, produced a huge increase in the volume of Asian business, which “spilled over from Tokyo to Singapore, being one of three Asian centres geared to meet such business demand with both a high level of technical expertise and a well-placed market infrastructure”.<sup>66</sup>

The generally self-satisfied feeling evident in Parliament and reported in the press was put in some perspective in an interview with a top American economist, Professor Thorn of the University of Pittsburgh.<sup>67</sup> His was a timely reminder for Singapore not to ignore its regional roots. In giving what was a positive view of Singapore’s progress in the global economy, Professor Thorn nonetheless warned that the city-state’s future would best reside in being the premier *regional* financial centre (my emphasis). He felt that not enough attention had been paid to what was patently an attractive market, and to establishing Singapore as the conduit for the movement of capital between the countries of Southeast Asia and the world’s major financial centres. Professor Thorn was arguably the first informed commentator to attempt a definition of Singapore’s *raison d’être* as an international financial centre. Hitherto, it could be said, too much attention had been given to the frequent and over-hyped bracketing of Singapore with ‘Zurich’, ‘Switzerland’, ‘Lombard Street’ and so on. Consistent with this interpretation is first, the tendency for Singapore to think of itself as being ‘ahead’ of its neighbours, and second, government’s perfectly laudable desire (*qua* Myrdal) to ‘think global’ rather than simply within a regional framework. Against this background it is easy to see how, in the 1970s and 1980s, Singapore came to concentrate more on the attainment of a place in the big league with London, New York and Tokyo, rather than on cementing its role within the less intoxicating realm of ASEAN.

“The days of special privileges for DBS Bank are numbered”, reported the *Straits Times* on 3 August 1988. Some twenty years after establishment of the Bank, and given its growth to become the Republic’s leading commercial bank, government obviously felt that there

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<sup>65</sup> *Business Times* (14 May 1987) ‘Be alive to changes in world financial markets, says Dr Hu’

<sup>66</sup> *Straits Times* (20 May 1987) ‘S’pore thriving as global link’

<sup>67</sup> *Business Times* (3 June 1987)

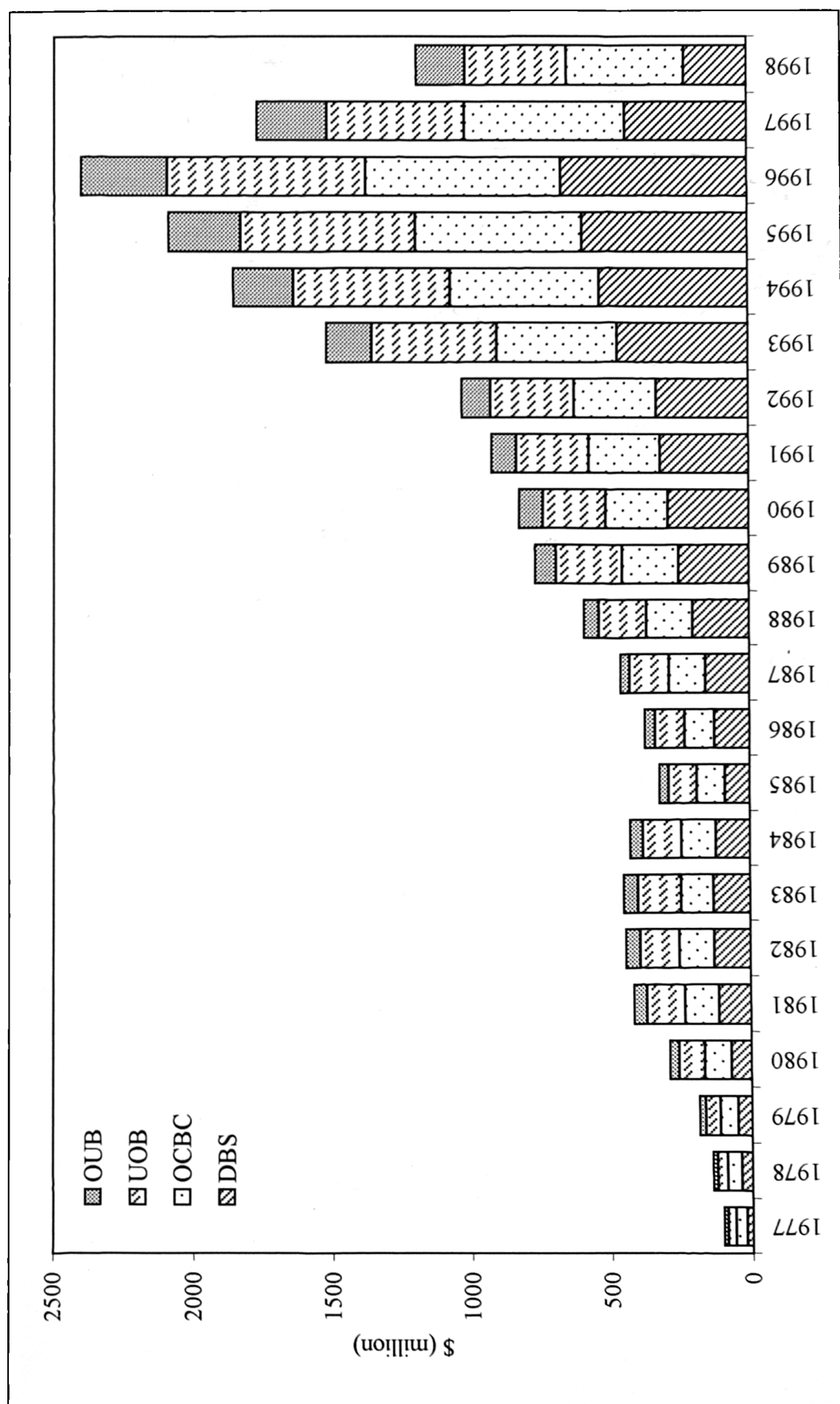


Figure 7.3 Singapore: after-tax profits of the 'big four' banks, 1977-1988

Sources: *Business Times* (20 May 1987), *Strait Times* (21 February 1998 & 21 March 1999)

was no longer justification for allowing it to operate from a favoured position. The main impact was on foreign ownership, a consideration of importance in the Bank's early years when government was keen to help establish its credibility as a development financing institution. DBS's competitors had been subject to the MAS 20 percent ceiling on foreign ownership; this was raised to 40 percent in 1990, a restraint which would have posed no problems for DBS.<sup>68</sup> By this time the Bank had become Singapore's largest in terms of profit, assets and shareholders' funds. At home it had 39 branches and 116 automated teller machines (ATMs), while abroad a network of 682 correspondent banks was sited in 75 countries.<sup>69</sup> Government remained the main shareholder (41.52 percent) and the Bank was confident that, in terms both of its development financing role and strength as a commercial bank, it would "continue to contribute to Singapore's 'next lap' of development".<sup>70</sup> A measure of the progress made by DBS during the Eighties is shown in Figure 7.3. All the evidence points to the Bank being confident of having reached the stage when it could 'open up': "Looking ahead, the Bank will continue to seek more business opportunities through an enhanced overseas presence and strategic alliances with established institutions in the region".<sup>71</sup> The first move in this direction was made in April 1990, with the opening of PT DBS Buana Tat Lee Bank in Indonesia, a joint-venture in which DBS took a 42.5 percent stake. DBS was now the number one bank in ASEAN based on shareholders' equity and, with OCBC and UOB placed second and third respectively in rankings based on shareholders' equity, Singapore's position as the financial hub for Southeast Asia seemed confirmed.

### ***7.5 Responding to globalisation III: biomedical sciences as the 'fourth pillar' of the economy***

#### ***7.5.1 A major landmark: the 1991 National Technology Plan***

A National Science and Technology Board (NSTB) was formed in January 1991, with the mission to develop Singapore into a centre of excellence in selected fields of science and technology, and so to enhance the city-state's competitiveness in the industrial services

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<sup>68</sup> Early in 1991, foreign shareholdings in DBS amounted to 46.2 percent of the total. This figure has been progressively reduced over the following years.

<sup>69</sup> DBS Annual Report (1990)

<sup>70</sup> *The Next Lap* (Goh 1991), linked with the hand over of power from Lee Kuan Yew to Goh Chok Tong, was the Government's mission statement of objectives to be achieved by the end of the twentieth century.

<sup>71</sup> DBS Annual Report (1990, 16)

sector (NSTB 1991, ii). In order to fulfil this mission, the NSTB produced within eight months a National Technology Plan which highlighted, *inter alia*, biotechnology and what it termed 'medical sciences' (including pharmaceuticals and medical products and processes) as two of nine key technology areas considered relevant to the Republic's future economic growth. At the heart of the Plan was the development of R&D activity, which the government knew fell short of the levels achieved by Singapore's rivals – among the Asian NICs as well as certain developed nations in the West – and which would have to be improved if Singapore was to maintain its competitiveness. The targets identified in the Plan were for: (a) total national expenditure on R&D to reach 2 percent of GDP by 1995; (b) a minimum of 50 percent of this total to come from the private sector; and (c) the ratio of the number of scientists and engineers engaged in R&D activities to reach 40 per 10,000 of the labour force, also by 1995. The comparative figures for 1990 were: (a) 1.0 percent; (b) 59 percent; and (c) 28 per 10,000. Indicators of the scale of the task Singapore was setting itself were provided by South Korea (1.8 percent of GDP spent on R&D; to be increased to 5 percent by 2000) and Taiwan (1.3 percent of GDP spent on R&D; to be increased to 2 percent in the 1990s) (NSTB 1991, 1).

The broad aim of the 1991 National Technology Plan, in support of the next phase of Singapore's economic growth, was:

“...to seek a more innovation-driven industrial programme. Our basic approach will still be to maintain an open economy to attract high quality world-class businesses to Singapore. We will refine this approach to encourage more developmental and research work in Singapore. Our aim is to make Singapore a centre of excellence in science and technology in fields that are properly chosen and suited to our capabilities” (NSTB 1991, vii).

The Plan identified biotechnology as one such field, noting the pressure that the US as world leader was coming under from Japan, Canada and Europe, all of which were promoting and investing in R&D. In the US alone, some 300 firms were established between 1980 and 1985, to conduct research in cell and molecular biology and produce a wide range of new products.<sup>72</sup> Bearing in mind Singapore's small size and late arrival on the biotechnology scene, its only feasible option, therefore, was to pursue a niche policy.

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<sup>72</sup> *Business Times* (5 October 1990) 'Ways to develop a biotech industry'

Whilst recognising that Asian countries had much ground to make up in their efforts to develop biotechnology, Singapore's National Technology Plan noted there was regional competition from South Korea, Malaysia and Thailand, all these countries having "placed biotechnology as an area of priority for government support" (NSTB 1991, 168). This echoed Singapore's policy, but the NSTB was obviously anxious to get the fundamentals right in order to make the desired progress: "Before biotechnology can contribute to the economy of Singapore, it is important that the shortcomings in infrastructure, research culture and manpower be arrested" (NSTB 1991, 169). The Plan went on to make 25 recommendations intended to address these shortcomings, including the setting up of specialist centres, introduction of greater tax incentives, development of formal procedures for clinical trials, establishment of Singapore's own patent laws, expansion of training opportunities, increased sources of funding and schemes to heighten awareness within business and the population at large of the growing importance of biotechnology.

In the case of the medical sciences – the second field selected as deserving of priority development – many organisations and services were already in place. However, the Plan looked for diversification and enhancement of clinical/hospital-based specialities, especially in areas such as cancer and heart and liver diseases. Pharmaceutical R&D, it noted, would be served best by collaboration between local enterprises and the established MNCs. Interestingly, those MNCs experiencing difficulties elsewhere with animal rights lobbyists were encouraged to relocate their animal experiments to Singapore; where, presumably, protesters could expect little sympathy for their actions. The recommendation for the medical device business – like pharmaceuticals, already established (see Chapter Six) – was to develop diagnostic products with a regular turnover, in areas like prosthetics and cardiovascular surgery. Finally, it was stressed that there was a pressing need throughout the medical sciences for new thinking and incentives in respect of manpower for medical research (NSTB 1991, 180).

The 1991 National Technology Plan was therefore a highly detailed document, and a signal of the Government's intention that the biotechnology and medical sciences could, and should, form key tools in the push to develop a knowledge-intensive economy in

Singapore. Amidst the plethora of detail, one set of proposals does stand out as central to the development of a critical mass of high-quality R&D activities, and of an environment equipped to attract foreign companies and scientists. These were the proposals (discussed in Chapter Eight) for the establishment of a 'Technology Corridor' within which the scientific community could work, live and thrive.

### **7.5.2 *From biotechnology to the 'PBH Cluster'***

By the mid-1990s, government thinking was still locked into biotechnology as a major contributor to the move towards a knowledge-based economy. The 1988 National Biotechnology Programme and subsequent Master Plan of 1990 continued to drive Singapore's biotechnological efforts. As the EDB stated, the aim remained the development of "a viable biotechnology industry contributing significantly to Singapore's economy by the year 2000" (EDB 1995, 1). This appears to have been no more than a vision, for quite how biotechnology *per se* would make a 'significant' contribution to the economy was not explained. Perhaps this was simply a loose use of the word itself, and that what the EDB was referring to also included the manufacturing contributions of pharmaceuticals and medical services. Nevertheless, moves intended to underpin the Government's commitment to biotechnology did continue, in the form of university-industry collaboration, such as the Centre for National Product Research, set up by Glaxo, EDB and IMCB; the establishment of further centres of competence, on the lines of the BioScience Centre at NUS; funding schemes to assist R&D; and manpower training programmes, in the shape of technical training at Kneehill and Singapore Polytechnics, and graduate/postgraduate courses at NUS and NTU. The importance of encouraging overseas companies to establish operations in Singapore remained a top priority, but the EDB – through Singapore Bio-Innovations Ltd, which it established in 1990 – was also looking to commercialise local biotechnology invention and innovation (EDB 1995, 5). The overwhelming impression, however, is of a sector of the economy almost totally dependent on the products of foreign MNCs, mainly in the pharmaceutical and medical-device areas, and with little or no evidence of measurable contributions to the economy as a result of local initiatives. Biotechnology remained "something of an anomaly for the Republic",<sup>73</sup> since government's determination for it to be a (long-term) growth area

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<sup>73</sup> *Business Times* (5 October 1990) 'Ways to develop a biotech industry'

appeared to be at odds with the repeated exhortations in Budget Statements during the 1980s and early 1990s for the economy to be 'quick and nimble' in response to external change.

There was no sign of any uncertainty, however, in the EDB's pronouncement early in 1997 that the "pharmaceutical, biotechnology and healthcare industry cluster (was) geared for further growth".<sup>74</sup> The formal bracketing of pharmaceuticals, biotechnology and healthcare is a good example of Singapore's pragmatic government at work. Faced with a biotechnology project that was both slow-moving and a difficult concept for people to grasp, its simple answer was to attach it to the manufacturing output of pharmaceutical and healthcare device companies, give it the catchy title of 'PBH Cluster' and, courtesy mainly of the manufacturing elements, be able to quote an output figure for the cluster.<sup>75</sup> From an operational point of view the move makes good sense: politically it helped draw attention to what government was doing, not only at the high value-added end of the economy, but also in improving healthcare for its citizens; and economically it brought cohesion and substance to early development of this particular sector of the knowledge-based economy. At the same time it did put into focus the less than exciting record of developments associated with biotechnology, which gave the project an air smacking more of altruism than dynamism. Doubts did not seem to enter the collective mind of the EDB, however, as the following positive and upbeat statement illustrates.<sup>76</sup>

"The PBH cluster is a technology-intensive and high value-added industry of strategic importance to Singapore in the next phase of economic development. Growing affluence and rising healthcare standards throughout the world have fuelled strong growth in the industry, particularly in the markets of emerging economies. The EDB is adopting an integrated approach in developing this cluster. With our existing base of world-class healthcare manufacturers, excellence in medical services and conducive climate for research and development, Singapore is strongly positioned as the hub for the healthcare industry in Asia".

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<sup>74</sup> EDB Press Release (27 January 1997)

<sup>75</sup> The PBH cluster grew by 10 per cent in 1996, with a manufacturing output of \$2.2 billion; value-added grew at 12 per cent to reach \$1.7 billion. (EDB Press Release, 27 January 1997).

<sup>76</sup> EDB Press Release (27 January 1997)

### 7.5.3 Emergence of a 'new cluster': the Life Sciences

In January 1999, the EDB launched Industry 21, a plan to develop knowledge-driven industries to underpin the developing knowledge-based economy, and form an economic blueprint for the 21<sup>st</sup> century. It was Singapore's response to the challenge of the rapid technological advances associated with globalisation, and manifestation of the Republic's belief that "knowledge will certainly become a strategic asset for economic growth" (EDB 1999a, 1). I discuss Industry 21 in greater detail in Chapter Eleven (see Figure 11.1 and Table 11.3). What the blueprint shows is that the composition of the PBH cluster was still open to adjustment. Hence, in Industry 21 there is not only the introduction of 'Life Sciences', but also a return to the separation of healthcare from pharmaceuticals and medical devices. The separation is hard to explain and only served to muddy the waters after the confidence with which the PBH cluster had been launched. Furthermore, cross-references within Industry 21 documents effectively acknowledge an interface between manufacturing activities and healthcare, in terms, for instance, of pharmaceutical research and clinical trials.

**Table 7.8 Manufacturing and value-added output: life sciences cluster, 1998-1999**

<i>Sectors</i>	<i>Output</i>			<i>Value-added</i>		
	<i>1998 (\$m)</i>	<i>1999 (\$m)</i>	<i>Growth (%)</i>	<i>1998 (\$m)</i>	<i>1999 (\$m)</i>	<i>Growth (%)</i>
<b>Pharmaceuticals</b>	2,857	5,052	76.8	2,438	4,521	85.4
<b>Medical devices</b>	1,101	1,275	15.8	556	703	26.4
<b>Total</b>	3,958	6,327	60.0	2,994	5,224	74.5
<i>Food &amp; agrobiotechnology</i>	<i>3,054</i>	<i>3,050</i>	<i>-0.1</i>	<i>677</i>	<i>684</i>	<i>1.0</i>
<i>Total</i>	<i>7,012</i>	<i>9,377</i>	<i>33.7</i>	<i>3,671</i>	<i>5,908</i>	<i>60.9</i>

Note: the 1999 figures are provisional

Source: EDB Press Release (3 February 2000)

A year later, surprisingly, healthcare did not even feature in an EDB briefing on the progress of the life sciences within the Industry 21 programme.<sup>77</sup> “Life sciences – a new cluster emerges with robust 34% growth in 1999”, ran the headline. Allowing for the extravagance of the language, the figure for growth *is* impressive; and even more so when the figures for the food and agrobiotechnology sector are omitted (see Table 7.8). The output figure for pharmaceuticals and medical devices (\$6.4 billion) represents close to a three-fold increase on the 1996 figure for the PBH cluster. The value-added performance of life sciences is also impressive, being similar to that achieved by the engineering industry, and above the performance of chemicals and electronics. In 1999, the life sciences contributed 7 percent of the total manufacturing output, but 17 percent of value-added for the sector. As the year 2000 opened, the EDB was looking for double-digit growth in the years ahead, an aspiration that presumably will require downward adjustment once the full impact of the current global recession is known. Until it is, the EDB’s goal remains that of doubling output and reaching \$12 billion in 2005.<sup>78</sup>

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<sup>77</sup> EDB Press Release (3 February 2000)

<sup>78</sup> This figure appeared in an EDB Press Release dated 22 May 2000 and appears to refer to the 1999 total output of \$6,327 million (see Table 8.1). However, the Release goes on to refer to the EDB’s development of the ‘cluster concept’, comprising in the case of life sciences, pharmaceuticals, medical devices, iotechnology and *health and nutritional foods* (my italics). It is one of many examples of confusion arising from loose use of terms and their allocation under particular headings.

## ***Chapter Eight***

### **Aspiring to a knowledge-based economy**

*“The vision of Industry 21 is for Singapore to be a vibrant and robust global hub of knowledge-driven industries. We want to develop manufacturing and service industries with a strong emphasis on technology, innovation and capabilities. We also want to leverage on other hubs for ideas, talents, resources, capital and markets. To be a global hub and to compete globally, we require world-class capabilities and global reach. The goal is for Singapore to be a leading centre of competence in knowledge-driven activities and a choice location for company headquarters, with responsibilities for product and capability charters” (EDB 1999a, 2).*

#### **8.1 Introduction**

The accelerating pace of globalisation, particularly in terms of advances in technology, means that knowledge has become an increasingly important element contributing to economic growth. In the 1990s, Singapore government plans and papers were sprinkled liberally with words and terms associated with this development, such as ‘creativity’, ‘entrepreneurship’, ‘appetite for change’, ‘risk-taking’ and ‘knowledge-driven industries’. The move to a knowledge-based economy represents government’s latest gear change in its recurring adjustments to the changing pace and direction of the global economy. The resultant broadening of the Singapore economy should help soften the impact of a downturn in any one of the existing niche activities in either the manufacturing or service sectors.

The PAP leadership has complained frequently about the reluctance of Singaporeans to engage in entrepreneurial activity, a tendency generally attributed to a national

characteristic known by the Hokkien term *kiasu*. Meanings include fear of loss, of being cheated, and of failure. The last gives rise to a risk aversion most associated with younger Singaporeans (those unfamiliar with Lee Kuan Yew's desert experience). They appear more concerned with acquiring and enjoying material comforts than worrying about such matters as press freedom or the absence of an effective parliamentary opposition, and are also uneasy with the obvious link between entrepreneurial activity and the possibility of failure. Ironically, the Government is now suffering from the effects of its own policies: the combined fallout from first, its success in producing the comforts of the 'air-conditioned nation' (George 2000); and second, the policy of developing an economy with a premium on FDI, MNCs and foreign talent. It comes as no surprise that top domestic talent has tended to prefer the career opportunities and rewards associated with the civil service and financial and business sectors, to the uncertainties of life as an entrepreneur.

The Committee on Singapore's Competitiveness (CSC), which reported at the end of 1998, perceived manufacturing and services as the 'twin engines' of growth. The desire to move up the value-added chain in manufacturing, and away from an over-reliance on a production base, has already been noted. The CSC's proposed manufacturing strategy is for Singapore to be a key hub, where both MNCs and local companies can manufacture high value-added products and offer manufacturing-related services to companies in Singapore and across the region. As regards services, the strategy again involves the establishment of the Republic as an Asian hub, this time 'with a global orientation'. In line with the development of a knowledge-based economy, the Committee proposed that in addition to building on services already having international recognition, such as financial services, international trading, transport and tourism, additional resources and emphasis should be allotted to areas such as the biomedical sciences, communications and information technology (MTI 1998). Underscoring the CSC's strategy - the announcement of which followed swiftly in the wake of the Asian financial crisis - was the realisation that Singapore would need to enhance its competitiveness if it wished to keep ahead of the anticipated resurgence of economies in neighbouring countries. The Government therefore determined to press ahead with the CSC proposals, and quickly produced *Industry 21*, an ambitious economic blueprint for the twenty-first century that envisaged a concentration of effort in a limited number of key areas (EDB 1999a). The intention was clear: whilst government would remain the facilitator, the success of the strategy would depend to a large extent on the scale and quality of involvement of the private sector.

The Government's backing for the strategy is shown by the \$7 billion it is investing between 2000 and 2005, as part of the National Science and Technology 2005 Plan. It is thus expected that by 2005 the country's R&D expenditure will be between two and three percent of GDP, making Singapore comparable with most developed countries and, importantly, with Taiwan and South Korea. Another area of crucial development meeting with some success is the establishment in Singapore of world-class educational institutions, generally working in co-operation with the NUS and NTU. The hope is to attract ten world-ranked overseas institutions to the Republic. Those that have already put down roots are INSEAD and the Wharton School, the elite European and US business schools respectively; Johns Hopkins, the top US medical teaching institution; MIT; the University of Chicago Graduate School of Business; and the Georgia Institute of Technology. The ultimate aim, within the knowledge economy project, is for Singapore to become the 'Boston of the East'.

Just as important as investment in R&D and education is the more practical issue of niche market selection. The Government has proved deeply aware of this through the 1990s, and its decision to place emphasis on the biomedical sciences is probably the boldest step it has made in this respect. However, patience is required, for it will take 10-20 years before Singapore will know whether the decision was not only bold but right. Lee Kuan Yew has compared Singapore's problem of niche selection to manoeuvring on its highway of growth before being overrun by huge convoys coming from China and India. Speaking in September 2001, Lee identified the window of opportunity for such manoeuvring as lasting for no more than five to 10 years.<sup>1</sup>

## ***8.2 The biomedical sciences: front runners in the knowledge economy***

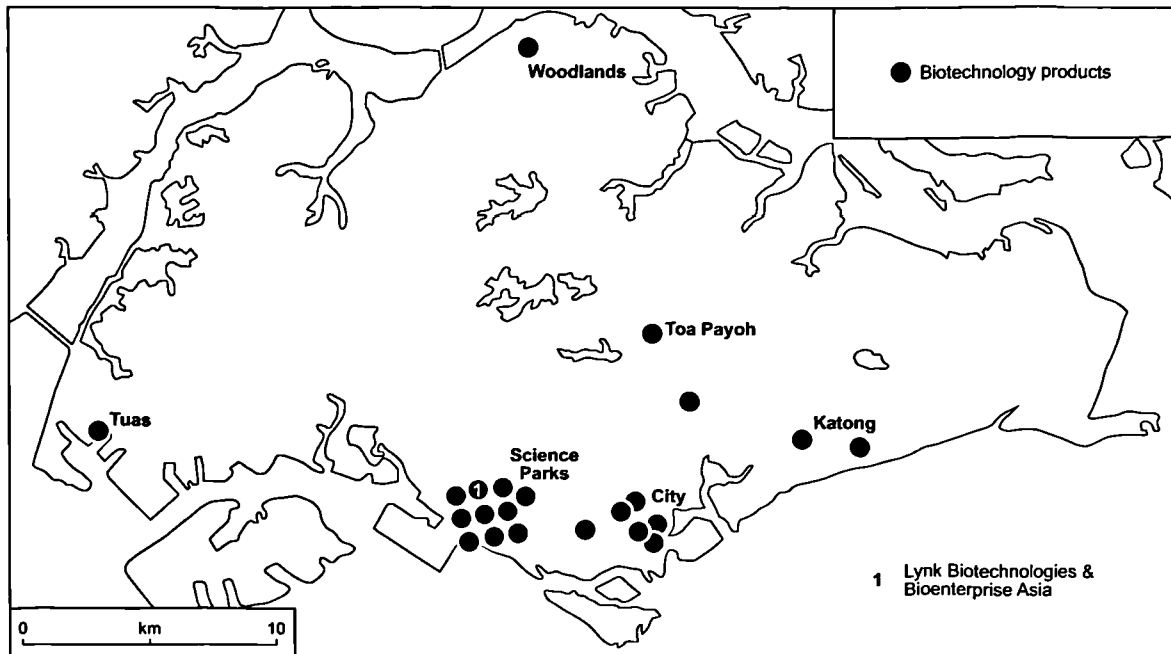
### ***8.2.1 Biotechnology: start-up companies at the cutting edge***

I described in Chapter Six the major role of foreign MNCs involved in the pharmaceutical and medical devices industries. These heavyweight organisations operate in areas of the biomedical sciences where size does matter – a fact reflected in their tendency towards mergers and acquisitions. They are not just the drivers of the biomedical sciences sector; they are also the pillars which support and give credence to the Government's aspirations

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<sup>1</sup> *MITA\_news@MITA.gov.sg* accessed 10 September 2001

in the field.. The contrast with the biotechnology companies could not be more stark, for the latter tend to be youthful organisations, setting out with brave hopes and only limited chances of success – and survival.



**Figure 8.1** Distribution of companies involved in biotechnology production  
*Source: Singapore Biomedical Sciences Directory 2001*

The distribution pattern of biotech firms (see Figure 8.1) is dominated by the clutch of sites in the Science Parks, immediately to the east of NUS and the National University Hospital. Eleven companies, nearly half of the biotech sector, have been attracted by the science park environment and, in some cases, the proximity of like-minded scientists, expertise and research activity within the University campus. A secondary ‘cluster’ of six firms has grown up in the city centre area, close to the financial district. The lists of Singapore’s biotech companies for 2000 and 2001 (Table 8.1) reveal something of the transitory nature of the business. While there are 12 listed for 2000, that number rises to 23 the following year, made up of 10 ‘survivors’ and 13 newcomers. The figures need to be treated with some care, since the EDB is patently in the process of consolidating and verifying some of its data; there does, however, appear to be clear evidence of churn. Gurinder Shahi, who heads BioEnterprise Asia, an incubator/accelerator company, has responded to the question of why most start-ups fail:

“It can be a very complex undertaking to get a new life science enterprise off the ground. In addition to dealing with the usual business and resource issues, life science enterprises also have to worry about the need for innovative R&D, protection of intellectual property, market entry and development, revenue generation, regulatory issues and concerns, etc. Then there is the long development cycle before any product can be brought to market and generates revenue. Few start-ups have the knowledge, experience and expertise to deal with these and other issues and concerns they face. Hence, only one in seven start-ups have historically been able to effectively make the transition from dream to reality”.<sup>2</sup>

Given such a scenario, and the Singapore Government’s strong interventionist tendencies and frequent reference to its quest for the fourth pillar of the economy, it follows that the EDB has sought opportunities for involvement with – and control of – some biotech start-ups. This makes sound sense, if for no other reason than that it enables the EDB to discover first-hand how the grass roots are responding to, and dealing with, an area of economic activity in its infancy in Singapore. Unlike Hong Kong, Singapore did not go through the dotcom boom and failure, but the lessons of that experience have been assimilated and an effort made to apply them to the process of biotech start-ups. During conversation with Dr Philip Masters, the Business Development Director of BioEnterprise Asia, he made the wry comment that the description of his company as a business ‘accelerator’, rather than the more usual ‘incubator’, was due in part to the association of the latter term with the dotcom humbling of Hong Kong.<sup>3</sup>

The establishment of S\*BIO Pte Ltd was announced by the EDB in mid-2000. This company was established through a joint venture between Singapore’s PharmBio Growth Fund and the California-based Chiron Corporation, a 19.9 percent stakeholder in the project. Chiron is one of the world’s leading biotechnology companies and the transfer of its technology to S\*BIO has given the Singapore company a running start in its focus on drug discovery for diseases prevalent in Asia. The EDB claims that the move represents “a key step in Singapore’s goal of becoming a global life sciences R&D hub”.<sup>4</sup> More realistically it might be said that government involvement gives S\*BIO a better chance than most start-ups of survival and possible success. This was the purpose behind the establishment of PharmBio Growth Fund by EDB Investments and NSTB Holdings in

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<sup>2</sup> *Business Times* (17 May 2001) ‘Players speak out’

<sup>3</sup> Interview DS/PM (6 June 2001)

<sup>4</sup> EDB Press Release (2 June 2000)

**Table 8.1** The biotechnology products sector

<i>Listed</i>		<i>Company</i>	<i>Primary products and services</i>
<i>2000</i>	<i>2001</i>		
	X	<b>Affymetrix</b>	Bioinformatics/software R&D
	X	<b>Agenica Research</b>	Development of cancer gene
X	X	<b>Allegro Science</b>	R&D in laboratory reagents
X		<b>Biocode Asia</b>	Antibody detection system
X	X	<b>Biotreat International</b>	Biomediation & waste water treatment
	X	<b>Cell Transplants Singapore</b>	Production of human myoblasts for therapeutic applications
	X	<b>E S Cell International</b>	Human embryonic stem cell research
X	X	<b>Genelabs Diagnostics</b>	Blood based viral diagnostic kits
	X	<b>Genencor International Asia Pacific</b>	Gene discovery/functional genomics/ molecular evolution & design
X	X	<b>Genset Singapore Biotech</b>	Oligonucleotide manufacturing
X		<b>Innovative Biotech</b>	Diagnostic kits
	X	<b>KOOPrime</b>	Bioinformatics software
	X	<b>Lynk Biotechnologies</b>	Drug design & drug target discovery service
X	X	<b>Masters Biotech</b>	Diagnostic kits
X	X	<b>Mycosphere</b>	Screening of microbes and fungi for active compounds
X	X	<b>Oculex Asia Pharmaceuticals</b>	Eye products
X	X	<b>Oribiotech</b>	R&D in cancer markers
	X	<b>Phytoprotein Biotech</b>	Development of biopharmaceuticals using plant
X	X	<b>Piscean Chemicals</b>	Industrial enzymes
	X	<b>Qugen</b>	Development of gene therapy products
	X	<b>Sangui Biotech Singapore</b>	R&D in blood substitutes and insertable & implantable sensors
X	X	<b>SciGen</b>	Biologicals & recombinant products
	X	<b>S*BIO</b>	Drug discovery
	X	<b>Surromed</b>	R&D on tools for biomarker discovery
	X	<b>VisionEx</b>	R&D – eye products

*Sources:* Singapore Life Sciences Directory 2000;  
Singapore Biomedical Sciences Directory 2001

1997, with an initial investment fund of \$100 million. Its approach is twofold: either to seek co-investments and long-term partnerships in projects that assist the growth of the biomedical sciences in Singapore, or to inject new capital into promising companies. In the first of these two approaches, PharmBio Growth Fund “shares the up-front risk with its partners and facilitates the smooth and rapid implementation of projects in Singapore *through its strong government contacts*” (my emphasis).<sup>5</sup>

The pattern of government endeavouring to leave as little as possible to chance is once again evident in joint ventures with S\*BIO, E.S. Cell International and others. There are instances, nonetheless, where all the risk is being carried by private investors, the sponsors of the technopreneurs<sup>6</sup> government is anxious should emerge from its risk-averse society. One such example is provided by Lynk Biotechnologies and BioEnterprise Asia, two small Singapore companies which, through their joint efforts, hope to generate a breakthrough early in the twenty-first century that will place Singapore on the world biotechnology map. Lynk was in the vanguard of biotech start-ups, being incorporated in February 2000 and opening its research facilities in November 2000 at the Technopreneur Centre, on the periphery of Science Park I and at the heart of the planned ‘Biopolis’ (see section 8.3.2). Adjacent are the offices of BioEnterprise Asia, “a life science business accelerator that turns scientific dreams into commercial reality”, in the words of Philip Masters.<sup>7</sup> Lynk, headed by Professor Lee Chee Wee of the Department of Physiology at NUS, has a staff of 12, whilst BioEnterprise Asia, led by Dr Shahi, a co-founder of Lynk, has a ten-strong team. The two indigenous companies represent the cutting edge of biotechnology in Singapore.

Although Lynk is only one year old, Professor Lee returned to Singapore from a ten-year period in Canada and the US, where he had been developing proprietary platform technology, called SM@RT Design and Receptonics Detection System. This technology is now being used by Lynk, following the purchase by BioEnterprise Asia of the intellectual property rights from NUS. The University maintains a stake in Lynk and receives payment for the patent that Lee purchased. The excitement of the research lies in the making of ‘tailor-made’ novel molecules that bind irreversibly to selected proteins, and so produce

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<sup>5</sup> EDB Press Release (2 June 2000)

<sup>6</sup> In local use to describe a technically-trained person who sets up in business.

<sup>7</sup> Interview DS/PM (6 June 2001)

specifically designed pharmaceutical effects. In simple terms, the aim is to change a molecule in order to cause only one effect on a specific protein. The ability to reduce a patient's blood pressure and the elimination of side effects, such as hair loss, experienced during cancer therapy, are just two of the avenues being explored by Lynk. A significant attraction for pharmaceutical companies lies in the potential for the Lynk technology to be used in proving the efficacy of a drug by minimising its side effects and enhancing the chances of a far speedier than normal adoption by the regulatory bodies. The shortening of the drug development process has the obvious benefits of reduced costs and extension of the window available for patent exploitation.

Uppermost in the minds of Professor Lee and the researchers at Lynk, however, is the possibility that they have made real progress in the search for a cure for cancer in humans. Results of tests with mice have proved positive and they now face a further five or six years of trials and tests before it is known whether they have a drug that humans can use. Putting matters in perspective, Gurinder Shahi observes that, "finding a cure for cancer is the holy grail of medicine, and this may be one small step towards that".<sup>8</sup> Philip Masters' enthusiasm for what Lynk has already achieved is obvious, not just from his description of the work, but also from the manner in which funding is being sought. Lynk was launched with a \$2 million investment, but a further \$20 million is required for the first phase of development. Arthur Anderson was given this task with two objectives in mind: first, that the use of such a prestigious firm would convince the world of finance that this is no 'third-world-country operation'; and second, with Europe and the US the most likely and appropriate sources of the necessary venture capital, Arthur Anderson appeared well placed to achieve a successful outcome. At the time of writing it is not known what has happened to the Arthur Anderson contract, following the company's fall from grace in the US. However, BioEnterprise Asia should have little difficulty in finding a suitable replacement. The reality is that the Asian investor has still to be convinced of the value of the biomedical sciences, a mercantile attitude to investment meaning that few are attracted to returns which may take ten years to materialise.<sup>9</sup> Meanwhile, Masters' other main challenge is to generate interest among the pharmaceutical companies, since a deal with one of the 'majors' would immediately enhance the value of Lynk, and possibly make it into a potential 'champion' for the government. Professor Lee's words tell their own tale:

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<sup>8</sup> *Straits Times*[I] (4 September 2001) 'Singapore firm develops drug that cures cancer in mice'

<sup>9</sup> *Far Eastern Economic Review* (23 August 2001) 'Medicine man returns'

“(Lynk’s biggest challenge) is convincing people we are good enough! Sometimes it seems as if we spend more time educating people than doing our own stuff. It is a perception problem; if this company were in the US we would have no difficulty getting people to talk to us. I don’t blame them; it’s a new industry. Lynk is setting the stage...”<sup>10</sup>

The importance of a facilitator, or accelerator company like BioEnterprise Asia, is thus obvious to a start-up company entering the ‘unknown’ of Singapore’s move into biomedical science. Apart from the financial side of the business, Shahi and Masters take all business matters off the scientists’ shoulders and free them to concentrate on ‘scientific dreams’. Lee puts a timescale of three years on this help phase; the hiring of a professional management team will be one of the consequences of Lynk’s anticipated success. The company strategy, he claims, is:

“(To) synthesise and produce good drugs, and outlicense them to big Pharma (the large pharmaceutical companies). We don’t have the resources to do the clinical trials ourselves, so for now we’re satisfied with collecting the royalties and establishing our reputation as makers of good drugs. In the future when we have the capital we may do our own trials”.<sup>11</sup>

The future of biotechnology in Singapore is in the melting pot, and much more than achievement of the Government’s fourth-pillar objective would appear to be at stake. Turning to Professor Lee again, his words may smack of hyperbole, but they are pertinent when it is borne in mind that biotechnology will almost certainly be an important contributory factor in determining whether the twenty-first century will come to be known as the ‘Pacific Century’. Referring to the post-genomic era, Lee suggests: “Whoever controls the life sciences will control the world. If we don’t go in, the West will control the world again. We must not miss these opportunities to create ripples in the pond...”<sup>12</sup>

### **8.2.2 Healthcare services and the contract research function**

The healthcare services embrace a wide range of establishments and activities. The ‘front-line’ services, which interface with the pharmaceutical, medical devices and biotechnology

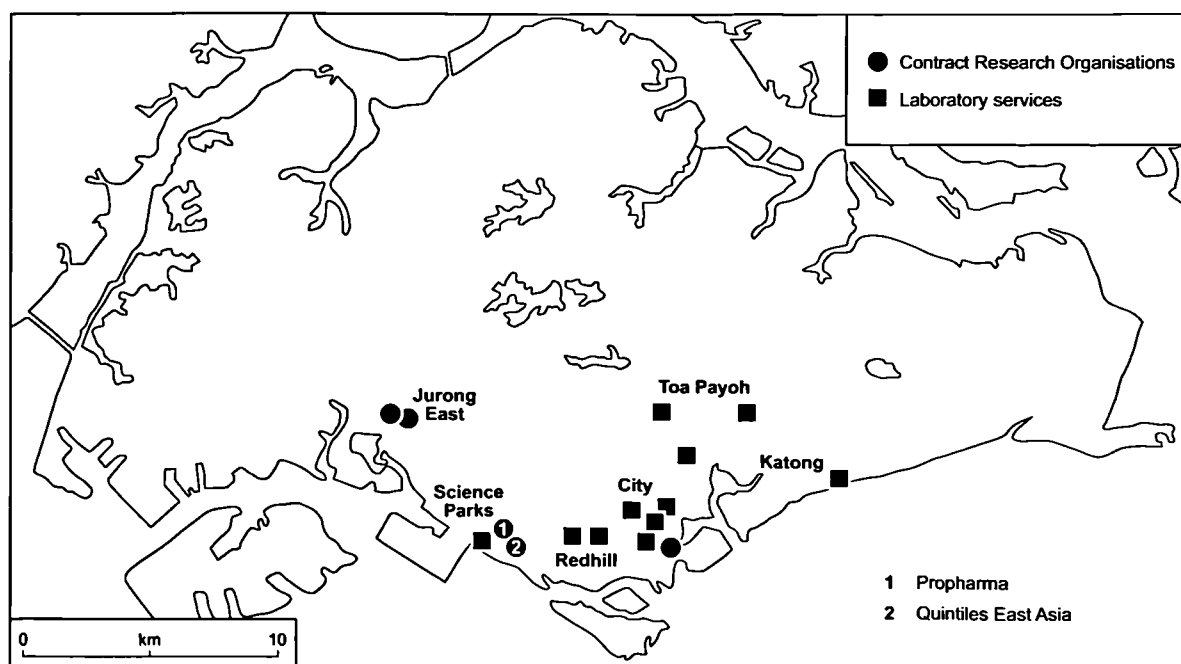
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<sup>10</sup> *Business Times* (17 May 2001) ‘Players speak out’

<sup>11</sup> *Business Times* (17 May 2001) ‘Players speak out’

<sup>12</sup> *Asian Business* (September 2001) ‘Gene-makers, dream-makers’

sectors, are the contract research organisations (CROs) and laboratory services. These are shown in Figure 8.2 and Table 8.2. The map shows clearly the pull of the Tanjong Pagar-Tuas technology belt, which contains four of the CROs. Quintiles East Asia and ProPharma are situated in the Science Parks, while Covance and ICON are to the west, in East Jurong's International Industrial Park. The laboratory services, together with the remaining CRO, TeamWorks, are grouped in the same City-Toa Payoh-Katong triangle favoured by many of the local pharmaceutical and medical devices companies. The other services within the healthcare sector are those provided by healthcare groups, hospitals and speciality centres, and range from the Singapore General and National University Hospitals to National Centres specialising in cancer, heart, skin and eye treatment. The EDB lists 19 hospitals, seven healthcare groups, three National Institutes and four National Centres.<sup>13</sup> Most contribute to, or are linked with, the biomedical sciences in Singapore, but their main role is concern for the day-to-day health of the island's population and they do not feature in this study.



**Figure 8.2** Distribution of selected healthcare services

Source: Singapore Biomedical Services Directory 2001

The main focus of the healthcare services, and specifically the CROs and laboratory services, is to provide support for biomedical sciences research in Singapore and the broader region. In the case of a biotech company like Lynk, perception must accompany

<sup>13</sup> Singapore Biomedical Sciences Directory 2001

to Singapore. What will appeal to these firms are the opportunities that exist for trials and development in connection with heart disease, liver cancer and hepatitis B. It may be slightly cheaper than in the West to undertake these operations, says Teoh, but that is not the prime factor; if it was, Eastern Europe would probably represent the best choice of location.

Robert Teoh was born in China, brought up in Hong Kong, studied medicine in England and took employment in England, the US, Hong Kong and Switzerland. While at Quintiles he was asked for his view of the best location for the Asia Pacific headquarters; he suggested Hong Kong, essentially on the basis of its proximity to the large markets of China, Korea and Taiwan. He now admits his error of judgement and that Quintiles made the right decision in coming to Singapore. That he learnt from the exercise is manifest in the siting of ProPharma's headquarters in the Republic. Despite his excellent connections in Hong Kong, Teoh now asserts, "I would certainly never have dared to start a company on my own in Hong Kong. The cost of living and office accommodation there is such that failure cannot be contemplated; in Singapore, on the other hand, there are the advantages of the 'science-park environment', subsidised rents and the positive approach of a supportive and pro-active government".<sup>23</sup> It would appear that, while the fear of failure in Singapore is primarily linked to concern about loss of face and an unwillingness to take risks, in Hong Kong it has its roots in the financial drawbacks of failure itself.

Quintiles, according to Teoh, arrived in Singapore before there were adequate opportunities for a CRO, but made the move on the basis of a ten-year tax-free arrangement in return for the tertiary training programme Quintiles set up in conjunction with NUS and NSTB. ProPharma on the other hand has not received government funding, other than a 50 percent rental rebate in Science Park II. In one of several insights into governmental attitudes, Teoh revealed that he did approach the authorities when setting up ProPharma, but mainly so that in the event his company was successful in a major way, government would not be able to enquire "why it had not been given a piece of the action".<sup>24</sup> He is equally pragmatic about the concentration of government policy on attracting foreign investment and establishing foreign companies in Singapore. If you are an MNC, he says, "they throw things at you"; the main recipients of the attractive range of

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<sup>23</sup> Interview DS/RT (25 May 2001)

<sup>24</sup> Interview DS/RT (25 May 2001)

Quintiles is “the world’s largest pharmaceutical healthcare outsourcing company”.<sup>17</sup> Established 20 years ago, the company now has interests in 40 countries world-wide, having entered Australia in 1993, and set up the Asia-Pacific headquarters in Singapore in 1995. Quintiles, a recipient of pioneer status and grants for the training of personnel, made an immediate move in 1995 to show that it would be a good citizen by setting up a regional clinical research associates programme with NUS and NSTB, to train 125 people a year in clinical research and biostatistics.<sup>18</sup> Singapore also houses one of Quintiles’ four Central Laboratories, and in February 2001 opened a Clinical Trial Supply Facility to serve the region. At the same time, and following a familiar government practice, it was announced that Quintiles’ chairman and CEO, Dennis Gillings, had been appointed to the EDB’s International Advisory Council.<sup>19</sup>

**Table 8.2 The healthcare services sector**

<i>Company</i>	<i>Contract Research Organisations</i>	<i>Laboratory Services</i>
<b>Bio-Clinical Laboratory</b>		X
<b>Biomedical Research Support</b>		X
<b>Clinical Laboratory</b>		X
<b>Covance Asia</b>	X	
<b>ICON Clinical</b>	X	
<b>Laboratory Diagnostics</b>		X
<b>Meditest Switzerland</b>		X
<b>Parkway Diagnostic Laboratory</b>		X
<b>Parkway Laboratories Services</b>		X
<b>Pathology &amp; Clinical Laboratory</b>		X
<b>ProPharma</b>	X	
<b>Quest Laboratory</b>		X
<b>Quintiles East Asia</b>	X	
<b>Seng’s Medical Laboratory</b>		X
<b>TeamWorks Clinical</b>	X	
<b>Thomson Pre-Natal Diagnostic Laboratory</b>		X

*Source:* Singapore Biomedical Sciences Directory 2001

<sup>17</sup>Interview DS/BO (29 June 2001)

<sup>18</sup>*Straits Times* (21 February 1995) ‘US clinical research firm to set up regional office’

<sup>19</sup>EDB Press Release (7 February 2001)

It is O'Keefe's view that the choice of Singapore as Quintiles' Asia Pacific headquarters was unchallenged, and the result of a combination of the conducive environment, financial incentives, a highly developed infrastructure, excellent communications and the presence of the major pharmaceutical companies. Hong Kong was the only possible competitor, says O'Keefe, but probably lost any chance it might have had as a result of the uncertainty at the time about Hong Kong's future, following separation from the UK. Shanghai, he thinks, "still has some way to go before it poses a real threat". In this context, O'Keefe also makes the interesting point, based on his first-hand experience, that "China is not a research-oriented society".<sup>20</sup> If he is correct, that fact would appear to give Singapore breathing space in which to establish a leading position within Pacific Asia as well as Southeast Asia. Credibility and reputation take time to establish in healthcare R&D, and so the presence of Quintiles (and others) is of supreme importance to the Singaporean authorities. In a branch of industry where secrecy is all, the need for CROs to maintain clear firewalls to protect the secrets of their clients is a prerequisite for business, and in this respect Quintiles has a proven record around the world.

What is needed now, according to O'Keefe, is for the major pharmaceutical companies to bring more of their drug development activity to Singapore, and to gain formal recognition from the world regulatory bodies (in the US, Europe and Japan) as a result of the efficacy of Singapore's new regulatory processes. This, coupled with an increasing tendency of leading pharmaceutical companies to outsource their clinical trials to CROs, should assist the growth and reputation of Singapore as the regional hub for biomedical science.

There are considerable differences between Quintiles East Asia and ProPharma. The latter, founded in 1998 by Dr Robert Teoh (formerly with Quintiles), has offices in Singapore and Hong Kong and field-based clinical research operations in Bangkok and Taipei. Business is handled by only 12 staff – six in Singapore, four in Hong Kong and one in each of Bangkok and Taipei. Talking to Robert Teoh<sup>21</sup> and visiting the company's website<sup>22</sup> confirms that this is a highly professional organisation, with the experience to undertake a wide range of services in accordance with strict international standards, and a level of performance capable of encouraging American and European firms to bring their business

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<sup>20</sup> Interview DS/BO (29 June 2001)

<sup>21</sup> Interview DS/RT (25 May 2001)

<sup>22</sup> [www.propharmaCRO.com](http://www.propharmaCRO.com)

to Singapore. What will appeal to these firms are the opportunities that exist for trials and development in connection with heart disease, liver cancer and hepatitis B. It may be slightly cheaper than in the West to undertake these operations, says Teoh, but that is not the prime factor; if it was, Eastern Europe would probably represent the best choice of location.

Robert Teoh was born in China, brought up in Hong Kong, studied medicine in England and took employment in England, the US, Hong Kong and Switzerland. While at Quintiles he was asked for his view of the best location for the Asia Pacific headquarters; he suggested Hong Kong, essentially on the basis of its proximity to the large markets of China, Korea and Taiwan. He now admits his error of judgement and that Quintiles made the right decision in coming to Singapore. That he learnt from the exercise is manifest in the siting of ProPharma's headquarters in the Republic. Despite his excellent connections in Hong Kong, Teoh now asserts, "I would certainly never have dared to start a company on my own in Hong Kong. The cost of living and office accommodation there is such that failure cannot be contemplated; in Singapore, on the other hand, there are the advantages of the 'science-park environment', subsidised rents and the positive approach of a supportive and pro-active government".<sup>23</sup> It would appear that, while the fear of failure in Singapore is primarily linked to concern about loss of face and an unwillingness to take risks, in Hong Kong it has its roots in the financial drawbacks of failure itself.

Quintiles, according to Teoh, arrived in Singapore before there were adequate opportunities for a CRO, but made the move on the basis of a ten-year tax-free arrangement in return for the tertiary training programme Quintiles set up in conjunction with NUS and NSTB. ProPharma on the other hand has not received government funding, other than a 50 percent rental rebate in Science Park II. In one of several insights into governmental attitudes, Teoh revealed that he did approach the authorities when setting up ProPharma, but mainly so that in the event his company was successful in a major way, government would not be able to enquire "why it had not been given a piece of the action".<sup>24</sup> He is equally pragmatic about the concentration of government policy on attracting foreign investment and establishing foreign companies in Singapore. If you are an MNC, he says, "they throw things at you"; the main recipients of the attractive range of

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<sup>23</sup> Interview DS/RT (25 May 2001)

<sup>24</sup> Interview DS/RT (25 May 2001)

tax and other monetary incentives are foreign companies, rather than local start-ups. ProPharma, however, has no complaints, for it obviously thrives on the productive and congenial working environment that government has established in the science parks, and on the spin-offs derived from working alongside global players.

### ***8.3 Creating a conducive environment for biomedical sciences and knowledge-based industry***

#### ***8.3.1 The Technology Corridor***

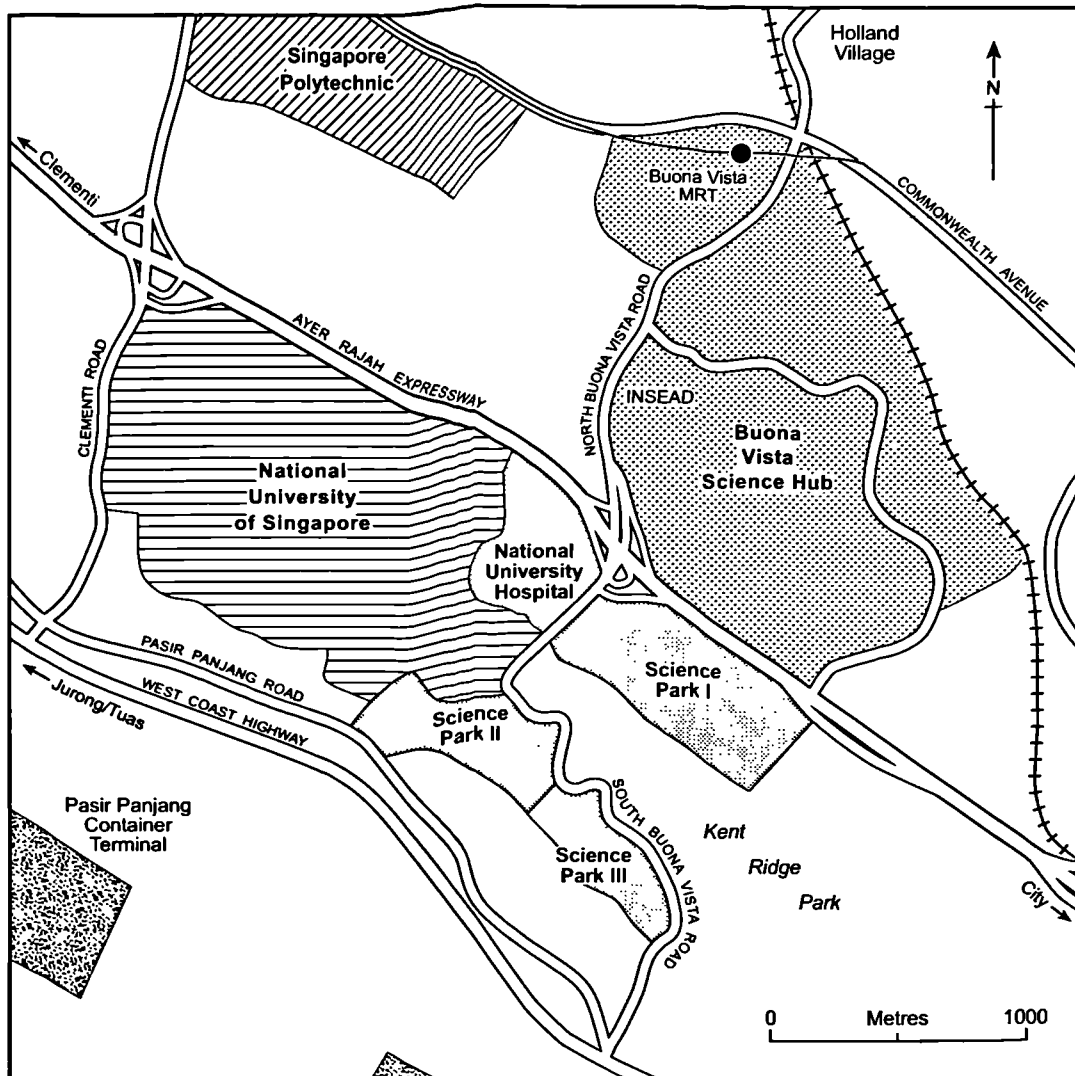
“As we move into an innovation-driven phase of economic growth, our infrastructure development must change to meet the needs of an economy characterised by knowledge-intensive activities. Intensive knowledge-based activities flourish best in a closely knit community which includes a high concentration of high technology industries, research centres and higher education establishments integrated within an attractive living environment. Such a community is usually called a technopolis” (NSTB 1991, 71)

The technopole, or science city, is indeed one of the features common to most highly developed economies, and it is hardly surprising that Singapore aspires to the creation of its own ‘Silicon Valley’, providing an environment capable of:

- attracting and retaining foreign talent;
- facilitating formal and informal interaction between researchers;
- welcoming the presence of industrialists, financiers and managers to exploit the commercial potential of research;
- facilitating the exchange of knowledge and ideas with researchers around the world; and
- providing an attractive location in which to live.

In the 1980s, Singapore was able to draw on a large body of experience and discourse (see e.g., Gibb 1985; Sunman and Lowe 1986; OECD 1987; Sunman 1987; Massey, Quintas and Wield 1992; Liu 1992) when deriving its own ‘science-park strategy’. This was always going to be a government-driven project. At that time, Singapore had neither the resources nor human capital to generate the high degree of spontaneity that was evident in the rise of California’s Silicon Valley, and was more comfortable with a scheme instigated and controlled by government, similar to Scotland’s ‘Silicon Glen’. There are certain similarities, too, with the Cambridge Science Park, in terms of the close relationship

between park and university.<sup>25</sup> Singapore's NUS and NTU are closely bound to the Science Parks and research activity elsewhere in the Technology Corridor (see Figures 8.1 and 8.3).



**Figure 8.3 The 'heart' of the Technology Corridor and site of the new Science Hub**

It was the 1991 National Technology Plan that strongly advocated development of the area between NTU, situated to the north of Jurong, and Kent Ridge, lying to the north of the Pasir Panjang Terminal. In 1991 this stretch of land already housed NUS, Singapore Polytechnic, Science Park I (from 1984) and a number of research institutes; ease of contact with the rest of the island was provided by the Ayer Rajah Expressway and the MRT Westbound line; and there was already in existence a number of social and

<sup>25</sup> In the case of the Cambridge Science Park, it was actually established by Trinity College Cambridge.

recreational amenities. In 1991, therefore, this was already more than an embryonic technology corridor. The NSTB, however, foresaw much that could be done to enhance the existing infrastructure. Its major recommendations were:

- Expansion of the science park concept beyond the 30-acre site of Science Park I, with its 84 tenants, including foreign MNCs, local start-up companies, and the NSTB and other government agencies. Science Park II should be built as soon as possible, south of and adjacent to Science Park I, and consideration should be given to a third science park next to NTU.
- Setting up of a number of business parks to cater for the anticipated growth of high-tech companies.
- Linking of establishments within the Corridor so that businesses, academics and researchers could have speedy electronic contact with one another, international research and academic networks, and government agencies.
- Making comfortable housing and related facilities a priority, and upgrading the current poor level of facilities supporting NUS and Science Park I. The object should be to introduce a 'campus town' feel to the Corridor.

### **8.3.2 *From Technology Corridor to Biopolis***

Since 1991, there has been steady development of the biomedical sciences infrastructure. Apart from the establishment of a number of business parks, both within and beyond the Corridor, three developments on the ground stand out as a clear statement of Singapore's intent regarding its putative status as a major biomedical sciences hub.

- *Tuas View Pharma Park.* The siting of the Pharma Park in 125 hectares of reclaimed land in the extreme southwest of the island has strengthened the agglomeration of major pharmaceutical companies in the one area. Wyeth (1998) and Merck Sharp & Dohme (MSD) (1999) took advantage of the facilities offered in the new Park, and joined GSK, Schering Plough and Rhone-Poulenc Rorer, all of which have manufacturing sites in the near vicinity and, like Wyeth and MSD, enjoy special fast-track status and incentives from government. There is room for further expansion of the Pharma Park as the need arises. The EDB, meanwhile, is doing all it can to

attract more of the world's major pharmaceutical companies to establish factories – and regional headquarters – in the Republic. The Pharma Park is managed by Jurong Town Corporation (JTC) which, apart from managing some 19 industrial projects in the Asia-Pacific region (action only possible since corporatisation), has 35 industrial parks under its control in Singapore. The parks house more than 6000 local and foreign companies, including the majority of firms and institutions involved in the biomedical sciences.

- *The Science Park complex.* The success of Science Park I, the first phase of development, has been followed by Science Park II (in accord with the National Technology Plan proposal), and there are plans for a Science Park III in the same vicinity (see Figure 8.3). The clean architectural lines, landscaped surrounds and peacefulness of the parks produce an ambience that is there to assist the work of the knowledge-driven organisations that are the main occupants. The government's assistance with rents is another contributory factor, especially for the local start-ups in biotechnology and healthcare. Situated in the heart of the Technology Corridor, companies in Science Parks I and II benefit from the close proximity of NUS, the National University Hospital, IMCB, NSTB and most of the major research institutions. Walking round the area and experiencing the work atmosphere in buildings with evocative names such as the Alpha, Gemini, Faraday, Pasteur, Rutherford and Cavendish, it is apparent just how much attention to detail has been paid by JTC and NSTB. Their reward is in the form of the occupants of the Science Parks - more than 250 MNCs and 7,000 researchers, engineers and support staffs.
- *The Biopolis.* News emerged during 2001 of plans for the establishment of a 194 hectare science hub in the area immediately to the north of NUS and the Science Parks complex, and sandwiched between the Ayer Rajah Expressway and Buona Vista MRT (see Fig. 8.3). To be called the Buona Vista Science Hub, the park is to have a bioscience park within it – the Biopolis. The project is being co-ordinated by the Biomedical Research Council, and the first buildings are scheduled to open in 2003.<sup>26</sup> The

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<sup>26</sup> *Straits Times*[1] (8 February 2001) 'Bioscience park coming up in Buona Vista'

Science Hub's international panel of advisers met in July 2001 to consider phased development over at least 20 years. The intention is that, as well as the biosciences, the Hub will house interests from infocommunications technology and media. Comparison has been drawn with the move in Japan two years ago to develop clusters of activity in eco-systems, information technology and logistics. According to one Japanese member of the Hub's Resource and Advisory Panel, each of these three sectors is expected in ten years to be worth ten times the US\$400 billion value placed on the Japanese automobile industry.<sup>27</sup> Singapore's Science Hub carries the clear imprint of JTC and, says that body, is the result of 'careful breeding of ideas'.<sup>28</sup> Evidence of the growing attraction of the Biopolis and of Singapore's potential as a world biomedical hub, is apparent in the planned move of the Genome Institute to the Biopolis in 2003, and recent decisions by ES Cell International, Novartis and Eli Lilly to move research bases to the Republic.<sup>29</sup>

Another exciting idea to surface in 2001 was the proposal to establish a \$35 million biomedical laboratory in the Biopolis, sponsored by the Asia-Pacific International Molecular Biology Network (based in Singapore). The aim is to promote Singapore - supported by satellite laboratories elsewhere in Asia-Pacific - as the main base for regional collaboration in the biological sciences. Europe has a similar organisation in Heidelberg. The outcome, according to Dr Shahi, of BioEnterprise Asia, could be for Singapore "to be a driver for change".<sup>30</sup> It does appear that JTC will seek to use the Biopolis project as the inspiration for foreign companies to come to the Science Hub. The \$300 million biomedical park is scheduled to have 'sky bridges' linking twelve multi-storey complexes, the workplaces by 2010 for 4,000 scientists and researchers.<sup>31</sup> The obvious conclusion to be drawn is that Singapore is totally committed to its city-within-a-city Science Hub - to be called 'One-North' - with the objectives of attracting top talent from around the world and establishing the Republic as a major player in the biomedical sciences.

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<sup>27</sup> *Business Times*[O] (16 July 2001) 'Science Hub panel meets to discuss project'

<sup>28</sup> *Business Times*[O] (16 July 2001) 'Science Hub panel meet to discuss project'

<sup>29</sup> *Straits Times* (11 May 2002) 'Biomedical hub set to double in size'

<sup>30</sup> *Straits Times*[I] (7 September 2001) 'Biotech base may be set up in Singapore'

<sup>31</sup> *Straits Times*[I] (11 May 2002) 'Biomedical hub set to double in size'

When the Science Hub was officially launched on 4 December 2001 by Dr Tony Tan, the Deputy Prime Minister, his speech contained references to aspirations for Singapore to be a 'culture capital', 'global city' and 'global talent hub'. That the speech was made at a time of unprecedented slowdown in economic growth, with contraction over the first three quarters of 2001 the steepest and deepest since independence, is testimony to Singapore's unswerving determination to realise its vision of the city-state in ten to 20 years time. As Dr Tan made clear:

"We...need to continue to invest in knowledge creation in R&D in areas such as biomedical sciences and IT, as well as encourage enterprises to pursue new opportunities and generate more wealth. To succeed, we must build on our intellectual assets and fuse it (sic) with innovation and creativity if we are to see a quantum leap in our efforts as well as distinguish ourselves from our competitors".<sup>32</sup>

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<sup>32</sup> MITA Press Release (5 December 2001)

## Chapter Nine

### The regional dimension

*"Regionalization and globalization not only have important economic possibilities. An increasing array of co-operative and mutually beneficial economic networks also helps to augment international relevance and political security" (Bellows 1995, 61).*

*"The Government has taken a number of initiatives to help our businessmen expand into the rapidly-growing region. Just as we had tapped into the rapidly growing OECD economies in the past 30 years to transform ourselves from a developing country into an NIE, we should now use our experience and resources to help the expanding regional economies become NIEs. Singapore is in the midst of it. We will all benefit from going regional."*  
(Prime Minister Goh Chok Tong)<sup>1</sup>

#### 9.1 Introduction

A thread running through preceding chapters has been that of the recurring need for Singapore to 're-make' or 're-invent' itself in order to address new challenges that threaten the republic's competitiveness and prosperity. In the 1990s, and running parallel with moves to create a knowledge economy, was the campaign to 'go regional'. At first glance, this is perplexing. After all, has not Singapore always had a strong regional dimension to its economy, dating from the pomp of the nineteenth century entrepôt trade? That is true, but equally so was the tendency during the highly productive period of EOI for Singapore to develop an over-dependency and concentration on the interface with developed countries in North America and Europe. What became ever clearer in the late 1980s and

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<sup>1</sup> Conclusion to his keynote address to the Regionalisation Forum, held 21-22 October 1993 (EDB 1993, 34)

early 1990s was that an EOI strategy would need to be augmented if Singapore was to retain both competitiveness and prosperity. The feeling in government was that, with the competition closing in, it was essential to move on from EOI without in any way abandoning the manufacturing sector. Hence the decisions to create a knowledge economy, move up the value chain in manufacturing, and establish a vibrant external wing to the economy.

The main purposes of going regional have been to strengthen the domestic economy, boost the performance of local companies and transform some of them into MNCs. I return later to consideration of Singapore's regionalisation programme, but note first the vital role that the city-state, as the most economically advanced country in the region, must play in assisting economic development in Southeast Asia. Singapore's attractiveness to FDI will decline if its neighbours demonstrate neither political stability nor evidence of a soundly-based recovery from the 1997 crisis. In addition, Singapore's requirements from the region are markets for its services and advanced manufactured products, and a return movement of goods for transshipment to the rest of the world. Singapore has exhibited periodic frustration with both the rate of progress and the failure of countries such as Indonesia and the Philippines to lift their eyes from internal problems and recognise the pressing need to compete with other developing countries and regions, and demonstrate to investors that Southeast Asia is a credible alternative to Northeast Asia, and the burgeoning opportunities offered by China. It is no exaggeration to suggest that, apart from a possible failure of its own initiatives, Singapore could ultimately be dragged down through the inability of the ASEAN region to generate the critical mass of economic activity and growth required to sustain, for example, Singapore as an international financial centre. Continuous growth in the region is therefore vital to Singapore's future as a regional/international hub for a range of activities, and it is this regional dimension that I investigate in the pages that follow. This takes the form of assessment of the city-state's approach to: (a) its role within ASEAN; (b) its sub-regional initiative in developing the SIJORI Growth Triangle; and (c) seeking bilateral FTAs.

## *9.2 Singapore, ASEAN and free trade*

A founding member of ASEAN in 1967, Singapore has endeavoured to play a pro-active role in the Association's work towards the establishment of its fundamental goals, those of

‘cooperative peace and shared prosperity’. From the start, Singapore’s interaction with ASEAN was predicated on survival, economic growth and security (Shee 1997, 68). Security issues were of paramount importance to the ASEAN states in the early years, and when in 1975 Singapore put forward proposals for a regional FTA, little interest was generated. At the time (1974) intra-ASEAN trade formed only 12.8 percent of total trade, making for an apparent mismatch with Singapore’s perception of ASEAN as the catalyst for economic growth. However, the slowness of ASEAN’s progress towards formal economic cooperation arguably helped strengthen Singapore’s determination to gain export markets in the OECD countries.

This pro-active approach was a necessity, since neither in terms of its security nor its economic development could Singapore rely on the efforts of others. It is this pugnacious approach, coupled with immensely successful economic and social progress, that has regularly enabled Singapore to punch above its weight in ASEAN circles. An outstanding example was the leading part played by Singapore in the UN during the late 1980s in bringing about the end of Vietnam’s occupation of Cambodia. Vietnam (1995) and Cambodia (1999) are now both members of ASEAN, and so party not only to the principles of amity and cooperation that support a culture of mutual respect and non-interference in one another’s affairs, but also the wider security net of the ASEAN Regional Forum (ARF). The ARF was established in 1994 and is ASEAN’s initiative to involve other countries - including the US, Russia, China and Japan - in its benign approach to confidence-building, preventive diplomacy and conflict resolution. To some, the ARF is a toothless tiger, mainly because of US reluctance to engage fully in multilateral movements in Asia Pacific, but since 1967 the ‘Asian way’ has undeniably proved its worth in preventing armed confrontation among its members. Interestingly, Singapore’s pragmatism and self-interest enable a continuing firm commitment to ASEAN and the ARF to exist comfortably with the provision of naval base facilities at Changi for the US fleet.

Progress towards economic co-operation in Southeast Asia may have been slow, due to the varying stages of development among ASEAN members and the fact that the emphasis has tended to be on exports out of the region rather than intra-ASEAN trade. However, preferential trade arrangements in force since 1977 have helped to generate increased trading between Southeast Asian nations, and led in 1992 (17 years after Singapore first

made the proposal) to the five founding members plus Brunei agreeing to introduce an ASEAN Free Trade Area (AFTA). The plan was for the progressive elimination of tariff and non-tariff barriers between members over a fifteen-year period. Subsequent reductions to this timetable, mainly in response to increasing competition from outside the region and the need for a positive response following the 1997 financial crisis, brought realisation of the free trade goal forward to 1 January 2003. This does represent a significant achievement, since the six members concerned account for some 96 percent of trade in the region and have, between 1993 and 2002, reduced the average tariff on goods traded among themselves from 12.76 percent to 3.5 percent. This is well within the target of 0-5 percent, the figure which the four remaining members - Vietnam, Laos, Cambodia and Myanmar – hope to achieve by 2006. The current target dates for the elimination of import duties are 2010 for the six and 2015 for the other four members.

**Table 9.1 ASEAN trade, 2000 (US\$ million)**

<i>Country</i>	<i>Total</i>		<i>Intra-ASEAN</i>	
	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>
<b>Brunei Darussalam</b>	1,068	2,169	535	639
<b>Indonesia</b>	33,515	62,164	6,781	10,884
<b>Malaysia</b>	79,648	98,154	15,935	24,409
<b>Myanmar</b>	2,219	1,194	1,113	393
<b>Philippines</b>	31,387	38,078	4,955	5,983
<b>Singapore</b>	134,680	138,353	33,292	37,784
<b>Thailand</b>	61,906	69,254	10,476	15,100
<b>Vietnam</b>	15,635	14,308	4,519	2,613
<b>Total</b>	360,058	423,634	77,606	97,805

*Source:* Joint Press Release (14 September 2001) of the AFTA Council – Tables 2 and 3 [www.aseansec.org](http://www.aseansec.org) accessed 26 June 2002

These actions, although welcome, have been long coming. As a result, even after allowing for fluctuations in intra-ASEAN trade following the 1997 regional financial crisis, the proportion of intra-ASEAN trade to total trade remains low; at 22 percent it is only just over one third the level achieved in the admittedly older and more sophisticated market of

the EU. Enhanced intra-ASEAN trade is vital to Singapore, as it seeks to grow and widen the scope of its economy and reinforce its role as the premier regional hub for trade and services. Singapore's dominant position within ASEAN in terms of both total trade and intra-ASEAN trade is shown in Table 9.1. In 2000, Singapore, with 0.69 percent of the ASEAN population, was responsible for 34.84 percent of total ASEAN trade and 40.52 percent of intra-ASEAN trade. These figures leave little doubt as to the importance of the synergy between the city-state and a regional hinterland containing over 500 million people and a valuable store of natural resources.

### *9.3 The growth triangle: a sub-regional response to economic cooperation*

Hopes for regional economic cooperation in the Asia Pacific have been held back mainly as a result of the uncertain political climate in the post-Cold War period and - despite Japan's status as one of the world's three largest economies - a lack of leadership. ASEAN's plans for a free trade area (AFTA), although moving forward, also show the difficulties that occur when members' economies are more competitive than complementary, and there exist substantial differences in terms of stages of development. However, progress was made during the 1990s towards establishment of a new form of regional economic cooperation, one involving the participation of two or more countries, but usually affecting only part of their respective territories. Goh Chok Tong is credited with coining the phrase 'triangle of growth' in December 1989, shortly before he became Prime Minister, and with reference to the initial plan to produce economic synergy between Singapore, the Malaysian state of Johor, and Batam, an island in Indonesia's Riau province (Lee 1992, 2). This particular 'growth triangle', referred to here as SIJORI, was in the forefront of a number of similar initiatives throughout Asia Pacific during the 1990s.<sup>2</sup> However, the 1997 regional crisis put a number of potential projects on hold whilst regional governments carried out much-needed structural financial reforms.

In one respect the use of the word triangle to describe SIJORI is a misnomer, for the relationship between the participants takes a linear form, with little or no interaction between Johor and Riau. Singapore, as the provider of capital, highly-skilled technical and

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<sup>2</sup> Prominent among these are the Southern China Growth Triangle (involving Guangdong/Fujian, Taiwan and Hongkong), the Tumen River Area Development Programme (involving China, Russia and North Korea), and the Indonesia-Malaysia-Thailand Growth Triangle (linking Aceh, Kedah/Perak and the Songkhla area).

managerial personnel, and the services of a world city, plays a dominant role, but the success of the enterprise stems from the complementary nature of what each partner brings to the table. Johor tends to concentrate on medium technology operations, whilst the Riau Islands undertake those that are low technology and labour-intensive (Perry 1991, 138). The question obviously arises concerning the benefits (and drawbacks) that SIJORI produces:

- Development of the growth triangle has given Singapore access to resources in short supply in the Republic: cheap land for industrial development and supplies of semiskilled and unskilled labour. These factors have proved significant as incentives for manufacturing MNCs based in Singapore not to relocate to even cheaper locations in Asia and elsewhere. The 'release valve' that is SIJORI has also enabled the Government to concentrate maximum effort within Singapore on encouraging the development of higher value-added industries and the knowledge economy.
- The economic linkage between Singapore, Johor and the Riau Islands should help soften the all-too-often fractious political relationships between Singapore and her immediate neighbours. Also, and setting aside the benefits to Singapore, development of both Johor and Riau has resulted from the inflow of investment, enhancement of their infrastructure, and links to Singapore's facilities - particularly communications, the financial and business centre, and import/export establishments.
- Problems on the Johor side relate mainly to Malaysia's perception of its relationship with Singapore. The Malaysian Government has designated southern Johor a development zone, and so welcomes the presence of MNCs operating out of Singapore. The downside, however, is the increased cost of living for Johor residents, and the resentment that is engendered because Singapore is seen to be 'exploiting' this part of Malaysia as a source of cheap labour. One manifestation of this resentment is the effort that is going into establishing the port of Tanjung Pelepas (PTP) as a serious competitor for PSA Corporation's clients; two of the world's largest shipping lines, Maersk and Evergreen, are recent acquisitions by the Johor port.

- The Riau islands of Batam and Bintan are the main sites of labour-intensive activity associated with Singapore-based MNCs. Each has industrial parks which, jointly developed by Singapore GLCs and Indonesian conglomerates, had by October 2000 received over US\$1 billion in FDI (Lim 2001, 199). Bintan also seems set to grow as an attractive tourist centre, although some difficulties have arisen over the provision of adequate housing and other facilities for migrants from other parts of Indonesia. As in Johor, the rising cost of living has not been welcomed by local residents.
- The overwhelming impression in Batam is of a frontier society in which gleaming new factories and scattered housing developments are at odds with areas of squalid buildings in a barren, despoiled landscape. Unfinished building projects are obvious reminders that in Indonesia, recovery from the 1997 financial crisis is still underway.

There are still question marks about the long-term success of the SIJORI growth triangle. However, given the benefits that have so far accrued to Singapore, it does seem likely that investment and encouragement for development – particularly in the Riau Islands – will continue to be firm government policy. This prospect has been enhanced by the impending FTA between the US and Singapore which, at Singapore's instigation, seems set to include the Indonesian element of SIJORI. Negotiations are in train for electronics products from Bintan and Batam to be part of the FTA.<sup>3</sup> Trade and Industry Minister George Yeo has been at the forefront of these efforts, and sees the FTA as an important contributory factor to Indonesia's efforts at economic recovery under President Megawati Sukarnoputri. This is the second of two ways in which the SIJORI project has prompted separate growth in the region; the other, ironically, is the stimulus it has provided for Malaysia to increase investment in Johor, with the objective of competing directly with Singapore in port and other facilities.

Another sign of hope for the region, and of post-1997 recovery, is the emergence of a proposal for the area known as the 'Emerald Triangle', where the boundaries of Thailand, Cambodia and Laos meet, to be developed as a growth triangle. That this initiative

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<sup>3</sup> *Business Times[O]* (20 August 2002) 'S'pore-US FTA could benefit Bintan, Batam'

involves two of ASEAN's newest and poorest members may encourage others to follow and revive the growth triangle concept in Southeast Asia. To date, only SIJORI and the Indonesia-Malaysia-Thailand scheme have survived the initial euphoria of the late 1980s and early 1990s.

#### *9.4 Regionalism in the form of Free Trade Agreements*

Like other countries which embrace fully the concept of free trade, but are also aware that the multilateral objectives of the WTO will take time to reach fruition, Singapore has sought to chip away at barriers and generate trading opportunities via the mechanism of bilateral FTAs. Reducing the process of liberalisation to this scale is a sensible strategy for a small state whose life-blood is trade. The alternative is to miss out on a host of opportunities whilst waiting for AFTA to become fully operational and for realisation of the commitment of Asia-Pacific Economic Cooperation (APEC) to 'free and open trade in the Asia-Pacific'. There are positive signs in the present discussions between ASEAN and both China and Japan, the informal forum of ASEAN + 3 (China, Japan and South Korea), and bilateral arrangements such as those being pursued by Singapore. All could hasten the arrival of the third element in a triad of major trade blocs, as aired in Chapter Four.

At the time of the signing of Singapore's first bilateral FTA, with New Zealand (see Table 9.2), concerns were expressed within ASEAN about unilateral action by a member that appeared to run contrary to the spirit of the AFTA project. Malaysia, in particular, talked in terms of Singapore FTAs acting as a 'back door' through which products could be brought more cheaply into the ASEAN region. There has been increasing recognition, however, that Singapore's FTAs do in fact offer conduits for ASEAN-originated goods to reach certain advanced markets. Furthermore, just as the emergence of free trade arrangements within East Asia could accelerate progress towards a major trade bloc in the region, so there is the likelihood that Singapore striking out on its own may galvanise fellow ASEAN members into a more proactive and less protectionist response to the prospect of being submerged by the rising economic power of Northeast Asia. It will also not have escaped ASEAN leaders that early in 2001, agreement was reached at the Summit of the Americas to form a major trade area by 2005, to include 34 countries in North, Central and South America. Indeed, Prime Minister Goh's response was to warn ASEAN

that for the Association to remain a spectator to this and similar developments would risk the sidelining of Southeast Asian interests.<sup>4</sup>

Apart from its role in jolting ASEAN members into opening doors to free trade with other countries outside the region, Singapore's FTA strategy brings certain benefits to the Republic:

- A growing network of free trade agreements will ease the way for Singapore companies and entrepreneurs to enter export markets.
- Partners in FTAs will contribute to, and thereby enhance, Singapore's services sector and knowledge-based economy.
- The flows produced by FTAs will augment Singapore's world-city status as a major regional hub for trade, services and tourism.

Singapore's strategy clearly supports the theory expounded in Chapter Four that multilateralism and regionalism are complementary rather than competitive. What is evident from Table 9.2 is how active the Singapore Government - a firm supporter of the WTO - has been over a short period in seeking out FTAs around the world. Some negotiations - for example with Australia - have been protracted, whilst those with Japan and the US have demonstrated the tendency of developed nations to seek special treatment when dealing with a 'lesser' partner. As was noted in Chapter Four, it is this attitude that has contributed to the exclusion of poorer and less developed countries from the expanding network of FTAs, and thus to their marginalisation in the global economy. This fate has not befallen Singapore, because it has much both to contribute to and gain from OECD countries; further, it is much to the city-state's credit that, as a long-standing duty-free port, it has freed up trade with less-developed countries.

George Yeo's view is of Singapore playing a pioneering role in the region, and "laying broadband economic connectivity to the US and Japan and Europe, which, one day, other countries in south-east Asia will be able to tap into".<sup>5</sup> This business of encouraging its

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<sup>4</sup> *Business Times* (9 May 2001) 'PM: FTAs ensure others, ASEAN remain engaged'.

<sup>5</sup> *Financial Times* Country Survey: Singapore (13 November 2001) <http://news.ft.com/ft/gx.cgi> accessed 13 November 2001

**Table 9.2 Progress of Singapore FTAs and other bilateral arrangements**

<i>Participants</i>	<i>Status</i>
<b>FTAs</b>	
Singapore-New Zealand	Concluded November 2000
Singapore-Japan	In force October 2001
Singapore-EFTA	Concluded July 2002
<b>FTAs being negotiated</b>	
Singapore-US	Talks commenced December 2000; aiming for conclusion by end-2002
Singapore-Australia	Eighth round of negotiations July 2002; no formal date for conclusion
Singapore-Canada	Third round of negotiations April 2002; no formal date for conclusion
<b>FTAs under discussion</b>	
Singapore-Taiwan	Talks progressing on limited form of FTA
Singapore-Hongkong	Idea of FTA mooted at highest level, but talks yet to commence
<b>Bilateral arrangements</b>	
Singapore-Thailand	Negotiations on enhancement of 1997 Partnership; aim to form the Singapore-Thailand Enhanced Economic Relationship
Singapore-India	Aim an 'Economic Partnership Agreement' rather than full FTA
<b>At the exploratory stage</b>	
Singapore-EU	Interest in FTA expressed by Singapore, but EU currently giving priority to progressing action by the WTO
Singapore-Malaysia	Economic union only a long-term possibility according to Malaysia

*Sources:* Numerous statements or articles in Government Press Releases, *Straits Times*, *Business Times* and *Far Eastern Economic Review*

neighbours is taken seriously by the city-state, but does cause a certain resentment, particularly from Malaysia. However, in the latter's protection of its car industry (Proton), and stance that ASEAN solidarity should prevail over an individual country's desire to act unilaterally in search of trading opportunities, may be seen a mindset that, if not jolted out of its steady conservatism, will almost certainly leave ASEAN languishing in the slipstream of global economic activity. With the stakes so high - for both Singapore and

ASEAN – the city-state's series of FTA negotiations can play a significant role in driving the region forward.

### ***9.5 Singapore's regionalisation strategy***

The long-term aim of the Singapore Government is to create a developed nation, measured in terms of standard of living and quality of life, and a 'global city of distinction'. The strategy for achieving this aim is via two parallel and linked programmes. The first of these has already been considered, and comprises a continuous upgrading of the domestic economy through the development of higher value-added industries and growth of a knowledge-based economy. The second, and the latest answer to Singapore's resource limitations, is the construction of an 'external wing' to the economy.

In the aftermath of the 1985 recession, and report on 'new directions' the following year by the Economic Committee, the Government encouraged outward investment, essentially to the markets of the US and Europe. The results were disappointing, mainly because at that time few Singapore companies had the size, know-how and performance record necessary to gain a foothold in these advanced economies (Yeung 2000b, 143). It was following his move from Prime Minister to Senior Minister in November 1990, that Lee Kuan Yew suggested a more focussed concentration on the Asian region rather than on the OECD countries. In the words of Mauzy (1995, 183), what Lee wanted was for Singapore "to be like the Swiss and put money in the right countries and thus become owners of high-quality foreign assets". The move was well timed, for not only were there obvious signs of burgeoning opportunities in the Asian economies, but also an added pressure to seek out new openings following the EC's declaration in December 1990 that Singapore had become a developed economy and would no longer benefit from a GSP (General System of Preferences) rating, which that year affected 22 percent of the city-state's exports (Shee 1992, 122).

The concept of regionalisation, therefore, was a call to Singapore businesses and Singaporeans to get out into Vietnam and other ASEAN countries and, more importantly, emerging markets in China and India, in order to invest in ways that would help the growth of the domestic economy. A seemingly sound strategy, it did raise one crucial question: how would businessmen reared in a state-driven and highly protected home environment

cope with “Asia’s chaotic emerging economies”?<sup>6</sup> Advice was forthcoming from Goh Chok Tong in his keynote address to the EDB’s Regionalisation Forum (EDB 1993, 32), when he laid out five core principles, summed up as follows:

- Spread investments around the region and explore every possibility thoroughly.
- Retain close involvement with Singapore’s traditional partners in ASEAN.
- Look for long-term, durable relationships.
- Seek to replicate the productive role played by foreign MNCs in Singapore.
- Invest in, and assist, the local community.

In addition, the Government made clear its intention to assist the regionalisation programme, but not at the expense of a hollowing out of the domestic economy through the wholesale re-location of businesses and manufacturing processes overseas. The point was made forcefully by S. Dhanabalan, then Minister for Trade & Industry, in his closing address at the Regionalisation Forum (EDB 1993, 98): “A direct linkage that enhances the domestic economy must be the sine qua non of public sector participation in regionalisation”. It is hardly surprising, therefore, that during the 1990s, GLCs were at the forefront of regionalisation, particularly in “overseas infrastructure projects which provide a supportive environment for the expansion of local companies” (Willis and Yeoh 1998, 207). Prominent examples of this approach are the SIJORI industrial estates, the Bangalore IT Park, and the Suzhou Industrial Park in Jiangsu province. Among the largest of the GLCs seeking to reach out to the region and beyond are SingTel (with aspirations to be Asia’s number one telecommunications company), Singapore Airlines (pursuing a ‘global footprint’ via acquisitions in Australia, India and elsewhere), PSA Corporation and DBS Bank.

The further development of the regionalisation programme is of immense importance to Singapore’s competitiveness and prosperity, and this I discuss in Chapter Eleven. Of particular interest is whether the regionalisation project has led, as Toh (1995, 442) was sure it would, “to the evolution of a less paternalistic government and higher consensus between businessmen and civil servants as ‘Singapore Inc.’ becomes an internationally-

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<sup>6</sup> *Far Eastern Economic Review* (25 April 1996, 58)

recognized formula". The importance of the success of Singapore's efforts to go regional is highlighted by the unremitting vulnerability of the city-state to the vagaries of the global economy. As the 1990s came to a close, for instance, the dependence on links with a still fragile region and a volume of international trade about three times that of GDP (Lee 1999, 73), had all the hallmarks of a disaster waiting to happen. In the aftermath of the 1997 financial crisis and the latest severe world recession, therefore, the Government had to draw the conclusion that a new and radical impetus would need to be given to the economy's external wing. How this is being addressed is something I also discuss in Chapter Eleven. The remainder of this chapter is devoted to assessment of the part played in the regionalisation effort by two of the government's champions – PSA Corporation and DBS Bank.

### *9.6 PSA Corporation: steady overseas development from Belgium to China*

Singapore is essentially a container port, with PSA responsible for nearly all of the country's container activity. The newly-corporatised Jurong Port currently handles 8 percent of its cargo in the form of TEUs (66,000 in 2000) and has intimated that it hopes to have a throughput of one million TEUs within three to five years.<sup>7</sup> However, Jurong Port's approach to charges levied for its container services will certainly have minimal impact on PSA policy, and the container activity of the two organisations is likely to remain more complementary than competitive. It is from a secure home base, therefore, that PSA has been able to seek to extend its influence abroad. In addition to 17.04 million TEUs credited to the Port of Singapore in 2000, PSA could claim a further 2.7 million TEUs handled in 13 ports in eight countries around the world. The establishment of overseas interests started with a joint venture terminal operation in Dalian in 1996, and PSA is now thinking in terms of 30 per cent of total business coming from overseas investments by 2007. This would involve PSA managing 10 million TEUs outside Singapore.

The Authority was building overseas contacts as early as 1988, the year it set up high-level missions tasked to promote PSA and study other port operations. At first, the objectives were relatively low-level, being concerned primarily with opportunities to talk to customers and potential business partners. This was the case with ASEAN countries, and

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<sup>7</sup> *Straits Times*[1] (13 January 2001) 'Jurong Port's target: 1m TEUs'

the help and advice of the PSA was sought by Vietnam (1992), Cambodia (1993), Myanmar (1995) and Vietnam (1995). The benefits of such groundwork were seen best in Indonesia, where the PSA's success in greatly improving productivity at Tanjung Priok, the port serving Jakarta, was followed in 1997 by an invitation to construct – and eventually manage – a container terminal at Cigading in West Java. PSA's ability to invest overseas only came with the certainty of the move to corporatisation and privatisation; hence the initiative at Cigading and the earlier commencement, in 1996, of the PSA's joint venture at Dalian in Northeast China. The Authority's annual reports in the early 1990s naturally do not give any hint of the frustration that must have been felt with respect to the inability to invest overseas, particularly at a time when government was frequently exhorting Singapore business interests to look outside the confines of the state and make an impact within the global economy. Not that the PSA would have needed much prompting: by the end of the 1980s Singapore was well-established as the world's busiest port, and shared with Hong Kong the role of world leader both in terms of TEUs handled and the construction and management of container terminals. The financial success and confidence of the Authority was evident in the huge investments in Pulau Brani and the planning for the Pasir Panjang terminal.

There is little doubt now, however, that the PSA has found itself at a disadvantage by arriving late on the scene of international port development. Only in 1996, coinciding with the transfer of regulatory powers to the MPA and PSA's entry into China, did PSA set up an International Business Division, given the task of transforming the shortly-to-be corporatised organisation into an international port company.<sup>8</sup> Since then, the inclination towards a prudent approach in weighing up business opportunities has had to be set against increasing competition from other major port operators for access to a finite number of ports. Port management contracts are not short-term arrangements and so, according to the president of PSA's International Business Division, "once (a) port is gone, or leased out to someone else, it's leased out for the next 30 years".<sup>9</sup> It is in this attenuating environment that PSA has sought to expand its reputation and influence, and to play its part in extending

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<sup>8</sup> *Business Times* (8 May 1996) 'PSA sets up international business division'

<sup>9</sup> *Straits Times* (1 June 1998) 'Container and port operator aims to bring in a third of revenue from overseas operations by 2007'

Singapore's global reach. There is no doubt that it has a struggle on its hands, and limited time in which to register advances against its main competitors.<sup>10</sup> As Drewry Shipping Consultants (1998, 35) explain:

"The remarkable worldwide simultaneous move towards privatisation has created what most major port developers agree on as a ten year window of opportunity. Essentially, there is a one-off opportunity to ride the wave of global privatisation and become established as truly international players. Whilst individuals will argue as to when the window opened and how long it will be open for, there is no doubt that it is open, and has been for several years already. Naturally there will be ongoing opportunities for greenfield developments as trade grows and individual nations prosper, but participation in the first phase is critical."

The point about opportunities arising at greenfield sites is well made. A good example involves the ambitious international shipping centre of Shanghai, which has announced plans to build a virtually new port at Yangshan, in the neighbouring province of Zhejiang.<sup>11</sup> Shengsi, the county in which the harbour lies, is a water transport hub between northern and southern China and is at the intersection of the Yangtze and Qiantang Rivers. Shanghai handled 5.61 million TEUs in 2000 and this figure is expected to almost double when Yangshan commences operations in 2005. There is no evidence at the time of writing that PSA will have an involvement in the Yangshan project, but the combination of PSA's existing commitments in China, its high profile and reputation there, and the likelihood that China's economy will continue to expand at approaching 10 per cent per annum for the foreseeable future, should mean that there will be joint venture opportunities arising for both PSA Corporation and the Hong Kong-based Hutchison Port Holdings (HPH) to exploit.<sup>12</sup> Figures produced by Ocean Shipping Consultants (1998) lend weight to this interpretation. They estimate global container port throughput will double (from 218 million to 417 - 491 million TEUs) between 2000 and 2012, with Asian ports generally out-performing those in other regions. Southeast Asian ports are forecast to see

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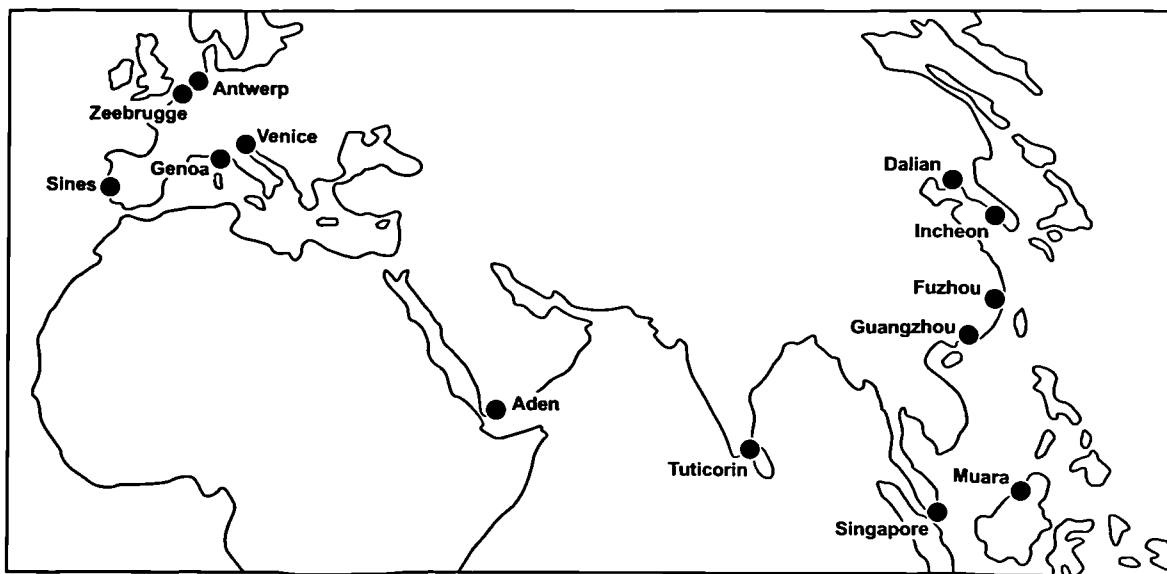
<sup>10</sup> There are only five truly global container terminal operators: *Hutchison Port Holdings*, the leader, with coverage including Asia, Western Europe, Central America and the Caribbean; *P&O Ports*, which has the greatest geographical spread, ranging from the UK to Australia and Russia to Southern Africa; *International Container Terminal Services Inc* is based in the Philippines and has started to expand into Central and South America and the Middle East; *Stevedoring Services of America* has its strongest interests in North and Central America and New Zealand; and *PSA Corporation*, the latest to arrive on the scene, but with rapidly growing interests in China, the Middle East, India, the Mediterranean and Western Europe.

<sup>11</sup> *Business Times[O]* (24 October 2001)

<sup>12</sup> HPH operates 30 ports (including Hong Kong) in 15 countries. Two of its most strategic locations are at either end of the Panama Canal.

their volume of TEUs rise from some 33 million in 2000 to between 85 million and 105 million in 2012, giving the region a 20 per cent share of world throughput. China's ports are expected to produce a similar big increase in container traffic, from 38 million TEUs in 2000 to as many as 84 million in 2012.

The PSA's 'late' entry into the China port market has worrying echoes of the Authority's slow start when building its first container berths. The largest of its competitors, Hutchison Port Holdings, has a ten-year advantage, having been exploring and developing China's port business since the mid-1980s. The PSA is rightly proud of its three ventures in China: Dalian, serving Northeast China, was joined in 1998 by a container terminal at Fuzhou, the mainland's sea link with Taiwan, and in 2001 by container facilities at Guangzhou, Southeast China's largest city and at the heart of the rapidly developing southern coastal



**Figure 9.1**  
**Location of PSA Corporation's container terminal interests, 2001**

belt. However, the extent to which PSA can enter into further port developments in China is unclear. On the face of it the opportunities appear immense: by 2020 China expects to have 1,100 deep-water berths handling 2.8 billion tonnes of cargo, a 117 per cent increase on the 2000 throughput. Not unexpectedly, therefore, the PSA remains bullish about future container terminal development and claims to have "a number of projects on (its) plate, but

nothing confirmed at this point”.<sup>13</sup> This optimism is not shared by HPH, which is currently involved in nine mainland China ports which handle nearly a quarter of the country’s total container throughput. HPH’s managing director has been reported in the Hong Kong press as confirming that there are no immediate plans to pursue further investment in China’s ports, not least because they have difficulty in identifying openings.<sup>14</sup> It is not clear where the truth lies between this view and the Chinese government’s apparent reluctance to allow HPH to gain further influence and control over the country’s ports. Whatever the answer, the PSA faces an uncertain road ahead. China undoubtedly values PSA’s record of achievement and excellence, but may well feel that it has now accumulated sufficient learning from PSA and HPH to allow domestic development and handling of future container terminal facilities. A measure of the PSA’s progress in developing overseas container terminals is shown in Fig. 9.1, and the nature of PSA involvement is shown in Table 9.3. It is now either actively involved, or in the advanced planning stages, with 15 ports in ten countries.<sup>15</sup>

A further point emerges in relation to PSA’s ventures in China. Whilst Hong Kong’s success (and that of HPH) may be explained away partly by the advantages of proximity and well-established business ties with the mainland, it does throw into sharp relief the impotence of the PSA as statutory body during years when it should have been grappling with the challenges of its competitors within the global economy. The protection engendered by government control may produce an assured developmental environment, but it does not necessarily enable the spawning of an entrepreneurial culture. A root cause of the puzzlement and irritation expressed by government during the 1980s and 1990s regarding the general failure of businesses to be more entrepreneurial is thus only too obvious. As for ‘champions’ such as Singapore Telecom, Singapore Power, PSA Corporation and the DBS Bank, they may have been tardy in emerging from the comfort of their domestic cocoons, but they are now fully engaged with the outside world and bringing added value to Singapore’s economic performance. The PSA Corporation’s chairman, Neo Ning Hong, has compared its approach to that of Fiat and other large multinationals which, faced with an increasingly integrated and globalised world, have set

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<sup>13</sup> *Business Times[O]* (24 July 2001) ‘PSA still sees potential in investing in China’s ports’

<sup>14</sup> *Business Times[O]* (24 July 2001) ‘PSA still sees potential in investing in China’s ports’

<sup>15</sup> PSA’s on-going negotiations with Cigading (Jakarta) and Hibiki (Fukuoka) are included in these figures

out to improve the service to their world markets. PSA, he has said, is “searching the world for like-minded partners to share its experience and expertise” in order to build “world-class maritime and logistics hubs”.<sup>16</sup>

**Table 9.3 Status of PSA Corporation's overseas container terminal interests**

<i>Country</i>	<i>Port</i>	<i>Project commenced</i>	<i>TEU Performance (2000)</i>	<i>Berths</i>	<i>PSA management term (years)</i>
<b>PR of China</b>	Dalian	1996 (Jul)	979,300	5	50
	Fuzhou	1998 (May)	328,000	3	50
	Guangzhou	2001 (Apr)	1.43m	6	
<b>India</b>	Tuticorin	1998 (Feb)	150,800	2	30
	Pipavav	1998 (Aug)	200,000*	3	30
<b>Italy</b>	Genoa	1998 (Jan)	743,900	6	60
	Venice	1998 (Oct)	192,500 **	3	
<b>Yemen</b>	Aden	1999 (Mar)	247,900		30
<b>South Korea</b>	Incheon	1999 (Dec) (agreement)		3	
<b>Portugal</b>	Sines	1999(Sep) (agreement)	1.4m*	3	30
<b>Brunei</b>	Muara	2000 (Oct) (agreement)	500,000 * (projected)		25 (option to 30)
<b>Indonesia</b>	Cigading	1997 (Feb) (feasibility study)			
<b>Belgium</b>	Antwerp & Zeebrugge	2001 (Mar) (agreement)	22 terminals (6 handling containers) across both ports.		
<b>Japan</b>	Hibiki	(agreement imminent)			

Notes: \* Capacity; \*\* 1999 figure

It may be argued, however, that just as the PSA was late in reaching out into the global economy because of its prolonged role as a statutory board, so there is a current danger that delayed privatisation may hold back (or even deny) efforts to maximise opportunities in

<sup>16</sup> *Business Times* (27 May 1998) 'PSA talking to a dozen potential project partners'

the limited window identified by Drewry. This is particularly applicable to the rapidly expanding port business in China, where difficulties similar to those being experienced by HPH could afflict a PSA Corporation 'burdened' by its 100 percent ownership by Temasek Holdings. If, as is claimed by government, the main objective of the flotation of PSA is *not* financial, then there is a strong argument for ignoring market conditions and allowing an IPO in order to remove any drag on the expansion of PSA's overseas business. With the move towards fewer, but larger, world shipping lines there is likely to be an increasing tendency for lines to seek linked deals with port operators on their main routes. PSA Corporation says it could be interested in the idea of 'global contracts' with shipping lines, and is currently exploring a joint-venture arrangement with Mediterranean Shipping Company and CP Ships at Antwerp.<sup>17</sup> There are obvious advantages to be had from building up a network of ports (including Singapore) that form the basis for long-term, profitable deals with major shipping clients. This, hopefully, goes some way to explain PSA's strong interest in a further five investments in the Shanghai-Guangzhou region, and the intended privatisation of India's waterfront.

Despite the privatisation problematic, PSA's overseas growth has been steady and coordinated. In addition to its overseas container terminal businesses, which registered a 33 percent increase to 3.6 million TEUs in 2001, the Corporation is seeking "opportunities to develop synergistic businesses where PSA can add value".<sup>18</sup> These businesses include logistics, IT and marine services such as the widely acclaimed, and used, PORTNET system, a significant aid in facilitating the operations of shipping lines and so reducing their costs. In 2001, income growth from overseas operations helped soften the setback of reduced container volumes in the home port. And the outlook for 2002 is positive, with Singapore on target for return to the 2000 level of 17 million TEUs, and the firm expectation of a doubling of the overseas figure following formal acquisition of the Belgian port facilities in March 2002.

### ***9.7 DBS reaches out***

Following the period of consolidation in the 1980s DBS, by then clearly Singapore's premier bank, was ready for the next phase in its development, reporting that, "our mission

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<sup>17</sup> *Business Times[O]* (21 June 2002) 'PSA may tie up with shipping lines, consider global contracts'

<sup>18</sup> Chairman's Message, PSA Annual Report (2001, 9) [www.psa.com.sg](http://www.psa.com.sg) accessed 23 August 2002

for the 1990s is to build on our pre-eminent position in Singapore to be a leading bank in the Asia-Pacific region".<sup>19</sup> By the end of 1990, DBS Bank's domestic and international strengths could be identified in:

- 39 branches and 116 ATMs in Singapore;
- 8 overseas branches, agencies or representative offices;
- 682 correspondent banks in 75 countries; and
- a 42.5 percent stake in PT DBS Buana Tat Lee Bank, a joint venture bank in Indonesia.

A securities research office had been set up during the year in Malaysia, and the Annual Report reveals DBS's strong interest in exploring other opportunities in the ASEAN region. Also in 1990, Singapore was well positioned to further its role as a financial centre. Most striking were the effects of regional financial liberalisation, and the benefits flowing from Japan's enhanced status as the major financial hub for the Asia-Pacific region. That Singapore was fully aware of increasing competition (and opportunities) is demonstrated in a speech by Dr Richard Hu, the Minister for Finance, given in Tokyo in October. Noting that, apart from Hong Kong and Singapore, the financial sectors of countries in ASEAN and the Asian NICs had been relatively small during the 1970s and 1980s, he expected "the financial sectors in Taiwan, Korea and ASEAN to grow in significance in their contribution to GDP...(and that)...demand for more sophisticated financial products and investments will increase (and) as the barriers to cross-border capital flows in the region are relaxed, there will be greater need for financial intermediaries to handle such flows".<sup>20</sup>

The main question facing Singapore's financial sector as it entered the final decade of the twentieth century concerned when the government would feel ready and able to further relax banking controls, in order to encourage foreign institutions and capital to regard the city-state as the preferred location from which to do business, and to expose local banks to the full force of competition for that business. As William Purves, Chairman of HSBC, put it: "Singapore has a very good track record of economic growth and the authorities here

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<sup>19</sup> DBS Annual Report (1990, 8)

<sup>20</sup> *Business Times* (10 October 1990) 'Enjoying mutually reinforcing growth'

felt that banks had to be given time to grow, otherwise they would have been swept away by larger foreign banks in the 60s, 70s and 80s. But...unless you open up, domestic banking will not have the competition needed to propel it into the next division".<sup>21</sup> In this regard, DBS, as "partners in the nation's vision for the 1990s",<sup>22</sup> was looking to diversify and strengthen its earnings base in order to have a platform from which to reach out and become a force in the region.

By 1995 the Bank's overseas offices had reached 18 in number, DBS itself continued to be strongly capitalised (its great underlying strength which regularly attracts top ratings from Moody's and Standard & Poor's), and Ngiam Tong Dow, the chairman, felt able to report: "Looking to the future, I have set a profit target of \$1 billion to be achieved within the next five years....The Asia-Pacific economies are growing rapidly, financial liberalisation in the region is gathering pace, Singapore companies are continuing to venture overseas. All this augurs well for our drive to develop and expand our external wing".<sup>23</sup> In the same year there were surprising reports from Japan that Singapore was increasingly viewed as having the potential by the end of the century to oust Tokyo as the Asian financial hub. Japan's efforts to remove financial controls were regarded as inadequate when compared with London and New York, the other global hubs. According to a survey of foreign institutions in Japan, conducted by an affiliate of the Finance Ministry, Singapore was regarded as having fewer restrictive regulations on financial trading and providing more opportunity than Tokyo for foreign firms to earn money. This analysis<sup>24</sup> may have been overly pessimistic about Tokyo's position, and said more about Singapore's performance in a 'beauty contest' than its financial infrastructure, but it does indicate how far Singapore had travelled in its drive to become a major financial centre.

During the 1990s DBS extended its position abroad, through the opening of overseas offices in the first half of the decade (Table 9.4), and progressively in the form of joint ventures and alliances in the ASEAN region and Hong Kong. As the century came to a close, the Bank had consolidated stakes in four overseas subsidiaries:

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<sup>21</sup> *Straits Times* (5 September 1992) 'It will take time before a world-class bank develops here'

<sup>22</sup> DBS Annual Report (1991, cover page)

<sup>23</sup> DBS Annual Report (1995, 9)

<sup>24</sup> *Straits Times*, 1 November 1995 'S'pore set to be Asia's most popular financial centre: poll'

- *The Philippines*: DBS Bank Philippines – so named following DBS's acquisition of a 60 percent shareholding interest in the Bank of Southeast Asia in 1998.
- *Hong Kong*: DBS Kwong On Bank – an acquisition completed in 1999, with a DBS shareholding of 87 percent.
- *Thailand*: DBS Thai Danu Bank – the original (1991) 3.4 percent stake had grown to 50.3 percent by 1997.
- *Indonesia*: PT Bank DBS Buana – a 42.5 percent stake taken in 1990 in PT DBS Buana Tat Lee Bank was sold in 1997, to be replaced by an 85 percent stake in Bank of Tokyo-Mitsubishi's joint venture.

Table 9.4 DBS: growth of international banking offices

<i>Year Opened</i>	<i>Overseas Office</i>	<i>Status (Year 2001)</i>
1977	Tokyo	Branch
1980	New York	Agency
1981	London	Branch
1981	Seoul	Branch
1982	Los Angeles	Agency
1983	Taipei	Branch
1984	Osaka	Branch
1989	Jakarta	Representative Office
1991	Hong Kong	Branch
1992	Beijing	Branch
1992	Bangkok	International Banking Facility
1992	Kuala Lumpur	Representative Office
1993	Mumbai (India)	Branch
1994	Labuan	Branch (Licensed offshore bank)
1994	Yangon (Myanmar)	Representative Office
1995	Manila	Branch
1995	Shanghai	Branch
1995	Rayong (Thailand)	International Banking Facility

*Source*: DBS Annual Report (various)

DBS interest in the region did not waver during the 1997-1998 Asian economic crisis, although the investment in Thai Danu severely strained the Bank's resources. John Olds, appointed CEO in August 1998, certainly appeared to feel in retrospect that DBS had overreached itself and perhaps would have been better advised to 'make haste a little slower'.<sup>25</sup> At a press conference in February 1999, Olds had expounded on the regional opportunities: despite its current difficulties, Thai Danu was a "great franchise"; the troubles of Indonesian banks would delay any forays in that country; while acquisitions in Malaysia would only become realistic once the rules had been changed to allow foreign majority control.<sup>26</sup> All of which reinforces the view of a Singapore (and DBS) keen to develop regional interests, but being held back by the difficulties facing even the strongest of their

**Table 9.5 Impact of the Asian financial crisis  
on Singapore's 'big four' banks (all figures in \$m)**

	<i>DBS</i>	<i>OCBC</i>	<i>UOB</i>	<i>OUB</i>
<b>Net Profit</b>				
1997	436	581	502	255
1998	223	425	368	180
<b>Provisions</b>				
1997	496	569	335	317
1998	996	938	654	474
<b>Non-performing Loans</b>				
@ Dec 1997	1,112	1,850	991	613
@ June 1998	3,908	2,600	1,488	1,534
@ Dec 1998	7,086	4,059	2,191	2,888

*Source: Straits Times (27 March 1999)*

neighbours. It was no surprise, therefore, that profits plunged in 1997 and 1998 (see Table 9.5), affected directly by performance in the region's troubled economies, and indirectly through the Bank's substantial provisions against losses deriving from loans. The *Straits Times* reported that loans to the ASEAN region at year-end 1997 amounted to \$6.86

<sup>25</sup> Interview DS/JO (14 November 2000)

<sup>26</sup> *Business Times* (23 February 1999) 'DBS on lookout for bigger bank acquisitions in Asia'

billion, or the equivalent of 10.5 percent of the Bank's assets.<sup>27</sup> The impact of the crisis on the big four banks is apparent in Table 9.5, which shows DBS net profits in 1998 down to \$223 million, non-performing loans at the potentially dangerous level of \$7 billion, and a provision against losses of some \$1 billion.

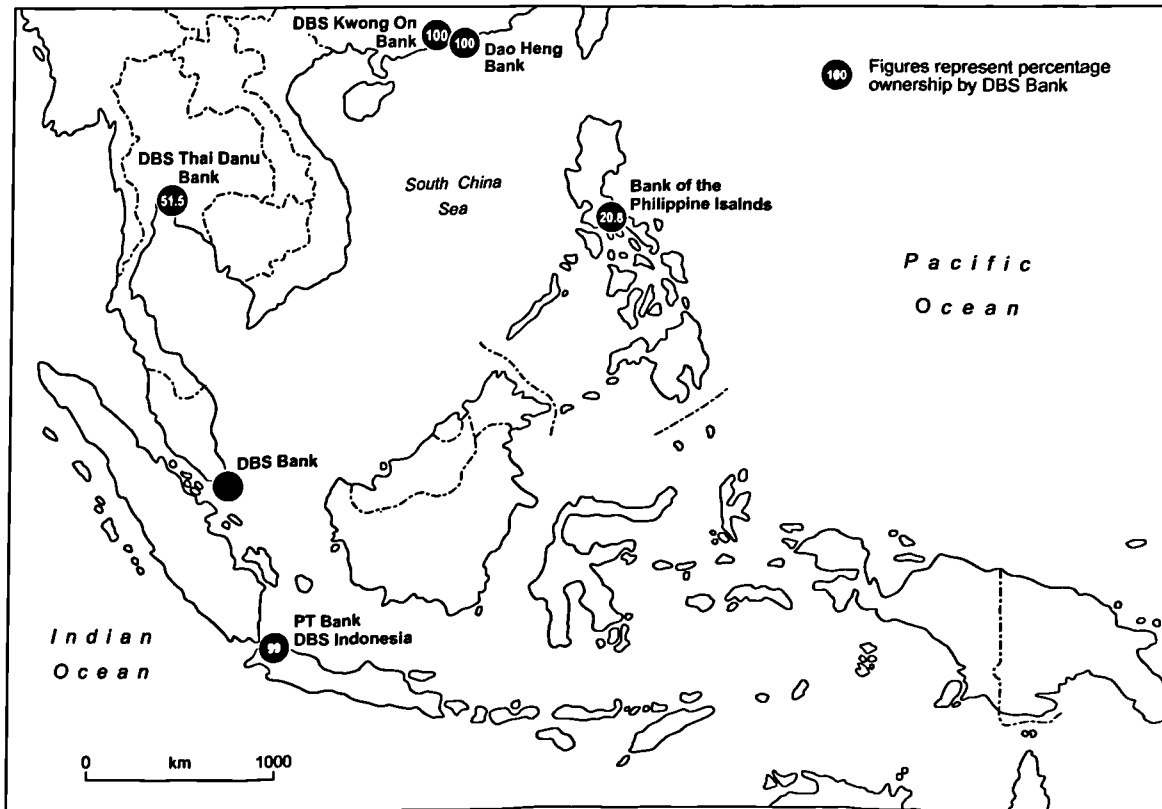
However, what the crisis did reveal was the strength of DBS's fundamentals, enabling it to bounce back swiftly and strongly in 1999. Return on equity that year, at 10.35 percent, was back at the levels attained prior to the Asian economic crisis, and operating profit was an impressive \$1.964 billion. Although net profits started to climb back, to \$662 million, they were depressed by the \$1 billion provision against losses. As might be expected, the Bank was publicly optimistic about the road ahead. 'Getting to world class' was the theme of the 1999 Annual Report which, in its letter to shareholders, observed: "To sum up, there are encouraging signs that the regional economies are well on the road to recovery. But the operating environment will continue to be both competitive and unpredictable. The global forces for consolidation sweeping across banking and financial services and the Internet are opening up our marketplace to new competitors even as the liberalised Singapore banking market opens it to conventional ones....The Asian economic crisis, difficult as it was, has created opportunities".<sup>28</sup>

With the Southeast Asian economies recovering only slowly from the Asian financial crisis, it was to be expected that the most likely opportunities would lie to the north, particularly in light of China's impending entry into the WTO. In April 2001, DBS Bank bid to establish a prime base in Hongkong by procuring the Dao Heng Bank for \$10.5 billion. At three times book value this was a contentious purchase in the minds of some DBS shareholders; furthermore, the continuing depressed state of the markets means that there has been no real opportunity for realisation of the expected return on investment. It is, however, a deal that must make sense in the long-term. DBS Bank is now the fourth largest in Hongkong, with offices and a small number of outlets on the mainland, and is positioned to benefit from China's rapid economic growth. The latest position regarding DBS Bank's overseas properties is shown in Figure 9.2.

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<sup>27</sup> *Straits Times* (5 March 1998) 'DBS group earnings plunge 38%'

<sup>28</sup> DBS Annual Report (1999, 9)



**Figure 9.2 DBS Bank's overseas properties, 2002**

In Singapore itself, questions still arise regarding the extent of liberalisation of the banking sector and whether the three local banks should continue to enjoy a measure of protection. In recent years MAS has frequently pointed to the experience of New Zealand, where the outcome of what might be termed over-zealous liberalisation has been the disappearance of local banks. Singapore, in contrast, has persevered with its policy of establishing a small grouping of local banks whose interests are in tune with those of the Singapore economy. Government regards DBS Bank as the figurehead of this group, although following UOB's takeover of OUB it is no longer the largest. Where DBS scores over its two local rivals lies in its regional reach, and in particular the promising foothold it is establishing in Hong Kong with the gradual integration of the Dao Heng and DBS Kwong On banks.

However, DBS, UOB and OCBC remain small players in the banking world when compared with the likes of HSBC and Citigroup, two of the present holders of FQB licences. Despite the nomenclature, these licences do still impose certain restrictions on the holders, a matter of concern to the US side in the on-going Singapore-US FTA negotiations. Neither the US nor the UK employ restrictions on foreign banks, whilst in

Asia Pacific the same applies to Hong Kong and Japan. All the logic points to the early lifting of restrictions on foreign banks if Singapore is to achieve its overarching ambition to be accepted as a world-class financial centre. It is interesting, therefore, that MAS has suggested it could adopt a flexible approach to the five-year liberalisation programme due to end in 2004, accelerating the programme itself and bringing in more FQB licences.<sup>29</sup>

Financial services are at the cutting edge of globalisation, and Lee Hsien Loong and his colleagues will come under increasing pressure for the doors to be flung open to unfettered competition between local and foreign banks. But if that happens, DBS Bank's role as a key player in Singapore's regionalisation strategy - along with DBS itself - will almost certainly be swallowed up by a global giant. This would not necessarily be a disaster for Singapore, for full liberalisation would greatly assist both the strengthening of the city-state's hub status in the region, and in promoting and augmenting links with other economies. Although according to Lee Hsien Loong there can be no thought at the moment of the three local banks being taken out of Singapore ownership, the situation is more fluid - and confusing - than appears to be the case. This is because Lee is also reported as saying that there may well be future relaxation of the rules barring foreign banks from owning local ones.<sup>30</sup> Those who favour the 'wait and see' approach will find comfort in the latest ratings from Standard & Poor's, which confirm that DBS, UOB and OCBC have ample resources to withstand competition from foreign banks in the consolidation period following the recent mergers and acquisitions.<sup>31</sup>

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<sup>29</sup> *Business Times*[O] (22 May 2002) '5-yr bank liberalisation timeframe not cast in stone: MAS'

<sup>30</sup> *Straits Times*[I] (3 July 2002) 'S'poreans must control Singapore banks: DPM'

<sup>31</sup> *Straits Times*[I] (23 July 2002) 'S&P confirms stable outlook for Singapore's three banks'

## ***Chapter Ten***

### **Conclusions**

In light of the extensive ground covered in this work, I have endeavoured, in the interests of clarity, to group the main conclusions under nine headings. Three of these (1,2 and 7) are related to the theoretical framework informing the study of Singapore's positioning in the global economy; a further five (3-6 and 8) to the factors having most impact or influence on that positioning, whilst the final conclusion (9) deals with the approach and methodology deployed in the research project.

#### ***1. Globalisation: a powerful force subject to great uncertainty and conflicting views***

This thesis demonstrates just how linked Singapore is to the process of economic globalisation and, increasingly, to regional movements. Both globalisation and regionalism are problematic in that they raise considerably more questions than answers. In the case of globalisation, the jury truly is out, despite all the efforts of academics and politicians to come to an understanding of its complexities and uncertainties. Inspection of Held *et al.* (1999a) is instructive. With little to offer either the optimist or the pessimist, it is arguably the outstanding text in its field, yet after "nearly a decade of research and an unusual confluence of interests" (1999a, xix), over 500 pages and some 1000 references, the concluding chapter still raises weighty questions across a raft of issues. The only conclusions to draw at present are that the process of globalisation is ongoing and an undeniable feature of the world economy; is uneven in its extent and subject to major

fluctuations; is manifest more in the actions of multinational companies than states; and that its future direction and development are impossible to predict with any confidence.

## ***2. Singapore as world city: easy to designate, but difficult to measure***

The very nature of Singapore as a city-state means that it can only build itself through interaction with the global economy, a strategy it has prosecuted with great success over four decades. In the process, the PAP Government has converted an already important entrepôt within a world economy driven by the colonial powers, into an increasingly key regional trading and services node within the space of flows that are the 'joined up' element of today's global economy. It is through this importance as a regional command and control centre that Singapore is designated a world city.

Designation, however, is one thing; comparisons another altogether. Based on the literature and research evidence it may be seen that each city is unique in terms of its assets, whether these be geographical, economic, cultural or matters of governance. Singapore, it has been noted, is unique among world cities in terms of the all-important role of national government. Nonetheless, it is possible for a survey of command and control functions present in a city, together with the empirical analysis of selected services as conducted by the GaWC Studies Group and Network at Loughborough University, to give a useful insight into the positioning of a city in the space of flows of the global economy – and even allow for the establishment of a tentative 'pecking order' of world cities. But at best it is a partial picture (duly noted by Beaverstock *et al.* 1999, 457) and concrete conclusions should not be drawn from it. A further point is that, in Singapore's case, for instance, no account is taken in either of the above 'measurements' of the supreme importance of geographical location, the nature of historical development since 1819, and the pre-eminence of the port in world trade. All three are crucial in making Singapore what it is today. The port, functioning as it does as a major component of what Sassen and Ward (1995) term the 'voice' of the city, is arguably of greater significance than any of the Loughborough criteria. The question of comparisons between world cities, in order to uncover what distinguishes one from the other in terms of the factors and events that have made them into world cities, is quite obviously a theme deserving of serious research (see

Chapter Eleven). It certainly does seem to offer insights not even broached in the production of arbitrary checklists.

### ***3. Double-edged sword I: benefits and dangers in embracing the global economy***

The remarkable achievements of Singapore's post-independence switch to export-oriented industrialisation owed much to timing. It was during the 1960s and 1970s that developed countries in the West, and MNCs headquartered in those countries, were looking to the developing world for the production of manufactured goods, using cheap land and labour. Singapore proved highly adept at offering attractive packages of land, labour and financial incentives to foreign MNCs, and a sound ethical business environment valued by the providers of foreign direct investment. The same remains true today. However, the world recession of the mid-1980s was a rude interruption, and a wake-up call to Singapore's leaders. It was their first real lesson about the uncertainties of the global economy and the degree to which Singapore's economic health depends on it. In retrospect it could be said that although the work and recommendations of the Economic Committee were exemplary, the same was not true of follow-up action, which was sluggish and insufficiently focussed. In this respect the rapid recovery of the economy and manufacturing exports probably contributed to the feeling that all was well, once again. This feeling of Singapore being back in a 'comfort zone', together with a certain reticence towards entrepreneurship, and acceptance of government as the instigator and director of change, arguably slowed progress on 'going regional' and the movement away from an over-dependence on electronics and other export markets.

The effects of the 1997 Asian financial crisis were softened in Singapore because of the soundness of the city-state's financial and business institutions. And as countries struggle to emerge from the 2001-2002 world recession, it is obvious that the integrity and efficacy of Singapore's system of financial governance, when weighed against a post-Enron US and the procedures of certain of Singapore's Southeast Asian neighbours, must give added strength to the Republic's reputation as a safe haven and standing as an international financial centre. However, there is little it can do about the reduction in trade and investment in the region, brought about by the severe difficulties of its Southeast Asian

neighbours. In the case of the latest world recession, the exposure of the largely export-driven economy to outside events has left Singapore severely handicapped. It has come down to waiting for the global economy to pick up, and in particular for consumer spending in the US to return to the confidence and levels of 2000. A ray of sunshine amidst the gloom has been the performance of the biomedical sciences sector which, with the chemicals industry, has led tentative signs of recovery. These are still early days, but the signs are that government's strong commitment to the biomedical sciences will prove a sound, long-term investment. Performance in the markets, however, remains essentially driven by foreign MNCs in the pharmaceutical industry.

#### ***4. Growing a knowledge-based economy: a necessary but high-risk strategy***

The government is going through a testing period as it awaits global economic recovery and the hoped-for return of the US to its assumed role as the cornerstone of world-wide growth. Above all, it recognises the imperative of re-making the economy in order to maintain competitiveness in an increasingly competitive world. Priority must lie with seeking out productive niche activities, in manufacturing as well as the knowledge economy, and moving up the value chain in order to attract both domestic and foreign talent and foreign investment. High labour and other costs now make Singapore clearly unable to compete with developing countries in terms of basic product manufacturing. The great challenge now facing government, therefore, in its efforts to grow both the external economy and knowledge-based industry, must be to take a step back, concentrate on a role as facilitator, and allow greater freedom and opportunity for the private sector. Government frequently articulates its desire for the Singapore economy to be 'nimble' and swift to respond to challenges. However, in the world of the twenty-first century - with the huge opportunities that will arise in Asia Pacific - this will not transpire if government continues to keep its hands on the oars as well as the tiller.

#### ***5. Double-edged sword II: the pros and cons of state intervention in the economy***

The government's hands-on, interventionist approach to running the economy is at the heart both of its startling achievements and current difficulties in carrying out the latest, and much needed, re-making of the economy. Starting out as a necessity, it has also become an

ingrained facet of the PAP Government's psyche. The economic successes it engendered in the 1970s and 1980s have also been taken as justification for its continuance. It should also be noted that a confident approach both to policy matters and the handling of problems, has been assisted greatly by the long-term security of tenure of the PAP Government. Significantly, the hand of the state has been steered not by ideology, but by a pragmatic, practical, flexible approach to all issues. The absence of any meaningful opposition has made easy the exercise of control through government agencies and its partial or full ownership of a considerable array of companies, including 'champions' in the various sectors of the economy.

However, despite an undisputed record of almost unbroken success, there are downsides to this practice of close control of, and involvement in, the functioning of the economy. First, pragmatism and flexibility can give a Janian aspect to decision making; generally swift and incisive, there are occasions when an uncharacteristic and undue caution is exhibited, sometimes to poor effect. Second, government's perceived protection and sponsorship of its own companies goes down badly with many private companies, which feel at a severe disadvantage and under-valued by government. Third, the firm hand of the state, coupled with the successes it has engendered and the feeling of the people that 'government knows best' in most matters, has contributed to the emergence of a risk-averse society. Fourth, the development of a knowledge-based industry and growth of an external economy, involving changes of mindset of both government and governed, are proving awkward and slow processes as a result of over three decades of the tight control and readiness to intervene that have been the hallmark of government activity.

**6. *Regionalism I: attractive way-station on the uncertain route to a multilateral world?***

Progress on the multilateralism agenda of the WTO, firmly linked to the 1 January 2005 deadline for the Doha Round, will depend on the ability and willingness of world leaders to remain focussed on the aim of multilateralism, whilst pursuing aspirations for regional groupings. However, it is wrong to envisage an 'end game' when assessing regionalism and its role in the evolution of a new world order, since it is far from being a unified concept. The EU is often held up (by Europeans mainly) as the deepest and most complete form of

regional integration, but its format does not necessarily fit all circumstances. For instance, it is highly unlikely that the 'open regionalism' and Asian values espoused by Asia-Pacific countries will lead to the degree of political integration the EU is moving towards. That is why Hurrell and Fawcett (1995, 327) conclude that: "At best it can be argued that regionalism may come to constitute one of the many pillars supporting an evolving international order". Nonetheless, given the tendency of states to be 'catalytic' in the way that they constantly seek power-sharing arrangements (Weiss 1998, 211), it does appear that regional integration may provide the best structure for states to maximise their inherent economic attributes and potential through collaborative power-sharing arrangements. This is the pattern emerging swiftly and with much purpose in Asia Pacific.

#### ***7. Regionalism II: FTAs the key to Singapore's continuing viability and prosperity***

Singapore, despite its size, has played a prominent part in regional movements in Asia Pacific. A founding member of ASEAN, a leading proponent of the formation of the ARF, and an early (rebuffed) advocate of an ASEAN FTA, it has lately turned to a range of bilateral trade agreements. Involvement in a web of defence and economic agreements is demonstrably an effective way for Singapore to either enhance its security or expand two-way trading opportunities for a city-state whose ability to exist and prosper is totally dependent on relationships with the world outside its borders. This self-interest also has benefits for others, for Singapore views its bilateral agreements as arrangements for the other Southeast Asian countries to either join or emulate. The combination of this activity with the increasing pace of development of AFTA will be to the mutual benefit of the countries themselves and to Singapore which, as the advanced regional hub, has the skills, products and services that others can access as Southeast Asia returns to pre-1997 levels of economic growth. Looking further afield, the putative moves towards an East Asian trade bloc can bring nothing but good for a trading nation like Singapore. The city-state is clearly well placed to participate in the exciting growth of China and India. It has close cultural links with both, and earlier collaborative ventures, particularly those involving the establishment of business parks, should bring rewards as a result of the high regard in which Singapore business practices are held by political and business leaders in two countries whose domestic markets encompass one third of the world's population. The

competition amongst developed nations and MNCs to participate in the enormous growth that is at an early stage in China and will soon emerge in India, will be fierce. That is why in the case of Singapore so much rests on the performance of Temasek Holdings in fostering a dynamic, adventurous approach to the much-vaunted regionalisation programme.

#### ***8. No escape from a condition of vulnerability***

Singapore's economic success has been underpinned by a necessarily robust approach to matters of security. One of the reasons for the PAP's continuing hold on power lies in its clever use of the city-state's vulnerability in its search for social cohesion, sense of nationhood and unity of purpose. An unstable region, characterised by cultural and religious diversity, requires constant vigilance, whilst over-exposure to the vagaries of the global economy poses an ever-present threat to the city-state's economic well-being. Indeed, it is certain that with its small size, and limited resources and population, Singapore - like city-states throughout history - will always be at risk of running out of options when faced with powerful external pressures, whether they be of a military or economic nature. That Singapore is fully aware of the dangers is evident in the way it seeks security and stability through the integration of its interests with those of other nations, and particularly the great powers (US, China and Japan) which have their own vested interests in a stable and prosperous Asia Pacific.

#### ***9. Appraisal of approach and methodology***

Consideration of the Singapore 'success story' is not new; it is a topic that has excited the interest of social scientists, including geographers, economists, sociologists and political scientists. However, in seeking to assess Singapore through its positioning in global, regional and local space, this thesis addresses its subject matter in ways that differ from the norm. Much of the literature tends to be so dominated by a welter of statistics pointing up Singapore's successes, that little or no consideration is given to the crucial 'spatial' framework within which things happen. Consideration of location and space permeates the pages of this thesis, although logic has dictated a multidisciplinary approach to study, in particular, of the theoretical framework.

Prior to independence, location was the determining factor in Singapore's rise to pre-eminence as a world port; since then, a combination of locational factors and a mixture of sound and proactive governance has enabled the city-state to engage, remarkably successfully, at a global scale. The latest phase of engagement involves a re-making of the economy, which should result in Singapore being more securely anchored within its extended region, the Asia Pacific. It is seeking to reduce, but not relinquish, its dependence on the wider global economy, and to embrace with renewed vigour the burgeoning opportunities of East and Southeast Asia. Singapore appears to be on target to attain its desired status as a world city of distinction, and to consolidate its position as a major regional hub in the space of flows. It is no mean feat that tiny Singapore has taken on globalisation – that complex mix of opportunity and danger – and in typically pragmatic fashion, and in its own way, continues to make nonsense of the 'end of geography' discourse.

Note was made in the Introduction (pages 6-7) of problems encountered during the research project. However, whilst it was undoubtedly disappointing not to gain direct access to certain key political figures, this did not noticeably diminish the quality or efficacy of the material assembled and analysed. Ministerial views are the subject of regular public exposure in Singapore, either in the form of speeches or press statements, and are accurately – some would say slavishly – reported, accompanied on occasion by critical analysis. It is thus possible to assess policies and decisions largely on their merits, without the confusion of either governmental obfuscation or press antagonism. Naturally, this raises questions about the robustness of research based substantially on press reports, the release of information by government and its agencies, and reports and other publications issued by commercial entities. The author would claim that the quality and integrity of these sources is generally sound, and form the basis from which informed judgements may be made.

### ***Part III***

## **Reflections on positioning Singapore in the global economy**

*"If the year 2001 is seen as pivotal in Singapore's modern history then the month of October of that year will stand out. In that month the government forecast that the economy could experience its sharpest recession in its history, it introduced the largest ever economic support and redistribute policy and announced the distribution of 'New Singapore' shares to bolster its new social compact with the people. In that month both the prime minister and senior minister gave televised speeches to trade unionists and young people. Interestingly, the younger of the two, the prime minister, who had outlined the need to create a new Singapore within ten years, seemed to emphasize the current problems of unemployment and the need to maintain social cohesion, especially after the terrorist attacks on the United States in the previous September.... In contrast, the senior minister appealed to the young that 'we have to remake Singapore over the next 10 to 20 years' and the Singapore has to reinvent itself for the 'New Age'.... Whether this can be done depends on whether the young have survived the over-regulated, conformist system that brought Singapore to the position it found itself in November 2001 – ostensibly rich, perhaps developed, but vulnerable and experiencing a serious recession"* (Peebles and Wilson 2002, 270-271)

## Chapter Eleven

### Reflections

*"The region will in time recover from its present difficulties and become once again prosperous and stable. Globalization and technology are transforming the world economy and Singapore's place in it. Our competition is becoming fiercer. So far, our policies and formulae have worked beyond expectations. But they need creative and fundamental rethinking, even when they are still working. We cannot navigate the next 30 years on autopilot. In a rapidly changing world, we either adapt or become irrelevant"*  
(Lee Hsien Loong 1998, 2).

#### 11.1 Introduction

In February 2001, Finance Minister Hu Tsu Tau opened his Budget Statement on a note of high optimism: "We are starting off on a good footing in the new millennium. Last year our economy outperformed expectations and grew by 9.9 percent, a rate not exceeded since 1994".<sup>1</sup> Initial recovery from the 1997 Asian financial crisis had, indeed, been impressive (see Table 11.1). But at the time Dr Hu was speaking, the Singapore economy had already started to experience the effects of a simultaneous downturn in the US, Japan and Germany, the world's three largest economies. By the second quarter of 2001, high optimism had turned into the first of four successive quarters of negative growth. That the Finance Minister, whilst accepting that external economic growth was becoming 'less rosy', still felt able to forecast growth of between 5 and 7 percent for the year, is a potent

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<sup>1</sup> Transcript of the 2001 Budget Statement – Part One: review of the economy (*Business Times*[O], 23 February 2001).

reminder of just how quickly trends in the global economy can impact on the highly exposed Singapore economy. Lee Hsien Loong gave a graphic illustration of this at a 1988 conference, when he pointed to the importance of the US composite index of leading indicators which “predicts two-thirds of Singapore’s economic performance, that is providing we do the right things”.<sup>2</sup> According to Lee, the time lag between the index and performance was between two and three quarters – an extremely limited window of opportunity for the likes of Singapore to take appropriate remedial action. The speed with which a ‘problem’ can become a ‘crisis’ cannot be helped by a level of trade which, at \$470 billion in 2000, was some three times Singapore’s GDP (see Table 7.1). Even the ‘world’s most globalised nation’<sup>3</sup> has no special protection against the very openness and integration with other countries that the accolade recognises.

**Table 11.1 Singapore in recession, 2001-2002**

Year	GDP % growth	Quarterly figures GDP	
		Period	% growth
1998	1.5		
1999	5.4		
2000	9.9		
2001	-2.2	{ Q1	5.0
		{ Q2	-0.5
		{ Q3	-5.4
		{ Q4	-6.6
2002	*3.0-4.0	{ Q1	-1.5
		{ Q2	3.2

\*Advance estimate

Sources: Annual budget statement (various), Parliamentary Debates, Official Reports; Ministry of Trade & Industry Press Release (10 July 2002)

The *Foreign Policy* survey, published one month prior to the 2001 Budget Statement’s ‘note of high optimism’, is also interesting for its warning signals. The survey observed

<sup>2</sup> Closing address at conference on ‘Global strategies: the Singapore partnership’ (24-26 October 1988 in Raffles City Convention Centre).

<sup>3</sup> The result of a survey conducted by the leading American political journal, *Foreign Policy*, in association with the consultants A.T. Kearney. Singapore ‘far outstripped’ its nearest rivals (Netherlands, Sweden and Switzerland) in terms of such indicators as trade levels, international telephone traffic, international travellers and cross-border contact between people (*Straits Times*, 10 January 2001 ‘S’pore tops in globalisation’).

that despite Singapore's impressive ranking, it had struggled in recent years to maintain the necessary high levels of trade and foreign investment. Tellingly, the magazine pointed out that Singapore's process of integration with other countries was being held back by "slow progress in privatising state industries (and) its failure to win endorsement for a regional free-trade agreement...".<sup>4</sup> There has been subsequent progress on the second point, but the first remains problematic and is addressed later in this chapter.

Towards the end of 2001 there were three events, each of significant, but differing, importance to Singapore as it started out in 2002 on recovery from a deeply damaging recession. First, on 14 November in Doha, the WTO agreed the start of a new three-year round of talks to liberalise global commerce. In the months leading up to Doha, there were concerns that the 2000-2001 downturn in the global economy might encourage a protectionist approach amongst the developed countries. The agreement was therefore particularly welcome not just to a trading nation such as Singapore, but also to the developing countries which form 70 percent of the WTO membership and account for over one third of global traffic in merchandise. The second event, and culmination of some fifteen years of negotiation, was the entry of China into WTO membership on 11 December. The resultant boost for the global economy and prospect of rapid economic reforms in China were welcomed around the world, but for Singapore especially China's full engagement with the global economy could not have come at a more propitious time.

The third background event highly relevant to Singapore's progress through the early years of the twenty-first century was the General Election held in November 2001. The history of the PAP's unbroken hold on power is shown in Table 11.2. In every election since independence varying numbers of seats have been uncontested, and in 1968, 1991, 1997 and 2001 the PAP actually won the election before voting day. The traditional measure of the PAP's success is its share of the vote in those seats that are contested. The 2001 election result, with the PAP gaining 75.3 percent of valid votes therefore appears to be a resounding vote of confidence for the ruling party. It is certainly read that way by the PAP, although the leadership must be aware that a certain - possibly substantial - number of votes cast for the Party come from people who, under a compulsory voting system, feel

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<sup>4</sup> *Straits Times*[1] (10 January 2001) 'S'pore tops in globalisation'

that in the absence of any meaningful alternative, they have little option but to support the status quo – whatever their view of the PAP's performance.

The vote is, of course, also a reflection of the ineffectiveness of the opposition parties, led by the Singapore Democratic Party and Workers' Party. Their appeal to the electorate to "end the PAP's stranglehold on Parliament",<sup>5</sup> was never likely to translate into votes, particularly as the opposition finds difficulty in offering attractive policies to counter those of the PAP. The 2001 election was also crucial in enabling the PAP to continue unhindered with the coherent, long-term planning that has served Singapore effectively over four decades. Equally important in the short term is that it clears the decks for the PAP to navigate the economy out of recession and prepare for the transition to a 'third-generation' leadership in advance of the 2007 elections.

**Table 11.2 Singapore elections, 1959-2001**

<i>Year</i>	<i>PAP's % of valid vote</i>	<i>Total Seats</i>	<i>Seats won by PAP</i>	<i>Seats won by opposition</i>
1959	54.1	51	43	8
1963	46.4	51	*38	*13
1968	86.7	58	58	0
1972	70.5	65	65	0
1976	74.1	69	69	0
1980	77.7	75	75	0
1984	64.8	79	77	2
1988	63.2	81	80	1
1991	61.0	81	77	4
1997	65.0	83	81	2
2001	75.3	84	82	2

Notes: 1959 and 1963 elections were for Legislative Assembly

\* as at 9 August 1965

Sources: Pugalenthir (1996); *Straits Times* (3 January 1997)

*Straits Times [I]* (4 November 2001)

The pattern of development explored in Chapter Seven was one of Singapore's integration in the global economy and of the PAP Government's capacity and will to develop the economy to cope with and benefit from global and regional shifts. Now, in 2002,

<sup>5</sup> *Straits Times*[I] (4 November 2001) '75.3% resounding win for PAP'

Singapore is at the start of yet another 'next lap',<sup>6</sup> one involving decisions and actions of far-reaching importance for the maintenance of the city-state's competitiveness and well-being of its people. In the pages that follow I discuss certain key issues in terms of their significance and the form of Singapore's response, now and in the future. This is about the positioning of Singapore in local, regional and global space, in a progressively more competitive world and one in which a tiny city-state cannot rest on the laurels of past success.

## ***11.2 Resolving key local environmental and social issues***

### ***11.2.1 Sound fundamentals***

Singapore's emergence from recession will lean heavily on the fundamentals that underpin its status as a total business hub and prove attractive to both FDI and MNCs. The response of MNC investors in the mid-1990s, when asked why they had chosen Singapore, is equally valid today: "A highly effective government; a competent civil service; great infrastructure; well-trained and motivated workers; meritocracy; favourable incentives and tax breaks; proactive policies; (and) emphasis on productivity".<sup>7</sup> In this respect Singapore has an advantage over many competitors, and these fundamentals should prove their worth in the re-shaping of the economy. That major project will naturally generate its own problems, and these are addressed in section 11.3. However, whilst most debate about Singapore does revolve around its ability to sustain and refresh the economy, there are other important issues at home that impact on ambitions to create a 'global city of distinction'.

### ***11.2.2 Questions about land and water***

Singapore faces awkward questions in connection with the use of scarce land and guarantee of its water supply. If not tackled with resolution and imagination these could prove a serious setback to the country's overarching ambitions. The next review of the Master Plan is due in 2003, but the interim production of Concept Plan 2001 does reveal an awareness of the need to coordinate action devoted to developing an attractive living environment for Singaporeans and enhancing the appearance, ambience and synergy of the international business hub. Among ideas thrown up by two focus groups towards the end

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<sup>6</sup> The title of a keynote publication (Government of Singapore 1991) that was a vehicle for Goh Chok Tong, newly installed as Prime Minister, to establish his credentials as Lee Kuan Yew's successor, and in the wake of what he regarded as a 'failure' in the 1991 elections.

<sup>7</sup> *Business Times*[O] (19 April 2002) 'Staying calm over strategic threats'

of 2000 was that of linking further development and expansion of the financial centre/Downtown area with the shift of all port areas to the reclaimed zone of Tuas in the southwest of the island.<sup>8</sup> This (presumably) final chapter in the westward progression of the port would have the advantages of concentrating all maritime activity and facilities in one area away from the heart of the city, and of removing the current heavy road traffic between the port and the industrial complexes of Tuas and Jurong.

Other Asian cities such as Kuala Lumpur (the Petronas Towers) and Tokyo (the Millennium Tower) have shown a predilection for very tall buildings, and there could be a temptation for Singapore to follow suit in its plans for further Downtown developments. However, although the focus groups do refer to 'Manhattan-style housing',<sup>9</sup> there will certainly be questions about the advisability of pursuing such a strategy after the events in New York on 11 September 2001. A further consideration must relate to the construction of very tall buildings on reclaimed land. Singapore's considerable experience in land reclamation means there should be no repeat of events at Osaka's Kansai airport in the early 1990s, when severe subsidence and flooding resulted from miscalculations about the extent of settlement of the reclaimed land. But skyscrapers are a different matter altogether. The authorities could be well advised not to give way to the temptations of world-city machismo when implementing further development of the Downtown Singapore skyline. Taking the island as a whole, the Government estimates that reclamation can produce a further 15 percent increase in land area, a crucial contribution to plans to provide housing and recreational and other facilities for a projected population of 5.5 million. Any further increase in coastal and island expansion would certainly risk territorial disputes with Malaysia.

In addition to land use and extent, the other pressing environmental issue is that of the island's water supply. At present, under the 1961 agreements with Malaysia that expire in 2011 and 2061 respectively, the main source of supply is Johor. Contentious price negotiations are in progress and, given the history of innuendo about 'cutting off' the water and President Mahathir's latest oblique warning that as with a cat, "there are many ways to

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<sup>8</sup> *Straits Times* (24 November 2000) 'A map of the future'

<sup>9</sup> *Straits Times* (25 November 2000) 'Limits of land use'

skin Singapore”,<sup>10</sup> there seems much sense in Singapore becoming self-sufficient in water as early as possible. Moves in this direction already include plans for the construction of two new reservoirs, the linking of all reservoirs to obtain maximum yield by 2009, completion of the first desalination plant by 2005, and the production of recycled water (‘NEWater’). Recently, politicians have been queuing up to sample the NEWater and demonstrate that they are none the worse for the experience. Singapore cannot afford to enter the 2011 negotiations as a supplicant with little in the way of bargaining power. This is certainly so if, as Malaysian reports claim, Singapore intends to reduce its dependence on imported water to around 20 percent of total requirements over a 20- to 30-year period.<sup>11</sup> It is an issue requiring calm diplomacy on both sides, particularly as the water issue is only one of a package of issues between the two countries that include Malaysia’s plans for a bridge to replace the Causeway and Singapore’s use of Malaysian air space. The Malaysian Government, meantime, is affecting a disinterested attitude towards Singapore’s future intentions regarding water.

Much will depend, therefore, on the public’s response to NEWater – although it is likely that the bulk of recycled water will be for use in industry. The present political climate in Southeast Asia is far from stable, with economies in slow recovery, changes in leadership (including one forthcoming in Malaysia), and real and potential threats from terrorist groups operating in the region. It is a scenario within which Singapore – and its water supply – remain as vulnerable as ever.<sup>12</sup>

### ***11.2.3 Forging social cohesion: the greatest challenge at home***

The history of city-states is not one of great durability. The most successful, Venice, managed to flourish for 1,000 years before falling to Napoleon and becoming part of a united Italy in the eighteenth century. Today, Singapore exhibits the sense of vulnerability that characterises city-states and the national psyche that stems from such feelings. For over three decades, a slow growth towards nationhood was subordinate to the attention Rodan’s ‘hard developmental state’ gave to development of the economy, although there

<sup>10</sup> *Straits Times*[I] (4 May 2002) ‘Water deal unfair, but KL can’t act alone’

<sup>11</sup> *Straits Times* [I] (7 August 2002) ‘Mahathir ready to end water pact’

<sup>12</sup> It is noteworthy that 38 percent of the 2002 expenditure budget has been allocated to security and external relations. In his 2002 Budget Speech, Lee Hsien Loong made great play of the “complex and unpredictable” regional situation, and the need “to preserve and enhance our capacity to defend ourselves”. [www.budget.gov.sg](http://www.budget.gov.sg) (para 2.11) accessed 15 May 2002

were signs through the 1990s of a growing government awareness of the necessity to address social issues other than those relating to people's needs via housing, education and medical programmes, and the Central Provident Fund (CPF). Events since 1997 have underscored the need for this process and forced government to concentrate attention on ways of 'remaking' Singapore, socially as well as economically. These tasks are currently in the hands of two high-level committees, reportedly taking on board the views of a wide cross-section of civil society and the business community. Dr Vivian Balakrishnan chairs the Remaking Singapore Committee, whilst Deputy Prime Minister Lee Hsien Loong looks after the Economic Review Committee.

The work of the former committee continues that of the Singapore 21 Committee, launched by the Prime Minister in August 1997, "to strengthen the 'heartware'<sup>13</sup> of Singapore in the 21<sup>st</sup> century" (Government of Singapore 1999). The Committee met with some 6,000 Singaporeans from all walks of life before presenting a 'vision' comprising five key ideas:

- Every Singaporean matters.
- Strong families: our foundation and our future.
- Opportunities for all.
- The Singapore heartbeat: feeling passionately about Singapore.
- Active citizens: making the difference.

That such a vision required articulation is a reflection, according to Wong (2000, 274), "of the increasing conviction of the political leadership of Singapore that the potential threats to social cohesiveness will represent a major challenge to the ability of the government to pursue its economic policies to sustain Singapore's competitiveness in the medium and long term". The stakes are high, therefore, and for there to be real progress obviously requires changes of mindset on the part of both government and people. The lead, however, must come from the PAP, because without an easing of political control, and a move towards a form of communitarian democracy that the Government purports to favour, the ordinary Singaporean will simply opt for maintenance of the status quo. The most prominent and successful opposition MP, Chiam See Tong, is highly critical of the

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<sup>13</sup> Described in the Committee's 1999 Report as "the intangibles of society – social cohesion, political stability and the attendant will, values and attitudes of a people".

tardiness of moves to jolt the people into new ways of thinking and acting. In Parliament he has pointed to the “twenty years (that) have been wasted mainly in trying to contain the opposition, instead of spending that time to open up our society”.<sup>14</sup>

At least the Government is now talking openly of the need for change, but earlier efforts – the introduction of a (strictly controlled) ‘Speakers’ Corner’, Nominated Members of Parliament (NMPs), and artificial stimulation of opposition views in Parliament – although welcome, have done little more than tinker with the problem. In facing up to problems such as provision for an ageing population, increasing inequalities in incomes and living standards, the desire of the younger generation for a greater say in their lives, and tensions within a society that is both multiracial and cosmopolitan, the Government must forge a new, mutually-beneficial contract with its citizens. This is especially important, given that the progress of the ‘next lap’ will be in the hands of third-generation Singaporeans, those born after 1965. Goh Chok Tong regularly raises the issue of how these ‘3G Singaporeans’ will handle themselves and their country. Will they, as the old saying goes, be the ones who ‘spend away’ the gains of the previous two generations?<sup>15</sup> The concern of the PAP leadership is understandable. The advances made by Lee Kuan Yew’s ‘independence generation’ and Goh Chok Tong’s ‘upgrade generation’ have produced a polity of both comfort and control (George 2000), and 3G Singaporeans have grown up in relative luxury and affluence, without the challenges faced by their forebears. It is not unreasonable to question, therefore, how they will respond if the security or sustainability of their country comes under threat. All this is over and above the continuing need to maintain and further develop feelings of nationhood and shared purpose amongst diverse racial, cultural and religious groups.

The matter of nationhood has an added dimension now that, with greater spending power and opportunity to pursue careers abroad, some 100-150,000 Singapore citizens are overseas at any one time. This movement out of Singapore is part of the country’s growing up process, and indeed has been encouraged by government. However, for all Singaporeans, at home or abroad, to feel totally committed to their country in the manner the Government seeks, requires the most difficult action of all to come from government

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<sup>14</sup> *Asia Times* (6 April 2002) ‘Singapore frets over the end to the good life’

<sup>15</sup> Rhetorical question posed by the Prime Minister in his speech in Chinese at the Marine Parade National Day Dinner (24 August 2002) *mita\_news@MITA.GOV.SG* accessed 26 August 2002.

itself. That is, acceptance of a diminished control over the everyday life of its citizens. Without sensible and appropriate loosening of the reins, the capture of genuine feelings of nationhood will remain elusive, and result in a weakening of the power of the state against outside influences. In theory, the action required should be made easier for a ruling party that has negligible formal opposition and can envisage indefinite electoral success in the years ahead.

In the 'land of the not-so-free'<sup>16</sup> avenues for true freedom of expression by individuals and groups or associations need to be opened up, in order to sponsor proper debate of social and other issues, instead of the present system of 'controlled' feedback. Until this happens, the Government will find it difficult to mould the economy and society in ways it deems most appropriate and beneficial. The steady state described by Chua (1997, 210) is still in place and just as stultifying, and hence counter-productive:

"...on the one hand, an ideologically self-conscious interventionist but popularly elected government which maintains a tight rein over freedom in civil society, while simultaneously continuing to produce a better material life for the population as a whole. On the other, an electorate which is appreciative of the government's efficacy in economic matters but is, nevertheless, uncomfortable with all its interventions and seeks to have a greater say in the formulation of national interests and to have more opposition voices in Parliament to check the easy slippage into arrogance of power and of authoritarianism of an absolutely dominant PAP government, but without removing it".

It may be argued that the process of globalisation, with its propensity to create a borderless world, reduce the drawbacks of distance and pull the parts of the world closer together, has the capacity to send Singapore the way of all earlier city-states and remove it from the political map. The increasing pressure of economic competition and potential threats arising from an instability inherent in parts of Southeast Asia have rendered the 'little red dot' less secure and more vulnerable than ever. In order to face up to these real and potential threats, a speeding up of movement towards a system of less intrusive and controlling governance is needed to bring Singaporeans 'on board'. However, the views of respected commentators on the contemporary scene such as Vasil (2000), Chua (1997) and

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<sup>16</sup> A Singaporean friend's view of her homeland, and an expression of the cynicism that is rarely heard in public debate, yet must be a worry for the PAP Government as it seeks to forge the 'global city, best home' envisaged by Goh Chok Tong in his 1999 National Day Rally Speech.

George (2000) suggest that the process of change will be slow. I question whether slow social change is a luxury the city-state can afford in these challenging times. One thing is certain: the pace and nature of change will be determined by Goh Chok Tong's '3G Singaporeans' who, in all probability, are more likely to continue building a stronger, more stable, prosperous and cohesive nation, than 'spend everything away'.

### ***11.3 Re-making the economy: a case of grasping nettles***

#### ***11.3.1 Industry 21: worthy but not radical enough***

During a dialogue with union leaders and employers in October 2001, with the economy into its third successive quarter of negative growth, the Prime Minister issued this mixture of exhortation and warning:

“We have to fundamentally change our economic orientation, in order to succeed in the next phase of our development. We have to expand our economic space beyond our immediate region. We have to encourage Singapore entrepreneurship as another pillar of growth to supplement our MNC strategy. We must become an innovative nation. In short, we have to restructure our economy and change our development strategy”.<sup>17</sup>

Goh Chok Tong was looking forward to a post-recession period when, as always in the past, the PAP Government would produce a winning formula. This time, however, delivery cannot be so straightforward. Although some commentators claim that a return to positive growth in the second quarter of 2002 marks Singapore's exit from recession, others are more cautious, suggesting *inter alia* that the recession will not be over until there is 'full employment'. With the level of unemployment running at 4.5 percent in March 2002, and still expected to peak close to six percent before the year is out,<sup>18</sup> the 'feeling' of recession could last well into 2003. There are other factors that may slow Singapore's rate of recovery; in the US they include a weakening dollar, depressed stock market, accounting scandals, and cutbacks in spending by both consumers and the corporate sector. Elsewhere, much will depend on how quickly world semi-conductor sales recover, and whether the other Southeast Asian economies can inject some urgency into their continuing emergence from the 1997 financial crisis. A further note of caution is sounded by the narrow nature of the second quarter recovery, which was driven largely by surges in the

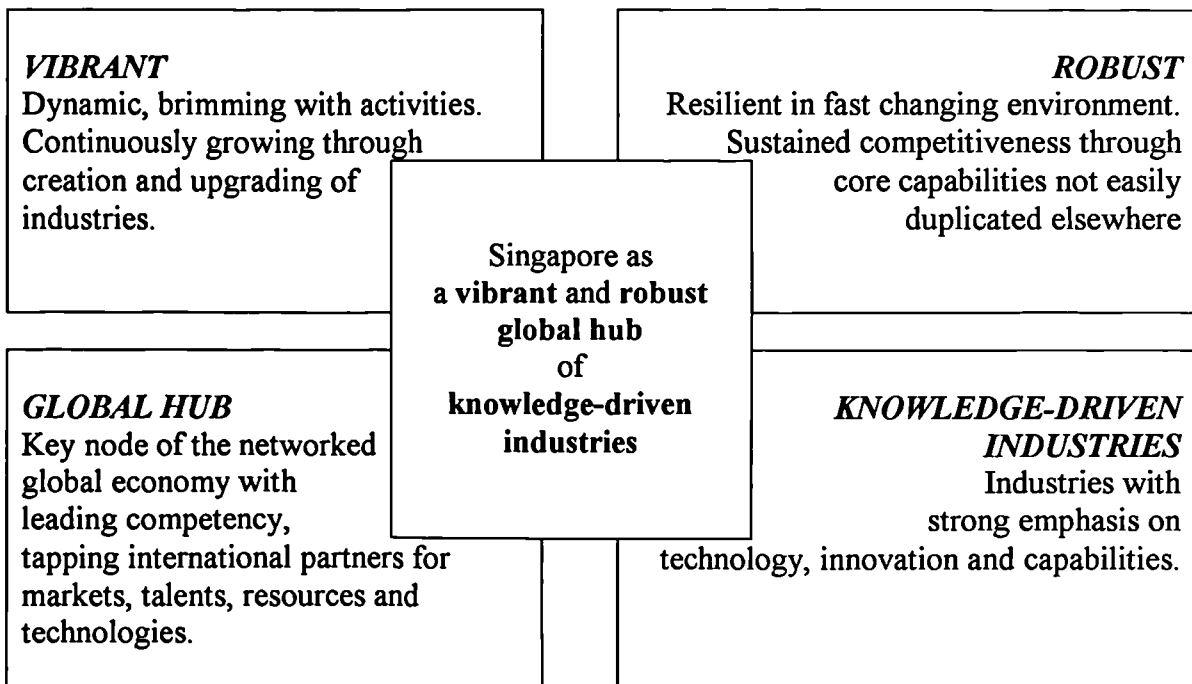
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<sup>17</sup> *Straits Times*[I] (15 October 2001) 'Toughest challenges facing Singapore'

<sup>18</sup> Prime Minister's May Day Message (29 April 2002) [mita\\_news@mita.gov.sg](mailto:mita_news@mita.gov.sg) accessed 30 April 2002.

chemicals industry and biomedical sciences (mainly pharmaceuticals), and not by electronics.<sup>19</sup> Since it is semiconductors, disk drives and other electronics products that account for 38 percent of manufacturing output and two thirds of all exports, it can be argued that until they show sustained growth, the economy as presently structured will not have emerged from recession.

I outlined in Chapter Five how, since the late-1980s, the Government has introduced new measures and initiatives to help reduce dependence on the manufacturing sector. This strategy involved the retention of certain basic manufacturing activities – albeit encouraging their relocation in the Johor and Riau areas of the Growth Triangle; shifting the emphasis in the electronics and other manufacturing industries up the value-added chain; and promoting a knowledge-based economy through education and training schemes



**Figure 11.1 The vision of Industry 21**  
 Source: EDB (1999a, 2)

and the fostering of new high-tech developments in the fields of IT, telecommunications and the biomedical sciences. In January 1999, the EDB launched Industry 21, a plan to develop knowledge-driven industries to underpin the developing knowledge-based economy, and form an economic blueprint for the twenty-first century. This was

<sup>19</sup> *Business Times*[O] (11 July 2002) 'Too early to say recovery is here'

Singapore's response to the challenge of the rapid technological advances associated with globalisation, and manifestation of the Republic's belief that "knowledge will certainly become a strategic asset for economic growth" (EDB 1999a, 1). Industry 21 envisages

**Table 11.3 Industry 21: key objectives of EDB's blueprint for economic success**

<b>Electronics</b>	Grow a world-class electronics hub By 2010: <i>Secure 150 new electronics projects</i> Generate \$150 billion output
<b>Chemicals</b>	Grow a world-class hub for petroleum and petrochemicals By 2010: Generate \$75 billion output
<b>Life Sciences</b>	Grow a life sciences hub with world-class capabilities across the whole value chain of activities By 2010: Home to 15 world-class life sciences companies Regional centre for clinical trials/drug development
<b>Engineering</b>	Grow an engineering hub with capabilities to develop state-of-the-art technologies in support of key industries By 2010: Nurture five new industries Attract 20 global engineering centres Attract 50 manufacturing headquarters
<b>Education</b>	Establish world-class education hub Bring in 10 of world's top universities Draw best talents world-wide to teach, do research, or work in new knowledge-based companies
<b>Healthcare</b>	Develop a world-class medical hub Attract at least five world-class centres of excellence Attract a cluster of healthcare services companies
<b>Logistics</b>	By 2010: Develop a leading integrated logistics hub in Asia Develop full range of capabilities to support manufacturing and business services
<b>Communications and Media</b>	Develop a premier communications and media hub in Asia Deliver innovative services for the global market Attract leading global companies and develop local capabilities across the range of activities
<b>Headquarters</b>	Build a reputation to attract MNCs across a diversity of industries to base their regional/international headquarters operations
<b>Promising Local Enterprises</b>	By 2010: Build at least 50 local world-class knowledge-based enterprises

Source: EDB (1999a)

Singapore as a 'vibrant and robust global hub of knowledge-driven industries (Figure 11.1), and the key objectives of the sectors identified in the blueprint give a sense of the ambitious way in which government is tackling the changes it seeks in the economy (see Table 11.3).

Aspirations and statements of intent announced in 1999 will require thorough re-examination once recovery is demonstrable and there is acceptance that future annual growth rates will probably be nearer to 5 than 8 percent. Numbers may need to be scaled down and timetables extended. Above all, there will be pressure for the recovery of lost ground, and for momentum and optimism to return to the economy. Given the changed circumstances, and the need for restructuring of the economy to be imbued with urgency and credibility, and to have the confidence and cooperation of the private sector, a genuine change of mindset on the part of the Government is required. The way in which the Industry 21 proposals were framed suggests that the original intention was for the PAP Government to continue running the economy in the tried and tested manner; in other words, companies would be 'encouraged' and entrepreneurs 'nurtured'. There is no mention of any public-private partnership or, it has to be said, evidence of especially radical thinking.

On the one hand, therefore, changes that will help sustain Singapore's competitiveness, broaden the economy, and reduce the risk of over-dependence on electronics exports, are patently in hand. On the other, in a rapidly changing and increasingly competitive world, the micro-management of people and economy, so successful for four decades, is arguably no longer appropriate. The question now is whether the PAP leadership has the will and the courage to break the mould of "state-directed, 'nanny' capitalism", as it seeks to create a more entrepreneurial society.<sup>20</sup>

### ***11.3.2 Temasek Holdings takes charge of the regionalisation project***

There are four fundamental obstacles in the path of such a move. The first, and most obvious, is articulated by an economist at G.K.Goh: "The government has been in business so long, and it has made so much money out of it, that it must be reluctant to stand back".<sup>21</sup> There are a number of examples of this reluctance, e.g., in the case of both PSA

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<sup>20</sup> *Far Eastern Economic Review* (11 July 2002) 'Re-imagining Singapore'

<sup>21</sup> *The Economist* (1 June 2002, 67) 'Picking the losers'

Corporation and the DBS Bank. The Government's response to criticism has been to point to a shortage of buyers able or willing to offer the 'right price'; it has also expressed a reluctance to allow national flagships such as PSA Corporation to come under foreign ownership. With regard to the position of GLCs, government argues that they have made a major contribution to Singapore's success, and that in times of trouble and fragile markets, a government stake represents stability and a fence against short-termism. The second obstacle is the result of a 'grace and favour' culture, a common feature in most countries, but particularly visible in one as small as Singapore. The tight network of people who run statutory boards, and have close links with government and the civil service, has already been mentioned; in the case of GLCs, many represent power bases for a number of well-connected people who will not be keen to relinquish their positions.<sup>22</sup>

The third obstacle is an intriguing one, for it is the outcome of a savings habit, something usually viewed as an admirable trait. Singaporeans are among the best savers in the world, and the Government, too, has huge fiscal surpluses that are viewed by the IMF as 'well in excess of needs'.<sup>23</sup> But in Singapore's risk-averse culture the savings of the ordinary Singaporean tend to reside in the safety of the Central Provident Fund (CPF), where they grow at less than 2 percent per annum. The reluctance to invest in the private sector is thus a hobble on government efforts to produce entrepreneurs. The final obstacle, and one resulting from the PAP's past approach to servicing the country's needs, is the education system and career patterns of the brightest students. The traditional school curriculum has ignored creative thinking in favour of a highly-competitive examination culture, with school leavers aspiring, as has already been noted, to 'safe' positions in the civil service or MNCs, rather than risk failure in the local private sector.

These obstacles say much about the well-established foundations of the present system. In all four cases, however, the Government does hold the keys to change and so must be looked to for leadership and actions that back up publicly-stated aspirations for a less state-controlled and more adventurous economy. The Trade and Industry minister, Raymond

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<sup>22</sup> The Prime Minister explains the small, powerful coterie in terms of the small number (3 percent) who, in his day, went to university. As a result of concern about the future an important element of change in the present education system is the introduction of training to produce a new breed of managers to replace the tight-knit group of 'second-generation high fliers' (*Straits Times*, 21 June 2002 'PM sheds light on the ins and outs of government-linked firms').

<sup>23</sup> *Far Eastern Economic Review* (11 July 2002) 'Re-imagining Singapore'

Lim, was recently quoted as saying: “We need to be comfortable with greater untidiness in society...We need to celebrate diversity and appreciate that, as a government, we should not be overly preoccupied with trying to reduce uncertainty for our people”.<sup>24</sup> This kind of statement has given hope to those suggesting that in its re-making of the Singapore economy, government must reduce the dominance of GLCs. But despite a range of welcome adjustments and initiatives aimed at providing the infrastructure for entrepreneurial activity to flourish, any thought that the field occupied for so long by GLCs would be fully opened up to the private sector has not materialised.

The Government appears to have been struggling for some time over the question of the future of the GLCs. Several of the largest - PSA Corporation, SingTel, SIA and DBS Bank – have been successful in their efforts to tap into regional or global markets, and it is this ability to expand internationally that the government wishes to see in more GLCs and SMEs. The main focus for such activity must be China, the huge new “vacuum cleaner for FDI”, in the words of Lee Kuan Yew,<sup>25</sup> and a growing attraction for MNCs seeking to effect cost-cutting relocation that brings them closer to China’s rapidly growing markets. The core elements of Singapore’s economic growth - FDI and MNCs – are thus both under threat from developments in Northeast Asia. Little can be done in the case of the number of MNCs that will transfer to China; the challenge for Singapore is to replace their contribution to the economy by attracting more foreign MNCs and assisting the development of local MNCs to boost Singapore’s external economy.

Currently, such conversion is within the capabilities of certain existing GLCs and a few SMEs. However, efforts by government to sell off or effect substantial reductions in its holdings in GLCs, and to urge them, together with SMEs, to venture into the region, have met with only limited success. The depth of the global economic downturn, and particularly the spectacular corporate scandals in the US, have come at a bad time for a country seeking to create an entrepreneurial society. Yet Singapore’s problem cannot be explained away by external difficulties since, as already suggested, a major cause is the culture of government. Linda Lim is in no doubt: “The role of the state in business has become at best unnecessary and at worst dysfunctional. It has warped the development of

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<sup>24</sup> *Far Eastern Economic Review* (11 July 2002) ‘Re-imagining Singapore’

<sup>25</sup> *Straits Times*[I] (6 February 2002) ‘An entrepreneurial culture for Singapore’

the private sector. For a bright young person, the system has been totally biased against entrepreneurship".<sup>26</sup>

Lim's interpretation fits with what is now happening on the ground. Temasek Holdings, the government's investment arm, has been placed in the reportedly firm and capable hands of Ho Ching, wife of the Deputy Prime Minister, Lee Hsien Loong, and the government, its original plans for the private sector having fallen far short of expectations, has brought in Temasek *to make privatisation work*. Pragmatism is again to the fore, and government is in effect saying: 'We tried, but it is not working; our best option, therefore, is to change Temasek's role from passive to active, and use it to spearhead the regionalisation project by employing a raft of healthy and progressive companies drawn from the ranks of both GLCs and SMEs'. It would appear that far from being withdrawn, the hand of the state is to be even more visible in the running of the economy. As an editorial in the *Business Times* put it: "The new charter of Temasek Holdings, unveiled this week, spells out the official word on whether the Singapore government will get out of the private sector: It won't".<sup>27</sup>

Temasek's new charter<sup>28</sup> lays out the pattern of future action, in which Temasek will:

- be willing to work with GLCs, MNCs and SMEs in pursuit of regionalisation objectives;
- only assist or partner businesses with international potential;
- divest those GLCs that are no longer relevant or have no international potential;
- insist that all companies concentrate on core competencies, divesting all non-core activities;
- not necessarily dispose of a GLC simply because it is operating in a field that already has private-sector involvement;
- support SME/GLC mergers where such will produce exportable skills and businesses capable of entering different markets;

<sup>26</sup> *Asiaweek* (4 May 2001) 'The risks of playing it safe'

<sup>27</sup> *Business Times[OJ]* (5 July 2002) 'A charter for partnership'

<sup>28</sup> [www.temasekholdings.com.sg/temasek\\_news](http://www.temasekholdings.com.sg/temasek_news) accessed 4 July 2002

- run GLCs as commercial entities, ensuring the separation of government ownership from commercially-driven management; and
- reserve the right, when necessary, to use its stakeholding in a company to influence strategic decision making.

These action points are expected to form the basis of GLC/SME developments in the years ahead, and there can be little doubt that the intention is for Temasek to maintain firm control over those GLCs that perform well, fill important niches in the economy, and might perform less effectively if sold off. Less certain is Temasek's commitment to selling off underachievers within the GLC ranks or those with no potential to operate in international markets. But arguably the most significant moves will be those where Temasek is able to bring together the financial strength of a GLC and business acumen and ideas of an SME, to produce an organisation capable of breaking into overseas markets and generating returns to the Singapore economy. Much will depend, therefore, on Temasek acting not just with financial acuity, but also with a boldness that could carry Singapore's overseas activities onto a higher plane of achievement. Lee Hsien Loong is quite right when he says that to move in this direction does not require government to 'sell off the family silver' and expose *all* GLCs to market forces.<sup>29</sup> However, at the moment the Temasek charter generates more questions than answers, most of them revolving around the strength of government's commitment to transforming the culture of change implicit in the charter into reality. There is no question of denying government's right and proper role as a facilitator of economic growth; but can it switch the emphasis from detailed involvement in 'making things happen' to 'allowing things to happen'. Failure to do this could well signal the collapse of attempts to promote an entrepreneurial spirit in the Republic.

Temasek's management team is presently assessing how best to implement the new charter, and so there is likely to be much activity in the boardrooms of GLCs and SMEs in 2003, as they digest Temasek's plans and proposals. There is some evidence already of a desire to break from the past, with reports that Temasek prefers to think of companies in which it has a stake as Temasek-linked companies (TLCs), rather than GLCs. The latter term is sometimes viewed as a liability when negotiating for overseas markets; in addition,

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<sup>29</sup> *Straits Times*[1] (29 August 2002) 'We're not about to sell off all 'the family silver''

not all GLCs come within the Temasek remit.<sup>30</sup> It is, however, little more than a cosmetic change, and to assert otherwise would be an insult to the intelligence of foreign business people and politicians, all fully aware of Temasek's relationship to government. Nothing can disguise 'government ownership' of its champions - PSA Corporation (100 percent), SingTel (68 percent), SIA (57 percent) and DBS Bank (30 percent). Whilst PSA Corporation awaits public listing, the other three are all public companies, a fact that has not prevented their operational capabilities from being constrained by government involvement. In the case of SIA, its chairman, Koh Boon Hwee, goes so far as to assert that government ownership has acted as a 'straitjacket' on the airline's development over the past decade.<sup>31</sup> Government 'threats' of divestment of its stake in SIA have so far come to nothing.

Temasek thus faces a daunting challenge. Changing GLCs to TLCs is easy, but changing a well-established government mindset is truly problematic. It is fair to say that when it comes to freeing up the economy, government has to date 'talked a good fight'; the task now for Temasek is to put on the gloves and support words with action. In this it has to hand the excellent and forward-looking report of the Entrepreneurship and Internationalisation Sub-Committee (EISC) of the Economic Review Committee (Government of Singapore 2002). The EISC prefaced its recommendations with a paragraph of considerable import:

"The Government no longer needs to take a hands-on approach by involving itself in business. It should encourage the private sector to be at the frontier of developing new business ideas. Its primary role is to ensure a level playing field and provide opportunities for all enterprises to have a fair chance to succeed. It should intervene only under exceptional circumstances, such as market failure" (Government of Singapore 2002, para 6).

It will be interesting to see whether the new CEO, Ho Ching, will be allowed the space and freedom to regulate Temasek's 70 companies (asset value \$60 billion) in a way that will inspire the entrepreneurial, outward-looking approach at the heart of Singapore's regionalisation project. In this respect, a key test of the commitment to change will undoubtedly reside in the actions of Ho's chairman, S. Dhanabalan, a man whose career has been steeped in the ethos of an interventionist and controlling government.

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<sup>30</sup> *Business Times*[O] (31 July 2002) 'Temasek companies are now TLCs, not GLCs'

<sup>31</sup> *Straits Times*[I] (30 June 2002) 'Government may divest its interest in SIA'

Singapore has consistently demonstrated a much-admired ability to marshal resources – FDI, MNCs, and the workforce – for the production and export of manufactured goods. Its most recent accolade came from the UN Industrial Development Organisation, which ranked the Republic first out of 87 countries, and immediately followed by Switzerland, Ireland, Japan, Germany and the US.<sup>32</sup> Temasek will now be judged on another ability, that of developing Singapore's own MNCs, and facilitating their moves out into the region and beyond. A vibrant and enterprising external wing to the economy could make a vital contribution to the evolution of a 'world city of distinction', not simply by maintaining Singapore's economic competitiveness and stability, but also by inspiring real feelings of achievement, worth and nationhood amongst Singaporeans.

#### *11.4 Financial liberalisation and questions for DBS Bank*

Prior to its introduction, the five-year programme of financial liberalisation (1999-2003) was endorsed by the International Advisory Panel,<sup>33</sup> with two provisos: first, that it was important for there to be a strong local banking presence after liberalisation; and second, that the five-year plan was not ambitious enough and should be speeded up. In Parliament, early in 1999, while explaining the purpose of liberalising the banking sector to foreign competition, Lee outlined the three main objectives:

"First, it will encourage banks to provide efficient and innovative services, comparable to the best available in other major financial centres; second, it will nurture a group of robust local banks who measure up against leading international players in Singapore and abroad; and third, it will encourage strong and well-managed foreign institutions to expand their activities in Singapore, and take a stake in the growth and stability of our financial system."<sup>34</sup>

When the details of the liberalisation measures were released by MAS on 17 May 1999, the message for local banks was unequivocal: "The present situation is not

<sup>32</sup> *Business Times[O]* (31 July 2002) 'S'pore 1<sup>st</sup> in competitive industrial performance: UN'

<sup>33</sup> The existence of the MAS International Advisory Panel is yet another example of Singapore's openness to outside advice and expertise. It was at their inaugural meeting in January 1999, that the Panel, chaired by J.Y. Pillay (see Table 7.9), gave their views on Singapore's proposed financial sector reforms. The Panel comprises leaders in international finance drawn from the US, Europe and Japan. Prominent among members at the January 1999 meeting were the President of the Nasdaq, the Chairmen of Lloyds TSB, Citibank, ABN AMRO, Nomura and the Industrial Bank of Japan, and senior representatives of Deutsche Bank, J.P. Morgan, Goldman Sachs and Morgan Stanley Dean Witter.

<sup>34</sup> [www.mas.gov.sg/newsarchive/sp](http://www.mas.gov.sg/newsarchive/sp) (17 May 1999) accessed 14 October 2000

sustainable...(and) globalisation (has) altered the financial landscape”.<sup>35</sup> In the detail of the statement, however, it is plain that, having cosseted the local banks over the years in order to “enhance the resilience and stability of (the) banking system”, government still wished to retain its ‘pivotal role’ in the aftermath of liberalisation. MAS firmly believes that bailing them out (as happened in Scandinavia) or allowing a total foreign takeover (as in New Zealand) could not be contemplated in Singapore. At the same time as removing the 40 percent limit on foreign ownership, therefore, MAS intimated that it would ensure protection of the national interest through regulations on board membership and the introduction of Nominating Committees. As the statement confirms: “In a major crisis, we must be able to count on major players with long-term interests aligned with the Singapore economy, to act as stabilisers for our financial system”.

In a belated response to government’s promptings, the remaining five local banks did reduce their number to three in a mid-2001 scramble, with OCBC making an uncontested takeover of Keppel TatLee, and OUB falling to UOB after what appeared to be no more than a nominal challenge by DBS Bank. Some measure of the long-overdue nature of these changes was given by one of the founding fathers of MAS, J.Y. Pillay, when he claimed that the over-cautious (or perhaps complacent?) approach towards management of the financial sector in the 1970s and 1980s had left Singapore lagging as much as two decades behind Hongkong in the push to become Asia’s pre-eminent financial centre.<sup>36</sup> A similar caution was evident at the start of the second phase of the five-year liberalisation programme, announced on 29 June 2001: there was to be a further, limited easing of the rules for foreign banks and - as noted in Chapter Eight - the award of two more full qualifying bank (FQB) licences.<sup>37</sup> *The Economist* was not overly impressed. Under the heading ‘After the slumber’ it concluded:

“All this activity is moving Singapore closer to the kind of banking system that the local regulators have in mind: two or three big local banks, competing with half a dozen, suitably hamstrung, foreign rivals. Time, perhaps, for a nap before plotting their next move”.<sup>38</sup>

<sup>35</sup> [www.mas.gov.sg/newsarchive/sp](http://www.mas.gov.sg/newsarchive/sp) (17 May 1999) accessed 14 October 2000

<sup>36</sup> *Straits Times*[I] (19 July 2001)

<sup>37</sup> FQB licences were awarded to ABN AMRO, Banque Nationale de Paris (BNP), Citibank [subsequently Citigroup] and Standard Chartered in October 1999. HSBC and the Malaysian Maybank joined them in December 2001.

<sup>38</sup> *The Economist* (7 July 2001, 95)

The local banks are currently in a three-year time-frame, starting at end-2000, and during which MAS requires them to separate financial from non-financial activities. This move, linked to the liberalisation programme, is intended to make local banks concentrate on their core activities and not to be involved in risks associated with, for example, the property market. At the same time they are having to adjust to greater competition brought about by the Government's liberalisation programme.

This phase of liberalisation, accompanied by adjustment to the recent ownership changes, and exposed to the effects of global and regional recession, is an appropriate time to introduce a note of realism concerning Singapore's banking sector. A sense of proportion is clearly necessary when assessing DBS Bank's prospects as a 'regional bank with a global reach', a 'world-class bank' or 'the premier bank in Asia'. It is quite obvious that size cannot be the criterion. Taken together, Singapore's three banks account for no more than 1.5 percent of Asia's banking assets and amount to one quarter the size of Tokyo-Mitsubishi, Asia's largest bank. Following the mergers and acquisitions of 2001-2002, DBS would rank no higher than 23<sup>rd</sup> in terms of assets in the *Asiaweek* Financial 500 list, with UOB 32<sup>nd</sup> and OCBC 43<sup>rd</sup>.<sup>39</sup> The aim of DBS Bank, therefore, is to make its mark in Asia through quality of performance rather than the pursuit of placement in a league table according to size. The obvious conclusion to be drawn is that ultimately DBS will be swallowed up by an American or European behemoth seeking to raise its profile in Asia, but the Singapore government will presumably veto such a move. Lee Hsien Loong, in his capacity as MAS chairman, is sufficiently realistic to recognise that DBS cannot become an HSBC. In a revealing interview<sup>40</sup> he looks, instead, at Swiss banking, operating within an economy twice the size of that of Singapore, and notes that UBS and Credit Suisse - both Zurich-based, and ranked 15<sup>th</sup> and 17<sup>th</sup> respectively in *The Banker's* 'Top 1000' in July 2000 - have retained their status as Swiss banks. "Can we produce a UBS?" he asks; "I'm not sure. It's late in the game now and our region is much more difficult".

The point has been made that the Singapore Government is feeling its way through the liberalisation process. This caution exercised by Lee Hsien Loong in the matter of awarding FQB licences appears to be a reflection of the contradiction between the increasing opening up of the market to foreign banks, and the close watch being kept on

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<sup>39</sup> *Straits Times*[I] (11 September 2001)

<sup>40</sup> *Business Times*[O] (14 March 2001)

the fortunes of local banks. The prize, it should not be forgotten, is considerable, with the EDB firmly committed to its goal of getting 500 MNCs to set up regional or international headquarters in Singapore by 2010. The message will not have been lost on foreign banks, particularly those whose clients already include MNCs that might be expected to respond to the EDB's overtures. Despite all the hype, however, it is significant that only Caltex of the 200 MNCs awarded headquarter status since 1986 has based its international headquarters in the city-state. One firm conclusion to be drawn from this is that, while Singapore may continue to grow in significance as a regional financial hub, it is unlikely to threaten Tokyo's status as a global financial centre.

The futures of DBS Bank and Singapore as a financial centre continue to be closely linked and dependent to a large extent on the resurrection of the ASEAN economies. For the Bank, the region offers considerable opportunities, but only if countries bite the bullet and attend to the strengthening and liberalisation of their financial regulations.<sup>41</sup> The next 12 to 24 months will be crucial. As regards Singapore's aim of becoming an established international financial centre, the global economy is now more complex than in Singapore's heady days of the 1970s and 1980s; the vision must change to adapt to the changed environment. The answer may lie in adopting the role which a McKinsey study envisioned at the time the liberalisation process started. The concept was for Singapore to be 'Lon-rich' in Asia, operating on two levels: in a primary role in certain areas, like London; and in a complementary role in others, much in the way that Zurich functions. It is, as Lee Hsien Loong concedes, "a very ambitious objective".<sup>42</sup> This caution notwithstanding, Singapore does have the right to be ambitious in its plans to strengthen its role as a major financial centre within both the ASEAN and Asia-Pacific regions; it is sensibly making the increasing competition welcome, and endeavouring with considerable success to be the manager of change rather than its servant.

The biggest stumbling block, however, remains Singapore's addiction to size, of thinking big about everything, whether it be banks, port facilities (justified) or new initiatives like the biomedical sciences project. The most important message to emerge from the Lon-rich

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<sup>41</sup> At end-2001, Malaysia was seeking to merge 54 financial institutions into 10 'anchor' banks, whilst Indonesia faced the awesome task of reducing 237 banks to 30 or fewer (*Straits Times*[I] 31 December 2001).

<sup>42</sup> *Business Times*[O] (14 March 2001)

vision is that there has to be some compromise, some cutting of cloth, when it comes to a tiny city-state taking on the giants of the global economy. Thus it may be a mistake for DBS to measure itself constantly against the likes of UBS and Credit Suisse. These two are not only in the top twenty of world-ranked banks, but have assets that are respectively some nine and seven times larger than those of DBS. They are in a different league, and one that does not necessarily need be aspired to.

**Table 11.4 Top global banks (selected)**

<i>Global ranking</i>	<i>2000 World ranking</i>	<i>Bank</i>	<i>Total Assets (\$ billion)</i>	<i>% of Assets Overseas</i>
1	433	American Express (US)	12	81
2	81	Standard Chartered (UK)	88	79
3	15	UBS (Switzerland)	614	77
4	343	Investec (South Africa)	26	74
5	17	Credit Suisse (Switzerland)	452	73
.....				
10	94	Danske Bank (Denmark)	95	55
11	115	Allied Irish Banks	68	54
.....				
?	68	DBS Bank	64	?

*Source: The Banker* ( February 2001, 41)

An alternative route for DBS, and a logical one since it must look outside Singapore to both survive and prosper, is to develop into a global bank, not in terms of size, but of reach. Table 11.4 includes examples of medium-sized banks - headed by American Express and Standard Chartered - which, when measured in terms of the percentage of total assets held overseas, have a much larger than expected global reach. Given the strength of its domestic platform since the merger with POSBank, there seems no reason why DBS should not go in pursuit of reach – within and beyond ASEAN – rather than size.

### ***11.5 Regionalism in Asia Pacific***

#### ***11.5.1 Singapore: balancing ties with ASEAN and the need to reach out***

Singapore's development as an independent city-state has been characterised by an emphasis on EOI, and an unflagging, intense interaction with regional and global flows of people, goods and services. On the one hand, intensive efforts have been made to draw in foreign investment, companies and talent in order to produce a strong base for both manufacturing and service industries; on the other, the preoccupation has been with global rather than regional markets, and in particular those in the US and Europe. Endorsement of the process of 'thinking globally' has come in the form of regular awards and marks for excellence from a range of world bodies, identifying Singapore as a world leader in terms of competitiveness, attractiveness to foreign investment, freedom from corruption, and so on. I suggested earlier that a major reason for Singapore looking out from, rather than into, the region could be found in the tardy progress of the countries of Southeast Asia in coordinating their political and economic strategies for the purpose of offering the region as an attractive business environment for nations around the world.

In this respect, the problems facing Southeast Asian countries could not have come at a more difficult time. China's membership of the WTO and rapid economic expansion have enabled that country to register impressive advances in terms both of domestic manufactures and FDI. In Southeast Asia, despite the welcome advancement of AFTA targets, most countries face up to five more years of recovery from the combined effects of the 1997 financial crisis and the current global recession. In the case of Indonesia, continuing political, cultural and economic tensions and instability will almost certainly extend the recovery period. Thus when ASEAN proclaims the great potential of its market of some 517 million, it has to be remembered that some 64 percent (334 million) live in the troubled states of Indonesia, Myanmar and the Philippines. As regards Singapore, its future is inextricably linked with its immediate neighbours, Malaysia and Indonesia. But as Trade and Industry Minister, George Yeo, has said, "Singapore's economy has both a regional and an international dimension. While we cannot confine ourselves to the region, we also cannot ignore the region. We cannot be an international hub without also being a

regional hub".<sup>43</sup> Southeast Asia's trading patterns are shown in Table 11.5. Singapore's dominance in both total and intra-ASEAN trade only serves to underscore the yawning

**Table 11.5 ASEAN: total trade and intra-Asean trade, 2000**

	<i>Population (000)</i>	<i>Total trade</i>		<i>Intra-ASEAN trade</i>		<i>Intra- ASEAN trade as % of total trade</i>
		<i>US\$ m</i>	<i>%</i>	<i>US\$ m</i>	<i>%</i>	
<b>Brunei</b>	328	3,237	0.41	1,174	0.67	36.29
<b>Cambodia</b>	11,168					
<b>Indonesia</b>	212,107	95,639	12.21	17,665	10.07	18.47
<b>Laos</b>	5,433					
<b>Malaysia</b>	22,244	177,803	22.69	40,344	22.99	22.69
<b>Myanmar</b>	45,611	3,413	0.44	1,507	0.86	44.15
<b>Philippines</b>	75,967	69,465	8.86	10,938	6.24	15.75
<b>Singapore</b>	3,567	272,933	34.83	71,075	40.52	26.04
<b>Thailand</b>	61,399	131,160	16.74	25,576	14.58	19.50
<b>Vietnam</b>	79,832	29,943	3.82	7,132	4.07	23.82
<b>Total</b>	517,593	783,593	100.00	175,411	100.00	

Note: Trade figures for Cambodia and Laos not provided by ASEAN

Source: Joint Press Statement issued by ASEAN Council (14 September 2001)

www.aseansec.org accessed 8 March 2002.

gap between potential and performance in the region's most populous countries. The Table also shows why Singapore cannot afford to see the region slacken in efforts to restore pre-1997 credibility for investors and create a free-trade area.

It is easy to understand, therefore, Singapore's balancing act between openness to, and cultivation of, the global economy and efforts to energise economic activity in Southeast Asia. However, despite the Republic's work within ASEAN to promote trade, conduct counter-terrorism measures, and provide training and other assistance to the less-developed members, it has to remain focussed on the mega-region when seeking out regional

<sup>43</sup> *Straits Times*[1] (30 April 2001) 'Between North and South, between East and West'

opportunities. This point was underscored by the EDB's International Advisory Council early in 2001, when it urged Singapore to reach out to the market of 2.8 billion people living within a seven-hour flight radius of the city-state.<sup>44</sup> Patently, the potential for growth within China and India is immense, and Singapore's historical, cultural and linguistic ties with both are a sound basis for business links. Viewed in retrospect, the moves to assist in the establishment of industrial parks like Suzhou and Wuxi in Jiangsu province and the Bangalore IT Park, were forward-looking and demonstrated to both countries the value in doing business with Singapore. Major projects like these have been instrumental in confirming Singapore's technical and managerial expertise, and are shining examples for putative entrepreneurs contemplating a role in the Republic's regionalisation project.

The city-state's initiatives in China and India are similar to those leading to bilateral FTAs in that they are a clear indication of Singapore's determination to think outside the ASEAN region. And it is a sensible policy, since globalisation does not wait for countries to get their houses in order. It marches on, favouring the routes and sites of greatest opportunity and exploitation. That is why there is presently an apparently inexorable move of capital and MNCs into Northeast Asia, and particularly China. Nothing will prevent China, with its plentiful resources and labour supply, from becoming a major manufacturing centre for the world and, more gradually, an immense market for goods and services. The big question, therefore, is how the rest of Asia Pacific will respond. The answer that is already emerging is a new-found belief in the value of the regional grouping. Such thinking and attendant action is very much to Singapore's advantage, and is the subject I turn to next.

### ***11.5.2 Intense recent activity***

Prior to the 1997 Asian financial crisis and the following world recession, remarkably little action resulted from debate about regionalism. Dr Mahathir's espousal of the idea of an East Asian Economic Caucus in the 1980s - inspired as much as anything by the desire to keep economic development in Asian hands - showed no sign of producing an FTA. And the two established regional groupings - ASEAN and APEC - were long on committee activity, but short on decisive action towards trade liberalisation. However, both had

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<sup>44</sup> *Straits Times*[1] (10 February 2001) 'Singapore's future lies beyond S-E Asia: Panel'

produced plans: ASEAN established AFTA in 1992, with an original 15-year timeframe for the reduction of tariffs and non-tariff barriers; and APEC, through its 1994 Bogor Declaration of Common Resolve, had set a goal of free and open trade by no later than 2010 for industrialised economies and 2020 for developing economies. Whilst APEC never intended (and probably could never deliver) an FTA, the perception amongst Southeast Asian nations was that ultimate integration of their economies was a prerequisite for the region to realise its full potential and competitiveness. Singapore's self-interest has meant that the city-state has been to the fore in all free trade initiatives.

In the past, ASEAN has suffered both from the misconceptions of the outside world and its own inadequacy in dealing with regional problems. It was found wanting in the face of the 1997 crisis, and how to respond to the struggle in East Timor, the haze over large parts of the region as a result of Indonesia's forest fires, and escalating maritime piracy. The last of these is now being tackled in a concerted manner, and the same can be said of the threat from terrorism in the region, with the signing of an ASEAN-US pact to 'cooperate to combat international terrorism'.<sup>45</sup> But question marks remain about ASEAN's ability to become more progressive and dynamic whilst it continues to operate under a worthy system of civilised consensus and the right of veto on any matter. It is a system that "may have worked in the past, but, with an expanded and more disparate membership, it may result in the paralysis of Asean".<sup>46</sup> That may be so, but in mid-2001, headlines in the *Straits Times* - 'Impotent? Asean out to dispel notion' (24 July), 'Region moves to shed sick-man image' (25 July), and 'Asean can overcome threat of redundancy' (8 August) - revealed the galvanising effect of the revised AFTA timetable.

However, if the trigger for ASEAN to think more clearly and decisively about future performance was the 1997 crisis, the shift in regional attitudes appears to have been induced by a series of major events in 2001. Economies already depressed by the severity of the world recession were thrown into further disarray by the terrorist attacks of 11 September and the subsequent 'war on terrorism'; then came the unexpectedly successful outcome of the WTO meeting in Doha and the start of a new round of trade talks, and China's long-awaited entry into the WTO. It is not unreasonable to argue that during the same period, Asian leaders would be regarding with some concern, first, the EU's moves

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<sup>45</sup> *Straits Times*[1] (3 August 2002) 'Asean countries benefit from anti-terror pact'

<sup>46</sup> *Far Eastern Economic Review* (17 August 2000, 28)

to enlarge its membership by including developing East European economies, viewed in Asia as competitors in low-cost manufacturing production, and second, signs that NAFTA was moving inexorably towards the formation of an FTA of all the Americas. It was this scenario, I believe, that engendered in countries throughout the Asia Pacific a belief that the strength to compete would be achieved best through the establishment of regional groupings. Another factor, impossible to measure, is Singapore's pursuit of a range of bilateral FTAs (noted in Chapter Eight), which the Republic has frequently held up as an example for others to follow – or join.

It is already apparent that there will not be an immediate move to form a single overarching free-trade arrangement for the whole region. History, uneven economic and cultural development, and the Asian preference for progress by consensus all represent obstacles. Instead - and the signs are already evident - there will be a number of partially-overlapping regional groupings, with APEC holding a watching brief. The first significant move came in November 2001 when ASEAN and China agreed to have an FTA operational within ten years. Chinese Premier Zhu Rongji had broached the idea only the previous year, and many have been surprised by the speed of the negotiations. The man said to be behind China's policy is Wang Jian, senior economist at a think-tank linked to the State Economic Development and Planning Commission.<sup>47</sup> Mr Wang sees the integration with ASEAN as a step towards what he terms a West Pacific Economic Zone (WPEZ – comprising Greater China, Japan, Korea and ASEAN), and predicts that WPEZ will complete the envisaged triad of world economic blocs by as early as 2010. By then, he claims, the EU would have a population of 500 million and GDP of US\$21 trillion, whilst for NAFTA the figures would be 400 million and US\$19 trillion, and for the projected WPEZ population, 1.9 billion and US\$25 trillion. The figures may be contested, but what appears beyond doubt is the intent.

The most important result of China's actions is that they have nudged Japan into talks and positions that would have been unthinkable only two or three years ago. The main focus has been on an ASEAN-Japan 'Comprehensive Economic Partnership', and it may be deduced that ASEAN is rapidly becoming the vehicle for the eventual conjunction of China and Japan in the one trade agreement. Looking beyond any deal with ASEAN,

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<sup>47</sup> *Straits Times*[1] (30 November 2001) 'China gains big in FTA deal with Asean'

Japan has recently proposed the establishment of an Asian free-trade zone, comprising the countries of the existing ASEAN + 3 forum (the 3 being China, Japan and South Korea), together with Hongkong and Taiwan.<sup>48</sup> In other words, it is an identical proposal to that of China. Japan does go a little further, suggesting that the zone could be enlarged to take in Australia and New Zealand. An Asian summit will be held in Cambodia during November 2002, when the Japanese proposal is due for discussion. Interestingly, Japan is said to favour the zone becoming operational before APEC's 2010 target for trade liberalisation amongst its developed members. When the APEC, China and Japan projects are viewed together, it has to be recognised – not without some astonishment – that the first stages of an Asia-Pacific trade bloc could come into force within the next eight years.

All this almost frantic activity puts in the shade the Asia Cooperation Dialogue (ACD), promoted by Thailand. At its first meeting in June 2002 it was made clear that there was no intention of creating a regional bloc. Rather, the emphasis is to be on development of contacts and exchanges between regional groupings in West Asia, the Gulf States, South Asia, ASEAN and East Asia. Such talk will undoubtedly bring benefits, but the development of FTAs in East/Southeast Asia (a region housing one third of the world's population) will take centre stage over the next decade. Assuming developments proceed without undue disruption, and bearing in mind the close links the Asia Pacific countries have with the EU, through ASEM, and with NAFTA under the APEC umbrella, the process of regionalism could make a huge contribution over the next decade towards realisation of the WTO's multilateral aims. On a lesser scale, another beneficiary should be Singapore, for it will be in a position to capitalise on burgeoning free-trade opportunities, and enhance its world-city status and range of hub activities to service the Southeast Asian region.

### *11.6 The perception of Singapore as a world city*

Towards the close of the twentieth century, Friedmann (1995, 36) reported that Singapore was “consolidating its position as South-East Asia's ‘control centre’”. Viewed from this standpoint, Singapore has always been a world city. As Chua (1998, 985) states, it “has always been part of global service capitalism, adhering to the contours of its different

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<sup>48</sup> *Business Times[O]* (13 April 2002) ‘Japan wants to speed creation of Asia free trade zone’  
*Straits Times[I]* (14 April 2002) ‘Fast track to an Asian free trade zone’

phases...". Ho (1976, 109) follows a similar line: what makes Singapore global, he says, is that "its weal and woe (are) tied up with the fortunes of the industrially advanced countries of the world". Ho is one who dislikes the labelling of the Republic as a global city, mainly because it has "a pretentious ring about it" (1976, 108). This sentiment accords with those of Douglass (2000, 48), who whilst using the term 'world cities' to describe those cities outside Sassen's triumvirate, does suggest that their importance may be exaggerated: "(T)he idea of world cities seems to have taken on a meaning and imagery that far outreaches both the levels of global power they actually represent and the understanding of the processes of their formation and decline". That is debatable, but it is certainly arguable that use of the word 'global', rather than 'world', can give world cities a 'meaning and imagery' greater than many of them merit.

In the case of Singapore it is probable that use of the term global city dates back to a remarkable speech made by Sinnathamby Rajaratnam, the Foreign Minister, on 6 February 1972 (Rajaratnam 1972). The audience was the Singapore Press Club, and the speech reveals a clear intention to seek an understanding and sympathetic interpretation of government strategy from the assembled journalists. The most notable aspect of the address is its title – 'Singapore: global city' – for it employed terminology and the core of a concept that pre-dated Friedmann and Wolff by a decade, Friedmann's hypothesis by 14 years, and Sassen's defining work on global cities by two decades. Rajaratnam's global city construct was not based on such measures as numbers of legal and accountancy firms, banks and advertising agencies. It was, rather, founded in the theory that in order to survive, Singapore had to reach out and embrace the broader world; put another way, in political and economic terms it would have to 'act locally, whilst thinking globally', with the former process the servant of the latter. Rajaratnam reasoned that the declining importance of the entrepôt trade, the closure of the British military bases, and the gradual erosion of Singapore's role as the trading city of Southeast Asia, all pointed towards the "transforming (of Singapore) into a new kind of city – the Global City" (1972, 3).

In his address he observed that this 'new type of city' differed from the more parochial cities of the past in that it was a 'world embracing city', or global city which, he suggested, "...is the child of modern technology...(and)...the city that electronic communications, supersonic planes, giant tankers and modern economic and industrial organisation have made inevitable" (1972, 3). There is a sign of the possible influence of Hymer here, but it

is Rajaratnam speaking when he later asserts that, "...nothing short of a total collapse of world civilisation can halt the *take-over of the world by the cities*" (my emphasis) (1972, 5). There are obvious similarities here with Sassen's much later take on cities having 'the capacity for global control'. Rajaratnam's assessment of the global city was indeed way ahead of its time. Comparison with the ideas of Sassen and Castells are again evident in this passage (1972, 5):

"The Global Cities, unlike earlier cities, are linked intimately with one another. Because they are more alike they reach out to one another through the tentacles of technology. Linked together they form a chain of cities which today shape and direct, in varying degrees of importance, a world-wide system of economics. It is my contention that Singapore is becoming a component of that system – not a major component but a growingly important one. It is in this sense that I have chosen to describe Singapore as a Global City".

Whilst not rejecting Singapore's role as a regional city, having close links with regional economies, and drawing sustenance from the region, Rajaratnam clearly envisaged the 'international economic system' as being "the final arbiter of whether we prosper or decline" (1972, 8). Such an approach was a simple but effective counter to the pessimistic scenarios stemming from Singapore's lack of a hinterland, raw materials and a large domestic market. As far as Rajaratnam was concerned, 'thinking globally' in Singapore's case involved concentration on the consolidation of maritime and air transport hubs; integration with the international finance network; encouragement of MNCs to establish links and, hopefully, a presence; and 'plugging in' to advanced economies in order to reduce dramatically the time taken for Singapore to join the ranks of developed countries. It was a strategy not without considerable risks, but for Rajaratnam there was no option: "(T)he alternative to not moving into the global economic system is, for a small Singapore, certain death" (1972, 11).

One final observation on Rajaratnam's address reveals further the clear-headed thinking that was characteristic of Singapore's first generation leaders. He accepted that whilst he had concentrated on the economic dimension of the global city, far greater problems would attach to political, social and cultural considerations. "These may", he said, "be the Achilles heel of the emerging Global Cities" (1972, 12). Thirty years later, the problems he identified do exist, although there is no measure for determining their ultimate effect on the continuing viability of individual world cities. What is beyond doubt is that in 1972,

Sinnathamby Rajaratnam registered an early, perceptive image of the developing city-state of Singapore and its positioning as a world city within the global economy.

In conceiving of Singapore as a world, or global, city Rajaratnam took a similar multidimensional approach to that employed in this research project. A crucial common denominator is the significance given to the 'voice' of the city, rather than some mathematical formula, in order to show how and why Singapore deserves the appellation of world city. This thesis has not addressed the totality of that voice (the all-important social dimension, for instance, is only touched upon), but it does illustrate the unique nature of Singapore's 'world-cityness' – and by implication that of every other world city. They patently rebel against classification or categorisation. What has become clear as this work has progressed is that construction of the voice of each world city and the ways in which those voices communicate through the space of flows is the way forward for world city research. Such work should also prove of immense value as we try to make sense of evolving relationships between regional and global movements, between North and South, and rich and poor.

### Appendix Record of interviews

<i>Date</i>	<i>Interviewee</i>	<i>Position</i>	<i>Organisation</i>
14-11-00	<b>John Olds</b>	Chief Executive Officer	DBS Bank
15-11-00	<b>Simon Tay</b>	Nominated Member Chairman	Parliament Singapore Institute of International Affairs
04-05-01	<b>Loh Chee Kit</b>	Deputy Director, Technology Division	Maritime & Port Authority
25-05-01	<b>Robert Teoh</b>	Managing Director	ProPharma
28-05-01	<b>Chia Der Jiun</b>	Senior Assistant Director, Supervisory Policy Division	Monetary Authority of Singapore
30-05-01	<b>Andrew Witty</b>	Senior Vice-President & Regional Director, Asia Pacific	GlaxoSmithKline
05-06-01	<b>Dr Phil Masters</b>	Director of Marketing & Business Development	Bioenterprise Asia/Lynk Biotechnologies
11-06-01	<b>Daniel Tan</b>	Secretary General	Federation of ASEAN Shipowners' Assoc'ns
14-06-01	<b>Thomas Frischmuth</b>	Managing Director	Siemens Advanced Engineering Pte Ltd
16-06-01	<b>Henley Seto</b>	Corporate Relations	PSA Terminals
18-06-01	<b>James Wessel</b>	President, Asia Pacific Region	Becton Dickinson and Company
20-06-01	<b>T K Chan</b>	Managing Director Consumer Banking Group	DBS Bank
25-06-01	<b>Ho Suu Wei</b>	Assistant Director (Sea & Air)	Ministry of Communications and Information Technology
29-06-01	<b>Dr Brian O'Keefe</b>	President, Product Development Asia Pacific	Quintiles

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