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A Most Convenient Flag
- The Development of the Singapore Ship Registry, 1969-82

by

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A MOST CONVENIENT FLAG
- THE DEVELOPMENT OF THE SINGAPORE SHIP REGISTRY, 1969-82

Non-technical summary
The aim of this report is to trace the development of the Singapore Ship Registry, from the introduction of open registry in 1969 until the tightening of registration requirements from the late 1970s.

The extraordinary growth of the Singapore merchant marine is analysed in the light of the policies of the Singapore government. In many respects, the opening of the registry mirrors the Singapore economic policies in general, as it facilitated the growth of domestic employment and production, without necessitating large domestic investments.

The shift in the shipping policy in the late 1960s was motivated by the wish to save foreign exchange, create employment opportunities and exert greater control over the country’s foreign trade. However, the opening of the registry for shipowners of all nations should also be seen in relation to the desire to promote Singapore as a maritime centre. Certain characteristics of the Singapore fleet and the pragmatism of the authorities in establishing and disbanding the open registry distinguish the Singapore registry from some of the other important Flags of Convenience.

The opening of the registry in the late 1960s, motivated by the stigma associated with being a Flag of Convenience, represents one important shift in the Singapore shipping policy. When the open registry had reached its sell-by date, and the initial problems had been alleviated, the authorities’ strategies were reversed. The shift towards tighter requirements illustrates the pragmatism with which the Singapore authorities have changed their shipping policy.
The fleets of most traditional maritime nations have developed gradually over several decades, or even centuries. However, there are several examples in the postwar period of massive increases in the tonnage of countries whose maritime history at best can be described as limited. Motivated by the foreign exchange income from ship registration and tonnage fees, these nations have sought to attract foreign shipowners wishing to escape fiscal and other consequences of registration under their domestic flags.

The tremendous growth of the Singapore merchant marine in the 1970s was the result of policies specifically aimed at attracting foreign-owned tonnage. Starting from 31 January 1969, the less than four year old Republic of Singapore lifted all restrictions on the nationality of shipowners flying the Singapore flag, thus facilitating the enormous growth of the merchant marine from approximately 250,000 gross register tons (grt) to almost eight million grt within a ten year period. However, although the measures introduced were similar to those used in other fast-growing maritime nations, in several respects the development of the Singapore fleet differed from the traditional Flags of Convenience (FoCs).

This report analyses the growth of the Singapore registry, in the light of the policies of the Singapore authorities. The report consists of two main parts. The first chapter is an introduction to the establishment of the Singapore registry and the motivation for the changes in Singapore shipping policy. The shipping policy is compared to other aspects of Singapore economic and development policies. It is argued that the introduction of the open registry was a convenient strategic step, as it created employment opportunities without necessitating large domestic investments. The second chapter details the growth of the Singapore fleet in the period 1969 to 1982, and the changes in the composition of the fleet with regard to vessel types, size and age are examined. Finally, the basis for the tightening of the registration requirements in the late 1970s is briefly analysed.
CHAPTER ONE – SHIPPING POLICY AND ECONOMIC POLICY IN SINGAPORE

The policies of the Singapore government were crucial both to the growth of the tonnage on the Singapore registry and to the general economic development of the Republic. The shift in shipping policy in the late 1960s was central to the development of Singapore as a major maritime nation. However, the policy shift bears a strong resemblance to other policy measures introduced by the authorities. As such, it can be seen as one aspect of a more comprehensive development strategy.

1.1. The establishment of the open registry

In September 1966, one year after the Republic gained full independence, the Singapore Registry of Ships was established through the Merchant Shipping (Amendment) Act. The scheme was based on regulations similar to those in force in the United Kingdom. Accordingly, the registry was originally open only to Singapore citizens and Singapore-registered companies.

The initial growth of the Singapore registry was characterised by the repatriation of domestically owned vessels from the British and Malaysian registries. Although the relative growth was high, the amount of tonnage registered was relatively low. The Singapore fleet increased from 13 ships at the time of the introduction of the registry, to 354 ships, totalling approximately 244,000 grt, by the end of 1968.

Less than a year after the establishment of the registry, a shipping development unit, organised within the Economic Development Board (EDB), discussed various measures through which the Singapore merchant marine could be increased. The shipping development unit examined the Liberian system in detail, analysing the tax

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1 The Economic Development Board was a government body fashioned after the Japanese model, aimed at attracting investments, coordinating export activities and supervising the economic development of the Republic – see Schein (1996). According to Huff (1994:340), “Singapore planners, helped by intelligence from EDB overseas offices, closely monitored the world market, and initiatives were undertaken to attract desirable industries.”
effects and other implications of establishing an FoC-arrangement. Indeed, according to a local newspaper, “[i]n aspiring to become a world maritime nation, Singapore is taking a leaf out of the Liberian book.” Following the recommendations of the shipping development unit, it was decided to open the Singapore registry to non-nationals and to create a low-cost institution which was favourable enough to attract foreign shipowners.

The aim of the open registry was to increase the amount of tonnage flying the Singapore ensign. There were mainly three reasons that the growth of the Singapore fleet was given particular priority by the authorities, viz (i) the wish to save foreign exchange, (ii) the creation of employment opportunities and (iii) the wish to exert greater control over the country’s foreign trade.

(i) Foreign exchange

The desire to generate foreign exchange has played an important part in connection with the establishment of several FoCs. The rationale behind this aspect is particularly important for countries with limited foreign trade. For some FoCs, the foreign exchange earnings from the registration of vessels have had a substantial positive impact on the Balance of Payments. Indeed, the importance of the foreign exchange generated by the “domestically owned” shipping sector is one of the common features of FoC-registries (Rochdale, 1970:51). In the case of Singapore, traditionally an entrepôt with a high ratio of trade to GDP, the motivation was to reduce the amount of foreign exchange used to buy shipping services, rather than acquiring foreign exchange per se.

Brooks (1985:2) claims that “[t]he objective of ameliorating a balance of payments difficulty was not considered as a rationale for fleet development by the Singapore government.” However, a survey of the benefits of an open registry put forward prior to the establishment shows that the effects on the Balance of Payments (BoP) were not disregarded. At the time, an official of the Economic Development Board emphasised the importance of ensuring equitable freight rates, saving foreign exchange and providing more job opportunities. Nevertheless, the BoP-aspect was undoubtedly less important than in the case of other FoCs with more limited foreign trade.

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2 The Straits Times, 4 November 1969, pp. 9-10.
(ii) Employment

The second – and probably the principal – reason for the introduction of an open registry was the creation of job opportunities for Singapore seamen. In the late 1960s, Singapore was faced with high unemployment. In the period 1966-68, when the idea of an open registry was adopted and devised, the unemployment rate fluctuated between seven and nine per cent.

The shipping registry was constituted in a manner which encouraged the employment of Singapore personnel. According to Part XIII of the Merchant Shipping Act S.419 (ii), dealing with foreign-going ships, there was “a refund of 50% of the annual tonnage tax paid for any particular ship in any year if during that year the crew of the ship has consisted of 25% or more of seamen who are Singapore citizens” (Rodyk & Davidson, 1974:1).

Although the employment aspect of the open registry was emphasised at the time of its introduction, the long-term effects were limited. One reason for the limited effects was the low tonnage fees which made the savings associated with domestic personnel relatively insignificant. Moreover, the state of the Singapore labour market changed from oversupply to high demand during the 1970s.

(iii) Foreign trade control

The final reason for the priority given to the development of the merchant marine was the wish to secure equitable freight rates and be less dependent upon foreign shipping lines. This latter aspect must be viewed in connection with the authorities’ ambition to establish a national shipping line. Moreover, it reflects a general feeling among less-developed nations that the shipping companies of the industrialised nations, and particularly the companies engaged in liner conferences, were charging too high rates through cartel behaviour (Yeats, 1981:31-36). In the case of Singapore, which had traditionally been an

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3 The Straits Times, 29 September 1967, p. 10
4 Phang & Toh (1994:216) and Chia (1989:112) claim that employment creation was the main motive for the development of the open registry, whereas Brooks (1985:2) includes the objectives “to increase Singaporean participation in the provision of international shipping services” and “to exert greater control over Singapore’s foreign trade and development.” Contemporary sources emphasise the three elements detailed in this report.
important entrepôt, there was a well-founded fear that high freight rates could reduce the country’s international competitiveness.

Parallel with the introduction of the open registry, the national shipping company The Neptune Orient Lines Ltd (NOL) was incorporated, with the dual aims of assisting local exporters in reducing freight rates and training up “an all-purpose crew for local shipowners to keep abreast of changes in shipping technology” (Fong, 1970:43). The company, with an authorised capital of S$100 million, was wholly owned by the government of the Republic of Singapore.

The establishment of a national shipping company represented another important shift in the Singapore shipping policy and was in line with recommendations from the United Nations Conference on Trade and Development (Yeats, 1981:139-140). Less than six months after its incorporation, NOL was admitted as a member in the powerful Far Eastern Freight Conference. The conference participation was based on the notion that long-term pressure on conference freight rates would not be possible if the company refrained from cooperating with other shipping companies.

The authorities’ investments in NOL were accomplished through Temasek Holdings (Private) Ltd, one of three holding companies established by the government for the purpose of investing in strategic sectors. Despite this involvement, the authorities have, in line with the country’s liberal shipping policies, largely refrained from granting subsidies or introducing measures restricting cargo access, such as discriminatory measures and cargo sharing arrangements. In this respect, the Singapore policy has differed from the policies of the other countries in the region (Chia, 1989:113-117).

On 23 December 1968, the Singapore Parliament passed the Merchant Shipping (Amendment) Bill, paving the way for the establishment of the open Singapore registry.5 The Merchant Shipping (Amendment) Act came into force on 31 January 1969. In the parliamentary discussion, particular emphasis was placed on the effect of the legislation on the employment opportunities for Singapore seamen.6 For vessels engaged in domestic

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5 Three pieces of legislation followed in its wake, viz the Merchant Shipping (Fees) (Amendment) Regulations 1969, the Merchant Shipping (Registry of Ships) (Fees) Regulation 1969 and the Merchant Shipping (Registry of Ships) Regulation 1969.

6 According to The Straits Times, 23 December 1968, p. 4, the Minister of Communications told the
and local trade, there were specific conditions regarding the use of Singapore seamen. Foreign shipowners operating in international waters were encouraged to employ Singapore crews through the previously mentioned tonnage fee rebates.

The open registry embodied many of the rules and regulations common for Flags of Convenience. Registration was simple, and previous classification of vessels by any of the six leading classification societies was accepted. To obtain a permanent Certificate of Registry, shipowners had to pay a registration fee amounting to S$2.50 per net register ton (nrt). The annual tonnage fee, payable in advance, amounted to S$0.20 per nrt. Moreover, the authorities guaranteed that the tonnage fee would not be increased for 20 years from the date of the initial registration of the ship.\(^7\) In term with the facilities in other FoC-countries, no income tax was levied on the profits generated by vessels included in the registry.

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<th>Table 1. FoC-fees, early 1970s(^8)</th>
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The registration and tonnage fees demanded were considerably lower than in the case of Liberia and Panama, the main FoCs. However, the fees were relatively insignificant for shipowners – the annual tonnage fees for the largest vessels in the early 1970s were less than $6,000 under the Singapore flag, compared with $10,000 under the Liberian flag.

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\(7\) The Straits Times, 4 November 1969, p. 9 and 24 December 1968, p. 4.

\(8\) Figures taken from OECD, Maritime Transport 1971, Organisation of Economic Cooperation and Development, Paris, 1972, p. 98. The annual fees in Liberia and Singapore were frozen for 20 years after the initial registration.
The biggest vessel in the Singapore fleet in late 1972, the ore-oil carrier Cypress King, paid an annual fee of less than S$4,000.

1.2. Singapore economic and development policy

As previously mentioned, the shift in the Singapore shipping policy, symbolised by the introduction of the open registry, may be seen as an example of a more comprehensive attempt at changing the Singapore society through direct government policies. According to Huff (1994:355), “economic development in Singapore after 1959 depended very considerably on government interventionism, which successfully adapted the domestic economy to changes in the international economy.”

The government intervention which led to the introduction of the open registry can be understood in the context of the problems encountered by the authorities in the late 1960s. On the one hand, unemployment was high and there was a need for employment-increasing measures. The withdrawal of the British forces in the period 1968-71 would aggravate the problem, leading to the loss of some 20,000 civilian jobs (Tan, 1992:86-87). On the other hand, savings were relatively low – in 1965 more than 90 per cent of the Gross Domestic Product (GDP) was consumed (Krause, 1988:S56). The average annual savings rate, as share of GDP, was less than seven per cent in the period 1960-66 (Huff, 1994:302). This implied that the access to domestic, employment-enhancing investment capital was limited.

The authorities solved the twin problems of high unemployment and low savings by bringing in investment capital from foreign sources. Foreign Direct Investments were encouraged and nurtured by the authorities – as Wong (1979:74) points out, “[t]he paramount role of foreign investment in Singapore’s past industrial growth hardly needs stressing.” In the manufacturing sector, the inflow of investment capital was characterised by the multinational companies which came to dominate the country’s export sector and lay the foundation for the transformation of the Singapore economy from a developing to a developed country, and from a staple entrepôt to an exporter of high-technology manufactures.
In the shipping sector, Foreign Direct Investment was secured by the opening of the country’s registry to shipowners of all nations. Whereas Foreign Direct Investment in manufacturing has close links to the economic activity of the host country, this is seldom the case for the shipping sector (Tenold, 2000b:8-9). Indeed, the tax rebate offered to shipowners employing domestic personnel was motivated by the fact that the production facilities – ie the ship – have less close ties to the host country than in the case of manufacturing.

By offering fee reductions in connection with the employment of domestic personnel, the authorities sought to establish a closer link between the ship and the country of registry than what has been common for other FoCs. In fact, although shipowning is a capital-intensive industry, the opening of the registry for foreigners and the tax concessions with regard to domestic manning implied that the Singapore economy was affected in a labour-intensive manner, as labour, but not capital, was absorbed.

Although its importance should not be overstated, the shift in shipping policy represented by the establishment of the open registry was one aspect of Singapore’s successful transformation from a developing country to an industrialised country with a high standard of living. The task force which devised the concept of a free registry was set up within the Economic Development Board, whose main functions were to promote foreign investment in Singapore and facilitate the establishment of foreign and local companies.

The EDB managed to attain an important position in the economic development of Singapore. It had been established in the early 1960s to become a “one-stop government agency to promote the establishment of new industries in Singapore and accelerate the growth of existing ones” (The first EDB Annual Report, quoted in Schein, 1996:42). Notwithstanding the fact that the EDB focussed on manufacturing, the shipping sector was one of the industries deemed worthy of special treatment. The favourable institutional framework created to attract foreign capital in other sectors thus has its parallel in the easy access to register ships in the Singapore registry.

The establishment of the open Singapore registry was of limited importance compared with the drive towards industrialisation, both with regard to the significance for
economic growth and for employment. Nevertheless, it may be viewed as one of the factors which contributed to the growth of Singapore as a major maritime centre. Parallel with the increasing amount of tonnage flying the Singapore flag, the investments and activity in the Port of Singapore increased considerably, and the country also attained an important position in the shipbuilding and ship repair industries.

The importance of domestic shipowning for a country’s trade, shipbuilding and ship-repair is controversial. Nevertheless, it is evident that the existence of a growing number of shipowning companies was one facet of Singapore’s emergence as one of the world’s leading maritime centres. The colony, and later country, had a long tradition as one of the most important regional ports. However, its emergence as a full-fledged maritime hub in Asia followed the introduction of the open registry and other policy measures focussing on auxiliary activities.

The development of the Singapore maritime cluster rested on three pillars; the port, the fleet and the shipbuilding and ship-repair industries. The authorities’ proactive initiatives with regard to the ship register were matched by similar endeavours with regard to the port and the shipbuilding and ship-repair industries.

The port, organised through the Port of Singapore Authority (PSA), was targeted in order to improve the efficiency and the competitiveness of its services. A development programme costing S$164 million culminated in 1972 with the opening of the Tanjong Pagar container berth. The investments secured that Singapore was the first port in Southeast Asia to cater for third-generation container ships, and in the late 1970s annual average port investments amounted to more than S$100 million. In their 1983 budget, the PSA allocated more than S$441 million to development projects. The amount of tonnage calling on the port doubled during the 1970s, and in 1986 Singapore became the world’s busiest port in terms of shipping tonnage.

The authorities also targeted the shipbuilding and ship-repair industries. In both instances, state participation was vital for the development of the activity. In the late 1960s and early 1970s more than S$200 million was invested in the Jurong Shipbuilding

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9 In *The Straits Times*, 6 December 1967, p. 12 it is claimed that the growth of the Singapore fleet would lead to an increase in auxiliary activities such as bunkering and repairs. Moreover, it would “further
and Repairing Complex, which was expected to generate some 30,000 jobs. The yard was a joint venture between the Singapore authorities and the Japanese shipbuilding giant Ishikawajima-Harima Heavy Industries. Employees at the yard were sent to Japan for 18-24 months in order to receive training. Other Japanese corporations, including Hitachi and Mitsubishi, also undertook massive investments in shipbuilding and ship-repair facilities in Singapore.\(^{10}\)

The value of the output of the shipbuilding and ship-repair industries increased by more than 20 per cent annually in the late 1960s and early 1970s (Fong, 1970:42). The capacity of the ship-repair industry increased from 75,000 dwt in 1973 to 2.1 million dwt in 1977 (Lauriat, 1975:204).

The shipbuilding industry fell victim to the international shipping depression after 1973, but was to some extent able to maintain the activity by diversifying into the production of offshore vessels (Todd, 1985:7 and 362). In the late 1970s the authorities, in an attempt at supporting the domestic shipbuilding industry, offered credit to Singapore shipowners building vessels domestically. The main motivation for this scheme was to assist the local yards, rather than the shipowners.

The growth of the port, the expansion of the fleet and the increasing activity in the shipbuilding and ship repair industries were important aspects in the development which made Singapore one of the world’s leading maritime centres. The integration of the various elements can be exemplified by the Neptune Ruby, a 15,000 dwt Freedom-type vessel, launched in early 1972. The Neptune Ruby was built by Jurong Shipbuilders, a company which was partly owned by the authorities. She was owned by the government-owned NOL, operated on a line calling on the port of Singapore and was included in the Singapore registry.

The various measures undertaken to improve Singapore’s position as a maritime hub also facilitated the country’s position as a leading provider of auxiliary activities such as ship management and chandlering, freight forwarding, marine insurance and shipping finance.

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\(^{10}\) The Straits Times, 12 July 1973, p. 4.
Schein (1996) has described the policies of the Singapore authorities in general and the EDB in particular as “strategic pragmatism”. With regard to the shipping industry, this is undoubtedly a fitting assessment. The establishment of the registry was motivated by contemporary problems. However, when Singapore’s importance as a regional and international maritime player had been secured by the late 1970s, and the country’s registry arrangements became subject to increasing criticism, the authorities did not hesitate to change their policy. By this time, the main aim for the opening of the registry – the increase in the amount of tonnage flying the Singapore flag – had been accomplished.
CHAPTER TWO – THE GROWTH OF THE SINGAPORE FLEET

The most important aspect of the The Merchant Shipping (Amendment) Act, introduced in 1969, was the access for any person or company, irrespective of nationality, to register ships in Singapore and fly the Singapore flag. The Singapore registry was largely modelled on the traditional Flags of Convenience and its introduction was motivated by the desire to increase the size of the Singapore merchant marine.

2.1. The growth of the Singapore fleet, 1966-1982

Three months after the initial Singapore registry had been established in 1966, approximately half of the 150 vessels included in the registry were sailing ships or barges. Nine vessels were transferred from the British registry, whereas 139 vessels, including 68 sailing ships or barges, were transferred from the Malaysian registry. Measured in tonnage, the sailing ships and barges comprised 8,589 grt and the motor and steam ships 29,151 grt. The following year, the number of vessels was doubled, and the fleet had increased to 139,507 grt, of which sailing ships and barges made up approximately 15 per cent of the tonnage.

Despite the strong relative growth of the Singapore fleet in 1966 and 1967, estimates show that by the end of 1967 only a third of the Singapore-owned fleet was registered in Singapore. The rest was registered in FoCs, for tax reasons, or in Hong Kong, due to the fact that Singapore ships had previously been barred from trading with Indonesia.11

In the final year of the old closed registry, the Singapore fleet continued to grow, both as a result of the repatriation of foreign registered vessels and as a result of the fact that the authorities managed to secure that newly-built vessels were entered into the domestic registry. In December 1968, one month before the open registry came into effect, the fleet had increased to 354 vessels, of which 157 were sailing ships or barges.

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Despite making up almost 50 per cent of the number of vessels, these vessels comprised less than ten per cent of the total tonnage of 244.161 grt. Before the open registry was introduced, the Singapore merchant marine made up approximately 0.1 per cent of the world fleet. At the time, the country’s fleet was not among the world’s 50 largest fleets.

The effects of the liberalisation of the registration requirements did not take long to materialise. Approximately a year after the registry had been opened, 19 foreign-owned vessels, amounting to almost 90,000 grt, had been registered. The vessels were owned by companies in Australia, France, Liberia, Panama and Hong Kong. Moreover, the repatriation of Singapore-owned vessels continued. In the following years, foreign shipowners played an increasingly important role in the growth of the Singapore fleet.

In the first six years after the registry had been opened to shipowners of all nations, the average annual growth of the steam and motor fleet was approximately 40 per cent, measured by grt. By 1972 the Singapore fleet had grown to more than one million grt, and the five million grt mark was reached three years later. Within a ten year period, the Singapore fleet had been transformed from a relatively insignificant fleet dominated by vessels for the local trade to the world’s 15th largest merchant marine. Its share of the world fleet had increased from 0.1 per cent in 1969 to approximately 1.9 per cent ten years later. In this respect, the changes in the shipping policy had undoubtedly been successful.

Figure 1 shows the changing basis for the increase in the Singapore fleet in the period of strong growth after 1966. In 1966 and 1967 the majority of the vessels included in the registry were vessels which had been transferred from the British or Malaysian registries. From 1968 onwards, vessels transferred from other registries, eg other countries offering FoC-facilities or traditional maritime nations, became increasingly important. Another significant shift occurred from 1973 onwards, when new, as opposed to second-hand vessels previously registered elsewhere, assumed increasing importance. By 1977 the transfer of tonnage from Commonwealth ports had largely been terminated.

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Moreover, more than 40 per cent of the vessels registered in Singapore for the first time were newly-built vessels.

**Figure 1. The basis for the growth of the Singapore fleet, number of vessels, 1966-77**

The changing basis for the growth of the Singapore fleet before and after 1969 shows that the policy shift represented by the opening of the registry to non-nationals initiated two significant trends. During the first years, a substantial amount of tonnage was transferred to Singapore from other Flags of Convenience and from traditional maritime nations. This was partly a result of the repatriation of Singapore-owned vessels previously registered abroad. However, the large amount of tonnage transferred indicates that the Singapore flag was sufficiently attractive for foreign shipowners with vessels registered in FoCs or traditional maritime nations to transfer the registry of their vessels.

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13 The figures have been taken from Marine Department of Singapore, *Annual Reports*, 1966-77, and refer to steam and motor tonnage only. Due to changing statistical bases, the figures have been slightly adapted. The vessels categorised as “Transferred from Commonwealth” include vessels listed as transferred from the Malaysian and British registries in the period 1966-69, and vessels listed as “transferred from Commonwealth ports” in the subsequent years. The vessels listed as “First registry – old vessels” include vessels listed in the annual reports as “First Registry (Vessels not new)” and “Transferred from other ports”.
The second important development trait was the growing number of newbuildings which was allocated to the Singapore registry. Again, the shipowners ordering new vessels for inclusion in the Singapore registry were a combination of domestic agents and foreign shipowners. However, with the exception of the Neptune Orient Line, the majority of the local shipowners were small agents, operating in regional trades and primarily owning smaller vessels. By the middle of the 1970s, approximately 30 per cent of the tonnage on the Singapore register was domestically owned, and this proportion was relatively stable into the 1980s. However, the vessels owned by Singapore citizens were considerably smaller than the average vessels in the Singapore fleet.

Figure 2 shows the strong growth of the Singapore fleet in the late 1960s and in the 1970s. Sailing ships, barges and tugs have been separated from the overall figures, and have been categorised as “Other vessels” in order to give a better representation of the country’s merchant marine. The difference in average size is evident from a comparison of figures from the number of vessels and the tonnage in each group.

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14 Interview with Mr. Goh Chok Tong, Managing Director of NOL, *Business Times*, 19 April 1977, p. 1. Mr. Goh Chok Tong entered NOL when the company was established in 1969. Four months after the interview he became Senior Minister of State for Finance, and he has been Prime Minister of the Republic of Singapore since 1990. Figures for local ownership in 1980 taken from Brooks (1985:31).

15 The data upon which Figure 2 is based refer to the end of the year and have been taken from Marine Department of Singapore, *Annual Reports*, 1966-82. The group other vessels consists of the tonnage listed as sailing or non-propelled vessels in the period 1966-78 and the vessels listed as tugs, barges and miscellaneous after 1978.
Figure 2 shows that the Singapore authorities succeeded in increasing the amount of tonnage flying the domestic flag. Moreover, the diversity of the Singapore fleet is evident. In 1982 the tugs and barges and vessels in the miscellaneous category made up almost two thirds of the number of vessels, but less than ten per cent of the tonnage. The majority of the tonnage, however, consisted of tankers, bulk carriers and general cargo vessels. In order to evaluate the growth of the Singapore merchant marine, the tugs, barges, etc should be omitted from the material analysed. The remaining analysis consequently focuses on the merchant marine, i.e. tankers, bulk carriers, combination carriers, general cargo vessels and passenger ships.

Changes in fleet composition – type, size and age
The Singapore merchant marine changed dramatically during the 1970s. In addition to the growth of the aggregate tonnage figures, the composition of the fleet changed with regard to both vessel types and age, and the average size of the vessels increased considerably.
Figure 3 illustrates the changes in the composition of the Singapore fleet. In the first years of the 1970s, when the amount of foreign-owned tonnage was still limited compared with the total tonnage registered, there was a predominance of general cargo vessels. During the 1970s the share of the fleet comprised by tankers and bulk carriers increased considerably. By the early 1980s, the share of tankers in the Singapore fleet was approximately three percentage points lower than for the world fleet as a whole and the share of ore, dry bulk and combination carriers approximately two percentage points lower.

There was still an overproportion of general cargo vessels – these vessels made up 36 per cent of the Singapore fleet in mid 1982, compared with 22 per cent of the world fleet – and a lack of fishing vessels and vessels in the “miscellaneous”-category. However, with regard to the type of vessels registered, there were no fundamental differences between the Singapore and the world fleet of the type seen in the early 1970s. In 1970, the first year for which data are available, general cargo carriers had made up

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16 Based on mid year grt-data from OECD, *Maritime Transport*, Organisation of Economic Cooperation and Development, Paris, various issues. The categorisation is not internally consistent during the period analysed, container vessels were eg reclassified from “miscellaneous” to “general cargo”. Nevertheless, the figures give a good indication of the structural changes in the Singapore fleet.
three quarters of the Singapore fleet, compared with 32 per cent of the world fleet.

Figure 4. Average size of Singapore vessels (1000 grt), 1966-82

The changes in the structural composition of the Singapore fleet occurred parallel with a strong increase in the average size of the vessels flying the Singapore flag, evident from Figure 4. Prior to the opening of the registry for shipowners of all nations, the fleet was dominated by small vessels operating in domestic and regional waters. Following the changes in the shipping policy, the importance of these vessels waned, as a growing proportion of the fleet consisted of larger vessels operating in the international shipping market.

One month prior to the introduction of the open registry, the average size of the vessels flying the Singapore flag was approximately 1,100 grt. Three years later it had been doubled, and by early 1974 the average size had increased to more than 5,000 grt. From 1979 onwards, the average size of the vessels was more than 10,000 grt. According to figures from Lloyds Register, the average size of the vessels in the Singapore merchant marine increased by approximately 266 per cent from mid 1969 to mid 1979. This can be

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17 Based on the Singapore fleet as defined in Figure 2. The figure is based on the average size by the end of the year, as found by calculations based on Marine Department of Singapore, Annual Reports, 1966-82.
compared with an increase of less than 38 per cent for the world fleet.\textsuperscript{18}

The growth in the average size of the vessels included in the Singapore registry was thus considerably stronger than for the world fleet as a whole. It reflected the increasingly important position of ocean-going vessels, rather than vessels operating in regional waters. As such, it can be seen as an indication of the increased Singapore participation in the international shipping industry.

In addition to changes in the composition with regard to types of vessels and average size, there was a clear transformation of the age structure of the Singapore fleet. This change was partly a reflection of the strong growth of the fleet. As the importance of the small, regionally based general cargo vessels dominating the fleet in the late 1960s fell, the proportion of older vessels declined considerably.

In 1972, the first year in which the age composition of the Singapore fleet is available in OECD-sources, only ten per cent of the Singapore tonnage was less than five years old. However, parallel with the strong influx of second-hand and newly-built tonnage, the average age of the Singapore fleet, and the share of the fleet comprised by relatively modern vessels, increased considerably.

\textsuperscript{18} Due to different statistical bases, these average size figures are not directly comparable with those on which Figure 4 is based.
Figure 5 shows that the share of the fleet made up by vessels less than five years old grew considerably in the early 1970s, from ten per cent in 1972 to almost fifty per cent three years later. One of the reasons for this increase is reflected in Figure 1, viz that a growing proportion of the vessels registered in the Singapore registry for the first time was newly-built vessels. The amount of newly-built tonnage included in the Singapore registry increased dramatically at the beginning of the 1970s.

In 1971 only 0.016 per cent of the vessels launched were registered in Singapore. This share increased considerably, to more than two per cent by 1973 and approximately three per cent around the middle of the decade. In the mid 1970s the share of the world’s newly-built vessels which were included in the Singapore registry was higher than Singapore’s share of the world fleet. In tonnage terms, the amount of newbuildings included in the Singapore registry increased from 4,000 grt in 1971 to more than one million grt in 1975.

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Table 2. Newly-built ships registered in Singapore, 1000 grt and world share, 1971-78\textsuperscript{20}

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Tonnage</td>
<td>4</td>
<td>236</td>
<td>677</td>
<td>641</td>
<td>1,117</td>
<td>982</td>
<td>304</td>
<td>298</td>
</tr>
<tr>
<td>Share (per cent)</td>
<td>0.02</td>
<td>0.88</td>
<td>2.15</td>
<td>1.91</td>
<td>3.27</td>
<td>2.89</td>
<td>1.10</td>
<td>1.64</td>
</tr>
</tbody>
</table>

The increasing amount of newbuildings which were included in the Singapore registry made an impact on the age composition of the fleet, and brought the age composition of the country’s fleet more in line with the international average. Although there was a strong reduction of the average age of the world fleet in the first part of the 1970s, the transformation of the Singapore fleet was even more pronounced.

In the early 1970s, the share of older vessels was considerably higher for the Singapore fleet than for the world fleet as a whole. However, the heavy influx of newbuildings and relatively modern vessels transferred from other registries changed this picture. By the mid 1970s the share of new vessels, ie vessels built within the last five years, was higher for Singapore than for the international fleet. Indeed, the proportion of new vessels in the mid 1970s was considerably higher than the average of the OECD-countries, whose fleets have generally had a relatively low average age. In 1976 Singapore was the country with the highest proportion of vessels which were less than five years old.

Figure 6 is based on a comparison of the age composition of the international and Singapore fleets, divided between four age groups. A positive figure indicates an overproportion of tonnage in a given age group, whereas a negative figure indicates that the age group made up a smaller proportion of the Singapore fleet than of the world fleet. The reduction of the overall figures during the 1970s indicates that the age composition of the Singapore fleet increasingly corresponded with the age composition of the international fleet.

\textsuperscript{20} Based on data from Table XX and Table XXII in the statistical annex of OECD, \textit{Maritime Transport}, Organisation of Economic Cooperation and Development, Paris, various issues.
For the group “Vessels older than 15 years” in 1972, the value 43 indicates that the proportion of the Singapore fleet consisting of vessels older than 15 years was 43 percentage points higher than the corresponding figure for the international fleet (68 per cent for the Singapore fleet minus 25 per cent for the world fleet). Similarly, the lack of modern vessels in the Singapore fleet in 1972 is reflected in the fact that the age group “Under 5 years” is given the value -27 (ten percentage points for the Singapore fleet minus 37 percentage points for the world fleet).

Figure 6 clearly shows the effect of the large amount of newbuildings included in the Singapore registry in the mid 1970s – from 1975 onwards the proportion of new vessels in the Singapore fleet was higher than for the world fleet as a whole. Moreover, the duality of the flying the Singapore flag is evident.

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From 1975 until the early 1980s, Singapore had an overproportion of relatively new vessels, ie vessels less than five years old, and relatively old vessels, ie vessels which were more than 15 years old. This duality reflects the fact that the fleet consisted of a large proportion of modern, ocean-going vessels, to a large extent owned by foreign interests but registered in Singapore due to the FoC-facilities, as well as a considerable share of older, generally small vessels engaged in regional transport.

By the early 1980s the age composition of the Singapore fleet corresponded closely to the composition of the international fleet. This can be illustrated by a comparison of the differences in the share of the tonnage in the various age brackets. The sum of the absolute “percentage point deviations”, which had been 90 in 1972, had been reduced to 14 by 1982. This reflected the strong modernisation which had taken place in the Singapore fleet and the corresponding ageing of the world fleet.

Summary – the Singapore fleet

The development of the Singapore fleet was characterised by four interrelated trends. First, the fleet grew massively, from approximately 250,000 grt in early 1969 to approximately 7.5 million grt ten years later. The Singapore share of the world fleet increased from 0.1 per cent to almost 1.9 per cent over the same period. Second, the composition of the fleet changed, reflected in a relative reduction of general cargo tonnage and an increase in liquid and dry bulk tonnage. Third, there was a strong increase in the average size of the vessels, from slightly above 1,100 grt at the time of the introduction of the open registry in 1969 to more than 10,000 grt in the late 1970s. Finally, the proportion of older vessels declined considerably, and this led to a reduction in the average age of the fleet and an age composition which did not deviate significantly from the international fleet.

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22 This measure takes into account the sum of the absolute figures of the deviations. A value of zero indicates that the age compositions of the two alternatives are identical.
2.2. The tightening of requirements

In the mid 1970s the open Singapore registry was subject to increasing criticism, both within Singapore and from sources abroad. The FoC-institution was criticised in the Singapore Parliament in 1974, when the MP N. Gavindasamy suggested that the open registry policy “did not benefit Singapore at all, except perhaps enjoying the ‘dubious prestige’ of having its name in Lloyds Register as a country with a sizeable shipping tonnage.” The claim was refuted by the authorities, which claimed that “[t]he registry of shipping […] played a role in publicising Singapore as a shipping centre.” Two years later a widely published international study cited Singapore as a “particularly bad example” of the much maligned FoCs. True to form, the study was criticised by the authorities for being “unnaturally biased against FoC-countries.”

Despite their support for the registry in the mid 1970s, by the end of the decade the authorities welcomed proposals from the Marine Department calling for stricter and better control. The tightening of the requirements “reflect[ed] the Government’s desire to counter criticisms of Singapore’s open registry.” By increasing the demands on shipowners and on ships flying the Singapore ensign, the authorities attempted to silence the criticism of the country’s registry. In April 1979 new requirements were introduced to “improve the quality of ships and to effect better control over them.”

The basis for the change in the Singapore shipping policy was the stigma associated with being a Flag of Convenience. FoC-ships, and particularly older FoC-vessels, were responsible for a large share of maritime casualties and international tonnage losses. In the period 1964-73, on average 18 per cent of the world fleet was registered in FoC-countries, but vessels registered in these countries made up 39 per cent of the

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25 The Straits Times, 30 May 1979, p. 9.
26 Marine Department of Singapore, Annual Report 1979, p. 1. According to Phang & Toh (1994:217), the restrictions were also affected by the fact that the government was “faced with the possibility that Singapore-flagged ships could be used for purposes of spying during the Cold War period.” I have not found any support for this assertion.
tonnage lost (OECD, 1975:89). Of the 12 Singapore vessels lost in the period, only one was less than 15 years old, and one was in the 15-20 years bracket. The majority of the Singapore vessels lost were above 25 years old.

The policy shift consisted of two associated components, viz increased transparency of ownership and measures aimed at improving the standard of the fleet. Due to the previously mentioned duality of the Singapore shipping sector, it was fairly easy to design the requirements in a manner which pinpointed the “undesirable” segments of the Singapore fleet, ie the smaller shipowners operating older vessels. Accordingly, the majority of the shipowners, and tonnage, would not be negatively affected by the changes. Initially, the tightening was accomplished through changes in the administrative procedures. However, from 1981 the changes were implemented in the legislation.

First, the authorities gradually introduced more stringent control over shipowners, attempting to increase the transparency of vessel ownership. According to the 1979 procedure changes, all owners were required to disclose particulars of ownership, and the paid-up capital of the company had to constitute at least ten per cent of the price of its vessels.27 These requirements were targeted at “fly-by-night firms which had little capital and used small ships and had been giving Singapore a bad image overseas.”28 The rules were more lenient for local companies than for foreign-owned companies. With the introduction of the Merchant Shipping (Registration of Ships) Regulations in 1981, registration was limited to Singapore citizens, permanent residents and companies incorporated in Singapore.29 Moreover, the companies had to provide information on shareholders, directors, board members and paid-up and authorised capital.

Second, the authorities sought to improve the standards of the vessels in the Singapore fleet by introducing age restrictions which would enhance the modernisation of the fleet. From 1979 onwards, new registrations for foreign-owned ships would only be

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27 The rule was subject to a minimum of S$50,000 and a maximum of S$500,000; see The Straits Times, 30 May 1979, p. 9.
29 The Straits Times, 3 November 1981.
granted if the vessels were above 1,600 tons and less than 15 years old. Again, the policy was less strict with regard to domestically owned vessels. However, in time, the oldest vessels in the fleet would be phased out, so that by 1982 only vessels of less than 20 years would be eligible for registration. The enforcement of the policy was accomplished through an increase in the use of spot checks.30

The tightening of the registry requirements was facilitated by the fact that although Singapore was a traditional Flag of Convenience by most definitions, the FoC-institution was less important for Singapore than for other FoC-countries. As previously noted, the Singapore registry was modelled on traditional Flags of Convenience, but at the same time differed from these in several respects – both with regard to the motivation for the arrangement and with regard to the composition of the fleet.

One difference was the use of the FoC-facility to increase domestic employment. Similar measures – in terms of an additional fee for non-domestic crews – were in effect in Cyprus. However, none of the other major FoCs had introduced measures of this kind. By the time the new legislation was introduced in 1981, a Marine Department official claimed that “Singapore has solved its unemployment problem. […] The original objective of the shipping registry […] has now become obsolete.”31

Another difference was the size of the income from the registry relative to the country’s Balance of Payments and Balance of Trade. In this respect, the income was of far less importance for Singapore than for other FoCs, partly as a reflection of Singapore’s position as an important regional trading centre. The relative importance of the registration and tonnage fees was limited due to the massive growth of the country’s manufactures exports.

Third, the vessels on the Singapore registry deviated from the tonnage registered in other FoC-countries, mainly as a result of the high amount of relatively modern vessels in the Singapore fleet and the distinct duality. Figure 7 compares the age composition of the Singapore fleet and the fleets of the other major countries offering FoC-facilities in 1977. The contrast between Singapore and Cyprus is particularly conspicuous.

31 The Straits Times, 11 July 1981.
Figure 7 shows the considerable differences in the age composition of the various FoC-countries. Again, the diversity of the Singapore fleet is striking. The country had a higher proportion of the most modern vessels than the other FoC-countries and the world fleet. Moreover, there was also a disproportionate share of vessels over 20 years old.

The duality evident from Figure 7, and the other factors which separated the Singapore fleet from the other FoC-countries, are important in understanding the smoothness with which the shift in the Singapore shipping policy was implemented. First, the duality of the fleet made a raising of the vessels’ standards relatively easy compared with other FoC-countries, and it made measures targeted at specific types of vessels and owners relatively easy to implement. Second, the Singapore economy was less dependent upon the FoC-institution than other registries offering such facilities, and a policy shift could consequently be enforced relatively easily. Indeed, the unemployment problem, which had been the main motivation for the introduction of the registry, had been replaced by an increasingly tight domestic labour market.

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Summary – the effects of the open registry and the tightening of requirements

The pragmatism which had led to the introduction of the registry in 1969 is reflected in the tightening of the requirements ten years later. To put it simply, the authorities found the benefits of the arrangement less weighty than the odium associated with being seen as a Flag of Convenience. In many ways, the registry had served its purposes, and there was little reason to continue the arrangement. There are several explanations of this policy shift.

First, the unemployment problem was no longer rife by the late 1970s – indeed as early as 1974 the government addressed the “acute shortage of manpower in the shipping industry.”33 The open registry managed to increase the share of Singapore seafarers working on domestically owned vessels, but the overall effect on maritime employment was limited. The employment of Singapore seafarers was relatively constant, in the region of 5-6,000, over the period 1965-81. However, the share of Singapore seamen working on domestically-registered ships increased from approximately a third to more than three quarters. By the late 1970s, due to the exceptional economic performance of the Singapore economy, the employment aspect of the open registry had become increasingly irrelevant.

Second, the authorities had succeeded in their endeavour to increase domestic participation in the transport of the country’s imports and exports. In the early 1980s, at the same time as stricter registry rules were introduced, the authorities sold one third of their interests in the Neptune Orient Line to the public. The company had acquired a fleet of more than 600,000 dwt, and the initial government support was no longer necessary. The parallel between the conscious support of the domestic fleet and the domestic shipping line, and the shift in policy when the circumstances had changed, is striking.

33 The Straits Times, 26 May 1974, p. 18.
Third, the authorities had managed to establish Singapore’s positions as the most important maritime hub in Southeast Asia and as one of the world’s leading maritime centres. The development of the domestic fleet had been one important aspect of this development. The tightening of the requirements led to a temporary, limited reduction in the country’s fleet.

By the beginning of the 1980s, fleet size per se was no longer an important determinant of Singapore’s position as a maritime centre. The policy change associated with the tightening of requirements reflected this. In 1982, one of the senior bureaucrats in the Ministry of Communications claimed that “unlike the early years of the open registry, [Singapore] is not interested in merely attracting more ships to its registry. It would prefer owners to set up their operations in the country and impart some know-how to the shipping community.” However, the authorities later introduced new measures during the 1980s and 1990s, through which they managed to attract foreign shipowners without retorting to the stigma associated with being an FoC.

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CHAPTER THREE – SUMMARY

This report has analysed the basis for the growth of the Singapore fleet, and the development traits which accompanied the increasing fleet in the 1970s. It has been emphasised that the shift in the shipping policy which led to the establishment of a Singapore Flag of Convenience was a conscious strategic choice. In many respects, the opening of the registry mirrors the Singapore economic policies in general, as it facilitated the growth of domestic employment and production, without necessitating large domestic investments.

The shift in the shipping policy in the late 1960s was motivated by the wish to save foreign exchange, create employment opportunities and exert greater control over the country’s foreign trade. However, the opening of the registry for shipowners of all nations should also been seen in relation to the desire to promote Singapore as a maritime centre.

In addition to the shipping policy, which aimed at increasing the country’s fleet, the government initiated the Neptune Orient Line. The establishment of national shipping lines was common among developing nations, and the NOL entered the Far Eastern Freight Conference. Moreover, Singapore’s maritime policies included initiatives with regard to the development of the country’s port and the domestic shipbuilding and ship repair industries. In both instances the authorities committed substantial sums in order to secure Singapore’s position as a maritime centre.

The growth of the Singapore fleet during the 1970s was considerable, from 350,000 grt to approximately seven million grt. Parallel with the growth, the average size of the vessels increased from 1,500 grt to more than 10,000 grt, whereas the average age of the vessels declined considerably. Moreover, the composition of the fleet changed. In the late 1960s/early 1970s, there had been an overproportion of general cargo vessels, but by the end of the decade there were no large differences between the types of vessels in the Singapore fleet and in the world fleet as a whole. However, the Singapore fleet was still characterised by a distinct duality. Tonnage-wise, the most important part of the fleet was modern, large vessels. These vessels, which operated in international waters, were to
a considerable extent owned by foreign agents. Based on the number of vessels, however, small, generally old vessels operating in regional waters and owned by domestic shipowners were still important.

By the turn of the decade the Singapore authorities decided to introduce stricter rules regulating the registry. The tightening of the requirements was motivated by the stigma associated with being a Flag of Convenience. Although the Singapore registry differed from other FoC-registries in some respects, the country had become subject to increasing criticism both domestically and internationally. As a result of the duality of the Singapore fleet and the differences between Singapore and other FoC-countries, the measures which implied a tightening of the requirements could be relatively easily introduced.

The opening of the registry in the late 1960s, motivated by contemporary problems, represents one important shift in the Singapore shipping policy. When the open registry had reached its sell-by date, and the initial problems had been alleviated, the authorities’ strategies were reversed. The shift towards tighter requirements illustrates the pragmatism with which the Singapore authorities have changed their shipping policy.
LITERATURE


Singapore Marine Department, *Annual Reports*, various issues, 1966-82.


