6. FALLING NUMBER OF SEAFARERS OF DEVELOPED ECONOMIES

The problem of falling numbers of seagoing personnel among Asian countries has already emerged. Details of the falling numbers as well as the attending circumstances of several modern advanced economies in the region are given in the following sections. This phenomenon became evident first in Japan, followed by the Asian NIEs. As economies become more developed providing better paid and terms of conditions of employment and more opportunities, the gap between wages paid to seafarers and those employed on shore-jobs narrows. There will be also a tendency for seafarers to spend shorter periods of their life at sea preferring to seek shore-based jobs earlier. Worse still, trained maritime personnel opt not to go to sea at all after graduating from maritime institutions since their skills are transferable to other employment. An additional contributing factor is that as there are fewer young people joining the ranks of seafarers, over time the proportion of older men increases and ultimately the losses come from retirement as well. The unfortunate part is that advanced countries with well established maritime training institutions encounter problems of falling intakes of trainees and, in some cases, have led to decisions to reduce or close down training programmes. The reduction in trained experienced seafarers becomes a matter of national concern when it adversely affects the maritime industry as a whole when there are insufficient managers to run shipping enterprises. These countries therefore have to resort to a range of measures to overcome the falling number of seafarers (see later discussion).

Seafarers will likely seek work in domestic shipping and as harbour pilots and the like if wages and other benefits are comparable or better than working on foreign-going vessels, whether national or foreign-owned. In the case of countries currently supplying seafarers to international shipping, should income levels rise and employment opportunities become available in their home countries, the capacity to maintain the supply of maritime personnel will very quickly fall. Concurrently, as seafarers from these sources demand higher wages, foreign shipowners will likely seek other cheaper sources of maritime manpower and demand falls accordingly. The resulting squeeze will be felt by the maritime training institutions which may lead to closures and curtailment of training programmes. It should be noted that for the more advanced countries, rising wages for ratings in particular have led to problems of unemployment among them. Unemployment of older seamen is particularly serious as they are unable or unwilling to switch to alternative work.

6.1 Japan

The above situation is best illustrated by the fall in the number of membership of the All Japan Seamen’s Union (JSU). The total number serving onboard cargo and passenger vessels fell from about 65,000 in 1982 to just over 34,000 at end July 1995 (see Fig. 4). The country developed quickly from the 1960s decade as a result of the nation’s 'doubling of income' policy. Japanese seafarers quickly took up readily available

26. The vast majority of seafarers are member of JSU. The number excludes members of JSU serving on fishing vessels but includes dockworkers.
well-paid shore-based employment. The largest decline applies to those employed in the foreign trades, the number decreasing from 34,866 in 1982 to 7,891 in 1995, a fall of 77.4 per cent over the period! The rate of decline for those employed on domestic trades is less drastic, falling from 11,593 in 1982 to a low of 8,417 in 1990 recovering to above 9,000 since 1992. There is also a decline in the number of ‘coastal and dockworkers’ falling from a peak of 19,353 in 1983 to 16,934 in 1995. It has been suggested that if present trends were to continue there will be as few as 3,800 Japanese seafarers by the year 2000.\textsuperscript{27} The above clearly suggests that Japan will need to depend heavily on the services of foreign seafarers and the situation will worsen much further in the future. The distribution of foreign seafarers employed on Japanese-owned vessels is shown in figure v.

There is also a serious ageing problem as the average age of Japanese seafarers is currently about 47. There is simply not enough young recruits being inducted into the industry to replace the older seafarers. While there is no problem filling the colleges and universities, a large proportion of them choose not to take up sea life but opt for the more attractive land-based jobs. The lower rate of wastage among graduates from maritime institutions since the end of the 1980s decade may be due to the slowdown of the Japanese economy when well-paid shore-based employment is harder to find.

The drastic fall in Japanese seafarers, the high wage costs as well as the high operating costs of ships registered in the country has forced Japanese owners to flag out to open registries. Figure VI shows that the sharp decline in the number of Japanese flag vessels over from 1,028 ships in 1985 to 280 ships in 1994. Since the total Japanese-owned shipping fleet has remained at about the same level between 1985 and 1994, the proportion of Japanese registered ships has fallen. The proportion declined continuously from 56 to about 27 per cent over the period, while Japanese beneficially owned vessels registered under foreign flags have correspondingly increased. The country is currently considering an international register for Japanese vessels similar to the Norwegian NIS and Danish DIS. This will help to alleviate the tax burden and to relax manning standards\textsuperscript{28} The proposal is to have a Japanese captain and chief engineer on board Japanese registered vessels and will also make it possible for Japanese officers to be paid higher wages.

\section*{6.2 Hong Kong}

In the case of Hong Kong, there was a total of 9,318 officers and 60,272 ratings registered with the Marine Department’s Seamen’s Recruiting Office (SRO) at the beginning of 1989. However, the number of ‘active’ (those serving or having served at sea within the previous 12 months) officers and ratings was 2,061 and 5,909 representing 22.1 and 9.8 per cent of those registered, respectively (pers. comm., Hong Kong Nippon Kaij Shimbun, 26 May 1996.

\textsuperscript{27} This scheme was reported in the \textit{Nippon Kaiji Shimbun} (Japan Maritime Daily) on 26 May 1995.
Seamen’s Recruiting Office). By 1994, there were only 3,709 seafarers serving on Hong Kong controlled vessels which had a total of 10,488 positions available. According to another source (Merchant Navy Training Board, 1992), in March 1992, there was a total of 4,175 active Hong Kong seafarers. The breakdown is given in table 10.

The steady decline in the number of Hong Kong seafarers suggests an urgent need to train local seafarers. In March 1992, a survey to determine the future manpower needs for the Colony was undertaken by the Merchant Navy Training Board (1992) of the Vocational Training Council. The survey was also conducted to help formulate training plans for seagoing personnel. Of a total of 42 companies (out of a total of 49) who gave information on the number of posts on board ships (735 ships out of a total of 858 ships) under their ownership or management, there was a total of 17,990 posts comprising 7,699 for officers and 10,291 for ratings. There were thus no more than one fifth of Hong Kong officers and one tenth of Hong Kong ratings on board these vessels, disregarding those 123 vessels whose information was not available. It is clear that Hong Kong relies heavily on non-local seafarers to man their vessels. The 1994 manpower survey conducted indicated that, taking into account the future needs and wastage of seafarers, there will be an annual demand for 150 officers and 140 ratings to maintain the number of Hong Kong seafarers employed on Hong Kong vessels.

The age distribution of active Hong Kong officers in 1992 is given in figure VII which shows clearly the problem of a declining number of young seamen. The proportion of those aged 40 and below has been falling from 33.1 per cent in 1990 to 23.8 per cent in 1992 for officers and from 16.5 to 15.0 per cent for the corresponding years for ratings. The mean age of Hong Kong seafarers is 45.9 years and this figure has been gradually increasing from 41.7 in 1988 and 42.6 in 1990. The 1992 survey revealed that 26 per cent of the companies surveyed prefer their seafarers to retire at over 63 years of age, 40 per cent of the companies indicated 61-63 years, and the remaining 26 per cent at 55-60 years. A similar proportion of the companies would prefer their ratings to retire at the same age ranges. However, there is no information on the desired retirement age from the point of view of the seafarers concerned.


30. The survey covered 49 Hong Kong shipping companies and river trade operators which have regularly employed Hong Kong seamen on board ships under Hong Kong ownership, management or crewing agency. The companies covered accounted for 858 ships under Hong Kong ownership, management or crewing agency of which some 504 had Hong Kong seafarers working on board. The distribution by ship type is: bulk (31%), tanker and combination carrier (22%), container (18%), general cargo (17%), passenger (5%), and others (7%). These ships were mainly registered in FOC states including Panama (40%), Liberia (22%), with UK and Commonwealth accounting for 9 per cent and Hong Kong 8 per cent of the total.
A summary of the findings of four biennial surveys conducted between 1988 and 1994 (table 11) although the figures are not strictly comparable due to the non-comprehensive nature of the survey. Albeit, it shows a clear trend toward increasing demand for seafarers (although few ships were included in the 1994 survey) but a declining supply and participation of Hong Kong seafarers. The Board’s report also expressed the opinion that with the anticipated revival of the world economy and the shipping industry, the fast development of maritime transport between Hong Kong and China, there would be a steady demand for well-trained and qualified Hong Kong seafarers from Hong Kong shipowners, managers and crewing agencies (Hong Kong Merchant Navy Training Board, 1992: 22).

A total of 28 companies gave forecasts of their manpower requirements in 1994; they indicate an increase of 4.4 per cent for officers and 4.7 per cent for ratings over a two-year period. Of the ten companies that gave information on their requirements in 1996, they forecast increases of 17.2 per cent for officers and a mere 2.1 per cent for ratings. Based on the information gathered from the survey, the Board estimated that there would be an average annual demand for 147 officers and 222 ratings for the succeeding two years from 1992. The Board took into account wastage rates of 5 per cent for officers and 10 per cent for ratings from retirement, emigration, change of occupation/employment, etc. The Board expressed great concern the continued decline in the number of active Hong Kong seafarers as well as the number of new entrants joining the industry and recommended greater efforts in publicising and promoting the image of sea-going careers in order to attract sufficient young people to join the merchant navy (Hong Kong Merchant Navy Training Board, 1992: 26).

6.3 Singapore

The National Maritime Board (NMB), established in 1973, is committed to promoting Singapore as an international maritime centre. Ships’ officers are not required to be registered with the Board. The number of seamen registered with the NMB has declined steadily over the years. The number of active seamen fell from 1,794 in 1985 to 1,264 in late 1989 which had 1,264 or 49 per cent in the active reserve pool. The proportion of Singaporean officers and ratings employed on Singapore flag vessels is small, 17 per cent (872) officers and 18 per cent (1,080) ratings. There was a total of 10,876 seafarers employed on Singapore ships in September 1989. It has been estimated that more than 75 per cent of the 1,103 deck officers and 2,755 engineers who have obtained certificates of competency were no longer employed on board Singapore ships and there are few working on foreign-flag vessels. Singapore shipowners, such as the Neptune Orient Line, have been urged to sponsor more trainees at the training institutions.

Figures VIII shows the status of Singapore seafarers over the period, 1988-1994. Both the number of seamen registered with the NMB and the number employed at sea have been declining, with the latter falling faster than the number of registered seamen. Chia (1989b, p. 218) reports that there were 9,187 registered seamen in 1973 and it declined to 5,297 in 1984. The recent trends confirmed the pattern of long-term decline of Singaporean seafarers and reflects the impact of the rapid rate of economic growth of
the country on the number of available seafarers. As at end 1992, the majority of ratings, 87 per cent, were in the deck department and only 15 per cent in the engine department, the remaining being in the catering section. Of the total, some 42.3 per cent were at sea with 24.2 per cent on the active reserve pool and the rest being inactive, and hence unavailable, for active service (table 12). Thus, while there is only available a very small core of Singaporean seamen to serve the nation's very sizeable merchant shipping fleet, there is paradoxically a problem of unemployment among Singaporean ratings. It may also be noted that there is a serious shortage of engine-room seamen.

Information on the age profile of the Singapore Maritime Officers' Union (SMOU) shown in figure IX reveals that there is a healthy spread of age groups among its members with 30 per cent in the age group '30 years and below' and 40 per cent in the '31-40' age group. Also the membership of the union remains fairly stable and had in fact increased since 1992 (figure VIII). It should be noted that membership of the Union is not restricted to Singaporean seafarers and also that employment opportunities for officers has been good. Nevertheless, Singaporean officers do not generally remain at sea for long. Tay (1981) reports that, at the beginning of the 1980s, an officer would take up a shore job after eight years at sea. Apart from the usual reasons for opting for a relatively short sea life, in the 1960s, many maritime officers had their compulsory national service deferred for many years due to the high demand for their services. Since the latter part of 1970s, deferment was no longer granted to maritime officers. He adds that, unlike maritime officers in Japan who are university graduates and are highly regarded by their employers, Singaporean officers do not have an opportunity to attain the status of graduates.

In the case of ratings, membership of SOS has been increasing gradually (figure VIII), but there has been a shift in the age profile of its members towards the higher age groups in the five year interval between 1988 and 1993 (figure X). Table 13 below shows that, as at end 1992, the large proportion, 92 per cent, of Singaporean seamen worked on Singapore registered vessels while a still significant proportion, 6 per cent, were employed on board UK registered vessels. This is indicative of the fact that Singaporean seamen are no longer competitive with foreign seamen and only local registered ships such as the national shipping line, Neptune Orient Line (NOL), and a handful of the larger owners of locally registered ships have been prepared to hire the more expensive Singaporean seamen.

6.4 Republic of Korea

Since the beginning of the 1960s decade, there has been rapid growth of the Korean national shipping fleet which totalled only 113,000 gt in 1960 to rise to 69 ships totalling 512,600 gt in 1985 and still further to 115 vessels totalling 696,300 gt. The fleet has grown to 2,121 ships totalling over 7 million gt. The country has been a significant source of seafarers for foreign shipowners. In 1985, the number of officers and engineers came to 12,177 and 22,901 seamen to give a total of 35,078 persons so employed. By 1990, there were a total of 9,658 officers and 19,284 ratings totalling 28,942 seafarers employed on foreign vessels in 1990 (table 8) representing a reduction of 17.5 per cent
over the five-year period. By end 1993, the number of Korean seafarers employed on foreign-flag ships was only 14,122 which was less than half the number in 1990. Currently it is facing the familiar problems of shortage of maritime personnel to man the nation’s own merchant navy.

Strong government support for the training and overseas employment of Korean seafarers resulted in a very rapid rise in their employment on foreign vessels from just under 70,000 in 1977 to reach a peak of 197,000 in 1982 before declining to 95,000 in 1986. The number employed on foreign ships had fallen steeply to 42,524 by August 1987. By end of 1993, Korean seafarers employed by foreign shipowners account for 79.4 per cent of Korean ocean-going seafarers and 62.1 of total seafarers including those on fishing vessels. There was, by then, 8,007 Korean seafarers employed on national flag vessels. The number employed on foreign vessels 22,129 which represented a further reduction in the number of active Korean seafarers. The earlier rapid rise in number of Korean seafarers was also attributable to relatively high wages paid to seafarers employed on foreign-owned vessels and the traditional close relationship with Japanese shipowners while the decline has been the result of strong economic growth of the country and the increasing value of the Korean won.

There has been serious concern about the fall in the number of recruits into the country’s maritime training institutions. The Busan Maritime High School had for several years suffered from a shortage of applicants and it was closed in 1992. However, there appears to be no shortage of officers and ratings in the immediate future at least up till the year 2000. One reason for this concern is that, due to demographic change, the number of young men leaving school is expected to decline drastically in about the year 2000 and that there are other attractive options by way of training courses other than maritime courses. There has been a suggestion to introduce mixed crews with Koreans working as core members. In order to attract entrants to seagoing jobs, there are plans for introducing a system of alternating work on board and ashore (Jeon, 1993).

According to Lee Tae-Woo (1993), the Korean shipping industry has been suffering from rising crew costs and difficulties in recruiting qualified crew. For these and other reasons, it has been suggested that Korean shipowners either flag out, or a Korean International Ship Register (KIS) be opened similar to the Norwegian and Danish open registers. Consideration should also be given to employing seafarers from the Philippines, China and Myanmar and that training centres be opened in the Philippines and China. From 1991 to 1993, there have been 368 Korean Chinese ratings being employed on Korean registered ships. Also encouragement should be given to ship management companies perhaps undertaking joint ventures between Korean and foreign ship management companies with the view to source low-cost crews.

31 According to Lee (1993), the annual manning costs for a Panamax bulk carrier manned by Korean crew exceeds US$800,000 in 1993 while one that is manned by Filipino crew with ITF approved rates would cost only US$350,000.
Matters that concern Korean seafarers come under the responsibility of the Korean Maritime and Port Administration (KMPA) under which is the Korea Seamen's Registration Office. KMPA is the overall responsible body for looking after the country's seafarers. The Seamen and Vessels Bureau is directly in charge of the affairs of seafarers in the organisation while the Korea Association of Seafarers’ Employment under KMPA created under the Seamen Act is concerned with the placement and recruitment of Korean seamen. The Government amended the Seamen’s Act in 1984 to reflect much of the contents of related ILO Conventions in recognition of the importance of the maritime industry to the country. In view of the demands made by the Seamen’s Union of Korea, the Seamen’s Act was amended in 1987 (Lee Jong Soo, 1987). The Seafarers’ Act is to be further amended by 1995.

The Korea Maritime University was formerly the Korea Merchant Marine Academy, established in 1945, and became a university in March 1992. The university produces some 700 officers each year. In addition, there are two seamen's high schools specialising in the training of ratings. The university is the premier maritime training institute of the country and has three independent colleges, the Colleges of Maritime Science, Sciences and Engineering, and Social Sciences, as well as the Faculty of Arts and Sciences and has developed a broad range of degree programmes from social sciences, shipping management, ship operation, naval architecture to marine engineering. The university also offers graduate programmes leading to masters and doctoral level studies as well as a number of research institutes. The Korean Maritime Training and Research Institute established to retrain seafarers has been able to train over 20,000 seafarers each year. It was reported at the beginning of the 1980s that a consolidated Seamen's Training Institute was to be established with Busan as a possible location. The Government enacted a Seamen’s Labour Standard Law and constructed more welfare facilities, improved working conditions and enhanced social recognition of seafarers' standing to be implemented in stages.

7. RESPONSES TO THE SHORTAGE OF MARITIME PERSONNEL

The developed countries within the region have responded to the shortage of maritime personnel in various ways. In order to solve the problem of the shortage, the developed or relatively advanced countries have resorted to some or all of the following measures:

(a) Flagging out of a portion of its national fleet;

(b) Reduce crew complement through adopting improved technology, thereby automating the operation of the ships and reassigning shipboard duties to its members;
