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# **The Bond between Chinese Seafarers and International Shipping Companies and the Impact on Career Development: A Survey Report and Policy Recommendations**

(中国外派海员的归属感及其对他们职业发展的影响：一个调研报告和政策建议)

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Bin Wu, Glory Gu and Chris James Carter

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# Preface



I am delighted to learn that my colleagues at the Haydn Green Institute for Innovation and Entrepreneurship, Dr. Bin Wu (Senior Research Fellow) and Dr. Chris James Carter (Assistant Professor), have been working together with an industrial partner, Mr. Glory Gu, to complete a research report on Chinese seafarers: the largest group in the global seafaring labour market. As a University with a truly global outlook, this is a significant piece of work which demonstrates our collective attention and interests in the international shipping: the first globalised industry in the world, responsible for the carriage of around 90% of world trade.

As shown by Dr. Wu in his previous research report a decade, the supply of seafarers to international shipping companies is closely related to rural development and poverty alleviation with respect to the sending communities of China and other developing countries. In this regard, this report represents a clear example of our continuing commitment to developing cutting-edge research that supports the UN Sustainable Development Goals.

The theme of this report - the impact of the bond between Chinese seafarers and international shipping companies - advocates for more equal, longer-term collaborative relationships through mechanisms of mutual trust, respect, shared values and identity. In my view, this is a meaningful and timely perspective given the current imbalances between labour and capital, and between the Global North and South. It is my hope that this report will contribute to the contemporary debates with regards to these issues.

Global seafaring has always played a prominent role in world trade, tracing back to Zhen He fleets (1405-1433) and the emergence of Venice merchants in the 16<sup>th</sup> Century. From the perspective of entrepreneurship education and training, it seems clear that seafaring skills are transferable and of significant benefit to international trade. With this in mind, I would like to congratulate the authors of this report and encourage continued research collaboration with industrial partners, including international shipping.

**Professor Simon Mosey**

**Director of Haydn Green Institute for Innovation and Entrepreneurship (HGI)**  
University of Nottingham

# Preface



Around 90 percent of world trade is carried out by the international shipping industry. Seafarers are fundamental in keeping this trade ongoing and in ensuring that goods move to and from opposite sides of the globe. Recognising the importance of these professionals, studies in the seafaring labour market have increased in the last two decades and currently represent an area of significant relevance in the Social Sciences.

Despite some important reports having been published on a regular basis at the European and international level, much remains to be done in terms of identifying the total number of seafarers employed in international fleets and relevant employment trends. Despite this, it is accepted that today Chinese seafarers represent an important segment of the maritime labour force.

China plays a prominent role in supplying seafaring labour. However, Chinese seafarers are not only employed in the international fleets but also work in great numbers upon vessels of the Chinese national fleet. This is a peculiarity of the Chinese seafarers. This situation makes studies on Chinese seafarers important and interesting as their employment trends and characteristics can be observed from different perspectives.

This research is led by an experienced researcher, Dr. Bin Wu, with whom I had the privilege to work with before, supported by others with relevant academic and professional backgrounds. The collaboration has resulted in the present report, examining the importance of the attachment, or bond, of Chinese seafarers to the international shipping companies they work for. It was conducted using various research methods, including field work on board ships.

The report starts by explaining the changes that have occurred since the 1990s, when Chinese seafarers started moving from working mainly to national shipping companies to the crewing of the fleets from other countries. Due to these changes it was not obvious and sometimes even possible to identify whether and to what extent the attachment that previously existed between Chinese seafarers and Chinese shipping companies, continued to exist when they moved to work for foreign shipping companies.

The research, as highlighted in the report, considered that depending on the origin of the shipping companies two cultures had to be considered: Chinese/Asian and Western. The authors of the report consider such division important because depending on the culture of the shipping company the attachment of Chinese seafarers may vary. The report further highlights that the employment of Chinese seafarers follows different patterns when compared to the employment of seafarers from other labour supplying nations.

This is a report that should be read closely by shipowners, ship managers, crew managers and others responsible for the recruitment and consequent employment of Chinese seafarers. It offers them the possibility of better understanding the reality these seafarers face and in this way establish mechanisms to get the most out of their contribution to the operation of the fleets they own or manage. It concludes by the importance that this attachment has for Chinese seafarers.

Finally, the authors propose actions or measures to improve the bonding of Chinese seafarers to the shipping companies. These include not only the provision of good salaries, but also the establishment of mechanisms to facilitate the career progression, including training, and ensuring the necessary care is provided to the families. The measures proposed should be seen by those responsible in the international shipping industry as important and beneficial for the management of the individual shipping companies, irrespective of their more Asian or Western culture.

The proposed measures if put in practice may also be relevant for the motivation of the individual seafarers, and altogether will have a positive effect on the workers productivity.

Finally, although this report is very beneficial to those in the shipping industry it should also be a relevant source of information to those academics interested in studies in the area of labour market. It can serve as motivation for further research in the topic. In view of the above I welcome and recommend the reading of this report.

**Dr. and Capt. Jaime Veiga**  
**Senior Project Officer**

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## Executive Summary

China is the largest supplier of seafarers in the world but faces significant challenges as a consequence of a diminishing pool of qualified seafarers – and especially officers (China Seafarers Report 2019). This report draws attention to the bond between Chinese-exported seafarers and foreign shipping companies, focusing particularly on the needs for, and conditions of, career development in international shipping. The term *bond* is used to reflect the need for seafarers to recognise, consent and integrate into management systems, safety culture, and the values of the shipping companies they service. Furthermore, it reflects the desirability of the shipping companies to respect and appreciate worker contributions, and to promote career development and recognise the difficulties faced by their families so that they may provide longer-term service.

Accounting for the triangular relationship between shipping companies, Chinese crewing agencies and exported seafarers, we argue that the bond perceived by Chinese seafarers is important not only for their satisfaction with a seafaring career, but also for retention and performance in international fleets. Accordingly, this project aims to address following questions: 1) What are the features and underlying factors of the bond between Chinese-exported seafarers and international shipping companies? 2) How does this bond relate to other attributes, such as motivation and satisfaction? 3) How does the bond influence seafaring careers, needs and perceptions of the future for Chinese seafarers working in international shipping?

To understand the bond of Chinese seafarers to foreign shipping companies, we must first consider the process of the transformation that the Chinese shipping system has undergone and in particular, the opening of its seafaring labour market to foreign shipping companies. In the early stages of China's reform, all Chinese exported seafarers were employees of state-owned shipping companies. Seafarers thus enjoyed the best welfare and variety of benefits provided by state-owned enterprises (SOEs) and so would subsequently tend to possess a strong sense of belonging to the SOEs despite working in foreign ships.

With the emergence of seafarers crewing agencies, which were independent of SOE shipping companies in the 1990s, many SOE seafarers have become "free seamen", working for foreign shipping companies. This has had a profound impact on sense of belonging amongst exporting seafarers. Under the current institutional framework, sense of belonging is not merely an issue for individual seafarers, but involves mutual trust and the relationship between Chinese seafarers, crew agencies and foreign shipping companies. As far as crewing agencies are concerned, for instance, mutual trust and long-term cooperation with foreign shipping companies will help to attract, recruit and retain more Chinese seafarers to develop longer-term bonds with shipping companies. The same applies to individual foreign shipping companies, which treat Chinese seafarers as an important asset, and working together with Chinese crewing agencies to provide career development opportunities, good income and attractive welfare packages, leading to an increase in their retention for longer-term service.

The empirical evidence of this report was collected using a mixed-methods approach that consisted of in-depth interviews ( $n = 12$ ) with international ship managers, Chinese crewing agents and crew members, and a questionnaire survey of active seafarers ( $n = 318$ ). The core research findings and conclusions can be summarised as follows:

- 1) Almost 70 percent of respondents expressed feeling some form of a bond with the shipping companies, of which 60 percent claimed that they already possessed a "feeling of belonging to the company" and the remaining 40 percent indicated desiring to achieve such a feeling.
- 2) A statistically significant relationship was found between this bond and the retention of Chinese seafarers to foreign shipping companies. Furthermore, respondents who signed

longer-term contracts with crewing agencies tended to indicate higher levels of bond. We also found the following factors related to bond: education and multinational crewing experience. However, highly mobilised "free seamen" were not necessarily poorly bonded due to many factors involved below.

- 3) There are many factors that influence the formation of the bond with foreign shipping companies. First, it appears related to motivation as an "exported seafarer": those with a "career-oriented" outlook indicated significantly higher bonding than those driven by "making money". Second, bonded seafarers paid greater attention to shipping companies' safety culture and management system compared with others who prioritised ship conditions and salary. Third, the investment of the shipping company in training contributes to bonding in two respects: internship opportunities via multinational crewing pattern, and shore-based training opportunities during the period of their vocation. Finally, it could be helpful to enhance bonding if shipping companies pay more attention to Chinese seafarers' welfare (e.g. food onboard) and families.
- 4) Different shipping companies appear to have distinct strategies or approaches to investment in Chinese seafarers. Western companies (UK or European) pay greater attention to formal training courses (both multinational crewing internships and land-based training), while Chinese companies (e.g. Hong Kong, Singapore and Taiwan) may be better at social and emotional investment (inputs). Both approaches, in our view, complement each other. Additionally, 61.9 percent of respondents were concerned that "lack of trust in Chinese seafarers". This is an important constraint for shipping companies when it comes to better use and development of Chinese crews with the aim of longer-term cooperation. This factor appears more important than other factors, such as "low wage strategy" and "cultural differences".
- 5) Evidence shows that bond with foreign shipping companies has a positive impact on the career development of Chinese seafarers at both an individual and group level. First, bonded seafarers report significantly higher levels of satisfaction with their seafaring career. Second, the proportion of those planning to leave the seafaring profession is significantly lower for seafarers bonded with their shipping company. Third, bonded seafarers tended to be cautiously supportive in consultations about the future of an exporting seafarer career, which was in contrast to the more negative attitudes of those indicating weaker bonds. Fourth, bonded seafarers tended to be significantly more optimistic about the future growth of the Chinese exporting seafarer industry.
- 6) Bond with shipping company appears to be an important indicator that reflects Chinese seafarers in terms of maturity, self-esteem, confidence, and integration into the global seafaring community. This can be illustrated from the confirmation of respondents about the improvement of their performances in international shipping in past five years. Furthermore, 37.8 percent of respondents were optimistic about the growth in the supply of Chinese seafarers, which was greater than those who held a pessimistic attitude. In addition, the majority of respondents called for more government-led intervention in promoting seafaring careers and protecting legal rights and interests in the global labour market.

The report concludes with a number of policy recommendations for key stakeholders, including international shipping companies, Chinese crewing agencies, Chinese-exported seafarers, seafarer education and training institutes, Chinese government and international organisations.



## 1. Introduction

The globalisation and rise of China in the 21<sup>st</sup> century is inseparable from the contributions of Chinese seafarers - including those who are exported. According to the latest *China Seafarer Development Report 2019* (MoC, 2020), the total number of registered seafarers nationwide is 1,659,188, of which 575,823 service international merchant fleets. This represents an annual increase of 5.3 and 5.5 percent, respectively. Among these figures, the number of exported seafarers who service foreign shipping companies was 137,569 in 2019; an increase of 6.5 percent annually, or 16.6 percent compared with 2015 figures.

The exportation of seafarers first developed in the late 1970s. These seafarers were pioneers in China "going global", making an important contribution to the country's opening policy in the past and now represent an important aspect of the "One Belt One Road" Initiative. Since the end of the first decade of the 21<sup>st</sup> Century, the Chinese government has issued a strategy of strengthening the nation in terms of seafarer supply, both in quantity - its share in the global seafaring labour market (especially the supply of officers) - and quality - meeting the needs of foreign shipping companies and better integration into the international seafaring community. According to BIMCO (Baltic and International Maritime Council) and ICS (International Chamber of Shipping) Manpower Report 2015, China has become the top seafaring supply county in the world, followed by Philippines, Indonesia, Russia and the Ukraine, and plays a vital role in fulfilling the shortage of officers in the global seafaring labour market (BIMCO 2015).

The potential of Chinese seafarer supplies for international shipping is far from over, taking into account its huge reserve of human resources and rich resources in maritime education and training (MET) institutes. Nevertheless, China currently faces a challenge demonstrated by shortages in the supply of junior officers. According to the *China Seafarer Development Report 2019*, though the enrolment of new students in MET institutes nationwide has increased by 26.1 percent from 14,960 in 2015 to 18,864 in 2019, the supply of 3<sup>rd</sup> officers and 3<sup>rd</sup> engineers (junior officers) for the global labour market has decreased by 26.5 and 25.4 percent, respectively, in 2019 (MoC, 2020). An important factor appears to be declining interest amongst this cohort of MET graduates in working onboard ships. According to statistics from the top ten MET universities and colleges in China, the average embarkation rate of graduates has declined from 36.5 percent in 2017 to 28.0 percent in 2019 and from 31.0 percent to 26.3 percent within the top four MET universities during the same period (MoC, 2020).

The shortage of junior officers for international shipping in recent years may reflect some fundamental issues in the Chinese seafarer exporting system, for which there are a number of explanations. These include a decline in the wage gap between shore-based jobs and seafarers, leading to diminished attractiveness of exported seafarers; deficiency of English competency among Chinese graduates; and institutional barriers that do not allow foreign shipping companies to directly recruit Chinese seafarers. However, we argue that such explanations ignore an important fact that shipping companies are not homogeneous in how they treat Chinese crews, leading to differences in retention rates and levels of appreciation from Chinese seafarers.

This report does not intend to provide a comprehensive and in-depth analysis on why and how to release the potential of Chinese seafarers in order to cope with the shortage of officers in international fleets. Instead, we focus on mutual trust, respect and long-term collaboration between ship companies and Chinese crews, and the impacts on both the career development of Chinese seafarers, and the retention of those commitments and highly skilled seafarers in foreign shipping companies. In particular, this report draws attention to the phenomenon of bonding between Chinese-exported seafarers and international shipping companies to reveal their recognition, psychological status and intention to follow a seafaring career and provide long-term service to trusted shipping companies.



This report aims to address the following questions: 1) What are the features and underlying factors of the bond between Chinese-exported seafarers and international shipping companies? 2) How does this bond relate to other attributes, such as motivation and satisfaction? 3) How does the bond influence seafaring careers, needs and perceptions of the future for Chinese seafarers working in international shipping?

The following report consists of seven sections: Section 2 briefly introduces the evolution of the exporting system for Chinese seafarers and its influence on their bond with foreign shipping companies. Section 3 describes the research design and methodology adopted for the field research. Section 4 provides profiles of the respondents to the questionnaire survey, associated with their motivation and satisfaction as an exporting seafarer. Section 5 focuses on the concept, measurement and distribution of bonding. Section 6 analyses the relationship between exported seafarers and shipping companies with a focus on bonding, while Section 7 reveals the impact on their personal career development plans, as well as their views on the performance, trends and future of Chinese exporting seafarers. Section 8 summarises the research findings, main conclusions and policy recommendations.

## **2. Evolution of the Chinese seafarer exporting system and bonding**

The Chinese seafarer resource system has undergone a significant transition as part of the reform of the national oceangoing shipping system. Before its transformation four decades ago, almost all of the Chinese seafarers belonged to three state-owned shipping companies: China Ocean Shipping Company (COSCO) for international routes, China Shipping Company (China Shipping) for coastal transport, and China Yangtze Shipping Company for inland water transport. There was no mobility of seafarers between shipping companies, and seafarers and ship managers belonged to the same employer. As permanent employees of state-owned enterprise (SOE), Chinese seafarers typically possessed a strong sense of belonging to the company.

Since the 1990s, the Chinese shipping industry has been transformed, with the monopoly and segmentation of the shipping market by the three aforementioned SOE organisations dismantled, and the emergence of a large number of private shipping companies. This development is associated with the emergence of the Chinese seafaring labour market and a group of "free seamen" who are highly mobile across shipping companies. Whereas once, Chinese seafarers would dedicate themselves to working for a single shipping company, the freedom to determine movement within the market is likely to have had a profound impact on the sense of belonging.

Running parallel to the reformation of China's ocean-going industry was the emergence of Chinese-exported seafarers. On June 25, 1979, COSCO and the Japanese Shipping Company signed an agreement to hire 29 Chinese seafarers to work on the company's ship: the pioneering group of Chinese seafarers working for foreign shipping companies. From 1979 to 1993, Chinese-exported seafarers were mainly sent by COSCO and by China Shipping. Although working for foreign shipping companies, they were, nevertheless still employees of the SOE shipping companies, and classed as "low-wage" but "high-welfare" (such as house allocation, retirement pension, vacation pay, free medical care, and many benefits to family members). Due to differences between SOE and foreign shipping companies in terms of wages, management and value systems, there has been a transition among SOE-exported seafarers in terms of their sense of belonging: some have kept their identity unchanged to stay as SOE employees, while others become "free seamen."

Since 1993, Chinese exporting seafarer affairs had been placed under the management of the Ministry of Commerce (formerly the Ministry of Foreign Economic Relations and Trade). Independent from SOE shipping companies, a number of seafarer intermediate companies were

established by SOE international economic and trade companies in coastal areas, leading to the establishment of a Chinese seafaring labour market for international shipping.

In addition to the formal SEO companies involved in seafarer exporting, a number of informal private crew brokers have developed in major seaport cities to search for and recruit qualified seafarers for legally licensed companies. This, of course, enables the brokers to earn intermediary fees from placing the exporting seafarers and has resulted in the co-existence of three types of Chinese seafarers for foreign shipping companies (Wu, et al. 2007): SOE employees, "Crew agency seafarers" who sign long-term contracts with crewing agencies, and "free seamen" who sign short-term embarkation contracts with crew agencies to work solely for foreign ship companies.

Since 2000, there has been a marked rise of private crewing agencies registered for seafarer exporting business. The process has further accelerated following the Ministry of Communications takeover of the administration and regulation of Chinese exporting seafarer system in 2010. This has resulted in an increase of 56 crew agencies in 2007 to 242 in 2019, and 133,326 exporting seafarers (person/time) in 2015 to 155,449 in 2019 (MoC, 2020).

The role of crewing agencies in Chinese seafarers' bond with international shipping companies may vary greatly, depending upon the construction of the "triangular relationship" between the crewing agency, shipping company and the seafarers themselves. With regards to the crewing agency, the established long-term mutual trust and stable strategic cooperation with foreign shipping companies facilitates the discovery and subsequent training of exported seafarers who are expected to develop a bond and longer-term services with the shipping companies. Crewing agencies that do not develop mutual trust with the shipping companies or focus primarily upon making profits in the short-term are more likely to negatively affect the bond of Chinese seafarers to shipping companies, causing them to change crewing agencies or end their seafaring career prematurely.

The role of shipping companies also varies in how they develop bonding in Chinese crews. A committed foreign shipping company that treats Chinese exporting seafarers as an important asset, works with Chinese crewing agencies, provides various training courses, career development opportunities, good income and welfare packages seems likely to retain them for longer service. In contrast, shipping companies may find it difficult to attract and retain Chinese crews if they feature any of the following aspects: poor ship conditions, insufficient maintenance costs, low wages and poor welfare, inattention to training course provision, no promotion opportunities, and so on. In the last decade, foreign shipping companies appear to be paying increasing attention to the retention of Chinese seafarers for longer-term service. Such claims are to be verified in Section 7 of this report.

### **3. Research design and fieldwork methodology**

The inspiration for this report can be traced back to 2006, when the authors attended the first Shengzhen International Maritime Forum, organised under the theme: "How to develop quality seafarers to meet the increasing demand in the global labour markets" (Wu, 2006). Accordingly, the first author of this report spent 73 days in the Winter of 2006-07 onboard two international merchant vessels with Chinese crews (a Bulk Carrier with Singapore Flag, a Chemical Tanker with Norwegian Flag) to learn about their attitudes, stories, and opinions on seafaring careers, as well as their perceptions and comments on the relationship with the shipping company (Sampson and Wu, 2007). To understand the latest developments amongst Chinese seafarers and the relationship with crewing agencies and foreign shipping companies, field research was undertaken in China between 2017 and 2018 using a combination of quantitative and qualitative methods.

The qualitative research took place in Beijing, Shanghai and Dalian in the summer of 2017 for two weeks. It involved a series of visits to two crew agencies (one state-owned and one private)

and three representatives of shipping company offices (Japanese, Hong Kong, and other Asia respectively) to: 1) observe and communicate with official Chinese crews who were preparing their voyage on board ships; 2) conduct interviews with staff and Chinese crews to learn the processes and challenging issues related to the theme of this project; 3) develop and test hypotheses related to career development of Chinese seafarers onboard foreign ships; 4) explore the access to and pathways for the dissemination of questionnaires to Chinese crews as a later phase of the research. With a broad theme of career development and constraints upon Chinese seafarers, representatives from foreign shipping companies, crewing agencies and Chinese seafarers were asked to offer their opinions, comments and explanations in one-hour unstructured interviews. In total, 12 interviews were conducted, of which three were with active seafarers (one cadet and two senior officers). The remaining eight interviews involved shipping company representatives and crewing agency managers, of which one was a non-Chinese Captain working in a Chinese crewing agency responsible for training in English language and competence assessment.

The transcription and analysis of the 12 interviews led to the emergence of a common theme of interest and the subsequent focus of this report: the bond between Chinese seafarers and foreign shipping companies, and a draft questionnaire to examine this. A pilot survey was conducted in a foreign shipping company involving 80 Chinese crews. Based upon the preliminary analysis and assessment on the results from the pilot survey, a further amendment was made to examine the mobility experience of the seafarers and elaborate on factors related to their selection of foreign companies. After this amendment, the finalised questionnaire was disseminated through crewing agencies across China.

To avoid sampling bias, the following criteria were applied in disseminating and selecting valid questionnaires: 1) Whenever possible, comprehensive coverage of international fleets from Western, Chinese (e.g. Hong Kong, Singapore and Taiwan) and other Asian locations (e.g. Japan, South Korea and India) was attempted; 2) The sample included different types of Chinese crewing agencies in terms of ownership (state vs. private), geographic location (north and south China), and size (large: > 4000, medium: 1000 - 4000, small: < 1000 in terms of Chinese crews); 3) The sample included all types of Chinese crews in relation to employment status (i.e. SOE employees, agent seafarers with long contracts, and “free seamen”) and rank (senior, junior officers and ratings, referring to unskilled/semi-skilled crews working in the deck or engine room); 4) The sample included active seafarers onboard or on-leave; 5) The sample included no more than 20 respondents for each fleet or medium crewing agencies.

Adhering to the above criteria, the finalised questionnaires were disseminated between August and October 2018 via a range of channels, including shipping companies, crewing agencies and training courses attended by officers on leave. After a process of validity checking against the quality of the questionnaire and taking into account the principles above, a total of 318 questionnaires were included in the dataset for further analysis and presentation in this report. In terms of data analysis, coding and recoding were adopted in relation to 1) Independent Variables: attachment, motivation as an exporting seafarer and career satisfaction; 2) Dependent Variables: plan for ending seafaring career and preference to get a shore-based job, advice for consultation on a seafaring career; criterion for the selection of foreign shipping companies, perceptions to Chinese exporting seafarers’ performances, trends, and policy suggestions, preference to multinational crewing patterns; 3) Control Variables: age, education, region of origin, length of seafaring career and exporting, mobility and multi-cultural crewing experience.

A key strength of this project is the mixed methods (quantitative and qualitative) approach adopted in the design and implementation of the research, leading to a wide coverage and balanced account of exporting seafarers in terms of employment status, crewing agencies and international fleets from Western, Chinese and other Asian cultural backgrounds. Nevertheless, we do not claim that the sample included in our survey can represent the full distribution of Chinese exporting seafarers, and acknowledge elements of sample bias, including: a relative overemphasis in the

sample of seafarers from coastal regions, and less attention paid to SOE companies: an important source of Chinese exporting seafarers.

#### 4. Overview: Demographic profiles, mobility and career perspective

This section provides an overview of the seafarers included in the sample, in terms of demographics (age, region, education), professional status (rank, seafaring and exporting length), employment status, mobility experience, and levels of motivation and satisfaction as exporting seafarers.

The mean age of respondents in the sample was 35.3 years old, of which 78.5 percent from the coastal region, 17.3 percent from the middle region and only 4.2 percent from the western region. At the time of the survey, 74.6 percent of respondents were married, and 70.5 percent of their parents are rural hukou holders, leaving the rest as urban hukou. Furthermore, 19 percent held a university degree, 47.6 percent had vocational education, leaving one-third (33.3 percent) who completed middle school education (mainly senior high school). In term of rank distribution, senior and junior officers were similar in size, sharing 62 percent, leaving the rest (38 percent) as ratings. The average length of seafaring career and their servicing as exported seafarers were 10.9 years and 7.5 years, respectively. Table 1 provides a summary of the sample of the seafarers' profiles:

**Table 1: Profiles of sample seafarers by age, education, rank, seafaring and exporting length (years)**

Age	%	Education	%	Rank	%	Seafaring	%	Exporting	%
<30	30.8	University	19.0	Senior	31.8	<=5	31.0	<=5	46.3
30-39	30.2	Vocation	47.6	Junior	30.2	6-10	28.2	6-10	31.5
>=40	38.1	M School	33.3	Ratings	38.1	>10	40.8	>10	22.2

With regards to employment status (defined as long term contract signed with SOE shipping company or crewing agency), Table 2 shows that 44.4 percent define themselves as “free seaman”, the largest group among respondents, followed by those from crew agencies (38.9 percent) and SOE companies (16.7 percent). The average age of respondents from crew agencies was 31.8 years old; the youngest group compared with 38.3 years old of free seamen, intermediated by seafarers from SEO companies at 35.8 years old. With regards to the length of current employment status, on average, those from SOE companies reported 11.1 years, those from crewing agencies 6.8 years, while free seamen reported 8.8 years. It is noted that free seamen represent 52.5 percent of senior officers and ratings, while seafarers depending on crewing agencies represent nearly 60 percent of the junior officers.

**Table 2: Seafarers' age, duration and distribution by employment status and rank (years, %)**

Category	No.	%	Age	Duration	Senior	Junior	Ratings
SOE company	52	16.7	35.8	11.1	21.2	15.2	14.2
Crew agency	121	38.9	31.8	6.8	26.3	<b>59.8</b>	33.1
Free seamen	138	44.4	38.3	8.8	<b>52.5</b>	25.0	<b>52.5</b>
Total/Mean	311	100	35.4	8.4	100	100	100

Note: bold is to highlight.

For mobility experience, the respondents can be distinguished from two interwoven respects: movement between foreign ship companies, and movement between crew agencies. Table 3 shows 48.2 percent of the respondents had kept their job in their current ship company (“one only” category),

which was slightly higher than those in the same category in the current crewing agency (53.4 percent). The mobility rate, however, varied significantly, depending upon the employment status and the rank. For instance, seafarers from SOE companies and crewing agencies are more likely to be sent by the same crew agency (around three-quarters) and also stay in the same foreign company vessels (over 50 percent). By contrast, only 38 percent of free seamen stay in one shipping company and more than 70 percent experienced moving between two or more crewing agencies. Furthermore, senior officers reported higher mobility, as only 30 percent of the former stay in the same shipping company, 25 percent lower than other ranks. It is noted that junior officers were more likely to stay in one crewing agency (over 70 percent) in order to develop their seafaring career.

**Table 3: Mobility of respondents across ship company and crew agency (%)**

Category	Ship company			Crew agent		
	One only	2 to 3	>3	One only	2 to 3	>3
SOE company	<b>51.3</b>	25.6	23.1	<b>77.1</b>	14.3	8.6
Crew agency	<b>57.4</b>	32.4	10.2	<b>74.6</b>	20.2	5.3
Free seamen	38.0	36.1	<b>25.9</b>	28.2	<b>54.0</b>	17.7
Senior officer	30.1	33.7	<b>36.1</b>	37.9	43.7	<b>28.4</b>
Junior officer	<b>55.1</b>	35.9	9.0	<b>71.1</b>	26.5	2.4
Rating	<b>56.6</b>	30.3	13.1	52.3	35.8	11.9
Mean	48.2	32.9	18.8	53.4	35.5	11.1

We paid special attention to respondent comments regarding satisfaction with their seafaring career. As show in Table 4, 43.8 percent reported being satisfied or very satisfied with it; a result similar to those who took a neutral position (42.9 percent, including those “hard to say”). This left around one-seventh (13.4 percent) dissatisfied or disappointed with their seafaring careers.

**Table 4: Satisfaction with the seafaring career**

	No	%	Cum. %
Very satisfied	15	4.8	4.8
Satisfied	123	39.0	43.8
Neutral	112	35.6	79.4
Dissatisfied	32	10.2	89.5
Very dissatisfied	10	3.2	92.7
Hard to say	23	7.3	100.0
Total	315	100.0	

There is no statistically significant relationship found between level of satisfaction and individual factors such as age, education, rank, employment status, marriage status, length of seafaring career and service as exported seafarers. However, an exception was identified regarding mobility experience, for which half of the respondents from both no mobility (once only) and high mobility (>3 times) groups were satisfied with the seafaring career, a number 15 percent higher than those from the medium mobility (2 to 3 times) group.

With regards to motivations underpinning the decision to become exporting seafarers rather than serving the national fleet, Table 5 indicates that 57 percent of respondents opted for “making money”, while “career development” and “seafarer dream” shared the remaining proportion of 43 percent.

Similar to satisfaction with seafaring career, no significant differences were found between motivation and factors such as age, education, rank, employment status, marriage status, seafaring length and the length of service as exporting seafarers. However, motivation was significantly related to satisfaction with seafaring career as shown in Table 5. Specifically, seafarers from a career-oriented group (including career development and dreams of becoming a seafarer) tended to express greater satisfaction with a seafaring career than those motivated by “making money”.

The correlation analysis further supported this by indicating that respondents reporting lower levels of satisfaction with their seafaring career tended to also report their main motivation as being money focused ( $r = -.21$ ,  $p < .001$ ). Indeed, satisfaction was reported as being significantly greater for respondents who were motivated by career compared to making money [ $F(1, 266) = 12.51$ ,  $p < .001$ ]. Broken down further, both career development and seafaring dreams produced significantly greater satisfaction with the career compared to making money, though not between each other [ $F(2, 265) = 6.49$ ,  $p < .01$ ].

**Table 5: Career satisfaction by motivation for exporting seafarers**

Motivation	No	%	Dissatisfied	Neutral	Satisfied
Making money	166	57.2	15.2	48.5	36.4
Career development	63	21.7	3.2	33.3	<b>63.5</b>
Seafaring dream	61	21.0	11.5	36.1	<b>52.5</b>
Total/Mean	290	100	13.4	42.9	43.8

From the cultural perspective of shipping companies, we categorise respondents into three groups according to their current working or experience servicing shipping companies in the past: Western (e.g. UK, EU), Chinese (e.g. ship owner from Hong Kong, Singapore and Taiwan) or Other Asia (e.g. Japan, India). Table 6 shows that over half of the respondents are currently working on or have experience working for Chinese background shipping companies, double the amount working for other Asian or Western shipping companies. It is worth noting that the total number of respondents here is greater than the total number of samples (i.e.  $n = 318$ ) because respondents were able to select multiple choices in relation to their mobility experience. In terms of experience of working within multicultural environments (via multinational crewing patterns), Table 6 shows that two-thirds of respondents either have or have had experience working with multinational crews. Such experience varied with companies they served, from 84 percent serving in Western companies, 73.9 percent in Chinese to 66.3 percent in other Asian shipping companies. Again, multicultural experience by each type of shipping company is higher than the mean of the total because respondents were able to select multiple options. This, however, should not influence the order between companies in terms of multinational crewing opportunities.

**Table 6: Background of ship company and multinational crew experience**

Ship company	Distribution		Multinational experience? ( % )	
	No.	%	No	Yes
Western	85	26.7	15.7	<b>84.3</b>
Chinese	178	56.0	26.1	<b>73.9</b>
Other Asian	89	28.0	33.7	66.3
Total/mean	352	110.7	37.7	62.3

One important research finding that emerged from the comparison of career satisfaction between shipping companies is shown in Table 7. Based on the data obtained, approximately 60 percent of



respondents who worked onboard western shipping companies were satisfied with their seafaring careers, which presents a number 20 percent greater than their counterparts working in companies from other parts of the world. Univariate analysis confirms that respondents with Western shipping experience reported significantly increased satisfaction with their careers compared to those without [ $F(1, 307) = 4.66, p < .05$ ]. In contrast, neither Chinese nor other Asian shipping experience was found to have a significant effect on career satisfaction.

**Table 7: Contrast of seafaring career satisfaction by ship company**

Western company?	Dissatisfied	Neutral	Satisfied
Yes	8.4	32.5	59.0
No	15.1	46.6	38.4
Mean	13.3	42.9	43.8

## 5. Bonding of Chinese seafarers: Definition, classification and characteristics

Having presented the background and profiles of the respondents in the sample, this section defines the concept of *bond*, through both qualitative and quantitative data, followed by the classification and characterisation of the different groups.

The term *bond* in this report is used to refer to the psychological phenomenon amongst Chinese-exported seafarers, who want to share their personal identity with, or are willing to become, a member of foreign shipping companies that they are serving, despite there being no direct, formal employment contract between them. Under the current regulation system in China, no labour market is open to foreign employers directly, so they have to go through the channel of intermediary labour brokers to search, recruit and sign both employment and boarding (voyage) contracts with foreign companies. In the case of exported seafarers, labour brokers are those licensing to Chinese crew agencies (other sectors involve Chinese labour exporting include, among others, nurses and air crews).

Despite the complicated and triangular relationship described above, bonding was a common topic of interest mentioned by shipping company representatives, Chinese crewing agents and seafarers. The following is a quote reflecting the concept of bonding among Chinese crews:

"To be honest, I don't think that my belonging to a foreign shipping company is strong at moment along I desire to be recognized by a company as its employee for a long-term service.

[*Could you say that you belong to this manning agent?*]

Not sure because it provides the expatriate services only.

[*could you say that you belong to your current ship company?*],

Of course not. It is not good at all for a seafarer who doesn't have a feeling of belonging to. I wish to become an employee of a foreign shipping company eventually not just in name but also in welfare and pay package" (Mr. Wang, 1st officer)

The desire to be a member of a shipping company is not merely for the purpose of a long term service, but involves shared values with a shipping company as shown by the quote below:

"In fact, I was treated well in the previous company in terms of pay and promotion, but I didn't have the feeling of belonging to. This is because the way the company run was totally based upon commercial principles. As a senior officer, however, I am concerned about the safety of the ship and crews, and also have a long-term perspective of our seafaring career in the company. In

contrast, the current ship company with a long history has a good reputation in international shipping. What you can see is honesty, seriousness and high standards, which makes me feel just like a member of the company. This was reason why I decided to move from that company to the current one". (Chief Engineer Cheng)

The above quote suggests that shipping companies may have different approaches to the bond of Chinese seafarers. This is expressed by the two contrasting opinions:

"we want to keep seafarers to continue to work with us so that we keep their 'heart' (commitment and loyalty) with us. If their 'heart' is not here, never put them onboard, not only because it involves the safety of hundreds of millions of US Dollars of assets, but also the safety of over 20 lives and their families." (Capt. L, a Japanese shipping company representative)

"In fact, foreign shipowners avoid talking about the issue of the 'feeling of belonging', because they are unwilling to give Chinese crews a promise of long-term employment. For this reason, the shipowner's strategy is to transfer the risk to Chinese crew agencies". (Capt. W, a private crew agency manager)

Nonetheless, it is possible to identify a trend with shipping companies paying increasing attention to the bond of Chinese seafarers, which the quote from a shipping company representative exemplifies:

"There is a close correlation between appreciation and accountability among Chinese crews. There are two types of responsibility: one comes from the shipping company and crew members have no choice but follow (required behaviour), another comes from seafarer's initiative (voluntary behaviour), who are willing to do something for the company. In recent years, there is an increase of people holding the second attitudes. Our company has begun to pay attention to develop their belonging and appreciation among Chinese crews, in particular these key persons [i.e. top 4: captain, chief engineer, first officer, 2nd engineer]".

A number of conclusions can be drawn from the above quotes. First, bonding is of common interest and is now regularly debated among shipping companies, Chinese agents and crews showing that different people may have different approaches. Second, attachment is also related to the motivation and working attitudes of Chinese seafarers onboard, which can be seemingly be divided into two groups: a long-term perspective of "career-oriented" and a shorter-term perspective of "making money". Third, bonding offers an effective means for us to recognise and distinguish exporting seafarers into different groups according to their attitudes, perceptions and psychological attributes in relation to the relationship with foreign shipping companies.

To measure this bond, we provided five options to the survey question, "do you feel that you are an actual member of a shipping company despite having no formal employment contract signed with it?" : 1) yes, I feel, 2) yes, I wish, 3) I am not sure, 4) I don't think so, 5) difficult to say.

Table 8 shows that 41.3 percent confirm that, while 27.1 percent wish to have such feeling. As a result, we can classify 68.4 percent of respondents as falling into the category of "**bonded**", nearly one in five (19.7 percent) in **neutral** (including "not sure" and "difficult to say" responses) and the remaining (11.9 percent) in **detached** ("don't think so"). The majority (two-thirds) of exported seafarers in our survey reported a bond with shipping companies, although to some extent.

**Table 8: Do you feel that you are a member of ship company?**

	No	%	Cum. %
Yes, I feel	128	41.3	41.3
Yes, I wish	84	27.1	68.4
Not sure	45	14.5	82.9
Don't think so	37	11.9	94.8
Difficult to say	16	5.2	100
Total	310	100	

Table 9 presents the characteristics of the different groups in relation to the bond and the significant differences between respondents in terms of education, employment status, mobility and multicultural crewing experience, and cultural background of the shipping company.

**Table 9: Distribution of attachment by relevant factors**

Factor	Item	Detached	Neutral	Bonded
Mobility: shipping company	One only	8.1	14.6	<b>77.2</b>
	2-3 times	17.4	23.3	59.3
	>3 times	8.0	18.0	<b>74.0</b>
Mobility: crewing agent	One only	8.8	16.2	<b>75.0</b>
	2-3 times	14.3	27.6	58.2
	>3 times	12.9	6.5	<b>80.6</b>
Employ status	SOE employee	13.7	23.5	62.7
	Agent seafarer	6.8	16.1	<b>77.1</b>
	Free seaman	16.4	20.9	62.7
Education	University	16.9	11.9	71.2
	Vocational	6.8	18.9	<b>74.3</b>
	M school	16.8	25.7	57.4
Multination experience	Yes	10.6	14.8	<b>74.6</b>
	No	12.5	26.8	60.7
Culture of ship company	Chinese	7.9	18.1	<b>74.0</b>
	Non-Chinese	17.3	21.8	60.9
Total		11.9	19.7	68.4

Note: bold is to highlight

A number of observations can be drawn from Table 9. First, bonding is related to the retention rate, which is indicated from the finding that 77.2 percent of the respondents without mobility experience (one shipping company only) fell into the category of the *bonded* group, nearly 20 percent higher than those who had mobility experience of 2 or 3 shipping companies. However, the reverse was not true, as nearly three-quarters of highly mobilised seafarers (>3 times) reported considerable levels of attachment. Indeed, the correlation analysis indicates that greater reported attachment was significantly related to lower mobility with shipping companies [( $r = .13$ ,  $p < .05$ )], though the relationship was not statistically significant for the mobility among crewing agents [( $r = .11$ ,  $p = .08$ ).]

Secondly, bonding was also closely related to the partnership between shipping companies and crewing agencies with regards to the following observations:

- 1) over three-quarters (77.1 percent) of agent seafarers fell into the *bonded* group, 15 percent higher than their counterparts from SOE seafarers and free seamen;
- 2) three-quarters of respondents who reported a stable relationship with the crewing agency (i.e. one agency only) fell into the *bonded* groups, a percentage much higher than the

average of 68.4 percent. Post-hoc analysis of variance indicated that free seamen reported significantly lower attachment compared to agent employees ( $p < .001$ ) but not SOE employees ( $p = .33$ ), with employment status a significant factor determining level of attachment [ $F(2, 300) = 5.83, p < .01$ ].

Thirdly, those with experience of high mobility among shipping companies and crewing agencies, did not necessary fall into the *neutral* or *detached* groups. Rather, such experience provides opportunities for them to compare differences between shipping companies or crewing agencies, and then “settle-down” and develop their bond with their current shipping company. The findings of our survey shown in Table 10 support this claim, as over three-quarters and over 80 percent of high mobile respondents fell into bonded group.

Fourthly, in relation to factors underpinning bonding, Table 9 shows that: 1) the number of graduates from universities (71.2 percent) and vocational institutes (74.3 percent) in particular reported greater bonding than those from secondary education (57.4 percent). Post-hoc analysis of variance indicated that respondents with school level education reported significantly weaker bonding compared to those with vocational qualifications ( $p < .001$ ) but not those with university education ( $p = .08$ ). Overall, education level is a significant factor in determining the level of bond [ $F(2, 305) = 5.64, p < .01$ ; 2)]. Multicultural working experience could also contribute to bonding as three-quarters of respondents were in the bonded group, nearly 15 percent higher than those without such experience; 3) among shipping companies, respondents from Chinese cultural background companies were also 15 percent higher than their counterparts working for Western or other Asian shipping companies. Univariate analysis confirms that respondents with Chinese shipping experience reported significantly greater bonding to their employer compared to those without,  $F(1, 302) = 10.35, p < .001$ . In contrast, respondents with other Asian shipping experience reported significantly weaker bonding with their shipping companies compared to those without,  $F(1, 302) = 6.40, p < .01$ , while Western shipping experience was found to have a significant effect on bonding. Finally, there was no significant correlation between bonding and age, rank, region of home, marriage status, length of seafaring and service as exported seafarers.

Table 10 confirms the relationship between bonding, motivation and career satisfaction, respectively. Compared to around two-thirds of the respondents motivated by making money and unsatisfied groups falling into *bonded* (yes) group, these figures increase to three-quarters or above in relation to career-oriented and satisfied groups.

**Table 10: Distribution attached seafarers by motivation and satisfaction**

Bond	Motivation		Satisfaction		Total
	Money	Career	No	Yes	
Yes	62.2	<b>78.5</b>	64.6	<b>74.4</b>	68.4
No	37.8	<b>21.5</b>	35.4	<b>25.6</b>	31.6
Total	100	100	100	100	100

Note: No in bond column includes neutral and detached groups.

Bringing together Tables 5 and 10, we can draw the following conclusions:

- 1) More than two-thirds of the respondents report a bond with shipping companies despite having different motivations as exported seafarers;
- 2) Comparing with other groups, career-oriented seafarers are more likely to fall into such a group who are bonded to their shipping company and satisfied with their seafaring career;
- 3) The bond of Chinese seafarers varies with the shipping companies, crewing agencies, and the relationship between the two. It is more likely that bonding is a process towards mutual trust, interaction and co-construction between seafarers, crewing agents and shipping

managers, leading to a relationship between bonding and satisfaction with career development.

## 6. Needs, perceptions and comments on shipping companies

The differences among Chinese seafarers can be understood from three interwoven dimensions: career satisfaction, motivation and attachment. With a focus on the relationship between exported seafarers and shipping companies, this section examines the needs, perceptions and comments between different groups in order to identify key factors influencing seafaring careers.

Through multiple choice responses in relation to factors influencing their selection of foreign shipping company, Table 11 shows the range of common needs and priorities for seafarers. Good conditions of the vessel was ranked top by 85.5 percent of the respondents, followed by a comprehensive management system (78.9 percent) and safety culture (78.6 percent), whilst decent salary was ranked in 4<sup>th</sup> place (71.7 percent). It is worth noting that over two-thirds of the respondents expressed concern about the attention paid by the shipping company to their families, job security, food and welfare onboard, ranked from 5<sup>th</sup> to 7<sup>th</sup> respectively. Career development factors including promotion and training opportunities were of concern to 60.4 percent and 52.5 percent of the respondents, respectively, and just over a half paid attention to the ship type and route. Interestingly, enterprise culture and communication factor were listed at the end, mentioned by a little more than one-third of the respondents (34.9 percent).

Distinctive needs among the respondents can be revealed from the different groups in terms of motivation, bonding and satisfaction. The bolded cells in Table 11 are used to suggest that differences are confirmed by statistical testing. Subsequently, a number of observations can be drawn:

First, differences between groups can be identified from different priorities in their needs. For instance, safety culture was listed as top priority by those motivated by career development, bonding and satisfaction, which is in contrast to their counterparts who favoured good conditions of the ship as the most important.

Second, in addition to safety culture, differences between exported seafarers can be recognised from other characteristics listed in Table 11. For instance, differences in motivation are likely related to varying emphases placed on vessel conditions and food/welfare onboard, while 'loyal seafarers' typically placed more emphasis upon the management system, seafarer families and job security and less to ship type and voyage route. It seems that career satisfaction is more related to the desire for a decent wage, taking care of seafarers' families, job security, as well as training opportunities ashore together with the enterprise culture.



**Table 11: Factors for selecting ship company by loyalty, career satisfaction and motivation**

No.	Item	No.	%	Motivation		Bonding		Satisfaction	
				Money	Career	No	Yes	No	Yes
1	Vessel	272	85.5	<b>91.6</b>	<b>77.4</b>	86.7	85.4	86.4	85.5
2	Manage	251	78.9	80.1	82.3	<b>68.4</b>	<b>84.9</b>	76.3	83.3
3	<b>Safe</b>	250	78.6	<b>75.3</b>	<b>84.7</b>	<b>65.3</b>	<b>85.4</b>	<b>74.0</b>	<b>85.5</b>
4	Wage	228	71.7	74.7	70.2	67.3	75.5	<b>67.2</b>	<b>79.0</b>
5	Family	219	68.9	68.7	71.8	<b>62.2</b>	<b>73.6</b>	<b>65.5</b>	<b>74.6</b>
6	Job sec	216	67.9	68.1	69.4	<b>58.2</b>	<b>73.1</b>	<b>62.7</b>	<b>76.1</b>
7	Food	215	67.6	<b>75.9</b>	<b>58.9</b>	68.4	67.9	67.8	68.8
8	Promotion	192	60.4	59.6	62.9	62.2	60.8	58.2	64.5
9	Training	167	52.5	50.6	56.5	51.0	53.8	<b>48.0</b>	<b>59.4</b>
10	Ship type/route	162	50.9	52.4	50.8	<b>61.2</b>	<b>46.2</b>	48.6	53.6
11	Culture	111	34.9	31.9	39.5	32.7	36.3	<b>28.2</b>	<b>43.5</b>

Notes: bold as pass significant test.

The vast majority (85.8 percent) of the respondents reported attending at least one of shore training courses. Table 12 shows, however, that bonded seafarers reported more chances to attend training courses than others. The same applies to 'career-oriented' seafarers when compared to their money-driven counterparts. With respect to differences between shipping companies in terms of investment on seafarer training, a small difference is noted in the number of the respondents who had yet to receive training (1.6 percent more respondents without Western shipping experience reported receiving no training compared to those with the experience). However, no significant impact of Western shipping experience is found on training opportunities, despite descriptive indications that those with Western shipping experience are more likely to encounter multiple training opportunities than those without. It is noted that satisfied seafarers, who place more emphasis on training opportunities in Table 11, do not appear in Table 12 due to findings of no statistical significance.

**Table 12: Did you get training opportunities provided by current shipping company?**

Category	Item	Not yet	Yes, once	Yes, many
Bonding	Yes	14.5	17.4	68.1
	No	13.5	33.3	53.1
Motivation	Career	14.8	16.4	68.9
	Money	14.6	26.8	58.6
West company?	Yes	13.1	13.1	73.8
	No	14.7	26.7	58.7
Total		14.2	23.0	62.8

With respect to which shore-based training courses are helpful, Table 13 shows that safety and technical training are ranked top (78 percent) and second (61 percent), respectively, followed by environmental protection, management systems, international regulation, and enterprise culture. While there was no significant difference between seafarers in terms of safety and technical training, those characterised by career development motivation, bonding and satisfaction were likely to place more emphasis or appreciation on courses covering content such as environment protection, management systems, international regulations and enterprise culture.



**Table 13: Which training course do you feel useful/helpful? (%)**

No.	Content	No.	%	Motivation		Bonding		Satisfaction	
				Money	Career	No	Yes	No	Yes
1	Safety	248	78.0	78.3	79.0	79.6	77.8	78.0	79.0
2	Technic skills	194	61.0	57.8	66.9	56.1	64.2	58.2	65.2
3	Environmental protection	145	45.6	42.2	51.6	40.8	47.6	<b>39.5</b>	<b>53.6</b>
4	Management system	121	38.1	<b>30.1</b>	<b>47.6</b>	<b>28.6</b>	<b>42.9</b>	36.2	40.6
5	International regulations	108	34.0	<b>25.3</b>	<b>46.0</b>	<b>24.5</b>	<b>38.7</b>	<b>26.2</b>	<b>44.2</b>
6	Enterprise culture	66	20.8	<b>16.9</b>	<b>29.0</b>	<b>12.2</b>	<b>25.0</b>	<b>14.1</b>	<b>29.7</b>

Notes: bold as to indicate statistical significance.

It is also important to pay attention to the perceptions and comments of the respondents in relation to barriers against effective communication, interaction and collaboration between Chinese seafarers and shipping companies. In practice, questions were raised in the survey from two angles: seafarers themselves and shipping companies, respectively. For the former, respondents were asked to offer comments on constraints to their career development while working onboard foreign ships; for the latter, they were asked to pinpoint which factors impeded shipping companies in better using Chinese crews.

Through multiple choice, the results of the respondents are presented in Table 14. Table 14 shows that approximately 80 percent of the respondents were concerned regarding the English competencies of seafarers, while lacking trust of the Chinese seafarers was the top issue as expressed by the respondents of the shipping companies. Comparing the top issues, other matters such as obedience and low wage strategy were perceived as less important, which can be seen from the share of the weight in responses. It is worth noting that no significant difference is found between different groups except two facts on shipping companies: unsatisfied seafarers seemingly pay more attention to low wage strategy (37.9 percent), being 13.3 percent higher than satisfied seafarers, while career-oriental seafarers put emphasise on the enterprise culture (37.9 percent), 12 percent higher than the “making money” group.

**Table 14: Barriers facing Chinese seafarers and shipping company to get a close collaboration**

Seafarers	No.	%	Weight (%)	Shipping company	No.	%	Weight (%)
English	252	79.2	50.4	Trust matter	197	61.9	39.5
Obedience	87	27.4	17.4	Low wage	102	32.1	20.4
Nation policy	80	25.2	16.0	Culture matter	97	30.5	19.4
Teamwork	64	20.1	12.8	Training invest	53	16.7	10.6
Others	17	25.2	3.4	Short view	50	15.7	10.0
Total	500	157	100		499	156.9	100

## 7. Views on seafaring careers, performance, and future in international shipping

From the perspective of attachment, this section examines different views on seafaring careers, performance and the future of exported seafarers in international shipping. In relation to seafaring careers, the following questions were asked in the survey: 1) Do you have a plan to end your seafaring career? 2) If so, when may it happen? 3) What is your next job ashore? 4) If someone ashore consulted you in the future of seafaring career, what would be your advice? The responses are summarised in Table 15.

**Table 15: Respondent's personal plan and advice regarding seafaring careers**

Question	Item	No	%
Do you have a plan to end your seafaring career?	Yes	224	73.7
	No	80	26.3
If yes, when are you going to leave?	<3 years	59	24.2
	3-5 years	90	36.9
	5-10 years	66	27.0
	>10 years	29	11.9
If leave, what is your preference for your next job?	Seafaring relevant	63	20.1
	Maritime relevant	82	26.2
	Any relevant job	135	43.1
	Hard to say now	33	10.5
Your attitude for advising seafaring career	Positive	40	12.7
	Neutral	120	38.1
	Negative	51	16.2
	Depending	104	33.0

A number of observations can be drawn from the results presented in Table 15. First, 73.7 percent of the respondents confirmed a plan to end their seafaring career, of which 61 percent suggest a time frame of 5 years, 27 percent within 5-10 years, leaving the remainder (11.9 percent) over 10 years. Second, regardless of when they plan to leave, one-fifth gave their preference to seafaring-relevant jobs, such as seafaring education and training, crewing agency and so on; 26.2 percent will look to say in the maritime sector, while 43.1 percent indicated a move to any suitable job, which not limited to the maritime sector. Third, a relatively small proportion of the respondents gave a clear indication regarding their position when consulted for the seafaring career, which accounts for less than 30 percent, leaving the majority of over 70 percent to 'neutral' or 'depending' responses.

A correlation analysis of the relationship between satisfaction of seafaring career and intention to end this aforementioned career showed a significant negative relationship ( $r = -.23$ ,  $p < .001$ ). This indicates that as expected, the more dissatisfied respondents reported themselves as being, the more likely they were to intend on ending their seafaring career. Similarly, there was a significant negative relationship with when they would end their career also ( $r = -.23$ ,  $p < .001$ ), indicating that the greater the respondents were dissatisfied, the sooner they intended leaving.

Further to differences of the respondents to above questions, Table 16 shows that those who indicated a bond and greater career satisfaction were significantly less likely than their counterparts in other groups to intend on ending their seafaring career. This suggests, therefore, that bonding and career satisfaction are related to intentions to leave the seafaring profession.

**Table 16: End of seafaring career by attachment and satisfaction (%)**

Category	Item	Yes	No
Career satisfaction	Satisfied	63.4	36.4
	Neutral	79.1	20.9
	Dissatisfied	88.1	11.9
Attachment to company	Bonded	71.4	28.6
	Neutral	77.6	22.4
	Detached	88.2	11.8
Total		73.7	26.3

When it comes to the decision to move to a shore-based job, different approaches can be identified from the factors listed in Table 17. Seafarers from inland China (i.e. middle and west), single, senior officers, satisfied and bonded seafarers in particular were more likely to prefer a job in the maritime sector. By contrast, seafarers from the east coastal region, married, with secondary education, rating, and those under the groups ‘career dissatisfaction’ and ‘making money’ were skewed to wanting any suitable job rather than being bonded to the maritime sector. Interestingly it was possible to identify those with preferences somewhere between seafaring-relevant and any job. Those with university degrees, holding a senior rank, career-oriented and satisfied seafarers appear to have more chance of staying in the maritime sector. No significant association was found between bonding and selection of the next job, as expected.

**Table 17: Next job by selected factor (%)**

Factors	Item	No.	Seafaring	Maritime	Any one
Region of home	East	199	20.6	28.9	<b>50.8</b>
	Middle	41	<b>29.3</b>	29.3	41.5
	West	8	<b>75.0</b>	12.5	12.5
Marriage	Yes	202	19.3	26.7	<b>54.0</b>
	No	67	<b>32.8</b>	34.3	32.8
Education	University	52	21.2	<b>55.8</b>	23.1
	Vocational	137	25.5	29.2	45.3
	M. Schooling	88	19.3	14.8	<b>65.9</b>
Rank	Senior	92	<b>26.1</b>	<b>39.1</b>	34.8
	Junior	87	19.5	31.0	49.4
	Rating	101	21.8	18.8	<b>59.4</b>
Career satisfaction	Satisfied	119	<b>32.8</b>	<b>35.3</b>	31.9
	Neutral	124	17.7	23.4	58.9
	Dissatisfied	35	5.7	31.4	<b>62.9</b>
Motivation	Money	148	15.5	22.3	<b>62.2</b>
	Career	51	<b>41.2</b>	<b>41.2</b>	17.6
	Dream	55	25.5	<b>41.8</b>	32.7
Total			22.5	29.3	48.2

Note: bold is to highlight

Bearing in mind that the majority of the respondents indicated a neutral position when it came to the future of the seafaring career, Table 18 shows that positive encouragement is more likely found amongst those satisfied with a seafaring career or the career-oriented group, as expected. Remarkably, negative advice is more likely to come from respondents who were aged older (> = 40

years), had more seafaring experience (> 10 years), had greater career dissatisfaction, were more motivated by “making money” and reported no bonding with their seafaring company.

**Table 18: Advising for seafaring career by selected factor (%)**

Category	Item	No.	Negative	Neutral	Positive
Age band	< 30 years	97	8.2	78.4	13.4
	30-39 years	112	16.1	72.3	11.6
	>=40 years	106	<b>23.6</b>	63.2	13.2
Seafaring length	<=5 years	97	9.3	73.2	17.5
	6-10 years	89	10.1	80.9	9.0
	>10 years	127	<b>26.0</b>	62.2	11.8
Career satisfaction	Satisfied	137	4.4	72.3	<b>23.4</b>
	Neutral	134	17.9	76.9	5.2
	Dissatisfied	42	<b>47.6</b>	52.4	0
Motivation	Money	164	<b>22.0</b>	68.9	9.1
	Career	63	1.6	77.8	<b>20.6</b>
	Dream	61	8.2	73.8	<b>18.0</b>
Bonding	Bonded	210	11.9	73.8	14.3
	Not	61	<b>26.2</b>	67.2	6.6
	Detached	37	<b>24.3</b>	64.9	10.8
Total			16.2	71.1	12.7

Moving from the personal to the collective level, we asked respondents to offer their comments on performance and the trends of Chinese exported seafarers in the past five years. Table 19 outlines key issues concerned as reported by shipping companies and crewing managers. Generally, respondents offered positive but cautious assessments on the performance of Chinese seafarers, which can be seen from the comments divided between “good” and “so-so”. By contrast, the vast majority of the respondents confirmed the progress made by Chinese seafarers in the past five years in all of the items. It seems that significant improvements have been identified in relation to safety awareness, environmental protection and near miss reporting in particular, although the majority of the respondents selected so-so or poor on current performance.

**Table 19: Comments on performance and trends of Chinese crews**

Item	Performance (%)			Trend (last 5 years, %)		
	Poor	So-so	Good	Decline	Unchanged	Better
Safety awareness	0.7	56.5	42.9	3.6	14.1	<b>82.3</b>
Environment protection	4.3	49.7	46.0	2.4	17.8	<b>79.8</b>
International regulations	1.3	41.0	<b>57.7</b>	2.4	18.7	<b>78.9</b>
Working attitude	2.4	42.3	<b>55.2</b>	8.6	28.8	62.6
Innovativeness	3.7	50.3	45.9	4.1	34.6	61.4
Hierarchy system	4.4	50.5	45.1	6.5	30.6	62.9
Near missing report	4.5	61.7	<b>33.8</b>	2.1	24.6	<b>73.3</b>
Teamwork	4.2	50.8	46.8	3.7	24.2	72.1
Share knowledge	3.1	46.4	50.5	2.9	26.9	70.2

Note: bold is to highlight

Given the importance of multicultural experience for the career development of Chinese seafarers, we asked the respondents to indicate their preferences in relation to multinational crewing patterns, with specific reference to all Chinese, mixed, or neutral. For a mixed or neutral choice, participants were asked which nationality of seafarers they preferred to work with. Generally, 43.3 percent

selected “all Chinese”, 21.4 percent for “neutral”, 35.4 percent for “mixed”. Among those who select “neutral” or “mixed”, 66.7 percent gave their preference as Europeans, 47 percent to Filipinos, 16 percent to Indians, and 31 percent to others.

Regarding differences between groups in relation to multinational crewing patterns, Table 20 shows the variations by selected factors: age, education, seafaring length, rank, employment status, mobility experience, career satisfaction, attachments, and others. It seems that the preference for multinational crewing patterns are more likely found among those who are younger (<30 years old) and with less seafaring experience (<5 years), university graduates, junior officers, crew agency seafarers, having past multinational working experience as well as those whose are currently working in Western or Chinese-background shipping companies. It is also clear that the preference for the all-Chinese crewing patterns was most related to those who were older (> = 40 years old), with greater seafaring experience (> 10 years), had a secondary education, were senior officers and ratings, were SOE employees and free seamen, were highly mobile and reported being no bonded, as well as those who didn’t already possess a multicultural working experience.

**Table 20: Preference of multinational crewing pattern by selected factors**

Category	Item	No.	All Chinese	Neutral	Mixed
Age band	< 30 years	84	25.0	33.3	<b>41.7</b>
	30-39 years	91	47.3	16.5	36.3
	>=40 years	79	<b>58.2</b>	13.9	27.8
Education	University	56	28.6	21.4	<b>50.0</b>
	Vocational	121	40.5	19.8	39.7
	M. School	75	<b>57.3</b>	24.0	18.7
Seafaring length	<=5 years	86	32.6	25.6	<b>41.9</b>
	6-10 years	74	40.5	20.3	39.2
	>10 years	92	<b>55.4</b>	17.4	27.4
Rank	Senior officer	86	<b>53.5</b>	15.1	31.4
	Junior officer	80	22.5	23.8	<b>53.8</b>
	Rating	88	<b>52.3</b>	25.0	22.7
Employment status	SOE	40	<b>52.5</b>	10.0	37.5
	Crewing agent	94	26.6	25.5	<b>47.9</b>
	Freeman	114	<b>55.3</b>	20.0	24.6
Mobility: crew agent	One only	122	32.0	23.0	<b>45.1</b>
	2-3 times	73	49.3	17.8	32.9
	>3 times	21	<b>57.1</b>	19.0	23.8
Career satisfaction	Yes	114	46.5	14.0	39.5
	No	139	41.0	27.3	31.7
Bonding	Bonded	168	36.9	21.4	<b>41.7</b>
	Not bonded	81	<b>53.1</b>	22.2	24.7
Multinational crewing	Yes	148	31.8	19.6	<b>48.6</b>
	No	97	<b>57.7</b>	24.7	17.5
Ship manager	Wester	71	33.8	12.7	<b>53.5</b>
	Chinese	120	35.0	23.3	<b>41.7</b>
	Other Asian	77	46.8	23.4	29.9
Total		254	43.3	21.3	35.4

From the perspective of the shipping company, whether seafarers and cadets have multinational working opportunities appears largely dependent upon a trade-off between crew career development and manning cost. This is explained as follows:

"Comparing with the multinational crewing pattern for Chinese crews, many crewing agencies prefer a whole Chinese crewing pattern for two reasons: easier for management and more profits.

For the purpose of seafaring career development, a multinational crewing pattern would be more beneficial to Chinese seafarers, but the shipping company may also give their preference to whole Chinese crews in order to reduce the manning costs." (Capt. D, a Hong Kong ship owner representative)

With respect to the future of Chinese seafarer supply to international shipping, respondents were asked to offer their comments on the trend: growth, neutral or a decline. Generally, 37.8 percent shared positive views of growth, 31.5 percent negative views of decline, leaving 30.7 percent as neutral. As shown in Table 21, different groups held distinct views on the future of Chinese exporting seafarers. The positive view was more likely to come from those in the middle age bracket (30-39 years old), junior officers, and career-oriented, satisfied and attached seafarers, while negative prediction was more likely to be expressed by older ( $\geq 40$  years), senior officers and seafarers reporting an absence of bond.

**Table 21: What is your prediction on the trend of Chinese exporting seafarers**

Category	Item	No.	Decline	Neutral	Growth
Age band	< 30 years	74	21.6	37.8	40.5
	30-39 years	88	26.1	27.3	<b>46.6</b>
	$\geq 40$ years	92	<b>44.6</b>	28.3	27.3
Rank	Senior officer	87	<b>43.7</b>	23.0	33.3
	Junior officer	72	26.4	31.9	<b>41.7</b>
	Rating	95	24.2	36.8	38.9
Motivation	Career	104	21.2	27.9	<b>51.0</b>
	Money	130	36.2	33.1	30.8
Career satisfaction	Yes	118	22.0	33.9	<b>44.1</b>
	No	135	39.3	28.1	32.6
Bonding	Yes	177	25.4	31.6	<b>42.9</b>
	No	75	<b>45.3</b>	29.3	25.3
Total		254	31.5	30.7	37.8

For the promotion of Chinese exporting seafarers in international shipping, respondents were asked to offer their comments on the potential measurements for improvement, including: governmental intervention, collaboration with ITF, regulating shipping companies and crewing agencies, opening the seafaring labour market to foreign shipping companies. Table 22 presents the results and differences among groups. Over two-thirds of the respondents called for more governmental intervention, followed by more regulation on crewing agencies. It is noted that 47.8 percent of the respondents called for collaboration with ITF, ranked as third. Table 23 also highlights significant differences between groups in some items. For instance, the governmental intervention was emphasised more by bonded seafarers but less by satisfied ones who instead preferred collaboration with the ITF. Furthermore, 46 percent of career-oriented and 42.8 percent of satisfied seafarers called for enhancing regulation on ship companies, compared with around 30 percent of seafarers who report dissatisfaction and no attachment to their shipping companies.

**Table 22: Measures to improve and enhance career development of exporting seafarers**

No.	Item	No.	%	Motivation		Bonding		Satisfaction	
				Money	Career	No	Yes	No	Yes
	Gov. intervene	213	67.0	65.7	69.4	<b>60.2</b>	<b>70.3</b>	<b>71.8</b>	<b>62.3</b>
	Crew agent	175	55.0	56.6	54.8	50.0	58.0	55.4	55.8
	ITF union	152	47.8	47.6	53.2	42.9	51.4	<b>42.9</b>	<b>55.1</b>
	Market opening	123	38.7	34.3	46.8	32.7	42.0	35.0	43.5
	Shipping company	112	35.2	<b>30.1</b>	<b>46.0</b>	30.6	37.3	<b>29.9</b>	<b>42.8</b>

Notes: bold as statistically significant findings.



## 8. Research findings, conclusions and policy recommendations

This report looked at the bond of Chinese exported seafarers to international shipping companies and the impact on their career development. Based on interviews and a questionnaire survey, this report draws upon the data analysis to identify features of bonding and the factors underpinning it; the relationship between bonding and other attributes, such as motivation and career satisfaction; the impact on seafaring career individually, as well as performance and trends collectively. Accordingly, a number of research findings and conclusions are highlighted, as follows.

First, the majority of the respondents demonstrated some type of bond with the shipping companies. This can be shown as 68.4 percent reported feeling being a member, or desiring to be a member, of foreign shipping companies. For Chinese seafarers, the bond is referred to as a relationship with shipping companies involving mutual trust, respect and long-term service. Nearly 20 percent (more precisely, 19.7 percent) were neutral in their responses (some of them even uncertain) and the remaining (11.9 percent) did not identify as sharing any bond.

Second, bonding cannot be narrowly understood as an economic matter. Instead, it reflects the need to recognise, consent or integrate into management systems, safety culture, and values of the shipping company workers are serving. It also reflects the seafarers' desire for the shipping companies to respect and appreciate their contributions, and to promote career development and recognise the difficulties that their families face (especially with respect to family emergencies), so that they can provide longer term service. Different degrees of bonding were identified: 60 percent of the seafarers demonstrated "feeling like a member of the company", while 40 percent expressed their desire to "have such a feeling".

Third, it is confirmed that there is a relationship between bonding and the retention of Chinese crews: 77.2 percent of bonded respondents have been in long-term service with the same company; a value nearly 10 percent higher than the average of long-term servicing respondents. Furthermore, the respondents who signed onto long-term contracts with crewing agencies were 15 percent more likely to indicate a bond. Furthermore, we identified the following factors related to bond, including: education (vocational education in particular), multinational crewing experience, and cultural background of the shipping company (Chinese companies from Hong Kong, Singapore and Taiwan). However, highly mobile "free seamen" did not necessarily report weaker bonding. This finding is exemplified by the chief engineer in Section 5, who indicated having to leave to find a suitable shipping company to which he could share the same value or identity.

Fourth, our survey shows that bonding is closely related to motivation and satisfaction of the seafarers with their career. More than 40 percent of the respondents identified themselves as being career-oriented (including a view of exported seafarers being as "a good platform for career development" or as an "ideal platform to achieve their seafarers' dreams"), leaving the rest (57.2 percent) to the "making money" group. More than 40 percent (43.8 percent) of the respondents were "satisfied" or "very satisfied" with their seafaring careers, with a similar amount neutral, leaving the remaining (13.3 percent) to "dissatisfied" or "disappointed". Furthermore, nearly 80 percent of the respondents satisfied with their seafaring career fell into the bonded category, a value significantly higher when comparing with those motivated by "making money" (62.2 percent). Similarly, the respondents who reported being satisfied were also significantly more likely to report being bonded than others (74.4 percent vs. 64.4 percent). Nonetheless, three categories (bonding, motivation and satisfaction) were not only highly overlapping in distribution, but also shared similar views or answers to specific questions in the questionnaire.

Fifth, the formation of bond and factors underpinning it can be further explored through the criteria in their preferences for selecting shipping companies. The survey results showed that 71.7

percent of the respondents were concerned about a "decent wage", which was ranked at 4<sup>th</sup> behind the conditions of the ship, the management system and the safety culture of the individual shipping companies. More than two-thirds paid attention to whether the shipping companies looked at "taking care about crew families", "job security" and "food and welfare onboard", ranking 5<sup>th</sup> to 7<sup>th</sup> respectively. The key difference between bonded and detached exported seafarers was the order or priority given to the factors above. For example, the former prioritised safety culture while the latter did so with the "ship condition". In addition, bonded seafarers paid less attention to "food welfare" than their detached counterparts.

Sixth, from the view of the respondents, the formation and development of bonding was closely related to the attitudes, strategies and training investment of the shipping companies in relation to Chinese crews. For instance, more than 60 percent of the respondents believed that "lack of trust in Chinese seafarers" was the primary factor hindering the better use of Chinese seafarers, much higher than "low wage strategy" and "cultural differences". However, a vast majority (85 percent) of the respondents attended one or more training courses provided by the shipping companies during the period of their shore-based leave, and confirmed their attendance and appreciation for the contents varying from highest (78 percent) to lowest (20.8 percent): safety, technological skills, environmental protection, management systems, international conventions and corporate culture. It was confirmed that training courses and investment had a significant effect on the bonding of Chinese crews. For example, bonded respondents reported more opportunities to attend training courses, especially those related to management systems, interventions and company culture. In addition, Western companies were significantly more favourable in terms of providing training opportunities, with a higher return of career satisfaction than their counterparts (i.e. Chinese or other Asian culture background companies).

Seventh, under the existing seafarer exporting system, the long-term cooperation between foreign shipping companies and Chinese crewing agencies was crucial in facilitating bonding which can be seen from two aspects: a) crewing agencies can recruit and manage Chinese crews on behalf of the shipping companies, a solid foundation for the formation and development of bonded seafarers. This can be illustrated by over-three quarters of "crewing agency seafarers" (i.e. signed long-term contract with crewing agencies) falling into bonded seafarers; b) the crewing agencies can serve as a channel for those highly skilled and bonded "free seamen" to access and service in partnership companies. The latter is mainly reflected in the fact that seafarers with high mobility were not necessarily people reporting weaker bonds, but indeed might be serving on a suitable shipping company for long-term service.

Eighth, bonding has an impact not only on personal seafaring careers but also on social contacts (e.g. relatives, friends, classmates, etc.). With regards to the former, bonded seafarers were more likely to have either not planned the end of their seafaring career or planned to leave within five-to-ten years. This was in contrast to those with no bond, who intended to leave within five to ten years. Additionally, more than 40 percent of the bonded respondents preferred to work within a multinational crewing pattern, compared with nearly 60 percent of the respondents reporting no bond, who gave their preference to work within an all-Chinese crewing pattern. When consulted about following an exported seafarer career, bonded seafarers appeared to be cautiously supportive of the career path, contrary to those without bonds.

Ninth, when examining the perceptions and comments on the performance and trends of Chinese exported seafarers in international shipping, the respondents confirmed the progress that has been made in the past five years by Chinese seafarers in terms of safety awareness, environmental protection, and implementation of international conventions. Meanwhile, they recognised that there were still some gaps to overcome (e.g. the need to address near miss reports). With respect to the future of Chinese exported seafarers, nearly 40 percent of respondents were optimistic, with the bonded respondents expressing this optimism significantly more than detached

counterparts. In addition, the majority of the respondents called for greater governmental intervention to promote seafaring careers and to protect their legal rights and interests in the global labour market.

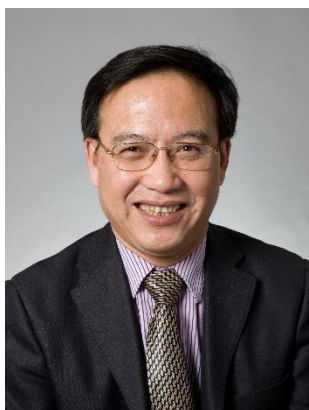
Based upon the preceding research findings, we would like to offer the following policy recommendations to key stakeholders:

- 1) Foreign shipping companies: bonding is an important element of the company's competitiveness so it is advisable to establish a partnership with Chinese crews to which the following actions may be helpful:
  - A space to be provided for the career development of Chinese crews: career planning, multinational crewing patterns for cadets, shore-based opportunities for excellent seafarers;
  - A humanised environment for frequent communication (information formally and emotional informally), taking care of their families in many ways, including allowing spouses of senior officers to be on board, and allowing early disembarking in case of family emergencies;
  - Sharing identity with the company via various training courses on enterprise culture, branding, career development, as well as incentives in honour (spiritual) and bonus (material);
  - Decent payment and bonuses: ensuring scheduled pay and, if possible, reward funds for good performance in safety hazard management, Flag State inspections, Port State Control inspections (PSC), other external inspections as well as other special contributions (e.g. discoveries of technological deficient with potential safety risks or solutions leading to the significant reduction of the company maintenance costs);
  - Set up a special fund or loan programme in China for those outstanding young people, who are interested in seafaring career but have financial constraints from their families, to take and complete maritime education and training courses. This would be a good opportunity not only for sponsored people to develop their attachment to the company, but also for the latter to establish the company's brand image in China.
- 2) Chinese crewing agencies: bonding should become one of the important missions as it is a key element for both competitiveness in the exported labour market and long-term cooperation with committed shipping companies. The following actions may be helpful:
  - Long-term cooperation with ship companies prompting mutual trust and commitment to Chinese seafarers, and ensure strict implementation of contacts/agreements in terms of recruitment, training and boarding arrangement for Chinese crews;
  - Joint effort with shipping companies to search, recruit, maintain and cultivate career-oriented seafarers to develop their skills, commitment and attachment to shipping companies via various channels and opportunities;
  - Best service and support to Chinese crews (both long-term contact holders and free seamen) to develop attachment and cope with the difficulties facing their families;
  - Mutual support from each other between crew agencies, and jointly reject vicious competition at the expense of the decline of Chinese seafarers' attachment.
- 3) Chinese exported seafarers: it is necessary to develop a concept or awareness that bonding with foreign ship companies is not only an important part of professionalism in international shipping but also key for them to improve their image and competitiveness in the global market:
  - Making an effort to create a favourable atmosphere for bonding among exported seafarers;
  - Making an effort to integrate into shipping companies, and attend activities and training courses provided by the company, protecting/promoting the company brand by providing excellent service onboard;
  - Taking the initiative to communicate with shipping companies directly to reflect voices, opinions and requests of Chinese crews, and to ensure their legitimate rights, interests and need to be heard and respected.

- 4) Maritime education and training institutes: bonding should be added as a core element in the curricula; ensure that lecturers, and guest lecturers, share the values and approach of bonding; exchange and promote attachment with academic and professional communication with MET institutes abroad; encourage joint courses with foreign shipping companies.
- 5) Chinese government: bonding should become a part of the governmental strategy to develop seafarer supply to international shipping, in both quantitative and qualitative terms, and also a part of its “Belt and Road Initiative” for better integration into international community seafarers. Accordingly, we recommend:
- Encouraging foreign shipping companies to increase training investment on Chinese seafarers;
  - Further opening the seafaring labour market to attract shipping companies to recruit Chinese crews;
  - Select and award good practices among shipping companies in terms of attachment;
  - Encourage and award Chinese seafarers who have good performance in promoting and maintaining bonds with shipping companies as an international image and brand in relation to Chinese seafarers
  - Encourage foreign shipping companies to establish a special funding or loan programme to help those who are committed to, or dream of pursuing a seafaring career to overcome financial constraints from maritime education and training.
- 6) International organisations (ILO, IMO, ICS, ITF, etc.): it is recommended that the bond of seafarers to shipping companies should be listed as a theme of the International Seafarers’ Day in order to promote mutual trust, respect, and long term collaboration between shipping companies and seafarers, together with blacklisting of those shipping companies who treat seafarers badly (e.g. delayed payment); the most important factor impeding the development of bonding among Chinese exported seafarers.



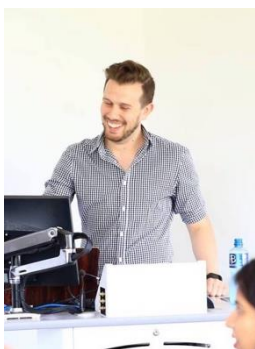
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