

**PROCEEDINGS OF
SIRC'S THIRD SYMPOSIUM**

Cardiff University

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The arguments and views expressed in these papers are the authors’ and not necessarily those of either the Seafarers International Research Centre or Cardiff University.

Introduction

Since the last symposium (2001) the Seafarers International Research Centre (SIRC) has progressively developed its diverse and innovative programme of work relating to seafarers and to issues of welfare, health, and safety.

In 2001, symposium papers were presented on offshore fatigue, mixed nationality crews, a global labour market survey of seafarers, and an international 'Flag State' audit. This year staff will present the findings of research into port-state control, the employment of women seafarers, international seafarer training, a comparative analysis of perceptions of work focussing on seafarers aboard maritime car carriers, and studies of seafarers in the Philippines and China.

In presenting this research, papers included in the 2003 symposium touch upon important issues of governance and regulation, occupational health and safety, gender and employment, and the recruitment and retention of international seafarers. All papers are geared towards an industry-based audience and include policy recommendations where appropriate. It is hoped that they will provide useful information to the maritime community and stimulate debate, perhaps culminating in the adaptation or affirmation of local, national, and international policy.

As always, SIRC collectively owes a debt of gratitude to funders, collaborators, and research participants. We hope they, and others, conclude that our endeavours over the last two years have produced research findings of interest and use and we welcome feedback on the symposium and specifically on the papers included here.

Welcome to Cardiff University and the third international SIRC symposium. We hope you will find it useful and enjoyable!



Helen Sampson
Director

STAFF BIOGRAPHIES

DR MARAGTAS S.V. AMANTE

Post doctoral research fellow

Maragtas S.V. Amante is SIRC's Mols Sorensen Post Doctoral Research Fellow from March 2002 to February 2004. He is on leave from the University of the Philippines, in Diliman, Quezon City, where he teaches in the graduate programme on industrial relations and does research on labour studies. His research report on "Filipino global seafarers: a profile" is now being prepared for publication. He is also a contributor to a Philippine magazine on seafarers. He is now finishing a report on Philippine maritime education and training.

DR NICK BAILEY

Seafarer Researcher

Having spent a total of 12 years at sea, Nick Bailey joined SIRC as a researcher in 2002. He has a D.Phil from Oxford and is currently completing an MSc in Social Science Research Methods in the School of Social Sciences at Cardiff. Nick has played important role in several projects since joining SIRC including a project on seafarer sexual health and port-State control. He is currently working on an ITF commissioned study of seafarer compensation claims.

Recent Publications include:

Bailey, N., (2003) 'The prudent mariner takes avoiding action', *The Sea*, Issue 164 Jul/Aug: 4.

PHIL BELCHER

Seafarer Researcher

Phil is a qualified Master Mariner with a total of 10 years experience at sea. He joined SIRC in October 2000 having completed a degree in Maritime Studies at Cardiff. He is currently registered to do a PhD at SIRC focussing on collision avoidance and utilising data collected from the busy Dover Straits. Additionally he has assisted with various projects in the centre such as an Economic Review of the Maritime Industry 2001 and 2002 for the ITF, an ILO project on Women Seafarers, and a cross-national study of the reported health and safety of UK seafarers.

Recent publications include:

Belcher, P.M. (2003) Crossing the Dover Strait, an analysis of near miss encounters, *Seaways* January 16-23.

PROF MICHAEL BLOOR*Professor*

Michael has a *Personal Chair in Sociology* in the School of Social Sciences in Cardiff. He joined SIRC on a part-time basis in 1999 and became a full-time member of the team in 2001. He is currently working on projects on the 'Problems of Global Governance of Seafarers Health & Safety' the 'Sexual Health of Cruise Ship Crews', and 'Fatigue Off-Shore – Phase III'. Additionally he is about to begin work on projects relating to the EU-funded 'Maritime Transport Co-ordination Platform' and is a co-granholder and co-researcher on 'Norwegian Seafarers Industrial Injuries'.

Michael has previously worked on studies relating to fatigue, fraudulent practices associated with certificates of competency and endorsements and the prevalence of self-reported injury among seafarers

Recent Publications include:

M. Bloor (2003) 'Comportements a Risque, Conditions de Travail Dangerereuses et Culture du Lieu de Travail: la santé et la securité au travail dans l'industrie navale mondialisée', *Annales des Ponts et Chaussées Ingénieur Science Société*, 106: 23-36.

NEIL ELLIS*Research Associate*

Neil officially joined SIRC at the beginning of May 2003. However he had previously been closely connected with the centre through his work at the *Cardiff University Centre for Occupational and Health Psychology* on a Fatigue, Health and Injury Project conducted in collaboration with SIRC. Neil is currently working on the Global Labour Market Project which examines global crewing patterns using collected crew lists from port and harbour authorities world-wide. He is also working on the newly developed Fraudulent Certification Project which examines the nature and extent of fraudulent practice within seafarers certification.

Recent publications include:

Ellis, N., Allen, P., & Burke, A. (2003). The influence of noise and motion on sleep, mood and performance of seafarers. *Contemporary Ergonomics 2003*. Edited by Paul McCabe. London: Taylor & Francis, 137-142.

DR EROL KAHVECI

Senior Research Associate

Erol joined SIRC in 1997 as a Research Associate having lectured in Sociology at Bath University. He was promoted to Senior Research Associate in 1999. He worked on the Economic and Social Research Council (ESRC) and SIRC funded 'Transnational Seafarer Communities Project' between 1998 and 2001. He also worked as a project manager and researcher on the ITF Seafarers Trust funded 'Outreach Seafarers Welfare Schemes Project' between 2000 and 2002. Since February 2003 he has been working on 'Work, Organisation and Technology in the Maritime Car Industry' as a researcher. This project is jointly funded by SIRC and the ESRC.

Recent publications include

The Sailing Chaplain & Outreach Seafarers Welfare Schemes Cardiff: SIRC(2003).

PROFESSOR TONY LANE

Tony joined SIRC as Director in 1997. He has recently retired from his full-time position but continues to play an important role in both the School of Social Sciences and SIRC where his primary focus is currently on the writing-up of several years of important research. In his time at SIRC Tony has been specifically involved in research on transnational seafarer communities, the global seafarers labour market and levels of crew competency;

Recent Publications include:

Lane, A D, Obando-Rojas, B, WU, B, Tasiran, A, (2002) *Crewing the International Merchant Fleet*, London: Lloyd's Register-Fairplay Ltd, ISBN 1-901-290-271.

DR BERNARDO OBANDO ROJAS

Research Associate

Dr. Bernardo Obando Rojas has been a member of SIRC since 1996. He combines his work as deck officer with shore-based research into labour markets, training and the certification of seafarers. He is currently working on various research projects including an MCA commissioned project into fraudulent practices associated with certificates and other documents, labour markets for seafarers in Latin America and fiscal incentives for shipping. He recently completed a DFT commissioned research into setting up a database for UK non-certificated officers and ratings.

Recent publications include:

Obando Rojas, B, (2002) *'A Systems Thinking Analysis of the Erosion of the Maritime Skills Base in the UK'*, PhD thesis, Cardiff University.

DR HELEN SAMPSON*Director*

Helen joined SIRC in 1999 to work on the Transnational Communities Project with Erol Kahveci and Tony Lane. In 2002 she was appointed as Deputy Director and subsequently became the Director of SIRC in September 2003. She has done work aboard internationally trading ships with multinational crews; in India with seafarers' wives; in Germany with unemployed seafarers from Cape Verde and Ghana; in the Philippines, Singapore, and UK, on Maritime Education and Training (MET); and with employers and women seafarers in North Germany and Singapore. She is currently working with Jaime Veiga on the implementation of a Human Resource Development project funded by EU-ASEAN and directed at raising standards of research and training in METs across the globe.

Recent publications include:

Sampson H. (2003) 'Transnational Drifters or Hyperspace Dwellers: an Exploration of the lives of Filipino seafarers aboard and ashore' *Ethnic and Racial Studies* vol 26, No. 2, pp. 253-277.

DR MICHELLE THOMAS*Research Associate*

In 1999, Michelle joined SIRC as a Research Associate. She has worked on a number of studies involving both qualitative and quantitative research techniques in which she has considerable expertise. She has worked on a variety of projects including recent research on the sexual health of cruise ship crews, women seafarers, the impact of seafaring work patterns on family life and the international surveillance of seafarers' health and working environment.

Recent publications include:

Thomas, M., Sampson, H. and Zhao, M. (2003) 'Finding a balance: companies, seafarers and family life', *Maritime Policy and Management*, 30(1): 59-76.

DR JAIME VEIGA

Research Associate

Jaime joined SIRC in January 2001 having completed his PhD in the Cardiff Maritime Studies department. He is currently working on a regional study of the maritime labour market in Mexico and a cohort study of the recruitment and retention of maritime students in Portugal and Spain. He is also contributing to an EU-ASEAN Project on Human Resource Development, and is working towards developing research collaborations across Europe and developing research opportunities in the Portuguese-speaking world. He has been centrally involved in the development of the EU-funded Maritime Transport Co-ordination Platform (MTCP) 2003-2004. Additionally Jaime has worked on studies of the global supply of ratings, the employment of women seafarers, and the implementation of STCW 95 in Mexico.

Recent publications include:

Veiga, J. (2002) "Safety Culture in Shipping". *WMU Journal of Maritime Affairs*. October 2002. n. 1. pp. 17-31. ISSN:1651-436X

DR NIK WINCHESTER

Research Associate

Nik joined SIRC in 1999. He holds degrees from the London School of Economics and the University of Bristol in sociology and economics. He is currently working on various research projects which include: the politics of global regulation; the Global Labour Market Project; and, an investigation, commissioned by the MCA, into fraudulent practices associated with certificates and other documents. His publications include a number of articles on globalisation and regulation in the maritime industry and the recently published book *Flag State Audit 2003*. His research interests include, flag state regulation, global governance, international political economy and social theory.

Recent publications include

Winchester N., Alderton, T., (2003), 'Flag State Audit 2003', 600 pp., SIRC: Cardiff, ISBN: 1-900174-19-7.

DR BIN WU*Research Associate*

Bin joined SIRC as a Research Associate in 2000. He was responsible for creating, maintaining, and updating SIRC's global seafarers database (cargo and cruise sectors). In addition, he has been responsible for conducting or participating in a variety of projects, including: 'Flow of Chinese seafarers in global labour market' (2003); 'Impacts of ICT revolution on seafarers'; and 'Feasibility of Setting up a Seafarers Database for UK Non-certificated Officers and Ratings'. His research is now concentrated on the theory and application of the SIRC global seafarer database to the dynamics of the global labour market.

Recent publications include:

"Accessing the global seafaring labour market: principles and application of the SIRC seafarers database in the cruise sector" (*WMU Journal of Maritime Affairs*, 2003, Vol.2, No1).

DR MINGHUA ZHAO*Deputy Director*

Minghua joined SIRC in 1998 from the Women Studies Program in the University of Hawaii, as a Senior Research Associate to conduct research on women seafarers in the EU fleet and to develop the Centre's 'China Strategy'. She was appointed as Assistant Director of the Centre in 2000 and in July 2002 became a Deputy Director. Her current and previous work has been focussed on women seafarers, seafarers' families, political commissars in the PRC fleet, the PRC seafarer labour market, and the cruise sector.

Recent publications include:

Zhao, M. Shi, X. Feng, T., (2003), *The Political Commissar and His Shipmates aboard Chinese Merchant Ships*, Beijing: Chinese Social Sciences Archives publishing House, December.

PROBLEMS OF GLOBAL GOVERNANCE: PORT-STATE CONTROL AND ILO CONVENTIONS

Michael Bloor

INTRODUCTION

This paper is an early report of an ESRC-funded comparative study of port-state enforcement of international regulations on seafarers' health and safety. The study involves the shadowing of inspectors on their ship inspections in the UK, India and Russia, plus interviews with inspectors and key industry stakeholders in the three countries, and involves collaboration between Cardiff University, the Russian Academy of Sciences in St Petersburg, the Tata Institute of Social Sciences in Mumbai and the International Labour Office in Geneva. However, the comparative analysis will not be complete until April 2004 and this paper simply provides an early report on the UK data.

The idea for this study grew out of the attendance of Tony Lane and myself at the 29th meeting of the Joint Maritime Commission (JMC) at the ILO in Geneva in January 2001 which launched 'The Geneva Accord', the resolution to consolidate into a single convention all the various operative ILO regulations on seafaring, some of them stretching back to the inter-war period. Without in any way wishing to detract from the great worth of this task of consolidation, it was evident to me at Geneva that almost everyone attending that meeting believed that the main problems of global governance in the shipping industry lay not in inadequate regulation, but in inadequate enforcement. SIRC provided the background research papers for that Geneva meeting (ILO, 2001); it is hoped that, once the work of consolidation of the conventions is complete, the JMC may consider anew the problems of enforcement and that these findings will provide some background information to assist in this task. Certainly it is the case up to now that the practice of port-state control has received hardly any research attention, with Hawkins's (1999) interview study of practice in the Asia Pacific Region providing the only comparative data.

METHODS

Following some pilot work, the main study has involved shadowing 33 ship inspections spread over a seven month period, conducted by 12 different inspectors working in two different Marine Offices, those offices between them being responsible for around 270 port-state inspections per year. The ship inspections embraced a wide spectrum of ship types – oil tankers, product tankers, specialist and general cargo ships and bulk carriers – and were conducted in nine different ports. No principles of selection were involved in the shadowing process: I attended all the inspections occurring on the days on which I was free for fieldwork and when an inspector was free from other duties to conduct inspections. Comparison of the ‘shadowed’ ships with records of other inspections in the two offices in the same period revealed no important differences, save that detained ships (in total five) were slightly over-represented in the shadowed group. I have also shadowed a port health inspector, a Seafarers Mission worker and an ITF inspector on their ship visits. And I have conducted interviews with inspectors¹ and various key industry stakeholders with particular perspectives on port-state control – ship operators, national and international regulators, a ships agent, union officials, and a P&I club manager.

THE CASE AGAINST PORT-STATE CONTROL

Among some ship operators there is a perception that port-state control is a Frankenstein’s Monster, created by the regulatory authorities with the best of intentions but now rampaging out of control. There is a belief that port-state control has served its purpose: it is claimed that the sub-standard ships have disappeared from the major ports. Now, port-state control is viewed simply a cost-burden on operators, requiring a major effort by ship operators, agents and crew to rectify at short notice seemingly minor deficiencies in documentation and equipment, listed by inspectors but actually of little import to the safe operation of the ship or the health of seafarers. There is also a perception that the targeting system of the Paris Memorandum of Understanding on Port State Control (Paris MoU) has itself ratcheted up standards, as operators switch away from flags and class societies with high target factors³ and thus come under the influence of responsible flag-state auditors and class surveyors who

will act to improve ship safety standards (J. Hawkins 1999 has suggested a similar process of flag-change in the Asia Pacific Region). Moreover, the trend of regulation in other industries has been for inspection to concentrate increasingly on 'process' rather than 'kit': for workplaces to have to demonstrate that they have their own, company-specific, operational, safety systems in place. Applying this trend to the shipping industry would imply that inspectors should simply confine themselves to ensuring that functioning International Safety Management (ISM) systems were in place.

Nevertheless, despite these beliefs about improving standards, the fact is that sub-standard ships ARE still trading in and out of the major ports. Here is just one example out of several I documented in the course of the study. The m/v Panagia Odigitria was inspected and detained for seven days at a UK port on 17/12/02, while discharging a cargo of South African coal. This bulker was gwt 46,000, built in 1984, Greek-operated, Marshall Islands-flagged, DNV-classed, with 21 crew of six nationalities, the senior officers being Ukrainians. The ratings had not been paid since joining the ship nearly four months previously and five of them had jumped ship leaving a note of complaint saying 'this is a very bad ship'. The inspectors listed 42 deficiencies in an inspection report that ran to nine pages, including radio-equipment deficiencies, safety equipment deficiencies, deficiencies in documentation, in accommodation and in provisioning. In respect of ILO conventions, we can particularly note that there appeared to be insufficient food to get them to their next destination (Egypt), they were almost out of soap, the towels could be torn apart with one's bare hands, there was insufficient bedding and bed linen, there were broken showers, broken WCs and broken wash-hand basins; some of the crew had set up their own do-it-yourself galley in one of the crew cabins with a couple of home-made hotplates.

So sub-standard ships are still with us – ships deficient in respect of labour standards and health and safety standards, as well as deficient in terms of structure and equipment. It's possible to argue that the fact that these sub-standard ships are still coming into major ports indicates that port-state control is not operating effectively. The cost of detention, we should recall, is very considerable: one ship detained in the UK last year for 18 weeks was thought to have cost the operator at least £100,000.

These costs are such that one is forced to conclude, either that a significant percentage of ship operators have no idea how bad their ships are, or that a significant percentage of ship operators believe that the chance of deficiencies being detected by port-state inspectors is minimal. Thus, we have now a second argument about the ineffectiveness of port-state control. It is not just a Frankenstein's Monster, pursuing trivia. It's also failing in its job of eliminating sub-standard ships, since sub-standard ships like the Panagia Odigitria are still with us.

However, this claim about the ineffectiveness of port-state control, if not false, at least has to be highly qualified for two reasons. In the first place, in respect of seafarers' health and safety standards, I believe that important aspects of seafarers' health and safety are inadequately regulated. In other words, there is a regulatory deficit, not an enforcement deficit: I propose to illustrate this point later in the paper with reference to seafarer fatigue. And the second qualification to the argument about the ineffectiveness of port-State control, lies in the fact that the very evidence I'm using to illustrate the continuing existence of sub-standard shipping is itself derived from a seemingly comprehensive and successful port-state inspection. We know that SOME inspectors are detecting SOME sub-standard shipping. This implies that the detection rate for sub-standard ships needs to be higher. If we accept this argument (and I have already mentioned the qualification that the regulations themselves may be inadequate), then to what might one attribute the seemingly deficient detection rate? Three possible causes can be suggested: firstly, there may be inadequate port-state control resources; secondly, there may be inadequate targeting of those resources; and thirdly, there may be inconsistencies in inspection practice – some inspectors may be more effective than others.

RESOURCES AND TARGETING

These two issues need to be dealt with together, since effective targeting can compensate for limited resources. Port-State control is not a revenue-earner (although maritime administrations may charge for return visits to lift a detention order) and so resources are always likely to be limited. Some national maritime administrations have dedicated PSCOs (port-State control officers), while others including the UK's

Maritime & Coastguard Agency, operate a generic inspectorate in which the same pool of inspectors may act on different days as PSCOs, or flag-State auditors, or maritime examiners of seafarer candidates for various certificates of competency⁴. A generic inspectorate clearly carries advantages in terms of flexibility of response to changing conditions.

All Member States of the Paris Memorandum of Understanding on Port-State Control (that is, most of the maritime European countries – including the UK – and Canada) must undertake to inspect, per annum, a minimum 25% of foreign flagged ships visiting home ports. But France failed to hit this target, only managing to inspect 16% of foreign ships in 2002 and 10% in 2001 (Paris MoU, 2002, 2003). In a global industry, the failure of one major maritime administration to hit inspection targets will have a deleterious global impact on shipping standards.

Furthermore, all Paris MoU countries are committed to a common methodology of inspection, whereby certain ships are prioritised for inspection by being allocated a high ‘target factor’ score. Naturally, ships which had deficiencies at their last inspection will have a higher target factor. Other factors contributing to a high target factor include the ship’s flag and class: flag-states (such as Cambodia) and class societies (such as the Albanian class society) which have had poor inspection records in the past carry a higher target factor. The Paris MoU targeting system is meant to shape the behaviour of maritime administrations, of industry stakeholders, and of individual operators and crew. For the national maritime administrations, high target ships carry a load factor, relative to low target ships, so that national administrations reach their 25% target more quickly with fewer inspections, if they concentrate their inspections on high target ships: a target factor of 35 or more counts as 1.8 units, while a low target-factor ship only counts as 0.8 of a unit. For the industry, the targeting system is a transparent one: operators can see that they can reduce the Target Factor on their ships by switching away from high-scoring flags and class societies; they are also acutely aware that charterers, insurers and other industry stakeholders are aware of the operator’s port-state inspections record and will factor this into their economic decisions. As one operator remarked:

‘It’s getting through to charterers now [...]. Everybody is using EQUASIS⁵ – lawyers, charterers, P & I clubs [...]. “Name and shame” works: it’s helping to remove the sub-standard ships that are driving down the freight rates.’

For individual operators and crew, the targeting system indicates that a ship with poor record in terms of deficiencies and detentions will be frequently inspected until that record improves. This inspector deliberately generated a long list of deficiencies, in the knowledge that it would result in a high Target Factor for the ship and more frequent inspections, which in turn would require a change in crew safety behaviour:

‘[The inspector] listed eleven deficiencies [...]. But on the advice of his line manager he did not detain the ship, although a couple of deficiencies were “borderline detainable” [...]. [The inspector] had been minded to detain the ship after he encountered an antagonistic attitude from the mate and the Chief Engineer. After he asked the mate to rig up steps and rails from the stevedores loading the deck cargo, the mate said, “OK, we rig up some steps for the inspectors and the girls”. After he pointed out to the Chief Engineer that there was an exhaust leak in the confined space housing the emergency generator, the Chief refused to accept it was a hazard and, as we left, shouted “I thank Heaven you are going”. Earlier, the Chief had told me privately that he thought that inspectors were just creating jobs for themselves [...]. [The inspector] had told the master and the mate that he was disappointed that senior officers were not more safety-minded. In the car returning from the dock, he talked at length about the ship: in his time as an inspector he had never encountered such antagonism from crew before [...]. [He] said that his decision to generate a long list of deficiencies would produce a high target factor for the ship in the SIRENaC⁶ database, which would result in frequent inspections, which would force the senior officers to adopt a more safety-conscious approach.’

The principles of the targeting system are clear and I am sure would command general support across the industry. Nevertheless, I need to point briefly to a number of

difficulties. Firstly, and most obviously, no targeting system can compensate fully for inadequate resources and there will be times when even very high-target ships are not inspected simply because no inspectors are available. In the case of the Panagia Oditigria, for example, although the ship had a medium-high target factor (30), the detaining inspector said that he would not have gone to inspect the ship if there had not been a complaint from the pilot, who had reported a snapped mooring wire, a seeming poor command of English on the bridge and the poor quality of equipment on view. It is MCA policy to respond to all such complaints, but otherwise the inspector would have stayed in the office dealing with the large amount of paperwork still outstanding from a previous detention, which was only released two days previously.

Relatedly, as was pointed out by both inspectors and regulators, the 25% target for Paris MoU countries and individual Marine Offices takes insufficient account of the fact that the very worst vessels (and especially the detained vessels) require much more inspection time. At present, the system incentivizes the inspector to inspect the second worst ship in the port, not the worst. I saw no evidence that inspectors avoided inspecting obviously sub-standard ships, but this is testimony to the professionalism of the port-state control officers, not the sophistication of the targeting system.

Secondly, the operation and local use of the SIRENaC system is subject to a number of problems. Sometimes the system crashes – this happened quite frequently in the first months of 2003. Not all local Marine Office staff are eligible to operate SIRENaC: inspectors who wish to make an early start to a distant port must phone in after 9.00 to find an office colleague to select a target ship and sometimes that journey may be wasted. Misreadings of the database are not uncommon: I myself have accompanied an inspector to the ‘wrong’ m/v Vera, there being four ships of this name. There are the usual difficulties with information being incorrect or outdated: again, it is common for inspectors to board a targeted vessel only to find it has been inspected in another Paris MoU port in the last few weeks, but the data have not yet been entered into SIRENaC. To use SIRENaC, office staff must of course have information on ship movements in and out of local ports; but the smaller ports do not typically supply this information to the Marine Offices, so target selection is confined to the larger ports and visits to the smaller ports depend on occasional ‘fishing trips’ by curious inspectors or on the investigation of a complaint.

More seriously, SIRENaC is far from an infallible guide to sub-standard ships. Take the example of the Agios Athanasius, detained on 30/7/03 with 23 deficiencies. One of the Paris MoU targeting criteria loads the target factor for bulkers over 12 years old, but a clean previous inspection record kept its overall target factor low at 11. The detaining inspector commented:

‘It had been inspected ten times previously and only one deficiency had been recorded. Most of the previous inspections had been in Spain or Piraeus. The class surveyor, who was listening, gave a snort of laughter when Piraeus was mentioned. [The inspector] said he found it scarcely credible that a 20-year-old [in fact, 23-year-old] bulker could have such a low target factor. The class surveyor agreed, gesturing to the hatch-cover and the cleats, he said that this kind of kit simply wore out after 15 years or so.’

The argument here is that poor inspection practice can result in a failure to detect deficiencies, which in turn leads to a low Target Factor, which in turns leads to fewer inspections and thus to fewer opportunities to expose the ship as sub-standard. This is issue of inconsistency in inspection practice requires examination at more length.

INCONSISTENCIES IN INSPECTION PRACTICE

‘There’s ONE word you can put in [your report] for port-State control: inconsistency. Inconsistency between ports and between countries.’ [ship operator]

The experience of the inspector on the Agios Athanasius, who found himself on a substandard ship with a clean record in recent past inspections, was a common one. For example, another inspector boarded a ship following a report from the French coastguard that the ship had been drifting broken-down off Ushant; it had a target factor of only 2 and at its last port-state inspection in Spain, only two months previously, no deficiencies had been recorded:

‘[The inspector was decidedly unimpressed by the state of the ship [...]. He said that it was the second ship he’d been on recently which had multiple serious deficiencies, but had a low target factor and had a clean bill of health at its previous recent inspection (with the previous inspection in Denmark).’

That ship had fourteen deficiencies listed and only avoided detention by the inspector because it was due to enter dry dock in the next fortnight. Another ship, which *was* detained by that inspector, with twenty two deficiencies (including defects in both of the lifeboats, non-operative smoke alarms in the engine room, cockroaches in the galley and cracked windows in the crew accommodation) had last been inspected in the UK, with zero deficiencies.

Port-State control in the Paris MoU countries is a discretionary system, in contrast to the checklist approach used in some other inspection regimes, such as that of the US Coastguard and the SIRE inspectorate operated by the oil companies. The first page of the Paris MoU manual for inspectors clearly states that inspectors are required to use their professional discretion in deciding how detailed that inspection will be. An inspector, who had found no deficiencies in the inspection of one lifeboat, was asked by the master if he wanted to inspect the other lifeboat: he declined, saying that port-State inspections were ‘a sample, not a survey’.

Discretion is a ubiquitous feature of legal processes; it is the means by which systems of governance achieve flexibility and minimise oppressiveness. Discretion allows the efficient use of scarce inspection resources and can provide a ‘light touch’ approach, which minimises difficulties for responsible operators. And it is a fallacy that the contrasting checklist approach ensures consistency in practice: there are plenty of sociological studies to demonstrate that no rule can specify the occasions of its use, and that all checklist systems are subject to variable interpretation by operatives. However, as Keith Hawkins puts it in his overview of socio-legal studies writings on discretion:

‘...While the flexibility of discretion can be valuable in individualising the application of the law, its subjectivism can also be the cause of

inconsistency in decision outcomes: apparently similar cases may not be treated in the same way by decision-makers [...]. An obvious corollary [...] is that discretion can impose similar outcomes upon apparently different cases [...]. Secondly, apparent inconsistency is often cited as an example of arbitrary decision-making [...]. A third set of criticisms has to do with the power that discretion grants to officials and the scope for its abuse [...]. For those affected by decisions, discretion can lead to uncertainty and insecurity and, in some legal settings, to intrusive behaviour by officials.’ (K. Hawkins, 1992: 15-16).

None of the inspectors I observed behaved arbitrarily or intrusively. On the contrary, I thought them models of good behaviour, who frequently went out of their way to be helpful to crew and to other parties. But inconsistency between inspectors was readily observable. At one extreme, as already demonstrated, some inspectors will judge a ship to be substandard and detainable although a previous recent inspection (both in the UK and in other Paris MoU countries) has found no deficiencies at all. At the other extreme, particular inspectors were observed to engage in particular inspection practices that were not followed by any other inspectors. For example, only one inspector was routinely observed to check the temperature gauge in the meat store, and only one inspector would routinely check on whether the ship’s bell was in place. Inspectors themselves were aware that their practices differed in some respects from those of their fellows: they were perfectly aware, for example, that some inspectors were more likely than others to detain ships and to list more deficiencies. These individual differences are evident from inspection records. Over a year in one office, for example, one inspector averaged 1.4 deficiencies per inspection, while one of his colleagues averaged 8.4 deficiencies per inspection. It is clear that some inspectors are more effective than others in detecting substandard ships.

ENFORCEMENT DEFICIT OR REGULATORY DEFICIT?

Good governance is a matter of both good regulation and good enforcement. Practically everyone I have spoken to in the industry believes that the current regulatory framework for the shipping industry is pretty adequate, although the

relevant ILO Conventions are in need of consolidation, an issue currently being addressed by the Joint Maritime Commission. Indeed, it was the widespread perception that the problems of shipping industry governance lay in enforcement, rather than in inadequate regulation, which was the stimulus for starting up this study. However, I want to suggest that, in one important respect, there is a current regulatory deficit: that deficit occurs in respect of seafarer fatigue.

We know that seafarer fatigue is an important health and safety issue. McCallum et al (1996) examined 279 US Coastguard Reports to show that fatigue was a contributory factor in 16 per cent of critical vessel casualties and 33 per cent of personnel injuries. Our own Cardiff fatigue study, collecting shipboard data from 177 seafarers on seven ships in the short sea trades, showed that high fatigue scores were directly associated with poorer mental health (Smith et al. 2003). Fatigue is a multifactoral phenomenon, caused by a combination of job factors, but the single variable most strongly associated with fatigue is that of working hours (ibid.).

Since port-State inspectors lack the resources to observe ships in operation at sea, investigation of hours of work and rest must be a matter of checking the paperwork. Crew lists and crew certificates of competency were routinely inspected to ensure that the ship was in conformity with the flag-State Safe Manning document. Likewise, records of hours of work were routinely inspected and, on five of the inspected ships, inspectors listed as deficiencies the failure to record hours of work or rest of at least some section of the crew. However, it was widely recognised that these paper records were being routinely falsified:

‘I was late arriving at the ship [...], by that time [the inspector] had finished with the paperwork and had just started on the bridge. I was asked if there were any issues about the paperwork. He said he’d looked at the logged hours of work and that “the captain had been honest enough” to state that the hours of work represented what they would be paid, rather than the actual hours worked. But without documentary evidence of excess hours, there was nothing that he, as an inspector, could do about it.’

‘In his office, the captain talked straightforwardly about the ISM code. Only he and the mate could take a watch, so they naturally worked more than the maximum hours and routinely under-reported their hours.’

‘When we first sat down to look at the paperwork, the mate (who looked desperately tired) said he’d not got to sleep until 2.00 this morning. [Inspector]: “Are you complaining about the hours chief?” Mate: “No I am not *complaining*, we are just having a conversation here”. Laughter all round.’

The falsification of hours of work and rest would be less material if the relevant ILO Conventions did not permit ‘six-and-six’ watch-keeping. One inspector was incensed to discover, on enquiry to his line managers, that he could not list as a deficiency for rectification the hours of work and rest of two engineers working six-and-six watches on a Panamanian-flagged bulker without an automated engine room:

‘In that six hours, they’ve got to shower and eat – any emergency and they’d be worn out’.

As things stand, the only action open to the inspector is to write to the flag-State and ask them to revise the Safe Manning document. The Paris MoU has announced that there will be a Concentrated Inspection Campaign on hours of work and hours of rest in the autumn of 2004. But it seems likely that further enforcement effort by inspectors in this area will have little impact on seafarer fatigue until the regulations on permitted hours of work and rest are amended.

CONCLUSION

Taken as a whole, the UK port-State control officers who have kindly allowed me to accompany their inspections, and have answered my questions, are hard-working, experienced and knowledgeable professionals. They often work under difficult conditions: I have seen them offered inducements and I have seen them abused. Many of them are ex-seafarers and all of them are committed to saving and improving the

lives of present-day seafarers. However, I have shown that there are a number of problems in respect of the governance of health and safety in the shipping industry – problems of resourcing and targeting, and problems of inconsistency – although in the particular case of seafarer fatigue, it is clear that problems of governance stem primarily from a regulatory deficit, not an enforcement deficit.

Clearly, twenty years of port-State control have not succeeded in eliminating substandard ships. This is not a controversial conclusion. The latest Paris MoU Annual Report (Paris MoU, 2003) itself states:

‘Port State control results for 2002 indicate that efforts need to be enhanced to obtain a substantial reduction in the number of substandard ships visiting the region.’

The lack of success of port-state control must be understood in the context of the globalised nature of the shipping industry. Global industries pose particular problems of governance (Braithwaite and Drahos, 2000). And, as any observer of the travails of the World Trade Organisation could tell us, there are no successful models of global governance for the shipping industry to emulate. An essentially local system (and therefore a locally variable system) of enforcement will never be wholly successful in policing a globalised industry.

Nevertheless, I believe there are some grounds for optimism. Within the industry there is a perception that, while port-State control has not eliminated substandard ships, it has nevertheless made it more difficult to operate them and some operators have been encouraged to re-position themselves in the marketplace and move towards the operation of better quality ships and crews. Relatedly, it can be seen that the economic decision to save on operating costs by regulatory avoidance is quite readily reversible. It is unnecessary for a visiting substandard ship to be detected in every port. That ship need only be detected on an *occasional* basis for the operator to find that the *occasional* costs of correcting deficiencies, extra berthing charges, releasing the detention, loss of freight earnings and loss of reputation, etc, all sum to an amount which removes the economic incentive to regulatory avoidance. It may well be that

we only need a marginal improvement in the detection of substandard shipping by port-State control for market forces to signal the virtual demise of substandard ships.

NOTES

1. I am very grateful to my SIRC colleague Nick Bailey for his help in conducting five of the interviews with the inspectors.
2. Designated Person Ashore, the representative of the ship operators who responds to breakdowns in safety procedures and regulatory breaches.
3. See section on 'Resources and Targeting'.
4. Port-State, flag-State and examining duties are only the most common tasks of the inspectorate. They must also act as advisors to the industry, respond to complaints from the public and gather preliminary evidence for the Marine Accident Investigation Branch on injuries and collisions.
5. EQUASIS is a common industry database on ship safety, set up following the International Quality Shipping conference in Lisbon in 1998 and financially supported by the EC, France, UK, Spain, Singapore and the Japan.
6. SIRENaC is the Paris MoU database which can be interrogated to provide Target Factor for a visiting ship.

REFERENCES

Braithwaite, J. and Drahos, P. (2000) *Global Business Regulation*. Cambridge: CUP.

Hawkins, J. (1999) *Final Report: Safer Shipping in the Asia Pacific Region Project (Phase 1)*. Singapore: Asia Pacific Economic Cooperation Secretariat.

Hawkins, K. (1992) 'The use of legal discretion: perspectives from law and social sciences', pp. 11-46 in K. Hawkins (ed.) *The Use of Discretion*. Oxford: Clarendon.

International Labour Organisation (2001) *The Impact on Seafarers' Living and Working Conditions of Changes in the Structure of the Shipping Industry*. JMC/29/2001/3. Geneva: ILO.

McCallum, M., Raby, M., and Rothblum, A. (1996) *Procedures for Investigating and Reporting Human Factors and Fatigue Contributions to Marine Casualties: Final Report*. Report No CG-D-09-97. Springfield, Va: National Technical Information Service.

Paris MoU on Port State Control (2002) *Annual Report: 2001*. The Hague: Paris MoU.

Paris MoU on Port State Control (2003) *Annual Report: 2002*. The Hague: Paris MoU.

Smith, AP, Lane T, Bloor M, Allen P, Burke A, Ellis, N (2003) *Fatigue Offshore: Phase 2 – The Short Sea and Coastal Shipping Industry*. Cardiff: SIRC

‘GET YOURSELF A PROPER JOB GIRLIE!’: RECRUITMENT, RETENTION AND WOMEN SEAFARERS

Michelle Thomas

INTRODUCTION

The world wide shortage of trained officers has received considerable media attention. The 2000 BIMCO/ ISF report on labour trends reported a 4% shortage in the current global supply of officers, with a predicted increase to 12% by 2010 (ISF/BIMCO, 2000). In the European Union alone, there was reported to be a shortage of approximately 13, 000 officers in 2001, a figure that has been predicted to more than double by 2006 (FST/ECSA 1999). To date, women account for only a very small proportion of qualified officers, for example, the UK officers’ union NUMAST reported that, in January 2000, women accounted for just 1.4 percent of its total membership of over 19,500 (NUMAST, 2000). The IMO report that women account for only between one or two percent of the 1.25 million seafarers in the world (IMO, 1992). As such women represent an untapped resource for crewing the world fleet and addressing the current labour shortage. Indeed the IMO noted that women are an ‘under-utilised and underdeveloped resource which could provide part of the solution to the problem of crewing the future world merchant fleets’ (IMO, 1997: 3). A view reflected in a communication to the European Commission which states that ‘[The social partners] should make every effort to promote and facilitate women’s access to the seafaring professions, [...]’ (Commission of the European Communities, 2001: 13) and in a later OECD report on the availability and training of seafarers, which recommended that ‘greater encouragement should be given to female entrants to the industry’ (OECD, 2003: 9).

This paper will explore the issue of women’s employment at sea in view of the current and predicted labour shortage within the industry. Drawing on in-depth interviews it will consider the attitudes and experiences of maritime employers regarding the employment of women seafarers and in doing this will highlight and examine popular myths regarding women’s employment alongside employers’ actual

experiences of employing women as deck and engineering officers. This section will be followed by a consideration of the accounts of women seafarers in order to explore women's experiences as seafarers and maritime employees. The paper will conclude with a discussion of these data and a series of recommendations to promote the participation and retention of women in the maritime industry.

METHODS

This paper reports on data collected in 2001 as part of an ILO commissioned study on women seafarers¹ (Belcher et al., 2003). The study involved qualitative and quantitative interviews with women seafarers, human resource managers of shipping companies, union officials, international regulatory bodies and trade unions in over thirty countries worldwide. Data were collected on both the cargo and cruise sectors of the industry, and included those involved with both the marine (deck and engine) and hotel and catering (cruise vessels) departments. This paper will focus on the employment of women in the marine departments of both cruise and cargo vessels, and in particular will draw on 22 depth interviews with senior executives of ship owning and ship management companies in North America, Europe and Asia and in-depth interviews with women, of a range of nationalities, working in the marine departments of a variety of vessels.

COMPANY PERSPECTIVES

The company officials interviewed for this study had a range of experience in terms of the employment of women seafarers. Some reported having had no experience of women as crewmembers, others' experience was limited to women in non-officer roles as stewards or assistant cooks and yet others described considerable experience as employers of numbers of women in senior officer ranks.

The interview data suggested that a number of myths or misconceptions regarding women seafarers continue to pervade the shipping industry. One common

misconception was related to ideas of 'appropriate' jobs for men and women. This notion is based on stereotyped beliefs and understandings regarding people's skills, abilities and characteristics, based solely on their gender. Historically, 'women's work' has been typically seen as that which involves 'caring' and 'expression of feeling' (Spencer and Podmore, 1987) and 'routine, less visible and more monotonous components of work' (Homans, 1987). Such gendered stereotypes regarding appropriate work tasks and workplaces were found to be held by some employers, based on ideas about 'natural' differences between men and women. As one employer noted:

Girls and boys are different, man and woman are different, for example, boys are braver than girls, and this is important, because this has an impact on decision making, you have to make critical decisions when you sail at sea.

Some employers held the view that seafaring was simply too 'difficult' and employment conditions too harsh for it to be a suitable career for women. As one employer stated:

I must say we are not willing to recruit the m. It's too [much] trouble to have them. As you know, seafarers work and life at sea is very hard, there is no comparison between their work, working conditions and conditions on land. Seafaring is a male profession; man should do this.

Others felt that women could work at sea but only aboard certain ships and only in positions that did not conflict with notions of femininity, thus women could work aboard cruise or passenger vessels in positions such as assistant cook, radio officer, steward or in hotel and catering departments. In particular, the engine room, with its associated images of 'heat, dirt and sweat' and 'heavy' physically demanding work tasks, was seen as the least suitable area for women's employment. As two employers stated:

¹ Data were collected by Phil Belcher, Helen Sampson, Michelle Thomas, Jaime Veiga and Minghua Zhao.

Another reason is because the work on the ship is just too hard. It's ok if the woman works at bridge--- as the navigator – but there is no way for her to work in the engine room, it's just too hard for her. Even if you have half man and half woman in the engine room, I can ensure you that at the end of the day, the hard work will have to be done by the males.

Women can work only for, as assistant cooks, as assistant [mess] boys. For officers I don't think so.

Negative attitudes to the employment of women also related to perceptions of women's role in the family and associated concerns regarding beliefs about the incompatibility of a sea career and marriage and motherhood. The expectation that women seafarers were more likely than their male counterparts to leave the sea early, specifically once they married and /or had children, was associated with a subsequent belief that women seafarers constituted a poor investment in terms of training and development. As one European shipowner stated:

Because you see women, maybe when we go on a ship they will find somebody, make love and maybe to marry and that's it. Will stop right there. And so the circle continue.

Related to this was a further concern occasionally expressed by employers that the presence of women on ships could lead to sexual tensions and jealousy amongst male crew members, thus threatening effective working relationships.

Employers who held negative views of women seafarers came from both European and Asian countries. These employers frequently had in common the fact that they had little or no experience employing women seafarers as marine crew. There were, also, however, a number of companies, from a number of world regions, who did not share these negative views and indeed we found that those companies who had employed women seafarers were generally very positive about the experience. These employers frequently spoke highly of the professional performance of the women seafarers they employed. As one employer noted:

They're more alert. I hate to say they're more intelligent because I don't make intelligence tests with them [but ..] they're more engaged you know.

Indeed, some employers stated that they felt women performed better in their jobs than their male counterparts. This was sometimes attributed to the difficulties and prejudices that women encountered during their training and careers which were felt to lead to women becoming more determined to succeed. As two employers commented:

They were good because they were (a) there was always a target in front of them, they always wanted to beat the male side of things, and no, it's a good target, and they all achieved it without doubt.

The girls that have made it I look at them and I talk to some of my friends who have worked with them, and the conclusion is that the girls who get up to that job are extremely determined, are very focussed on what they do. You know whatever problems they encounter, they will not push them from the tracks. So if I was about to employ a Second Engineer or a Chief Engineer who was a woman and who has the knowledge of offshore work and all that, I think I would choose her. If she's come this far, then I know I'm going to get somebody who is very determined to do the job well who is not there to muck around, who would have the right attitudes.

In contrast to concerns about women introducing sexual tensions, these company officials reported that the presence of women on board could actively improve the morale and atmosphere on board, promoting a more 'normal' environment for the crew to live and work within. With many seafarers working tours of duty of 4 months or longer, and often with few opportunities to go ashore, the more balanced environment of a mixed sex ship could be of considerable significance. As one employer noted:

The advantage is on board, all of a sudden, the whole language changes to the positive. Very positive. It's nothing like the good old English "Oi!" it's not that. There is a "please" all of the sudden, and even between the male community, everything changes. It has changed – no disadvantage but to the advantage.

When asked about the possibility that women seafarers might cut short their sea careers due to their commitment to marriage and family life, these employers were reflective. They recognised that a desire to be at home with partner and family may indeed influence a woman's decision to leave the sea, however they saw that this equally, could be the case with male seafarers. The problem of retention was seen to be an industry-wide problem regardless of the gender of the seafarer. As two employers noted:

There are always those who think, [...] there is always this feeling you know at some point, that they [women] will get married or they'll want to stay at home. But it is easy to make that statement. Often times, I stop and ask myself is it [a gender issue?], there's a lot of men who I know who, like myself, decide I'm going to start a family and stop [going to sea].

If you look at the drop-out rate in loads of companies, it's not a lot of difference really if you take it over. And I've seen loads of guys drop out.

EXPERIENCES OF WOMEN SEAFARERS

In order to fully understand the issues surrounding the employment of women seafarers it is necessary to talk, not just to employers, but also to women seafarers themselves. For this study, a total of 33 women working in the marine department participated in in-depth interviews, with a further nine women participating in focus group discussions. These women were of a range of nationalities and in ranks ranging from cadet to captain.

Women's accounts highlighted a number of difficulties that they faced in their pursuit of career at sea. For some of the older women seafarers, these problems started early, with difficulties gaining places in maritime colleges. These barriers were less likely to be reported by women who had started their maritime careers more recently², however some women report some sexism from staff at their training institution and both younger and older women reported difficulties in finding companies willing to let them sail on their vessels in order to complete their training. Once qualified many women felt that their opportunities for promotion were equal to that of men's, however several women had experience of applying to companies who rejected their applications on the grounds of their gender, or who applied unofficial 'ceilings' on the level to which women could be promoted. As one female engineer noted:

I think actually that half the time the company does not offer much. I heard one of the superiors from the company saying that no matter how good you are [as a woman], we are not willing to make you Chief Engineer.

Once onboard, whether as cadets or later as qualified officers, it was not unusual for women to experience difficulties with male colleagues, a small number of whom sometimes had difficulty accepting women in maritime positions. These prejudices tended to be manifested either overtly and occasionally in a hostile manner, or, less obviously, via men's belief that women could not perform the tasks of a seafarer and thus required a 'protective' almost 'paternal' attitude which also hampered their ability to do their jobs. As one woman put it:

There are two different types of guys. One type is expecting more because they say "Women can't work on board." And if you make one mistake they say, "Okay I knew it, I knew it. Now you see, she is not able." And there is the other type, if you make something absolutely normal, like with a hammer you put a nail in something, they say "Oh My God, great! You can do it. I knew it. Fantastic!" And this is also absolutely typical after a while, because the smallest things you're doing, they are so, "Oh my God. Yes.!"

² Indeed recently some countries maritime training institutions have been actively encouraging female applicants (see Belcher et al., 2003).

It was commonplace for women to report that they had to work much harder, and perform much better than their male counterparts in order to be accepted and be seen as able to do their jobs. As the following quotes illustrate:

It's very normal, you have to try twice as hard to be proven just half as good when it comes to the guys.

Most of the problems is that people look at your size and see your gender and think, "Oh, you are female, you are so small size, I don't think you can do all these tough jobs." And then the time when I was assistant engineer, the guys said to work about eight hours a day and I work about 12-16 hours a day. To prove that I can work and that I can do better. So from then on nobody actually disturbed me that much with this. They know that when I work, I work very hard.

However, the majority of women told us that, with time, they were usually able to overcome such reservations become accepted, and even respected, by their male colleagues. As one woman noted:

After six months I had no problem, if anything I was respected even – you know I had men coming to me, asking me questions. You just have to work hard and establish yourself. Everything seems to follow after that. I never had a problem beyond that. Received nothing but compliments but once you get over that initial hurdle I think you're fine.

In addition to these problems of professional acceptance, many women also reported problems with some male colleagues that could broadly come under the term 'sexual harassment'. Sexual harassment is a serious and complicated issue (for a detailed discussion of workplace sexual harassment please see Stockdale, 1996 or Cleveland et al., 2000). For the purpose of this paper, it is perhaps useful if sexual harassment is considered in terms of the following statement:

‘[...] in organisations where people work together in clear occupational hierarchies and some individuals occupy positions of power and authority over others, there exists a potential for individuals to abuse their powers in the interests of their own sexual gratification, and to the detriment of their subordinates.’ (Belcher et al, 2003: 63)

The sexual harassment reported by the women seafarers we interviewed took many forms including sexual comments in the guise of ‘humour’, persistent sexual invitations and unwanted physical contact, as the following quotes illustrate:

The only thing is, I heard somebody telling me after I sign off from that ship, they told me that now there are a couple of holes in the toilet which I didn’t find out. I actually tried to check for holes, first when I joined the ship, but I didn’t find any so I didn’t know that there are holes there. So somebody told me there are peepholes and they peep at me when I was taking shower.

I woke up with a [crewmember] feeling me up and stuff. And I went to, I mean, I was asleep – I thought I was dreaming. I didn’t realise at first and then it got a bit more

Like some Masters also this thing – you come on board, after two days they give you a drink and say, “Okay, come let’s go to bed.”

In the rigidly hierarchical and isolated environment of the ship such behaviours could be particularly difficult for the women involved, as one woman noted:

You can’t escape from it. It’s like, if you’re at work, you get harassed, you come home, you forget about it. You’re on ship, you get harassed, you go to your cabin – you’ve got a phone in your cabin, they ring you constantly. They’re knocking at your door, they’re walking up and down the alleyway.

Women reported taking a number of steps to avoid such unwanted sexual attention and advances, such as avoiding social situations on board, locking their cabins at night or attempting to de-feminise their appearance. Where women did attempt to report these problems to the company, they were not always successful, as one woman recounted:

As soon as I saw my personnel manager I told him and he said I should expect that sort of thing because I was at sea and I should deal with it myself.

In the cruise sector, where some companies held high profile and visibly enforced policies on sexual harassment, experiences of sexual harassment were reported to be much less common. However for many women working in the cargo sector, such policies and the subsequent protection they offered frequently did not appear to be in place.

Despite the problems they sometimes faced, the women who were interviewed displayed considerable enthusiasm for their work at sea and an, often striking, dedication and determination to succeed in this sector, as one woman said:

it all boils down to determination. We were determined to do it and there was nothing which was going to stop us.

Many women were dedicated to a long career at sea (and indeed at the point of interview several women had had many years sea time and were in senior ranks). As one woman stated:

There's a set number of years, if you do well, you get the right report, you can reach captain, you can get there. I intend to be up there in that time.

Where women thought of leaving the sea, often their intentions were to utilise their skills and experiences in a career in the maritime industry ashore.

DISCUSSION

Our data suggested that employers had a range of attitudes and experiences regarding women seafarers. These attitudes were often reflected in companies' informal recruitment policies which ranged from open 'equal opportunities' policies, with allowing women to be employed in any position or rank, through to unofficial policies of rejecting all applications from women seafarers, regardless of their rank, qualifications or experience. There was evidence that gendered stereotypes continued to persist within the industry, and these were most often expressed by those employers who had limited or no experience employing women as navigation or engineering officers. Those employers who had employed or worked alongside women seafarers frequently gave very positive accounts of women's seafaring skills, and several rated women's professional performance as equal to, and indeed often superior to, men's.

As noted above, those employers who held negative views of women working as seafarers typically had very limited or no experience employing women on their vessels. This is perhaps not surprising: if an employer in any industry holds a preconceived view that only male employees can effectively fulfil certain positions or perform certain tasks then, whilst there is an adequate supply of males to fill these positions, he or she is unlikely to employ females. It also appeared to be the case, with a small number of employers, that whilst during their careers they may have had a range of experience in terms of 'good' and 'bad' male seafarers, a single negative experience with only one or two women seafarers could effectively influence their view as to the suitability of all women as potential employees and thus these employers were effectively ignoring an important potential source of labour in the form of women employees.

Pertinent to the issue of women as a potential resource to address the current and predicted future shortage of qualified officers is the concern over possible differential retention rates between male and female seafarers. The perception of the primacy of the commitment to women and family has been cited to be highly significant in terms of women's marginalisation in the workplace (Spencer and Podmore, 1987). Our research, and that of other researchers, in fact suggests that separation from home and family is a significant source of stress to seafarers regardless of gender (see for

example Parker et al., 1997; Thomas 2003; Thomas et al 2003). Indeed, dissatisfaction with prolonged separations from home and family has been reported to be one of the most common reasons for (male) seafarers cutting short their sea career (Telegraph, 1999). There is no reliable data available relating to differential wastage rates of male and female seafarers. However, our data suggested that women remained at sea for significant periods and we found examples of women combining both marriage and motherhood with a very successful sea career. These findings are supported by other studies such as NUMAST's survey of its female union members which reported that 66% had over 6 years sea experience and nearly one in five (19%) 15 years or longer. Seventy one percent of the women responding to the questionnaire reported that they intended staying at sea to seek promotion to the highest levels (NUMAST, 2000). Our data suggests that the issue of retention is one that applies to both male and female seafarers and should be addressed by the industry as such.

Retention may be defined in terms of maintenance of a sea-going career, and more broadly in terms of retention within the maritime industry, whether at sea or ashore. The maritime industry has a continued need for qualified maritime officers with sea-going experience to fill positions in the industry ashore (OECD, 2003). Qualified women seafarers who have sufficient sea-time may be considered as a potential supply of labour to fill shore-side positions.

The women we interviewed were generally very positive about their experiences as seafarers and many were committed to a career in the maritime industry. However, a number of women spoke of problems they experienced gaining access to vessels for initial training and qualification, and, when qualified, some also spoke of rejection from companies based solely on their gender. Many women reported experiencing problems onboard that usually related to only a minority of their male colleagues, but could drastically influence their experience of a particular trip of contract. Such problems included hostility from male crew and reluctance to accept women as capable of undertaking the work of a seafarer, and incidences of sexual harassment ranging from verbal sexualised comments to physical assault. These factors need to be effectively addressed by companies in order to ensure the continued commitment

and retention of existing women seafarers and the recruitment of women seafarers in the future.

RECOMMENDATIONS

Our data from both employers and women seafarers themselves suggested that women are a valuable source of labour for the industry that is currently being overlooked. A number of steps need to be taken to promote the participation of women in the industry and to ensure that conditions on board are such that, once qualified, women choose to continue their sea careers. These recommendations are discussed in more detail in the report of this study (see Belcher et al, 2003), however they can be summarised as follows:

- Dissemination of the positive experiences of companies employing women seafarers should be facilitated in order to address, and diminish gender stereotypes within the industry.
- Development and implementation of policies addressing sexual harassment should be undertaken by all companies regardless of whether they currently employ women seafarers (as successfully undertaken by companies within the cruise sector).
- Where possible, the placement of female crewmembers (and particularly female cadets) should occur on vessels where they are not the lone female onboard.
- Consideration should be given to policies relating to pregnancy and maternity benefits.
- Active promotion of seafaring as a potential career for female (as well as male) young people should be extended.

Taken together these steps would encourage the employment of more women seafarers and assist with retention rates of both women and men at sea. The industry would thus benefit from the talent and human resources represented by women willing to seek a career in the maritime industry, something many shore-side employers capitalised upon some time ago. In the course of our study for the ILO researchers were continually impressed with the calibre, guts and determination of the women they met. It seems an expensive loss to the industry that many companies are unable to see beyond stereotyped perceptions to the value represented by women in the modern world of work. Our evidence suggests that there are a number of exceptional women prepared to dedicate themselves to a maritime career. Perhaps it is time for employers to match their courage and consider changing their employment practices to take full advantage of the opportunity that they are currently missing.

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REFERENCES

Belcher, P., Sampson, H., Thomas, M., Veiga, J. and Zhao, M. (2003) *Women Seafarers: Global Employment Policies and Practices*. Geneva: ILO.

BIMCO/ISF (2000) *2000 Manpower Update – The World-wide Demand for and Supply of Seafarers* – April 2000.

Cleveland, JN, Stockdale, M. and Murphy, KR. (2000) *Women and Men in Organisations: Sex and Gender Issues at Work*. London: Lawrence Erlbaum Associates.

Commission of the European Communities (2001) *Communication from the Commission to the Council and the European Parliament*. Brussels, 6.4.2001, COM(2001)188 final.

FST/ECSA (1999) *Improving the Employment Opportunities for EU Seafarers: an Investigation to Identify Seafarers' Training and Education Priorities*. Brussels.

Homans, H. (1987) 'Man-made myths: the reality of being a woman scientist in the NHS', in A. Spencer and D. Podmore (eds) *In a Man's World: Essays on Women in Male Dominated Professions*. London and New York: Tavistock Publications.

IMO (1997) *Action Programme 1997-2001*. Internal document.

IMO (1992) *Medium-term Plan for the Integration of Women in the Maritime Sector*. Internal document.

NUMAST (2000) *Fair Play*. London: NUMAST.

OECD (2003) *Availability and Training of Seafarers*. Report prepared for the OECD Maritime Transport Committee by Precious Associates Limited. Organisation for Economic Co-operation and Development.

Parker, A.W., Hubinger, L.M., Green, S., Sargaent, L. and Boyd, R., (1997) *A Survey of the Health, Stress and Fatigue of Australian Seafarers*. Canberra: Australian Maritime Safety Authority.

Spencer, A. and Podmore, D. (1987) 'Introduction', in A. Spencer and D. Podmore (eds) *In a Man's World: Essays on Women in Male Dominated Professions*. London and New York: Tavistock Publications.

Stockdale, MS. (1996) *Sexual Harassment in the Workplace: Perspectives, Frontiers and Response Strategies*. London: Sage.

Telegraph (1999) 'Research bid to cut officer 'wastage'', NUMAST Telegraph, November: pp3.

Thomas, M. (2003) *Lost at Home and Lost at Sea: The Predicament of Seafaring Families*. Cardiff: SIRC.

Thomas, M., Sampson, H. and Zhao, M. (2003) 'Finding a balance: companies seafarers and family life', *Maritime Policy and Management*.

EQUAL TRAINING IN AN UNEQUAL WORLD? AN EXAMINATION OF GLOBAL MET STANDARDS

Helen Sampson

BACKGROUND

In recent years shipping disasters have captured the headlines in an unprecedented manner and sparked considerable public concern in relation to standards of safety and training in the maritime sector and specifically in relation to vessels engaged in the carriage of potentially hazardous and high pollutant cargoes such as oil and chemicals. The loss of the *Prestige* is but one of a series of environmentally damaging incidents to have hit the headlines in the last decade.

Often the cause of these incidents and accidents has been laid at the door of the industry's training standards and seafarer competence. So serious and sustained has the concern been, that it has extended into the realm of popular culture as exemplified by the film *Naked Gun Two and a Half* in which there is a brief depiction of standards of training in the maritime sector as being comically inadequate. This is to be regretted and does nothing to improve the already tarnished image of an industry popularly perceived (and not always correctly) as substandard and exploitative. It reflects the high profile nature that marine disasters been given in the media and the extent to which they threaten human life and local economies and inflict terrible damage to the environment. Other industries, such as hospitality, automotive parts and electronics may have similar records of underinvestment in high quality training for their employees (Baum 2002, Cockrill 2002) but somehow such cases fail to capture the public attention or imagination. Inevitably, the human and environmental 'cost' of maritime disasters results in demands from the general public for higher standards and greater levels of regulation and control.

INTRODUCTION

This paper is based on the findings of a year-long pilot study of cadet education and training that took place in Singapore, the UK, and the Philippines¹, in the year March 2002-3. The research entailed a series of ethnographic site visits and the use of in depth, anonymised, confidential, tape-recorded interviews with employees of maritime education and training centres (METs), trade unions, the IMO, shipping companies and professional organisations such as the Nautical Institute². A total of four colleges and one training centre took part and thirty interviews were conducted, and transcribed³. All selected colleges had good local and international reputations and as such were considered to be amongst the best in the represented nations. Following the completion of the data collection transcripts were analysed and coded and field notes were reviewed and considered in congruence with standard practice and prior to the reporting of findings.

The study considers the specific question of whether (at least at baseline level) training can be made 'equally good' across maritime education and training centres (METs) of a heterogeneous nature and situated within widely variant contexts? In reflecting on this question the paper first considers some of the problematic features of regulation as it applies to the implementation of the STCW code. It then focuses on employer perceptions of standards in maritime education and training and finishes with a consideration of the issues faced by all METs in providing maritime training to large numbers of the world's future seafarers.

¹ This study was funded by the British Academy (ref: LRG 33549). Their support is gratefully acknowledged.

² My thanks to all participants.

³ 13 interviews were conducted with MET staff, 12 with employers and five with trade unions, the IMO and the nautical institute

STCW, REGULATION, AND ENFORCEMENT

I doubt there is anybody remotely connected to the maritime world who has not heard of STCW '95 or the original STCW code as agreed by members of the IMO in 1978. They may well have also heard the concerns that many have expressed in relation to the enforcement of STCW '95 and its perceived effectiveness with regard to its broad aim of raising, and to this extent standardising, general standards of watchkeeping and training in the merchant shipping sector.

There are two major issues in relation to the implementation of the code that deserve particular consideration. The first issue relates to the effectiveness of any 'enforced self-regulation' (Hutter 2001). The second concern relates to the difficulties generally experienced by regulators in relying on the 'regulated' for the provision of information and the effectiveness of any 'paper-based' regulatory monitoring and enforcement exercise (Lange 2002).

Enforced self-regulation as it applies to STCW and the maritime sector involves maritime administrations in submitting paper work that demonstrates compliance with STCW requirements. Parties to the convention are required to engage in self-regulation in that they are expected to audit and monitor standards of maritime education and training and to grant, or deny, training and education institutions 'approved' status as appropriate. The IMO has made suggestions as to what maritime administrations might reasonably consider in their assessment of METs. The list as described on the IMO website includes:

- Scope and objectives of training – e.g. to meet the requirements of STCW regulation II/1
- Minimum entry standards – age, sea experience, other training, medical fitness etc.
- Intake limitations, student/staff ratio etc.
- Staff qualifications, experience in subject, teaching skills, assessment skills
- Facilities and equipment necessary to meet objectives
- The written programmes, syllabus, timetable and course material
- Method of training, lectures, practical, videos etc. and percentage of time devoted to each.
- Assessment methods: examination, practical, continuous assessment etc.

- Certification to be issued on completion to meet STCW requirements
- Maintenance of student and other records
- Security of information
- Quality standards system requirements to ensure standards are maintained (IMO 2003:http://www.imo.org/HumanElement/mainframe.asp?topic_id=296)

Such thorough assessments could be expected to produce uniformly high minimum standards in METs. However efforts to encourage administrations to fully implement such audits, and to close down institutions failing to meet guideline standards face a number of problems some of which are common to many regulatory regimes operating on the basis of enforced self-regulation. These have been documented in relation to other industries. For example in the UK rail industry the extent to which such enforced self-regulation fails to deeply impact upon self-regulators has been highlighted (Hutter 2001). Where safety protocols and procedures are externally produced and 'imposed' it seems that they often fail to be internalised. This results in lip-service being paid to regulation rather than wholehearted commitment. The results of this study suggest that similar problems also exist in the regulation of METs.

Other difficulties have been identified in relation to regulation that relies on the provision of information by the regulated to the regulators. It has been posited that where regulators find it difficult to extract such information from the regulated they may simply relax their rules to accommodate such deficiencies (Lange 2002). In the case of the IMO there is an additional pressure to relax regulations with regard to specific administrations. This derives from the importance of particular nations to the international supply of seafaring labour. Pragmatic approaches to enforcement are not uncommon. For example, in his study of environmental pollution control Hawkins documents officers taking into account the impact on the local economy of any punitive sanctions that may arise from their actions (e.g. the closing of a factory and consequent unemployment) before deciding on a response to a clear infringement of pollution regulations (Hawkins 1984:197:8).

The evidence from this study certainly indicates that the 'enforcement' of STCW is not achieving its stated aims in improving standards of maritime education and training or seafarer competency. The example of corruption in the conduct of certificate of competency examinations in the Philippines illustrates the point. This

was made clear in Lloyds List when Oliver Wadeson interviewed the current President of the Philippines. He explains:

Philippines President Gloria Macapagal-Arroyo has taken the lead in attempting to rehabilitate her country's maritime image following last year's deck officers' examination scandal. International concern was such that Asia-Pacific neighbour Australia placed a ban on the hiring of Filipino seafarers...[Mrs Arroyo] said that the Philippines National Bureau of Investigation had been asked to secure an 'airtight case' against the examiners believed to have been responsible for leaking questions to examinees in the case. Australia lifted the prohibition order on July 3 after being assured by the Philippines' Professional Regulations Commission of the integrity of the Professional Marine Licence in the south-east Asian country. 'The PRC, in its reform, voided the 2002 professional licensure exams for marine deck officers' Mrs Arroyo said. 'most examinees have re-taken the exams and appropriate charges have been filed against the errant examiners' (Wadeson: 2003)

That such events can occur in 'white listed' countries must raise questions about the effectiveness of self-enforced regulation. It also highlights the extent to which such regulations may be seen as having no real 'teeth'. Indeed so bureaucratic are such regulatory forms that they might reasonably be thought to have what we might call 'paper teeth': pretty perhaps, but largely ineffective.

THE PERCEPTIONS OF EMPLOYERS

The evidence of the study suggests that employers recognise that cadets come from a variety of different socio-economic and educational backgrounds and believe that they cannot be regarded as meeting one generalised or minimum standard regardless of the intentions of the IMO in introducing STCW. Exemplifying a commonly expressed view, one employer suggested that the reason his company recruited in Pakistan and India rather than the Philippines was that the standards of education were higher there. He explained that the company hadn't:

Got any Filipino cadets although we have been looking at the new ...college down there that may be sponsoring a couple of them but the standards are no where as high as Pakistan or India...That's the standard of education and also [on] the maritime side down there. (Interview with Sampson 2002)

Others were more carefully discriminatory, identifying particular colleges rather than countries as problematic. In discussion of the Philippines, for example, consideration of cadets was often limited to those graduating from a list of colleges that employers had identified as maintaining high educational standards. One explained:

In the Philippines we are quite selective. I am not sure of the ones [i.e. the colleges] we have blacklisted, but there is a list we don't touch.
(Interview with Sampson 2002)

Some employers dealt with their perception of problematic standards by putting new recruits from specific countries through a 'top-up' training programme at the company's expense. As one employer explained:

Countries like China and the Philippines we actually have to do additional training before we put them on board our ships. (Interview with Sampson 2002)

There was a feeling that STCW had done nothing to change this situation. As one employer put it:

Seafarers have training to meet the STCW amendments, [but] are they really improved themselves? (Interview with Sampson 2002)

Furthermore, STCW was actually resented by some employers who believed that the training resource put into seafarers as a result of STCW regulations could have been better spent elsewhere. Often STCW was felt to have delayed the implementation of other planned training developments and was little more than a matter of inconvenience to them.

In recognising the variation in maritime education between and within maritime labour supply countries, employers highlighted the relationship between resources and standards. As one explained:

A good library [is important] and...next is equipment. Of course [name of institution] are alright. Another [meaning other] maritime school almost all over [i.e. everywhere] ...very poor!...Very poor equipment and very poor...instructors also. They have no experience...So if with not good equipment, if with poor instructor, it's the same – cannot expect good result
(Interview with Sampson 2002)

This is the factor which above all others is indicated in this study to be critical in the delivery of quality maritime education and training. It could be seen in three contexts:

1. The economic context of colleges
2. Their physical resources
3. Their human resources

Each of these impacted greatly on the ability of METs to deliver quality results and will be considered here in turn.

ECONOMIC CONTEXT

The METs included in the study were located in three different countries with different socio-political and economic characteristics. World Bank data suggests that whilst the UK and Singapore are relatively close in terms of economic indicators the Philippines suffers from relative economic deprivation. For example, Gross National Income (GNI) stands at US\$21,500 and US\$25,120 in Singapore and the UK respectively and at only US\$1,030 in the Philippines. Similarly indicators on infant mortality rates, per capita electricity use, access to improved water supplies and sanitation, and access to telecommunications, conveyed a similar tale (see Table One).

Table One: selected economic indicators for Singapore, the UK and the Philippines*

	Singapore	UK	Philippines
Per capita GNI (2001) US\$	21,500	25,120	1,030
Infant mortality rates (2001) per thousand live births	3	5	29
Per capita electricity (2000) kWh	6,948	5,601	477
Access to improved water supply - all areas (2000) %	100	100	86
Access to improved sanitation – urban areas (2000) %	100	100	93
Fixed line or mobile telephone per 1000 population (2001)	1,195	1,358	192

Source : www.worldbank.org/data/countrydata/countrydata/html. NB most recent available data is utilised i.e. that for 2000 or 2001 as available.

The economic context of METs is important in several ways. It impacts directly on colleges in terms of their own access to power and infrastructure such as telecommunications and the internet. It affects the level of resource they have access to in terms of government funding and support. It also affects them in less direct ways such as in the standard of education of their student intake. Thus the level of the wealth of a nation in which an MET is sited is critical in determining the standard of graduate it produces. As one college lecturer in a wealthy nation put it:

The advantage we have is fantastic resources, because of the wealth of the nation maybe. That's how we get it. Which, I suppose, if it was available in poorer countries, I mean those countries who are actually serving this industry [as labour supply countries]...it would be so much better. (Interview with Sampson 2002)

PHYSICAL RESOURCES

This study indicated that there was a tremendous range in the quality and quantity of physical resource that could be accessed by participating METs. In some there were classrooms with powerpoint projectors and screens as standard, radio microphones for lecturers' use, and student access to good simulation and lab equipment as well as the use of excellent libraries, comfortable desks, environmentally controlled working environments (heated or air-conditioned depending on the climate), and the internet. By contrast the research also found examples of classrooms with irregular access to power and thus electric light, poor equipment for environmental control, few modern teaching aids, such as overhead or powerpoint projectors, and very basic student facilities. In one observed class pupils shifted uncomfortably in their chairs as the fans cut out during a power failure and the windows had to be pulled almost shut to keep out the worst effects of a tropical downpour. In the absence of electric light and in the dim visibility resulting from the weather conditions outside it was quite impossible for students to make out what was written on the chalk board at the front of the class. None of them complained or asked if they could move forward they simply endured the circumstances in silence, looking uncomfortable and unhappy, for the remainder of the class.

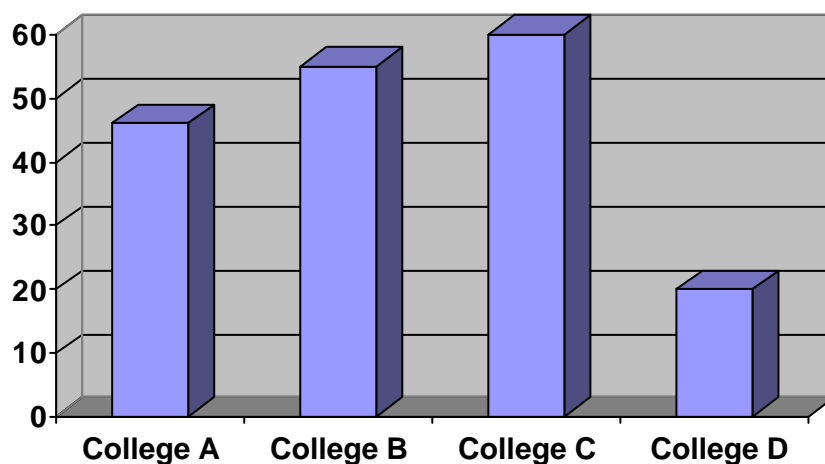
In order to summarise field note observations in a visually accessible form, selected resources available in colleges were considered and based on analysis of field note entries were given a numeric score ranging from 0-10 (see Table Two). The resources assessed were, desks/chairs, air-conditioning/heating, available space, projectors, environmental noise, chalk/white boards, other visual aids. These criteria are not identified separately in the table and appear in a random order to protect the identity of individual institutions.

Table Two : Distribution of physical resource amongst participating METs

	<i>College A</i>	<i>College B</i>	<i>College C</i>	<i>College D</i>
Criteria 1	10	10	10	0
Criteria 2	7	8	8	2
Criteria 3	5	8	10	0
Criteria 4	5	5	8	0
Criteria 5	7	8	10	5
Criteria 6	4	9	7	10
Criteria 7	7	7	7	3
Total Score	46	55	60	20

The table illustrates that in a possible numeric range of 0-70 the highest rated college achieved a score of 60 and the lowest, 20 (see Figure One).

Figure One : Total Scores for Colleges A-D



These scores represent a very significant range of college resource that has a marked impact on the learning opportunities available to students and the teaching capacity of staff. Simulation equipment was one area to which considerable financial resource had been devoted by all participating colleges. However, in some institutions pressure to allocate large sums of money to such equipment tended to result in sacrifices being made in other budgetary areas. Thus investment in basic classroom and teaching facilities as well as in teaching staff themselves was often understandably, but regrettably, sacrificed.

HUMAN RESOURCES

The level of human resource available to some colleges was so low as to markedly constrain their educational provision. In this they faced a number of problems ranging from limitations on the salaries that they could offer staff, associated staff inexperience, and lack of resource for staff development and training. In two colleges experienced marine staff were supported through extensive teacher training programmes resulting in recognised teaching certification. One of these institutions had a very generous human resource development budget and in the other staff were also supported in their professional development. However in the two other colleges, staff were offered much more limited opportunities for development that were generally restricted to courses meeting the minimum IMO recommendations for 'training the trainer'. Inevitably this impacted upon the skills of teachers and thus on the experience of learning in the colleges. It was interesting to note that in one of these resource-restricted institutions several members of staff had previously experienced longer teacher training courses abroad, supported by external grants. In their classes the student experience was markedly different to the average experience within the college. Modern teaching methods including the effective use of group work, visual aids, and competent classroom management, visibly impacted upon levels of student participation and engagement with the studied topics. Students were motivated and enjoyed learning, their demeanours transformed by enthusiasm and contrasting with the stoic bored expressions of their peers in other lessons.

CONCLUSIONS

Whilst it was only an exploratory investigation, the study clearly highlighted the extent to which STCW has failed to achieve standardisation in maritime education and training across the world and within individual nation states. Here there are important issues relating to enforced self-regulation. However, the greatest barrier to the improvements in levels of educational provision in the maritime sector, in line with the spirit of STCW, is raised by the economic inequalities persisting between maritime nations. While such differentials in resource remain, and in the absence of systematic cross subsidisation⁴ it seems likely that companies in pursuit of quality cadets will have to continue to choose their labour sources carefully and/or provide additional training at their own expense. STCW alone cannot but fail to achieve its stated aim of raising overall levels of education and training in the sector. It is clear that a great deal more remains to be done.

POSTSCRIPT

Following the completion of this project SIRC (Sampson and Veiga) put together a proposal for a human resource development programme in selected METs using European-ASEAN university network (EU-AUNP) funding. The bid was approved for funding in July 2003 and over a period of two years will deliver:

- Staff development in teaching and research methods
- A series of workshops to consider cutting edge research findings and develop college curricula in relation to these
- Hardware in the form of a laptop computer to each participating college
- Computer software for statistical analysis⁵ and a computer-based training programme relating to its use
- Practical guided research experience

⁴ Some subsidisation has occurred in places such as the Philippines and China from a variety of source nations most notably perhaps Norway and Japan.

⁵ Statistical Package for Social Scientists (SPSS)

SIRC is pleased that several METs will be in a position to benefit from this funding. This represents a direct link between the identification of problems using policy related research tools and practical attempts to address them: An approach to research and policy development to which SIRC remains committed.

REFERENCES

Baum, T. (2002) 'Skills and Training for the Hospitality Sector: a review of issues' *Journal of Vocational Education and Training* 54, No. 3, pp 343-363.

Cockrill, A. (2002) 'The Policy Implications of a Regional Case Study: skills shortages and provision in the Welsh automotive and electronics industries' *Journal of Vocational Education and Training* 54, No. 1, pp 67-84.

Hawkins, K. (1984) *Environment and Enforcement: Regulation and the Social Definition of Pollution* Oxford: Clarendon Press.

Hutter, B.M. (2001) 'Is Enforced Self-regulation a Form of Risk Taking? The Case of Railway Health and Safety' *International Journal of the Sociology of Law* 29, pp379-400.

Lange, B. (2002) 'What does law know?-Prescribing and describing the social world in the enforcement of legal rules' *International Journal of the Sociology of Law* 30, pp131-150.

Sampson, H. Veiga, J. (2003) EU-AUNP funding programme.

Wadson, O. (2003) 'Arroyo leads effort to repair maritime image' *Lloyds List* www.lloydslist.com (23/07/03).

SEAFARERS ARE DIFFERENT? A COMPARISON OF CAR CARRIER CREWS AND CAR FACTORY WORKERS

Erol Kahveci

INTRODUCTION

This paper presents some preliminary findings from an ongoing research project jointly funded by the Economic and Social Research Council and SIRC¹, and conducted by Erol Kahveci (SIRC) and Theo Nichols (SOCSI). The research examines the nature and development of the maritime car carrier industry and the consequences of its dynamics and internal organisation for seafarers in terms of their attitudes toward work, commitment, stress and productivity.

Car assembly workers are amongst the most researched subjects of industrial and occupational sociology. Over the last half century a considerable number of studies have been made of the car assembly line, such as, Chinoy (1955) and (Blauner) 1964 in America, Beynon (1973) in the UK, and Linhart (1981) in France. More recently, a further series of studies has been conducted into the impact of modern management on car workers, for example Berggen (1993), Danford (1999), Delbridge (1998), Dohse, Jurgens and Malsch (1985), Fucini and Fucini (1990), Garrahan and Stewart (1992), Milkman (1991 & 1997), Rinehart, Huxley and Robertson (1997). Yet beyond car assembly plants, which represent only the most visible part of the car industry, dramatic new technological developments have taken place both in production systems, organisational structures and the organisation of work.

Much industrial sociology has focused selectively upon specific loci of given industries, typically the factory and latterly the factory-like call centre. Karel Williams and colleagues have suggested that in relation to the car industry itself such a focus is too narrow (Williams et al, 1998) and that attention should also be given to workers and processes associated in the sale and repair of vehicles. This project

¹ ESRC ref: RES-000-22-0006

extends this line of thinking further and focuses on that part of the car industry that transports the finished product to the global market.

In general terms the project is to research how globalisation has impacted on car carrier employers and the consequences for employees. The aims and objectives of the project include:

- To conduct an original study of the changes that have taken place in a neglected industry, its dynamics, and consequences for both management and workers
- To contribute to the development of a comparative economic sociology by a systematic comparison of working and living conditions of seafarers to those of land-based occupational groups
- To examine the consequences of the changing nature of seafarers' work/life balance; attitude towards work, pay and job satisfaction; commitment, stress and productivity

The maritime car carrier industry is substantially globalised. World wide output of vehicle units (including trailers) currently stands at about 60 million per year, of which eight million are shipped on long haul, with millions more shipped on short haul routes (*Lloyd's List*, 2001).

The maritime car carrier industry has witnessed:

- very substantial new technological developments in terms of production systems (port and ship redesign);
- important changes in organisational infrastructure (the emergence of transnational corporations; the development of integrated logistics systems through which contractors can offer complete packages for maritime shipment, port operations and land transport);
- the rise of specialist management companies (and in the field of employment, international crewing agencies);

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- considerable change in the nature and scope of employment patterns and working practices.

The maritime car carrier industry is now multinational in ownership. It provides integrated logistics systems that control and co-ordinate delivery by sea, road and rail and which utilise track-and-trace systems to monitor the movement of every piece of cargo at all stages of the delivery cycle. Just in Time (JIT) systems have been introduced and loading and unloading at the land / sea interface has changed beyond recognition over the past quarter of a century.

Since the early 1970s, the average port-stay for maritime car carriers has fallen from 270 hours to 13 hours (Kahveci 1999: 11-19). This development has not yet run its course and the logic is similar to that which has characterised car assembly. As the Executive President of NYK, Europe puts it, 'if we can save one minute in handling one car, the effect with a ship load must be considerable' (*Lloyd's List* 2000). This is certainly the case as today the most advanced modern vessels have car carrying capacities of 6,000 plus.

Within the maritime car carrying sector, the drive to reduce costs has resulted in several developments beyond the setting of the port. Today, shipowners and managers scour the world for cheap labour. The average speed of vessels at sea has nearly doubled from circa 12 to 22 knots and crewing levels have fallen considerably. In the 1970s vehicles were carried in the holds of lift-on/lift-off general cargo vessels with crews of 30 plus. Today, some of the latest dedicated car carriers take 6,200 vehicles and operate with only 16 crew. Car carriers are now subject to advanced management systems (Drewry, 1999) and, as with all ship types, are increasingly regulated and monitored. However, conditions for workers remain hard as crews live and work in closed and institutionalised environments for extended periods (e.g. nine months) with rare opportunities for shore leave.

ORGANISATION OF THE STUDY AND METHODS OF INVESTIGATION

The research examines the car carrier sector at two inter-related levels, firstly, political economy and secondly, seafarers' living and working conditions.

At the level of political economy the objective is to examine an industry which has been overlooked by social scientists and students of work and organisation but which has undergone rapid and substantial change over the last 25 years and which depends substantially on the implementation of new technology. The industry is investigated with respect to changes in cost structure and dynamics; in ownership, freight, labour and other markets; in technological innovation and ship design; and in relation to car manufacturers, management companies and crewing agents.

In investigating these areas the study involved interviews with managers of shipping companies; the examination of documentary sources; and utilisation of the Cardiff SIRC global labour market database which holds information on the flagging practices of owners throughout the world and the related geographical origins of a quarter of a million seafarers.

With respect to seafarers' living and working conditions key matters investigated include attitudes towards work, pay, work/life balance, job satisfaction and job security; as well as levels of commitment, stress and productivity. In order to facilitate comparison with the attitudes of workers in other fields of employment, approximately 80% of the questions used in the questionnaire with seafarers paralleled questions used in the 1998 Workplace Employee Relations Survey (WERS 98). Referencing the Workplace Employee Relations Survey (WERS 98) enables us to systematically compare the responses of seafarers on car carriers to other land-based occupational groups.

Data on seafarers' living and working conditions is being collected in two ways: via onboard observation and using interviews with seafarers conducted in port, as detailed below.

- On board: observation, semi-structured interviews, focus groups and reflective diaries of researchers provide in-depth information on living and working conditions, on the performance of work processes, on variation and intensity of work rhythm at sea and when loading/unloading and on social interaction between peers and in authority relations.
- In port: following a method developed by Nichols and Beynon (1977) and utilised by them in numerous other studies, interviews take a processual form, beginning with life stories and career histories.

THE NATURE AND THE DEVELOPMENT OF THE MARITIME CAR CARRIER INDUSTRY

Table 1 gives a general idea about the global nature of passenger car production and sales. The table shows that in 2000 the main car producers were the USA, Japan and Germany with 25, 16 and 10 per cent of world production respectively. Eastern European countries, China and Mexico are increasing production levels as they attract inward investment, often as a result of relatively cheap land and labour. Certain countries, such as Germany and Japan, are net exporters of cars while others, such as Italy and the US, are net importers.

Table 1: Passenger cars new registrations and production, 1997–2000 ²

	New registrations (000s)				Production (000s)			
	1997	1998	1999	2000*	1997	1998	1999	2000*
Western Europe								
France	1,713	1,944	2,148	2,171	2,259	2,603	2,784	2,955
Germany	3,528	3,736	3,802	3,401	4,678	5,348	5,310	5,136
Italy	2,396	2,369	2,348	2,416	1,574	1,402	1,410	1,425

² The countries listed in this table are (with the exception of NAFTA) not inclusive of their area and therefore the sub totals below are not a sum of their particular figures.

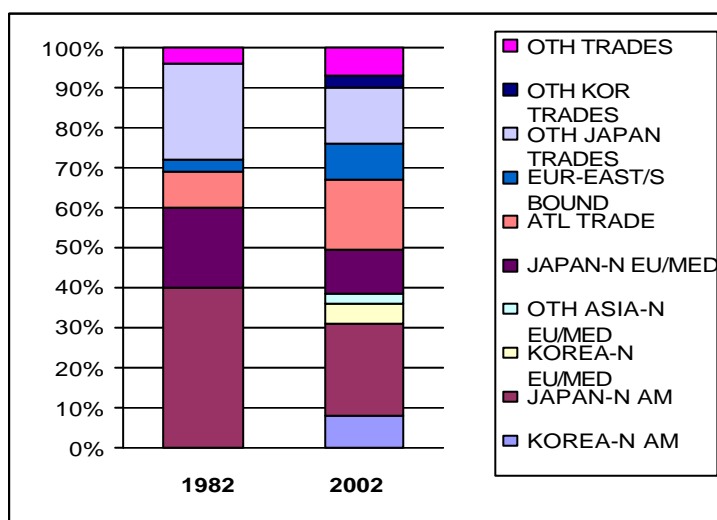
Spain	1,016	1,191	1,405	1,406	2,010	2,216	2,209	2,344
UK	2,171	2,247	2,198	2,190	1,698	1,748	1,787	1,711
Total	13,426	14,378	15,098	14,832	14,976	15,152	15,377	15,474
Eastern Europe								
Former USSR	1,150	1,065	1,149	1,203	1,055	923	1,009	1,070
Hungary	80	104	129	140	76	90	123	148
Poland	478	515	640	500	499	563	652	653
Total	2,183	2,180	2,394	2,290	2,209	2,301	2,470	2,610
NAFTA								
Canada	1,394	1,389	1,507	1,577	2,555	2,529	2,991	3,023
Mexico	479	641	663	889	1,335	1,418	1,476	1,889
US	15,161	15,586	16,944	17,515	11,800	11,649	12,621	12,896
Total	17,034	17,616	19,114	19,981	15,690	15,596	17,088	17,809
Latin America								
Brazil	1,569	1,198	996	1,102	1,680	1,244	1,103	1,322
Total	2,467	2,078	1,711	1,859	2,203	1,744	1,422	1,684
Asia								
China	475	508	570	610	482	507	565	606
Japan	4,492	4,093	4,154	4,255	8,492	8,056	8,100	8,369
South Korea	1,159	558	913	1,165	2,308	1,625	2,362	2,604
Total	7,808	6,491	7,237	7,825	12,698	11,184	12,310	13,073
WORLD	45,082	44,913	47,718	49,193	47,655	46,761	49,427	51,472
Source: <i>adapted from Financial Times</i> , 8 December 2000								
Note: * forecast								

Globalisation and diversification in car manufacturing in the last 20 years has had a direct impact on the maritime car carrier market. *Fairplay* (June 19, 2003) reports that twenty years ago according to figures generated by Swedish-Norwegian vehicle carrier company Wallenius Wilhelmsen, the routes from Japan to North America and

Japan to North Europe / Mediterranean commanded a staggering 60 per cent of the car carrier trade. Other routes from Japan accounted for 17 per cent, giving this one country about three-quarters of the entire trade. Little changed during the 1980s and carriers are regularly ballasted back to Japan to pick up load upon load of cars destined for Europe and the USA.

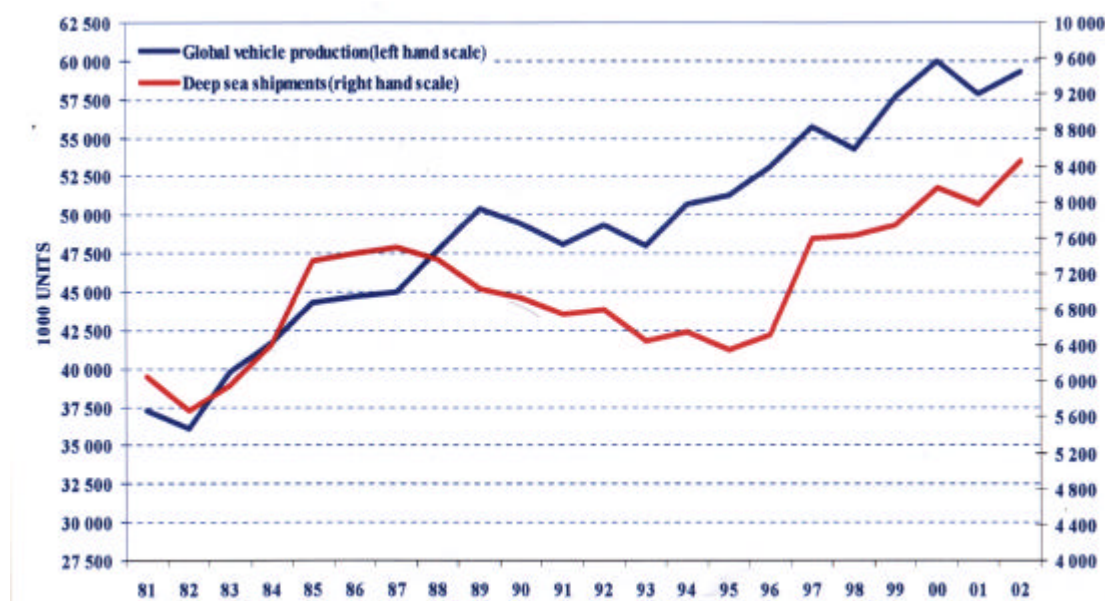
However, despite these continuities the period 1982-2002 saw a fragmentation in the trade (Figure 1). Whilst routes from Japan retain around half the vehicle shipments, Korean exports are currently estimated to constitute 20 per cent of the trade and there are indications that shipments will soon reach significant levels in South Africa, Thailand, Australia, Mexico and China (Fairplay June 19, 2003).

Figure 1: Global deep sea vehicle shipments: 1982 and 2002



(adapted from: Wallenius Wilhelmsen Lines, 2003)

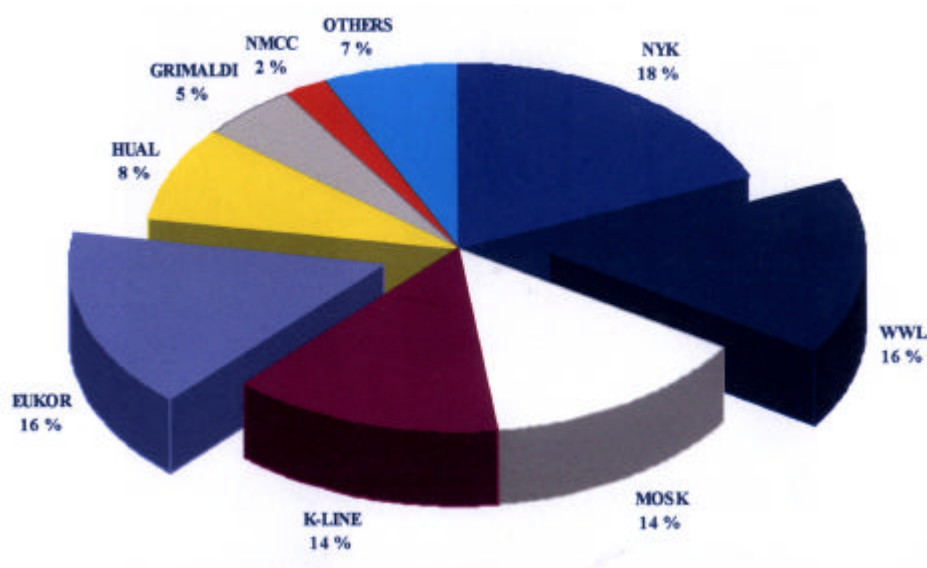
The globalisation of car manufacturing has been matched by the globalisation of the maritime car carrier sector. As figure 2 shows, there is a close relationship between vehicle production and deep-sea vehicle shipment overtime. Notwithstanding some divergence such as that illustrated in the period 1994-1997 when there was a general decline in deep-sea shipment at a time of increased global vehicle production.

Figure 2: Vehicle production and deep sea vehicle shipments

(adapted from: Wallenius Wilhelmsen Lines, 2003)

With the steady growth in vehicle shipment the total car carrying fleet has grown rapidly from 313 ships with a 1.3m car carrying capacity in 1993 to 417 vessels with a 1.9m capacity in 2003. We can also estimate the number of seafarers employed aboard car carriers as just over 9,000.

Whilst Japanese dominance in the car export trade has diminished, the big three Japanese maritime car carriers, NYK, Mitsui OSK and K-Line, still retain a 50 per cent share of the fleet. Wallenius Wilhelmsen holds a 16 per cent stake in the pure car carrier / pure car and truck carrier sector, doubled to 32 percent now that the Hyundai Merchant Marine fleet has come on board as EuKor Car Carriers.

Figure 3: Fleet capacity by carrier

(adapted from: Wallenius Wilhelmsen Lines, 2003)

SEAFARERS' LIVING AND WORKING CONDITIONS

As emphasised earlier, data on seafarers' living and working conditions was collected through onboard observation and interviews conducted in port. To date, two voyages have been completed; one aboard a car carrier trading in Western Europe and the Mediterranean and another on a car carrier trading in Europe and North America. Two further voyages are planned.

Port-based interviews utilise a modified version of the *Workplace Employee Relations Survey* (WERS98) conducted in major ports around Europe. This is a national survey of British workplaces, in which key role-holders at each workplace provide information on the nature of employment relations at their place of work. The survey is jointly sponsored by the Department of Trade and Industry, the Advisory, Conciliation and Arbitration Service, the Economic and Social Research Council and the Policy Studies Institute.

WERS 98 is the fourth in a series of surveys which began in 1980. Its primary aim is to provide statistically reliable, nationally representative data on the current state of workplace relations and employment practices in Britain. The survey is based on British workplaces and employees in those workplaces with at least 10 employees except for those in the following Standard Industrial Classification (1992) divisions: A (Agriculture, hunting and forestry); B (Fishing); C (Mining and quarrying); P (Private households with employed persons); and, Q (Extra-territorial organisations).

This part of the paper focuses on some of the responses of seafarers to the questions relating to attitudes towards work, pay, work/life balance, job satisfaction and job security; and their levels of commitment, stress and productivity. This part also compares the seafarers' responses with the WERS98 respondents working in manufacturing industries and with those car factory workers employed in two factories. All WERS98 respondents presented here are non-management employees.

The study aims to conduct 700 interviews all together. So far 150 questionnaires have completed by car carrier crews. Forty eight per cent of the respondents are junior and senior officers and the remaining 52 per cent are ratings – including petty officers. The majority of the respondents come from India and the Philippines although some come from European countries like England, Italy and Bulgaria. On average respondents are into their 3rd contracts on car carriers.

The nature of employment

As can be seen from Table 2, comparison of the length of work contracts demonstrates a sharp contrast between land-based manufacture workers and seafarers. All seafarers in our survey work on fixed term contracts whereas both manufacturing and car factory workers are overwhelmingly employed as permanent workers. Length of contract for officers in our survey varied from four to seven months, however, ratings were employed on fixed contracts of an average of nine months duration. Both officers and ratings had experienced rehiring by their employers or crewing agencies, but there was nothing to guarantee rolling contracts.

Table 2: Is your job permanent, or is it temporary or for a fixed term?

	Manufacturing employees	Car factory employees	Car carrier crews
Permanent	97%	97%	-
Temporary	2%	3%	-
Fixed Term	1%	-	100%

Note: The WERS data is weighted by size of establishment, therefore it represents the British industry entirely.

Working Hours and pay

Table 3 reveals that 77% seafarers work over 70 hours a week. There is no seafarer amongst the respondents working less than 61 hours a week. In contrast all workers in car factories work less than 51 hours a week. When the seafarers' working hours are compared to those of manufacturing workers a similar contrast persists; 90% of the latter work less than 51 hours in this industry.

Table 3: Weekly Working Hours – including any overtime or extra hours

Hours	Manufacturing employees	Car factory employees	Car carrier crews
Up to 36	10%	0	0
Between 37 and 40	45%	94%	0
41 to 50	35%	6%	0
51 to 60	8%	0	0
61 to 70	1%	0	23%
70 and over	1%	0	77%

When seafarers working aboard car carriers were asked about their reasons for working overtime or extra hours, the majority of the respondents (70%) said that it was required as part of their jobs. In contrast only 20% and 14% of the manufacturing and car factory workers respectively gave this reason.

Including extra hours and overtime UK manufacturing workers on average work 42 hours a week whereas car carrier crews on average work 73 hours. However, these long working hours are not reflected in seafarers' wages. Table 4 shows that 56% of

the car carrier crews earn \$284 or less a week but only 18% of manufacturing workers fall into this category.

Table 4: How much do you get paid for your job before tax and other deductions are taken out?

	Manufacturing employees	Car factory employees	Car carrier crews
\$80 - \$127 per week	2%	0	8%
\$128 - \$284 per week	16%	0	48%
\$285 - \$411 per week	26%	5	12%
\$412 - \$569 per week	27%	57	16%
\$570 - \$853 per week	22%	32	12%
\$854 - \$1074 per week	4%	3	4%
\$1075 or more per week	3%	3	0

Note: Seafarers' wages include basic wage and overtime. Seafarers are paid in US\$. UK manufacturing wages converted to US\$ (based on 31 August 2003 exchange rates £/\$1.58).

However, the above analyses of weekly wages is not reflected in wage-satisfaction levels of respondents. Table 5 below shows how satisfied the respondents are with the amount of pay

Table 5: How satisfied are you with the amount of pay you receive?

	Manufacturing employees	Car factory employees	Car carrier crews
Very satisfied	5%	14%	14%
Satisfied	30%	32%	59%
Neither satisfied nor dissatisfied	23%	30%	18%
Dissatisfied	28%	22%	9%
Very dissatisfied	14%	3%	0

Despite receiving much lower wages than manufacturing and car factory employees, 73 % of the car carrier crews are either satisfied or very satisfied with the amount of pay they receive. This satisfaction level is 35% of car factory employees and 35% for manufacturing employees. Only 9% of the car carrier crews are not satisfied with their pay however, 42% of the manufacturing employees and 25 per cent of the car factory employees are either dissatisfied or very dissatisfied with the amount of pay they receive.

Satisfaction of car carrier crews' with their pay level is also reflected in their responses to other questions. When car crews were asked about what made them decide to become a seafarer, 'to earn good money' was the overwhelming response. Again one of the things that car carrier crews liked about their job was mainly related to better wage conditions compared to land-based employees in their countries of origin. Many seafarers from Asia and South East Asia stated that the alternative to working at sea was low paid employment, unemployment or self-sufficient agricultural activity. Here the multinational composition of the seafarer sample seems to be a critical factor as wage levels need to be contextualised with reference to standards of living in countries of domicile. In real terms, the wage levels of seafarers may not compare as badly with UK shore-based employers as a straight comparison with the WERS98 data implies. This highlights the complexity involved in making such comparisons.

Company loyalty and management climate

WERS98 contains a number of statements to which respondents were given the opportunity to express their level of agreement/disagreement. Table 6 summarises the responses given to the statement: 'I feel loyal to my company'

Table 6: 'I feel loyal to my company'

	Manufacturing employees	Car factory employees	Car carrier crews
Strongly agree	15%	16%	17%
Agree	37%	43%	55%
Neither agree nor disagree	30%	27%	23%
Disagree	10%	11%	5%
Strongly disagree	5%	3%	0

As can be seen from the table, the majority of employees feel loyal to their companies. However, close examination of the responses shows that the car crew workers feel relatively more loyal to their companies. Altogether 72% of the seafarers agreed with the statement "I feel loyal to my company" and only 5% disagreed. 52% of the manufacturing employees and 59% of the car factory employees also agreed

with the statement. Only 15 and 14 per cent of them disagreed, or strongly disagreed, respectively.

When the seafarers were asked for the reasons for their loyalty some said:

“Because they selected and brought me up to this position”

“If any other company pay me more I would quit but I wouldn’t do that for a couple hundred dollars more because it is better to work for the same company”

A similar trend could also be observed in the responses of employees to the statement, ‘I am proud to tell people who I work for’. As can be seen from Table 7, the majority of employees agreed with the statement regardless of their group. However, the car carrier crew’s pride in their companies was higher than the other two groups (87%).

Table 7: ‘I am proud to tell people who I work for’

	Manufacturing employees	Car factory employees	Car carrier crews
Strongly agree	15%	14%	14%
Agree	38%	54%	73%
Neither agree nor disagree	31%	19%	8%
Disagree	10%	5%	5%
Strongly disagree	5%	0	0

When the reasons for this pride in their companies were asked the car carrier crews responded that:

“You get your payment on time. In some companies you get your payment two months late etc.”

“This is a good company in our country. They also give us respect. They always call us for job”

“It’s a very big company. Foreign based and we earn in US\$”

Despite employee's high level of company loyalty and pride in their companies the management was perceived by the different group of employees as less participative on issues like consultation, providing information on changes to work practices, responding to suggestions and pay. In fact, in some areas car crew management was perceived as relatively less participative by their employees than management in the other two respondent groups.

As can be seen from Table 8, 41% of car carrier crews have never been asked their views on changes to work practices. However, only 19 and 27% of the car factory and manufacturing employees fell into this category.

Table 8: 'How often are you and others here are asked by the company for your views on changes to work practices?'

	Manufacturing employees	Car factory employees	Car carrier crews
Frequently	15%	28%	18%
Sometimes	40%	42%	36%
Hardly ever	16%	11%	5%
Never	27%	19%	41%

Similarly, the responses presented in Table 9 indicate that 64 per cent of car carrier crews had never been asked about their views on staffing (crewing) issues. However, 52 and 58% of the manufacturing and car factory employees fell into this category.

Table 9: 'How often are you and others working here asked by the managers for your views on staffing (crewing) issues?'

	Manufacturing employees	Car factory employees	Car carrier crews
Frequently	7%	3%	5%
Sometimes	19%	22%	26%
Hardly ever	22%	17%	5%
Never	52%	58%	64%

Furthermore, only 9% of car crews responded that they were consulted by their management on pay issues and when car crews were asked how good management

was in responding to suggestions from employees only 17 per cent of them said 'good'. An account from a junior officer highlights the situation:

“On this ship it’s difficult to go any further than the captain or chief engineer. There is no chance of any form of contact with the shore side of the management. The superintendent is coming to this ship first time. I might see him, might not.”

However, management’s handling of health and safety at work was rated very highly by employees of car carriers. Sixty-eight per cent of car carrier crews said that their management had frequently asked for their views on health and safety issues. However, only 24 per cent of manufacturing and car factory employees fell under this category. There are several issues to consider here. These include the extent to which seafarer “loyalty” to companies is a result of the context of insecure employment within the global seafarer labour market. Certainly the discrepancies between seafarers’ responses to questions about company loyalty and the degree of participation and contact they have with companies requires further consideration.

Life/work balance

As far as the life/work balance is concerned, long contracts spent confined to a ship, exacerbated by long working hours are unthinkable for most manufacturing and car factory employees. It needs to be recognised that as far as the life/work balance is concerned car carrier crews are an extreme case, nevertheless evidence of car carrier crews’ difference on life/work balance comes from the responses to the question below.

Table 10: If you needed to take time off, at short notice, for example to look after a sick family member, how would you usually do it?

	Manufacturing employees	Car factory employees	Car carrier crews
Use paid leave	53%	8%	0
Take time off and make it up later	10%	38%	5%
Go on leave without pay	21%	27%	59%
Couldn't take time off	3%	3%	36%
Some other way	7%	14%	0
Doesn't apply to me	5%	11%	0

As can be seen from Table 10 when the 3 groups of employees were asked if they needed to take time off, at short notice, how would they usually do it, the majority of the car carrier crews (59%) responded that they would go on leave without pay. Using paid leave was not an option for seafarers. However, for the majority of the manufacturing employees (53%) and 8% of the car factory workers this was an option. 36% of the car carrier crews stated that they could not take time off at all. In contrast only 3% of the manufacturing and car factory employees said so.

The following additional comments reflect the limited options of car carrier crews:

“You have to be repatriated on compassionate grounds and have to wait for your reliever to come onboard”

“I can take leave without pay but I have to pay for my own fare”

“I have to break my contract and go”

“I have to write to the company and give it to the captain to be forwarded. It depends on the response from the company. It could be accepted or rejected”

When the car carrier crews were asked “is it easy for you to get time off to attend to personal needs such as attending a wedding or a funeral” 11 per cent affirmed that it

was easy. However, 14, 18 and 55% said it was difficult, very difficult or impossible respectively. It is these differences in life/work balance which may prove key to the attitudes of seafarers and potential seafarer recruits when considering their future life and careers. Recruitment and retention are ongoing concerns for most responsible shipowners keen to establish and maintain high standards of service delivery as well as health and safety. Further data collection and analysis will be reported as the project completes and should be of interest to shipowners and managers as well as those involved in the recruitment and education of future seafarers.

CONCLUSION

At this early stage in the project, it is possible to tentatively report the following preliminary findings:

- Unlike other industrial sectors considered here the nature of employment for car carrier crews is contract work. Despite this, and their relatively low pay, they appear to be loyal to their employers and proud of who they work for. However, this may relate more to the tenuous nature of their employment than with strong corporate identification and further analysis is required in this area.
- The work-life balance of car carrier crews is extremely out of proportion and particular attention needs to be paid and this area is improving employee perception of work.
- The management of car carrier crews seems to be less participative than in other areas on even the most basic issues such as providing information on changes to work practices, responding to suggestions from employees and wages.

REFERENCES

- Beynon, H. (1973) *Working for Ford*, Harmondsworth: Penguin.
- Blauner, R. (1964) *Alienation and Freedom*, Chicago: Chicago University Press.
- Chinoy, E. (1955) *Automobile Workers and the American Dream*, Boston: Beacon Press.
- Danford, A. (1999) *Japanese Management Techniques and British Workers*, London: Mansell.
- Delbridge, R. (1998) *Life on the Line in Contemporary Manufacturing: The Workplace Experience of Lean Production and the Japanese Model*, Oxford: Oxford University Press.
- Dohse, K., Jurgens, U. and Malsch, T. (1985) 'From "Fordism to Toyotaism"? The Social Organisation of the Labour Process in the Japanese Automobile Industry', *Politics and Society*, 14 (2)
- Drewry (1999) *Market Outlook for Car Carriers: New Opportunities in a New Millennium*, London: Drewry Publishing.
- Fucini, J. and S. (1990) *Working for the Japanese: Inside Mazda's American Auto Plant*, New York: Free Press.
- Garrahan, P. and Stewart, P. (1992) *The Nissan Enigma*, London: Mansell.
- Gereffi, G. and Korzeniewicz eds. (1994) *Commodity Chains and Global Capitalism*, Westport: Praeger.
- Graham, L. (1995) *On the Line*, Ithaca: ILR Press.
- Kahveci, E. (1999) *Fast Turnaround Ships and Their Impact on Crews*, Cardiff University: Seafarers International Research Centre.
- Karesek, R. and Theorel, T. (1990) *Healthy Work: Stress, Productivity and the reconstruction of Working Life*, New York: Basic Books
- Lane, A.D. and Kahveci, E. (2002) 'The Formation and Maintenance of Transnational Seafarer Communities', End of Award Report to ESRC, L214252036.
- Lewchuk, W., Stewart, P. and Yates, C. (2001) 'Quality of Working Life in the Automobile Industry', *New Technology, Work and Employment*, 16 (2).
- Linhart, R. (1981) *The Assembly Line*, London: John Calder.
- Lloyd's List (2000) 'Special Report on Vehicle Carriers: NYK Line Focuses on Efficient Delivery', Friday 4 August.

Lloyd's List (2001) 'Special Report on Vehicle Carriers: Operators Keeping on Top of Trends', Thursday 19 July.

Milkman, R. (1991) *Japan's California Factories: Labor Relations and Economic Globalisation*, Los Angeles: University of California

Milkman, R. (1997) *Farewell to the Factory: Auto Workers in the Late Twentieth Century*, Berkeley: University of California Press.

Nichols, T, Sugur, N. and Demir, E. (2002a) 'Beyond Cheap Labour: Trade Unions and Development in the Turkish Metal Industry', *The Sociological Review*, forthcoming March

Nichols, T, Sugur, N. and Demir, E. (2002b) 'Globalised Management and Local Labour: The Case of the Whitegoods Industry in Turkey', *Industrial Relations Journal*, 33 (1) March.

Nichols, T. and Beynon, H. (1977) *Living with Capitalism: Class Relations in the Modern Factory*, London: Routledge.

Rinehart, J., Huxley, C. and Robertson, D. (1997) *Just Another Car Factory? Lean Production and Its Discontents*, Ithaca: ILR Press.

Taylor, R. (2001) *The Future of Work Life Balance*, ESRC Future of Work Programme.

Williams, K, Froud, J., Haslam, C., Johal, S. and Williams, J. (1998) 'Breaking the Chains: A Sector matrix for Motoring' *Competition and Change*, 3, pp. 293-374.

Wallenius Wilhelmsen Lines, 2003 Presentation, 11 February 2003, PDF Document.

CHINESE AND FILIPINO SEAFARERS: A RACE TO THE TOP OR THE BOTTOM?

*Minghua Zhao and Maragtas S V Amante*¹

INTRODUCTION

All countries with significant coastlines and groups of islands inevitably produce seafarers at some time or other in the course of their economic development, and the two countries which are the subject of this paper are no exceptions. Chinese ships and seafarers were famously exploring the Indian Ocean more than a century before the arrival of the Portuguese and once the Spanish Pacific empire was established in the 16th century, the ships linking Mexico to Manila were mainly crewed by Filipinos. And it need hardly be said that Chinese and Filipinos have both been employed by foreign ship-owners throughout the 20th century. What is unquestionably new is the magnitude of Filipino seafarers' employment in the world's merchant ships and the extraordinary growth of China as a nation with a major stake in the shipping industry, both as ship-owner and as a source of seafarers.

The arrival of a major new maritime nation, the newness of a global labour market and the involvement in it of countries whose social, political and economic structures and institutions are not well-known or understood, naturally raises a number of issues, hence the cluster of SIRC studies focused on the demographic characteristics and systems of training, education and recruitment in what have come to be called the 'labour supply' countries. While this paper is of course entirely devoted to China and

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the Philippines, a similar study has been completed on Turkey, others are close to completion in Central and South America, and a study of India is in progress.

This paper comparing the Philippines and the People's Republic of China summarises a large amount of otherwise detailed and extensive information. The preliminary discussion of the numerical contribution made by Filipino and Chinese seafarers to the global labour market sets the tone of the discussion. After a brief note on seafarers' regional origins and family backgrounds, the paper focuses its analysis, first on recruitment, pay and trade union affiliations, and then on maritime education and training. By comparing these dimensions, we highlight the diversity and dynamics of seafarers in those two countries and argue that aside from numbers, the race to the top or the bottom of the seafarers' global labour market involves factors such as demographics, quality of maritime education and training, labour institutions such as trade unions, and other social dimensions.

We note that the variations in the practices have important implications affecting the supply of both Chinese and the Filipino seafarers, indeed seafarers of all nationalities to the world fleets. In the conclusion, we address this issue by attempting to answer the question raised in the title of this paper: What should China and the Philippines do in the face of globalisation? Should they compete against each other by depressing each other's wages and other standards and race to the bottom? Or should they help and support each other and race to the top standards?

THE RESEARCH

Data presented in this paper are drawn mainly from SIRC Global Labour Market Country Studies, conducted by SIRC researchers and associates in China and the Philippines in 2002 and 2003, and supplemented with information from other sources including SIRC Seafarers Database and available literature.² Specifically, data on

² The SIRC Global Labour Market Study represents a core part of the Centre's research on world seafarers. It has two main components: the annual survey of crew composition based on crew lists collected worldwide from maritime administrations, flag state registries, port authorities and

Chinese seafarers came from a survey of 189 seafarers conducted on board ships in four major port cities in 2002 (Shen *et al*, 2003) and another survey of 131 seafarers and 309 students in the country's MET institutions in 2003 (Li & Zhao, 2003).

Data on Filipino seafarers came from a survey of 374 seafarers in international ships and of 658 students in 11 MET institutions nationwide in 2002 (Amante, 2003). In addition to the questionnaire surveys with seafarers and students, in-depth interviews were also conducted with employers, crewing agents, government officials, trade union leaders and MET instructors in both cases.

CHINESE AND FILIPINO SEAFARERS: AN OVERVIEW

Further to SIRC report on the number and distribution of shipboard world seafarers in 2001 (Lane *et al*, 2001), the 2002 SIRC global census of the crews of cargo ships trading internationally showed some 28 per cent of seafarers were Filipino and 6 per cent Chinese.³ Where almost all Filipinos were employed aboard foreign-flag ships (96 per cent), the great majority of Chinese (80 per cent) were employed aboard nationally-flagged ships (25 per cent), Hong Kong-flagged ships (20 per cent) and approximately 35 per cent aboard Chinese-owned Panamanian-flagged ships. The general nationality distribution of the world's ten largest seafarer populations is shown in **Table 1** and this underlines the point that regardless of nationality, the world's shipping industry just like the world's textile and clothing industries, has become heavily dependent upon labour from the lower income countries.⁴

immigration agencies; country studies conducted by SIRC researchers with collaboration from senior researchers in relevant countries and world regions.

³ The SIRC Seafarers Global Labour Market Database counted seafarers on board ships and did not include those on shore leave or those waiting for employment. The total number of seafarer is estimated at 1.23 million (404,000 officers and 823,000 ratings) if those on shore leave and waiting for employment are included (ISF, 2000).

⁴ According to World Bank (2003), the GDP per capital was \$838 for China and \$1050 for the Philippines in 2001 based on exchange rates. In comparison, the GDP per capital was \$37,600 for the US and \$25,300 for the UK in the same year.

Table 1. Ten Largest Seafarer Nationality Groups (2002)

Rank	Country	% of world total
1	Philippines	28.1
2	Russia	6.8
3	Ukraine	6.3
4	China	6.2
5	India	5.0
6	Indonesia	4.0
7	Poland	3.5
8	Greece	2.8
9	Turkey	2.5
10	Myanmar	2.3
	<i>All top 10</i>	<i>67.5</i>

Source: *SIRC Global Seafarers Database, 2003.*

When we come to a comparison of the age and rank of Chinese and Filipino seafarers, the data in **Table 2** shows Chinese officers are much more likely to reach senior officer rank (master, chief engineer, chief officer, second engineer) than their Filipino counterparts. This difference appears to be largely a function of the fact that most Chinese work aboard Chinese-controlled ships and accordingly have considerably improved promotion prospects. No doubt the same explanation also serves for the larger proportion of Chinese junior officers.

Table 2. Distribution of Chinese and Filipino Seafarers by Rank (2002)

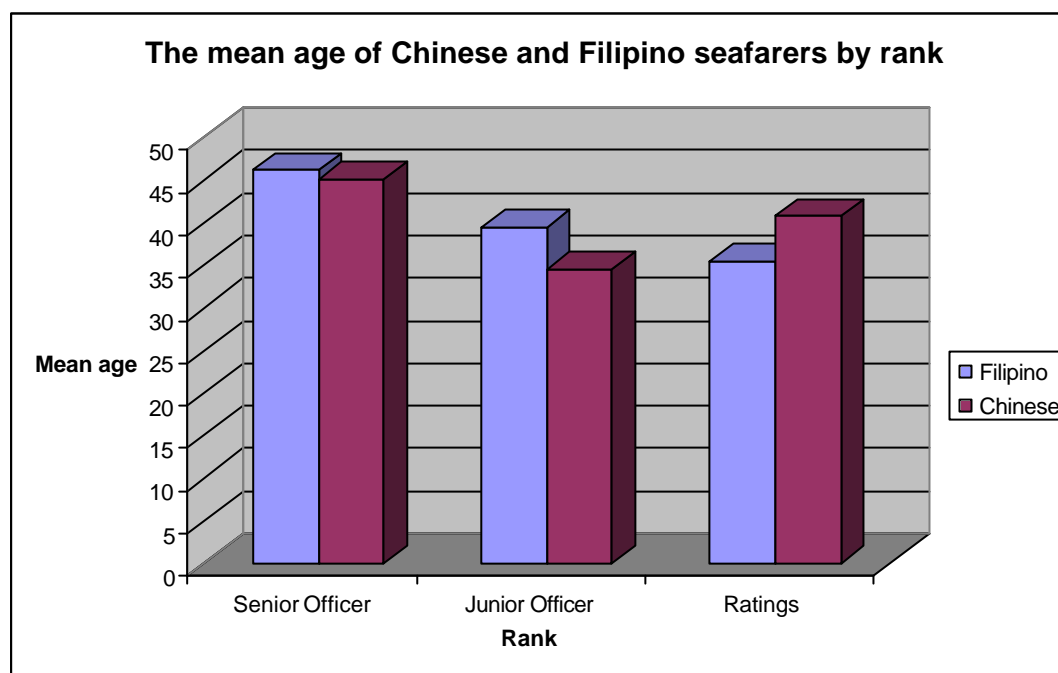
Rank	Chinese	Filipino
Senior officers	18 %	9 %
Junior officers	25 %	19 %
Ratings	57 %	72 %

Source: *SIRC Global Seafarers Database, 2003.*

As the data in **Figure 1** shows, although Filipino senior officers are a few years older than their Chinese counterparts the differences are not great and in any case probably reflect the enhanced promotion possibilities in an expanding nationally-owned fleet. The same reasoning presumably would apply to the significantly lower age profile of Chinese junior officers. Where ratings are concerned the significantly higher age of the Chinese ratings reflects the high levels of unemployment among them, due largely

to the replacement of older ships with large crews by new ships complements not much larger than the world average.

Figure 1. Chinese and Filipino Seafarers by Rank and Age (2002)



Source: SIRC Global Seafarers Database, 2003.

DEMOGRAPHICS

Regional Origin

Attitudes and values of seafarers are shaped by their socio-economic backgrounds. In both China and the Philippines, poverty and rural origin are two striking features in many seafarers' and students' backgrounds. In China, *hukou* registration defines individuals as having either an urban or rural status and this is important in determining the individual's life-chances because urban residents have far more opportunities than rural people do. In the SIRC survey of active Chinese seafarers 80 per cent were registered as urban residents whereas most students in maritime training and education (80 percent) were registered as rural residents. In 2000, Dalian Maritime University recruited 746 new students among whom 70 percent originated in inland provinces. In the same year, neither Dalian Maritime University nor

Shanghai Maritime University was able to recruit any student from Dalian or Shanghai (Shen & Zhao, 2001). In the Philippines the great majority - 81 percent - of the seafarers in the survey originated from high poverty rural areas of the island provinces of Cebu, Bohol, Mindanao and Leyte.

Family Backgrounds

Filipino seafarers typically come from large families, with an average of 6 siblings or an average family size of eight members (with two parents). In comparison, Chinese seafarers belong to small families, with an average family size of three to four (two parents with or without a sibling). Most Filipino and Chinese seafarers are married, with children. All Chinese seafarers with children have only one, reflecting the effectiveness of the country's strict family planning policy. On average, Filipino seafarers have four children.

Where socio-economic status is concerned both Chinese and Filipino seafarers are recruited from among families of lower social status. In the Chinese survey, some 60 percent of the seafarers' fathers were either peasants or other manual workers. In the Filipino sample, most (58 percent) of seafarers' fathers were engaged in fishing and farming.

Where mother's occupations were concerned, we found that some 53 per cent of Chinese mothers were peasants, 16 per cent were other manual workers and 13 percent were white-collar employees, a similar proportion to that found among Filipino seafarers' mothers (12 per cent). Most (55 per cent) Filipino mothers were fulltime housewives, 15 percent were self-employed market vendors.

In the Chinese survey, a comparison of parents' education and occupation as between serving seafarers and students in MET institutions suggests a clear decline in seafarers' social status. While some 10 per cent of seafarers' fathers were reported as having experienced higher education, only two per cent of students' fathers were found to have been to colleges or universities. A similar pattern was found in fathers' occupations. Over 19 percent of serving seafarers' fathers were white-collar workers but only six percent of students' fathers were in the same category. The new

generation of Chinese seafarers seems to be drawn increasingly from families where parents are likely to be less well-educated and employed in less prestigious occupations.

RECRUITMENT, PAY, UNION AFFILIATION & MET

What is the context by which China and the Philippines supply seafarers in the global labour market? In what conditions are Chinese and Filipino seafarers trained, recruited and paid? Variations in practices with respect to pay, recruitment, trade union affiliation, and maritime education and training, among other dimensions, affect both quantity and quality of supply of seafarers by both countries. The following details provide a rough sketch or landscape for the labour market entry of seafarers in both countries.

Recruitment

Philippines

Filipino seafarers are mostly dependent upon crewing agencies for their entry into the labour market, although some shipping firms recruit directly. Most of these agencies are concentrated in Manila. In 2002, there were 417 crewing agencies involved in the recruitment, processing and deployment of the 209,953 seafarers recorded as being contracted. These agencies are under the control of the Philippines Overseas Employment Administration (POEA), a government body set up in 1994 to regulate crewing agencies and the deployment of seafarers.

Although the agency is the formal point of entry into employment, the seafarers' own job search begins, as it does universally and in all occupations, with accumulating scraps of labour market intelligence from such formal and informal sources as advertisements, relatives, friends, classmates, school officials, former crew members and shipmates. They simultaneously make daily visits to agencies for the latest job postings and announcements. The Rizal Park seafarer labour market is the venue for

checking information with other seafarers, information about working conditions, policies and practices of crewing agencies and shipping companies.

Seafarers fly or travel by ferry into Manila, often from various islands hundreds of miles away and often spend months in job search. In our survey we found that the average cadet took 13 months to find his first job. Only those seafarers employed through a shipping company's wholly-owned agency could expect to have to wait for less than two months for their next ship. While engaged in job search in Manila, seafarers may stay with friends or relatives but most lodge in cheap and crowded rented 'apartments' or trade union-owned dormitories. According to the ILO convention and Philippines law, crewing agencies are not allowed to charge seafarers for placing them in employment. Seafarers however say that instead, they sign on for "cash advances", or "training and orientation fees" which are deducted from their pay later on. The market is most harsh to cadets. Many young graduates of the maritime academies have to work as 'utilities', i.e. as volunteer assistants, for the agencies for months without any pay before they can hope to have a assignment.

The POEA prescribes a Standard Employment Contract (SEC) which specifies the job title, length of employment at sea, hours of work, holidays, allowances, and pay of the seafarer. The SEC also specifies the procedures for repatriation, and the process for settling grievances, and compensation claims. It has a long annex listing types of injuries and corresponding compensation levels. The POEA standard employment contract for seafarers requires that the duration of the contract should not exceed 12 months. In practice most contracts are for between 6 to 9 months. Contract extensions are however possible and this is accepted by the POEA.

China

In China, seafarers' recruitment is much more varied. Seafarers may be direct and regular employees of shipping companies, clients of crewing agencies or attached to the labour bureaux of local governments.

Until the late 1990s, the absolute norm was for ocean-going seafarers to be attached to shipping companies and to rely on the company for assignment to ships and life-

long employment. Enterprise reform since the late 1980s has broken this pattern and fixed-term labour contracts have been introduced to cover all seafarers. However, different terms and conditions are provided for 'old seafarers', those employed before the adoption of the fixed-term contracts and 'new seafarers', those employed after its adoption.

'Old seafarers' are still treated as 'company men', although many have been forced into early retirement or made redundant. These seafarers still view themselves, and are viewed by their employer, as 'belonging' to the shipping company. This sense of 'belonging' is made material by the fact that virtually all matters concerning the seafarers' work and life, such as ship assignment, wages payment, leave rotation, party membership development, housing allowances and social security, are dealt with internally by the shipping company. To these seafarers, the shipping company is their 'work unit', which they depend upon for survival. They need to sign two kinds of contracts: *the employment contract*, which notes their overall employment conditions and relations with the company, and *the sailing contract*, which specifies terms and conditions for any particular voyage. Most of these seafarers are placed on nationally-owned ships, many of which fly the Panamanian flag.

Shortages of officers and a surplus of ratings impact on the length of duty tours. Officers, especially senior officers, have to stay at sea longer than before, often for more than 9 months or, alternatively, have to significantly reduce their home leave periods. On the other hand, ratings' sea service at sea has been drastically reduced 'so that more seamen can share our ships', as the HR Manager in a big shipping company explained in an interview. In most cases, it is normal for a rating to spend 6 months at sea in the calendar year. Compared with 'new seafarers' or seafarers recruited since the late 1990s and from the country's inland rural areas, these seafarers are in a relatively privileged position.

'New seafarers' are attached to crewing agencies or quasi-crewing agencies like the Seafarers Bureau operated by local labour bureaus (to be discussed later). These seafarers depend on agencies for job, training, and management of all other affairs relevant to their employment. Such a regime has effectively ended seafarers' dependency on shipping companies, the traditional 'work units', which were a most

important hallmark of the planned economy. 'New seafarers' have, therefore, been exposed to the risks of the labour market. Here, the lack of information of job opportunities, the absence of trade union representation etc have created new forms of dependency for seafarers. Now, seafarers have to rely on middle men and such a dependency makes individual seafarers more vulnerable to exploitation (Zhao & Li, 2003).

Compared with their counterparts in the Philippines, Chinese crewing agencies are a new phenomenon in the People's Republic and a direct result of the economic reforms since the 1980s. As of 2002, there were 54 crewing agencies registered with the Co-ordination Council for Overseas Seamen Employment of China (COSEC), a semi-governmental body set up in 1989 to co-ordinate the employment of Chinese workers to provide labour and service overseas, including seafarers' employment on foreign ships (COSEC, 2002). Most of the agencies are concentrated in such large port cities as Dalian, Qingdao, Tienjin, Shanghai and Guangzhou, although Beijing is the site of the two largest agencies in China, COSCOMAN (COSCO Manning Co-operation Inc.) and MASES (China Marine & Seamen Service Corp). Agencies can also be found in Wuhan, a metropolis located in central part of the country but with the largest and busiest port on the Yangtse. (Li, 1998; MASES, 1998, cited in Zhao 2000, and Shen & Zhao 2001).

As in the Philippines, quality of service varies greatly from agency to agency. There are agencies with whom seafarers are most satisfied with, and also agencies denounced by seafarers, trade unions and welfare agencies for abuse or negligence of seafarers they provided for unscrupulous foreign ship owners.⁵ Again like their Filipino counterparts, some Chinese agencies charge fees to both foreign ship owners and seafarers. Double book-keeping was reported by a considerable number of seafarers interviewed by both authors and their associates for their respective studies.

Many of the crewing agencies, especially the larger ones are subsidiaries of the personnel /human resource departments of big state-owned shipping companies located in main port cities, hence, for example, COSCOMAN-Shanghai Ltd.,

COSCOMAN-Guanzhou Ltd and so on. These 'Ltds' are subsidiaries specialising in the recruitment of seafarers for foreign ship owners (Shen & Zhao, 2001). With close personnel, political and technical links with parents shipping companies, these agencies are in an advantageous position in getting quality seafarers and relatively better regulated.

Overall, the agencies in China are, paradoxically, less centrally regulated than those in the Philippines. In China, there is no governmental body like the POEA charged with the administration and regulation of affairs concerned with seafarers taking employment on foreign ships. Many manning agencies operate without any awareness/concern for national and international labour and maritime rules and regulations. Seafarers involved in the widely-reported cases of the *Acadia* and *Pescama* were among those employed through manning agencies of this kind (Zhao, 2000).

The least regulated, however, are the agencies that operate underground and have never registered with COSEC or any other national organisation. Most of the seafarers dependent on these agencies are seafarers who have been made redundant by state-owned shipping companies. Dumped at the bottom of the labour market, they are most vulnerable to exploitation. These seafarers are called 'free seamen (*ziyou chuanyuan*)' and virtually entirely depend upon crewing agencies for their economic survival.⁶

The labour bureaux are government agencies, hived off from the Ministry of Labour at the provincial and local levels, and in charge of urban residents' employment issues. They normally show no interest in administration or management of employment affairs concerned with individuals from the countryside but this is not the case with regard to the shipping industry. A recently completed SIRC case study in an under-developed district in central China suggests that local government in inland provinces have started playing an active part in seafarers' training, employment and management (Li & Zhao, 2003). Our case study found that one local government

5. Examples include the notorious cases of *Acadia* and *Pescama* (Liu & Li, 1997) and letters of complaint sent to ITF from Chinese seafarers.

agency, called the Seafarers Bureau, had been set up with personnel support from the labour bureau, with the aim of ‘promoting the training and export of seafarers from our inland regions for national and international ship owners’. The agency has close bureaucratic links and political support from the Labour Bureau but with clear market functions – it charges fees from both seafarers and their employers. The bureau takes charge of seafarers’ education and training, employment placement, management and further training (when seafarers are between ships). Evidently, although a government agency, the labour bureau-tied agency also functions as a crewing agency, mirroring some typical features of the country’s ‘socialist market economy’ where the state strives to promote market values. Such dual identity allows the local government to benefit most from both the state and the market resources.

Pay

Seafarers’ pay has always been a politically sensitive and practically difficult topic. While the general impression in the industry is that Chinese seafarers receive lower wages than the Filipino seafarers and some commentators speculate that Chinese seafarers earn on average 20 percent less than their Filipino counterparts (Hand, 2001a), there was no valid data supporting such impressions or speculations. Data collected through our respective studies confirm that the total pay received by Chinese seafarers employed on ocean-going ships in big state shipping companies, on average, was 35.8 percent lower than that received by the Filipino seafarers, as shown in the following table.⁷

Table 3. Average total ‘all-in’ monthly pay (in USD), 2001

	Filipino	Chinese	Difference
Captain	2978	2011	967 (33%)
Chief Engineer	2765	1857	908 (33%)
Chief Mate	2300	1420	880 (38%)
AB	1001	611	390 (39%)

Source: Amante, 2003; Shen & Zhao, 2001.

⁶ Dr. Bin Wu’s survey in Hong Kong included many seafarers in this category in his sample and the research report will be published soon.

⁷ It would be ideal if a direct comparison could be made between wages received by Chinese seafarers on foreign ships and the wages received by Filipino seafarers on foreign ships. Unfortunately, there is no complete data available for the authors to make such comparison. The comparison presented here, however, provides some insights regarding the pay regimes for both cohorts.

On foreign ships, seafarers supplied by large crewing agencies are usually among the most experienced and with good formal standards in speaking English. On average, the pay received by these 'cream' seafarers was 30 percent higher than those placed on national vessels, and this is particularly true for officers. It must be noted that this tends to be the practice of large crewing agencies, hence does not reflect the practice of small (and usually less regulated) agents (Shen & Zhao, 2001). The figure, however, suggests that the pay received by these Chinese seafarers is close to the levels of Filipino seafarers taken as a whole, though it does need to be borne in mind that the labour market for Filipino seafarers is also stratified in terms of quality.

Our study on Chinese seafarers employed through medium and small crewing agencies (hence more vulnerable to exploitation) and placed on both national and international ships found that the highest 'all-in' monthly pay was 16,600 *yuan* (\$2000), the lowest 1,000 *yuan* (\$120), and the average 5506 *yuan* (\$663). In contrast, seafarers in the Filipino sample reported the highest pay of \$2978, the lowest \$358, and the average of \$1,224. On average, the Filipino 'all-in' monthly pay doubles the size received by the Chinese seafarers in this category.

Trade Union Affiliation

Freedom of association is a key labour standard. The capacity and strength of trade unions to negotiate and collectively bargain for pay, and other terms of employment can play a major part in determining the payroll costs of shipping firms. In China, trade unions are positioned as subordinate organisations to the Communist Party and all trade unions, including All China Seamen's Trade Union, are 'unified' under the monopoly of All-China federation of trade Unions (ACFTU). As workers in other industries in the state sector, seafarers in state shipping companies 'automatically' become union members at the time of their employment and their membership last as long as their employment. Nearly all the sampled seafarers reported that they were union members although few of them were aware of their labour rights.⁸ In the

⁸ The National People's Congress made amendments to the Trade Union Law in October 2001. The amendments brought in some favourable changes, making the country closer to ILO labour standards, although the Law in whole is considered as not effective on strengthening workers' rights. The role of Chinese trade unions is still viewed as more to help maintain social stability than to protect workers' rights and democratise union movement (Masako Asaeda, 2003).

Philippines, union membership is for the duration of the seafarers' employment contract, mostly from 6 to 9 months. Collective bargaining agreements may include all Filipino seafarers in a given voyage (union or closed shop provision). Membership fees of mostly \$5 monthly were automatically deducted from the seafarers' pay. About 47 percent of the Filipino seafarers said they were union members, and 10 percent said they were former union members. About 43 percent said they were not members of unions. A greater percentage of junior officers (51 percent) and ratings (47 percent) were union members, compared to senior officers (38 percent).

Maritime Education and Training

Institutions, enrolments and throughputs

Consistent with its being the largest seafarer supplying country, the IMO's *Compendium of Maritime Training Institutions* (IMO 2003) shows that the Philippines has 98 MET institutions, the world's highest. Philippine official reports show that across the country, there are 76 maritime education institutions and 41 seafarers training centres in 2002.

While the annual enrolments are estimated at 26,500, graduates from both deck and engine programs were registered as 5,178 in 2001 (CHEDMaritime Section 2002). The huge gap between the number of new students enrolled for MET studies and the number of graduates from these institutions suggest a large drop out or wastage rate. Most students were unable to afford the costs hence could not finish the course; many are unable to find placements for cadetship or shipboard training. Most maritime schools have 'ladder-type' systems, wherein students unable to finish the 4-year college program could be awarded an 'associate in nautical science' or 'associate in marine engineering' degree. The high wastage rates suggests inefficiencies in the 'free market enterprise' system of student admissions, which emphasise profit in admitting large number of maritime students who pay tuition, rather than quality.

China has two maritime universities and maritime departments in five other universities offering BSc and postgraduate degrees in maritime transport and engineering. In addition, there are six colleges offering non-degree MET courses, 22

marine or nautical schools and 40 training centres offering short updating courses. Annually, an estimate of 5,000 students are enrolled as deck and engine officers and 'several thousands' as ratings (Gao, 2002, Cui, 1998). The official figure notes that, in 2001, 3,927 graduated with BSc or other higher education certification from MET institutions with a pass rate of 89 percent.⁹ According to senior staff in the career office of one MET institution, most of the graduates who did not go to sea had employment in other sectors of the maritime industry. **Table 4** gives a summary of some main features concerning the number of institutions their total annual enrolments and graduates in China and the Philippines.

Table 4. MET institutions, enrolments and throughputs (2001)

	CHINA	PHILIPPINES
INSTITUTIONS	<ul style="list-style-type: none"> ▪ 2 universities for BSc & higher degrees in MET ▪ 5 universities offering BSc & higher degrees in MET ▪ 6 MET colleges ▪ 22 MET vocational schools ▪ 40 MET training centres 	<ul style="list-style-type: none"> • 76 MET institutions offering officer and rating programs at the college and associate levels • 41 training centres
ANNUAL ENROLMENTS	<ul style="list-style-type: none"> ▪ 5,000 officers ▪ several thousands ratings¹⁰ 	<ul style="list-style-type: none"> ▪ 27,000 (officers & ratings)
ANNUAL THROUGHPUTS	<ul style="list-style-type: none"> ▪ 3,927 graduates attending CMSA Exam (2001) ▪ 3,477 certified by CMSA (2001) 	<ul style="list-style-type: none"> ▪ 5,178 graduates in 2001

Sources: Song, 2002a, 2002b; Gao, 2002; Cui, 1998.

As in the rest of the world, seafaring is still a male monopolised occupation in both countries. In China, all the institutions, except one in Shanghai, are closed to women for marine training. Comparatively, the Philippines seem to have a more proactive

⁹ Of those who passed the examination, 1852 (53.3 percent) were deck officers and 1652 (46.7 percent) were engine officers.

¹⁰ While it has been widely agreed that about 5,000 students are enrolled for officer training in Chinese MET institutions every year, estimates of the number of ratings enrolled for training vary greatly. In 1998, Cui noted, 'Every year, our country's marine schools take 20,000 students and train them into ratings'. According to Gao's report in 2002, the annual intake of students for rating training became 'several thousands (Gao, 2002). The conflicting figures may suggest that the country has significantly reduced its training program for ratings because, as in many other labour supplying countries and as many Chinese shipping companies noted in our study, 'China has a surplus of ratings.'

approach: a dozen or so female students were found in each of the five biggest maritime colleges during our fieldwork in 2001.

Ownership & Governance

The state's influence over MET institutions is critical in regulating the quality and volume of the seafarers' flow into the global labour market. China and the Philippines present a strikingly different picture in terms of the MET institutions' ownership. In the Philippines, there is an active private sector engaged in seafarers' education and training. Of the 76 maritime institutions, only seven are owned by the government. One, MAAP, is financed by national and international trade unions, and several training courses in other institutions are supported by foreign investment (mainly from Japan and Norway). All other institutions and training centres are owned by entrepreneurs with interests in other areas of education and business more generally. Many school owners are involved in politics or have supportive connections with politicians.

In China, virtually all the maritime universities, colleges, academies, school and centres are directly or indirectly owned by the state via state-owned shipping companies. In recent years funding sources have been diversified to include funds from provincial or local governments, shipping companies, foreign ship owners and students' fees (discussed in more details below). Lack of funding for seafarers education and training is a serious problem faced by both the public and private sectors and in both China and the Philippines.

Table 5. MET ownership and governance

	CHINA	PHILIPPINES
OWNERSHIP & FUNDING	<ul style="list-style-type: none"> ▪ State (most) ▪ Shipping companies (e.g. Qingdao Marine College) ▪ Joint venture (e.g. Sino-Norwegian Centre) 	<ul style="list-style-type: none"> ▪ Private (most) ▪ State (7) ▪ Trade Union (1 MAAP) ▪ Foreign capital (IDESS, Norwegian Training Centre, etc.)
GOVERNANCE	<ul style="list-style-type: none"> ▪ Ministry of Education & ▪ Ministry of Communication 	<ul style="list-style-type: none"> ▪ Philippine Overseas Employment Administration (POEA) ▪ Maritime Training Council (MTC) ▪ Professional Regulation Commission (PRC) ▪ Commission on Higher Education (CHED) ▪ Maritime Industry Authority (MARINA)

As in the above table, both countries have designated bodies responsible for administration of seafarers' maritime education and training. In the Philippines, Philippine Overseas Employment Administration (POEA), Maritime Training Council (MTC), Professional Regulation Commission, Philippine Commission on Higher Education (CHED) and Maritime Industry Authority (MARINA) are all important administrative components regarding seafarers training and education. In China, Ministry of Education and Ministry of Communications are responsible for the administration. China does not seem to have as many specifically designated government regulatory agencies responsible for seafarers' affairs.

MET Process for Students

A formal Philippine maritime education consists of four to five years' college degree programmes for officers (marine deck and engineers) and 2 to 3 years' associate non-college degree programmes for ratings. College admission requires that the student has completed 6 years of elementary and 4 years of secondary (high school) education,

that is, a total of 10 years' compulsory pre-collegiate education. Many of the maritime schools offer a 'ladder-type program', according to which, after completing 2 to 3 years' schooling, students are given an 'associate nautical or marine engineering degree'. Graduates from such program find employment as ratings.

Graduates of the 'associate' degree program may find employment as ratings, but they have the option to proceed to the regular 4 – year college course. Students able to find placement and undergo shipboard cadetship training complete the program, and are awarded a college degree. They are then eligible to take the licensure examinations for marine officers. Those who don't finish, or fail the licensure examinations find employment as ratings.

In China students typically need two more years' pre-HE education before admission into universities for the MET degree study; Chinese ratings need significantly shorter time (1.5 years less) to complete the training.

Curriculum and Facilities

Military training for students is emphasised and practised by most MET institutions in both China and the Philippines. Such training requires several hours a week and mostly in parade and marching formation under all weathers. The training is conducted with the assistance of the Naval Reserve Officers Training Corps (NROTC) in the Philippines and by the People's Liberation Army (PLA) in China. Both countries employ the same rationale: it is claimed that it helps raise students' awareness of discipline and obedience, which in turn would improve their behaviour as seafarers. For their part students are apt to say that the military training is 'absolutely unnecessary, a pure waste of time'. The prevailing beliefs among school officials, common in both countries, is that regimented military training instils strong values of discipline, i.e. obedience into seafarers.

Interestingly, the ITF has been allowed to teach some rudimentary theories and practices of trade unionism to Chinese cadets on a course run jointly by the Norwegian Ship-owners Association and China Shipping at Shanghai's maritime academy (Guest, 2001, Lloyds List Special Report, 16 August, 2001). We note that

this is very rare given that trade unionism remains politically very sensitive in today's China. In the Philippines, maritime college courses include a course on 'Personnel Administration', or 'Human Resource Management' with topics on Philippine labour laws, including labour standards, unions and labour relations.

To most Filipinos, including seafarers, the English language, brought by American colonialisation of the Philippines from 1898 to 1946, is not a problem. Indeed, it is a tremendous advantage and 'asset'. According to the observation of some senior industry commentators, 'the proficiency of Filipino seafarers in the vital English language provides the nation with a trump card in its bid to stay number one in crew supply' (Hand, 2001a). English continues to be the official medium of instruction in Philippine maritime college courses, along with 3 or 4 mandatory courses on English communication skills (writing, grammar, and literature). All text-books and training materials in other subjects are also in English, although instructors often use the local language to explain complex concepts or lessons.

For Chinese seafarers, English unfortunately is a 'bottleneck', preventing more Chinese seafarers from employment on foreign ships. Language training and qualification are therefore emphasised throughout the process of a seafarer's recruitment, training, employment and further training. The minimum official requirement is for students to pass CET4 (College English Test, Grade Four) for ratings and CET6 for officers. In comparison, most other HE institutions expect students to reach CET4 as the minimum English standard to qualify them for a bachelor degree. The survey found that 78 percent of the seafarers had passed CET4 and 2 percent had passed CET6 (Li & Zhao, 2003).

China's training facilities, overall, have been described by international maritime press as 'good', 'excellent' or 'among the best in the Far East' in major MET institutions (Lloyds List, 2000; Hand, 2002b), although some shipping companies may not accept this view and the standards vary in some small institutions. In the Philippines, facilities vary greatly depending upon funding levels. 'State of the art' laboratories and equipments are found in a small number of institutions, but training facilities can be very poor in some private institutions.

In China, the reduction of the government funding forces MET institutions to establish closer links with the industry by placing students on board companies' trading ships as cadets. After 12 months, when cadets have obtained enough hands-on experiences, usually under supervision of some designated senior officers, and have successfully accomplished their thesis, the institution would grant them the bachelor's degree or other certificates accordingly. Both the maritime educators and the shipping industry welcome such a cadet training mechanism. Philippines maritime colleges establish linkages and agreements on cadetship and apprenticeship with both domestic and foreign shipping companies, for students to have shipboard training and experience. A common argument among Philippine maritime school officials is that cadetship or apprenticeship aboard an actual ship is better than having an expensive training ship with out-of-date or malfunctioning equipment, which are expensive and hard to maintain.

Cost for Students

The absolute costs, and who pays for maritime education affect the quality of education and the competencies of a seafarer. As demonstrated in the following, we have reason to argue that to ensure seafarers' quality, shipping companies must take bigger responsibilities in maritime education and training.

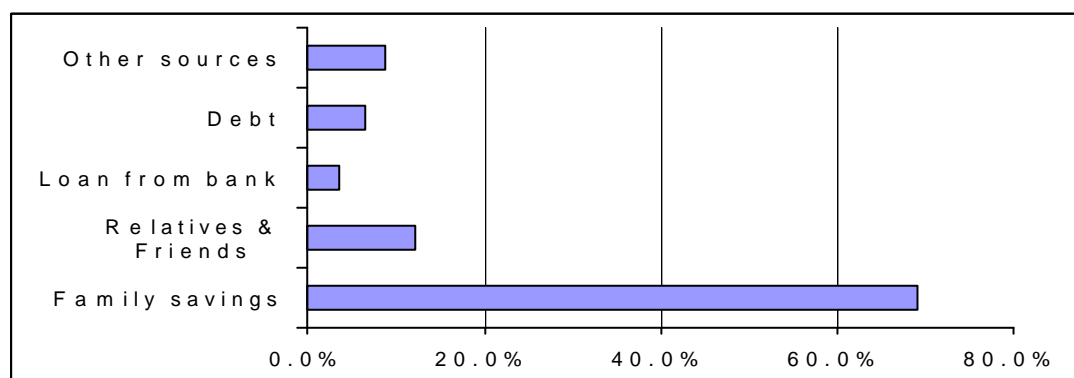
Both Chinese and Filipino students have to pay high fees for their maritime education and training and the cost is about the same in both countries. For each one-year or two-semester study in the MET institution, a Chinese student needs about 10,000 *yuan* (\$1,205) to cover his tuition, fees and living expenses, while his Filipino counterpart needs 62,542 *pesos* (\$1,250) to cover the cost. To complete a 4 year MET study in Shanghai or in Manila, the student would need about \$5,000 to cover the cost. This amount of money is equivalent to the total income of 17.5 Chinese peasants, given that average annual national income for rural resident was as low as 2366 *yuan* (\$285) in China in 2001. The cost of maritime education is about five times the average annual income for every Filipino, given that Philippine per capita income was \$ 1,050 in 2001.¹¹

¹¹ According to official statistics, the average annual income was 2366 *yuan* (\$285) for rural resident and 6859 *yuan* (\$634) for urban resident (CSSB, 2002). The statistics on the Filipino average annual

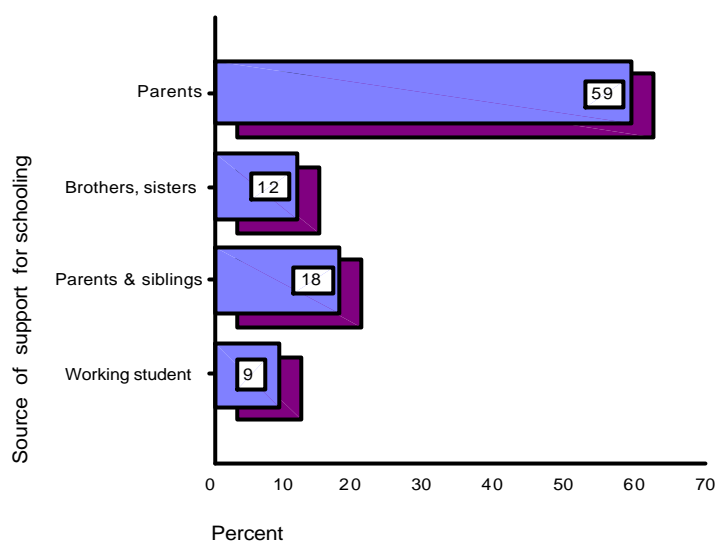
In China, maritime students' tuition fees used to be fully covered by a government grant, but this has been abolished as a result of the twenty years' market-oriented economic reform. There are scholarships, but the number is so small that very few students can get it. In China, we found no scholarship holders among our sampled students; in the Philippines, we found that only 2.3 percent of the sampled students were recipients of scholarships from shipping companies or beneficiaries of the government grant. In some cases, scholarships were given as 'study loans' and the students would be expected to return the money upon successful employment after graduation. No cases of real scholarship were found among the sample of Chinese students, including those under the training scheme with foreign funding, where the trainee is supposed to be 'fully covered'.

In both samples, most students have to rely on parents' savings or loans from friends, relatives and other sources including high-interest bank loans to pay the cost, as illustrated in the following charts (*Figure 2a, 2b*).

Figure 2a. Source of tuition fees & living expenses: China



income is from the World Bank Philippine country profile <<http://www.worldbank.org>> [Accessed 10 April 2003]).

Figure 2b. Source of tuition fees & living expenses: Philippines

Given that most of the Chinese and Filipino students were from poor rural areas and many from poverty stricken families, the MET cost is evidently a heavy burden to students and their families. Over 46 percent of the Chinese students and 14 percent Filipino students reported that their families had been deep in debt because their parents had to borrow large amounts of money to pay for their study. Many also reported that their parents even sold or leased property such as house, land (only in the Philippine sample), farming animals and cattle to raise funds for their schooling expenses.

It is most noteworthy that considerable proportions of the students (18 percent in the Filipino sample and 11 percent in the Chinese sample) reported that their siblings had to stop schooling to finance the student's maritime education and training. Most Chinese students (64 per cent) consider the fees 'excessively high' and many found it 'unbearable'. Although there is no quantitative data available for the Filipino cohorts, the excessive high drop out rate of 23 percent noted above (indicate that many Filipino maritime students could not afford to continue their schooling. Many students found part-time jobs, 31 percent of the Chinese and 41 percent of the Filipinos, to supplement their study in the MET institutions.

In China, one senior instructor in a maritime training program sponsored by some European ship-owners described a touching scene, '(A)t the beginning of a semester,

you would certainly see some lads submitting us large amounts of cash - old, dirty and small notes, and even coins. The notes and coins were the students' school fees. I could tell that every *fen* was by their parents to support their study in the academy. It was so moving that tears would well my eyes when I counted the notes and coins....'

CONCLUSIONS

As indicated by the comparative profiles discussed above, there are significant similarities and differences among the profiles of Chinese and Filipino seafarers indicate significant similarities and variations in terms of age, rank, family backgrounds, social status, work experience, practices in maritime education and training, recruitment, pay and trade union affiliations. Many of these reflect variations in both policies and practices concerning labour and maritime standards prevailing in either China or the Philippines. While there is some divergence in the seafarers' characteristics in both countries, there is increasing convergence in linkages with the global maritime labour market. Further research could examine the comparative history, thrusts and character of labour laws, stakeholders, and governance and institutions concerning seafarers in China and the Philippines.

There has been perceived tension and competition between the two labour suppliers in recent years.¹² Indeed, the competition, or 'race' for labour supply among crewing agencies is true not only for China and the Philippines, but to all seafarer countries mostly in the developing world. 'Race to the bottom' implies competition by eschewing labour and related standards. It therefore implies a need for much improved and effective global regulation and a strong and effective lead from the shipping industry's social partners.

¹² See for instance 'China threatens to displace Philippines as supplier of seafarers', page 1, *Business World*, May 30, 2002; 'Manning Industry to Resist Competition', *Philippine Star*, 23 August 2001; 'Chinese Onslaught, p. 4, *Tinig ng Marino* (Voice of the Seafarer, published by the United Filipino Seafarers;) September - October 2002); 'China 5 years away', headline news, *Philippine Maritime Enquirer*, December 2002; Marcus Hand, 'Philippines challenged on manning supremacy', *Insight and Opinion, Lloyd's List*, 27 November 2001.

It is also desirable that seafarers and welfare agencies world-wide strengthen their associations through various forms of bilateral or multilateral negotiations. Alongside the development of stronger seafarer organisations, we would expect the state to play a more active role in protecting seafarers' welfare and wellbeing in an age of globalisation. With regards to China and the Philippines, there is definitely a big gap between the countries' practices and such a goal, hence the urgent need for both to take immediate bilateral and concerted actions to strengthen their commitment. With regards to their positions in the global labour market for seafarers, their hope definitely lies in their racing to raise the quality of seafarers, and to the promotion of the best standards.

References

Asaeda, Masako, (2003), 'Seafarers Trade Unions in the People's Republic of China', internal document, ITF inspector in Japan.

Amante, Maragtas S.V. (2003), *Filipino Global Seafarers: a Profile*, draft report, SIRC, Cardiff University.

BIMCO/ISF (Baltic and International Maritime Council and International Shipping Federation), (2000), *BIMCO/ISF 2000 Manpower Survey: Summary Report*, Institute for Employment Research, University of Warwick.

CHED (Commission on Higher Education in the Philippines - Maritime Section), (2002), Unpublished statistical tables.

CMSA (Chinese Maritime Safety Administration), (2002), 'Statistics on the Total Number of Seafarers in Our Country', unpublished document, July, cited in Shen *et al*, 2003.

CMOC (Chinese Ministry of Communication), (2001), *Report on Chinese Shipping 2000*, Beijing: People's Transport Publishing House, p.148.

COSEC (Council for Overseas Service Employment Co-Ordination), (2002), 'Introduction of the Co-Ordination Council for Overseas Service Employment', organisation brochure.

CSSB (Chinese State Statistics Bureau), (2002), *State Statistics Report 2001*, Beijing, CSSB Publishing House.

Cui, Mingmo, (1998), 'The current and future status of the manning services of Chinese seafarers', Chinese Manning and Training International Conference, Qingdao.

Gao, Deyi, (2002), 'Maritime Education, Training and Administration in China', The First LSM Manning and Training in China Conference, Shanghai, 29-30 Oct.'

Guest, Andrew, (2001), 'ITF threatens action over Cosco's "double book keeping" on crew pay', News, *Lloyds List*, Sept. 7, <<http://www.lloydslist.com/NASApp/cs/Content>>, [Accessed 08 November 2002]

Hand, Marcus, (2002a), 'Philippines challenged on manning supremacy', *Insight & Opinion*, *Lloyds List*, 27 November, <<http://www.lloydslist.com/NASApp/cs/Content>>, [Accessed 08 November 2002].

Hand, Marcus, (2002b), 'Crewing faces China Syndrome', *Lloyds List*, 9 Sept., <<http://www.lloydslist.com/NASApp/cs/Content>>, [Accessed 08 November 2002].

IMO (International Maritime Organisation), (2003), 'Compendium of Maritime Training Institutes' <www.imo.org> [Accessed 16 September 2003].

Lane, A.D, Obando, B. Wu, B. Tasiran A (2002). *Crewing the International Merchant Fleet*, Surrey: Lloyd's Register - Fairplay Ltd.

Liu, Zhouwei & Li, Yongli, (1997), 'Bloody Murders on South Pacific', *Labour Guide (Laodong daobao)*, 28 Oct. p3.

Li, Jianqun, Zhao, Minghua, (2003), 'Seafaring Human Resource in China's Inland Areas', draft SIRC Report.

MASES (China Marine & Seamen Service Corp.), (1998), company brochure.

Shen, Guanbao; Zhao, Minghua; Li, Ling; Song, Juan; (2003), 'Chinese Seafarers', in-progress draft general research report.

Shen, G. Zhao, M., (2001), 'The Survey of Seafarers Labour Market in China: a report on phase I', working report presented to SIRC Global Labour Market Workshop, 29 June.

SIRC (Seafarers International Research Centre), (2003), unpublished statistical calculations from Global Seafarers Database, Cardiff University.

Song, Zhen, (2002a), 'Certification Requirement for Chinese Seafarers and Suggestions for Development of Seagoing Labour Providing', The First LSM Manning and Training in China Conference, Shanghai, 29-30 Oct.

Song, Zhen, (2002b), 'Challenges to Seafarers' Employment Overseas and to the MET in China', *Maritime Studies and Research (hanghaijiaoyuyanjiu)*, 2nd issue, pp.1-4.

Wang, Jixuan, (2001), 'The Present Situation and Future Prospect of Chinese Seamen Overseas Employment', LSM Asia-Pacific Manning and Training, Manila, November.

World Bank, (2003), 'Country Profiles', www.worldbank.org, [Accessed on 27 August 2003].

Wu, Bin. (2002), 'Chinese Seafarers in the Global Labour Market: a focus on the "exported" seafarers', paper presented to *British Ships in China* Conference, Liverpool, 17-19 September.

Wu, Bin, (2003), 'Flow of Chinese Seafarers in the Market Economy: a Report of Survey in the Port of Hong Kong (Draft Summary Report)', SIRC, Cardiff University.

Zhao, Minghua, Li, Jianqun, (2003), 'New Seafaring Labour in China's Inland Rural Areas: Summary Report', working paper, 2003.

Zhao, Minghua, Wu, Bin, (2002), 'Chinese seafarers at the beginning of the 21st century', LSM 1st Manning and Training in China, Shanghai, 26-27 Oct.

Zhao, Minghua. (2002), 'The Consequences of China's socialist market economy for seafarers', *Work, Employment and Society* (A journal of the British Sociological Association), Vol.16, No.1, March. pp. 171-183.

Zhao, Minghua. (2000), 'Chinese Seafarers: value for money or cheap labour?', *Maritime Review 2000*, pp.11-15.

Zhao, Minghua, (2000), 'Chinese seafarers at the end of the 20th century', *Seaways*, February, pp.7-10.