

**Dokuz Eylül Üniversitesi
Denizcilik Fakültesi Dergisi
Cilt: 2 Sayı: 1 2010**

**THE IMPACT OF GLOBAL ECONOMIC CRISIS ON HUMAN
RESOURCES STRATEGIES IN MARITIME INDUSTRY***

**Ender ASYALI¹
Yusuf ZORBA²**

ABSTRACT

Human resource is one of the leading determinants in maritime transport industry and both the industry and the individual shipping companies consider human resources strategies as an important area of research. The global financial and economic crisis that has been affecting international trade and shipping in a very dramatic way since the fourth quarter of 2008 forces researchers to examine the short and long term trends in maritime careers generally and particularly in seagoing professions. This study aims to research the developments in human resources strategies during the global financial and economic crisis. A survey was applied to the human resources managers in shipping companies in Turkey in order to define their human resources strategies. Through this research it is aimed to evaluate the human resources strategies in the field of resourcing, recruiting, selection and retention, compensation, performance management, training and development.

Keywords: Human Resources, Maritime

**KÜRESEL EKONOMİK KRİZİN DENİZCİLİK ENDÜSTRİSİNDE
İNSAN KAYNAKLARI STRATEJİLERİ ÜZERİNE ETKİLERİ**

ÖZET

İnsan kaynakları deniz taşımacılık endüstrisinin önemli belirleyici faktörlerinden bir tanesi olup, hem denizcilik endüstrisi hem de denizcilik

* An earlier version of this paper was presented at Maritime Education Summit: Trending and Pedagogy for the Future, Massachusetts Maritime Academy, April 15-17 2009, MA, USA.

¹ Dokuz Eylül University, Maritime Faculty, ender.asyali@deu.edu.tr

² Dokuz Eylül University, Maritime Faculty, yusuf.zorba@deu.edu.tr

şirketleri tarafından insan kaynakları stratejileri konusu önemli bir araştırma alanı olarak kabul edilmektedir. 2008 yılının dördüncü çeyreğinden itibaren uluslararası ticareti ve denizciliği etkisi altına alan küresel ekonomik ve finansal kriz genelde denizcilik özelde ise gemiadamları kariyer yönelimlerinin kısa ve uzun vadede incelenmesini gerekli kılmaktadır. Bu çalışma küresel ekonomik ve finansal kriz döneminde insan kaynakları stratejilerindeki gelişmeleri araştırmayı amaçlamaktadır. İnsan kaynakları stratejilerini belirlemek amacıyla Türkiye’de denizcilik işletmelerinin insan kaynakları yöneticilerine yönelik bir araştırma yapılmıştır. Bu araştırma ile işe alım, seçme, elde tutma, ücret, performans yönetimi, eğitim ve geliştirme alanlarındaki insan kaynakları stratejilerinin değerlendirilmesi amaçlanmıştır.

Anahtar kelimeler: İnsan Kaynakları, Denizcilik

INTRODUCTION

Globalization shaped the world for almost three decades starting from the end of the 1970’s and tremendous developments in international trade and shipping have been both the driving force and the outcomes of this peculiar era. The demand for international trade has ended in new technologies and systems for the transport of goods. Shipping industry has both initiated this growth and has also benefited from this huge demand. The ship technologies have developed remarkably, the world fleet has expanded continuously, the whole system has required a series of professions and the need for human resources at all sides of the picture has increased both in the quantity and the quality aspects.

Starting from the last quarter of 2008 however the world economy entered a dramatic shrinkage period and not only the international businesses but also the whole economic system has moved into a period of recession the future of which is still not predicted safely. International financial system has lost its confidence, international trade has dramatically slowed down sharply, a number of industries have almost closed their operations, hundreds of thousands of enterprises have been shut down and tens of millions of people have lost their jobs. The whole economic system has required the support of governments and international institutions in terms of stimulus programs. After so many decades of the struggles in trying to reach a global free trade system, there exists an important risk of a protectionism cloud that causes great concern for the developing and least developed countries that will not be able to supply this support. Free

enterprise system, businesses, international trade, maritime industry, investments and employment are in danger.

Under such severe conditions there exists a need for short and long term predictions on international trade, maritime industry and the maritime professions. However the financial and economic analysis performed by the leading international institutions end in conflicting forecasts. This forces the actors of the industries to perform qualitative and quantitative studies in order to be able to steer the recovery programs (Asyali et al,2009).

Impacts of the Global Crisis on Shipping

On October 28, 2008 the Baltic Dry Index (BDI) finished the day on 982 points, the first time it has dropped below 1,000 points since August 13, 2002. The BDI was down almost 92% from its May 20 peak of 11,793 points. The segment witnessing the greatest correction in spot time charter equivalent earnings was capesize, with the average of the four time charter routes down to \$7,340 daily on October 28, 97% below its peak of \$233,988 per day on June 5. The speed and violence of this collapse was as unprecedented as it had been unexpected. There is no doubt that the market is typically over-correcting to the downside, in response to a complete loss of participant confidence, that is completely out of proportion with the adjustments in market fundamentals (HSBC Shipping Services Limited, 2009).

Global Demand and Supply of Seafarers

The most widely quoted estimates of the developments in demand and supply come from the studies commissioned by BIMCO and ISF, undertaken every 5 years since 1990. The 2005 study calculated the total demand for seafarers in 2005 as 1.062 million, consisting of 476,000 officers and 586,000 ratings. It estimated the worldwide supply of these in two groups as 466,000 and 721,000, respectively, signaling an apparent excess in demand for officers and an excess in supply of ratings (BIMCO/ISF, 2005).

Future Demand for Seafarers

Future demand for seafarers will be driven by a number of factors, the same that determine present demand. They are as follows (BIMCO/ISF, 2005): (1) the future growth of world trade, and hence the growth in the world fleet;

- (2) the future growth of ship productivity, which will be determined by the technology embodied in new ships;
- (3) the changing vintage of the fleet, which will alter the crew levels required for safe manning;
- (4) changes in the required levels of manning to comply with national and international conventions as and when they alter;
- (5) changes in the flag composition of the world fleet, because this affects overall manning totals; and
- (6) changes in the proportions of non-national crews used by shipowners and ship management companies, as this affects the ‘typical manning levels’

The BIMCO/ISF study employed their computer model to project three different ‘scenarios’ for fleet growth. The growth rates were zero (low), 1% (most likely), and 1.5% (high). These growth factors were then used to generate the fleet composition for 2010 and 2015, which were taken as projection points. In the most likely scenario, the demand for officers was projected to grow to 499.000 in 2015, from 476.000 in 2005, some 4.7% over 10 years. Ratings demand grows too, from 586.000 in 2005 to 607,000 in 2015, or 3.5% over the same period (BIMCO/ISF, 2005).

Growth rates are expected to vary across the flag groups identified by the study. The benchmark scenario model projects a growth in OECD demand for officers of 2.4% over the 10-year period, 2005–2015. The only other group with a similar demand projection is for Africa/Latin America. Eastern Europe officer demand is stagnant, as is demand from the Indian sub-continent; on the other hand, Far East demand is projected to grow at 2.6% between 2005 and 2010, falling to 1.6% for the next 5 years. Ratings demand growth is slightly lower, at just under 0.5% per year over 2010–2015.

The estimated global seafarer supply is shown in **Table 1**. The total is 1.27 million, with 466,000 officers and 721,000 ratings. The main supplying countries are the OECD group, with 133,000 officers and 174,000 ratings, and the Far East, with 133,000 officers and 226,000 ratings (BIMCO/ISF, 2005). Putting the demand estimates together with supply generates the result that there appears to be an excess in demand for officers (of 10,000, or 2% of supply) and an excess in supply of ratings (of 135,000, or 19% of supply). Both the officer and ratings estimates are well within the margin of error of the supply data, given the comments about data reliability (Glen, 2008).

Table 1. Estimated Supply of Seafarers, 2005

Flag	Current supply (000)	
	Officers	
	Ratings	
OECD	133	174
Eastern Europe	95	115
Africa/Latin America	38	110
Far East	133	226
Indian sub-continent	68	96
All national groups	466	721

Source: BIMCO/ISF, 2005.

A stark indication of just how serious the manpower shortage is becoming came in a report issued by Drewry Shipping Consultants. It assessed the current shortfall of officers in the global fleet to be some 34,000, against a requirement of 498,000. Moreover, based on Drewry's fleet growth projections, and assuming officer supply continues to increase at current levels, the report predicts that, by 2012, the officer shortfall will have risen to 83,900 (Mitropoulos, 2008).

However these studies need to be repeated considering the effects of the economic crisis. It is required that shipping should be monitored under the guidance of the strategic human resources management in order to both fulfill the needs of the future international trade and transport industries and also to develop the qualifications required by the human resources at seagoing professions.

STRATEGIC HUMAN RESOURCES MANAGEMENT

Strategic management of organizations has an increased interest and this interest has resulted in various organizational functions becoming more concerned with their role in the strategic management process (SMP). Strategic management is the art and science of formulating, implementing, and evaluating cross-functional decisions that enable organization to achieve its objectives (David, 2007). Strategic management process has been implemented since 1950's, and this process is still widely practiced today in the business world especially during uncertain economic environments. There are two models that outline the process about SMP where researches have provided support for both. According to Resource-Based View (RBV) of SMP organization's resources such as financial, physical, technological, capital and human rather than the environmental

conditions determine organizational decisions and the strategy (Mello, 2002:62). On the other hand the Industrial Organization (I/O) model argues that the strategy of the organization is driven by external environment and considerations. Although organizations had gained competitive advantages through technology and financial capital, today integrating HR activities with the rest of the business and its environment is accepted as the main issue for sustainable competitive advantage in global shipping industry.

Strategic human resources management (SHRM) is the pattern of the planned HR deployments and activities intended to enable an organization to achieve its goal (Wright and Mc Mahan, 1992). In other words, SHRM is the organizational system designed to achieve sustainable competitive advantage through people. SHRM involves the development of a consistent, aligned collection of practices, programs and policies to facilitate the achievement of the organization's strategic objectives (Mello, 2002:100). The central idea behind SHRM is that all initiatives involving how people are managed need to be aligned with and in support of the organization's overall strategy (Mello,2002:62).

“Vertical integration” of HRM strategy with the strategic management process of the organization and the “horizontal coordination” among various HRM practices are the dimensions which make the difference between SHRM and the traditional HRM. SHRM differs radically from traditional HRM in a number of ways as illustrated in Table 2.

Environmental factors such as technology, uncertainty, changes in economic, demographic and regulatory environment, increased competition, all affect HR strategies of shipping companies which are the management responses to those emerging issues.

HR strategies set out what the organization intends to do about its human resources management policies and practices, and how they should be integrated with the business strategy and each other (Armstrong and Michael, 2006). Grundy defines, human resources (HR) strategy as: The plans, programs and intentions to develop the human capability of an organization to meet the future needs of its external and internal environment (Grundy,1995). Bamberger and Meshoulam define HR strategy as the pattern of decisions regarding the policies and practices associated with the HR system (Bamberger and Meshoulam, 2000). Dessler defines HR strategy as the courses of action HR uses to help the company achieve its strategic aims (Dessler, 2003:11). HR strategies can be either deliberate or emergent and they may arise from current constraints and deficiencies or

from the difficulty of meeting external or future needs. Specific HR strategies which can be only a general declaration of intention or more specific and detailed, have to be created for each organization as culture and environment of each organization is different than each other.

Table 2. Traditional HR versus Strategic HR

	Traditional	Strategic HR
Responsibility for HR	Staff specialists	Line managers
Focus	Employee relations	Partnership with internal and external customers
Role of HR	Transactional, change follower, and respondent	Transformational, change leader, and initiator
Initiatives	Slow, reactive, fragmented	Fast proactive, integrated
Time horizon	Short term	Short, medium, long (as necessary)
Control	Bureaucratic- roles, policies, procedures	Organic-flexible, whatever is necessary to succeed
Job design	Tight division of labor, independence, specialization	Broad, flexible, cross-training, teams
Key investment	Capital, products	People knowledge
Accountability	Cost center	Investment center

Source: (Mello, 2002:102)

There is interdependency between corporate strategies with human resource management strategies. Different types of corporate strategies such as growth, stability and turnaround require different types of HR strategies to be applied. During economic turnaround, corporate strategies such stability or in other words “maintaining the status quo” and retrenchment strategy are common. An organization pursuing stability strategy may see very limited opportunity in its environment and decide to continue operations as it is. The critical strategic HR issue in these organizations is the fact that the limited opportunities can be offered to its employees as the organization is not growing. As there may be fewer opportunities for

upward mobility, employees may decide to leave and pursue opportunities with other employers. It is critical for employers to identify key employees and develop a specific retention strategy to assist in keeping them (Mello, 2002; 68). Application of appropriate performance management strategies is very important during that period. On the other hand in a retrenchment strategy, reduction of expenditures and cost cutting in order to become financially stable is the key issue and in many organizations, particularly service organizations, payroll is the main expense. As the employees get demoralized, depressed, significantly stressed and less loyal to their employer, boosting the morale of the employees is a significant HR challenge, during application of this strategy (Mello, 2002; 69).

Table 3. Categories of Crew Costs

Wages	Other costs	Travel
Basic pay	Medical examination	Rail, road, ship, air
Overtime	Medical treatment	Accommodation
Special work payments	Union payments	Subsistence
Leave pay	Manning agent's fees	Baggage costs
Leave subsistence	Cadet training	
Bonuses	Levies	
Social security	Training costs	
Superannuation	Study leave and pay	
Crew overlap	Standby pay	
	Recruitment	
	Victualling	

Source: Downward, 1999

As freight rates worldwide have reached a level that no longer covers the costs of running a vessel, the main priority for shipping companies is cost-focused management nowadays. We can classify the cost of running a shipping company into five categories; Operating costs, periodic maintenance costs, voyage costs, capital costs and cargo handling costs (Stopford, 2002). Operating costs are the on going expenses connected with the day-to day running of the vessel, the principle components of operating costs are: manning cost, stores, routine repair and maintenance, insurance, and administration. Operating cost structure mainly depends on the size and nationality of the crew, maintenance policy and the age and insured value of the ship, and the administrative efficiency of the owner. Besides, other practices and strategies shipping companies generally focused on cutting crew costs which accounts for 26 percent to 32 percent of the operating costs for the capesize bulk carrier (Stopford, 2002). Crew costs include all

direct and indirect charges incurred by crewing of the vessel, including basic salaries and wages, social insurance, pensions, victuals and repatriation expenses (see table 3). The level of manning costs for a particular ship is determined by manning scale prescribed for the ship, the size of the crew and the employment policies adopted by the owner, nationality or nationality mix of crew, service condition and the ship's flag state.

METHODOLOGY

An exploratory research was performed in order to determine human resources strategies of shipping companies in Turkey during global economic turndown. It is our intention to determine how shipping companies are responding to changes in economic environment which has direct and indirect effects on their operations and how they are aligning their HR strategies to their business strategies. A web based survey was performed over a month period. Non probability convenience sampling technique was applied and a total of 15 shipping companies were replied to the study.

Questionnaire Development

A questionnaire consisting of 3 parts have been developed. The first part included open-ended questions regarding the profile of the respondents. The second part included 26 statements on human resources strategies. The respondents were asked to answer the statements regarding the HR strategies that they expect to apply during the recent global economic turndown. They were asked to reply as "Already applied", "Expected in Next 12 Months", "Not Applied yet" "No application is expected". The statements were developed through the works of Downward (1999), Stopford (2002) and Watson Wyatt (2008). The third part consists of 7 statements on Business level strategies. The scale was again arranged in 4-levels as "Already applied", "Expected in Next 12 Months", "Not Applied yet" "No application is expected". These statements are developed through the works of Stopford (2002) and David (2007).

Sample

Turkey is chosen as the research area of this study due to the rapid growth of the maritime fleet in recent years. In addition to that, Turkey is also considered as one of the main potential human resources suppliers of the maritime industry (Glen, 2008). The structure of Turkish merchant fleet has been changing in recent years. The Turkish-controlled fleet is 49 per

cent registered in Turkey, versus 51 per cent that uses a foreign flag. Almost half of the Turkish-controlled fleet are dry bulk carriers (6.1 million DWT), followed by 3.2 million DWT of oil tankers, 2.8 million DWT of general cargo vessels, 0.7 million DWT of containerships and 0.2 million DWT of other vessels. The share of foreign flagged tonnage is highest among oil tankers (67 per cent) and lowest among containerships (37 per cent) (UNCTAD, 2008).

Over the past 5 years, Turkish shipping industry has witnessed rapid growth both in number and deadweight tonnage. Between 2004 and 2008, fleet grew from 576 to 1026 in number which represents 51% increase and from 8.681.000 DWT to 13.159.000 DWT which represent 34% increase (See Table 4). As the increase in number is greater than the increase in tonnage, the chronic shortage of officers especially for marine engineers has become more intense during that period. With the combination of that rapid increase of the fleet in number with global financial crisis, responsibilities and role of HR departments in shipping companies have gained importance. It is necessary for HR managers to adjust and align their HR strategies with the corporate and business strategies dictated by this changing general and specific environment. Increased mobility of existing and ex-seafarers' in and out shipping labor markets, cancellation of proposed new building contracts, postponing purchasing new ships, selling or scrapping of existing ships, lay-ups, concentration on single type of vessels, or diversification of vessel types, cost reduction strategies all have impacts on seafarer labor markets.

Table 4. Development of Turkish Merchant Fleet between 2004-2008
(Vessels of 1,000 GRT and above)

Year	National flag	Foreign Flag	Total (number)	Total (DWTx000)	Total as a percentage of world total (number of vessel)	Total as a Percentage of world total (DWT)
2008	495	531	1 026	13 159	2.8	1.27
2007	448	426	874	10 927	2.5	1.12
2006	436	365	801	10 290	2.4	1.13
2005	423	225	648	8 768	2.0	1.04
2004	405	171	576	8 681	1.9	1.12

Source: Compiled from UNCTAD 2008, 2007,2006,2005,2004 Review of Maritime Transport

Due to these characteristics, Turkish shipping companies constituted the sample of this study and a non-probability convenience sampling technique is applied. The questionnaires were collected from 15 shipping companies.

Data Collection

A web based survey was performed during the period February 15 - March 15, 2009 and the questionnaires were collected through a special web service (www.online-anket.gen.tr) with a special invitation through the e-mail addresses of the participants.

FINDINGS

Profile of the respondents

All of the respondents were operating their own ships where 9 of them were tanker, and the others were container, bulk and dry cargo operators. They have a total DWT capacity of 4.270.000 which represents 32 % of Turkish fleet in tonnage and 144 ships which also represent 14 % of Turkish merchant fleet in number excluding a representative of an international shipping company having more than 1000 vessels located in Turkey.

When we consider the management level of respondents, one of the respondents were general manager, the rest of them were human resources management executives.

According to survey results decreasing benefits and incentives, reduction of the crew to the minimum number required under legislation, stopping sponsorship to the maritime education, reducing travel expenses, are the common strategies which had already applied by shipping companies who have responded the survey

Also, majority of the respondents mentioned that strategies such as freezing currency rates (means wage decrease), reduction of the crew to the minimum proficiency required under legislation, replacement crew with other nationalities on reduced wages, stopping apprentice program, decreasing health and insurance costs, increasing amount of onboard maintenance and repair, increasing automation to decrease manning level, increasing sea service periods, decreasing sea service periods, outsourcing HR functions, planning to employ new personnel, changes in reward and

employee relations, flexibility and employee relations, training and development practices, have not applied yet (See Table 5).

Table 5. HR Strategies Applied by Shipping Companies

HR strategies	Already applied		Expected in Next 12 Months		Not Applied		No Application Expected	
	n	%	n	%	n	%	n	%
Currency rates had frozen	2*/2	14,3	0	0	6/10	71,4	1	7,1
Decreased salaries	3/6	42,9	1/1	7,1	5/7	50	0	0

* Bold numbers represent the frequency of tanker owners' answers

Table 6. Business Level Strategies

BL Strategies	Already applied		Expected in Next 12 Months		Not Applied		No Application Expected	
	n	%	n	%	n	%	n	%
No new building contracts	4*/7	50	1	7,1	4/5	35,7	1/1	7,1
No new ship purchase	4/7	50	1	7,1	4/5	35,7	1/1	7,1
Scrapping of existing ships,	0	0	0	0	8/13	92,9	1/1	7,1
Laid-Up vessels	1/5	35,7	1	7,1	8/8	57,1	0	0
Cancellation of proposed new buildings,	2/5	35,7	1/1	7,1	5/6	42,9	1	7,1
Concentration on single type of vessels	1/3	21,4	0	0	7/9	64,3	1	7,1
Selling existing ships	0/1	7,1	1/1	7,1	7/11	78,6	1	7,1

* Bold numbers represent the frequency of tanker owners' answers

Considering business level strategies, companies mentioned that there have been no new building contacts (50%) and no new ship purchase (50%). On the other hand scrapping of existing ships (92,9%), concentration on single type of vessels (64,3%) and selling existing ships (78,6%), have

not been applied during that period and also is not expected in next 12 months (See Table 6). We can conclude that stability strategy is common among shipping companies as they try to maintain the status quo to deal with the uncertainty of a dynamic environment. Also at business level as competitive strategies cost leadership, differentiation strategies are common. Especially differentiation is common among tanker operators and laid-up is common practice on other operators. Also it can be concluded that there, is a slight differentiation between tanker cluster and the others with respect to HR and business strategies.

CONCLUSION

The remarkable developments in globalization and international trade could never be achieved without the technological, operational and financial investments in shipping. Shipping is a technical industry that highly depends on human skills, strategic, managerial and operational. Not only education and training, but also experiences are highly important in realizing a safe, secure and clean marine environment. The working conditions are tough for seagoing professions and especially for officers if these priorities are not taken into account the manpower shortage problem of the industry will never be solved.

The demand for shipping derives from the demand for international trade and this is the main reason for the fluctuating market conditions in the industry. If the shipping companies do not consider the negative effects of these fluctuations and if they reflect the problems mainly on officers by tightening their financial or social benefits and conditions, escapes from these professions will continue. The industry will not be able to attain the existing crews and attract the newcomers. The economic crisis that has started shaking the world since the fourth quarter of 2009 has brought even a unique risk to the industry which has to be handled with great care.

These risks can only be approached through the strategic human resources management principles and the shipping companies should develop their organizational culture in such a manner as to solve the problems in the scope of the long term visions. Economic downturn impacts all areas of business, operations, finance, marketing, sales, legal, and HR, and appropriate responses are required in every functional area of organizations. Surviving an economic downturn requires appropriate integrated and coordinated actions. HR departments in shipping companies should play an active role to rescue their organizations in the adverse effects of economic crisis, to support and assist their organization to adjust to the changes required by the economic downturn. This can be achieved not only

by applying cost reduction strategies but also applying practices that will increase morale, motivation, job satisfaction and loyalty of seafarers.

Image of seafaring is so fragile that some inappropriate practices and strategies implemented during economic turndowns can not only result in decreased morale, motivation and loyalty of seafarers working on board, but also decrease popularity of seafaring occupation among young generations. And this will have negative medium to long term consequences on the HR supply and demand equilibrium in shipping industry which has been facing chronic shortages of qualified seafarers for a long period.

In this study it is concluded that as gaining and retaining qualified seafarers is very difficult in maritime industry, shipping companies in Turkey try not to reflect the adverse impacts of economic crisis to the seafarers working on board in order to retain their key employees.

Acknowledgement

We would like to thank O. Kamil SAG and A.Guldem CERIT for their suggestions, helpful comments and contributions.

REFERENCES

Armstrong, M. (2006). *Strategic Human Resource Management : A Guide to Action.*

London, GBR: Kogan Page, Limited, pp. 38.

Asyalı E, Zorba Y, Cerit A.G., Sağ O.K., "Global Economic Crisis and The Impact on Human Resources Strategies for Seafarers", Maritime Education Summit: Trending and Pedagogy for the Future, Massachusetts Maritime Academy, April 15-17 2009, MA, USA

Bamberger, P. and I., Meshoulam (2000). *Human Resource Strategy: Formulation, Implementation, and Impact*, SAGE.

BIMCO/ISF Manpower Update: The Worldwide Demand for and Supply of Seafarers 2005. UK: Institute for Employment Research, University of Warwick. pp 93.

David, F.R. (2007). *Strategic Management, Concept and Cases*, eleventh edition, Prentice Hall, New Jersey pp,5.

Dessler, G. (2003). *Human Resources Management*, Ninth Edition, Prentice Hall, New Jersey.

Downward, J.M.,(1999).*Running Costs*, Ship Management Series, Fairplay Publications, Surrey, pp. 32.

Glen, David (2008). What Do We Know About The Labour Market for Seafarers?: A View From The UK, Marine Policy Volume 32, Issue 6, November 2008, pp 845-855.

HSBC, 2008. Impact of Global Financial Markets on Shipping, 31 October 2008.

Grundy, T., (1995). How to Turn your HR Strategy into Reality, Thorogood.

Mello, J. A (2002). Strategic Human Resources Management, South – Western, Cincinnati.

Mitropoulos, Efthimios E., 2008. Press Conference to Launch “Go to Sea! A Campaign to Attract Entrants to the Shipping Industry” 17 November 2008.

Stopford, M., (2002). Maritime Economics, Second Edition, Routledge, London.

UNCTAD (2008) Review of Maritime Transport, United Nations Conference on Trade and Development, Geneva

UNCTAD (2007) Review of Maritime Transport, United Nations Conference on Trade and Development, Geneva.

UNCTAD (2006) Review of Maritime Transport, United Nations Conference on Trade and Development, Geneva.

UNCTAD (2005) Review of Maritime Transport, United Nations Conference on Trade and Development, Geneva.

UNCTAD (2004) Review of Maritime Transport, United Nations Conference on Trade and Development, Geneva.

Watson Wyatt (2008).Effect of the Economic Crisis on HR Programs, www.watsonwyatt.com

Wright, P.M., and G.C. McMahan (1992). Theoretical Perspectives for Strategic Human Resource Management, Journal of Management, Vol.18, No.2, 295-320.