

<b>تواريخ البحث</b>	<b>أثر التأمين البحري في الحفاظ على القطع البحرية العراقية (دراسة استطلاعية في شركة ناقلات النفط العراقية)<sup>1</sup></b>
تاريخ تقديم البحث : 2023/1/23	
تاريخ قبول البحث: 2023/2/19	
تاريخ رفع البحث على الموقع: 2024/3/15	الباحث : علي عبد الكاظم عاشور الاستاذ الدكتور زينب شلال عكار
	جامعة البصرة / كلية الادارة والاقتصاد / قسم إدارة الاعمال

**المستخلص :**

يهدف البحث الى توضيح الاثر المترتب على التأمين البحري في الحفاظ على السفن البحرية العراقية العائدة الى شركة ناقلات النفط العراقيه والتي تمثل الوسيلة الاساسية لنقل وتصدير المنتجات النفطية بمختلف انواعها ، ولتحقيق اهداف البحث قام الباحث ببناء وتصميم المخطط الفرضي، والذي يوضح نوع العلاقة بين المتغيرات الرئيسية وهي (التأمين البحري) كمتغير مستقل ، و (أدارة القطع البحرية) كمتغير تابع ، علماً أن شركة ناقلات النفط العراقية تمتلك اربعة سفن ناقلة للمنتجات النفطية وقد كان المجتمع الكلي للأفراد (550) فرداً والافراد العاملين في ناقلات النفط العراقية (300) فرداً وبناء على ذلك كانت عينة البحث (169) فرداً وزعت لهم استمارة الاستبانة ، وقد استخدم الباحث البرامج الاحصائية (SPSS.V.23 ، EXCEL V.10 ) لتحليل البيانات ، وتوصلت النتائج الاحصائية الى قبول الفرضية الهادفة لتوضيح علاقة الارتباط والتأثير بين المتغير المستقل (التأمين البحري) والمتغير التابع (أدارة القطع البحرية) .

**الكلمات المفتاحية :-** وعي تأميني ، تأمين بحري على الافراد ، تأمين بحري على السفن والبضائع ، التصنيف البحري ، تقييم المخاطر .

<sup>1</sup> بحث مستقل من رسالة ماجستير ( دور السلامة والتأمين البحري في إدارة القطع البحرية )

## **The impact of marine insurance in the preserving Iraqi marine vessels (An exploratory study in the Iraqi Oil Tanker Company))**

**Researcher : Ali Abdul Kadhim Ashour**

**Prof. Zainab Shalal Akkar**

**Administration & Economics College , Department of Business Administration**

**University of Basrah**

### **Abstract :**

The research aims to clarify the impact of marine insurance in preserving Iraqi marine vessels belonging to the Iraqi Oil Tanker Company, which represents the main means of transporting and exporting oil products of various kinds, and to achieve the objectives of the research. The researcher built and designed the hypothetical scheme, which shows the type of relationship between the main variables, namely (marine insurance) as an independent variable, and (marine vessels management) as a dependent variable, noting that the Iraqi Oil Tanker Company owns four ships tanking oil products. The total community of individuals is (550) individuals and the individuals working in Iraqi oil tankers are (300) individuals, accordingly the research sample is (169) individuals to whom the questionnaire forms are distributed. The researcher has used statistical programs (SPSS. V.23, EXCEL V.10) to analyze the data, and the statistical results reached the acceptance of the hypothesis aimed at clarifying the correlation and effect between the independent variable (marine insurance) and the dependent variable (management of marine vessels).

**Keywords:** - Insurance awareness, marine insurance for individuals, marine insurance for ships and cargo, marine classification and risk assessment .

**Introduction: -**

Marine vessels are exposed to many risks during the sea voyage, such as the effects of weather and water currents in the seas and human mistakes that made the marine piece a means of transportation threatened and fraught with dangers in most cases. Marine accidents are one of the most prominent problems that the cruise is exposed to, which prompted the International Maritime Organization (IMO) to adopt hundreds of resolutions and many codes, agreements and laws in this regard. The purpose of the cruise is to take place safely, starting from the port of departure down to the port which ends at the ending cruise. The multiplicity of dangers and marine accidents that occur on the marine pieces are noted, while they are in ports or in the seas. The examples of these dangers are (collision, sinking, flare, fire, war hazards, coup, piracy, sea mines, malfunctions of machines or engines) (Gemayel, 2013: 5). These maritime hazards occur during maritime operations to which the parties are exposed to marine risks, namely the ship and its accessories, the goods transported on it, the freight or the nolon (Helbawi, 2009: 74). The maritime operations that contribute to the transport of people and goods across the seas and oceans and for long distances traveled by marine vessels may expose them to many risks caused by man or from nature, so man used marine insurance for an encouraging work environment in which there are factors of confidence and reassurance (Nasser, 2009: 211). The risk is the main element on which the insurance process depends, which consists of two sides (the first side - a legal aspect related to the insurance contract with conditions and obligations imposed) and (the second aspect - technical depends on the basis of clearing between insurance risks and dealing with them according to mathematical and statistical methods, relying on the law of large numbers) (Abboud et al., 2021: 56).

**1. Research Methodology:-**

**1.1: Research problem:-**

Despite the availability of insurance coverage on Iraqi oil tankers, but the problem of research arises in the large number of injuries that individuals are exposed to, in addition to accidents that threaten Iraqi oil tankers and as a result of the dangerous loads carried by those ships, so you must focus on reducing accidents and managing those accidents through risk assessment and speed of response to emergencies because they are a time bomb at sea or in the ports where they dock . Based on the foregoing, the following questions can be asked:

- Is there a correlation and influence between marine insurance and marine management of marine vessels?

- Is there a correlation and impact between insurance awareness and the management of marine vessels?
- Is there a correlation and impact between marine insurance on individuals and the management of marine vessels?
- Is there a correlation and impact relationship between marine insurance in ships and cargo on the management of marine vessels?

### 1.2: Research objectives:-

Most researchers in previous studies believe that the research objectives are based on the questions raised in the research problem, and therefore the following objectives can be clarified:

- Identify the nature of the relationship between marine insurance and management of marine vessels.
- Identify the nature of the relationship between insurance awareness and the management of marine vessels.
- Identify the nature of the relationship between marine insurance for individuals and the management of marine vessels.
- Identify the nature of the relationship between marine insurance on ships and goods and the management of marine vessels.

### 1.3: Research importance:-

The importance of the current research lies in the service of the oil tanker ships of the Iraqi Oil Tanker Company among themselves:

- Directing marine crews working in Iraqi oil tankers to manage accidents and respond quickly to emergencies.
- Compliance with the directives and instructions agreed upon in the marine insurance policies to avoid accidents and therefore marine vessels are not compensated when accidents occur as a result of non-compliance with the terms of the contract.
- Highlighting the dissemination of insurance awareness among marine crews of the danger of the cargo of these ships.

### 1.1.4: Population and Sample of Study:-

The sample size is determined based on the research community in the Iraqi Oil Tanker Company, and on the statistical table (Krejcie & Morgan, 1970: 607), as the total number of individuals in the marine vessels reached (550) individuals, while the number of marine crews in the Iraqi oil tankers reached (300) and therefore the research sample reached (169) individuals, in addition to the number of Iraqi oil tankers of (4) marine vessel.

**1.1.5 :Data collection methods:-**

The researcher relied on two aspects in collecting the information and data required for the current research :

**Theoretical aspect:** - In this aspect, the research was fed from previous studies and literature, which were represented in (theses, research, articles, letters, books and websites) related to the main and subsidiary research variables.

**The practical side:** -The practical side, the researcher distributed the examination list to determine the research problem along with the questionnaire form, which included a number of questions, numbering (20) questions, as the research relied on the five-point scale (Likert) ((I completely agree "5", agree "4", neutral "3", disagree "2", do not agree completely "1")), and was distributed to the research sample for the purpose of obtaining the data required to be analyzed statistically through statistical programs (EXCEL V.10, SPSS.V.23) to cover the practical side The following table can illustrate the standards adopted in this research.

**Table (1-1) Measurement of Questionnaire Paragraphs**

The variables	Sub dimensions	Paragraphs	approved scale
Marine insurance	<ul style="list-style-type: none"> <li>•Insurance awareness.</li> <li>• Marine insurance for individuals.</li> <li>• Marine insurance for ships and cargo</li> </ul>	1-4 5-8 9-12	Idris & Al-Hilali, 2020: 12 Bahlouli, 2015: 25 Bucklab, 2021:181
Management of marine vessels	<ul style="list-style-type: none"> <li>•Marine classification</li> <li>• Risk assessment</li> </ul>	13-16 16-20	Knapp , 2004 : 14 Bazina, 2004: 132

Source: Prepared by the researcher based on the sources above.

**1.1.7: Hypothetical scheme:-**

Based on previous studies, which are consistent with the current research in terms of content, the research variables were represented in two main axes, namely the independent variable (marine insurance), which includes three sub-variables, namely (insurance awareness, marine insurance for individuals, marine insurance for ships and Cargo) and the dependent variable (management of marine vessel) as well as includes sub-variables, (marine classification, risk assessment), and through those main and sub-variables, the hypothesis scheme is built for research in the figure below and on this basis The main hypothesis and sub-hypotheses of the research are formulated.

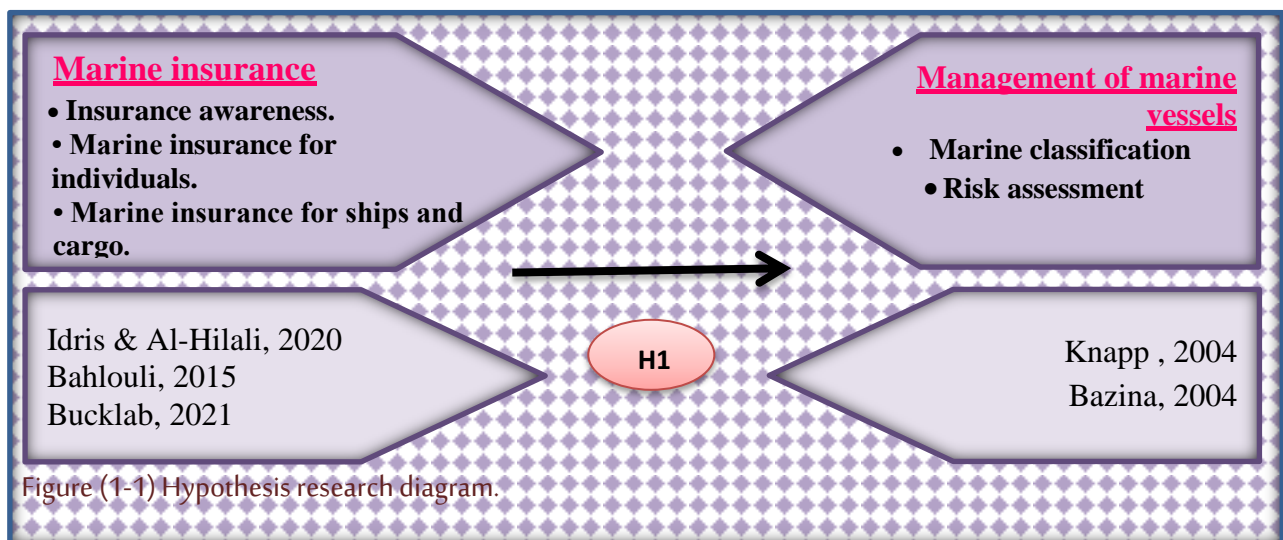


Figure (1-1) Hypothesis research diagram.

Figure: From the numbers of the researcher based on the sources referred to.

#### 1.1.8: The research hypothesis:-

- **The main Alternative hypothesis  $H_{11}$ :** There are significant correlation and influence relationships between the independent variable marine insurance and the variable management of marine vessel.
- **The main null hypothesis  $H_{01}$ :** There are no significant correlation and influence between the independent variable marine insurance and the variable of management of marine vessel .

sub- Alternative :

**The first sub- Alternative hypothesis  $H_{11a}$ :** There is a significant correlation and influence between insurance awareness and the management of marine vessels .**The null first sub-hypothesis  $H_{01a}$ :** There are no significant correlation and effect between insurance awareness and management of marine vessel.

**The second sub- Alternative hypothesis  $H_{11b}$ :** There are a significant correlation and influence between marine insurance for individuals and the management of marine vessels .

**The null second sub-hypothesis  $H_{01b}$ :** There are no significant correlation and effect between marine insurance on individuals and the management of marine vessels .

**The third sub- Alternative hypothesis  $H_{11c}$ :** There are a significant correlation and effect between marine insurance on ships and goods and the management of marine vessels .

**The null third sub-nullity hypothesis  $H_{01c}$ :** There are no significant correlation and effect between marine insurance on ships and goods and the management of marine vessels.

#### 1.1.9: Methods of Data collect:-

The researcher used the following statistical programs to analyze the data of the questionnaire form:

- Using EXCEL V.10 to Statistically Describe and Diagnose Search Variables.
- Use SPSS. V.23 to analyze influence and regression relationships between research variables.

#### 1.2: Previous Studies:-

It is necessary to stand at the previous literature related to the research variables to feed the theoretical side, so some relevant previous studies will be presented.

Table (1-2) Previous studies related to marine insurance

<b>The title of the study</b>	<b>Marine insurance on the ship</b>
Researcher's name and year	Bahlouli, 2015
the problem	The study dealt with the following problem: In light of the development of maritime trade, what is the role of marine insurance in providing protection and security on ships?
Curriculum and place of study	Descriptive method, Algeria.
study population and sample	The maritime sector of the Algerian Insurance Company, Algeria.
Study variables	Marine, Ship, Cargo, Liability Insurance.
Objectives of the study	The study aims to clarify the real guarantees to provide protection and safety for the hulls of ships and the cargo, equipment and personnel on board.
The most important conclusions	The ship is the main tool and pillar in the field of maritime transport and must be covered by insurance coverage to maintain it Make marine insurance contracts mandatory in application to maintain On the ship and what you carry on board.
The extent of similarity with it and benefit from it	<ul style="list-style-type: none"> <li>• The current study dealt with marine insurance on the ship, which is one of the main pillars of marine insurance, which represents one of the sub-variables of the independent variable of marine insurance.</li> <li>• The previous study can be used to enhance the theoretical aspect of the current study.</li> </ul>
The differences	<ul style="list-style-type: none"> <li>• The difference in terms of the location of the previous study was in Algeria while the current study was in Iraq.</li> <li>• Emphasis on marine insurance on the ship only within the previous study and not to mention other types of insurance, for example, insurance of individuals and insurance of goods etc. as in the current study.</li> </ul>
<b>The title of the study</b>	<b>Abandonment in marine insurance</b>
Researcher's name and year	Bucklab, 2021.
The problem	The problem of the study lies in exposure due to difficult conditions and the occurrence of risks that often cause serious damage, for example, leading to the loss of crews on the one hand and material losses on the other.
Curriculum and place of study	Descriptive method, Algeria
study population and sample	Marine insurance company in Algeria.
Study variables	Marine insurance, big loss, abandonment.
Objectives of the study	The goal is to search for ways to reduce the human and material losses that occur as a result of marine accidents.
The most important conclusions	<ul style="list-style-type: none"> <li>• The abandonment system is an efficient, easy and fast way to obtain compensation when major risks occur.</li> <li>• The system of abandonment is optional and the insured has the right to follow it or exclude it.</li> <li>• When the abandonment system is applied, ownership is transferred from the insured to the insurer, as ownership of the remaining shipwreck is transferred to the insurer.</li> </ul>
The extent of similarity with it and benefit from it	The previous study emphasized the abandonment system and its effective role in the field of marine insurance along with a focus on the maritime sector.
The differences	Emphasis on Algerian insurance companies, which represent the place of study, while the current study emphasized the insurance of Iraqi naval vessels.

**Table: From the numbers of the researcher based on the sources referred to.**

## 2. Literature Review:-



**Introduction:-**

In this aspect, the independent variable marine insurance was addressed by the previous literature for the purpose of identifying the concept of marine insurance and its importance, and then the sub-variables, namely (insurance awareness, marine insurance for individuals, marine insurance for ships and cargo), in addition to the variable of marine vessel management and its sub-variables (marine classification, risk assessment).

**2.1 :Marine Insurance:-**

**2.1.1: The concept of marine insurance:-**

Marine insurance is one of the oldest types of insurance, as it preceded other insurances (land and air) in the emergence of a very long time as a result of seaborne trade between different countries and the large number of serious risks to which marine pieces are exposed at sea, as traders and carriers resorted to marine insurance to reduce losses on goods. Despite the age of marine insurance, but it is one of the types and branches of insurance, which takes its idea and concept from the same concept and philosophy and the functional framework of insurance. Marine insurance differs from insurance in the place and field in which it is applied and also contains marine insurance on different terms, conditions and exceptions and what distinguishes marine insurance from the rest of the other insurances nature of the risk resulting from maritime navigation operations. (Omar, 2011: 5) added that insurance science related to all aspects of life lived by individuals in societies and enters insurance life of individuals personal, social and professional and also covers their diverse property. The basic idea behind insurance is to protect individuals and their money from risks and predestination. Insurance is based on studying the various risks to which individuals are exposed and providing compensation for losses. Therefore, the concept of insurance must be known from several different aspects to reach a better picture of the concept of marine insurance (Rahim, 2021: 59). Marine insurance will be defined according to the opinion of a number of researchers as shown in the table below.

**Table (2-1) Marine Insurance Concepts**

No.	Researcher and year	Marine insurance concepts
1	Ghafri, 2018: 108	A contract whereby the insurer undertakes to the insured, in accordance with the method of the agreed contract for maritime losses arising from maritime navigation risks.
2	Al-Ansari , 2019: 199	A contract that takes the insured on the shoulders of a certain group of risks that the contractors fear the possibility of their occurrence if the insured wishes not to bear them alone (individually) in return the insured pays the insurance premium to the insurer.
3	Arezuqi, 2021:28	A contract that undertakes the insurer to compensate the insured in the manner and to the extent agreed in the contract against losses and damages resulting from the realization of marine risks that occur to individuals and property at sea.

**Source: Researcher numbers based on the sources referred to above.**

It is worth mentioning that the concept of marine insurance is addressed according to the Iraqi legislator, which corresponds to the Ottoman legislation of 1863 AD, it was defined as a maritime contract that includes the undertaking to give full inclusion to the content of it in the treatment of the guarantee that the guarantor takes from the amount of losses and damages that occur due to a maritime deputy on things that he is careful not to encounter a risk in his travel freely (Qasim, 2018: 9).

### **2.1.2: The parties to the marine insurance contract:-**

The parties of the marine insurance contract are the insurer on the one hand and the insured on the other hand, and sometimes the contract is not concluded directly between them, but intermediaries enter into its conclusion, which are agents, brokers and marine insurance experts, and has shown (Wang, 2017: 29) every legitimate marine adventure can be the subject of the marine insurance contract. First: The insurer: - Researchers (Salam & Moussa, 2010: 104) defined the insured is the individual or company who provides insurance coverage for individuals seeking insurance against a specific risk and pays the insurance amount when the risk is realized. Second: the insured (insured): - The researchers (Salam & Moses, 2010: 105) to the insured or the applicant insurance is the person who is exposed to a certain risk in his person or in his property or his responsibility towards third parties resort to request insurance from the insured against marine risks in exchange for payment of a premium agreed upon in the contract.

### **2.1.3: Marine insurance properties:-**

Marine insurance is a contract between two parties, as it is based on a contractual relationship and specializes in some essential characteristics that distinguish it from other contracts, including that it is a consensual contract, a commercial contract, a contingent contract, a binding contract for both parties, a compensatory contract, a bona fide contract and is a continuous contract (Al-Omran, 2020: 416-419).

**First: Marine insurance is a consensual contract:** - Marine insurance, like other contracts, is compatible between the will of the insurer and the insured, as it is consensual once the two wills meet and acceptance .

**Second: Marine Insurance is a commercial contract:** - The marine insurance contract is commercial for the insured because the insurer takes it as a commercial project, while the insured does not consider it commercial unless it is associated with a commercial activity, so the contract becomes affiliated with the commercial activity .

**Third: Marine Insurance Probabilistic Contract:** - The contract is probabilistic for both parties, its advantages are unknown to all parties, resulting in provisions that occur or do not occur, as the possibility of insurance is linked to the risk against which it is insured, i.e. the contractors cannot determine the amount of what they take when concluding the contract to stop this amount on a future matter that is not verified .

**Fourth: Marine insurance is a binding contract for both parties:** - That is, both the parties to the insured contract and the insured are bound by each undertaking between them, the insurer pays the agreed compensation when the insured risk is realized and the insured pays the agreed insurance premium in addition to the rest of the obligations between the insured and the insured .

**Fifth: Marine Insurance Compensation Contract:** - The insurer pays to the insured in return for what he gives, i.e. the insurer compensates the results of the risks incurred and in return the insured pays the insurance premium .

**Sixth: Marine Insurance Compliance Contract:-** The insurer is responsible for the terms of the contract because he is the economically strong party and imposes its conditions and the insured cannot reject those conditions, so the contract is submissive for the insured .

**Seventh: Marine insurance is a continuous contract:** - The implementation of the contract extends for a period of time agreed upon by the contractors, and time is an essential element in the marine insurance contract and during this period the insurer is committed to ensuring the risk continuously, and the insured is committed to paying insurance premiums regularly during the contract period .

**Eighth: Marine insurance from good faith contracts:** - Requires in the marine insurance contract a high degree of honesty and good faith in dealing, so the insured is obliged to disclose all data related to the thing to be insured and based on this information the insurer will determine the acceptance of insurance and the insurance premium.

#### 2.1.4: Insurance Awareness:-

Insurance enjoys great importance in developed countries, as it is seen as one of the important criteria to indicate progress or backwardness. Interesting in insurance and development in all fields have become very important in order to keep pace with economic development with the world, and also generates the rigidity of the current situation of the insurance sector and the weakness of insurance awareness loss to the state economy, should be eliminated and resisted by various policies and comparison with the most prominent global insurance markets to raise the level of productivity of insurance companies and increase the state's economy (Zidan, 2009: 196), and as intended by insurance awareness conviction of individuals insurance with national insurance companies and what individuals pay from the financial premium is a service to protect against the risks to which ships and goods are exposed during maritime operations and protect capital from theft and poor storage in ports and this is necessary for the safety of individuals, ships and goods (Ahmed, 2009: 127), and insurance awareness is one of the most important factors that must be instilled in the hearts of individuals because this represents the spread of the application of insurance in the marine sector and the inclusion of a large number of individuals with insurance coverage, and there is no doubt that the weakness of insurance awareness is one of the problems to which individuals are exposed, and that the concept of insurance awareness is the degree of conviction of the individual or owners of companies of the necessity, importance and benefits of insurance as a means of providing insurance and protection from risks in order to perform their work normally away from anxiety And the fears resulting from risks and disasters, as defined as the degree to which individuals are convinced of the importance, benefits and necessity of insurance as a means of transferring the potential risk of exposure to it as a savings pot or both. It combines insurance and compensation to avoid a potential risk, and an important savings pot on which most countries rely to accumulate their individual savings (Idris&Hilali, 2020:12) .

#### **2.1.5:Marine insurance for individuals:-**

The emergence and development of insurance for individuals in England and appeared the first picture of insurance for individuals on the life of shipmasters and navigators during the duration of the cruise and for a period of one year or less and this refers to the temporary insurance that we are witnessing today, has been issued the first policy for insurance on the life of individuals in 19 Hazizan in 1583 in London, and then successively the emergence of many companies and insurance bodies and clubs of protection and compensation that cover their policies insurance on the lives of individuals and work injuries

resulting from risks (Abboud et al . , 2021: 131), and researchers (Osama & Moussa, 2010: 219-279) have shown that insurance for individuals is divided into life insurance and work injury insurance as shown below, and these are covered by regular insurance, and this differs in the issuing authority of the insurance policy from the insurance of individuals working in marine vessels.

**First: Life insurance for individuals:** - It means all insurance operations in which the lives of individuals have entered any insured risk that threatens the life of the individual with death.

**Second: Insurance for individuals from work injuries:** - It means here injury as a result of an accident during the performance of work or injury to one of the occupational diseases or injury due to fatigue and work stress that affects the insured individuals and the work injury depends on the health report.

As for the individuals working in the marine vessels, insurance policies are issued to them through protection and compensation clubs, as they cover the marine crews with insurance policies for work injuries resulting from marine hazards and the lives of individuals working in ships.

#### 2.1.6: Marine insurance for ships and cargo:-

Ships come on top of the money that is insured in the marine insurance policies and does not specify coverage on the hull of the ship, but includes coverage machinery, engines, machinery, equipment and tools carried on board, and also includes insurance on ships processing expenses of food, fuel, wages and salaries of crew members, and may insure ships in the period of construction, construction and maintenance to ensure the insured protection of the ship from the risk of fire and the risks of landing at sea and other marine risks (Taha & Hazelnut, 2005: 53).

The researchers (Bahlouli, 2015: 22-23-97) and (Souza, 2018: 21) agree that ship insurance is one of the most important branches of marine insurance, the first of which is the emergence and oldest of its origins, as its roots are related to the fourteenth century or earlier, and one of the most widespread types of insurance in various countries has gained its prevalence because of its close association with international trade, and dealing with it is not limited to the local and regional level of the state, so it is necessary to insure the marine pieces because they represent the main pillar of maritime operations. One of the main pillars of economic development in countries and based on the report of the United Nations Conference on Development "UNCTAD" ships contribute to the transfer of 90% of world trade, and the marine insurance contract on ships is concluded between two parties, the insurer and the insured by agreement and will of the parties and the ship insurance contract is subject to all general rules of marine insurance, and therefore marine insurance on ships is defined as a contract concluded between two

parties, the insurer and the insured to cover the loss or damage to the ship and its accessories during its establishment By cruise (Bucklab, 2018: 181).

## **2.2: Management of marine vessels:-**

### **2.2.1: Marine Classification:-**

In 1652 in England, a maritime classification body was established to determine the validity of marine pieces of sailing and the classification at the time depends on the age of the ship and the degree of confidence in the place of construction and the Lloyd's bodies issued a record of classification known as the Green Book, and then in 1799 the Red Book of the Marine Classification Authority of Lloyd's was issued, and that the safety of individuals and property and the protection of the marine environment is one of the most important Objectives of the maritime conventions issued by the International Maritime Organization (IMO) (Min, 2011: 7), and for this it was necessary to issue a classification certificate for marine vessels after conducting detection and survey on the application of maritime safety standards in accordance with the requirements of the International Maritime Organization and the suitability of marine vessels for sea, and insurance coverage cannot be accepted by marine insurance companies without a classification certificate, and this is what links the application of maritime safety standards to maritime classification bodies and its relationship with marine insurance, as shown in the figure below (Salima, 2017: 555).

### **2.2.2: Risk Assessment:-**

Risk is defined as the probability of an unforeseen event, which is the case in which the probability of the expected events can be distributed (Batouih & Ben Eid, 2007: 14), and that any decision or action that endangers the marine vessel endangers its cargo resulting from the negligence of the captain or crew who exposes the marine piece to the risk of continued damage and because this risk was caused by poor navigation or mismanagement, and in such cases the risk to the cargo is secondary in that the risk arose first on Marine Vessel includes a decision relating to the management of the Marine Vessel and that damage or loss caused by a particular incident requires the negligence of an official or person who is part of the management (Force, 2004:68), The extent to which the individual, environment or property is exposed to harm or other negative impact when exposed to it and the assessment of marine risks is also based on the regulations approved by the International Maritime Organization through wills, conventions and international treaties on how to deal during maritime navigation with transported materials and the

degree of their danger to marine pieces and the rehabilitation of individuals to avoid marine risks through safe driving, as maritime transport is controlled through different international regulations, each of which aims to prevent or reduce Negative impact on individuals, environment and property during transport (Hodge, 2014:4-10).

### 3. The practical side:-

#### 3.1: Description of the search variables:-

The results of the descriptive analysis of the data of the independent variable (marine insurance), which includes three sub-variables (insurance awareness, marine insurance for individuals, marine insurance for ships and goods), where the sub-variable dealt with insurance awareness from (Q1-Q4).while the marine insurance variable for individuals from (Q5-Q8), and the last sub-variable marine insurance for ships and goods from (Q9-Q12) and the results of the descriptive analysis of the dependent variable (management of vessel marine) represented in (marine classification, Risk assessment), the paragraphs of the questionnaire included (4) questions for each sub-variable, where the marine classification was taken from (Q13-Q16), while the risk assessment variable was taken from ((Q17-Q20).

#### 3.2:Normal distribution of data:-

The normal distribution is one of the necessary conditions for correlation analysis and regression analysis of data. In order to ensure that the normal distribution of data is achieved, the Kolmogorov-Smirnov test and the Shapiro-Wilk test are used, the null hypothesis of the two tests indicates that the data are normally distributed and the alternative hypothesis indicates that the data are not normally distributed and that the test results are shown in the table below.

**Table (3-1) Normal Distribution of Sample Answers Using Kolmogorov-Smirnov Test and Shapiro-Wilk Test**

dimensions	Shapiro-Wilk			Kolmogorov-Smirnov <sup>a</sup>		
	Sig.	Df	Statistic	Sig.	Df	Statistic
Insurance awareness	0.200	169	0.911	0.200	169	0.964
Marine insurance for individuals	0.200	169	0.804	0.200	169	0.949
Marine insurance for ships and cargo	0.124	169	0.955	0.200	169	0.931
Marine classification	0.200	169	0.940	0.060	169	0.805
Risk assessment	0.200	169	0.925	0.061	169	0.807

Table: Prepared by the researcher based on the outputs of (SPSS. V.23).

The table explains the results of the normal distribution test for the sample answers and from the results and by comparing the value of SIG of the dimensions (insurance awareness, marine insurance on individuals, marine insurance on ships and goods, marine classification, risk assessment) with the level of significance (0.05) we find that the value of SIG for all dimensions is greater than the value of the level of morality and this indicates the acceptance of the hypothesis that indicates that the data are distributed normally and thus statistical analyzes will be conducted that require the verification of this hypothesis .

### 2.3: Reliability:-

Reliability is defined as the stability of the answer when conducting the test at different periods, provided that all other conditions are constant, and there are conditions that must be ascertained for reliability such as stability, internal-reliability, and inter-observer consistency.

**2.3.1: Honesty of the insurance awareness paragraph:** - The following table shows the results of the reliability test (honesty and reliability) for the insurance awareness paragraph.

**Table (3-2) Results of the Honesty and Stability Scale for the Awareness Item**

Variable	Cronbach's Alpha if Item Deleted	Squared Multiple Correlation	Corrected Item-Total Correlation	Scale Variance if Item Deleted	Scale Mean if Item Deleted



The impact of marine insurance in the preserving Iraqi marine vessels

Q1	0.911	0.37	0.47	0.05	12.00
Q2	0.86	0.53	0.61	0.11	12.07
Q3	0.75	0.37	0.52	0.42	13.81
Q4	0.81	0.41	0.60	0.26	12.87
Reliability coefficient					

**Table: Prepared by the researcher based on the outputs of (SPSS. V.23).**

Through the table, we note that all the questions related to the paragraph of security awareness are important questions in measuring this paragraph, as all the values of the Corrected Item-Total Correlation coefficient are greater than (0.40). We also note a convergence between the values of Cronbach's Alpha if Item Deleted coefficient and the value of the alpha coefficient for the item as a whole (0.733), and this indicates stability in the sample answers.

**2.2.3:Honesty of the paragraph of marine insurance on individuals:** - From the following table the results of the reliability test (honesty and reliability) are shown.

**Table (3-3) Results of the Honesty and Stability Scale for the Marine Insurance Clause on Individuals**

Variable	Cronbach's Alpha if Item Deleted	Squared Multiple Correlation	Corrected Item-Total Correlation	Scale Variance if Item Deleted	Scale Mean if Item Deleted
Q5	0.911	0.37	0.47	0.05	12.00
Q6	0.86	0.53	0.61	0.11	12.07
Q7	0.75	0.37	0.52	0.42	13.81
Q8	0.81	0.41	0.60	0.26	12.87
Reliability coefficient					
No. of item=4 Cronbach's Alpha=0.733					

**Table: Prepared by the researcher based on the outputs of (SPSS. V.23).**

Table (3-3) shows that the questions related to the marine insurance paragraph on individuals are important questions in measuring the dimensions of the paragraph, as all the values of the Corrected Item-Total Correlation coefficient are greater than (0.40). It is also clear that there is a convergence between the values of Cronbach's Alpha if Item Deleted coefficient and the value of the alpha coefficient

for the item as a whole (0.733) and this is a good indicator to the stability of the answers of the research sample.

**3.2.3:Honesty of the marine insurance clause on ships and cargo:** - The table below shows the results of the reliability test (honesty and reliability).

**Table (3-4) Results of Honesty and Stability Scale for Marine Insurance on Ships and Cargo**

Variable	Cronbach's Alpha if Item Deleted	Squared Multiple Correlation	Corrected Item-Total Correlation	Scale Variance if Item Deleted	Scale Mean if Item Deleted
Q9	0.653	0.900	0.868	1.104	13.6686
Q10	0.722	0.821	0.748	1.257	14.6331
Q11	0.865	0.423	0.613	0.789	13.7396
Q12	0.807	0.637	0.547	1.492	13.6450
Reliability coefficient					
No. of item=4 Cronbach's Alpha=0.826					

**Table: Prepared by the researcher based on the outputs of (SPSS. V.23) .**

The above table interpreted the questions related to the paragraph of marine insurance on ships and goods, as they are important questions to measure this paragraph, as all the values of the Corrected Item-Total Correlation coefficient were greater than (0.40). If we notice the convergence between the values of Cronbach's Alpha if Item Deleted coefficient and the value of the alpha coefficient for the item as a whole (0.826), this indicates the stability in the answers of the research sample.

**3.2.4: Authenticity of the marine classification paragraph:** - The results of the reliability test (validity and reliability) of this paragraph are illustrated by the table below.

**Table (3-5) Results of the Honesty and Stability Scale for the Marine Classification Item**

Variable	Cronbach's Alpha if Item Deleted	Squared Multiple Correlation	Corrected Item-Total Correlation	Scale Variance if Item Deleted	Scale Mean if Item Deleted
Q13	0.796	0.776	0.572	1.022	9.6627
Q14	0.755	0.692	0.501	0.860	10.6036
Q15	0.729	0.314	0.557	0.508	12.1834
Q16	0.707	0.685	0.436	1.521	8.7515
Reliability coefficient					
No. of item=4 Cronbach's Alpha=0.721					

**Table: Prepared by the researcher based on the outputs of (SPSS. V.23).**

From the above table, it is clear that all the questions related to the marine classification paragraph are important questions for measurement, as all the values of the Corrected Item-Total Correlation coefficient are greater than (0.40). As well as the convergence between the values of Cronbach's Alpha if Item Deleted coefficient and the value of the alpha coefficient of the combined paragraph (0.721) and this indicates the stability in the sample answers.

**3.2.5: Honesty for a Risk Assessment Clause:-** The results of the reliability test (Honesty and Consistency) for this item are conducted in the table below.

**Table (3-6) Results of the Honesty and Stability Scale for the Risk Assessment Item**

Variable	Cronbach's Alpha if Item Deleted	Squared Multiple Correlation	Corrected Item-Total Correlation	Scale Variance if Item Deleted	Scale Mean if Item Deleted
Q17	0.904	0.776	0.744	0.636	12.9704
Q18	0.875	0.692	0.816	0.664	13.8817
Q19	0.875	0.314	0.816	0.664	13.8817
Q20	0.876	0.685	0.812	0.658	12.9467
Reliability coefficient					
No. of item=4 Cronbach's Alpha=0.937					

**Table: Prepared by the researcher based on the outputs of (SPSS. V.23).**

Table (3-6) shows that all the questions related to the risk assessment paragraph are important questions in measuring this dimension. All values of the Corrected Item-Total Correlation coefficient were greater than (0.40). It was also found that there is a convergence between the values of Cronbach's Alpha if Item

Deleted coefficient and the value of the alpha coefficient for the item as a whole (0.937), which is a positive indicator of the stability of the sample responses.

### 3.3: Statistical inference and hypothesis testing:-

#### 3.3.1: Estimation and testing of correlation relationships:-

Correlation analysis is one of the important statistical methods, which is one of the methods of statistical inference, through which correlation relationships between variables are estimated and these estimates are tested to ensure their significance and statistical significance, and this method is the first step to conduct regression analysis. Correlation analysis was used to estimate the correlation between the dimensions of marine insurance (insurance awareness, marine insurance on individuals, marine insurance on ships and cargo) on the variable of marine vessel management as shown in the table below.

**Table (3-7) Correlation between the dimensions of the marine insurance variable and the marine assets management variable**

dependent variable	Paragraph	Insurance awareness	Marine insurance on individuals	Marine insurance for ships and cargo
Management of marine vessel	correlation coefficient	0.611	0.528	0.566
	Sig	0.000	0.000	0.000
	the decision	statistical function	statistical function	statistical function
	the description	direct and powerful	Medium direct	Medium direct
	arrangement	1	2	3

**Table: Prepared by the researcher based on the outputs of (SPSS. V.23).**

The results of the correlation between the dimensions of the marine insurance variable (insurance awareness, marine insurance for individuals, marine insurance for ships and cargo) and the variable of marine assets management. From the results of the table, it is clear that there is a positive, strong and statistically significant relationship between the dimension of insurance awareness and the variable of marine assets management, as the value of the correlation coefficient reached (0.611) and the value of Sig = 0.000, which is less than the level of morality, and this means the significance of the correlation coefficient, and this means accepting the hypothesis of the sub- $H_{1a}$  for the correlation relationship, as evidenced by the table that there is a direct, medium and statistically significant correlation between marine insurance on individuals and the management of marine vessels, as the value of the correlation

coefficient Between the two variables (0.528) as the value of (sig=0.000), which is less than the level of significance (0.05), and this means accepting the sub-hypothesis  $H_{11b}$  of the correlation relationship, as shown from the table The existence of a medium and medium direct correlation with Statistical significance between marine insurance on ships and goods and the management of marine vessels, the value of the correlation coefficient between the two variables reached (0.566), as the value of (sig=0.000), which is less than the level of significance (0.05), and this means accepting the sub-hypothesis  $H_{11c}$  for the correlation relationship.

### 3.3.2: Estimating and testing influence relationships:-

To test the research scheme and estimate the effect relationships between the independent variable marine insurance and the dependent variable of the Marine Assets Department, simple and multiple regression analysis was used as shown below.

#### 3.3.2.1: Simple Regression Analysis of the Dimension of Insurance Awareness on the Marine Assets Management Variable:

**Table (3-8) Results of Simple Regression Analysis between the Dimension of Secure Awareness of the Independent Variable and the Dependent Variable Marine Assets Department**

The dimension	Beta	T	Sig.	Adjusted R Square	F	Sig.
Constant	5.143	7.986	0.000	0.655	10.389	0.000
Insurance awareness	0.281	7.847	0.000			

Table: Prepared by the researcher based on the outputs of (SPSS. V.23)

The table shows the results of the simple regression analysis between the dimension of the security awareness of the independent variable and the variable of the Marine Assets Department. From the results of the table, we note that the effect of insurance awareness amounted to (0.281) and this shows the amount of increase in the dimension of insurance awareness required to increase the variable of marine assets management and the value of (sig = 0.000) indicates the significance of the effect of the independent dimension on the dependent variable. The value of the coefficient of determination was (0.65) and this value indicates the variance of the dependent variable (marine artifacts management), which was explained by the independent dimension (insurance awareness), and the test value (F = 10.389) and its probability value (sig=0.000) shows the significance of the model consisting of the

variable marine plot management as a dependent variable and insurance awareness as an independent variable in addition to the fixed limit.

### 3.3.2.2: Simple regression analysis of the dimension of marine insurance on individuals and the variable of marine plot management- :

**Table (3-9) Results of Simple Regression Analysis between the Dimension of Marine Insurance on Individuals for the Independent Variable and the Marine Assets Management Variable.**

The dimension	Beta	T	Sig.	Adjusted R Square	F	Sig.
Constant	5.393	21.675	0.000	0.412	9.752	0.000
Marine insurance for individuals	0.376	5.794	0.000			

**Table: Prepared by the researcher based on the outputs of (SPSS. V.23)**

The table shows the results of the simple regression analysis between the dimension of marine insurance on individuals for the independent variable and the variable of marine assets management. From the results of the table, it is clear that the impact of marine insurance on individuals amounted to (0.376) and this shows the amount of increase in the dimension of marine insurance on individuals necessary to increase the variable of marine assets management and the value of (SIG = 0.000) indicates the significant impact of the independent dimension on the dependent variable. The value of the coefficient of determination reached (0.41) and this value indicates the variance of the dependent variable (management of marine pieces), which is explained by the independent dimension (marine insurance on individuals), and the test value (F = 9.752) and its probability value (sig=0.000) shows the significance of the model consisting of the variable Marine Plot Management as a dependent variable and marine insurance on individuals as an independent variable in addition to the fixed limit.

### 3.3.2.3: Simple regression analysis of the marine insurance dimension on ships and cargo and the variable of marine assets management .

**Table (3-10) Results of Simple Regression Analysis between the Marine Insurance Dimension on Ships and Cargo for the Independent Variable and the Marine Assets Management Variable.**

The dimension	Beta	T	Sig.	Adjusted R Square	F	Sig.
Constant	5.183	27.226	0.000	0.829	41.967	0.000
Marine insurance on Ships and cargo	0.265	6.478	0.000			

**Table: Prepared by the researcher based on the outputs of (SPSS. V.23 ).**

Table (3-10) explains the results of the simple regression analysis between the dimension of marine insurance on ships and goods for the independent variable marine insurance and the variable of marine assets management. Through the results of the table, it is clear that the impact of marine insurance on ships and goods amounted to (0.265) and this explains the amount of increase in the dimension of marine insurance on ships and goods required to increase the variable of management of marine pieces and the value of (SIG = 0.000) indicates the significance of the impact of the independent dimension on the dependent variable. The value of the coefficient of determination reached (0.82) and this value indicates the variation of the dependent variable (management of marine pieces), which was explained by the independent dimension (marine insurance on ships and goods), and the test value (F = 41.967) and its probability value (sig = 0.000) shows the significance of the model consisting of the variable marine assets management as a dependent variable and marine insurance on ships and goods as an independent variable in addition to the fixed limit.

#### **3.3.2.4: Analysis of Multiple Regression of Dimensions of the Variable Marine Insurance on the Variable Marine Assets Management.**

Multiple regression analysis was performed to estimate and test the effect relationship between the dimensions of the marine insurance variable as independent variables and the management of marine assets as a dependent variable as shown in the table below .

**Table (3-11) Results of Multiple Regression Analysis between Marine Insurance Variable as Independent Variables and Marine Assets Management Variable as a Dependent Variable.**

The dimension	Beta	T	Sig.	Adjusted R Square	F	Sig.
Constant	1.818	2.815	0.005	0.662	30.439	0.000

Insurance awareness	1.240	6.117	0.000			
Marine insurance for individuals	0.288	3.724	0.000			
Marine insurance for ships and cargo	0.432	6.849	0.000			

**Table: Prepared by the researcher based on the outputs of (SPSS. V.23 ).**

The table shows the results of multiple regression analysis between the dimensions of the marine insurance variable as independent variables and the marine assets management variable as a dependent variable. Through the results of the table, we notice that when the variable of marine assets management increases, the effect of insurance awareness should be increased by (1.240). And marine insurance on individuals by (0.288), and marine insurance on ships and goods by (0.432), as shown by the table of the significance of the parameters of the model and this is clear from the value of the sig corresponding to the parameters if it is less than the level of significance of (0.05). The value of the coefficient of determination reached (0.66) and this value indicates the variance of the dependent variable (marine plot management), which was explained by the independent variables combined (insurance awareness, marine insurance on individuals, marine insurance on ships and Cargo), as this value indicates the importance of the three dimensions combined in explaining the change in the dependent variable (marine vessel management) and the remaining unexplained variance (34%).

As it refers to other variables that were not included in the model, as the test value ( $F = 30.439$ ) and its probability value ( $\text{sig}=0.000$ ) appear to the significance of the model consisting of the variable marine management as a dependent variable and (insurance awareness, marine insurance on individuals, marine insurance on ships and Cargo) as independent variables in addition to the fixed limit, and this means accepting the main hypothesis  $H_{11}$  for the effect relationship.

#### 4.1:Conclusions: -

1. The existence of a strong correlation between the variable of managing marine vessels and the dimensions of marine insurance.
2. Most accidents are human errors resulting in maritime loss of people and property.



3. The interest of the management of the Iraqi Oil Tanker Company in the marine classification is an important link in the acceptance of the marine insurance company to cover marine pieces.
4. Failure of marine crews to comply with the instructions and directives issued by the senior management of marine vessels, which led to negligence and material losses.

**4.2: Recommendations: -**

1. Educating individuals on the speed of combating accidents before they escalate to avoid large losses in marine vessels.
2. Focus on the commitment of marine crews to the instructions of the National Insurance Company to reduce marine losses.
3. Emphasizing the commitment of marine crews to the directives of senior management, which contributes to reducing material and human losses.

## References:-

### First: Arabic sources.

#### A. Books:-

1. Salima, Salah Mohammed. (2017). Al-Wajeez in the rules of maritime trade in accordance with international agreements and some internal laws, Library of Law and Economics, first edition, Riyadh.
2. Abboud, Salem Mohammed, Alwan, Talal Nazim & Al-Baldawi, Alaa Abdul Karim. (2021). General Insurance Theory, Contemporary Introduction, Dar Al-Dr. for Administrative and Economic Sciences - Baghdad, Third Edition, Baghdad.
3. Al-Ansari, Bilal. (2019). Maritime Law, Strong Center for Legal Publications, First Edition, Cairo.
4. Al-Omran, Saleh bin Abdulaziz Abdulrahman. (2020). The effects of joint maritime losses, University Book House for Publishing and Distribution, first edition, Riyadh.
5. Batouih, Mohammed Omar & Bin Eid, Fahd. (2007). Risk Management, Afaq Library, Kuwait, First Edition, Kuwait.
6. Bazina, Muhammad. (2004). Personnel Management on Ships, Printed in Moore Advertising, First Edition, Arab Republic of Egypt.
7. Gemayel, Iman. (2013). Marine Accidents, National Book and Archives, First Edition, Alexandria.
8. Ghafri, Khaled Jasser. (2018). Maritime Law, Scientific Hurricane House, First Edition, Jordan.
9. Helbawi, Abdullah Tawfiq. (2009). Marine and Air Insurance, Al-Hurriya Library for Publishing and Distribution, Cairo.
10. Omar, Essam Al-Din. (2011). Securing Sea, Land and Air Transport, Arab Insurance Library, Second Edition, Cairo.
11. Salam, Osama Azmi, Moussa, Shaqri Nouri. (2010). Risk Management and Insurance, Dar Al-Hamid for Publishing and Distribution, First Edition, Amman
12. Taha, Mustafa Kamal & Bunduq, Wael, Anwar. (2005). Marine Insurance, Dar Al-Fikr University for Publishing, Alexandria.
13. Zidane, Salman. (2009). Insurance and Risk Management, Al-Amin for Publishing and Distribution, Second Edition, Sana'a.

#### B. Letters and treatises:

1. Ahmed, Samer Muhammad. (2009). The Future of Marine Insurance in Syria and its Impact on Revitalizing Maritime Trade, Master Thesis in International Relations, Faculty of Economics, Tishreen University, Syria.
2. Arezuqi, Warqa Ahmed. (2021). The role of ship structure insurance in the liquidity and profitability of the company, applied research in the National Insurance Company, Higher Diploma in Insurance equivalent to Master's, Higher Institute of Accounting and Financial Studies, University of Baghdad.
3. Bahlouli, Khairuddin . (2015). Marine Insurance on the Ship, Master Thesis in Business Law, Mohamed Boudiaf University, Messila.
4. Bucklab, Saham. (2018). Marine Insurance on the Ship and Cargo, PhD thesis in Insurance Law, Mentouri Brothers University -1- Constantine, Algeria.
5. Idris, Fatima Ahmed & Al-Hilali, Abdelkader. (2020). The impact of insurance awareness on increasing the subscription in fire insurance in the private sector in Khartoum State (applied to Shikan Insurance and Reinsurance Company for the period 2018 to 2019), complementary research for obtaining a master's degree in insurance, Faculty of Graduate Studies, University of Al-Neelain, Khartoum, Sudan.

6. Qasim, Diyar Hattab. (2018). Interest in the Marine Insurance Contract, Master Thesis in Private Law, College of Law and Politics, University of Basra, Basra.
7. Rahim, Arshad Hassan. (2021). Areas of strategic change and their role in the marine insurance market, applied research in the Iraqi General Insurance Company, thesis for obtaining a higher diploma equivalent to a master's degree in insurance, Higher Institute for Accounting and Financial Studies - University of Baghdad, Baghdad.

**C. Journals and periodicals:**

1. Bucklab, Saham. (2021). Abandonment in Marine Insurance, Journal of Jurisprudence in Algeria, Volume 2, Issue 27.
2. Nasser, Rahim Rahi. (2009) . Risk in Insurance of Seaborne Goods, Master's Thesis at Al-Muthanna University, Journal of the Islamic University College, Issue 8, Pages 209-239.

**References: foreign sources.**

**A. BOOK:-**

1. Wang, F. (2017). Illegality in Marine Insurance Law, by Informa Law from Routledge, First edition published, British.
2. Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and psychological measurement, 30(3), 607-610.

**B. Dissertations & Thesis:-**

1. Knapp, s., (2004) , Analysis of the Maritime Safety Regime: "Risk Improvement Possibilities for the Port State Control Target Factor, (Paris MoU) , Erasmus University Rotterdam MSc in Maritime Economics and Logistics.
2. Min,Y. (2011). Limitation of Liability of Classification Societies , A dissertation submitted to the World Maritime University in partial fulfillment of the requirements for the award of the degree of Master of Science In Maritime Affairs, World Maritime University, Malmo, Sweden.
3. Souza, R. (2018).The Role of Insurance in Ship and Oil & Gas Finance Structured Deals Such as Project Finance and Project Bond, Dissertation submitted to the World Maritime University in partial fulfilment of the requirements for the award of the degree of MASTER OF LAWS (LL.M.).

**C. Reports and Publications:-**

1. Force,R. (2004). Admiralty and Maritime Law, This Federal Judicial Center publication was undertaken in furtherance of the Center's statutory mission to develop and conduct education programs for judicial branch employees, Tulane Law School.
2. Hodge,R. (2014). Hazard Assessment of Ores and Concentrates for Marine Transport, Materials Stewardship, Copyright ICM.