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**MARINE HULL INSURANCE UNDERWRITING AND CLAIMS**

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**Original Text in book**

**Chapter.5, Page no. 50.**

**A. Institute Time Clauses (Hulls) 1983**

**1. History of Institute Time Clauses (ITC)**

The first set of comprehensive Hull Clauses, independent of the erstwhile S.G. form was devised and came into effect in the London market in October 1983. The widest cover for Hull and Machinery (H&M) interest is provided by the Institute Time Clauses (Hulls) dated 1-10-1983. In other words, they cover H&M on “full conditions”.

There are 26 clauses comprising the set of ITC Hulls 1-10-1983 and a study will be made in the following paragraphs of some of the more important clauses therein. The ITC Hulls have been subject to revisions over the years. The Indian Marine Hull market still follows the 1-10-1983 version, although the Joint Hull Committee (JHC) in London has issued revised version of ITC Hulls dated 1-11-1995, following adverse loss experience in the Hull insurance portfolio. But as there were certain provisions in the 1-11-1995 Clauses which were not accepted by the Indian Ship-owners, the Indian Hull Insurers have not been able to implement it, despite the TAC having formally approved this Clause.

In 2002, the International Hull Clauses were introduced which were amended in 2003. The latest version is effective from 1-11-2003. As stated earlier, the Indian market is still using the 1-10-1983 version only. An analysis of the 1-10-1983 Clauses is given below:

(A reading of ITC(H) 1.10.83 shows no classification as done below. Also it does not make understanding better; hence its original form should not be tampered with- Requesting the Institute.

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**Revised text as below**

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APPENDICES, Page no. 282.

- A. Appendix I : The Marine Insurance Act, 1963
- B. Appendix III : General average security documents
- C. Appendix IV : Recoveries

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Revised text as below Additional information is included

APPENDICES, Page no. 282

- A. Appendix I : The Marine Insurance Act, 1963
  - B. Appendix II : General average security documents
  - C. Appendix III : Recoveries
  - D. **Appendix IV: Research paper on history and development of Marine Hull Insurance - Nguyen Zen Nguyen- University of Labour and Social Affairs, Vietnam**
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# History and Development of Hull Insurance and Protection and Indemnity Insurance

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## ABSTRACT

The article has relied on the historical data of the insurance industry and maritime history to synthesize the process of the birth and development of hull insurance and Protection and indemnity. Accordingly, insurance was born under the requirements and inevitability of historical circumstances. It develops continuously when people face many risks to deal with such as diseases affecting health, and accidents that cause loss of money, property, and human lives. Since the appearance of insurance, it exists in many different ways, the principle of operation is also regulated differently by each social group. But up to now, the insurance industry in general and maritime insurance in particular has common rules and laws applicable to all activities participating in waterway transport in the world.

**Keywords:** Insurance; History; Hull Insurance; P&I,

## I. INTRODUCTION

Insurance is a business that comes from two parties (the insured and the insurer). When a person agrees to pay a fee for themselves or a third person, when there is a risk, they are compensated by another party. That's when the insurance policy was established. Insurance appeared and developed with human society from prehistoric times to ancient, medieval, and modern times. Marine insurance, including hull insurance, was one of the first types of insurance in history. It forms under the influence of the process of commodity exchange and human trade. Protection and indemnity (P&I) insurance came into existence later and responded to the actual needs of shipowners when they were liable for the lives of seafarers and the value exceeded their cargo insurance policies. Both hull insurance and Protection and indemnity insurance are very important. It is the decisive factor for the strong development of today's shipping industry. Understanding the birth and development of these

two types is very important in analyzing the current situation of the insurance products business in Vietnam.

## II. INSURANCE HISTORY

### 2.1. Prehistory

Human society has two types of economy, non-monetary economy (natural economy) and monetary economy. In a non-monetary economy, people use barter, and trade does not have a centralized and standardized set of financial instruments. In contrast, the monetary economy has the appearance of markets, currencies, and financial instruments. Insurance has existed in various forms since prehistoric times along with the history of the development of the natural economy. The primitive communal social institutions and forms of insurance during this period required mutual agreement, reciprocity, and mutual protection (Fukuyama & Francis, 2011). According to Szarmach et al. (1998), "mutual aid agreement" insurance helped the Clan survive and survive in difficult and harsh circumstances (p.329). Financial transactions do not represent the "insurance payments" of this period, but instead are pledges to help rebuild if destroyed or share food if there is a famine.

### 2.2. Ancient era

As early as the 2nd millennium BC, merchants (Babylonian, Indian, Chinese) knew how to apply risk distribution and transfer. In the process of transporting goods, to avoid sinking and minimize losses, Chinese merchants divided the cargo evenly on several ships when crossing dangerous waters (Vaughan, 1996). In the years c.1792–1750 BC, the Babylonian Empire I in the city of Shush, Iran enacted a cuneiform law with 4,130 lines written by the sixth Babylonian king Hammurabi (Scheil, 1902, p.12). The Code of Hammurabi is engraved on a stone stele 2.25 meters high (Roth, 1995, p.15) and is intended for the groupsailing merchants. The Code of

Hammurabi stipulated such that the debtor must repay the loan to the creditor on a schedule with the maturity date specified in the written contract terms (Hammurabi, 1903, p.75). Laws 101 and 102 provide that "shipping agents, brokers or charterers are required to repay the principal of the loan to creditors only in case of loss or total loss due to the Law of God" (Hammurabi, 1904, p.35). In addition, it has hundreds of other laws related to cargo insurance, shipping, shipbuilding, shipwrecks ... In c. 1000 BC, the "Law of the Rhodes Sea" originating from the Greek island of Rhodes is believed to be the earliest example of the introduction of the Law on Insurance. The law specifies that "if a seafarer is compelled to throw cargo into the sea to save a ship from sinking, the loss shall be compensated jointly by his colleagues" and applies to seafarers and traders (Memorial Publications of the Prudential Insurance Company of America, 1915). Then, in c. 600 BC, in Greece and Rome came the birth of the "benevolent society". The association takes on the role of caring for the family of the deceased and it also pays funeral expenses for the bereaved who are members of the association. In the 4th century BC appeared the "Maritime Loan" of the ancient Athenians. They advance money for the voyages and the refund is canceled if the ship is lost. During this period, the cost of loans varied, and it was assessed based on when it was safe or dangerous to sail at sea during the year. This is an intuitive way of valuing risk with an impact similar to insurance (Franklin, 2002, p.259). In the Hindu Dharmasastra, Arthashastra, and Manusmriti sutras, the 3rd century BC also finds the concept of insurance (Tapas & Debashis, 2016). The AD period saw the emergence of social clubs (funeral societies) or religious collectives whose members worked for their common benefit belonging to the Nerva–Antonine era (c. 133 AD during the reign of Hadrian (117–138) of the Roman Empire. The Society prescribes the rules and membership fees of a "burial ceremony in Roman institutions" (Newark, 1915, pp.5-6). In 220 AD there was the original form of the Mortality Rate table which was the "Life Table" from the Severan dynasty compiled by the Roman jurist Ulpian (Newark, 1915, pp.6-7).

### 2.3. Medieval era

The Early Medieval era was a period of European history that lasted from the 5th century to about 1000, which was the decline of the Roman Empire. Trade was severely affected and there was no promotion of insurance forms during this

period. It was only until about 1000 to 1300 (the Medieval era) that politics and economy stabilized and developed again. Loans by sea (*foenus nauticum*) preceded traditional marine insurance in the Middle Ages. An investor lent his money to a merchant and the merchant would be responsible for paying it back if the ship returned safely. In this way, credit and sea insurance are provided at the same time. To offset risks at sea, traders are obliged to pay high-interest rates, as opposed to land traders who only split the profits. It was denounced as usury and condemned by Pope Gregory IX in the Edict of Naviganti of 1236 (Roover, 1945, p.172). Merit contracts (*Commuda*) were introduced to replace the "*foenus nauticum*". Under reward contracts, investors provide capital to an entrepreneur to make a trade, bearing the risk of loss in exchange for a profitable share of the return of the entrepreneur (Kingston, 2011, p.162). In the late 13th century, Italian merchants began to separate risk management from finance, completing management with cambium contracts based on the purchase of discounted bills of exchange from merchants who did not personally go to sea. To manage risk at sea, traders developed insurance loans: merchants pay insurance premiums to shipowners in the form of an irrefragable loan, under an agreement that shipowners will pay losses to merchants if their goods do not arrive at their destination (Van Niekerk, 1998). In 1293 of the 13th century, King Denis of Portugal raised the interests of Portuguese merchants. He established a joint fund by agreement called the *Bolsa de Comércio*. The first recorded form of marine insurance in Europe, it was approved on 10 May 1293 (John Brande Trend, 1958, p.103), (Bailey Wallys Diffie, 1977, p.21). By the early 14th century, the tendency to hire authorized base agents in various markets emerged as European merchants sold their goods globally but encountered numerous thefts (Roover, 1945, p.172). In 1310, the Chamber of Assurance was established in the Flamish trading city of Bruges (Miteski, 2019). The merchant sends his goods to agents who sell goods on behalf of the merchant. Instead of sending all their cargo on one ship/truck, they often send their cargo through multiple ships to avoid losing the entire shipment if the ship encounters a storm, fire, piracy, or is attacked by the enemy. From the role of insurance during this period, Mundy concluded: that insurance is the oldest method of risk transfer, developed to mitigate commercial/business risks (Mundy, 2001). Separate insurance policies (i.e. insurance policies that do not accompany loans or other types of contracts) were invented in Genoa in

the 14th century, as were insurance funds backed by commitments on property on land. Since the first Insurance Policy became known, over the next century, marine insurance grew widely and premiums intuitively varied with risks (Franklin, 200, p. 274). In the 15th century, Italian merchants spread knowledge and the use of insurance into Europe and the Mediterranean. Policies and wording for insurance contracts have been standardized. By the 16th century, insurance was popular in England, France, and the Netherlands. The concept of insurance outside native countries emerged in the 17th century due to reduced trade or higher local insurance costs. According to Kingston (2011), Lloyd's Coffeehouse was the prominent marine insurance market in London during the 18th century and European/American merchants used this market to insure their shipments (pp.162-184).

#### 2.4. Modern Insurance

Insurance became more complex in the Enlightenment and specialized types developed. Several forms of insurance developed in London in the early decades of the 17th century. Property insurance as we know it today can be traced back to the Great Fire of London, which in 1666 burned down more than 13,000 homes. The devastating effects of the fire transformed the development of insurance "from a matter of convenience into one of urgency, a change of opinion reflected in Sir Christopher Wren's (the most highly regarded architect in English history) inclusion of a site for 'the Insurance Office' in his new plan for London in 1667" (Dickson, 1960). In the book, *The Two and a Half Centuries History of British Insurance*, *Hamburger Feuerkasse* (English: Hamburg Fire Office) is the world's first officially established fire insurance company and the oldest existing insurance business available to the public, having begun operations in 1676 (Evenden, 1989)

The first insurance programs intended for underwriting business projects are ready. In the late 17th century, London's growing importance as a commercial center increased the demand for marine insurance. In the late 1680s, Edward Lloyd opened a café on Tower Street in London. This took place during a boom of hundreds of coffees gathering places in London, many catering to certain groups of social customers. Lloyd's customers were often ship owners, merchants, and captains. This helped Lloyd's Coffee House become the go-to source of the latest shipping news (Dickson, 1960). These informal beginnings led to the establishment of London's insurance market and several related transport and insurance businesses. In 1774, long

after Edward Lloyd died in 1713, the members of the insurance agreement formed a committee and moved to Cornhill as Lloyd's Society. Since its inception, Lloyd's has operated not as an insurance company but as a collection of individuals (and more recently, small groups of individuals) issuing insurance policies (Dickson, 1960).

Policies were first launched at the beginning of the 18th century. The first company to offer life insurance was Amicable, founded in London in 1706 by William and Sir. Amicable Society for a Perpetual Assurance Office, founded in 1706, is the company insurance first in the world (Anzovin, 2000). The first life insurance plan is that each member pays a fixed annual payment per share of one to three shares depending on the age of the members between 12 and 55. At the end of the year, a "friendly contribution" is divided among the deceased members' wives and children in proportion to the number of shares owned by the heirs. The Friendly Society began with 2,000 members (Amicable Society, 1854)

At the end of the 19th century, "accident insurance" began to be implemented. This product works just like modern disability insurance. The first company to offer accident insurance was the Railway Passengers Assurance Company, founded in 1848 in England to insure the growing number of fatalities on the fledgling railway system. It was registered as the Universal Casualty Compensation Company to: "... provide security for the lives of those traveling by railroad and, in the event of an accident not resulting in death, compensate the insured for injuries under certain conditions" (Woodward, 1917). Thus, the Railway Passengers Assurance Company was founded in 1848 as the first company to offer accident insurance.

Also in the late 19th century, governments began implementing national insurance programs against disease and old age. Germany built on a tradition of welfare programs in Prussia and Saxony that began in the 1840s. In the 1880s, Chancellor Otto von Bismarck introduced pensions for the elderly, accident insurance, and medical care, laying the foundation for Germany's welfare state. His paternalistic programs won the support of German industry because its goal was to win working-class support for the Empire and ease the flow of immigrants to America, where wages were higher, but welfare did not exist (Hennock, 2007), (Beck, 1995). In Britain, the National Insurance Act of 1911 gave working-class Britain the first contribution insurance system against disease and unemployment. This system was significantly expanded after the Second World War under the

influence of the Social Insurance Report and Union Services (Beveridge Report), to form the first modern welfare state (Hennock, 2007). In the United States, until the passage of the Social Security Act in 1935, the federal government did not regulate any form of insurance for the entire country.

Thus, the history of insurance marks the development of the modern insurance business against risks, especially those related to goods, property, death, accidents, and medical treatment. The insurance industry eliminates risk, spreads risk from individuals to the larger community, and provides an important source of long-term financing for individuals and communities.

### III. HISTORY OF HULL INSURANCE

The history of insurance development has recorded marine insurance activities dating back to the beginning. Under the impact of trade and commodity exchange activities in human history, maritime insurance, including Hull Insurance, appeared quite early in many forms. Between c. 3000 and 2000 BC, Chinese and Indian traders knew how to evenly divide cargo on multiple ships when crossing dangerous waters to avoid drowning cargo when transporting, minimizing losses (Vaughan, 1996). In 1901 the Code of Hammurabi was written between c. 1792 –1750 BC. The Code of Hammurabi contains many laws providing for the protection of shipfarers and shipowners, such as "Law 238 which provides that the captain, manager or charterer must pay the shipowner only half of the value of the ship" (Hammurabi, 1904, pp.43–45). Law 240 makes the owner of a cargo ship that is wrecked in a collision liable for replacing the passenger ship and the cargo held by the passenger ship upon the testimony of the owner of the passenger ship about the collision (Hammurabi, 1903, pp.85–86). Around c. 1000 – 800 BC, the "Rhodian law" stating marine insurance was established on the island of Rhodes. The general loss law is that underlies all types of insurance. This law is summarized in the Compendium Roman Law and written by the Roman jurist Paulus at the beginning of the Imperial Crisis (Translated by Scott, 1932). In 1293 of the 13th century, King Denis of Portugal established by mutual agreement a fund called Bolsa de Comércio and the first recorded form of maritime insurance in Europe, approved on 10 May 1293 (John Brande Trend, 1958, p.103), (Bailey Wallys Diffie, 1977, p.21).

In the 14th century in Floren, Genoa, Italy, the first marine insurance policies appeared (the

oldest insurance policy is found dated April 22, 1329, kept in Floren). Accordingly, an insurer undertakes to the insured to compensate for the property damage suffered by the insured when the damage occurs at sea, and he receives a fee. The discovery of the Indian Ocean and the subsequent discovery of the Americas caused the maritime industry in general and maritime insurance in particular to develop rapidly. Premiums vary according to intuitive estimates of seasonal and piracy change risks (Franklin, 2001).

The Barcelona example of 1435 was the first legal document in the insurance industry. This was followed by Philippe's decree of 1458 and other regional decrees such as the Finnish decree of 1563 relating to cargo insurance contracts. However, it was not until the 16th - 17th centuries, along with the advent of capitalist production methods, that insurance activities developed widely and increasingly penetrated many areas of socio-economic life. Paving the way for this development was the English law of 1601 under Queen Elizabeth, followed by the 1681 French edict enacted. These are the laws that paved the way for the marine insurance sector (Cuong, n.d, p.12).

In the early 17th century, England took a leading position in International Trade and Navigation with London being the most prosperous center. Ships from Asia, Europe, America, and Africa all dock on both banks of London's River Thames. Coffee shops where merchants, bankers, carriers, and insurers meet to exchange news directly with each other. In the late 1680s, Edward Lloyd (a retired sea captain) opened a café on Tower Street in London. Lloyd's Coffee House was the first marine insurance marketplace. It quickly became a popular location for ship owners, merchants, and captains, as well as a reliable source of the latest shipping news (Palmer, 2007). Lloyd serves them by providing reliable shipping news. The shipping community frequents the venue to discuss maritime insurance, ship brokerage and foreign trade (Marcus, p.2). The transactions that took place led to the establishment of insurance markets Lloyd's of London, Lloyd's Register, Lloyd's List, and a number of related transport and insurance businesses (Marcus, p.195).

In 1906, the Marine Insurance Act codified the earlier common law; it was both an extremely thorough and concise work. Although the title of the Act refers to marine insurance, the general principles still apply to all types of general insurance. In the 19th century, Lloyd's and the London Guarantee Institute (a group of insurance companies in London) developed standardized

terms for the use of marine insurance and these terms have been maintained ever since. As of 2020, the Nordic region was the largest provider of hull insurance with 14% of the world market, China was second with 12.4%, and Lloyd's in London was third with 8.6%, according to (Osler, 2021).

#### IV. PROTECTION AND INDEMNITY INSURANCE

Protection and Indemnity Insurance in Vietnam also known as Shipowners' Civil Liability Insurance, abbreviated as P&I, is a form of general marine insurance provided by the P&I club (Anderson – 1999). While a marine insurer offers "hull and machinery" insurance to ship owners and cargo insurance to shippers, the P&I club offers coverage for open risks that traditional insurers don't want to cover. Typical P&I insurance covers the carrier's third-party risk for damage caused to goods during transit (John Dunt – 2009); risks of war (Michael D Miller – 1994); and the risk of environmental damage such as oil spills and pollution. In the UK, both traditional underwriting organizations and P&I clubs are subject to the Marine Insurance Act 1906.

Since 1720, the Royal Exchange Assurance Company and London Assurance Company have been licensed exclusively in hull insurance. These two companies and some major private insurers such as Lloyd's have a monopoly on the coverage and price of hull premiums in the UK. Dissatisfied with the pricing policies offered by large insurance companies, shipowners have formed groups of shipowners according to the geographical area in which they operate, called hull insurance societies. Insurance associations of small ship owners at this time do not have legal status or are just cooperatives of ship owners operating in a spirit of reciprocity, sharing risks and acting as insurers. This was the original form of the P&I Insurance Association. However, by 1824, due to competition in the British insurance market and Lloyd's offices, large insurance companies such as Exchange Assurance and London Assurance went bankrupt, and small insurance associations also weakened and withered (Cuong, n.d., p.31).

When hull insurance associations ceased to exist, shipowners found it necessary to form similar associations for a different purpose. This need arose strongly in the mid-19th century after ship owners had to bear the burden of responsibility for third parties; Casualty sailors needed compensation from the person who hired them and the Lord Campbell Act of 1846 introduced stricter rules of liability for loss and

casualties for those who had to rely on lost sailors (Cuong, n.d, P.32). In addition, the migration policies of the 19th century created waves of emigrants to North America and Australia, and passenger complaints increased dramatically. Therefore, the shipowner should be insured for these risks as well as the remaining 1/4 of the collision liability that the hull insurer refuses to insure as well as the liability over the amount of compensation (the maximum compensation value including loss of ship, loss of cargo and liability for damage caused does not exceed the value of the ship) (Cuong, n.d, P.32).

Carriers soon realized that they were often at fault if goods were lost or damaged at sea, and they sought to purchase third-party indemnity insurance against cargo liability. Underwriters showed no willingness to take such open risks, so shipowners responded by forming their joint P&I clubs, operating as a shipowners' cooperative (Susan, 2001). In 1855, the first P&I Insurance Association was formed as the "Shipowner Mutual Protection Association", the predecessor of the later British P&I Insurance Association. This association operates like a hull insurance association but includes liability for life, casualties as well as collision liability that is not covered by hull insurance, especially values that exceed the limits of the insurance policy (this is a type of protection insurance). An advantage is a working club for ship owners, thus eliminating the underwriter's profit margins and making P&I Insurance significantly cheaper (Susan, 2001).

In 1874, the liability risk for cargo (Indemnity Insurance) transported by the insured vessel was added to the coverage provided by the P&I club. After 1874, many clubs added maritime compensation to meet these new requirements. This class was later merged with the marine insurance class dedicated to the original protection risks, and the distinction between the two was virtually gone. In the past, P&I associations formed in British cities and dominated the world's insurance markets. Today, societies form and thrive in Scandinavia, the United States and Japan.

#### V. CONCLUSIONS

The article sheds light on the formation and development of insurance, marine insurance, hull insurance and P&I. History has shown that "Sea cargo" is often insured twice according to insurance standards. The shipper or shipper will be insured by a marine insurer capable of insuring 'all risks'. Carriers or ship owners will be insured by the P&I club but will usually limit their liability to

shippers to a fraction of the retail value of the cargo.

### REFERENCES

- [1]. Fukuyama, Francis (2011). *The Origins of Political Order: From Prehuman Times to the French Revolution* (reprint ed.). Profile Books. ISBN 9781847652812.
- [2]. Szarmach, Paul E.; Tavormina, M. Teresa; Rosenthal, Joel T., eds. (1998). "Guilds and Fraternities". *Medieval England: An Encyclopedia*. Volume 3 of *Routledge encyclopedias of the Middle Ages* (reprint ed.). Abingdon: Taylor & Francis (published 2017). p. 329. ISBN 9781351666374.
- [3]. Vaughan, E.J. (1996). *Risk management*. New York: Wiley. ISBN 978-0471107590.
- [4]. Scheil, Jean-Vincent (1902). *Mémoires de la Délégation en Perse*. Vol. 4: *Textes élamites-sémitiques*. Paris, France: Ernest Leroux. p. 12. ISBN 9780483463967.
- [5]. Roth, Martha T. (1995). "Mesopotamian Legal Traditions and the Laws of Hammurabi". *Chicago-Kent Law Review*. 71 (1): 15–24.
- [6]. Hammurabi (1903). "Code of Hammurabi, King of Babylon". *Records of the Past*. 2 (3). Translated by Sommer, Otto. Washington, DC: Records of the Past Exploration Society: 75–76.
- [7]. Hammurabi (1904). "Code of Hammurabi, King of Babylon" (PDF). Liberty Fund. Translated by Harper, Robert Francis (2nd ed.). Chicago: University of Chicago Press. p. 35.
- [8]. *Memorial Publications of the Prudential Insurance Company of America* (1915). *The Documentary History of Insurance, 1000 B.C. - 1875 A.D.* Newark, New Jersey: Prudential Press.
- [9]. Aubert, Jean-Jacques (2008). "Dealing with the Abyss: The Nature and Purpose of the Rhodian Sea-Law on Jettison (Lex Rhodia De Iactu, D 14.2) and the Making of Justinian's Digest". *Beyond Dogmatics: Law and Society in the Roman World*. 8: 157–172. DOI:10.3366/Edinburgh/9780748627936. 003.0033. ISBN 9780748627936. Retrieved January 18, 2021.
- [10]. Franklin, James (2002). *The Science of Conjecture: Evidence and Probability before Pascal*. Baltimore: Johns Hopkins University Press. p. 259. ISBN 9780801871092.
- [11]. Tapas Kumar Parida, Debashis Acharya (2016). *Life insurance industry in India: Current status and efficiency*. Spring. P. 2. ISBN 9789811022333.
- [12]. *The Documentary History of Insurance, 1000 B.C.–1875 A.D.* Newark, NJ: Prudential Press. 1915. pp. 5–6. Retrieved June 15, 2021.
- [13]. *The Documentary History of Insurance, 1000 B.C.–1875 A.D.* Newark, NJ: Prudential Press. 1915. pp. 6–7. Retrieved June 15, 2021.
- [14]. Hoover, Florence Edler (November 1945). "Early Examples of Marine Insurance". *The Journal of Economic History*. 5 (2): 172–200. DOI:10.1017/s0022050700112975. ISSN 0022-0507. S2CID 154479277.
- [15]. Kingston, Christopher (March 2011). "Marine Insurance in Philadelphia During the Quasi-War with France, 1795–1801". *The Journal of Economic History*. 71 (1): 162–184. DOI:10.1017/s0022050711000064. ISSN 0022-0507.
- [16]. Van Niekerk, J. P. (1998). *The Development of the Principles of Insurance Law in the Netherlands from 1500 to 1800*. Vol. 1.
- [17]. Bailey Wallys Diffie (1977). *Foundations of the Portuguese Empire, 1415-1580*. U of Minnesota Press. p. 21. ISBN 978-0-8166-0782-2.
- [18]. John Brande Trend (1958). *Portugal*. Praeger. p. 103.
- [19]. Hoover, Florence Edler (November 1945). "Early Examples of Marine Insurance". *The Journal of Economic History*. 5 (2): 172–200. DOI:10.1017/s0022050700112975. ISSN 0022-0507. S2CID 154479277.
- [20]. Miteski, Stefan (12 July 2019). "History of insurance – what do you know?". *Reinsurance Weekly*.
- [21]. Mundy (2001). "Enterprise risk: who knows my business better than me?"
- [22]. Franklin, James (2001). *The Science of Conjecture: Evidence and Probability Before Pascal*. Baltimore: Johns Hopkins University Press. pp. 274–277.
- [23]. Evenden, William L. (1989). *German Fire Marks*. VVW Karlsruhe. ISBN 9783884871904.

- [24]. Dickson, PGM (1960). Solar Insurance Office, 1710–1960: A Two-and-A-Half-Century History of British Insurance. Oxford University Press .
- [25]. Anzovin, Stephen (2000). Famous First Facts. H. W. Wilson Company. p. 121. ISBN 978-0-8242-0958-2.
- [26]. Amicable Society, The charters, acts of Parliament, and by-laws of the corporation of the Amicable Society for a perpetual assurance office, Gilbert and Rivington, 1854 Amicable Society, article V p. 5
- [27]. Woodward, A. P. (March 1917). "The Disability Insurance Policy". *The Annals of the American Academy of Political and Social Science*. 70 (1): 227–237. DOI:10.1177/000271621707000116. S2CID 144345819.
- [28]. Hennock, E. P. (2007). *The Origin of the Welfare State in England and Germany, 1850–1914: Social Policies Compared*. Cambridge University Press.
- [29]. Beck, Hermann (1995). *The Origins of the Authoritarian Welfare State in Prussia: Conservatives, Bureaucracy, and the Social Question, 1815-70*. University of Michigan Press. ISBN 978-0472105465.
- [30]. Roth, Martha T. (1995). "Mesopotamian Legal Traditions and the Laws of Hammurabi". *Chicago-Kent Law Review*. 71 (1): 15–24.
- [31]. Hammurabi (1904). "Code of Hammurabi, King of Babylon" (PDF). Liberty Fund. Translated by Harper, Robert Francis (2nd ed.). Chicago: University of Chicago Press. pp. 43–45.
- [32]. Hammurabi (1903). "Code of Hammurabi, King of Babylon". *Records of the Past*. 2 (3). Translated by Sommer, Otto. Washington, D.C.: Records of the Past Exploration Society: 85–86.
- [33]. "The Civil Law, Volume I, The Opinions of Julius Paulus, Book II". *Constitution.org*. Translated by Scott, S.P. Central Trust Company. 1932.
- [34]. Palmer, Sarah (October 2007). "Lloyd, Edward (c.1648–1713)". *Oxford Dictionary of National Biography* (online ed.). Oxford University Press. DOI:10.1093/ref:odnb/16829.
- [35]. Marcus, G. J. *Heart of Oak: A Survey of British Sea Power in the Georgian Era*. Oxford University Press. p. 192. ISBN 0192158120.
- [36]. Marcus, G. J. *Heart of Oak: A Survey of British Sea Power in the Georgian Era*. Oxford University Press. p. 195. ISBN 0192158120.
- [37]. Osler, David (6 September 2021). "Chinese hull market overtakes Lloyd's". *Lloyd's List Intelligence*. Informa UK. Retrieved 3 December 2022.
- [38]. *Law of Marine Insurance - Susan Hodges - Cavendish Publishing - 2001 - ISBN 1-85941-227-0 - pp 323-326*
- [39]. *The Mariner's Guide to Marine Insurance - P Anderson - 1999 - Nautical Institute - ISBN 1870077539*
- [40]. *Marine Cargo Insurance - John Dunt - 2009 - Informa - ISBN 9781843117636*
- [41]. *Marine War Risks - Michael D Miller - 1994 - Lloyds - ISBN 1850445168*
- [42]. Cuong, D. M. (n.d.). Vietnam and World Maritime News, retrieved 2024-03-20 from <https://hanghaikythuat.files.wordpress.com/2014/03/bhhh.pdf>