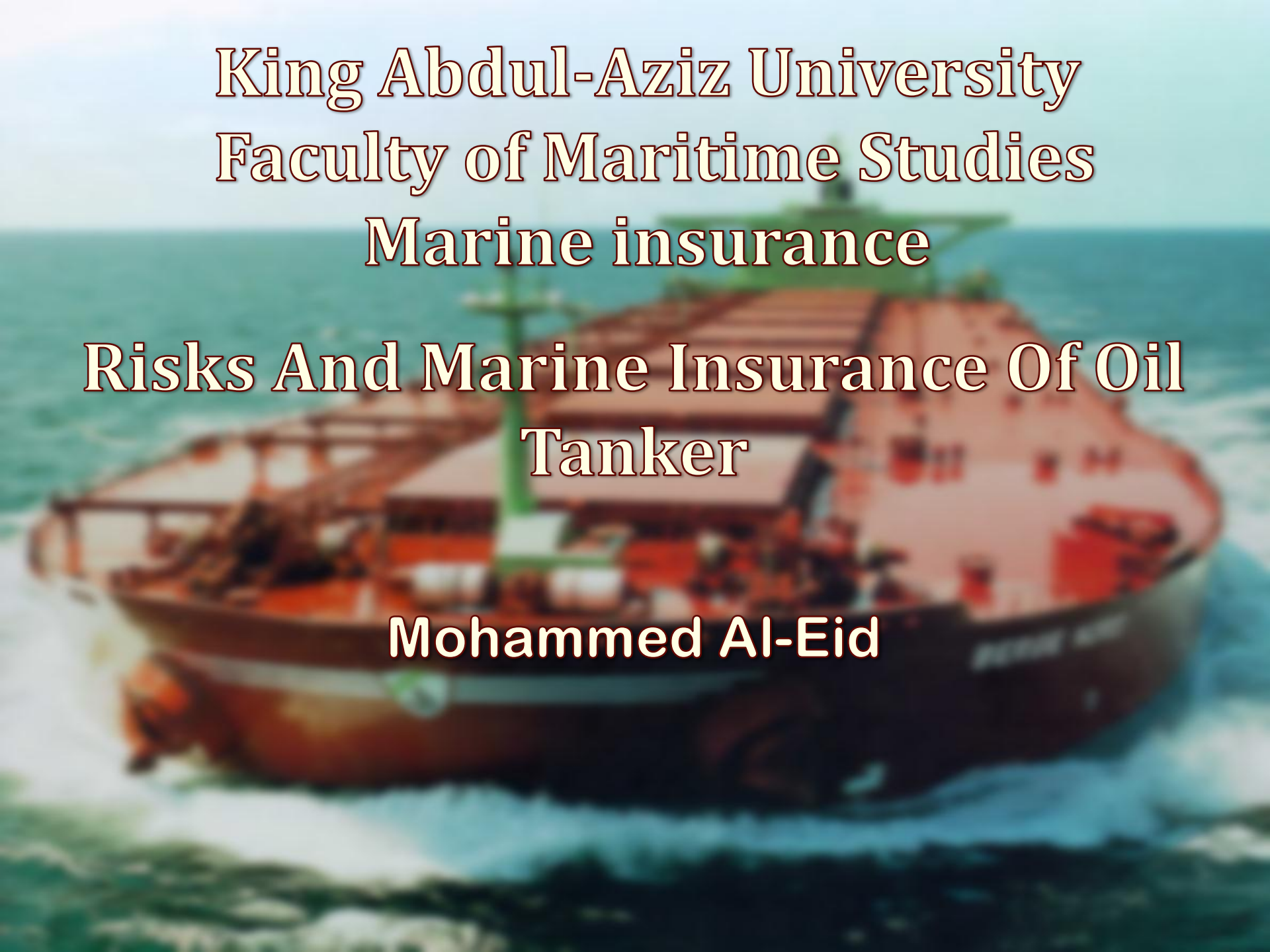


**King Abdul-Aziz University
Faculty of Maritime Studies
Marine insurance**

**Risks And Marine Insurance Of Oil
Tanker**

Mohammed Al-Eid



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INTRODUCTION :

Oil tankers is the only mean of transportation of oil and because the oil industry is considered as one of biggest industry in the world. It takes up to 53% of the volume of world trade.

Oil tankers are very risky and very expensive

WHAT IS TANKER ?

- o A very large ship which carries crude oil or other petroleum products in big tanks.
- o vessel designed to transport liquid hydrocarbons (crude oil or refined products) in bulk in its tanks.
- o A ship designed for the carriage of oil in bulk, her cargo space consisting of several or many tanks. Tankers load their cargo by gravity from the shore or by shore pumps and discharge using their own pumps.

TYPES OF TANKERS:

Classified of the Tankers on basis of Type

1. **Oil Tankers**: Oil tankers as their name suggests carry oil and it's by products. Oil tanker however, is a generic terminology and includes not only crude oil but also petrol, gasoline, kerosene and paraffin. Oil tankers are further sub-divided into two main types: product tankers and crude tankers:

-***Product tankers*** are used to transport the above mentioned petroleum based chemicals

-***Crude tankers*** are specifically used to transport crude oil .

2. **LNG Carrier**: The LNG Carriers are those tanker ships that are used to cargo LNG or Liquefied Natural Gas. These types of tankers require careful and delicate handling.

3. Chemical Tankers: Chemical tankers are those cargo tankers which transport chemicals in various forms.

4. Slurry Tankers: Slurry refers to all those materials that do not disperse or dissolve in water.

5. Hydrogen Tankers: used for the shipping and transportation of liquefied hydrogen gas.



Risk assessment

key questions:

- What can go wrong? → Scenario
- How likely is it? → Likelihood
- What are the consequences? → Consequence

- o The overall objective of a shipping operation might be defined as "to transport cargo or passengers safely and cost-effectively from origin to destination." You cannot do this unless you identify and manage the risks inherent in the process.
- o The use of risk based techniques applied to the classification of marine vessels and offshore structures is becoming more commonplace. Classification Societies are publishing Guides that the industry would follow to make use of risk assessment techniques to support the request for classification approval.

o The risk-based classification process can involve any of a wide range of risk assessment approaches, from simple qualitative tools to full quantitative risk models, depending on the extent and complexity of the new or alternative design to be classed. The use of tools such as quantitative models will significantly assist the industry in taking advantage of this innovative risk. One of the developed tools is a comprehensive Quantitative Risk Assessment (QRA) model for an oil tanker. This model may be used to evaluate competing designs, the relative benefits of redundancy, and the impact of equipment unavailability during operations.

RISKS IN GENERAL

- **Sea Perils**: Risks with natural character in the sea (Sea floods- lightning- storms at sea, they are the source and origin of natural)
- **Perils in sea**: Source and origin is not natural (Maritime collision, sea thieves, pirates, war, and other risks that do not come from a natural)

o **Mixed Perils:** Include the types mentioned previously in addition to the risks that may be exposed to the goods on land, whether in the ports of loading or unloading or during the road trip full of (Danger of theft - deterioration of the truck - burned or collapsed bridges that pass over - collision - theft of the goods or any danger that might happen during that part of the journey)

GENERAL INFO ABOUT INSURANCE

- o Marine insurance covers the loss or damage of ships, cargo, terminals, and any transport or cargo by which property is transferred, acquired, or held between the points of origin and final destination..
- o Cargo insurance is a sub-branch of marine insurance, includes Onshore and Offshore exposed property (container terminals, ports, oil platforms, pipelines)

RISK MANAGEMENT:

What is risk & risk management ?

Risk is a measure of the likelihood that an undesirable scenario will occur together with a measure of the resulting consequences.

Risk management is the identification, assessment of risks followed by coordinated and economical application of resources to minimize or eliminate the Risk.

RISK MANAGEMENT:

Risk management is all about Reducing the risk and casualty and minimize the damage as much as you can, and handle it the right way.

And the Medicine for Risks is **SAFETY.**

RISK THAT MAY FACE TANKER:

Tankers are like any other ship in the risks that may face it or overcome it except for some other risks that are specific to it, and the risks are :

- Collision
- Piracy (over the last years tankers are targeted for piracy more than any other ship)
- Oil spill (pollution)
- Explosion
- Fire
- Sinking

INSURANCE IN SPECIFIC

Tankers also have insurance mostly like any type of vessel but the insurance is more focused on some specific perils.

- o Property insurance

- o Liability insurance which consist of :

Collision insurance, Protection and indemnity (P&I) And other liability insurance.

But the thing that tankers suffers from specifically is

- o Piracy: over the last decade pirates are targeting tankers because of the high cost of oil and tankers, therefore the insurance on this risk has been rising and the perinums is higher than before.

- o Oil spill: has always been the main issue of tankers and the most thing that insurance focus on.

Other thing that also affect the insurance of the tankers and maybe focused on from insurers are :

o Political problems

Political problems have been a risk that is mostly not so important, but it rises from time to time

Like for example the latest issue with Strait of Hormuz

When some country stated that it will close it.

That immediately made the insurance top up for 15 % more.

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IMPORTANCE OF MARINE INSURANCE:

Because tankers have a really high cost and because of its vital role in the oil industry insurance is very important to it, to insure that the oil will arrive and moved safely in the right time and to insure peoples right in case of any damage or something goes wrong.

Also tankers are very risky and one small fraction of mistake could turn in to disaster and could cause casualty and that's again why insurance are very important to the tankers industry.

CONCLUSION

Finally:

Insurance play a vital role to the tankers because of the unlimited tankers risks.

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