
Risk vs. Business Requirement – Industry Perspective

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Introduction

• What are the tools for Risk Management (mitigation)?

• What is Marine Insurance?

• How does it differ amongst its types?

• How Marine Insurance works as a Risk Mitigation tool

• What we do to determine, manage and mitigate risks

• Case studies
What is Risk Management (Mitigation)

- Consideration of all alternative methods for dealing with Risk
  - Avoid
    - Don’t go into that line of business
    - Sell that line of business
  - Loss Prevention and Reduction
    - Engineering control
  - Retention – Planned assumption
    - Self insure
  - Transfer
    - Insurance
    - Contractual
What is Marine Insurance

• Oldest type of insurance
  – Ancient Phoenicians in 3000 BCE shared the common rise
• Formalyzed by the Italians in early current era (+/-500 AD)
• Lloyds Coffee house – 1734 developed into the center for global marine market
• Now over a 30 billion dollar market (IUMI estimated 2010)
Marine Insurance - Types

• Combination of Dynamic and static Risks
• Dynamic
  – Cargo in transit
  – Hull
• Static Risks
  – Ship Builders
  – Ports and Terminals Liabilities
  – Cargo in Storage/Delay in Transit
Dynamic – Cargo in Transit

Analysis of risk
- Where to/from
- Piracy
- Weather
- Transit restrictions
- Volcano
- Tsunami
- Port Damages
Dynamic - Hull
Static – Marine Liability

• Analysis of Risk
  – CAT
  – Political
  – Social
  – Location
    • Near population
  – Activities
Static – Ship Builders
Static – Cargo in Storage/ Delay in Transit
Supply Chain Risks

• Interruptions caused by something that does not cause Physical Damage or loss to the subject of the insurance. For Example:
  – Car parts delayed due to the Japanese Earthquake causing shutdowns in the US car market
  – Iceland volcano shutting down air and vessel traffic
Case Studies - Hurricane Ike

- Cargo on dock in Houston Ship Channel for project in Peru
- Houston was a layover/consolidation point
- 2008 – struck just east of Houston and Galveston
- Storm Surge up the ship channel
- Over 9 feet 30 miles inland
- Dock overtopped by storm waters
- Project delayed for over 6 months due to cargo damages
Case Studies - Piracy

The Piracy - Figures

The Piracy in the world

Total number of attacks
(actual and attempted attacks)

Sources: International Maritime Bureau
Case Studies - Piracy

The Piracy - Figures

 Attacks: 2003 - 2010

Sources: International Maritime Bureau

- Reduction in South East Asia
- Explosion in Indian Ocean
- Growth in West Africa
Case Studies - Piracy

The Piracy - Figures

The piracy in Somalia

Somalia
Several political entities
Multitude of tribal authorities
5 to 10 gangs
1500 pirates
6000 US$ invest for hijacking campaign
Earning by pirate 400 US$
6 / 8 land bases

Counterpiracy
35/45 warships from 20 nations
Some ships security companies
1 000 private armed guards
Somaliland coast guards
Puntland Marine Force

28 000 ships transit
624 M tons (8% world)
1% attacked
0.3% hijacked

17 hijacked ships
375 hostages
2011/31/08
# Case Studies - Piracy

## The Piracy - Figures

### Cost of piracy

<table>
<thead>
<tr>
<th>Cost for shipping</th>
<th>Cost for global economy</th>
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<tr>
<td><strong>Freight rate</strong></td>
<td><strong>Extra Cost of shipping &amp; trade</strong></td>
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<tr>
<td><strong>Piracy risk surcharge</strong></td>
<td>2010 global cost 8/10 Bil US$</td>
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<td><strong>Crew salary</strong></td>
<td><strong>Regional trade</strong></td>
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<td>Special prime</td>
<td>2010 global cost 1.25 Bil US$</td>
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<td><strong>Insurance Premiums</strong></td>
<td>Eg: Kenya 414 MUS$; 95 $ / TEU, 15 $ / ton wheat</td>
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<td>War risk surcharge: 2010 global cost 4 Bil US$</td>
<td><strong>Cost for countries</strong></td>
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<td>Kidnap &amp; ransom: 2010 global cost 540 M US$</td>
<td><strong>Military Counterpiracy &amp; dedicated programs</strong></td>
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<td>Extra 30 000 – 60 000 US$ by transit, 2011: extended area</td>
<td>2010 global cost 2 Bil US$</td>
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<td><strong>Security Guards &amp; Equipements</strong></td>
<td><strong>Prosecutions by justice in Africa, USA, Europe</strong></td>
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<td>100 000 US$ for 10 days</td>
<td>2010 global cost 31 M US$</td>
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<td><strong>Bunkering</strong></td>
<td><strong>Antipiracy organisations in East Africa</strong></td>
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<td>Enlarge routing Arabian Sea, speed steaming in Gulf of Aden Rerouting via Cape (+0.7 MUS$)</td>
<td>2010 global cost 24.5 M US$</td>
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<td><strong>Ransom</strong></td>
<td>Sources: Loyd List Daily, The Economic Cost of Maritime Piracy, oceansbeyondpiracy.org</td>
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<td>2009: 177 M US$, 2010: 238 M</td>
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<td>Average 2007: 1.5 M US$, 2010: 5.2 M US$ + 50% additional costs</td>
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What is being done?

- Rerouting
- Convoys
- Hardening ships
- Crew training
- Rapid response
Questions