



International Hull and its Challenges

Marine Forum South Africa

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II - Technical Challenges

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Challenges by the Market (1)



**How much wider will
the underwriting gap
open??**

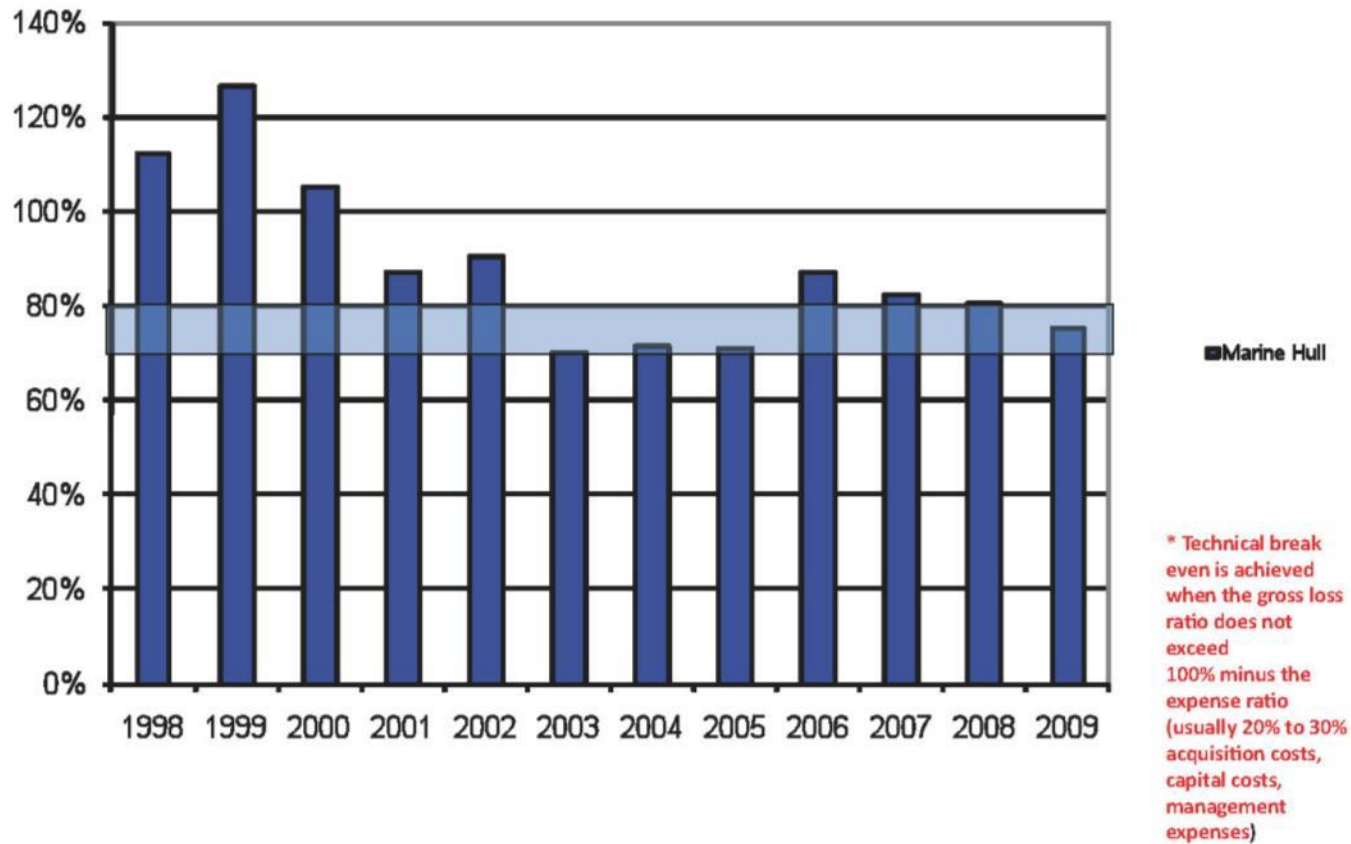
- **Questionable (mostly no) profitability**
- **Abundant capacity**
- **Strategic underwriting**
- **Globalization of H&M markets**

Challenges by the Market (2)

Questionable (mostly no) profitability



Marine Hull Gross* Ultimate Loss Ratio U/W Years 1997 to 2009



Challenges by the Market (2)

Questionable (mostly no) profitability

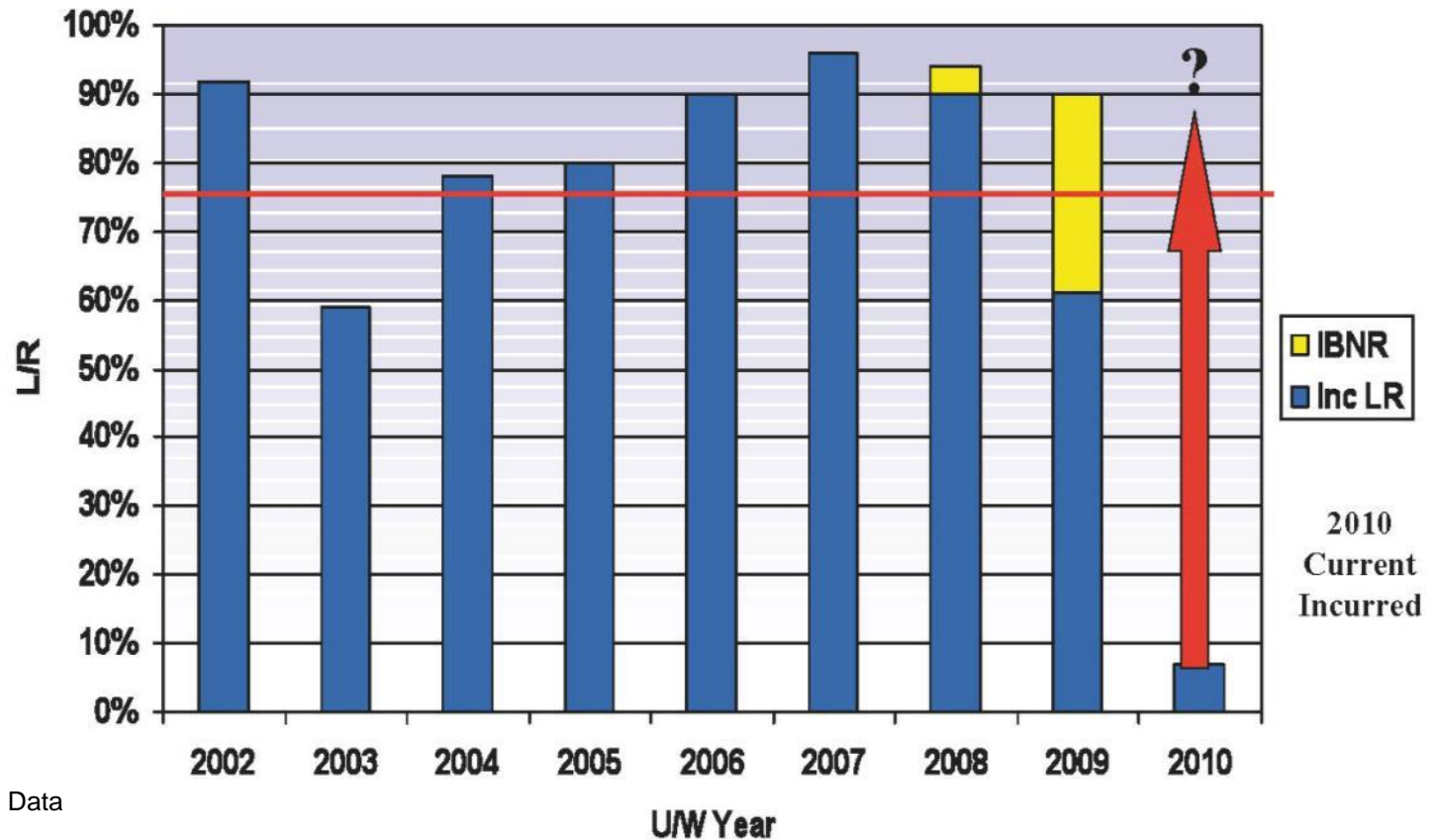


Lloyd's Results

"T" Risk Code @ Q2 2010

Gross of R/I, Net of Commission

ESTIMATED ULTIMATE LOSS RATIO

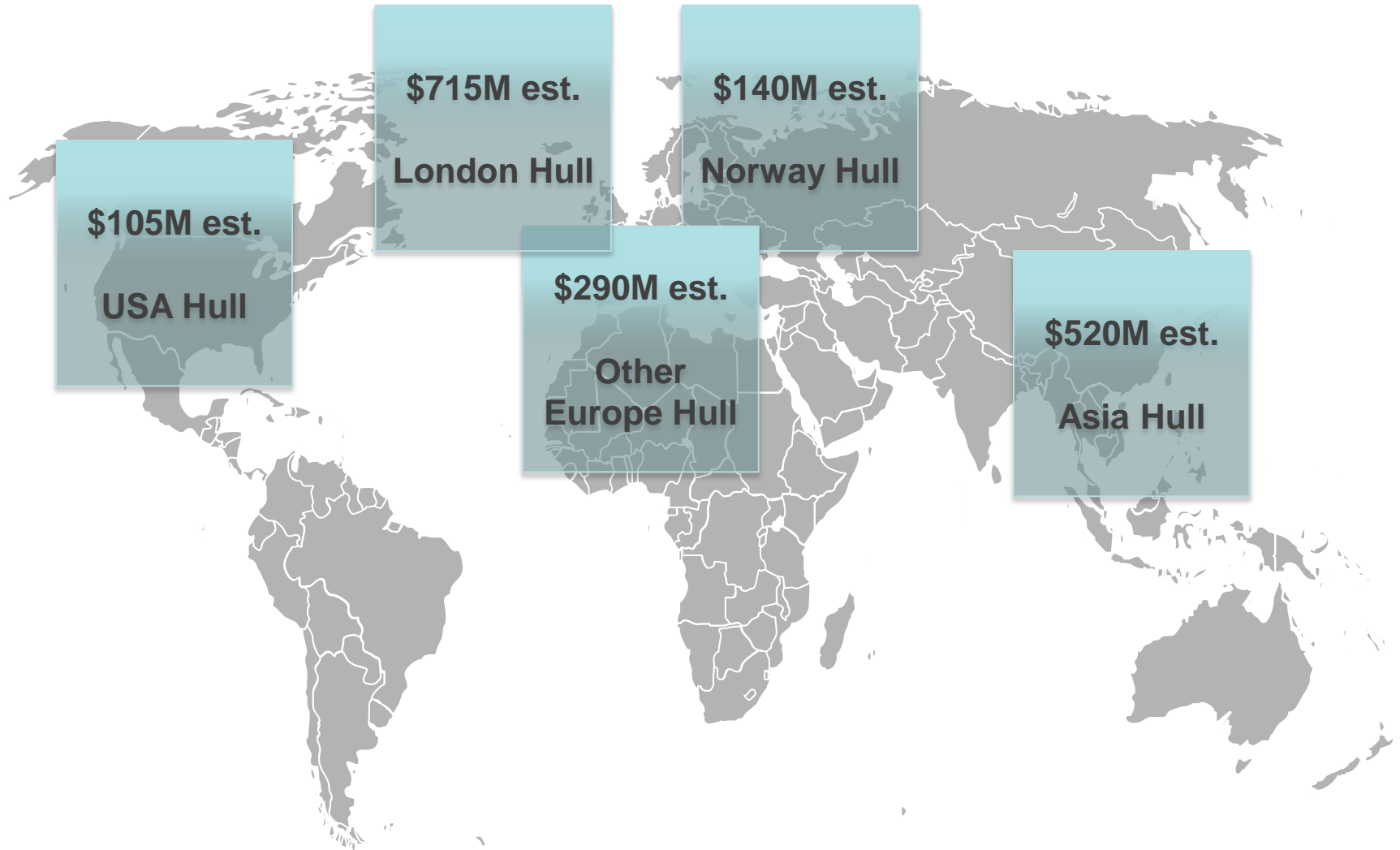


Estimated ULR

Source: LMA Risk Code Data

Challenges by the Market (2)

Abundant global capacity



Challenges by the Market (2)

Strategic underwriting



Example: Gross Premiums in USD

<u>Germany</u>		<u>Mainland China</u>	
2005	2009	2005	2009
179 mio	214 mio	363 mio	612 mio

(Ocean and Inland / latest confirmed official figures)

Challenges by the Market (2)

Globalization of H&M markets - Change of traditional H&M Markets

Example: the German H&M Market (Split of Gross Premium in USD)

	<u>2005</u>	<u>2009</u>
Ocean	66 mio	70 mio
Inland River	41 mio	38 mio
<u>Yacht</u>	<u>72 mio</u>	<u>106 mio</u>
Total	179 mio	214 mio

The shipping crisis

- ▶ Passed or reiterating?
- ▶ Its direct effects on H&M
- ▶ Its indirect effects

Challenges by the Market (3)



Challenges by the Market (4)

- ▶ Sanctions
- ▶ A side view to Builder's Risk and War

I - Challenges by the Market

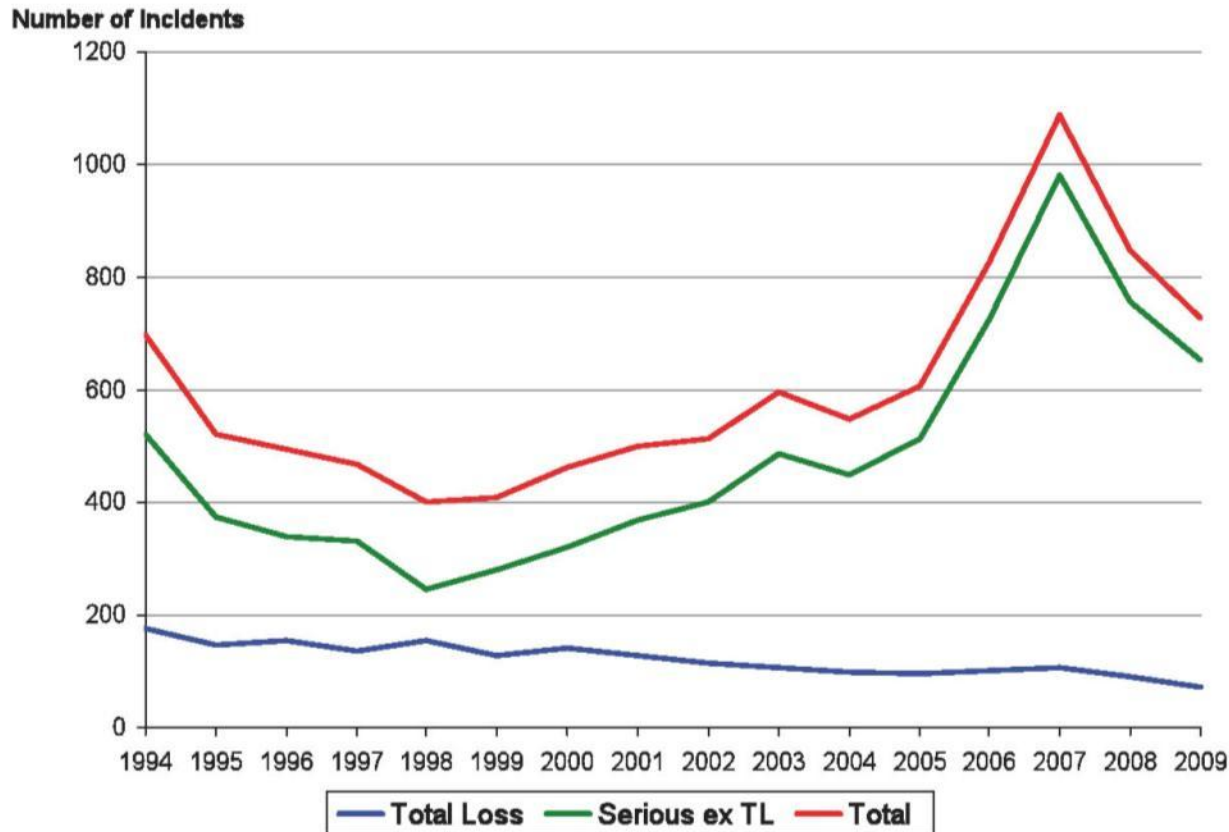
II - Technical Challenges

III - The Impact of Piracy

Technical Challenges (1)

Claims Statistics and Developments

Serious and Total Losses 1994 - 2009
By Number (vessels > 500 GT)

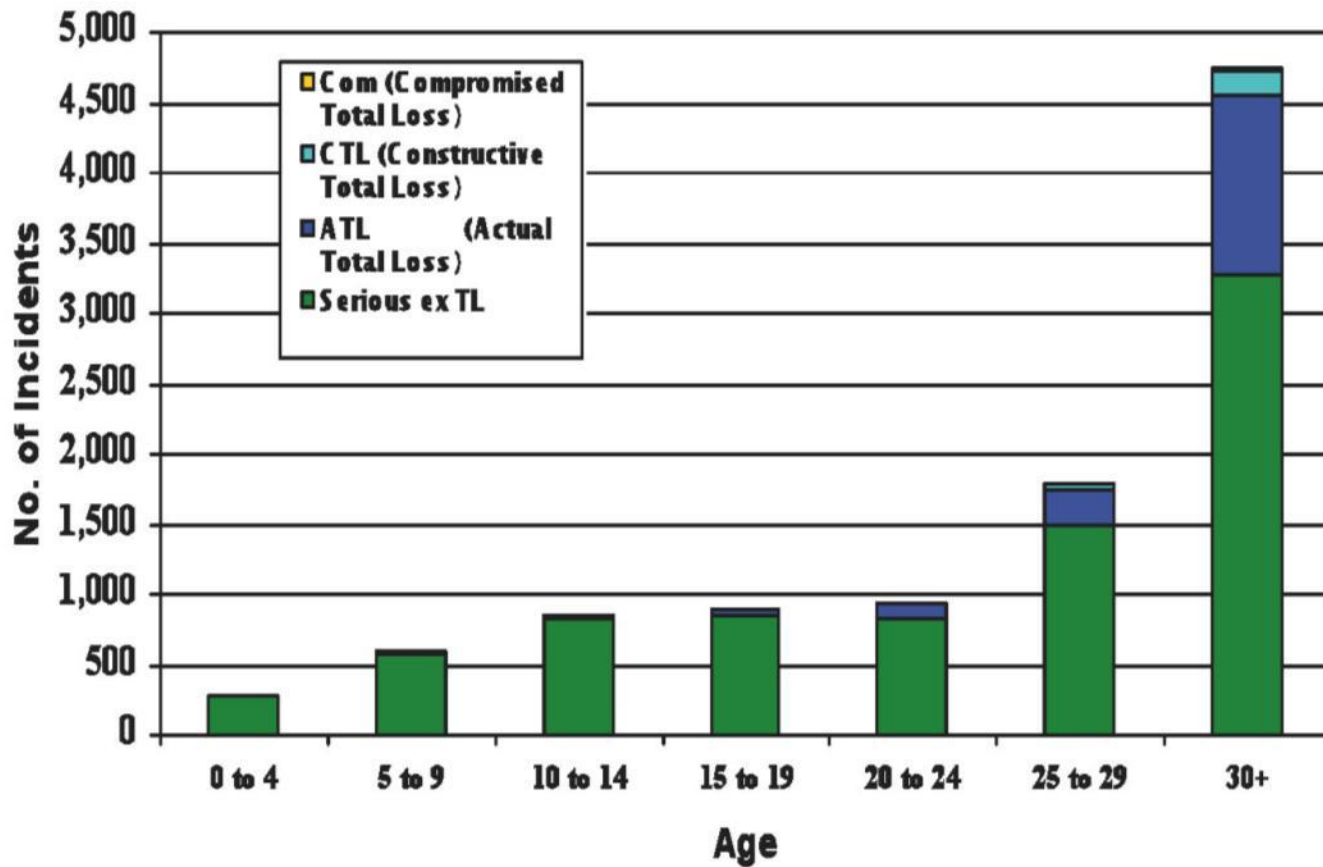


Source: LMIU, total losses as reported by Lloyd's List

Technical Challenges (1)

Claims Statistics and Developments (contd.)

Serious and Total Losses 1994 - 2009
By age (vessels > 500 GT)

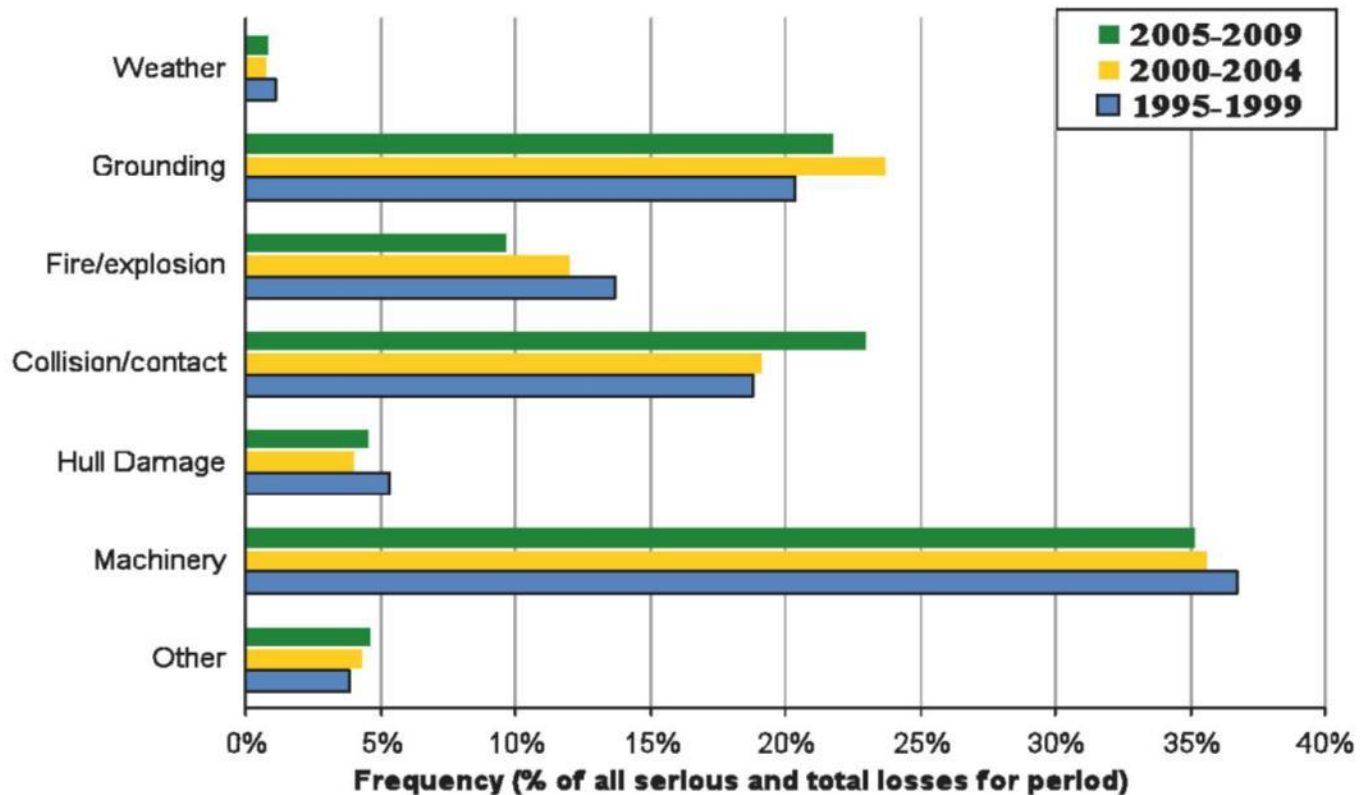


Source: LMIU, total losses as reported by Lloyd's List

Technical Challenges (1)

Claims Statistics and Developments (contd.)

Serious Losses 1995 - 2009
By Cause, All Vessel Type (vessels > 500 GT)

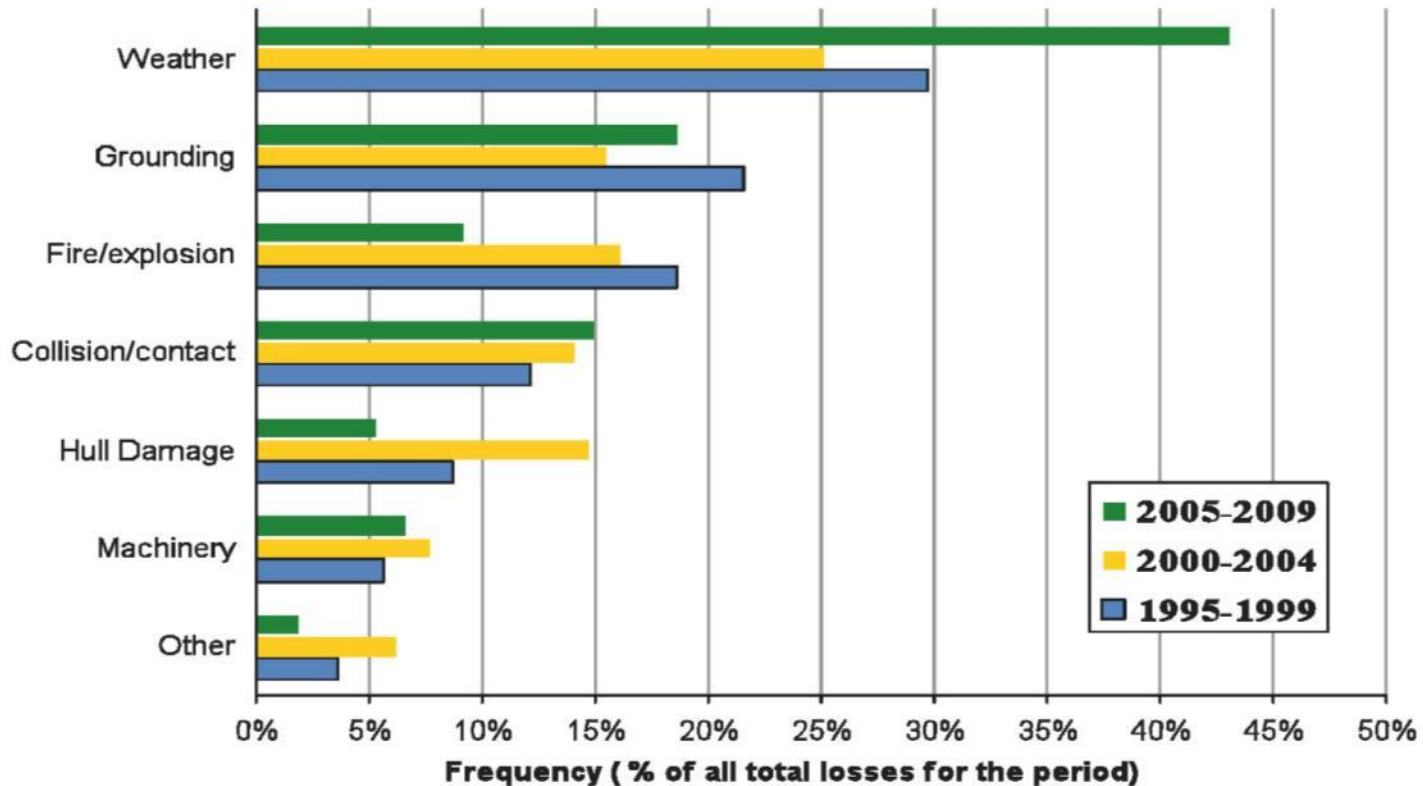


Source: LMIU, total losses as reported by Lloyd's List

Technical Challenges (1)

Claims Statistics and Developments (contd.)

Total Losses 1995 - 2009
By Cause, All Vessel Type (vessels > 500 GT)



Source: LMIU, total losses as reported by Lloyd's List

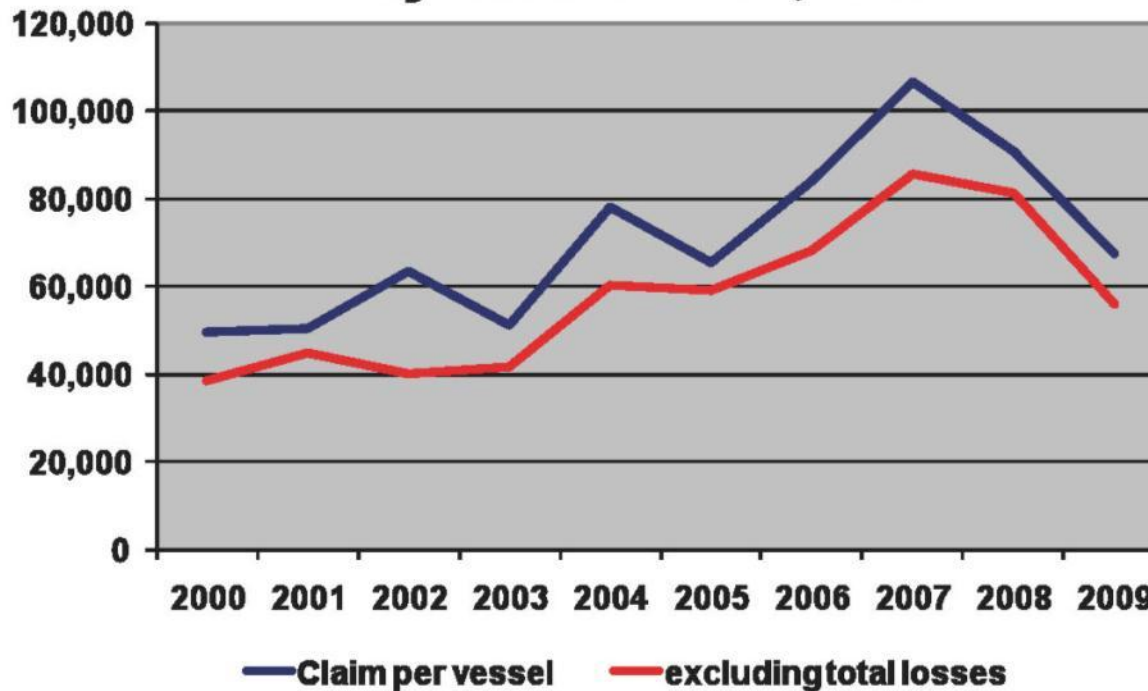
Technical Challenges (1)

Claims Statistics and Developments (contd.)

Claims Trends



Claim cost per vessel, by date of loss, USD



Source: CEFOR Claims update June 2010

Technical Challenges (1)

Claims Statistics and Developments (contd.)

Pint of Beer



- 1992
- Pint = £1.30

- 2010
- Pint = £3.50



Technical Challenges (1)

Claims Statistics and Developments (contd.)



Oil Price

- Approx capacity - 4m barrels of Oil
- 1992 = \$82 million
- 2010 = \$295 million



Technical Challenges (1)

Claims Statistics and Developments (contd.)

Progress



Y.O.A.	Type	YrBld	ValueUS\$	DeductibleUS\$	GRT
1992	BBU	1992	33,500,000	100,000	29,369
2010	BBU	2010	42,000,000	100,000	31,200
1992	TCR	1992	36,700,000	100,000	79,014
2009	TCR	2008	68,800,000	100,000	61,449
1992	TTA	1990	25,000,000	175,000	43,398
2009	TTA	2010	84,000,000	150,000	49,866

- ▶ The growth of Container Vessels
 - Technicalities
 - Consequences
 - Accumulation aspects

- ▶ A new spate of Bulk Carrier losses?

Technical Challenges (2)

MAERSK 18.000 TEU



Accumulation (1)

Ocean-going Container Vessel – Feeder Vessel Handy Size (1500 TEU)

		Low	High
Cargo	approx. USD	25 - 40 mio	48 – 50 mio
Container	approx. USD	7 mio	8 – 9 mio
Vessel incl. Equipment	approx. USD	10 – 15 mio	20 mio
<hr/>			
Total	approx. USD	52 – 62 mio	76 – 79 mio

Accumulation (2)

Ocean-going Container Vessel – Panmax (4,400 TEU)

		Low (Europe-Asia)	High (Transpacific)
Cargo	approx. USD	120 – 140 mio	140 – 170 mio
Container	approx. USD	20 mio	20 mio
Vessel incl. Equipment	approx. USD	35 – 50 mio	60 mio
Total	approx. USD	175 – 210 mio	220 – 250 mio

Accumulation (3)

Ocean-going Container Vessel – Jumbo (7,000 – 9,000 TEU)

		Low (Europe-Asia)	High (Transpacific)
Cargo	approx. USD	150 – 220 mio	200 – 250 mio
Container	approx. USD	28 – 30 mio	28 – 32 mio
Vessel incl. Equipment	approx. USD	40 – 70 mio	70 – 95 mio
Total	approx. USD	218 – 320 mio	298 – 377 mio

Accumulation (4)

Ocean-going Container Vessel – Supersize (18,000 TEU)

		Low (Europe-Asia)	High (Transpacific)
Cargo	approx. USD	300 – 450 mio	400 – 550 mio
Container	approx. USD	60 – 70 mio	65 – 80 mio
Vessel incl. Equipment	approx. USD	180 – 190 mio	180 – 190 mio
Total		540 – 710 mio	695 – 820 mio

Technical Challenges (3)

- ▶ Ageing of certain fleets / tonnage
- ▶ Shortages in the crew sector
- ▶ Trends in repair & salvage capacity
- ▶ Increasing repair costs, inflation and currency effects

I - Challenges by the Market

II- Technical Challenges

III - The Impact of Piracy

► Overall Features

- Numbers and Changing patterns
- „Success“ rates and probabilities
- The unsafe legal ground
- Costs
- Countermeasures

Hostage-Taking at Sea 2010

- 1181 Seafarers captured
- 8 Seafarers killed
- 53 Ships hijacked
- 445 Attacks

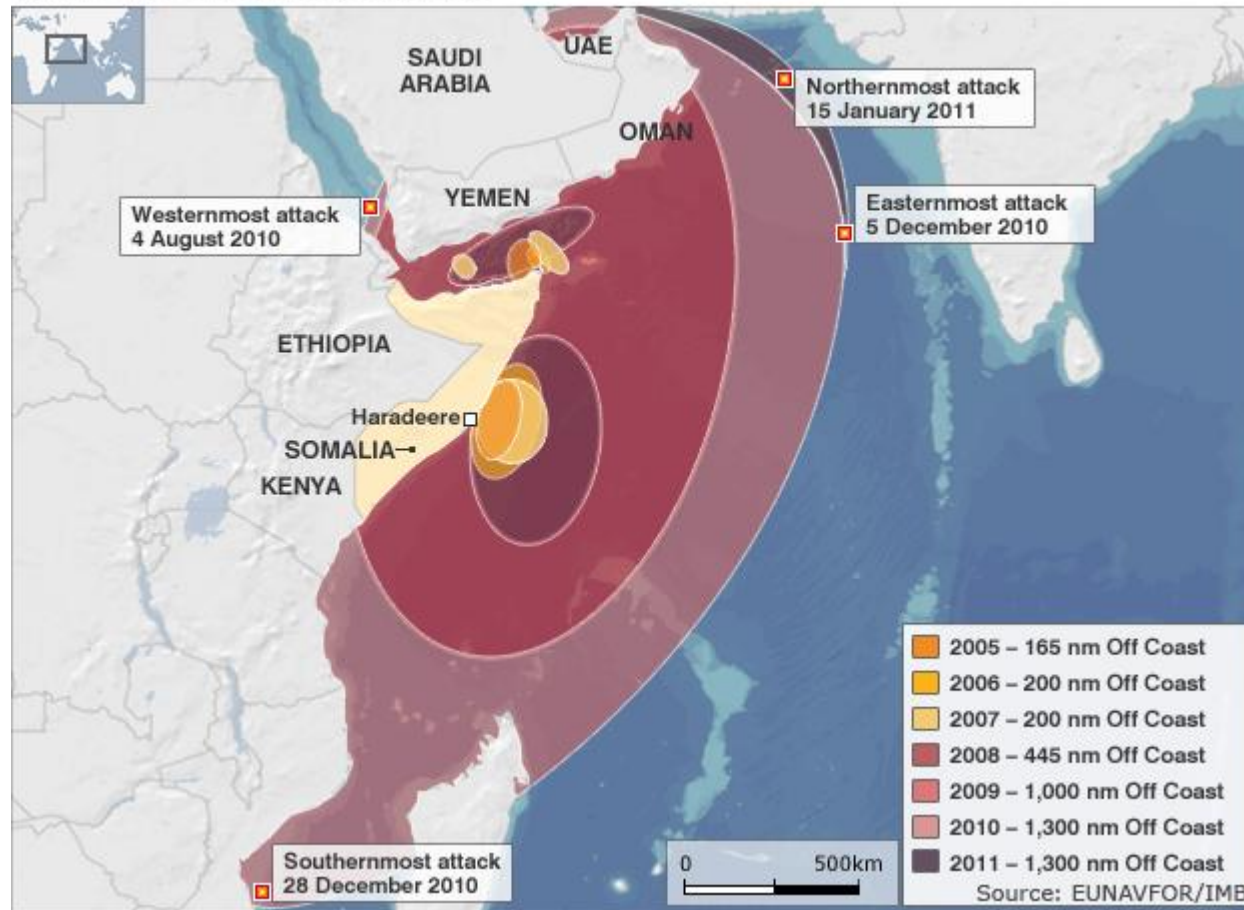
(Source: IMB / ICC)

Probability / Vulnerability 2009



Expansion of Pirate operations

Expansion of pirate operations



Mother Ships

vessel name	vessel type
Jih Chun Tsai 68	Fishing vessel
Prantalay 12	Fishing vessel
Prantalay 14	Fishing vessel
Aly Zoulfecar	Fishing vessel
Iceberg 1	Ro-ro vessel
Asphalt Venture	Asphalt tanker
Yuan Xiang	General cargo
Polar	Product tanker
Tai Yuan 227	Fishing vessel
Izumi	General cargo
Motivator	Chemical tanker
Hannibal II	Chemical tanker
Albedo	Containership
Shiuh Fu 1	Fishing vessel
MSC Panama	Containership
York	LPG carrier
Golden Wave	Fishing vessel

Faces



Skiff



Zhen Hua 4



Faina



Biscaglia



Sirius Star



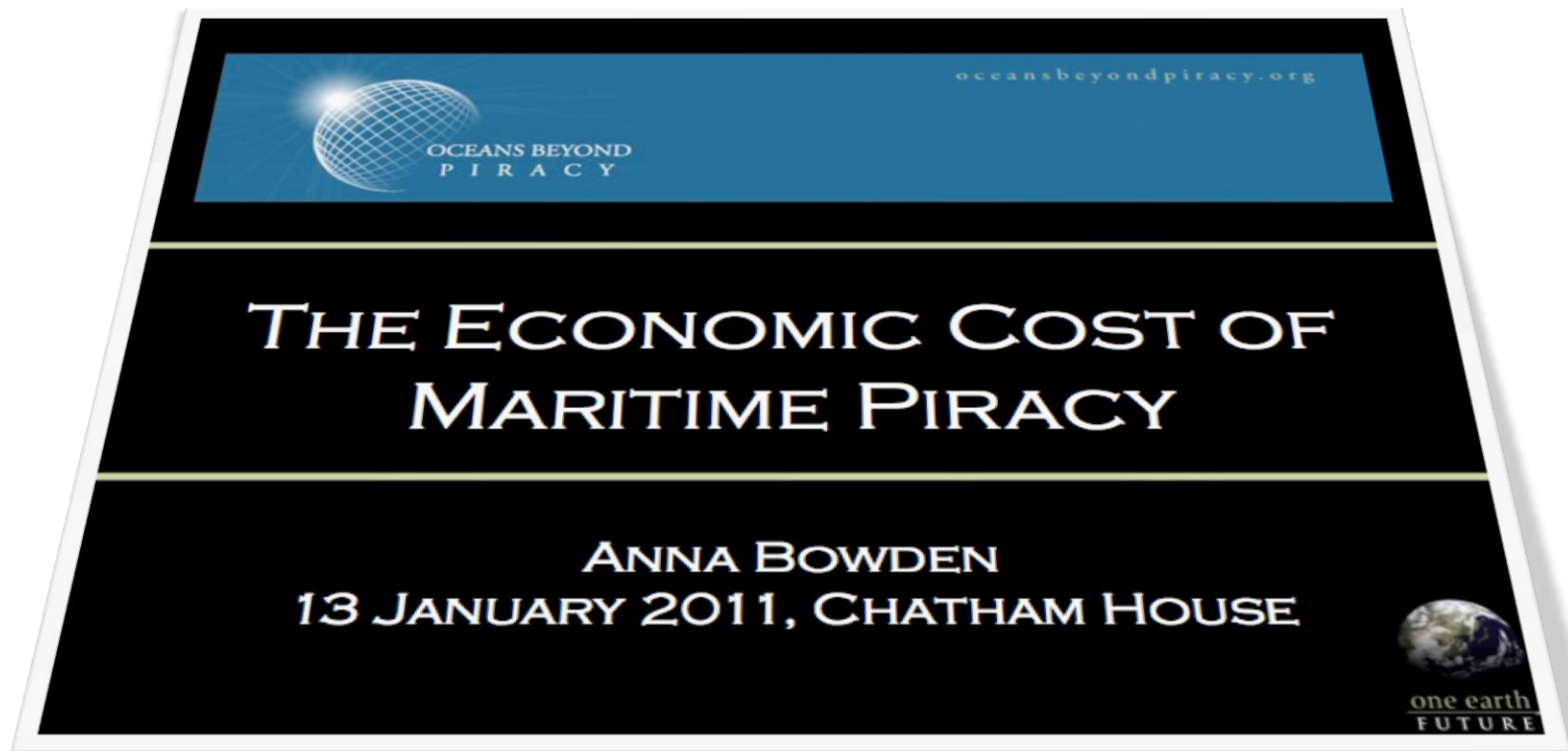
Pirates' Homeland



Naval Pursuit



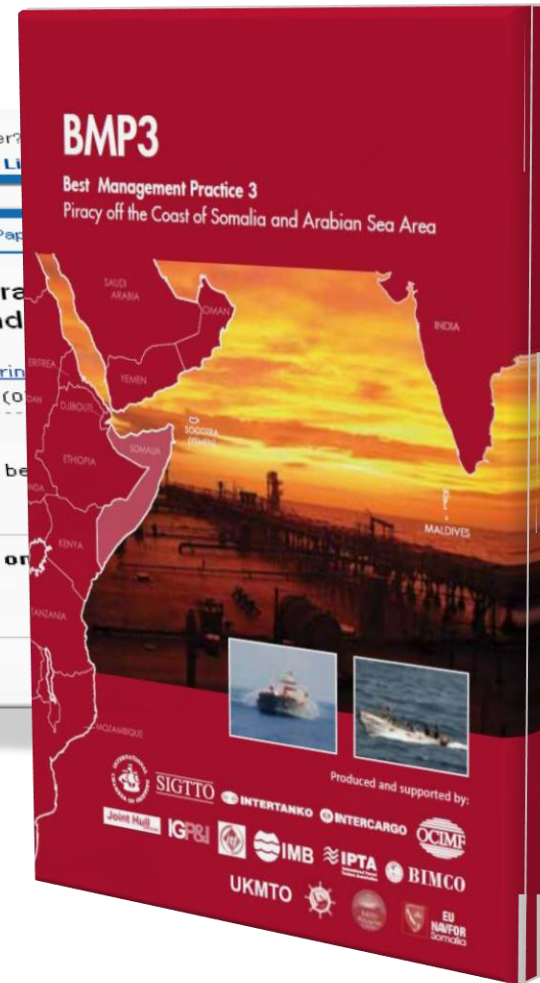
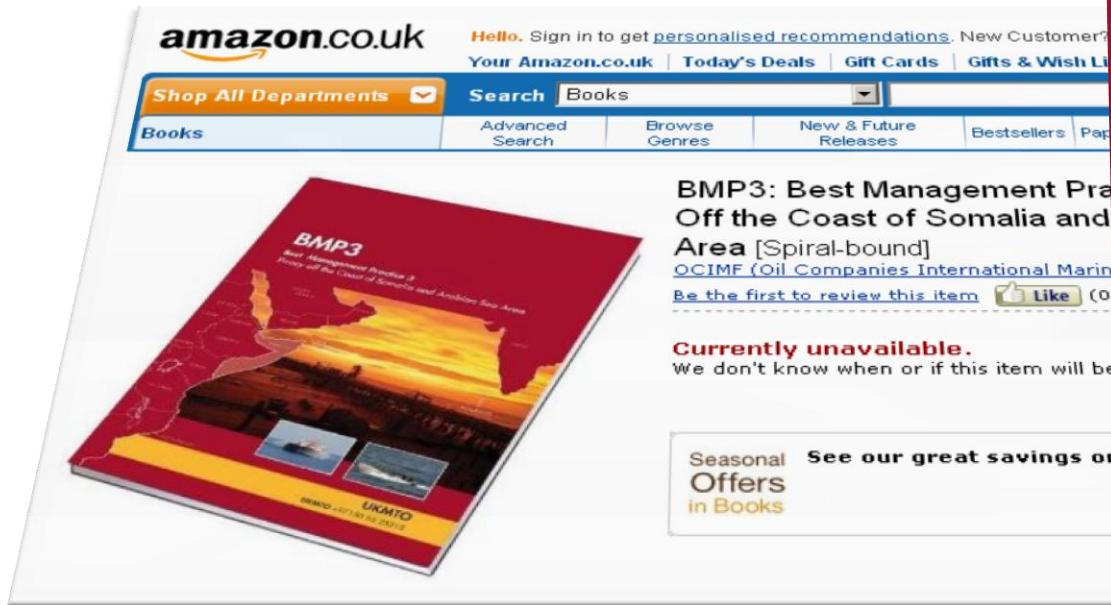
The economic cost of maritime piracy



► Insurance Issues

- Handling as G.A.?
- Cover Issues under H&M / War
- K&R
- New (financed) Loss Prevention Solutions
 - JLT Proposal
 - Merchant Marine Convoy Ships

BMP3 – Best Management Practise 3



Atalanta / Naval Convoys



Zhen Hua 4



Zhen Hua 4



Zhen Hua 4



Probability / Vulnerability 2010

Ship Type	Transits
Tankers	3.479
LNG Carriers	525
Bulk Carriers	3.166
Combined Carriers	34
General Cargo	1.862
Container Ships	6.080
RO / RO	263
Car Carriers	844
Passenger Ships	106
Others	869
Total	17.228

Probability & Costs

- **18.000 Suez passages p.a.**
- **90 successful attacks p.a.**
- **Probability: 0.5 % or one every 200 passages**
- ▶ **a ship with 6 transits p.a. can trade 33 years in which one successful attack occurs**

Investment for 50% risk reduction of 1 Mio. \$ case

= 0.5 Mio \$ per 200 transits

= 15.000 \$ p. a. or 2.500 \$ per transit

Probability & Costs

18.000 Suez passages p.a.

15.000 \$ p. ship p.a.

Total economically justified investment

225 Mio. p.a.

Total costs German Navy: 75 Mio. €

Total costs Atalanta: > 500 Mio. €

Total costs for 79 pirates at 5 years

sentence: 30 Mio. €



**Thank you very much
for your kind attention!**

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