2011 Global Marine Insurance Report

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Global Marine Insurance Report 2011

• Global Marine Insurance – Market overview
• Global Hull and Cargo market and results
• Global Offshore Energy market
• Addendum (for download only):
  Tables with underlying reported figures
Total reported: 25.3 USD billion

New: China included.
Impact: 1.96 USD billion

Total estimate of global marine market: <= 30 USD billion
Global Marine premiums reported 2008 to 2010

New: all figures including China

- **Total**
  - 2010: $+2.6$
  - 2009: $+5.6$
  - 2008: $-0.7$

- **Offshore/Energy**
  - 2010: $+5.6$
  - 2009: $+5.6$
  - 2008: $+0.0$

- **Marine Liability**
  - 2010: $+2.6$
  - 2009: $+2.6$
  - 2008: $+0.0$

- **Transport/Cargo**
  - 2010: $+2.6$
  - 2009: $-0.7$
  - 2008: $+2.6$

- **Global Hull**
  - 2010: $+1.9$
  - 2009: $+1.9$
  - 2008: $+1.9$

In 2009 reduction in global cargo volume, following the financial crisis.
Market Shares 2010

Total reported: 25.3 USD billion
Total estimate of global marine market: <= 30 USD billion

- Europe: 54.3%
- Asia/Pacific: 29.9%
- North America: 7.4%
- Other: 8.4%

**New: including China**

**Countries in italics did not report in 2011**

*Europe*: Albania, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Nordic (Cefor), Poland, Portugal (2010 est.), Romania, Russia, Slovenia, Spain, Sweden, Switzerland, Turkey, *Ukraine*, UK (IUA + Lloyds)

*Asia/Pacific*: Australia, *China (new!)*, Chinese Taipei, Hong Kong, India, Japan, Korea DPR, South Korea, Malaysia, New Zealand, Singapore

*North America*: Bermuda, Canada, USA

*Other*: *Bahrain*, Brasil, *Congo*, Egypt, Israel, Jordan (new!), Kazakhstan, Kenya, Lebanon, Morocco, Nigeria, South Africa, *Tunisia*, *United Arab Emirates*
P&I Clubs International Group – Gross Calls 2010 (Premium) – Operational location

Source: International Group of P&I Clubs

Calls 2010:
- UK: 2.07 (62%)
- Nordic: 0.92 (7%)
- Japan: 0.23 (3%)
- US: 0.11 (28%)
- Total: 3.33 (USD billion)
Global Cargo Premium by markets 2010

Total: 12.8 USD billion

- Brazil: 4.9%
- Japan: 14.6%
- Germany: 9%
- France: 6.3%
- Italy: 3.8%
- New: China: 9%
- Other markets: 24.3%
- USA: 5.6%
- UK (Lloyds): 6%
- UK (IUA): 2%
- Spain: 2.1%
- Russia: 3.3%
- Nordic*: 2.6%
- Netherlands: 3.3%
- Nordic**: 3.3%

** Lloyds: includes fac. and prop. reinsurance
*** IUA: data from Xchanging
* Denmark, Finland, Norway, Sweden
Global Hull Premium by markets 2010

Total: 7.5 USD billion

- New: China (10%)
- France (6%)
- Italy (5%)
- Japan (9%)
- Korea, Republic (4%)
- Netherlands (4%)
- UK (Lloyds) (13%)
- UK (IUA) (4%)
- Spain (3%)
- Other markets (23%)

** includes facultative and prop. reinsurance
*** data from Xchanging

* Nordic countries (Norway, Sweden, Denmark, Finland)
World Seaborne Trade Volume and Trade Values, Global Cargo Premium, Index of evolution, 1995 = 100%

2010/2011 upswing in trade, but unstable market conditions:

Which effect on cargo market?

Some cycle irregularities due to exchange rates.

Source: World Trade Values: IMF
Index of Evolution of USD Exchange rate against selected currencies

(exchange rates as of December each year, 2011 as of June 11)

Source: Norges Bank Exchange Rates Statistics
World Merchant Fleet and Global Marine Hull & Liability Premium, Index of evolution, 1995 = 100%

Sources: Indicators for World Fleet from ISL Bremen, Vessel value index: Cefor data as of 30.06.11
Change in insured values on renewed vessels, by year of renewal

(= insured value on renewal / insured value previous year)

Insured values decrease since 4Q 2008, with stabilization in 2011

Source: Cefor, The Nordic Association of Marine Insurers, figures as of 30 June 2011
Marine Hull and Cargo/Transport

Gross* Ultimate Loss Ratio, U/W Years 1998 to 2010

Hull - 2009/2010:
Some improvement compared to peak years 2006 to 2008.

But: Claim cost and loss ratios stabilize at high levels.

No technical profit.

* Technical break even: gross loss ratio does not exceed 100% minus the expense ratio (usually 20%-30% acquisition cost, capital cost, management expenses)
Marine Hull - Gross* Loss Ratio
Underwriting years 2003 - 2010 as reported after 1, 2, 3, 4 and 5 years

Recent loss ratio level

Previous loss ratio level

2009/2010 loss ratio

2006-2008:
Repair cost driven up by changing frame conditions
=> Change in claims pattern!

2009/2010:
Price-driving factors turn back to "normal" levels, but no stable environment
=> difficult to estimate effect on results.
Unstable frame conditions continue

Steel prices / repair yard capacity / exchange rates / commodity prices / vessel utilization / newbuildings / world trade /...

Changes in market environment influence both income (vessel values) and cost (claim frequency and repair cost).

Repair cost and claims frequency reached a peak in 2007/2008.

Some improvement in 2009/2010, especially with regard to claims frequency, but loss ratios and claims costs stabilize at high levels.

Catching up of trade in 2010 and higher utilization rates may cause repair cost to rise again.

Major claims may smash a year’s result and occur at any time!
Summing up Hull

- Hull technically at loss for **15 consecutive years**!
  Something’s stable after all...

- **Future Global Hull Market depends on**
  - Understanding of dependencies between macroeconomic parameters and repair cost
  - Good models to estimate expected claim cost (= risk premium)
  - Trade / Fleet development
  - Market discipline / capacity
  - and as always: the impact of major claims
Marine Hull and Cargo/Transport
Gross* Ultimate Loss Ratio, U/W Years 1998 to 2010

2011:
New Zealand earthquake – Japan earthquake & tsunami – Floods – Tornados – New York storm

2011 level?

2007 to 2010:
Clear deterioration of results – profitability not ensured.

2002 to 2006:
Gross loss ratios keep below 60% - technical profit.
Marine Cargo - Gross* Loss Ratio
Underwriting years 2003 - 2010 as reported after 1, 2, 3, 4 and 5 years

2007-2009:
Changing market demands upwards adjustment of claims reserves
=> Change in typical claims pattern

As of December 2010:
2007/2008 improved, but still at high levels

2010:
starts high - will end above 70%, if new pattern continues
Summing up Cargo

- Since 2008 **reduction in insured values**, effect on cargo income.

- **2010 growth in cargo premium reflects recovery in world trade volumes**, but economical environment remains unstable.

- **Unusual upwards adjustment of 2007-2009 claims reserves.**
  2007/8 somewhat improved in 2010, but loss ratios stay high.
  If these prove to be correct, cargo will produce a **technical loss**.

- **2010 loss ratio starts high.**
  Expected to end above 70%, if new pattern continues.

- **Claim amounts unlikely to decrease** because of increased risk of accumulation, moral hazard, theft frequency, natural catastrophes.

- **2011**: Increased impact of **natural catastrophes** (NZ earthquake, Japan tsunami, floods, tornados, US storms) and **unstable economical environment** may lead to further deterioration of results.
The complexity of interdependencies...

Macroeconomic parameters/ Market environment

Claims cost

Income

Insurance results

Unstable environment
No data: Nordic region, Russia, Kazakhstan.
Energy Mobiles, Day rates, Oil Price, Global Offshore Energy Premium

Index of evolution, 2000 = 100%

Sources: No. Contracted rigs, day rates: RigZone, Oil price: Energy Information Administration (US), 2011 figures as of 31.07.11
As of December 2010:

- **2005**
  - Katrina & Rita
  - 2009/2010 no major hurricane activity, but...

- **2004**
  - Ivan

- **2008**
  - Ike

Offshore Energy Gross Reported Loss Ratios (excluding liability) – U/W Years 1996 to 2009

The diagram shows the reported loss ratios from 1996 to 2010, with a peak in 2005 due to hurricanes Katrina & Rita. The years 2004 and 2008 also show significant peaks, indicating major events such as Ivan and Ike. The years 2009/2010 show no major hurricane activity.
Summing up Offshore Energy

- **Volatile** business, strong hurricane impact – but reduced in recent years.

- **Long time lag** between accident and claims payment, due to technical complexity of the insured objects.

- **No regular claims patterns.** Claims reserves set according to knowledge about individual claims.

- **2009 to 2011:**
  - Little hurricane impact.
  - **Increasing impact by single loss events!**
  - **Events with high liability cost** (2009 West Atlas, 2010 Deepwater Horizon) - **not reflected by reported loss ratios.**
  - In 2011 already three major single loss events – ca. 1.6 $ bn.
Thank you!

Iceberg!

Sometimes you may need a new solution...
(or an actuary?)
Cédric Villani = famous French mathematician/physician.

“How could we know that a mathematician could be so artistic & creative?”

(Blogger about Cédric Villani after the Scandinavian Talk Show “Skavlan” 1. okt. 2010)