

The 2012 Cefor NoMIS Ocean Hull Report

Nordic Marine Insurance Statistics

Underwriting Years 1996–2012, as of 31 December 2012

If not indicated otherwise, data in this report is on **accident year basis**
(i.e. claims allocated to the calendar year in which the accident occurred)

All **figures as reported by 31 December 2012**
(i.e. without "IBNR" loading for claims not yet registered or incurred by this date)

Included are only **vessels with a registered IMO-nr.**
(i.e. not small coastal tonnage)



2012 Nordic Marine Insurance Statistics – Part

- Part 1 Introduction
(Contents / NoMIS history / Definitions)
 - Part 2 NoMIS position in the Global insurance market
(Global Marine Hull Insurance Market 2011 /
Cefor Marine Hull Insurance Market 2012)
 - Part 3 NoMIS portfolio Key figures
(Number of vessels / Development of insured values and gross ton /
Change in insured values on renewal / Age / Standard deductible /
Claims in layers / Claims by type of claim / Claim frequency / Claim
cost per vessel / per Sum Insured / per gross ton /...)
 - Part 4 Key figures by age group
 - Part 5 Key figures by vessel type group
 - Part 6 Key figures by size group
- (Part 4-6: Distribution of number of vessels / Claim frequency / Claim cost per vessel / per Sum Insured / per gross ton)



2012 Nordic Marine Insurance Statistics – Part 1

Part 7 – Distribution by flag and classification society

- Distribution of number of vessels by flag, 16 largest
- Distribution of number of vessels by classification society, 6 largest

Part 8 – Exposure curves

- Sum Insured bands
(<5, <20, <100, and >100 MUSD; for partial claims / all claims)
- Explanations

Part 9 – Cost Driving Factors Inflation Index (by date of loss)

Legal disclaimer Cefor provides the statistics material in this presentation for general information purposes only. All key figures are derived from the Cefor portfolio, which reflects a minor part of the world fleet, the selection of ships being biased by Norwegian underwriting preferences. Therefore Cefor can accept no responsibility and shall not be liable for any loss which may arise from reliance upon the information provided.

With reference to [Commission Regulation \(EU\) No 267/2010 of 24 March 2010](#) (EU Block Exemption), it is further stressed that the statistical data presented in this publication is non-binding in its character.



2012 Nordic Marine Insurance Statistics – Part 1

The Nordic Marine Insurance Statistics (NoMIS) is a joint database project of Cefor members active on the Hull & Machinery market to compile insurance data and vessel characteristics for statistical purposes and administered by Cefor.

Since its foundation in 1985 until 1997, the data was compiled by appointing Cefor a facultative reinsurer to which members of the Norwegian Hull Agreement ceded 0.1% of their H&M insurance. Premium and claims information was exchanged via Borderaux, the lead insurer providing details of each claim. While the Hull Agreement was discontinued in 1996, the statistics cooperation continued.

In 1998 steps were taken to update the NoMIS' database electronically. Thus from December 1999, Cefor could produce up-to-date hull figures on a monthly basis and extend the database substantially by including non-lead business. From 2000, also business back to underwriting year 1995 was updated electronically. In the following years, several new major Cefor members joined the NoMIS cooperation, reporting retrospective data from 1995 underwriting year.

In 2009, data from Gjensidige and Tryg was integrated, dating back to underwriting years 2000 and 2003 respectively.

In 2012, data from Alandia was integrated, dating back to underwriting year 2005, and If extended their scope of reporting to include all Nordic business.

By 31st December 2012, in all 180,482 vessel years (vessels with IMO-number) and 55,686 claims were registered on underwriting years 1985 through 2012.

The NoMIS statistics in this report comprise data from the following marine insurers:

Alandia, Bluewater (until 2008), Codan Group, Gjensidige, If, Gard, NEMI (until 2009), Norwegian Hull Club, Swedish Club, Tryg (until 2009), Zurich (until 2002).



2012 Nordic Marine Insurance Statistics – Part 1

All amounts are presented in USD.

Rate of exchange applicable to convert the figures from the original currencies into USD:

Premiums: average monthly rate of exchange of the month of transaction

Paid claims: average monthly rate of exchange of the month of transaction

Outstanding claims: average monthly rate of exchange of December 2012

Underwriting year = year in which the insurance policy attaches

All claims are net of any applicable deductibles.

Total Claims = Paid claims + Outstanding claims

TLO (or Total Losses) = claims in excess of 75% of the Sum Insured

Partial Losses = all losses less than or equal to 75% of the Sum Insured

IBNR ("Incurred but not reported") = reserve for claims adjustments and registration backlog



2012 Nordic Marine Insurance Statistics – Part 1

Types of vessels specified

<u>Vessel Type group</u>	<u>Vessels Types included</u>	<u>Lloyds Conf. Index Code</u>
BULK	Bulk, Ore, Cement	BBU, BCB, BCE, BOR, BWC
CAR/RORO	Car Carrier, RoRo	MVE, URC, URR
CARGO	Dry Cargo, General Cargo, Reefers, Pallett Vessels, Animal Transport Vessels	GCT, GGC, GPC, GRF, MLV
CHEM./PRODUCT	Chemical Carriers, Product / Acid / Edible Oil / Fish Oil / Fruit Juice / Wine / Molasses / Waste/ Water Tankers	TAC, TCH, TCO, TEO, TFJ, TFO TMO, TPD, TWA, TWN, TWT
CONTAINER	Container	UCC, UCR
FISHING	Fishing vessels	FFC, FFF, FFP, FFS, FTR,FWF,FWH
LNG/LPG	Gas Carriers LNG, LPG, LNG/LPG	LNG, LPG, LNP
OBO	Combined Vessels Bulk, Ore, Oil	COO, CBO
OTHER	any other ships and floating units, any codes not specifically defined otherwise, like Barges, Cranes, Floating Storage, Floating Production, Pollution Control Vessels, Mud boat, Research vessels, Cable, Seismic Search vessel, Flo/Flo, etc.	



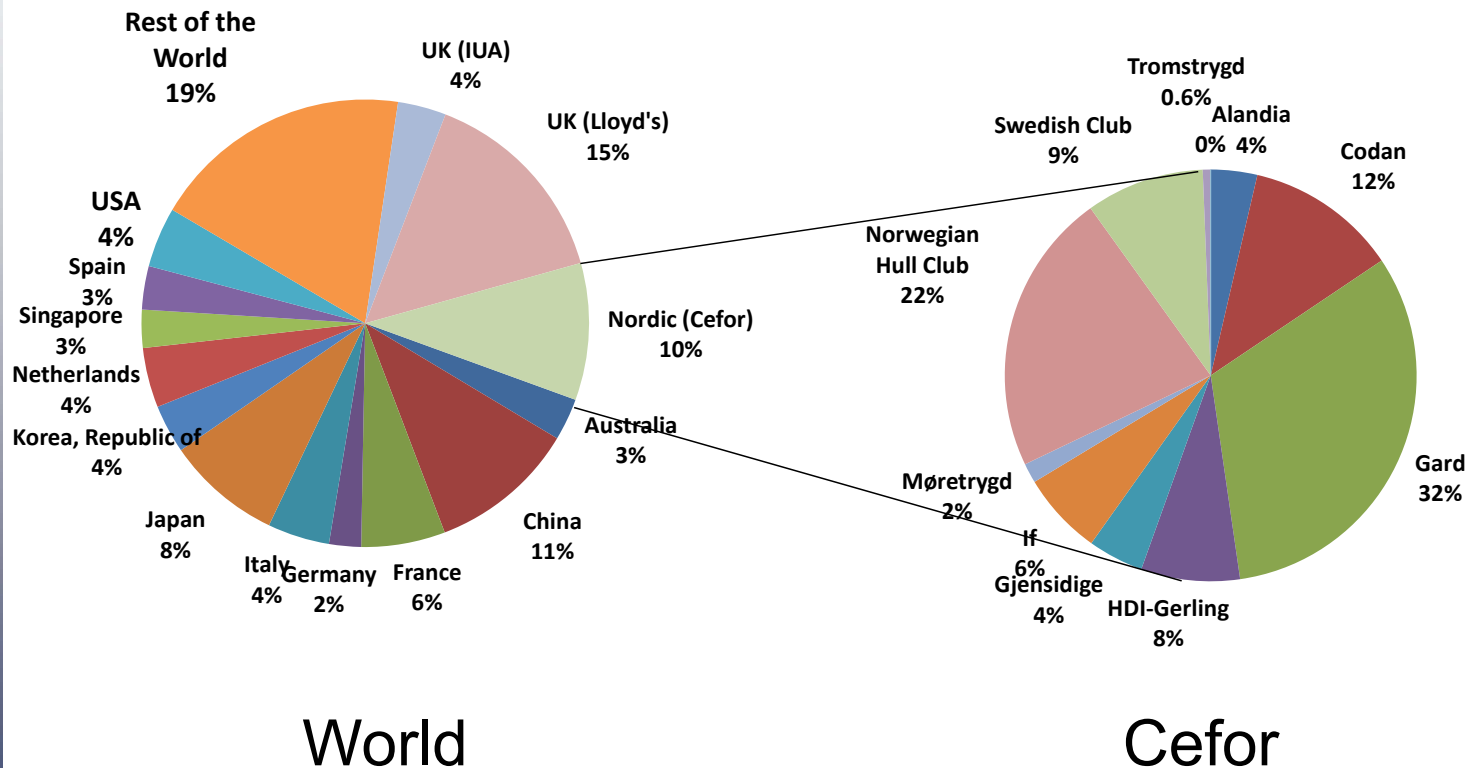
2012 Nordic Marine Insurance Statistics – Part 1

Types of vessels specified contd.

<u>Vessel Type group</u>	<u>Vessels included</u>	<u>Lloyds Conf. Index Code</u>
PASSENGER	All types of passenger vessels and ferries, Passenger/Roro, Highspeed Craft	LOF, LOP, MPR, OFY, OHF, OHS, PRR
SUPPL/OFF	Supply, Anchorhandling, Standby, Drilling Vessel, General Service Vessel, Supply (Tug, Anchor), Tug/Icebreaker	OBS, OBT, ODS, OIB, OIF, OIS, OIT, OLT, OMN, OMT, OOS, OPP, ORP, OSU, OSY, OSZ, OWO, XAA, XAF, XAG, XAH, XAT, XCT, XFF, XFS, XPT, XTG, XTI, XTP, XTR, XTS, XTT, XTX
TANK	Tanker, Sludge Vessel, Crude Oil Tanker Asphalt Carriers, Bunkering Tanker, Naval Auxiliary	OSC, OTC, TAS, TBK, TCR, TNA, TTA

2012 Nordic Marine Insurance Statistics – Part 2

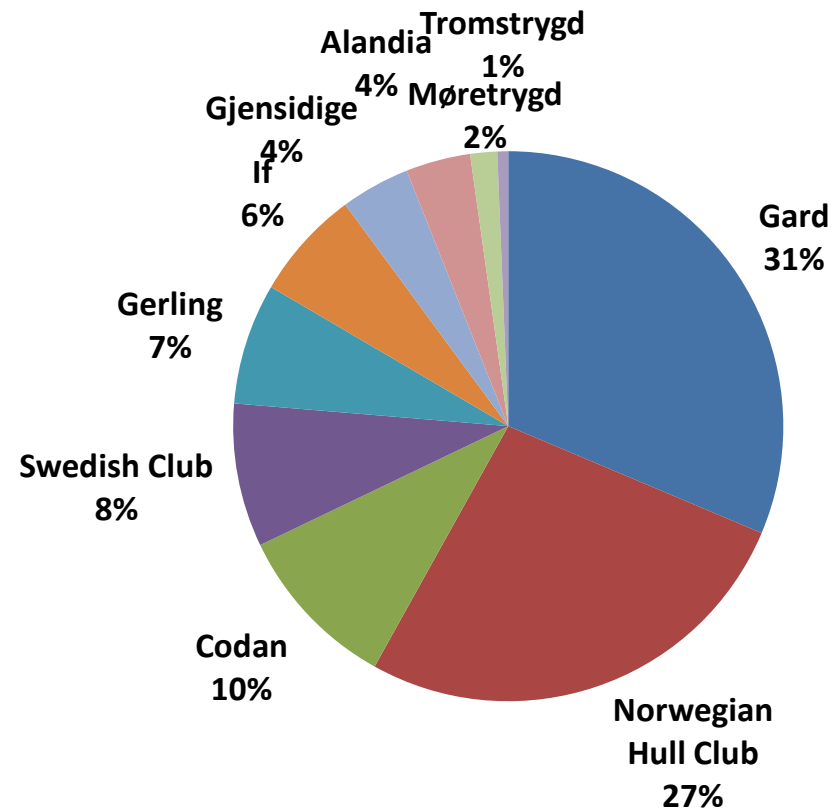
Distribution of Global Marine Hull* Premium 2011



* The premium on this slide includes both ocean and coastal hull business for all hull-related insurance types (Hull, hull interest, freight interest, loss of hire, builder's risk, fishing (catch & gear)).

2012 Nordic Marine Insurance Statistics – Part 2

Distribution of Cefor Marine Hull* Premium 2012



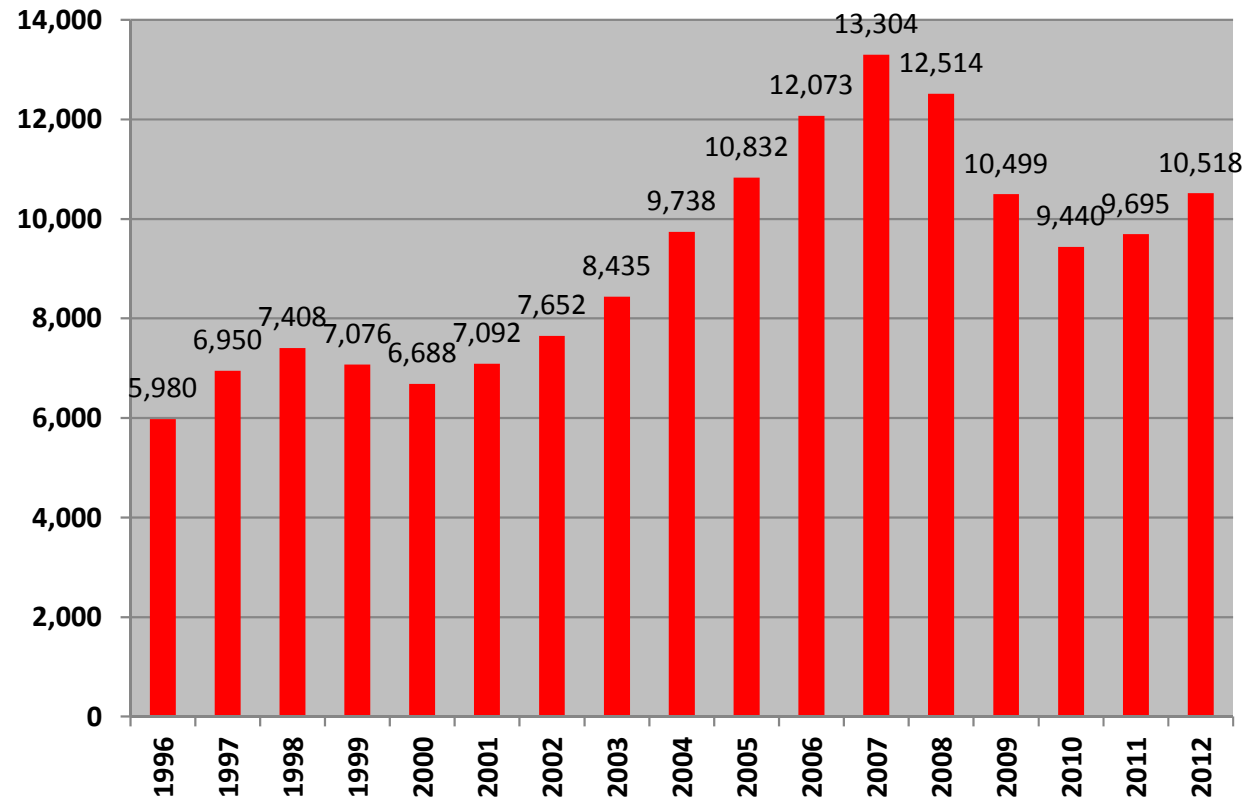
* The premium on this slide includes both ocean and coastal hull business for all hull-related insurance types (Hull, hull interest, freight interest, loss of hire, builder's risk, fishing (catch & gear)). **Source: Cefor Annual Report 2012**

All following statistics are pure hull statistics based on vessels with valid IMO-number only, and EXCLUDE loss of hire, hull and freight interest, builder's risk. For claims trends for minor coastal tonnage check «The Cefor NoMIS COASTAL Hull report 2012»

2012 Nordic Marine Insurance Statistics – Part 3

As of 31 December 2012

Number of vessels by year of exposure

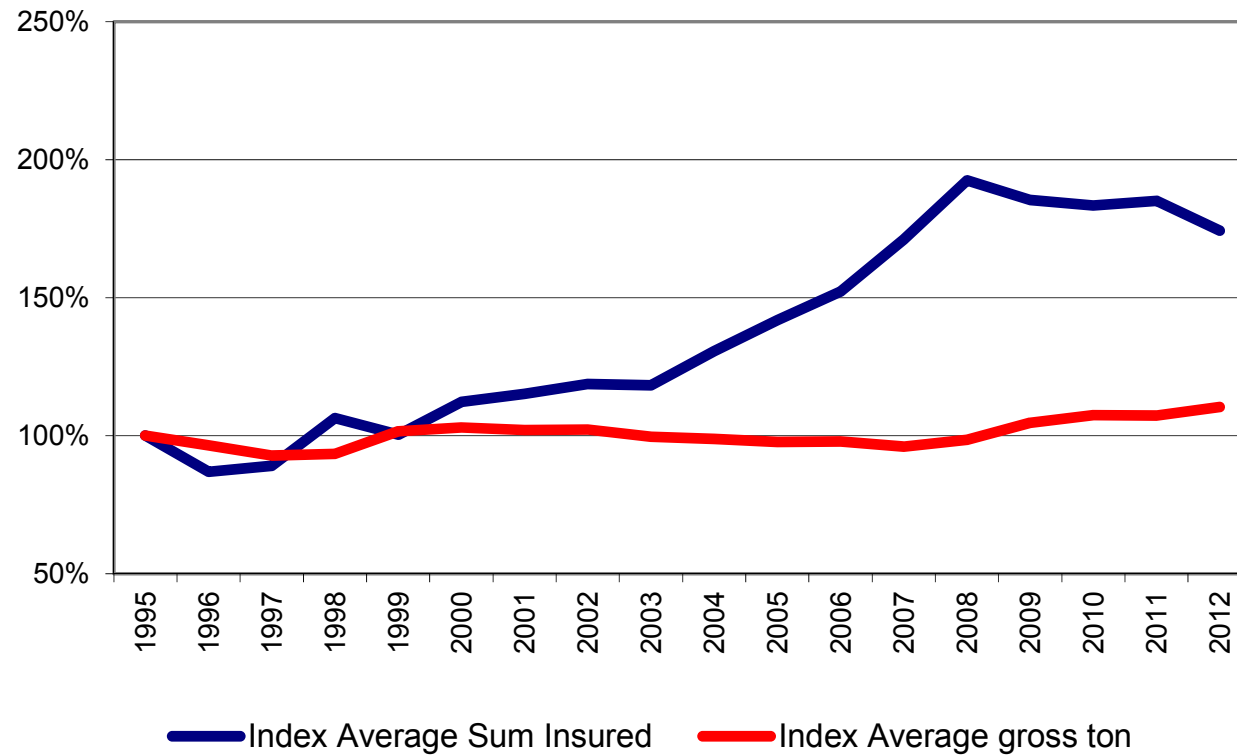




2012 Nordic Marine Insurance Statistics – Part 3

As of 31 December 2012

Index of evolution of average Sum insured and gross ton
1995=100%



Includes all insured vessels per underwriting year (renewed and new business).

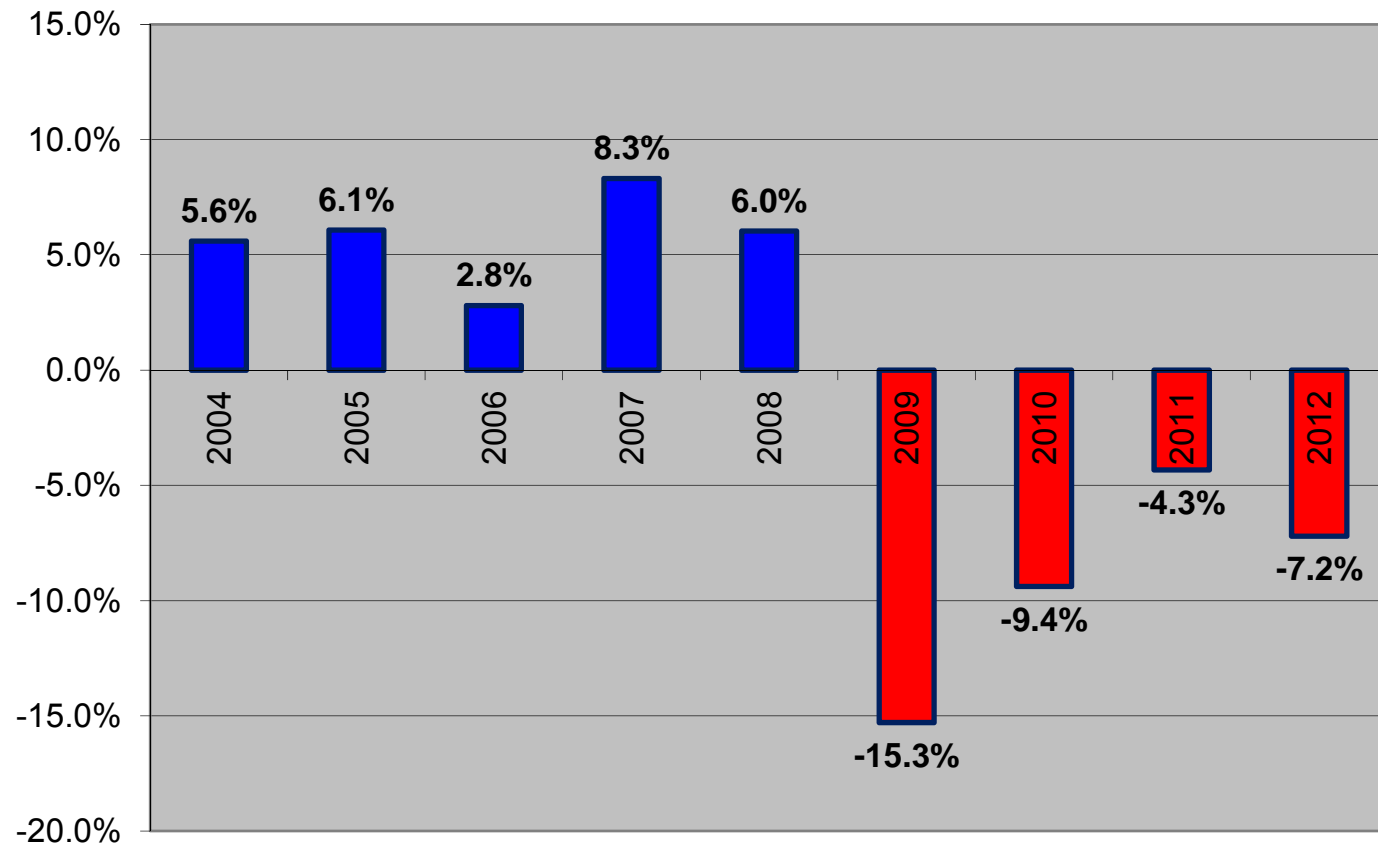


Cefor

2012 Nordic Marine Insurance Statistics – Part 3

As of 31 December 2012

**Average annual change in insured values
on renewed vessels**

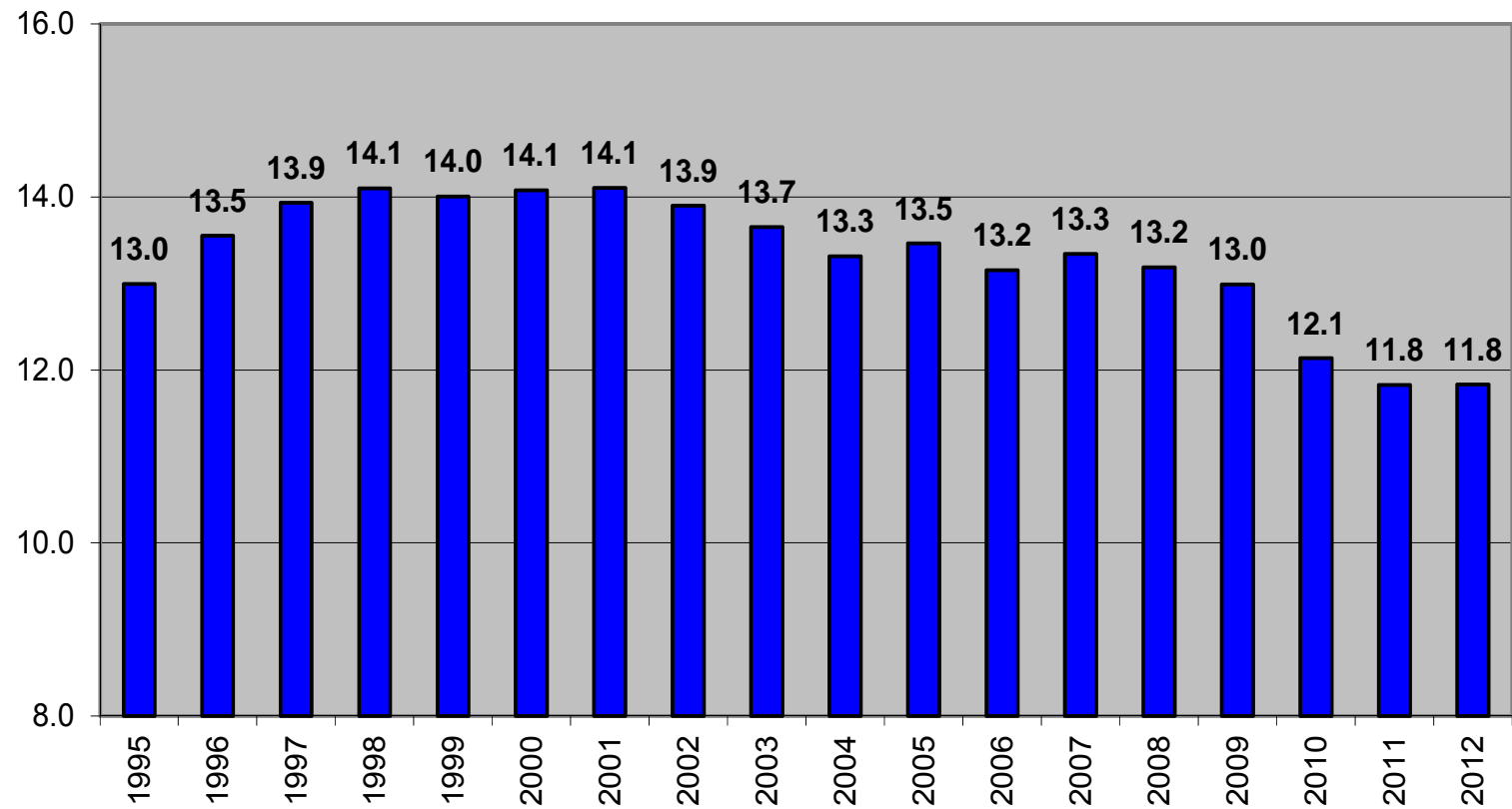


Based on renewals in respective year – excluding new business.

2012 Nordic Marine Insurance Statistics – Part 3

As of 31 December 2012

Average Age per underwriting year





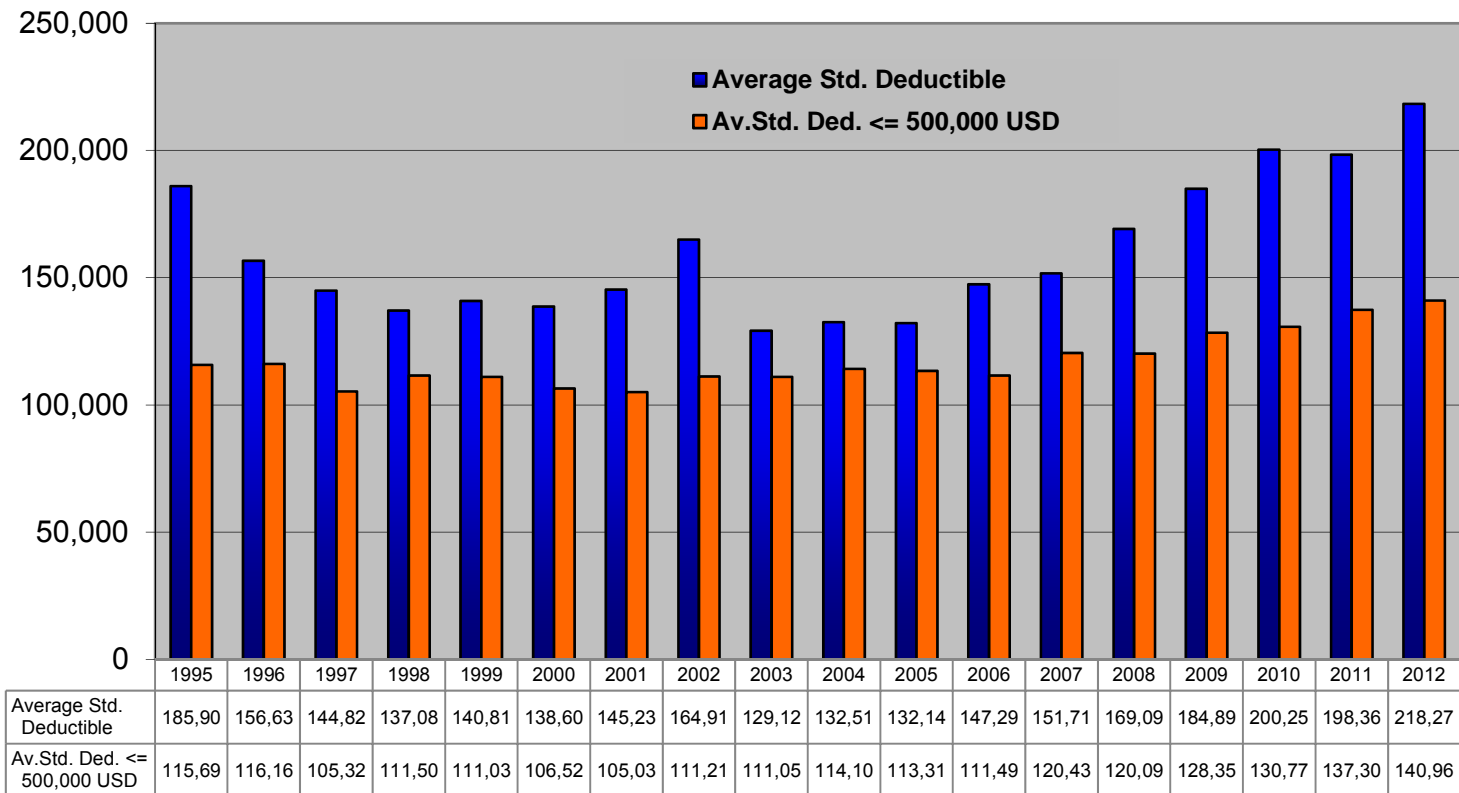
Cefor

2012 Nordic Marine Insurance Statistics – Part 3

As of 31 December 2012

Average Standard Deductible Development

All business, **100%**, in USD



Includes all insured vessels per underwriting year (renewed and new business).

2012 Nordic Marine Insurance Statistics – Part 3

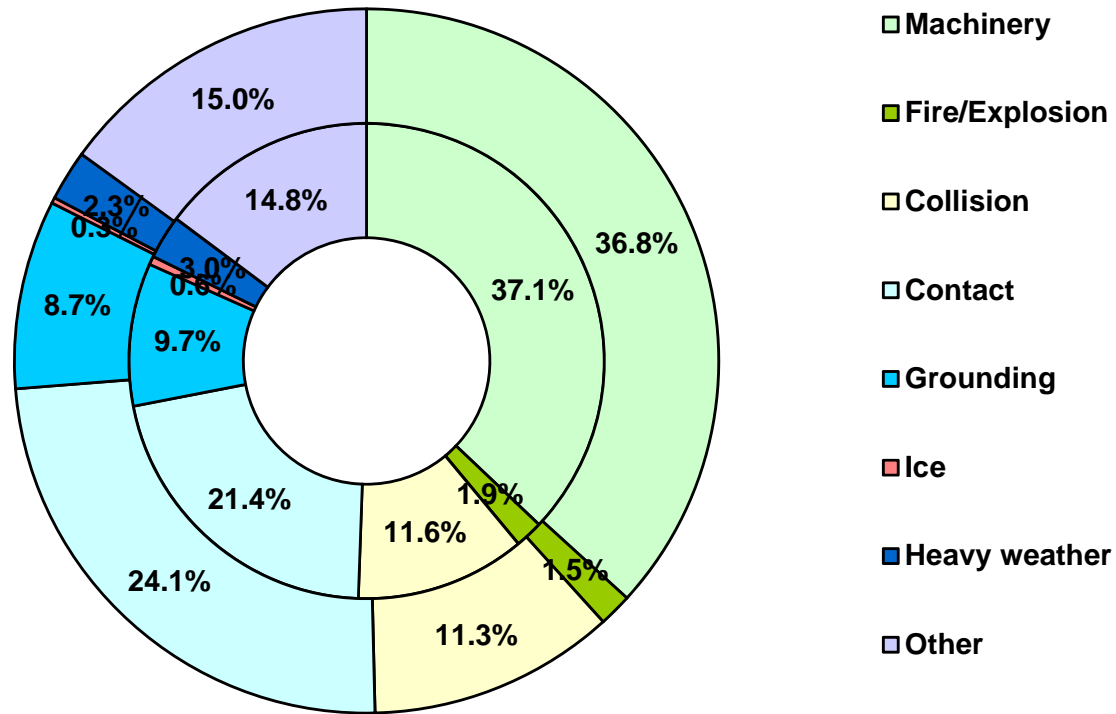
As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

Claims by Claims type

Number of claims

Inner ring: 2007-2011

Outer ring: 2012



Totals	
2007-11:	16,127
2012:	2,239

2012 Nordic Marine Insurance Statistics – Part 3

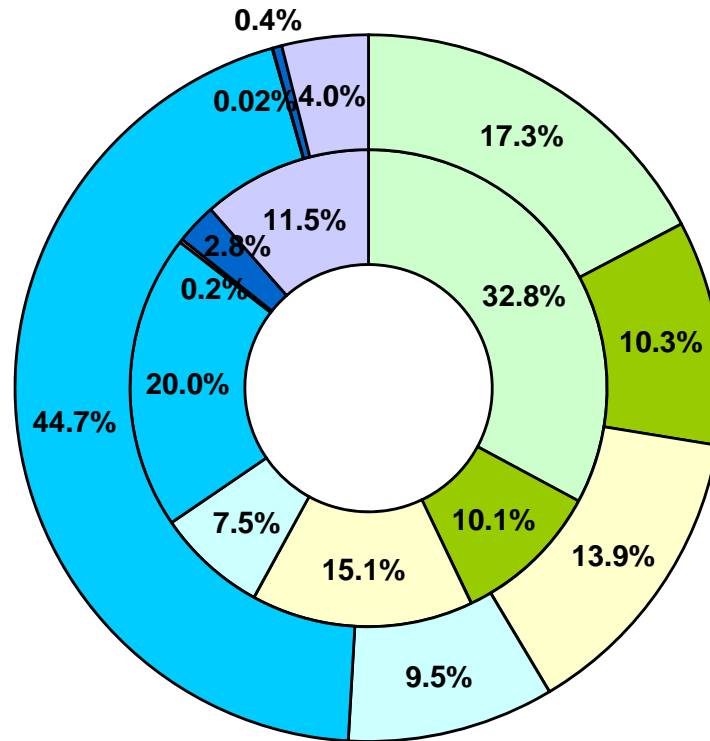
As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

Claims by Claims type

Cost of claims

Inner ring: 2007-2011

Outer ring: 2012



- Machinery
- Fire/Explosion
- Collision
- Contact
- Grounding
- Ice
- Heavy weather
- Other

Totals

2007-11: 4,689.1 MUSD

2012: 1,045.2 MUSD

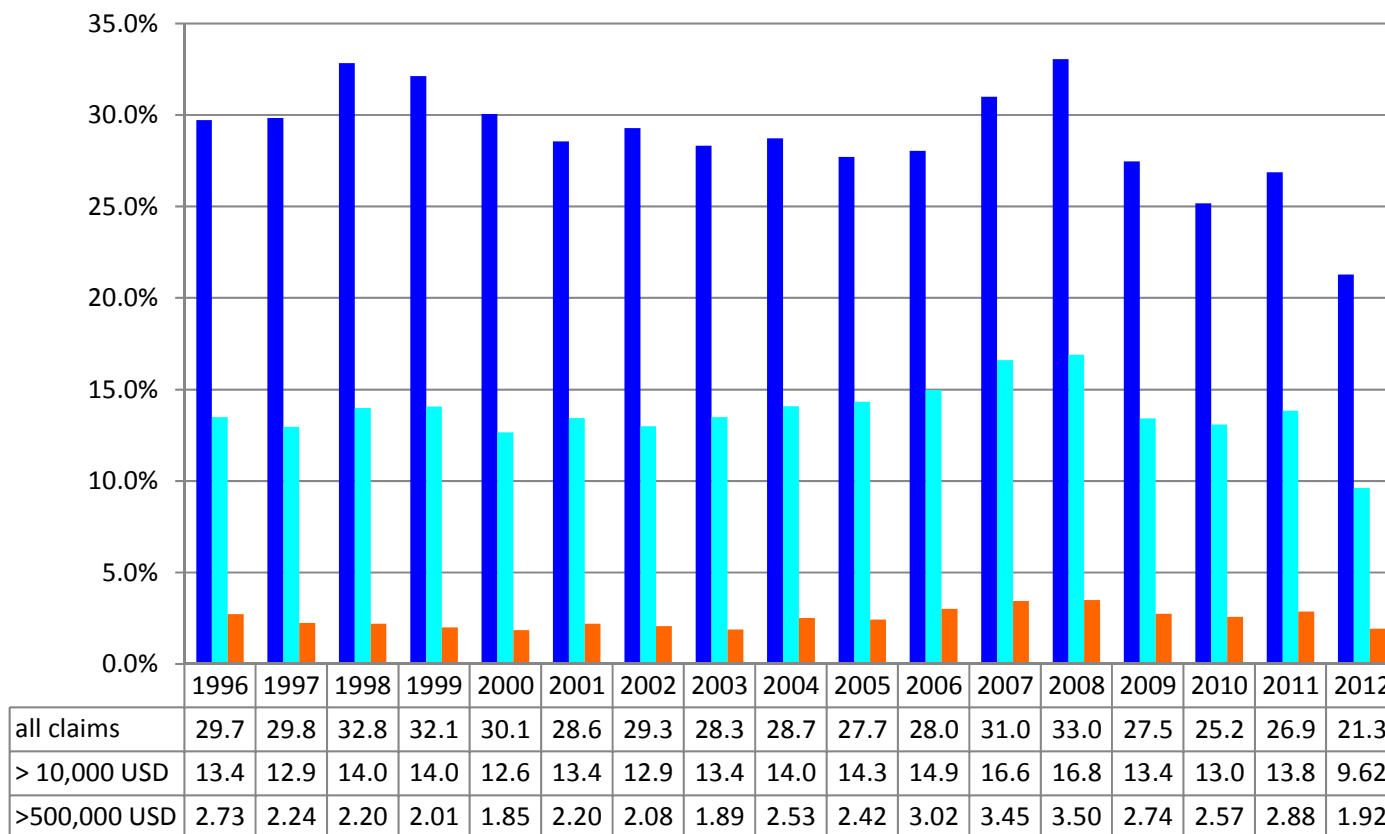


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2012 Nordic Marine Insurance Statistics – Part 3

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

Claim frequency by date of loss (%)



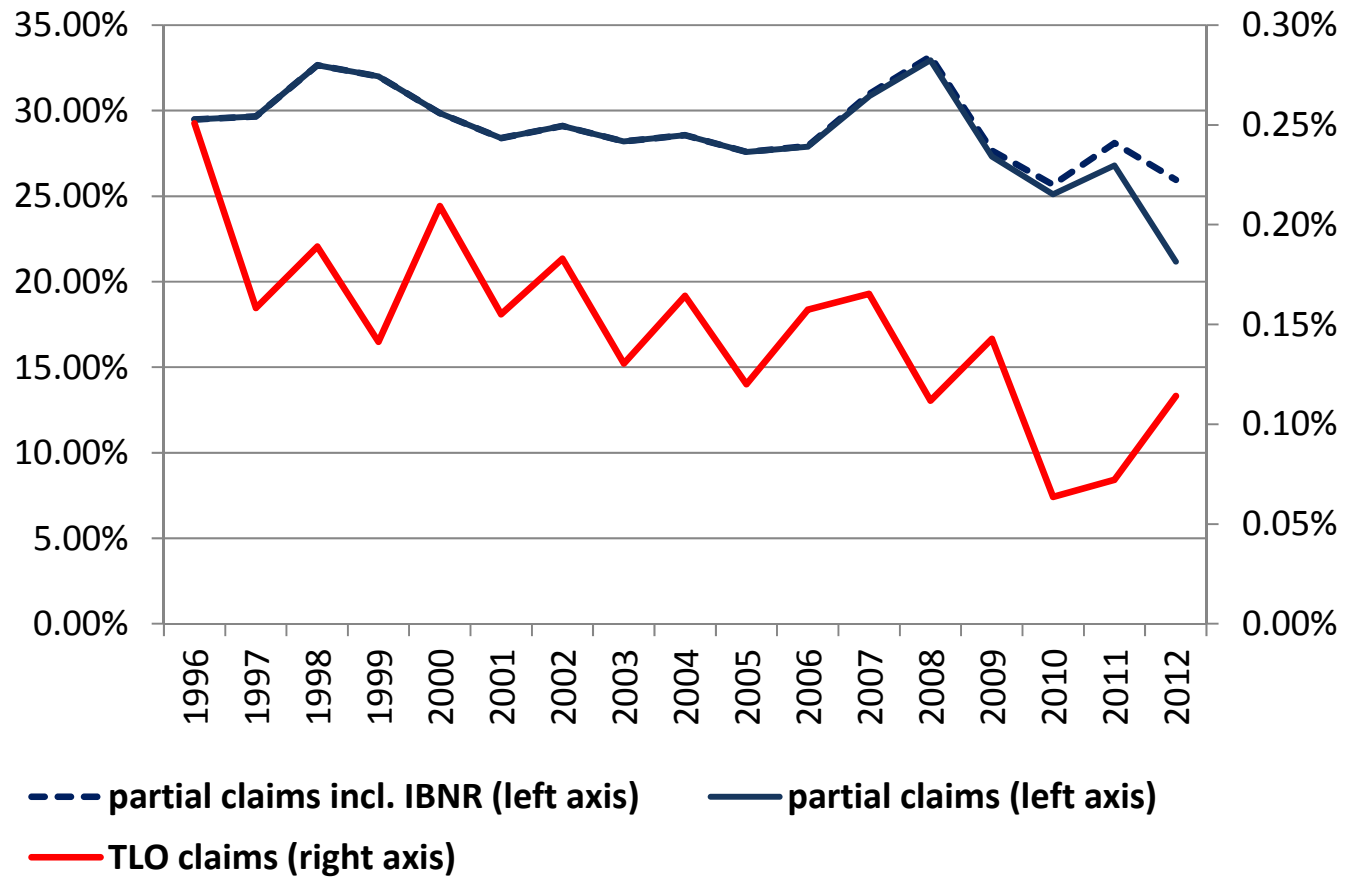
Comment: Claims < 10.000 USD account for about half of all claims. Registration of these may vary over time and in each company and will thus influence the registered frequency. In addition any increase/decrease of insurance deductibles will have impact on the registered frequency



2012 Nordic Marine Insurance Statistics – Part 3

As of 31 December 2012 – incl. IBNR reserve for claim frequency partial claims

Claim frequency, by date of loss



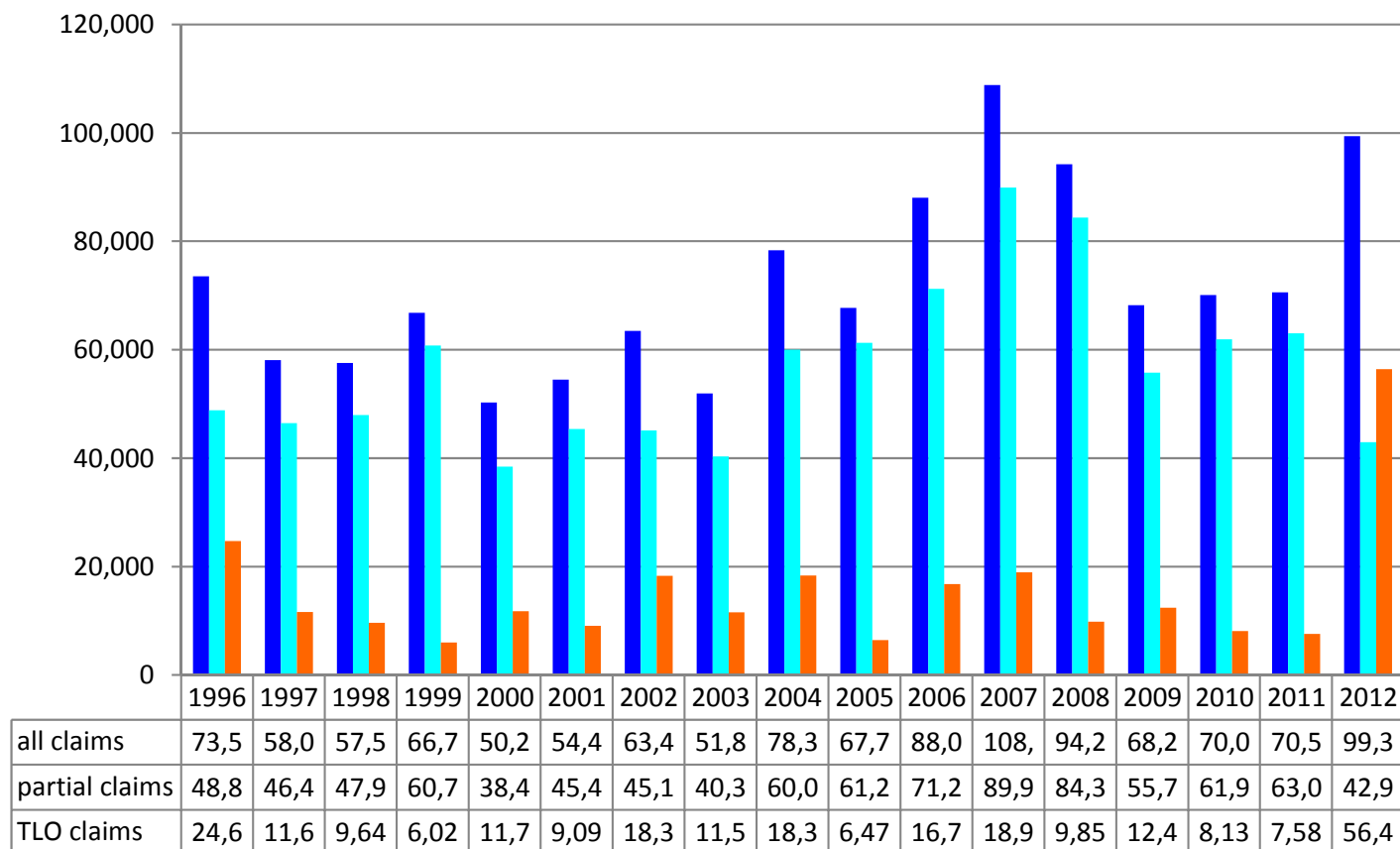


Cefor

2012 Nordic Marine Insurance Statistics – Part 3

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

Claim per vessel by date of loss (USD)



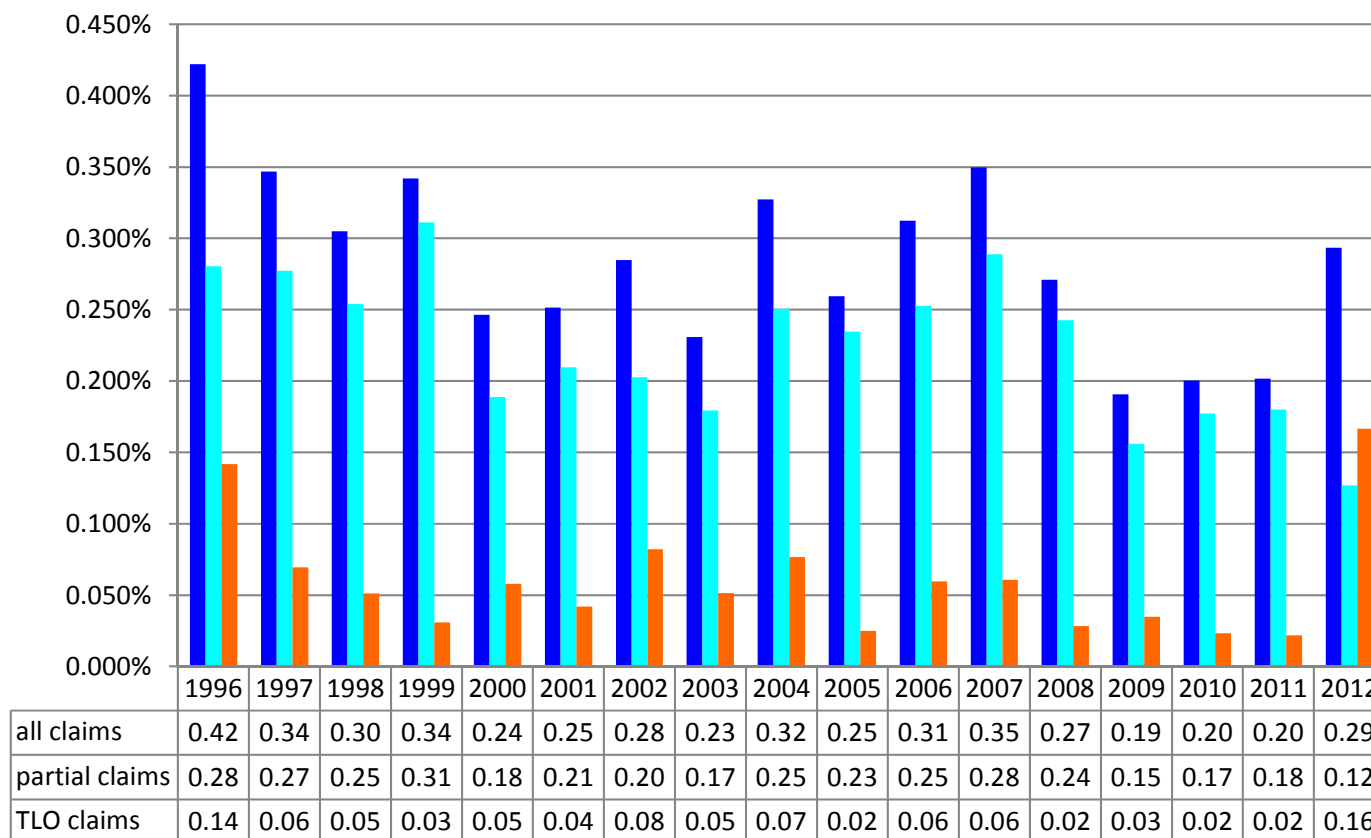


Cefor

2012 Nordic Marine Insurance Statistics – Part 3

As of 31 December 2012 – paid+outstanding as reported, no IBNR added

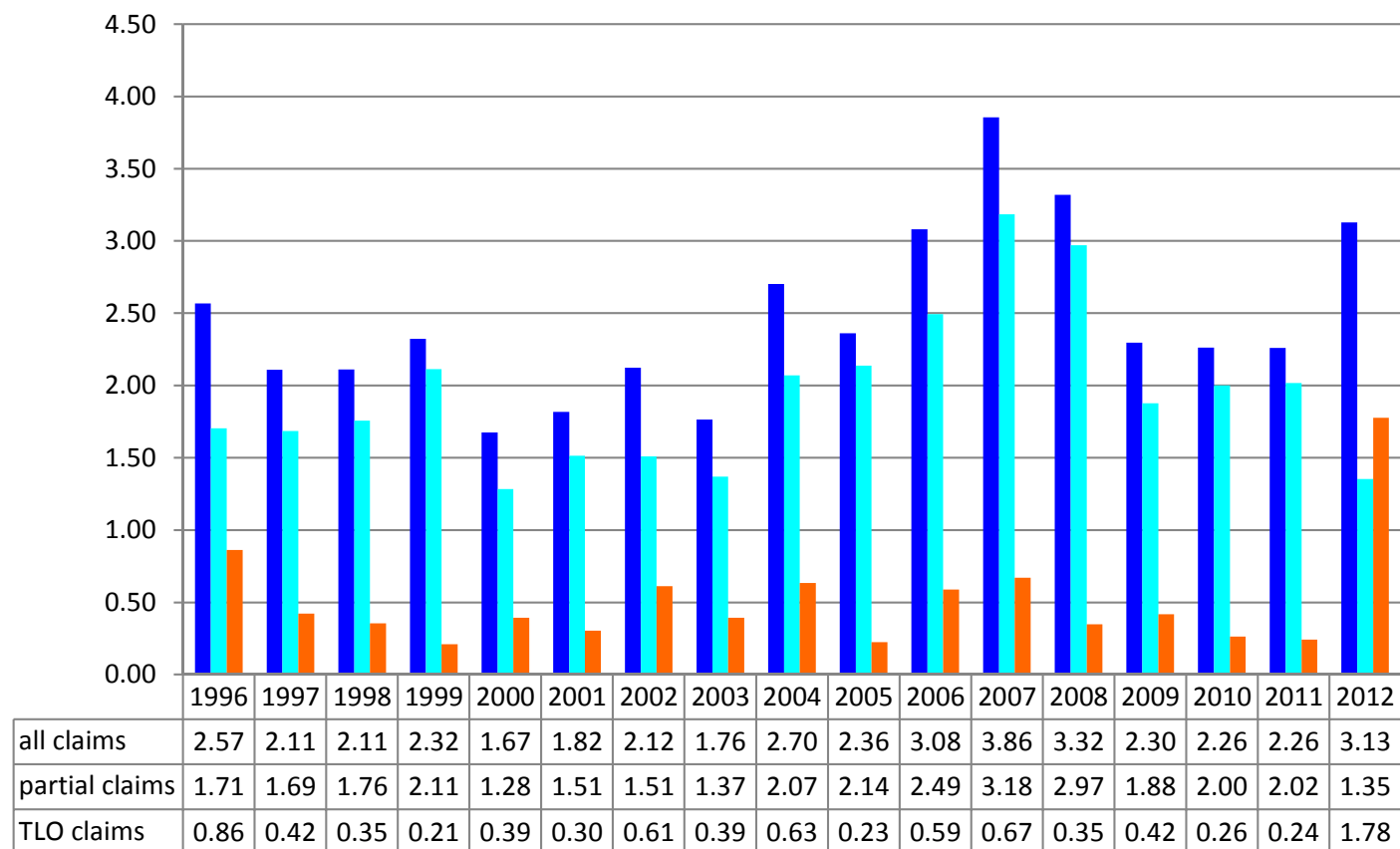
Claim per Sum Insured by date of loss (%)



2012 Nordic Marine Insurance Statistics – Part 3

As of 31 December 2012 – paid+outstanding as reported, no IBNR added

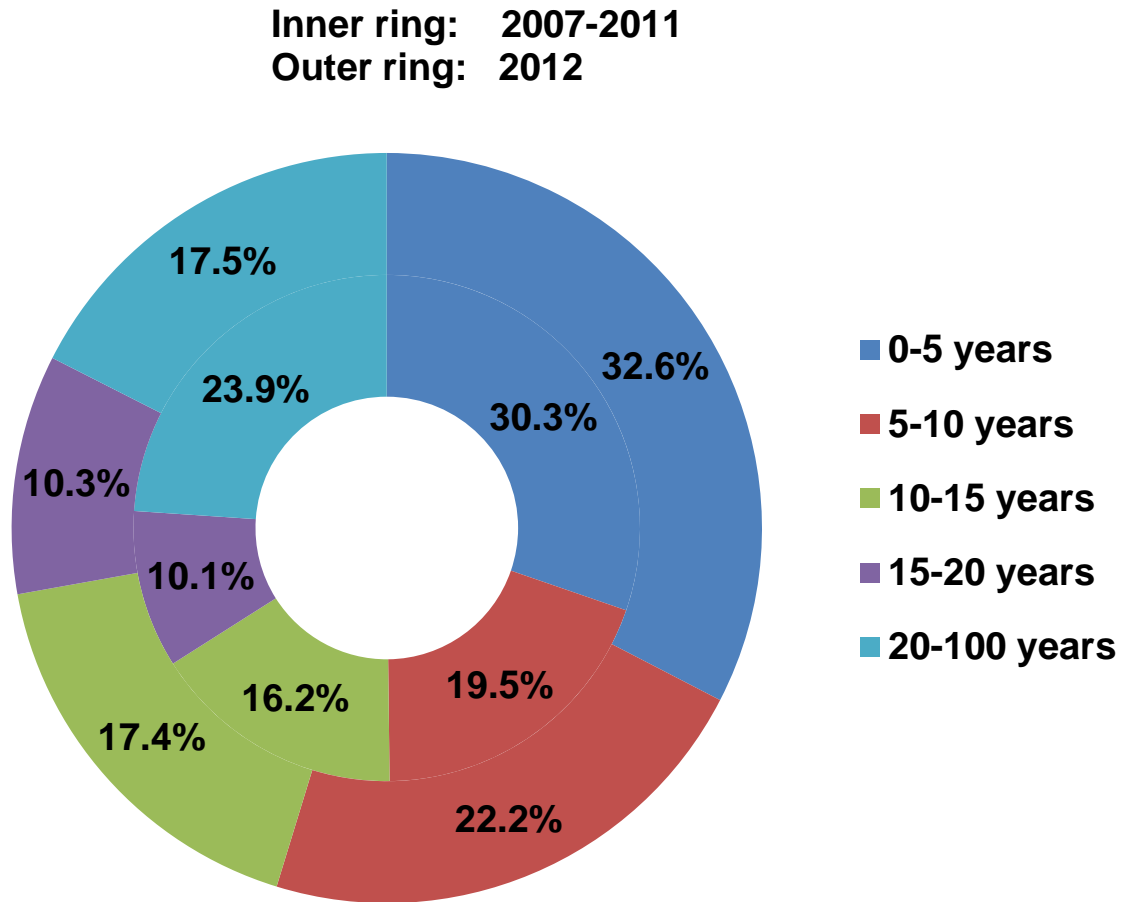
Claim per gross ton by date of loss (USD)



2012 Nordic Marine Insurance Statistics – Part 4

As of 31 December 2012

Number of vessels per age group, by year of exposure



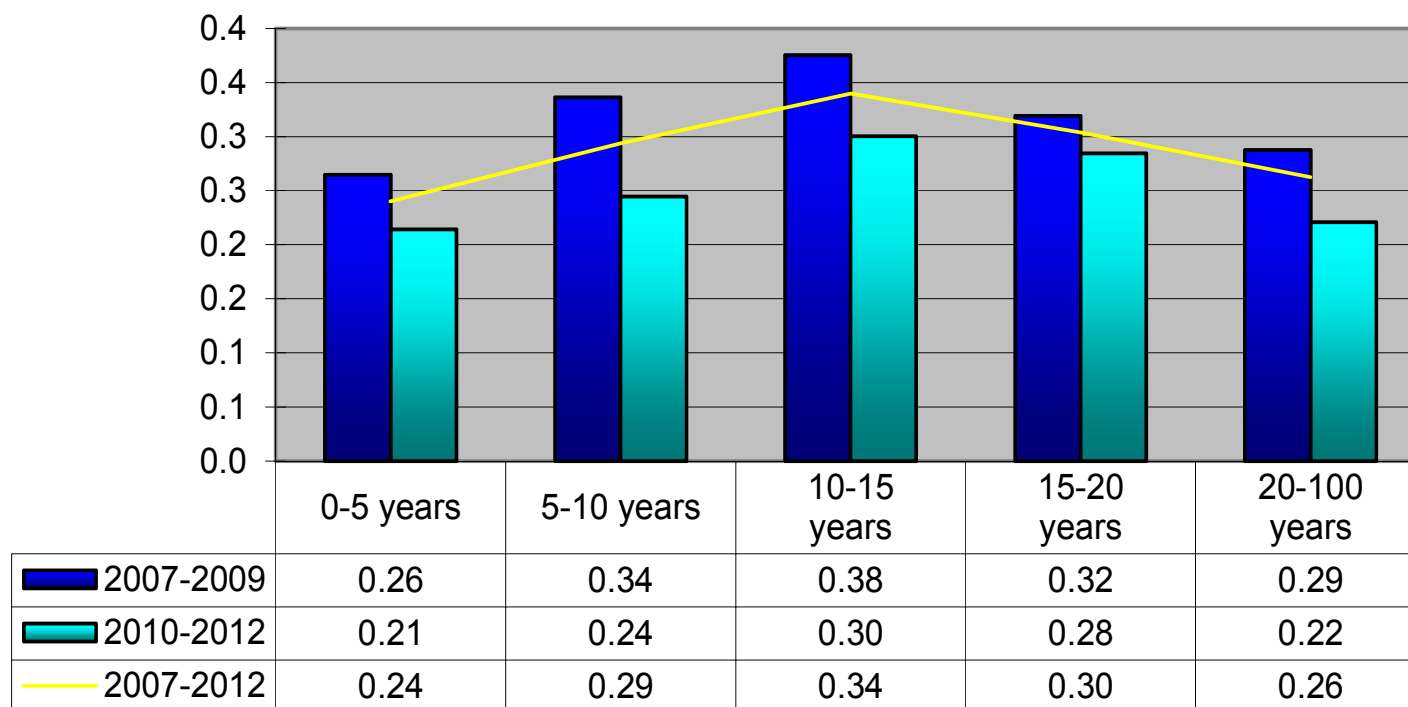
Total number of vessels
2007-11: 55,453
2012: 10,518



2012 Nordic Marine Insurance Statistics – Part 4

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

Claim frequency per age group

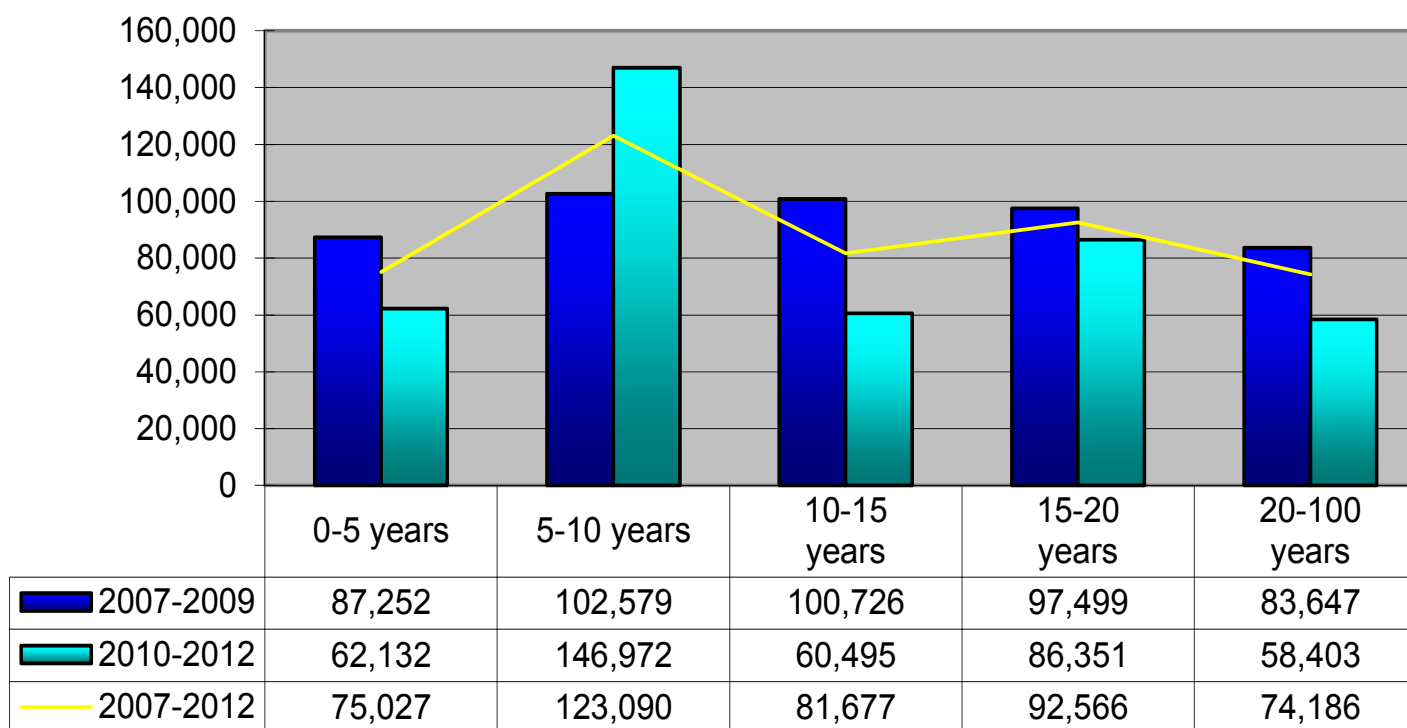


Comment: Claims < 10.000 USD account for about half of all claims. Registration of these may vary over time and in each company and will thus influence the registered frequency. In addition any increase/decrease of insurance deductibles will have impact on the registered frequency

2012 Nordic Marine Insurance Statistics – Part 4

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

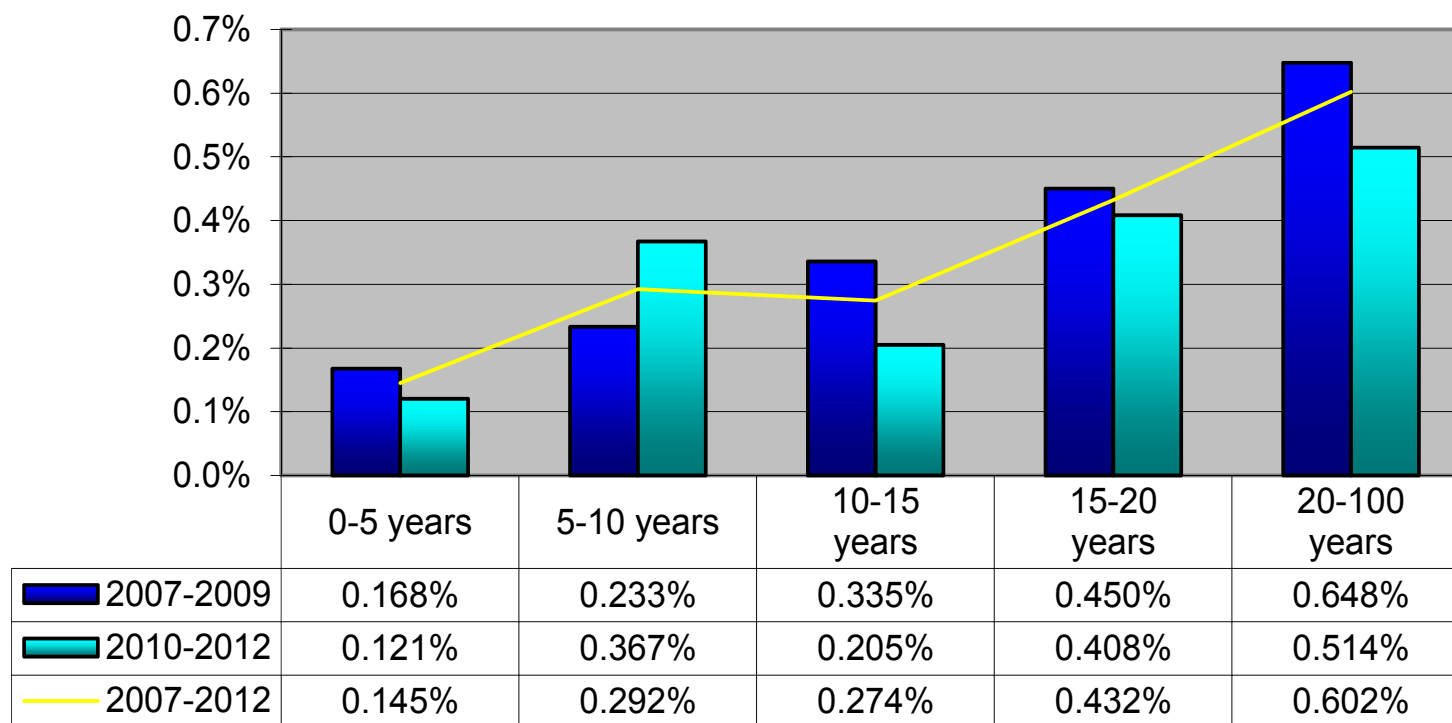
Claim per vessel per age group
in USD



2012 Nordic Marine Insurance Statistics – Part 4

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

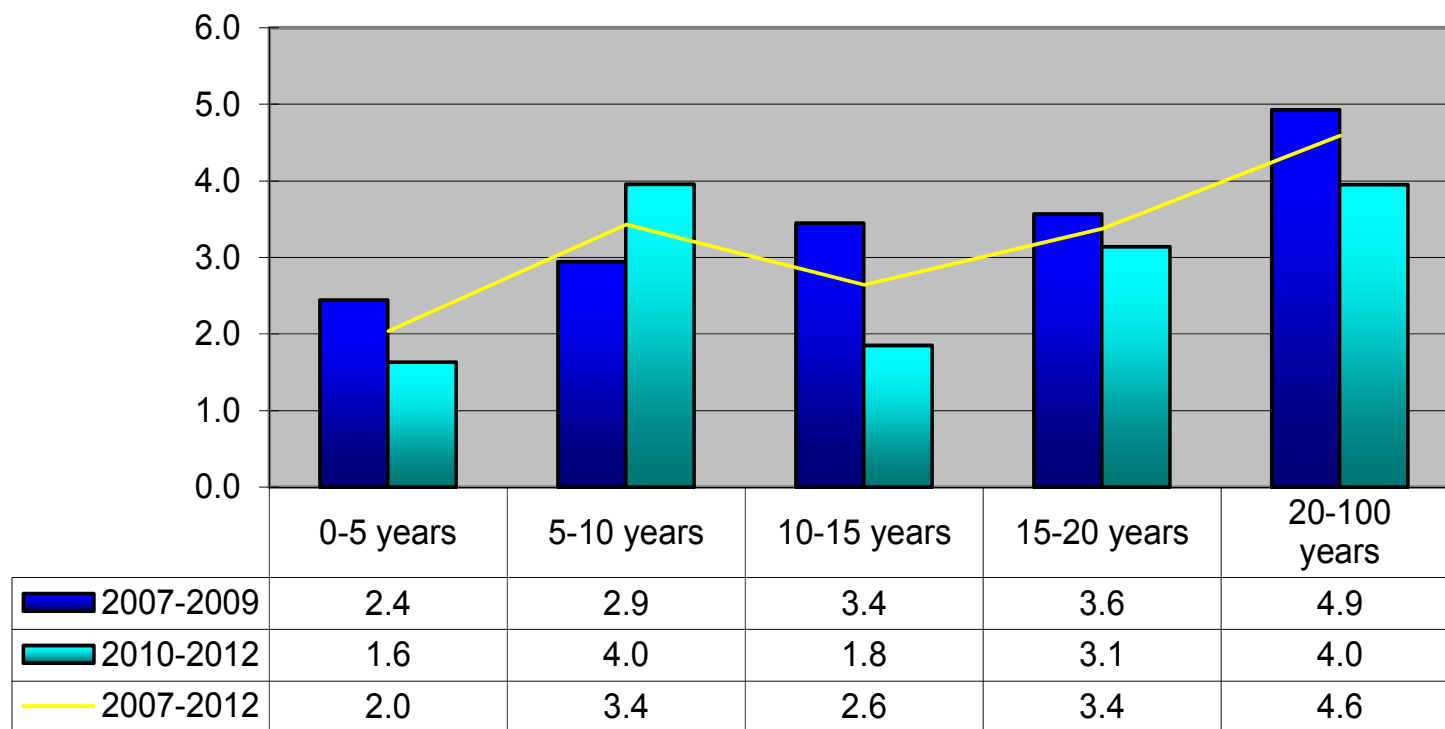
Claim per Sum Insured per age group



2012 Nordic Marine Insurance Statistics – Part 4

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

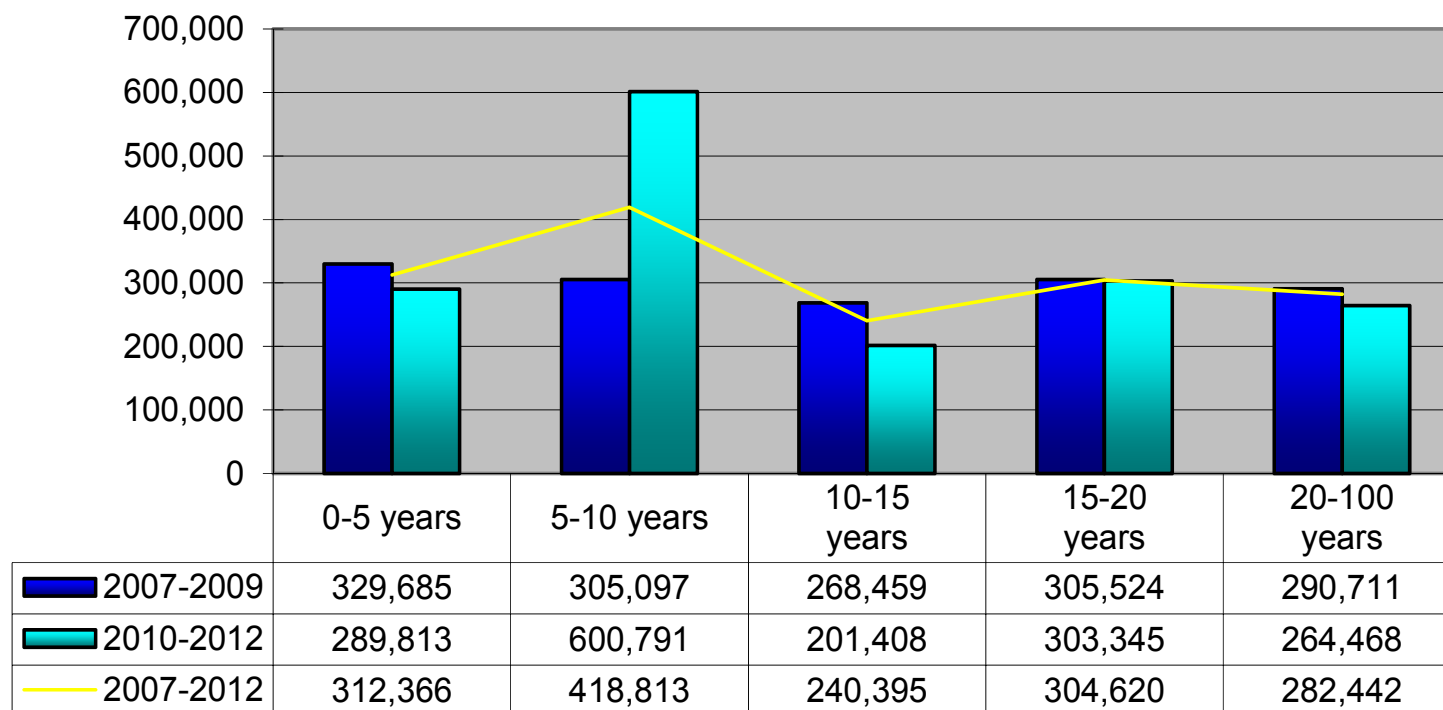
Claim per gross ton per age group
in USD



2012 Nordic Marine Insurance Statistics – Part 4

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

Average claim amount per age group
in USD





Cefor

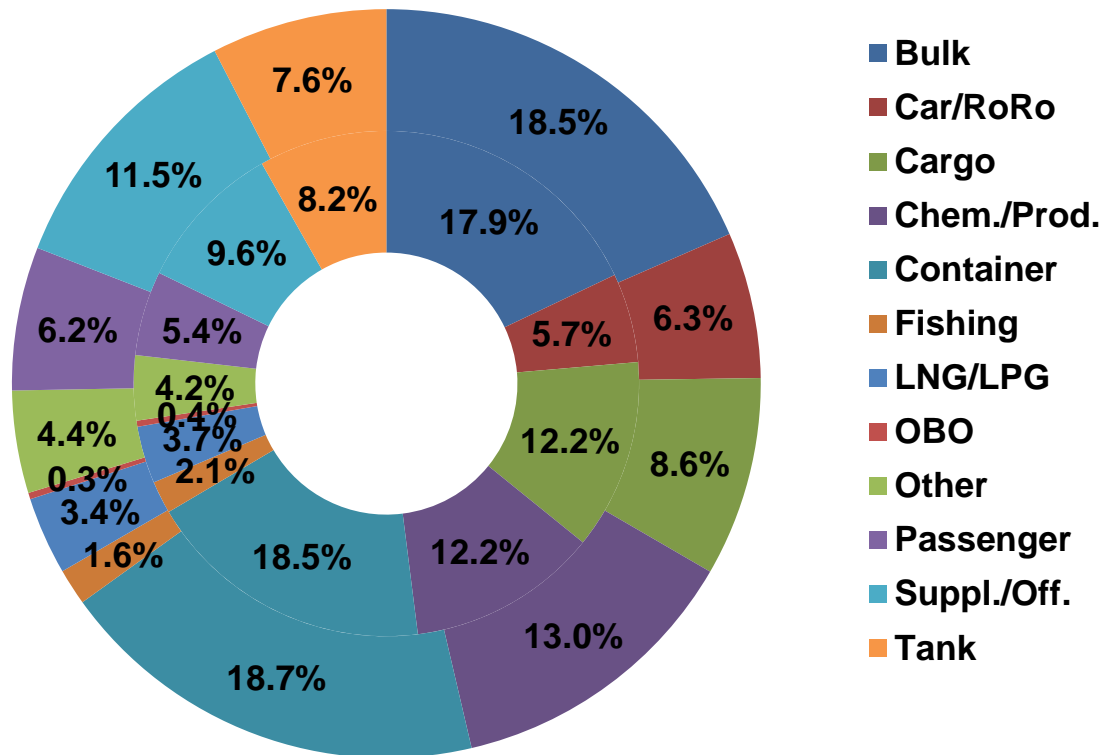
2012 Nordic Marine Insurance Statistics – Part 5

As of 31 December 2012

Number of vessels per vessel type, by year of exposure

Inner ring: 2007-2011

Outer ring: 2012

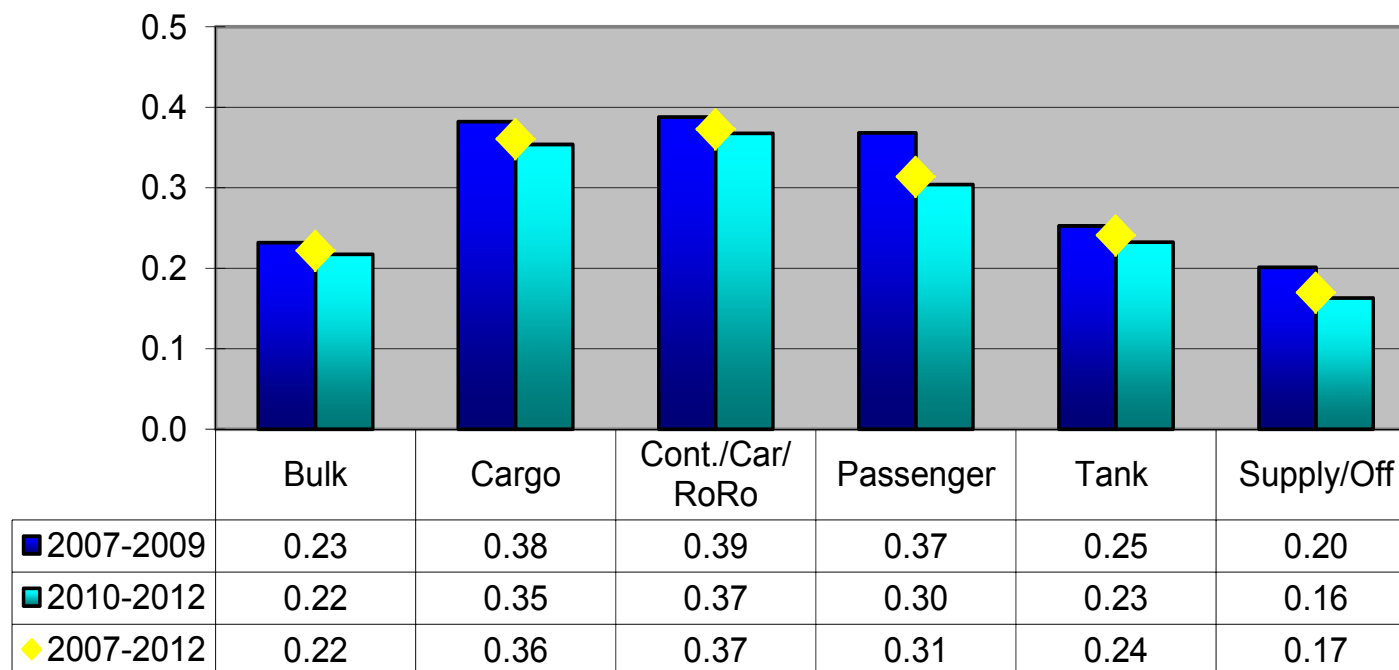


Total number of vessels
2007-11: 55,453
2012: 10,518

2012 Nordic Marine Insurance Statistics – Part 5

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

Claim frequency per vessel type group



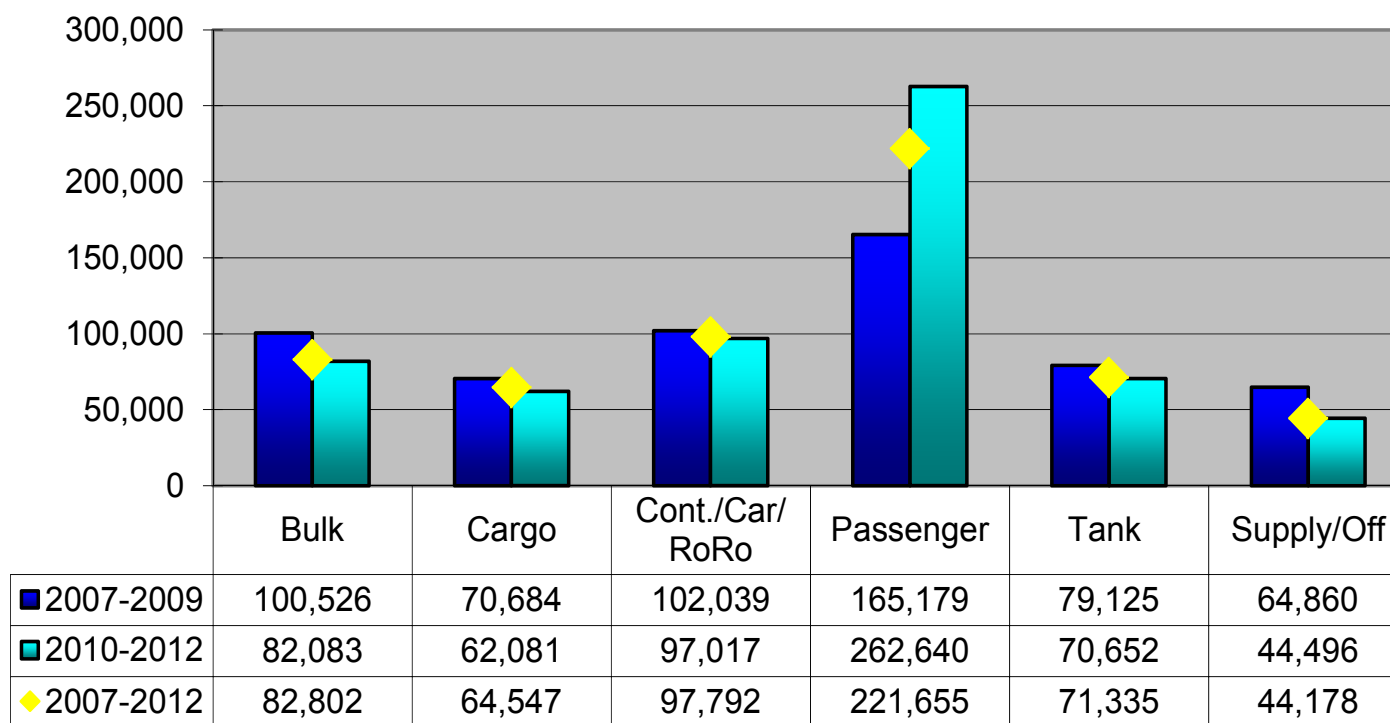
Notes:

- "Tank" includes in this and the following slides: Chemical/Product, LNG/LPG, OBO and other tank vessels
- Claims < 10.000 USD account for about half of all claims. Registration of these may vary over time and in each company and will thus influence the registered frequency.
In addition any increase/decrease of insurance deductibles has impact on the registered frequency

2012 Nordic Marine Insurance Statistics – Part 5

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

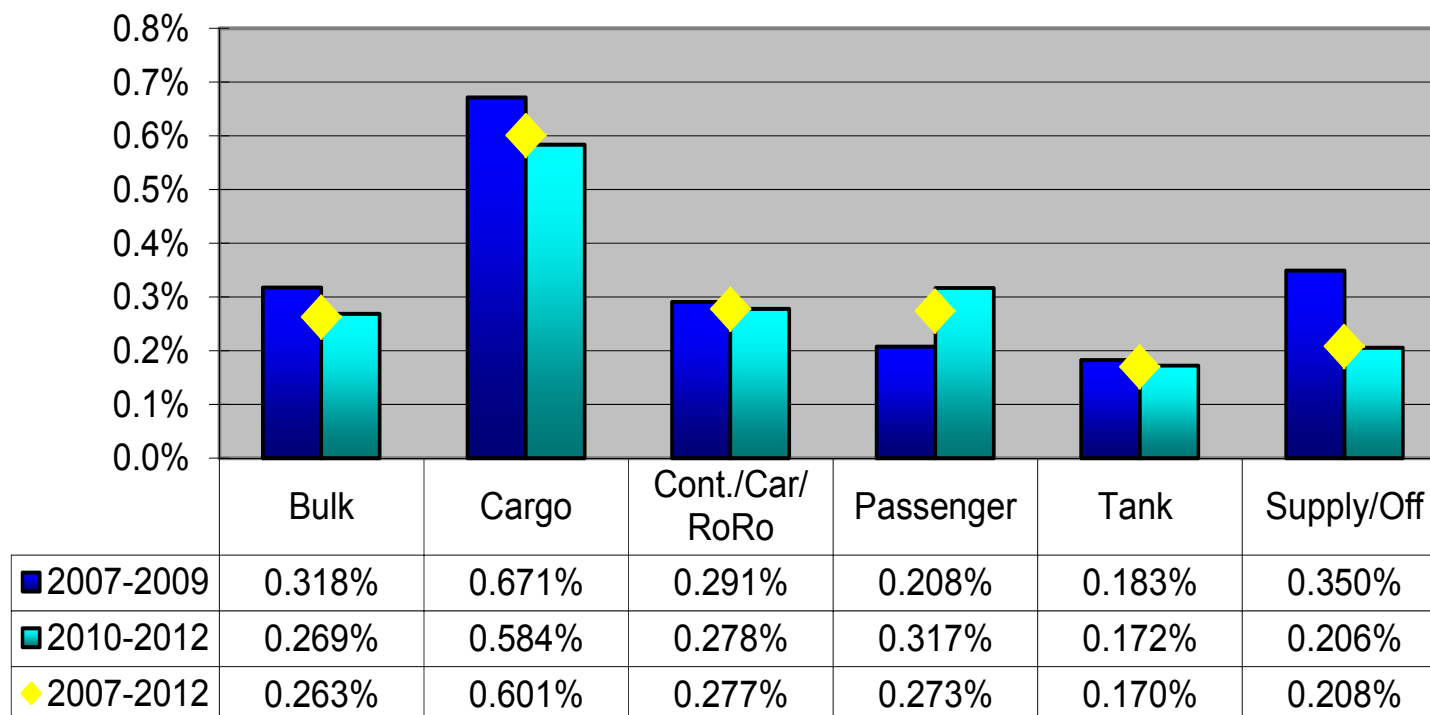
Claim per vessel per vessel type group



2012 Nordic Marine Insurance Statistics – Part 5

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

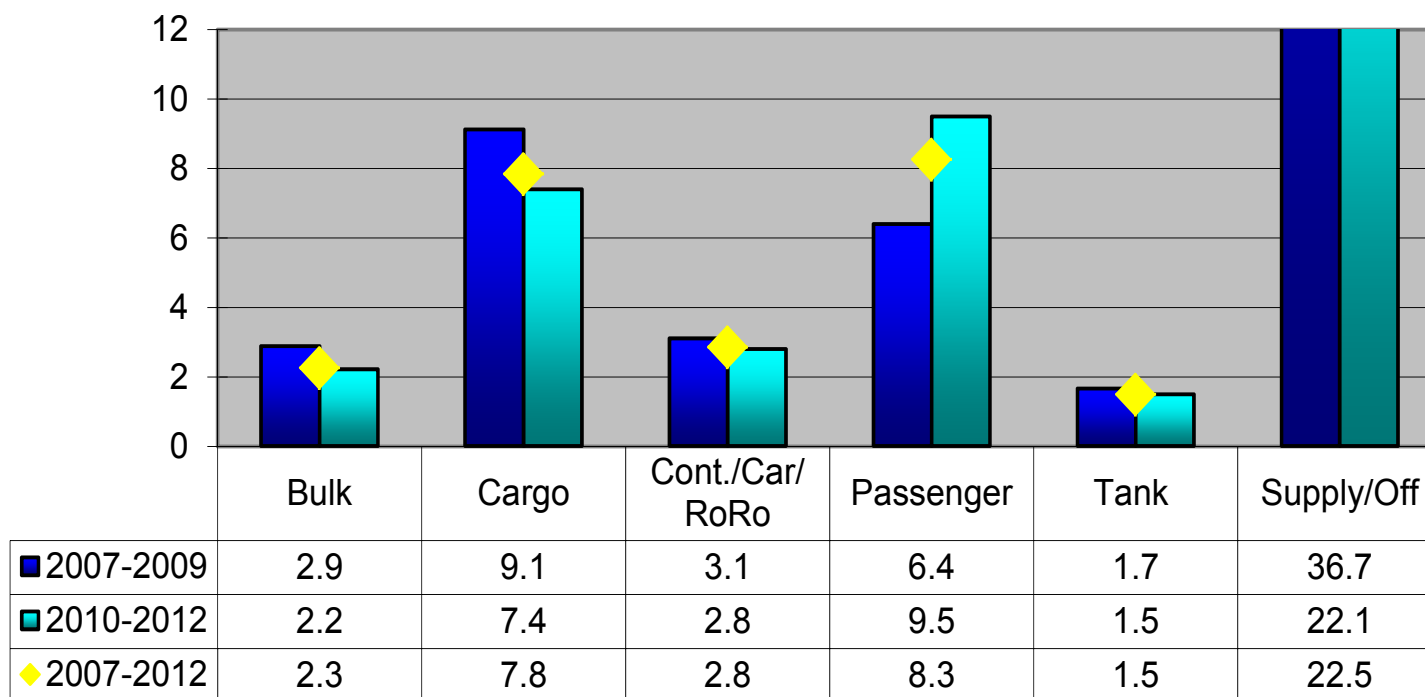
Claim per Sum Insured per vessel type group



2012 Nordic Marine Insurance Statistics – Part 5

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

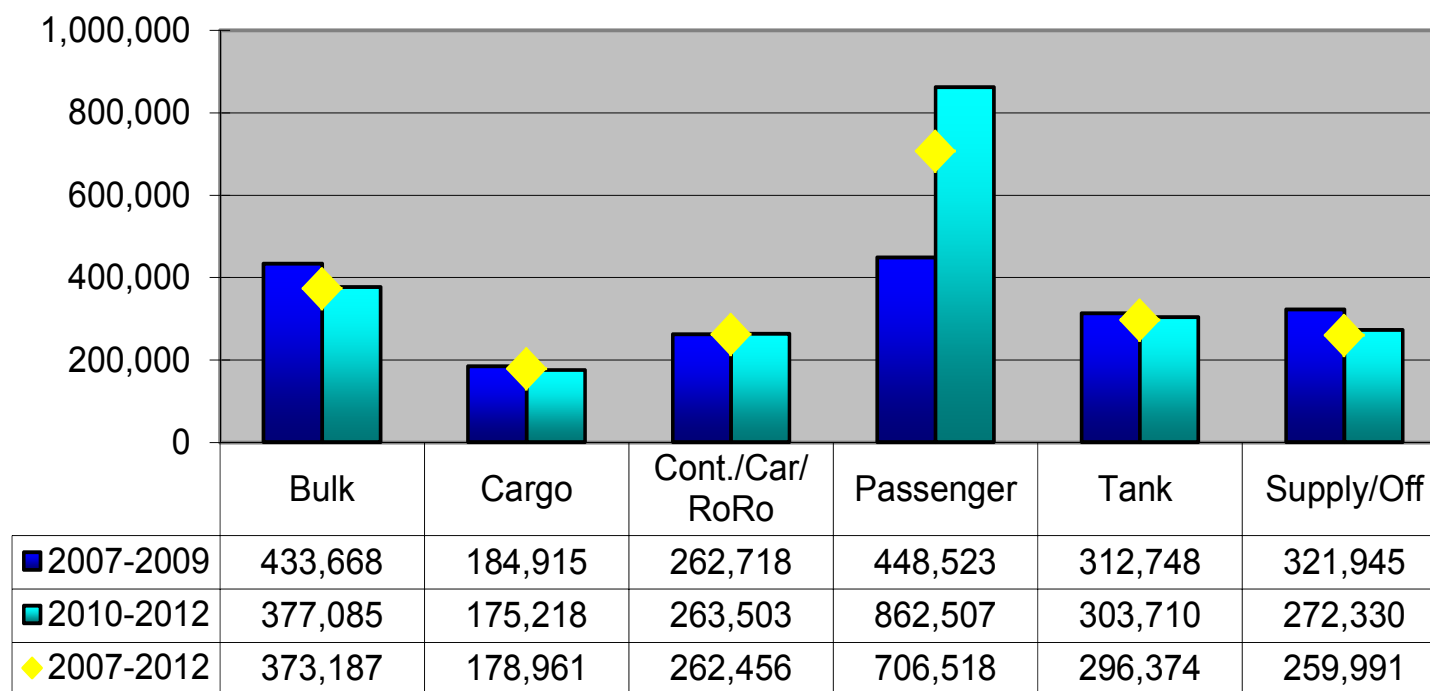
Claim per gross ton per vessel type group



2012 Nordic Marine Insurance Statistics – Part 5

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

Average claim amount per vessel type group





Cefor

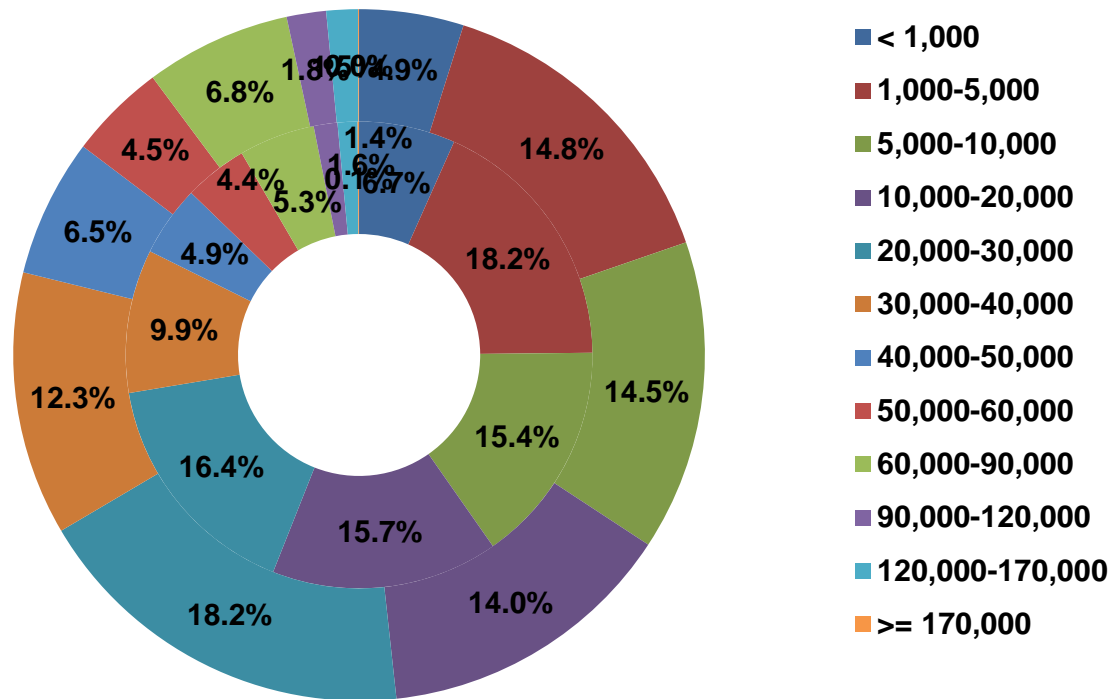
2012 Nordic Marine Insurance Statistics – Part 6

As of 31 December 2012

Number of vessels per GT Size Group, by year of exposure

Inner ring: 2007-2011

Outer ring: 2012

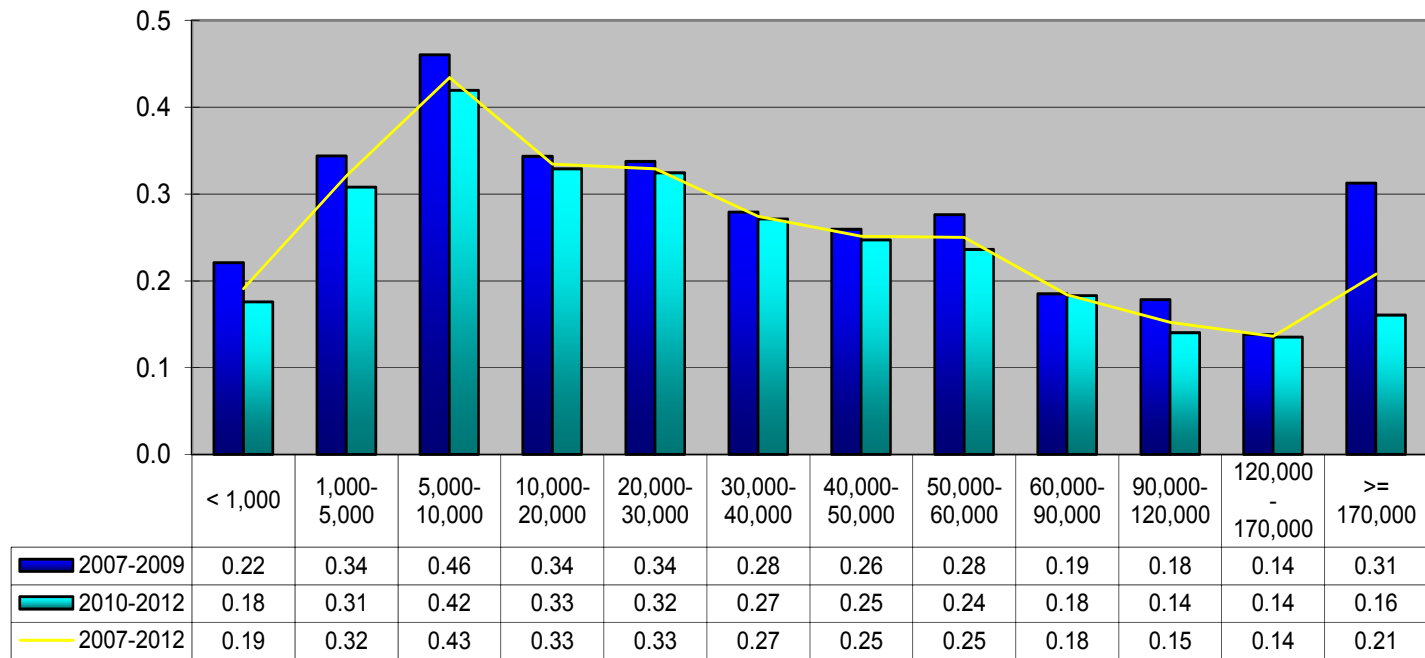


Total number of vessels
2007-11: 55,453
2012: 10,518

2012 Nordic Marine Insurance Statistics – Part 6

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

Claim frequency per GT size group



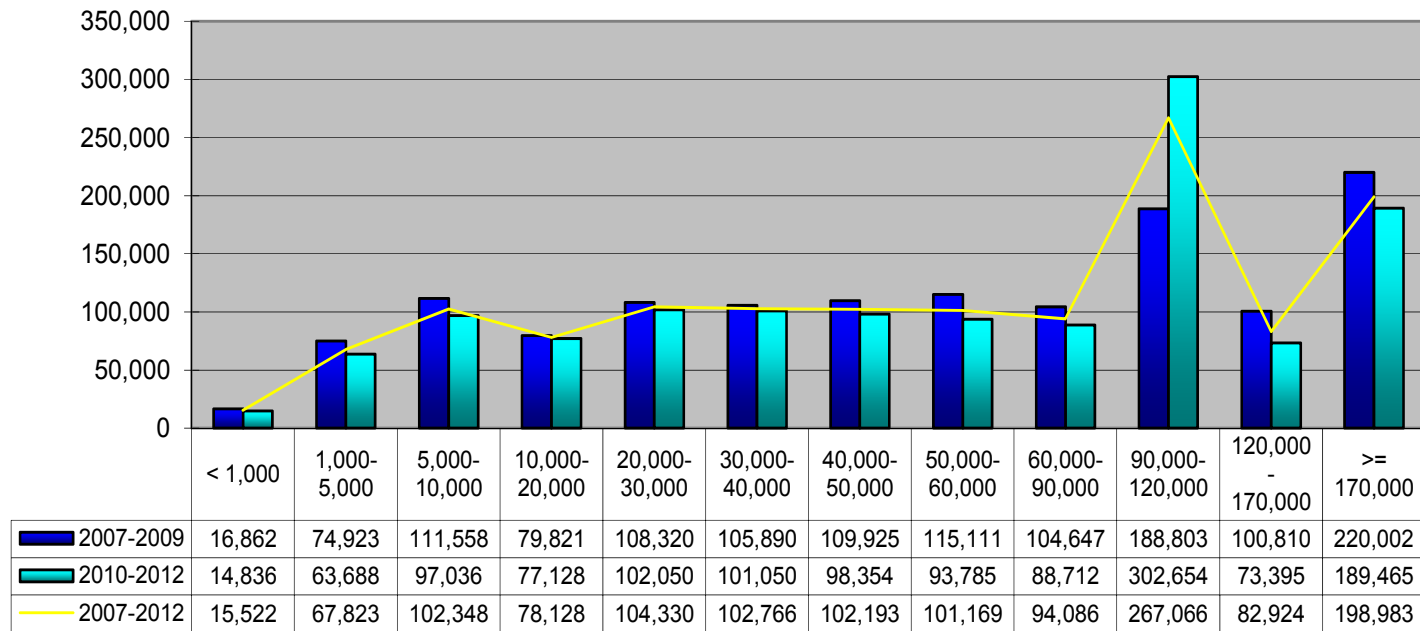
Comment: Claims < 10.000 USD account for about half of all claims. Registration of these may vary over time and in each company and will thus influence the registered frequency. In addition any increase/decrease of insurance deductibles will have impact on the registered frequency



2012 Nordic Marine Insurance Statistics – Part 6

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

Claim per vessel per GT size group

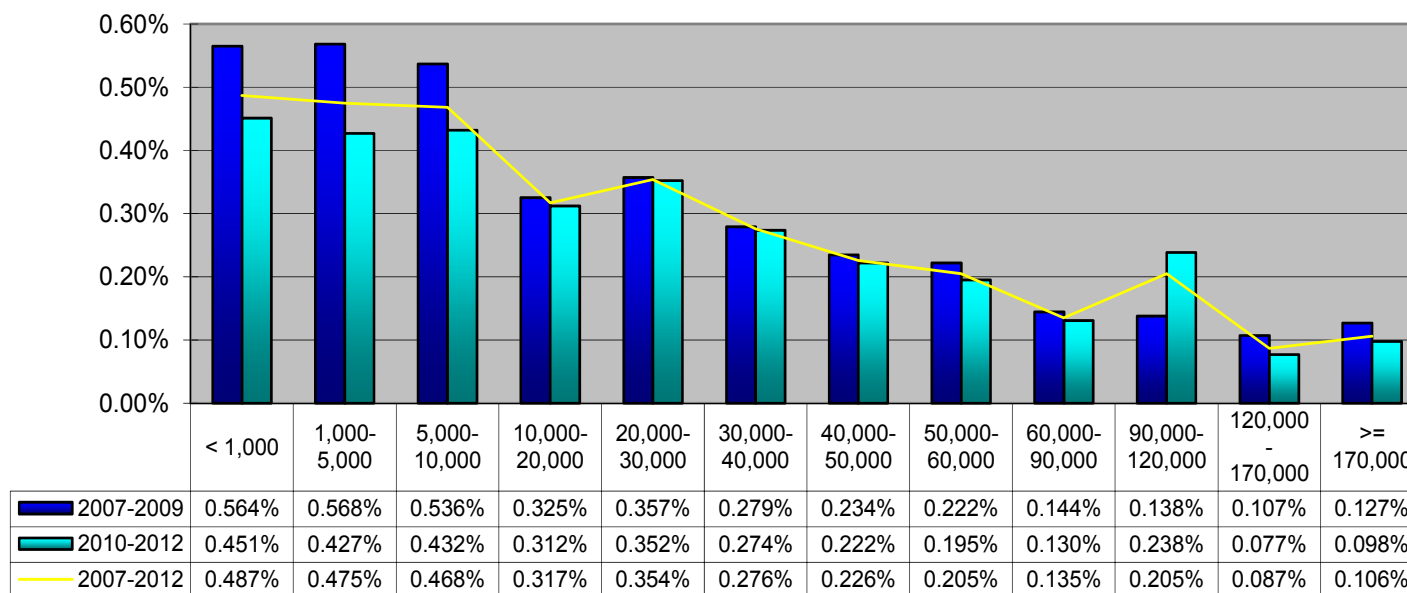




2012 Nordic Marine Insurance Statistics – Part 6

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

Claim per Sum Insured per GT size group

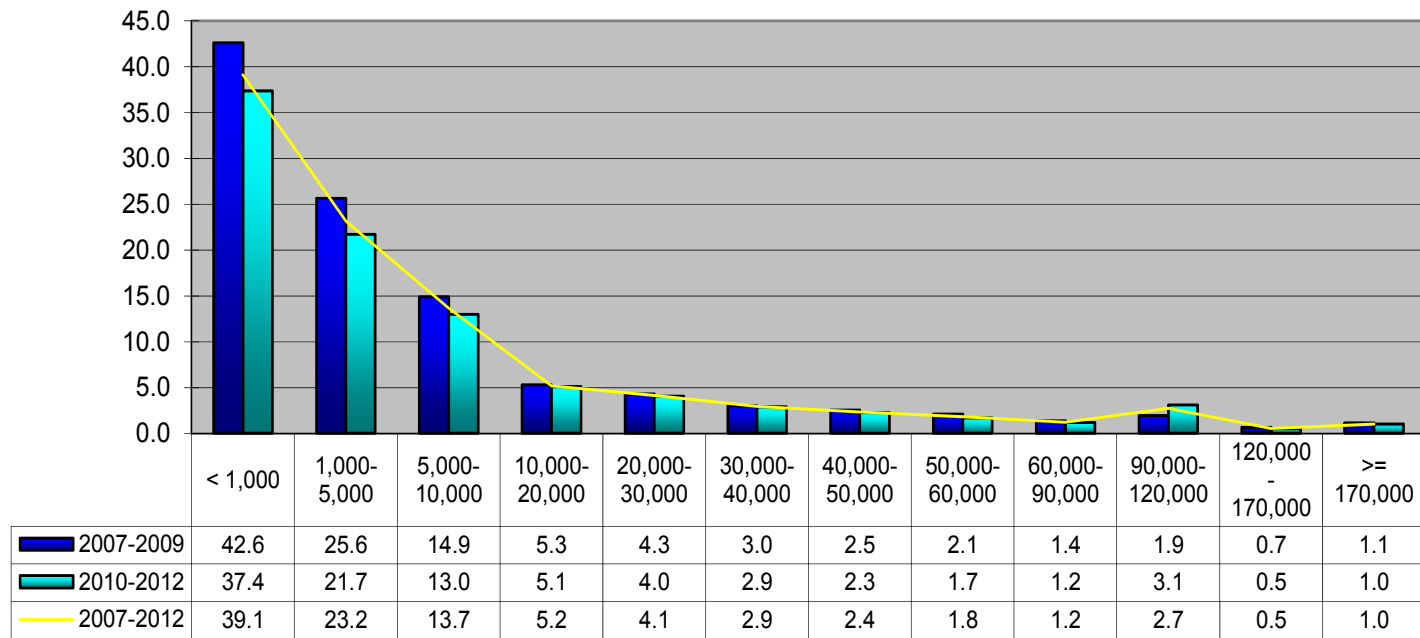




2012 Nordic Marine Insurance Statistics – Part 6

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

Claim per GT per GT size group

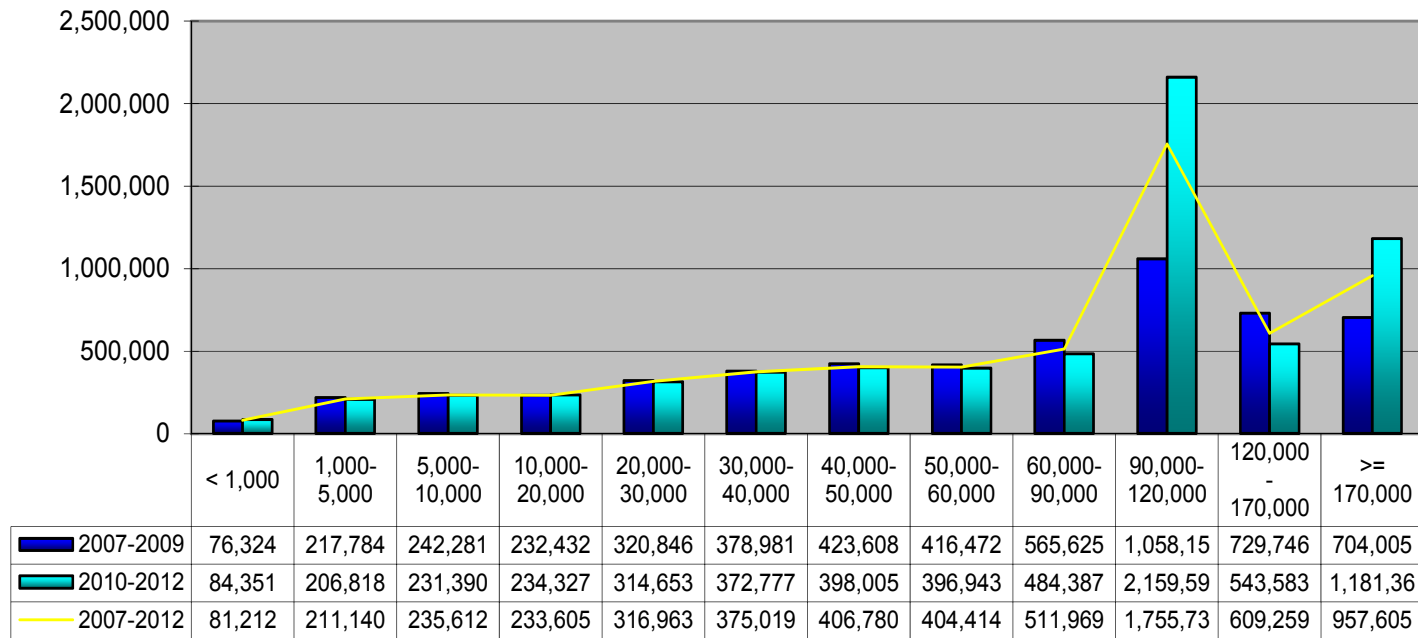




2012 Nordic Marine Insurance Statistics – Part 6

As of 31 December 2012 – paid+outstanding as reported, no IBNR reserve added

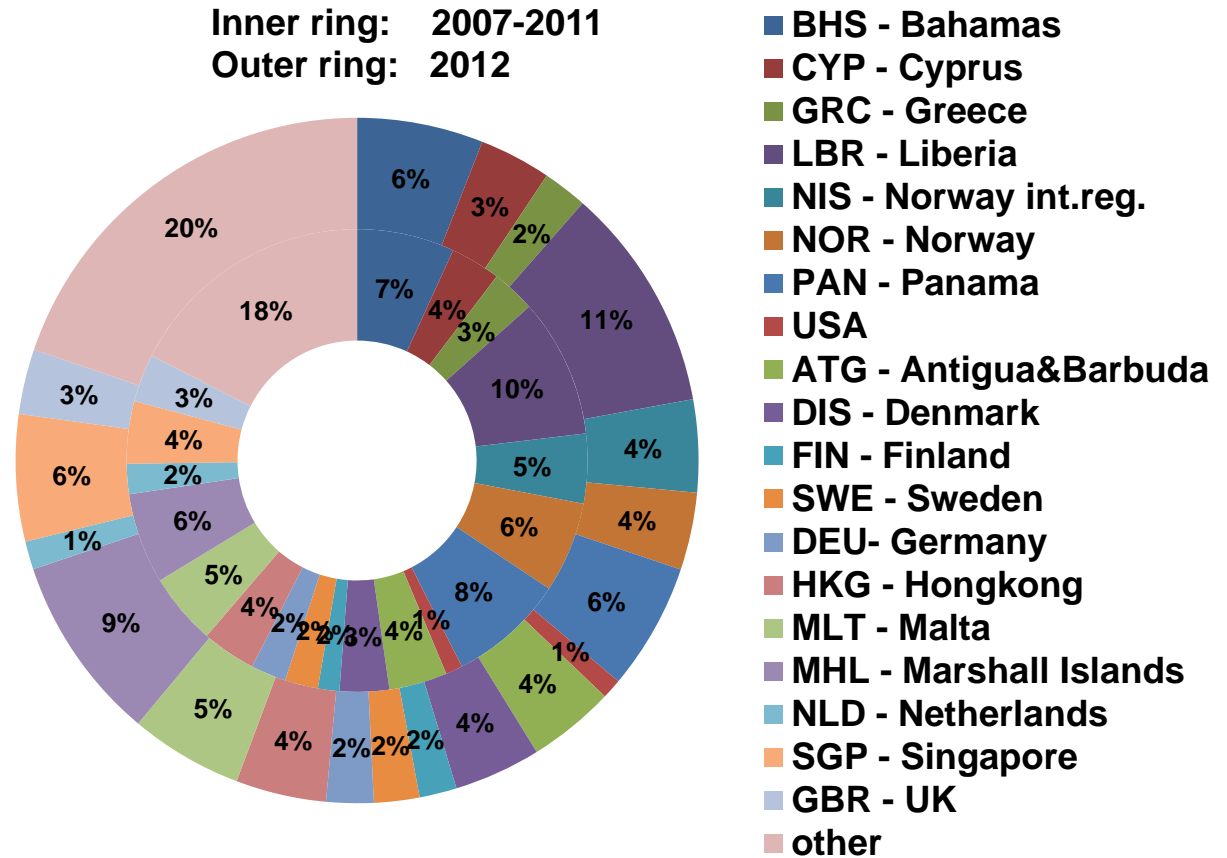
Average Claim amount per GT size group



2012 Nordic Marine Insurance Statistics – Part 7

As of 31 December 2012

Number of vessels per largest flags, by year of exposure



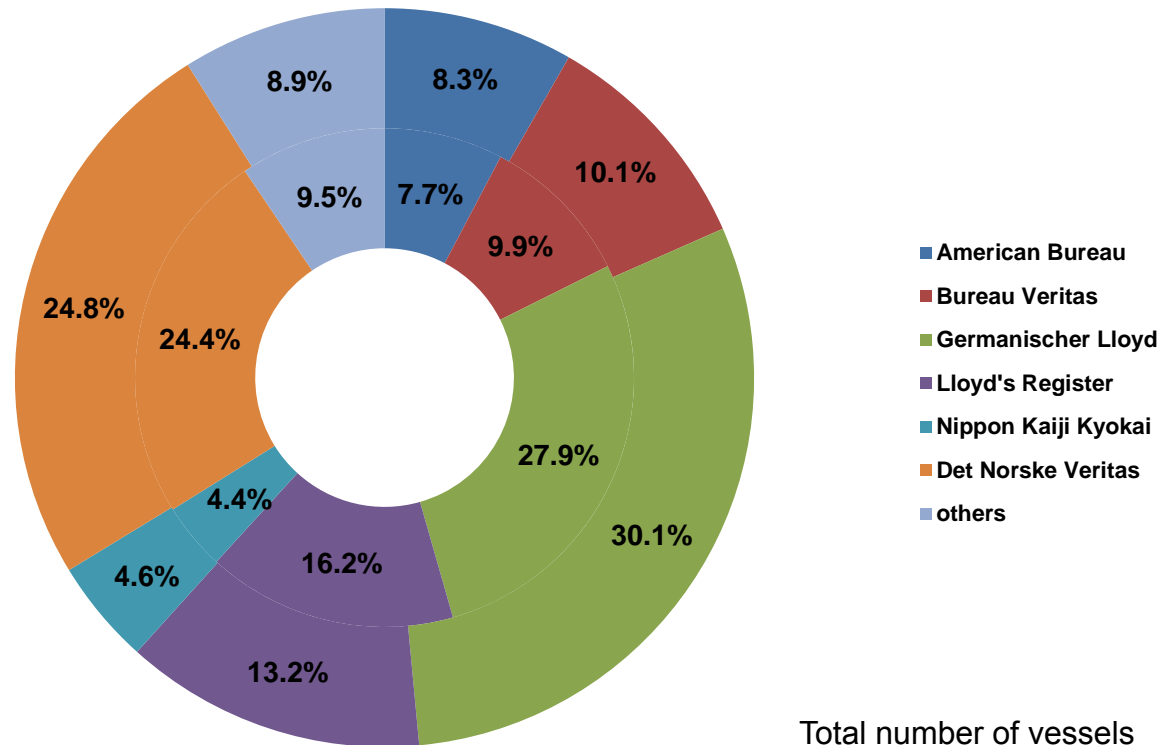
Total number of vessels
2007-11: 55,453
2012: 10,518

2012 Nordic Marine Insurance Statistics – Part 7

As of 31 December 2012

Number of vessels per classification society, by year of exposure

Inner ring: 2007-2011
Outer ring: 2012



Total number of vessels
2007-11: 55,453
2012: 10,518



2012 Nordic Marine Insurance Statistics – Part 8

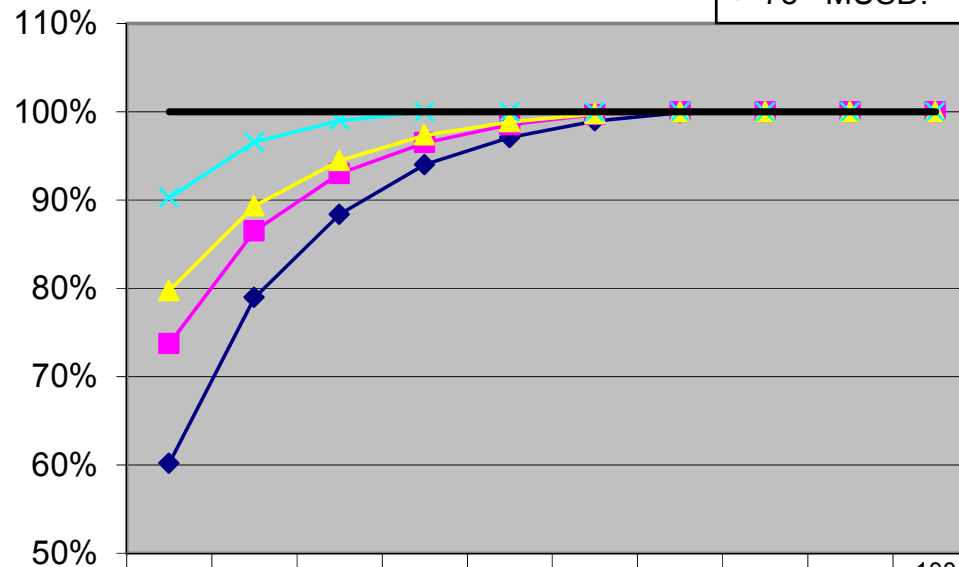
As of 31 December 2012 – paid & outstanding as reported

Based on claims occurred in years 2007-2012

Ceding company's retention of claims (in % of total claims)

Exposure curves by Sum Insured Partial Claims only (<75%SI)

PA claims in % of all claims* :
 0-5 MUSD: 76%
 5-20 MUSD: 87%
 20-75 MUSD: 78%
 > 75 MUSD: 68%*



* «all claims» includes Costa Concordia cost; PA% for claims >75 MUSD is therefore lower than usually

Sum Insured	10%	20%	30%	40%	50%	60%	70%	80%	90%	100 %
—◆— 0-5 Mio USD	0.602	0.789	0.884	0.940	0.971	0.990	0.999	1.000	1.000	1.000
—■— 5-20 Mio USD	0.737	0.865	0.930	0.965	0.985	0.997	1.000	1.000	1.000	1.000
—▲— 20-75 Mio USD	0.797	0.893	0.945	0.974	0.989	0.998	1.000	1.000	1.000	1.000
—×— > 75 Mio USD	0.903	0.966	0.990	1.000	1.000	1.000	1.000	1.000	1.000	1.000
— 100%	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Ceding company's retention as % of SI

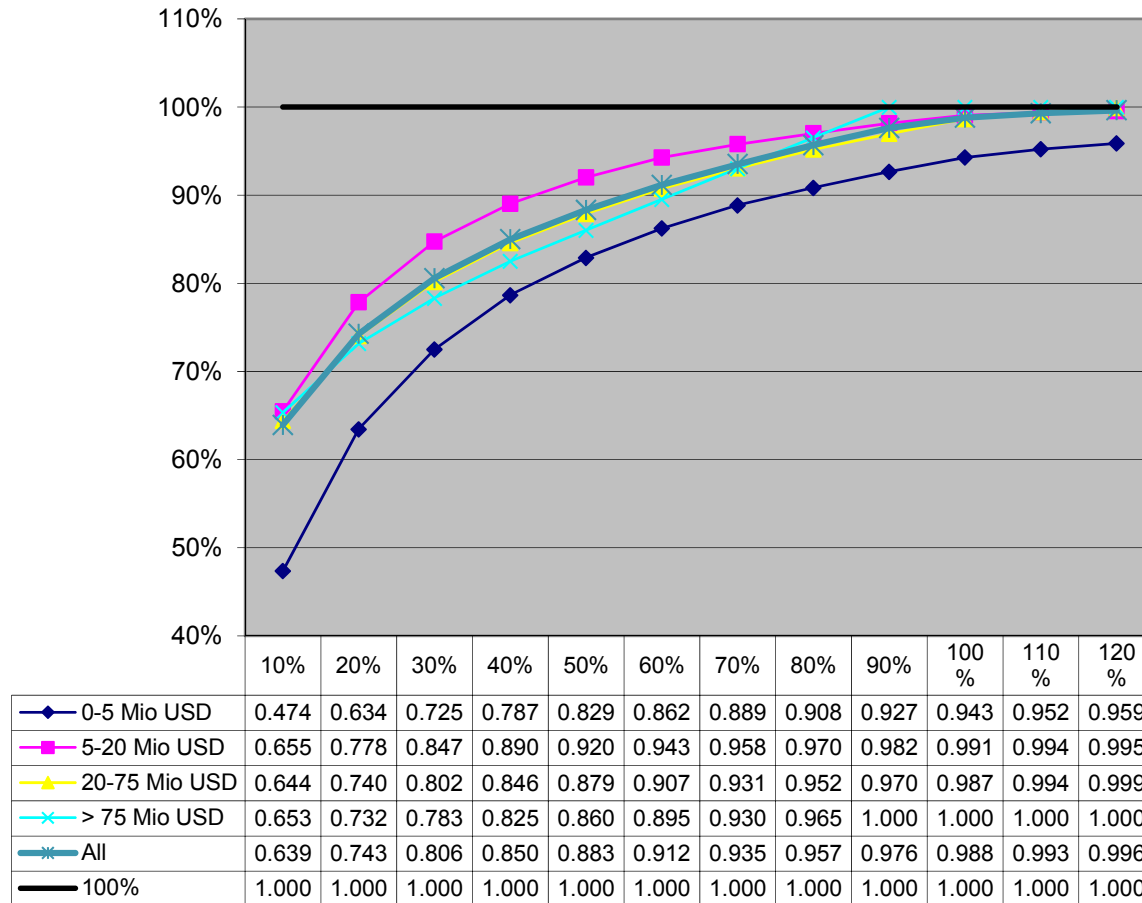
2012 Nordic Marine Insurance Statistics – Part 8

As of 31 December 2012 – paid & outstanding as reported

Based on claims occurred in years 2007-2012

Ceding company's retention of claims
(in % of total claims)

**Exposure curves by Sum Insured
All claims including total losses**



Ceding company's retention as % of SI



2012 Nordic Marine Insurance Statistics – Part 8

As of 31 December 2012

Exposure Curves

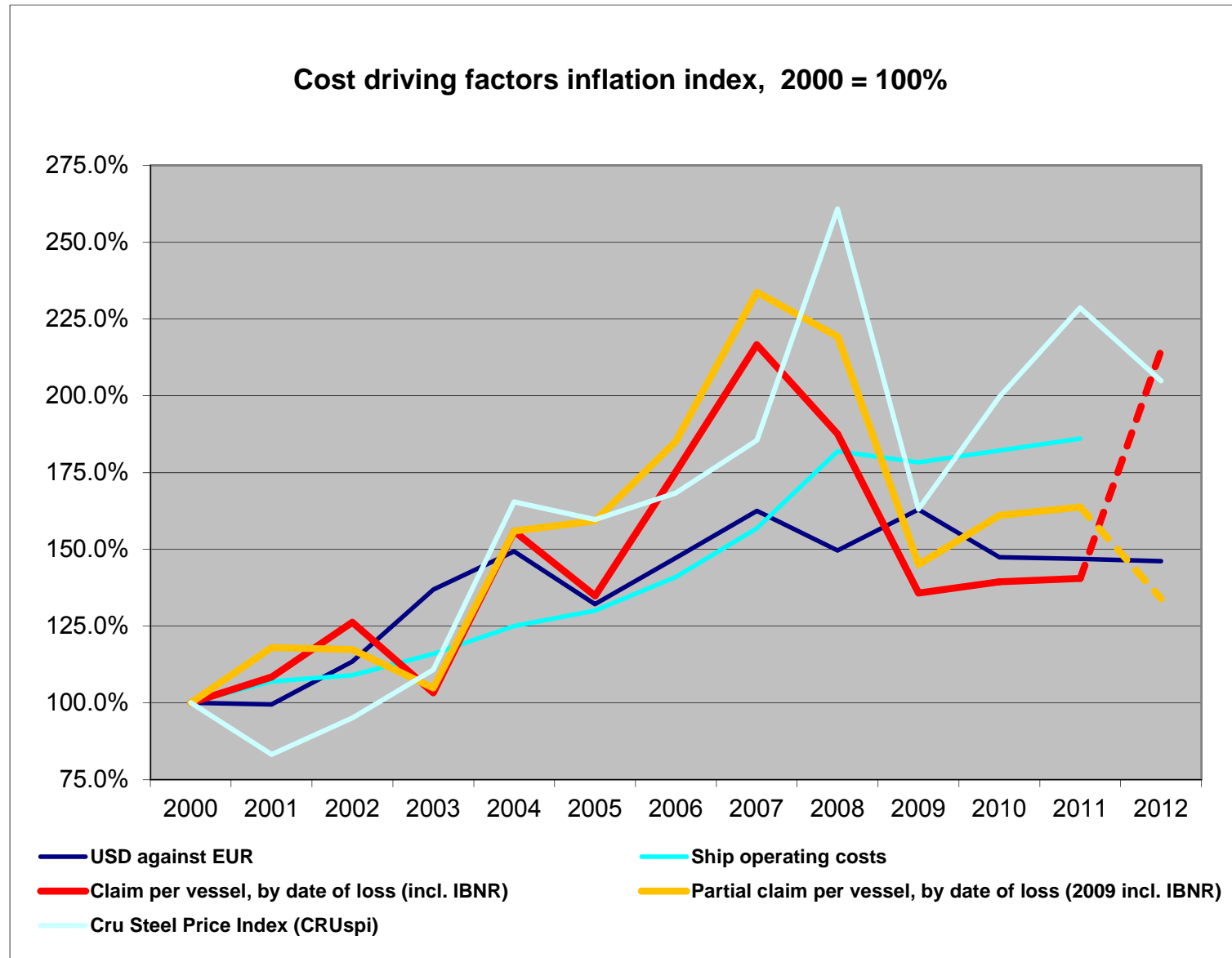
- Exposure curves are used by reinsurers to price excess of loss reinsurance.
- The curves indicate the ceding company's retained share of PA claims after ceding claims in excess of a given percentage of a vessel's sum insured.
- The curves should be applied on individual vessels or groups of vessels with similar values and written shares.
- The curves are calculated for 100% values. In applications the choice of curve should thus also be based on 100% values.
- The curves are based on USD claims amounts. Due to exchange rate fluctuations, the ratio between claim cost and insured value may deviate in the original currency.

Exposure Curves technicalities

- The curves are based on H&M covers only for vessels with valid IMO-No.
- The curves are based on the years 2007-2012
(15,166 partial claims; 15,242 claims in all; only claims with cost > 1USD included)
- The curves are calculated as follows:
x = percentage retained
C = Individual claims ¹⁾
V = Vessel value
 $f(x) = \frac{\sum \min[C, V \cdot x]}{\sum C}$

¹⁾ First set of exposure curves: based on partial claims only; Second set of exposure curves: based on all claims, including total losses / claims exceeding the Sum Insured

2012 Nordic Marine Insurance Statistics – Part 9



Sources:

Claim index: Cefor NoMIS data as of 31 December 2012; Exchange rates: Norges Bank, Ship operation costs: Moore Stephen's, Steel: CRU Steel Price Index (<http://www.cruonline.crugroup.com/Steel/CRUspi.aspx>)



2012 Nordic Marine Insurance Statistics

Cefor marine insurance statistics publications at www.cefor.no/statistics :

- Cefor Annual Report 2012
- The 2012 Cefor NoMIS OCEAN Hull Report
- The 2012 Cefor NoMIS COASTAL Hull Report

- Half-yearly Claims Update Fact Sheet

- All Cefor statistics, including previously published reports, are available for download from the statistics section of the Cefor website:
www.cefor.no/statistics
(check the “NoMIS” section – Nordic Marine Insurance Statistics)

Other marine insurance statistics:

- IUMI (International Union of Marine Insurance):
Statistics issued by IUMI’s Facts & Figures Committee:
<http://www.iumi.com/index.php/committees/facts-a-figures-committee/statistics>