



Global Marine Insurance Casualty trends

IUMI @ IMO 2017

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CONTENTS

- The Global Marine Insurance Market
- Vessel values & fleet trends with impact on casualty trends
- CASUALTY TRENDS

Main data sources:

Premiums:	IUMI (Global Marine Insurance Report published September 2016)
Fleet data:	Clarkson Research, Lloyds List Intelligence
Vessel values:	The Nordic Marine Insurance Statistics (NoMIS)
Casualties:	Lloyds List Intelligence; The Nordic Marine Insurance Statistics (NoMIS)



CONTENTS – CASUALTY TRENDS

SHIPOWNERS' LIABILITY (Crew, Environment, collision etc.)

- Pool claims International Group of P&I Clubs

OFFSHORE ENERGY

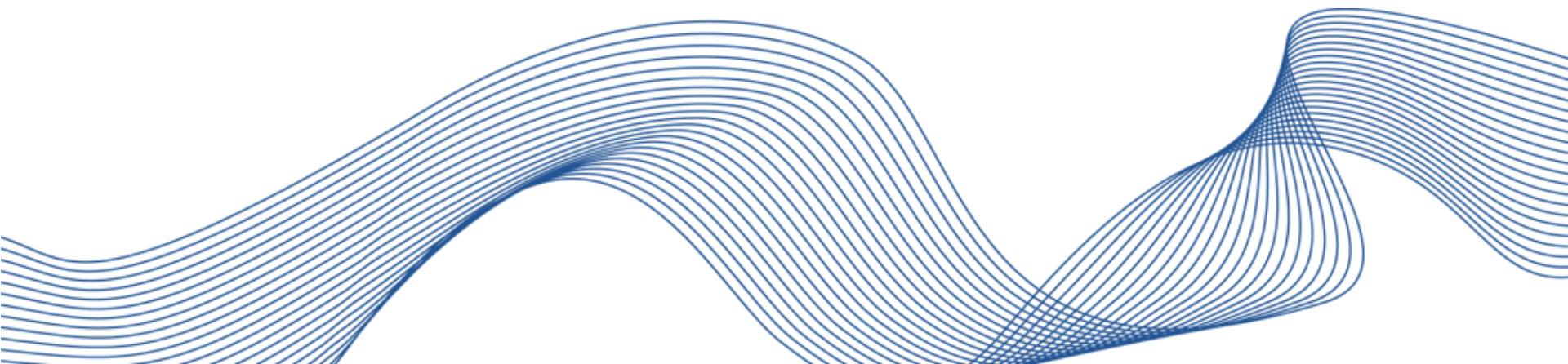
- Casualties on mobile offshore units

HULL CASUALTY TRENDS

- Total and major losses and their impact
- 'Serious' (LLI / IMO etc.) versus 'Major' (Insurance) casualties – beware of the terminology!
- Trends by type of casualty
- Trends by vessel type / age group
- Special:
 - Cost driving factors
 - Effect of Lay-ups on the claims frequency



THE GLOBAL MARINE INSURANCE MARKET

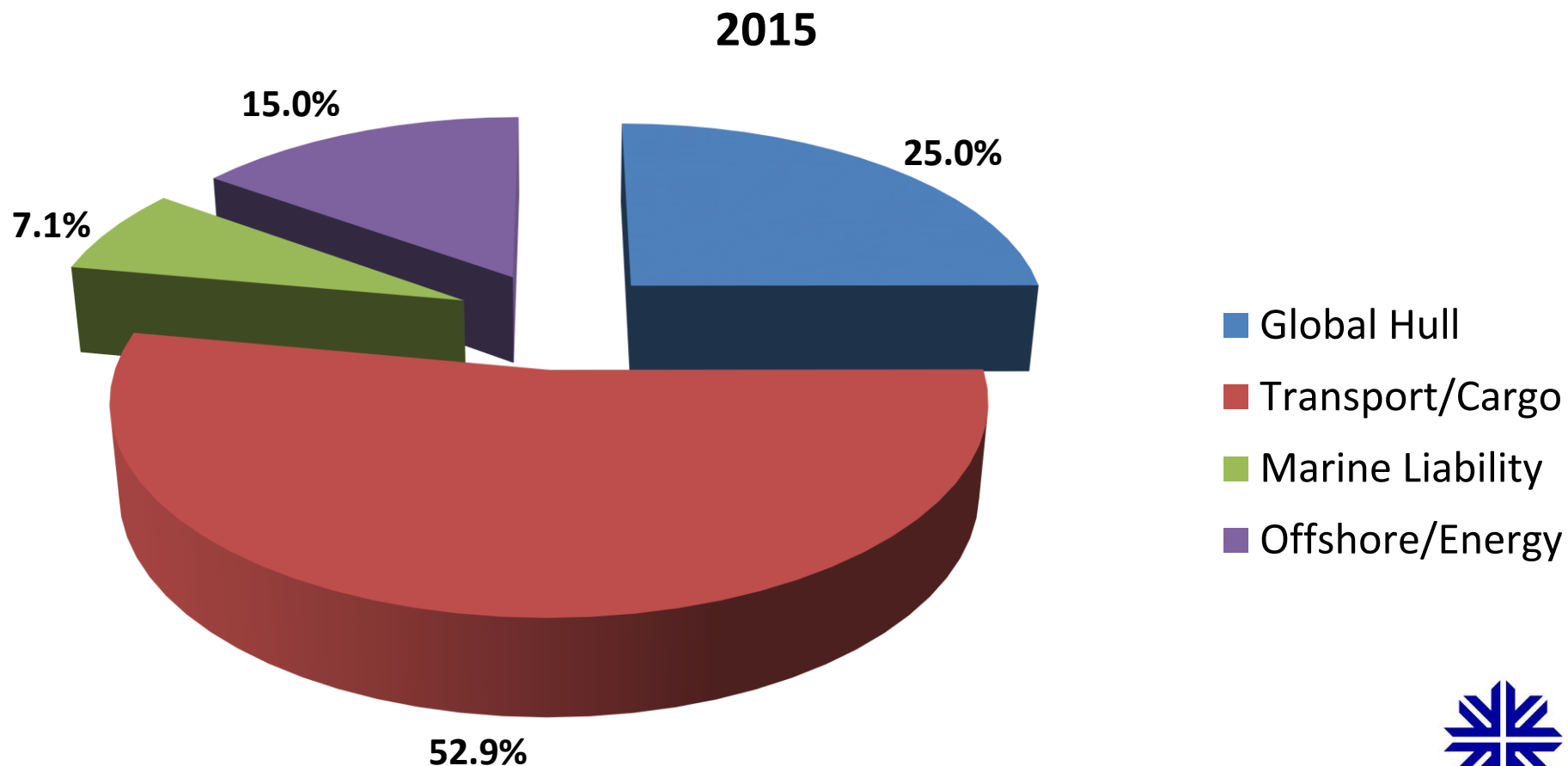


MARINE PREMIUM 2015

BY LINE OF BUSINESS

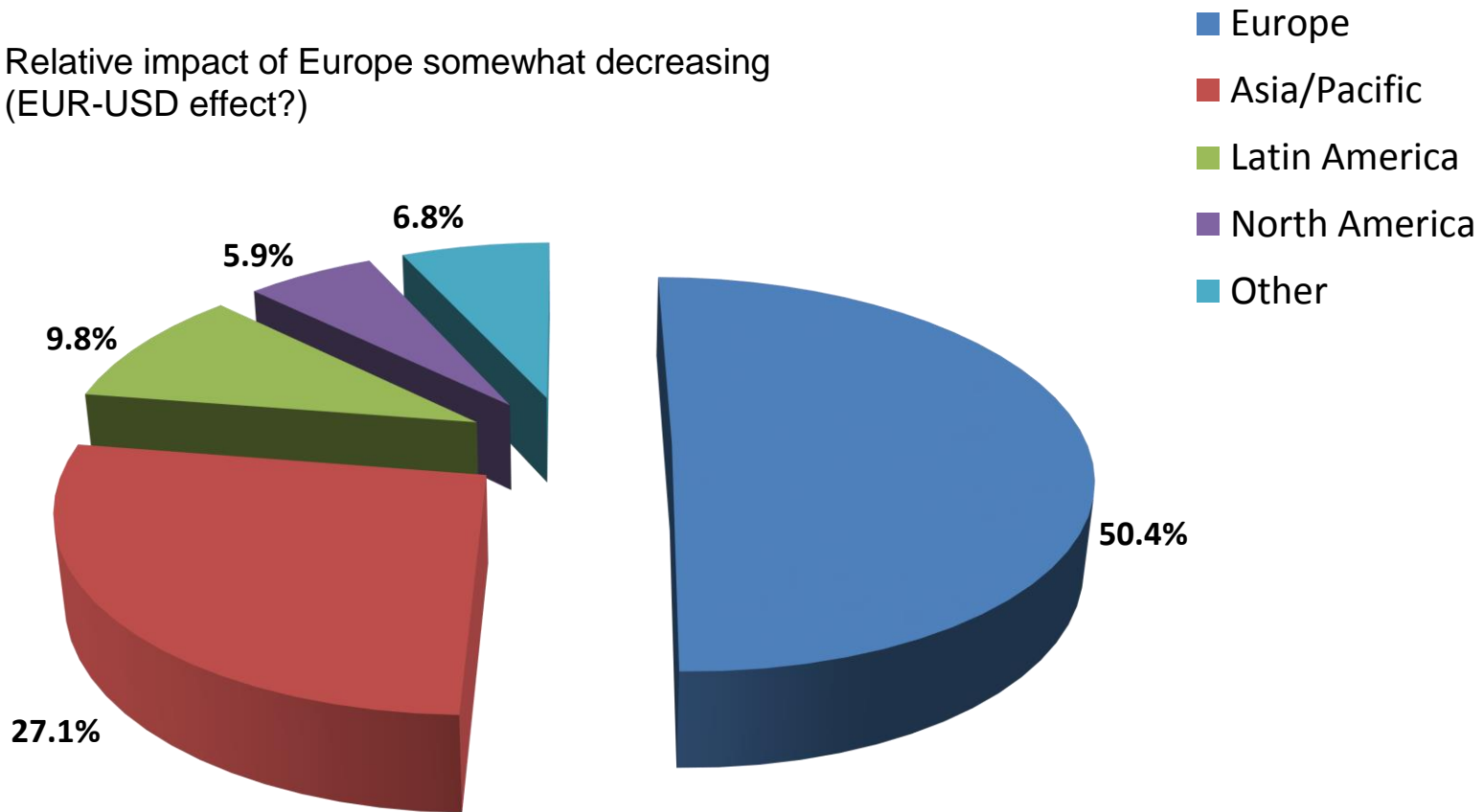
Total: 29.9 USD billion / Change 2014 to 2015: -10.5%

NB: Strong USD «reduces» premium in USD as compared to local currency!



MARINE PREMIUM 2015 BY REGION

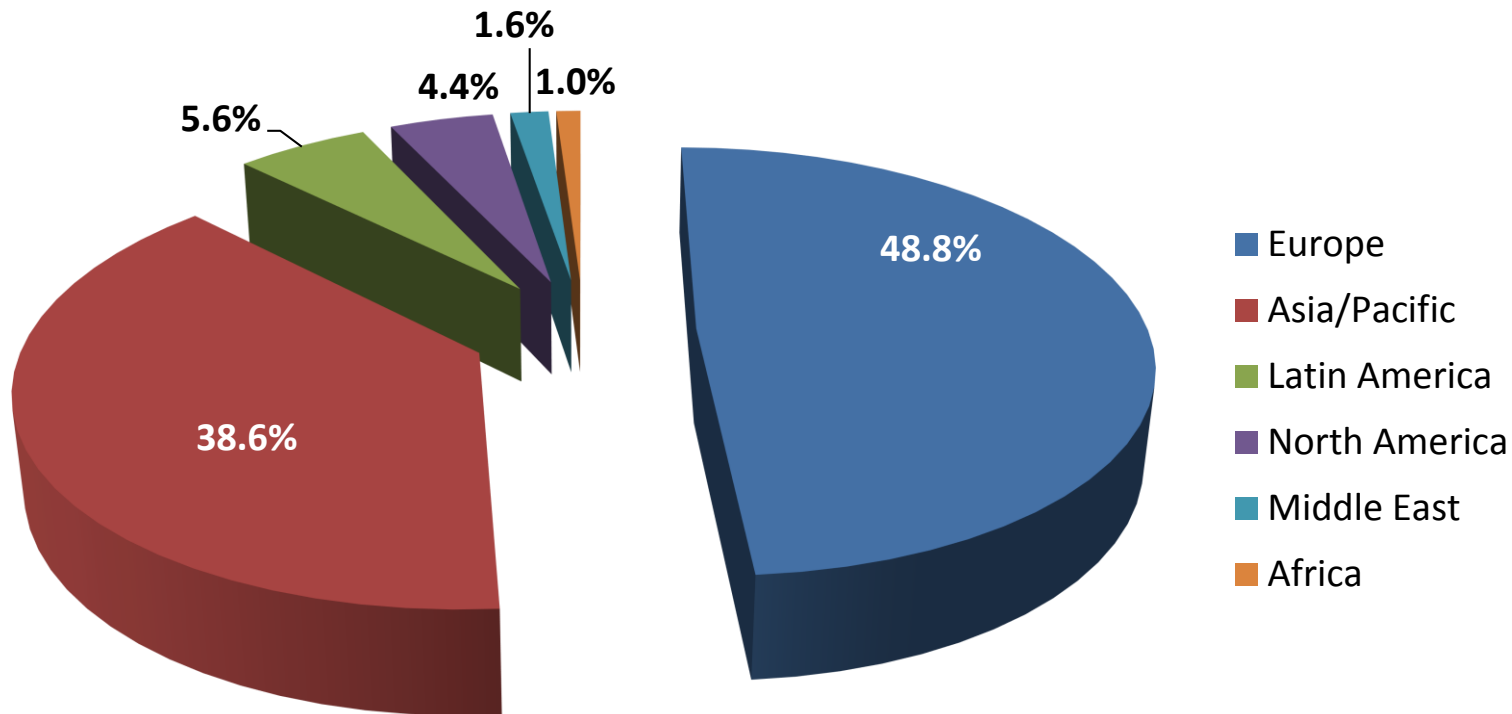
Relative impact of Europe somewhat decreasing
(EUR-USD effect?)



Total: 29.9 USD billion

HULL PREMIUM 2015 – BY REGION

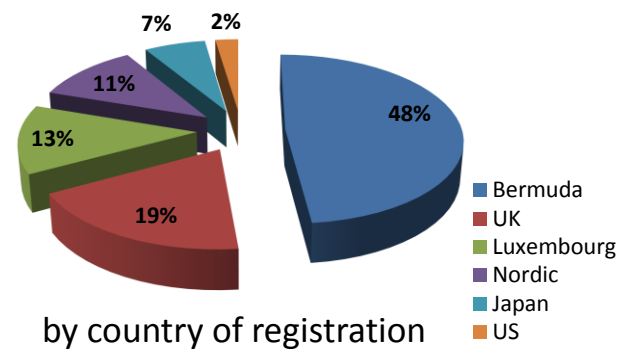
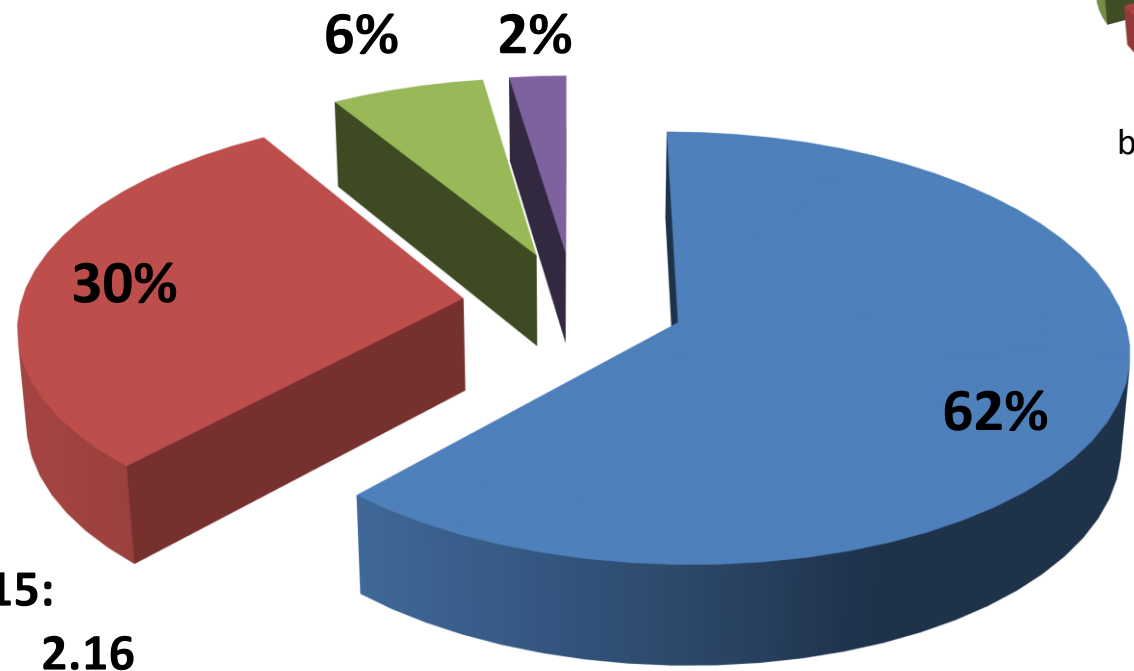
Total: 7.5 USD billion / Change 2014 to 2015: -8.4%



P&I CLUBS INTERNATIONAL GROUP

PROTECTION & INDEMNITY = SHIPOWNERS' LIABILITY

GROSS CALLS (PREMIUM) 2015 – OPERATIONAL LOCATION



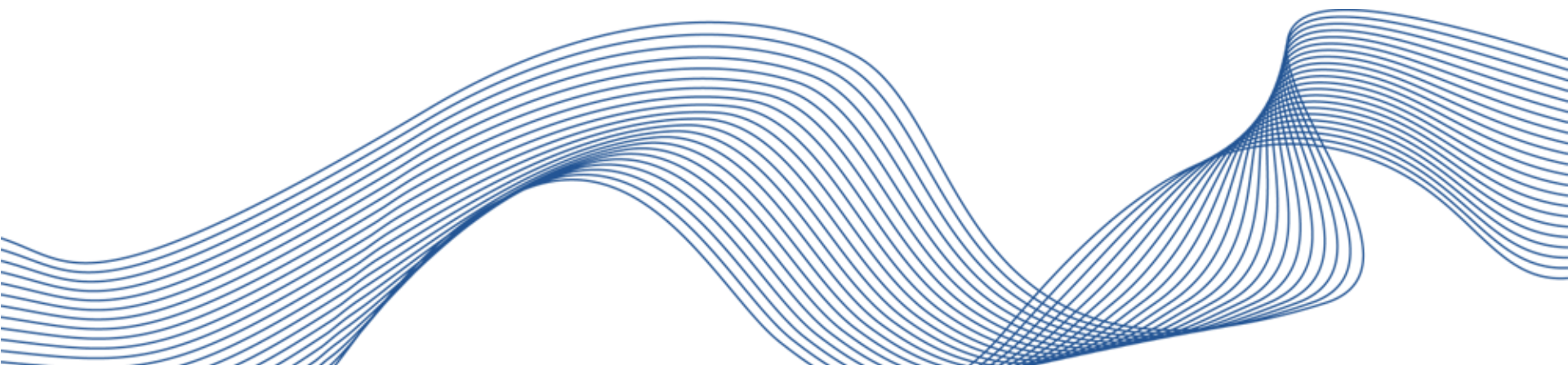
Calls 2015:

UK:	2.16
Nordic:	1.03
Japan:	0.22
US:	0.08
Total:	3.50 (USD billion)

- UK
- Nordic
- Japan
- US

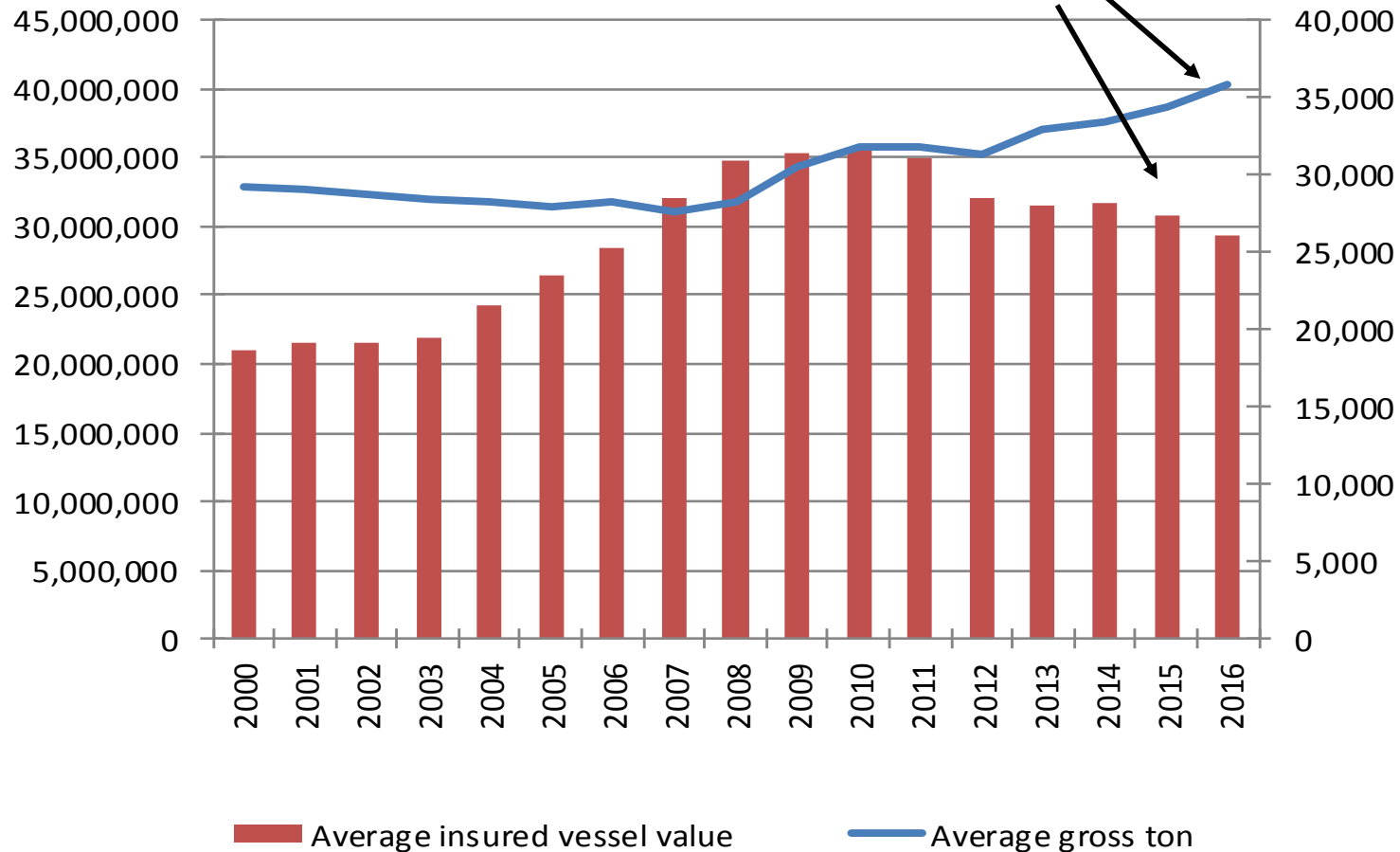


VESSEL VALUES



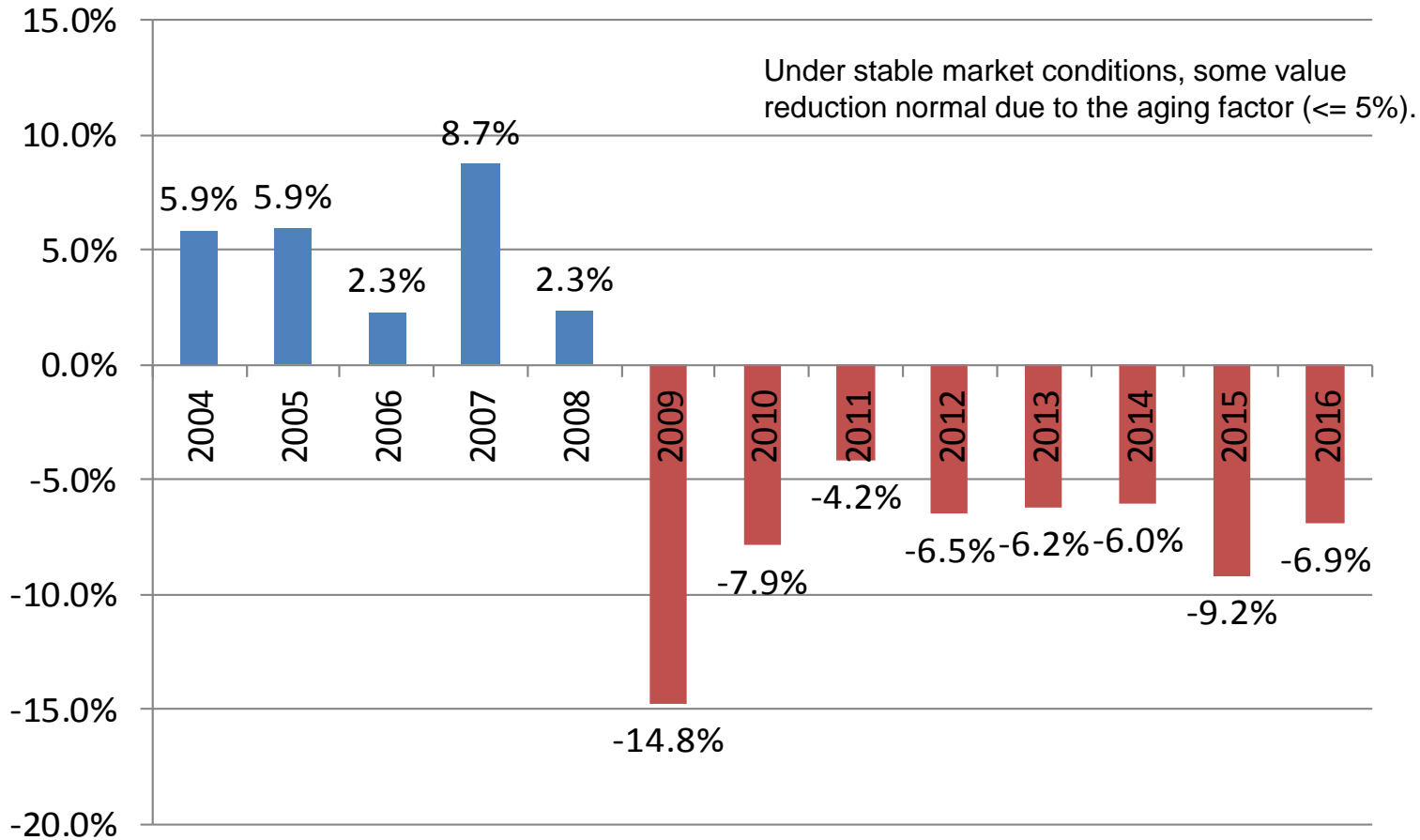
AVERAGE GROSS TON & VESSEL VALUE

Decrease in av. vessel values despite
increase in av. vessel size

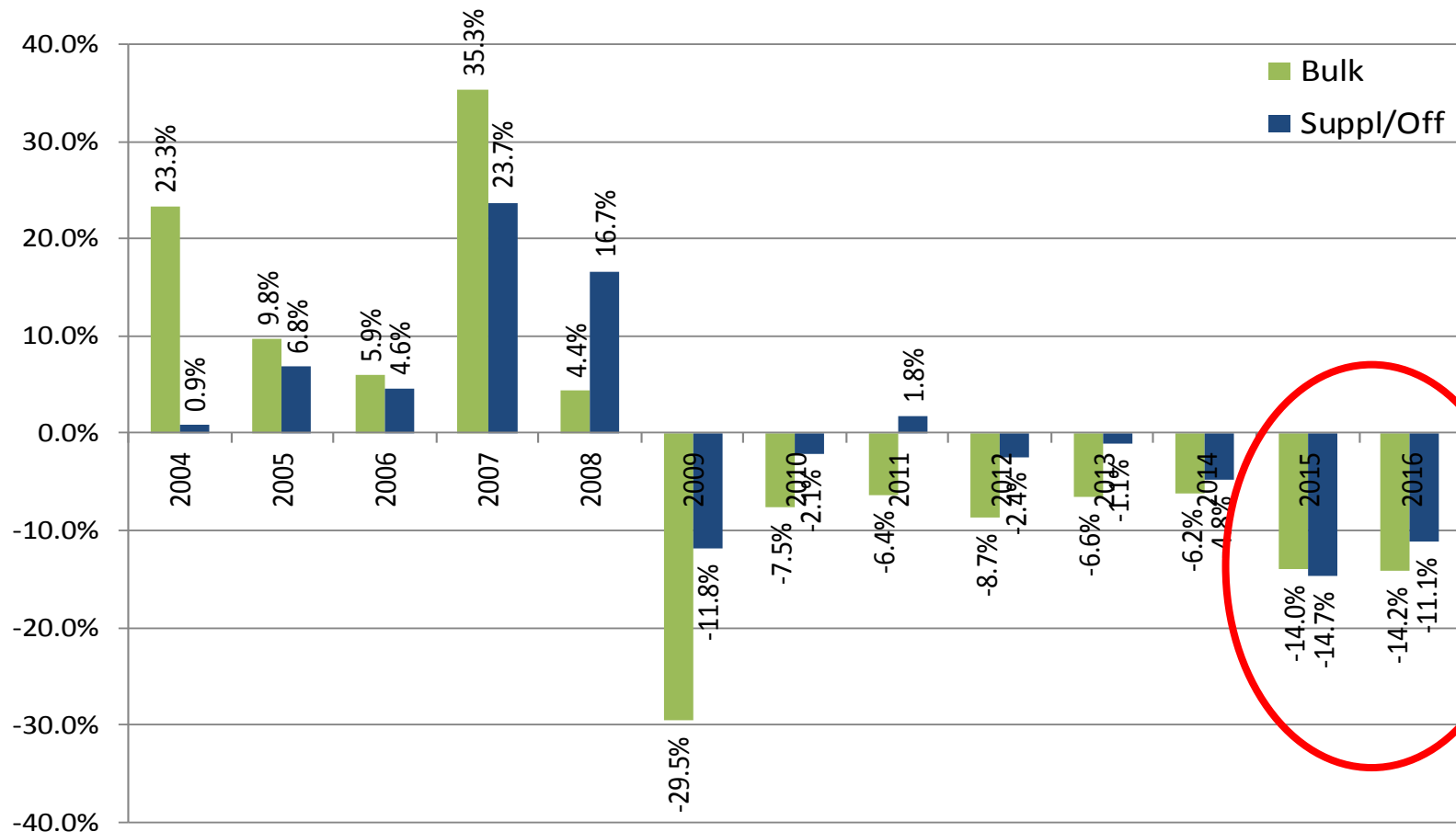


CHANGE IN VALUES – ALL VESSELS

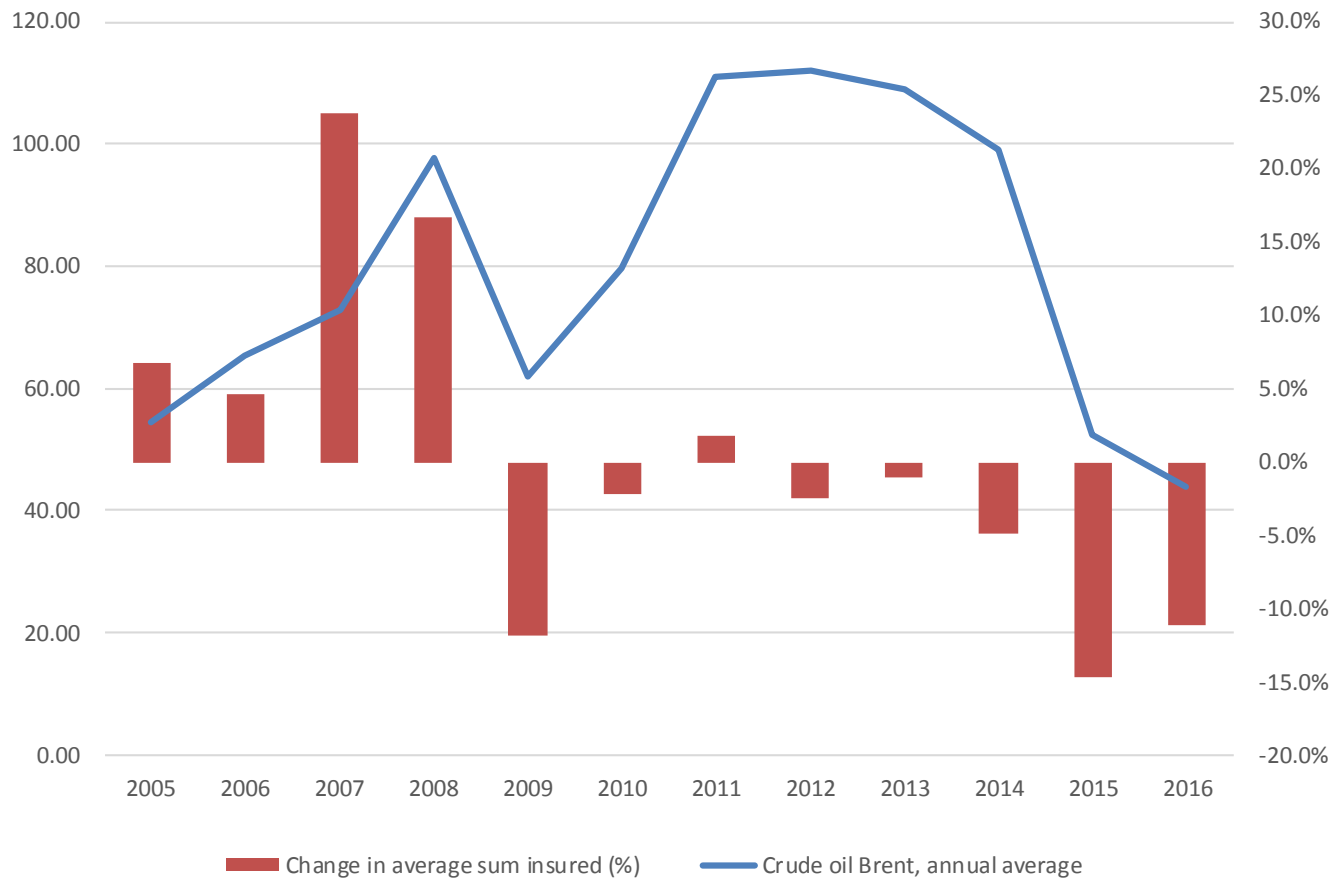
COMPARING INSURED VALUE OF SAME VESSELS IN TWO CONSECUTIVE YEARS



BULK, SUPPLY/ OFFSHORE: STRONG DROP IN VALUES

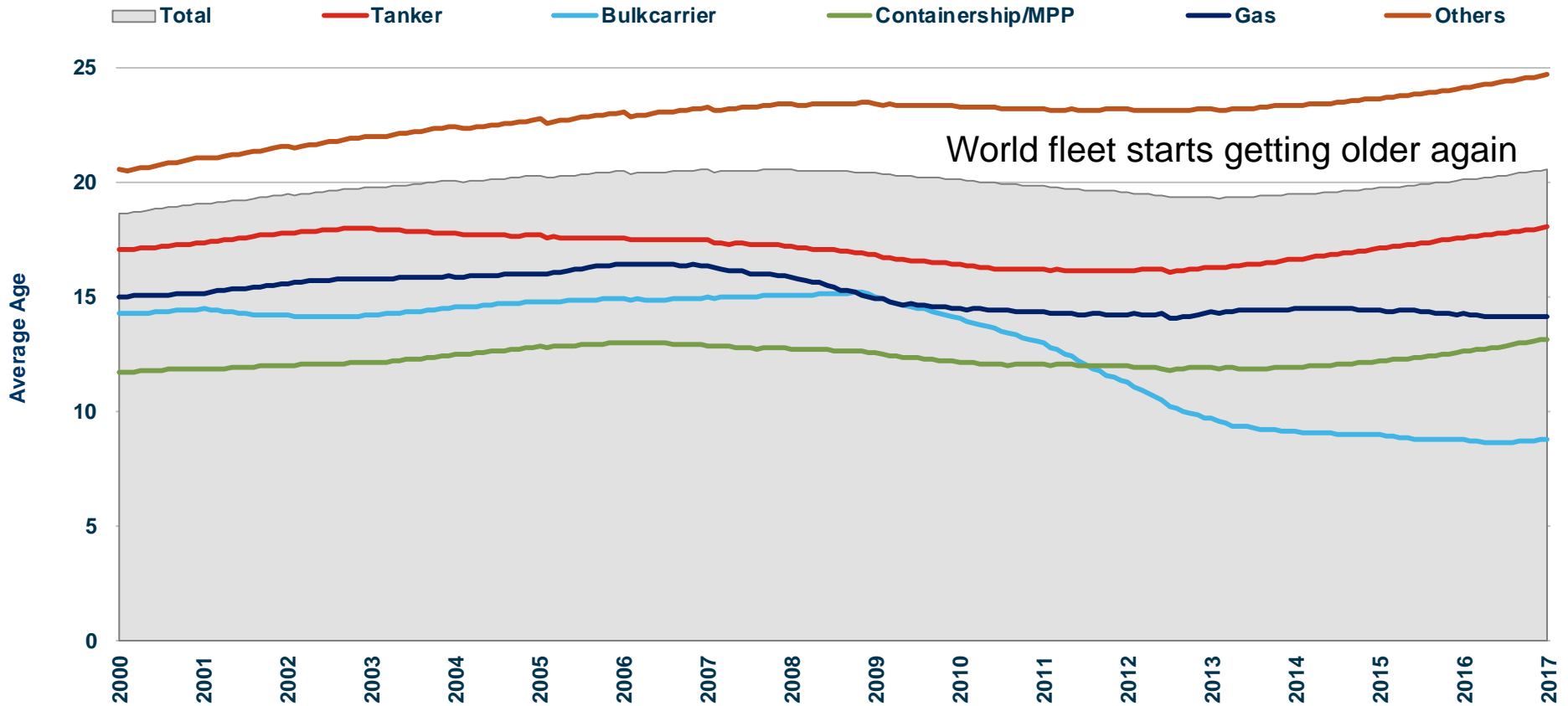


OFFSHORE VESSEL VALUES & OIL PRICE



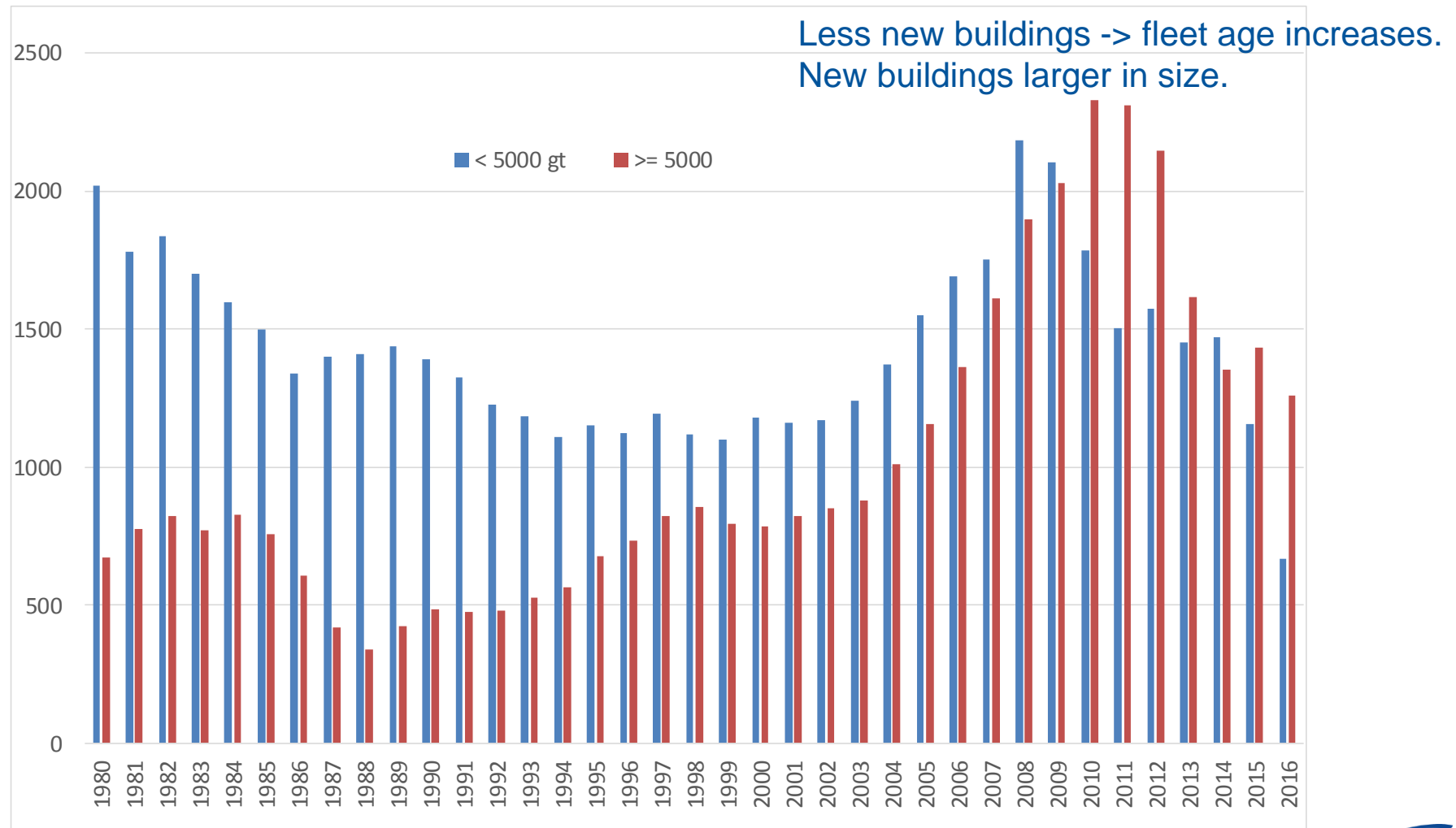
WORLD FLEET – AVERAGE AGE

VESSELS > 100 GT



NEWBUILDINGS WORLD FLEET

LESS THAN AND ABOVE 5,000 GROSS TON

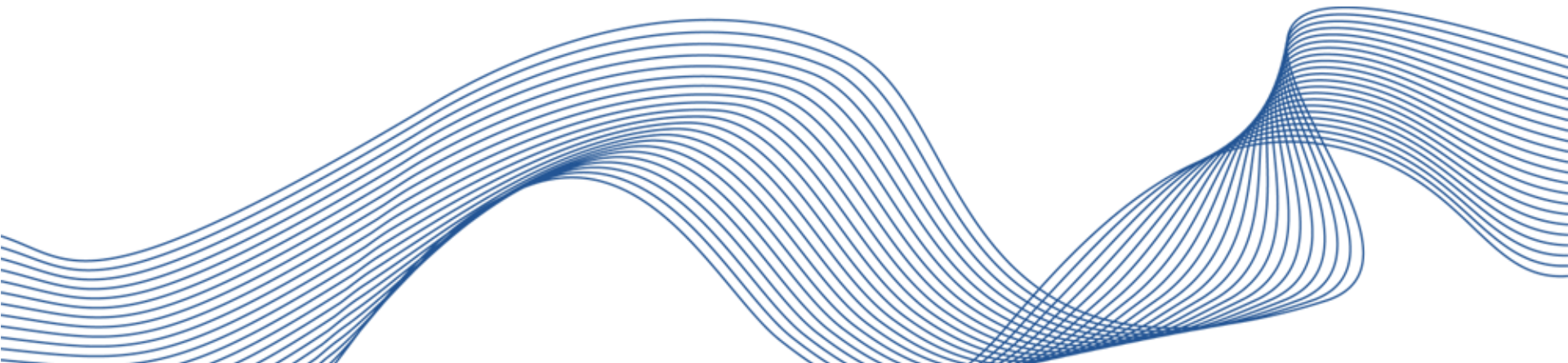


No claim – just a matter of perspective!



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CASUALTY TRENDS



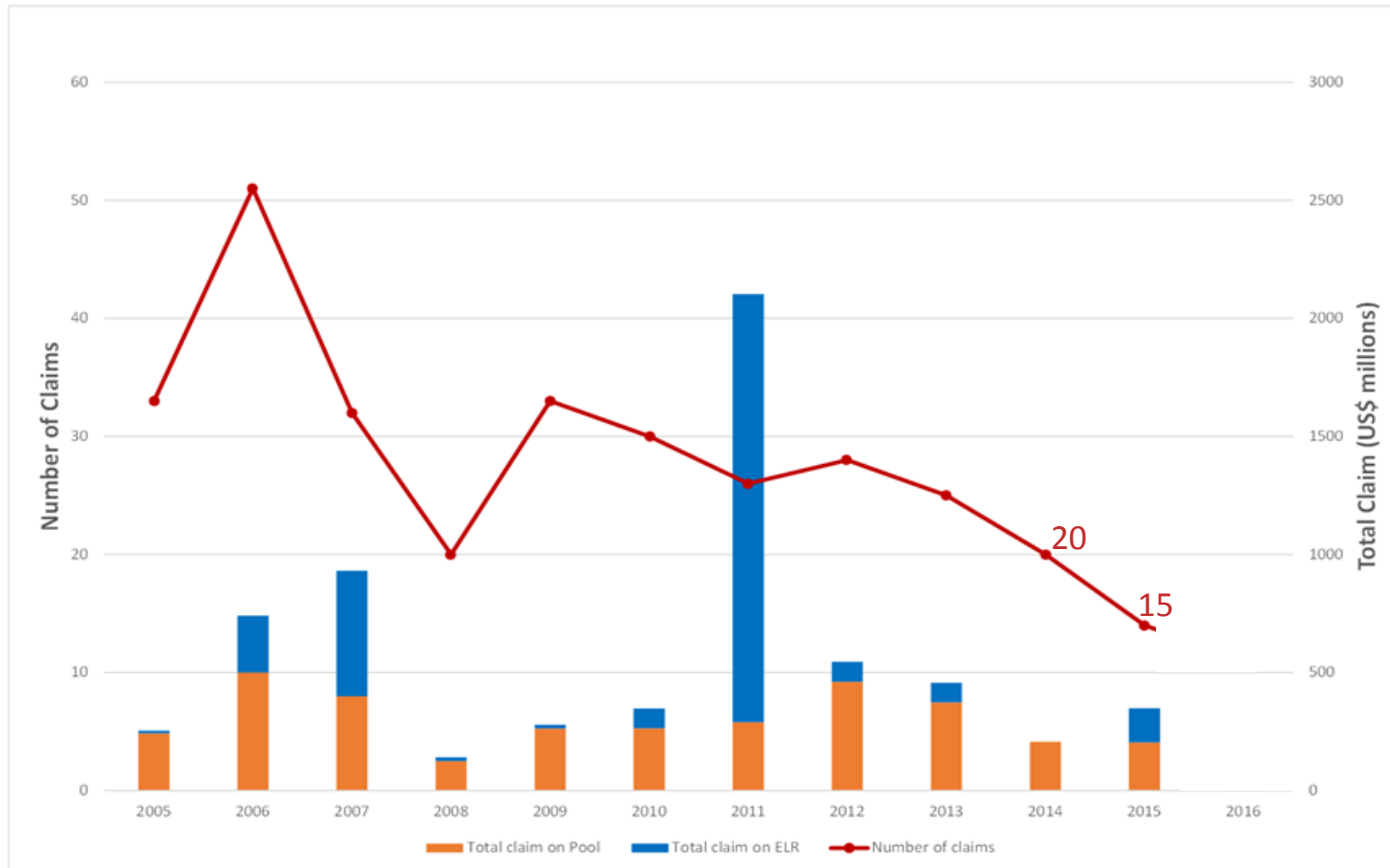
TYPES OF (INSURED) CASUALTIES

- Physical damage – vessels, offshore energy units, cargo
- Third party liability
 - To object e.g. collision
 - People (passengers, crew)
 - Environmental damage (e.g. oil spill)
- Loss of income
- Terror etc.

P&I POOL CLAIMS BY POLICY YEAR

= SHIPOWNERS' LIABILITY CLAIMS

No. of claims in 2015/16 policy year below five-year average of 23 claims per year.
 Claims frequency and severity likely to be well below the peak years of 2006 and 2011.



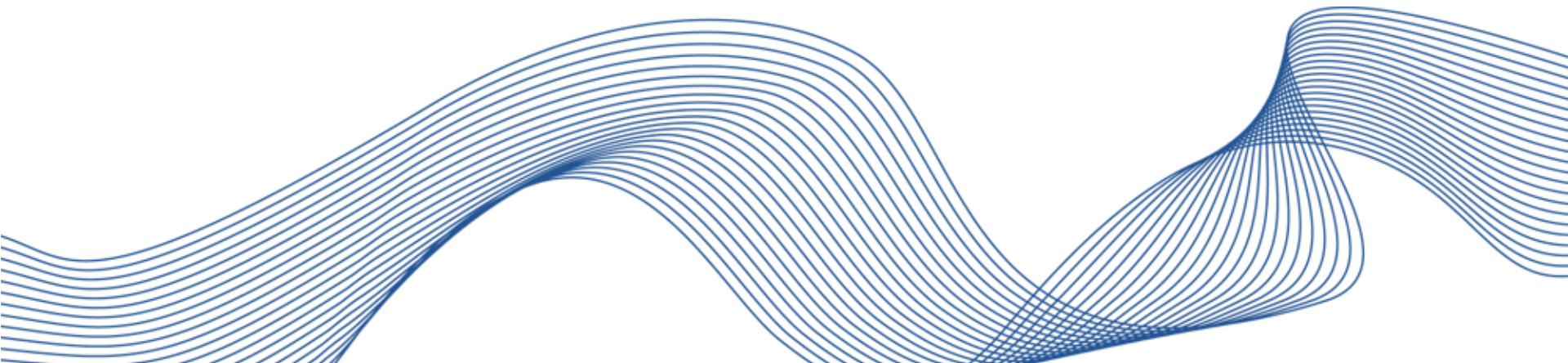
Source: IG P&I Annual Review 2015/2016



Read this to understand complexity of exposure under P&I liability!



OFFSHORE ENERGY CLAIMS TRENDS – MOBILES

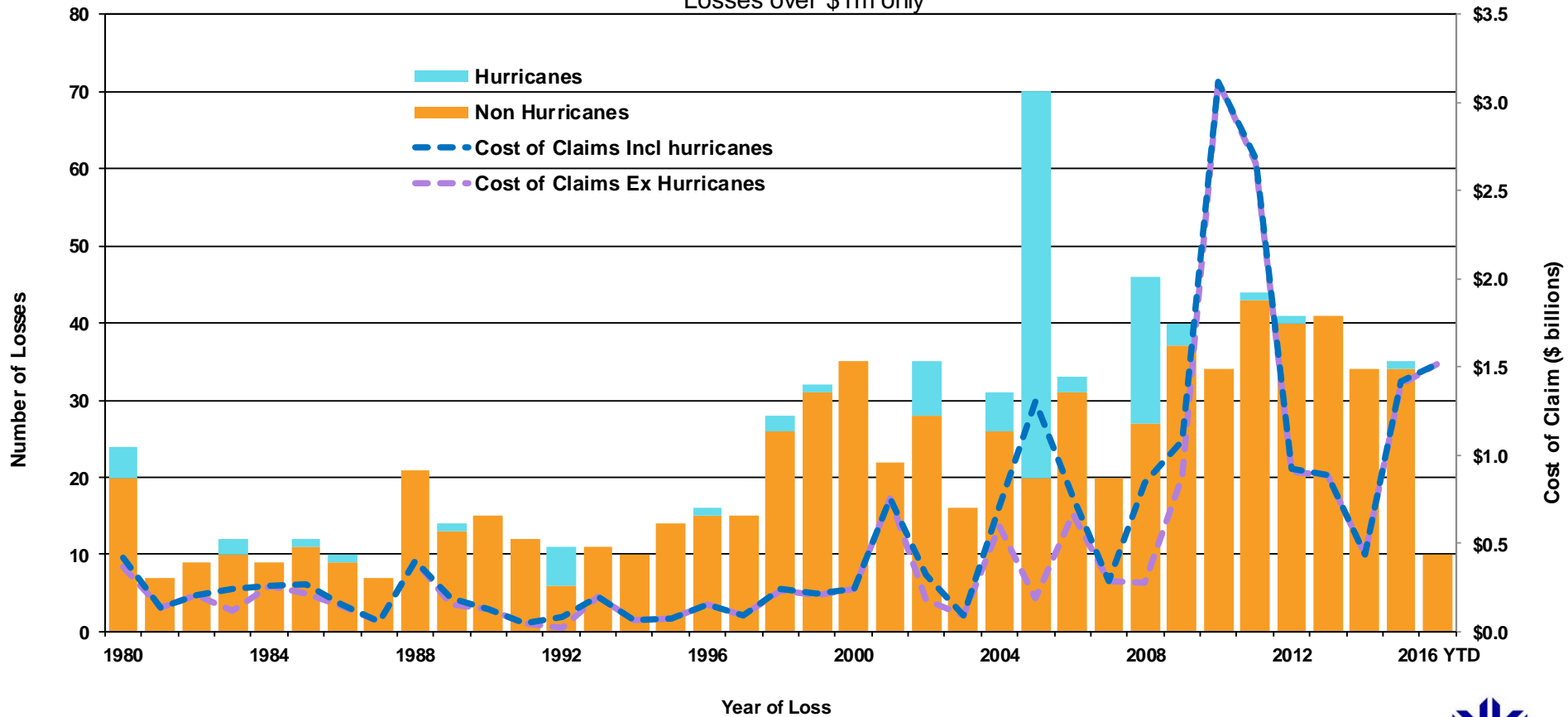


NUMBER AND COST OF LOSSES – MOBILES

LOSSES > 1 USD MILLION

Mobiles - Number of Losses by Size

Losses over \$1m only



Data Source: Willis Claims Database

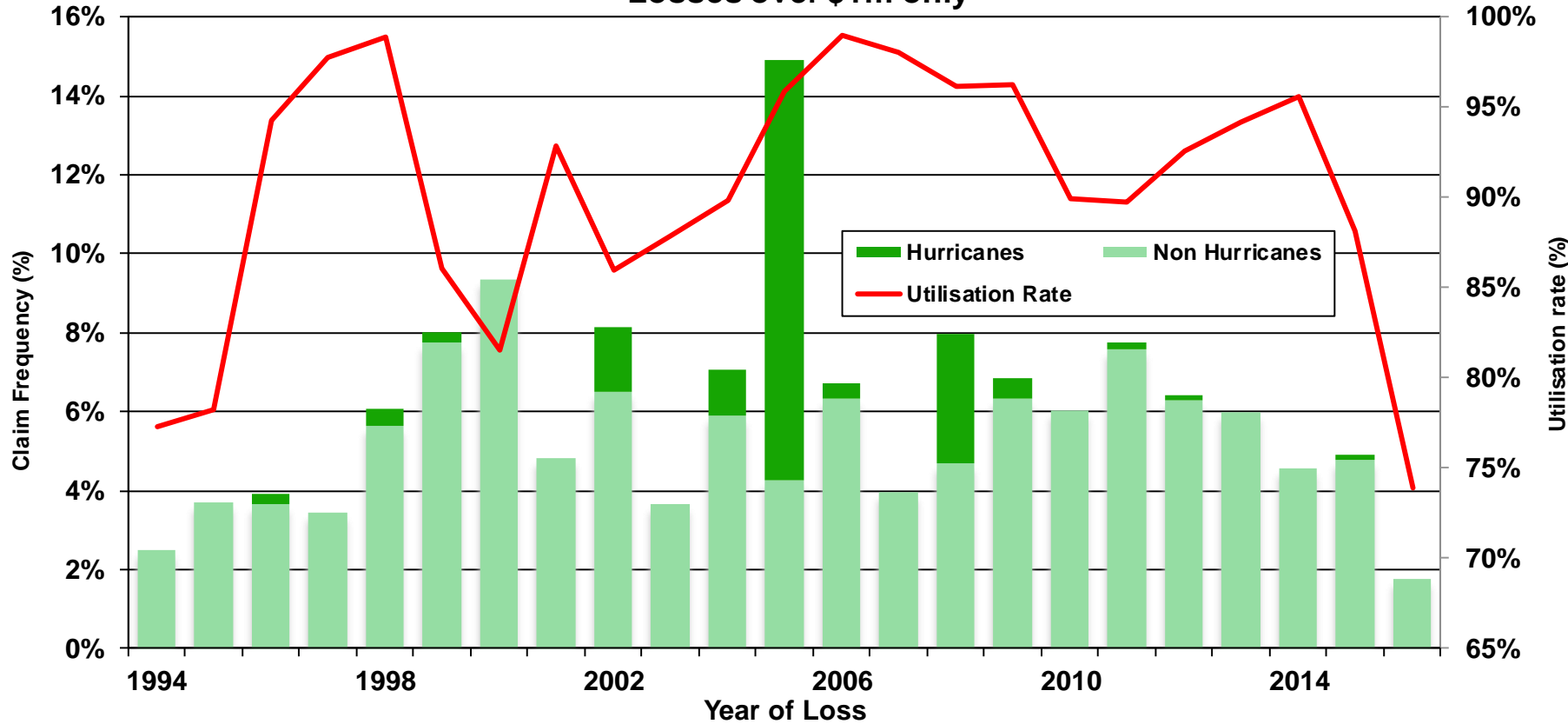


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CLAIMS FREQUENCY VERSUS UTILISATION RATE

AS A RATIO OF CONTRACTED RIGS

**Mobiles - Claims Frequency as % of Contracted Rigs by Cause
Losses over \$1m only**

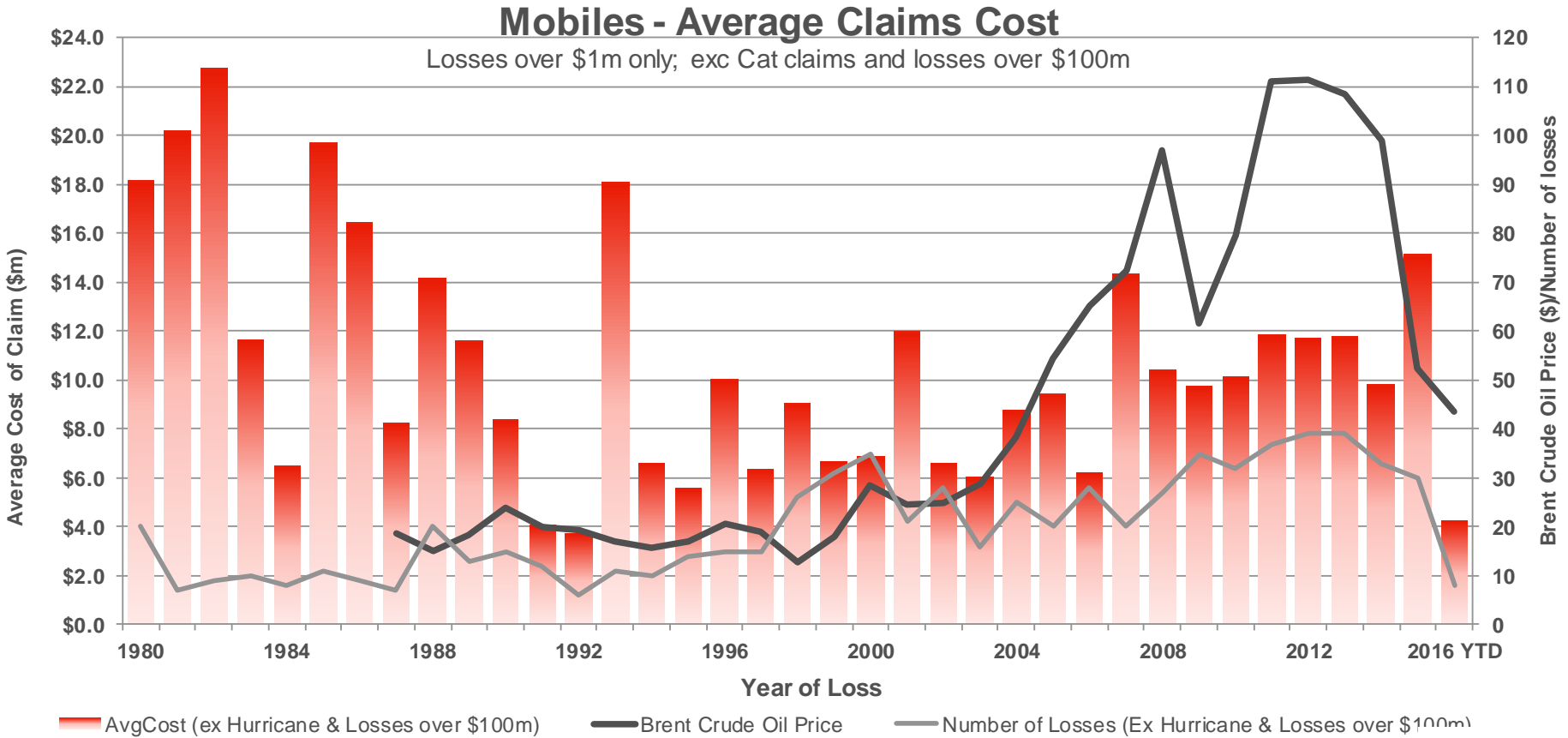


Data Source: Willis Claims database, Clarksons Research, Energy Information Association



IUMI

AVERAGE CLAIMS COST VERSUS OIL PRICE AND NUMBER OF LOSSES

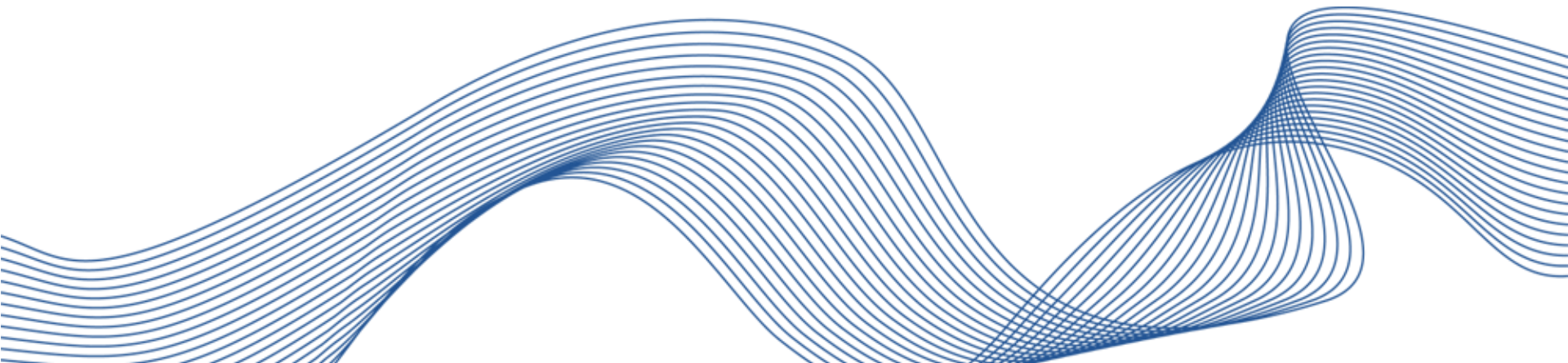


Data Source: Willis Claims Database



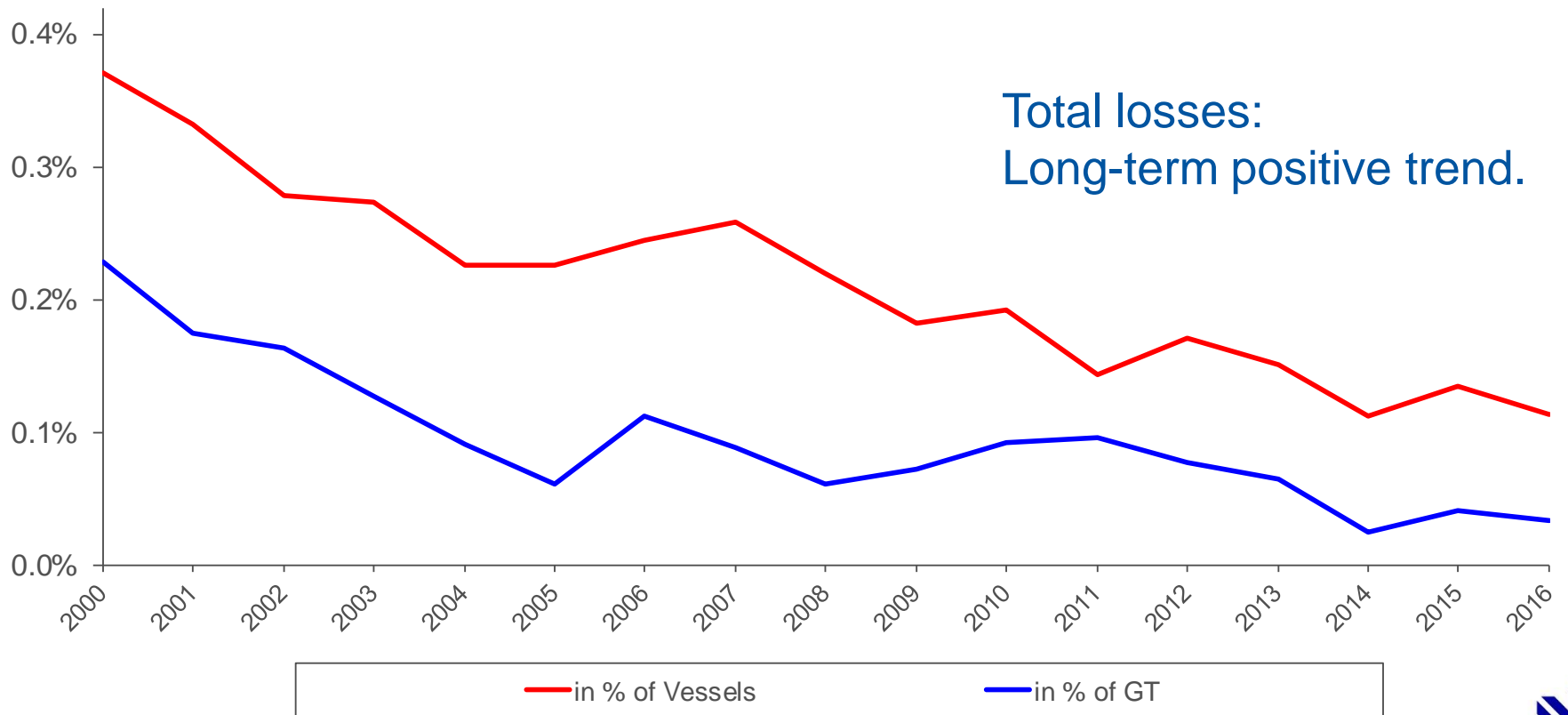
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HULL CASUALTY TRENDS – FREQUENCY



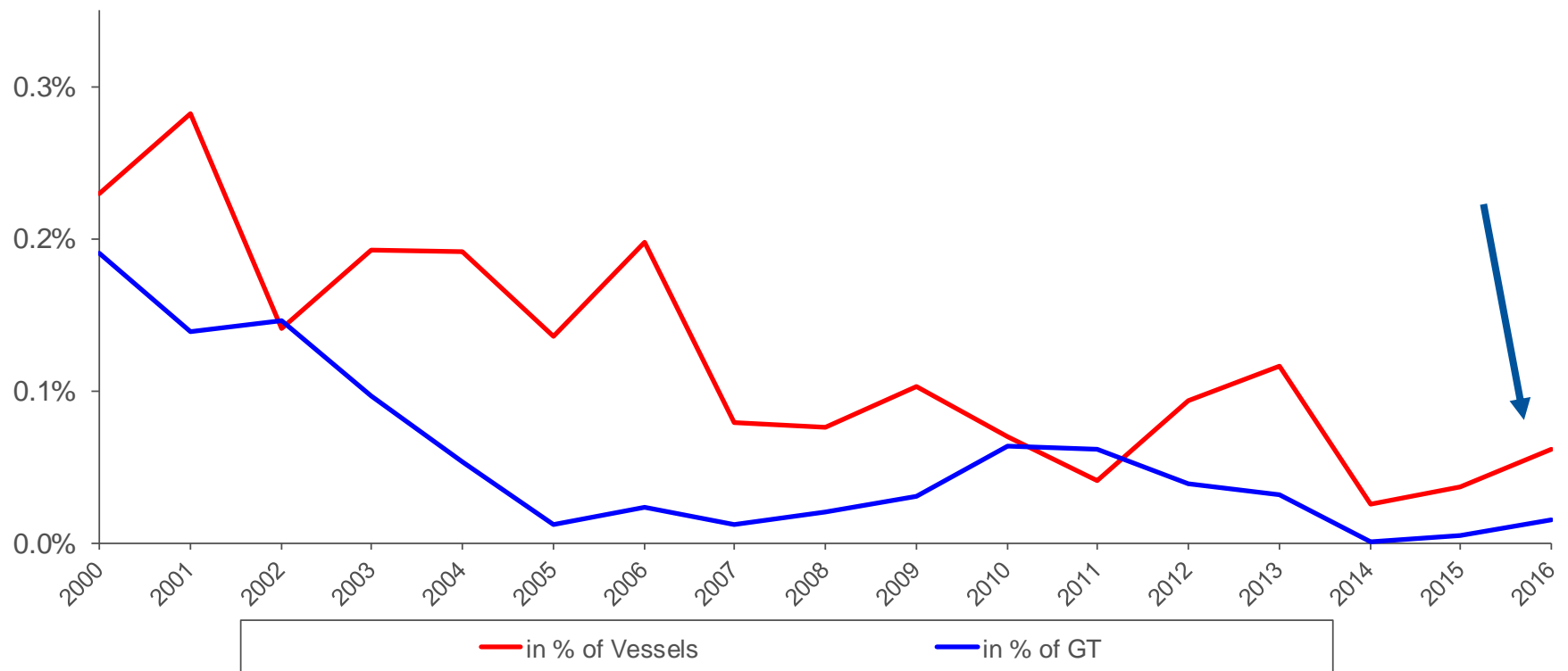
TOTAL LOSSES 2000-2016 (LLI)

AS % OF WORLD FLEET, VESSELS > 500 GT



TANKER TOTAL LOSSES 2000-2016 (LLI)

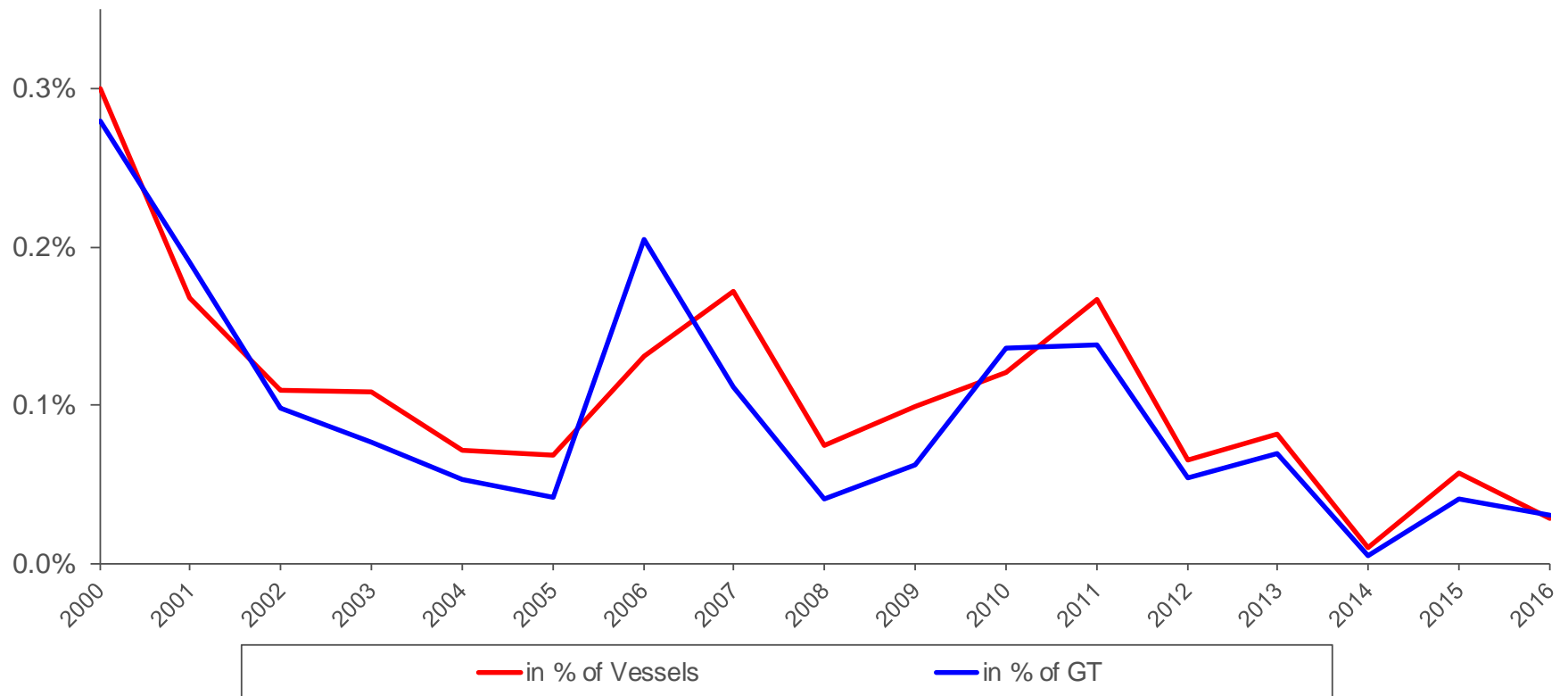
AS % OF WORLD TANKER FLEET, TANKERS > 500 GT



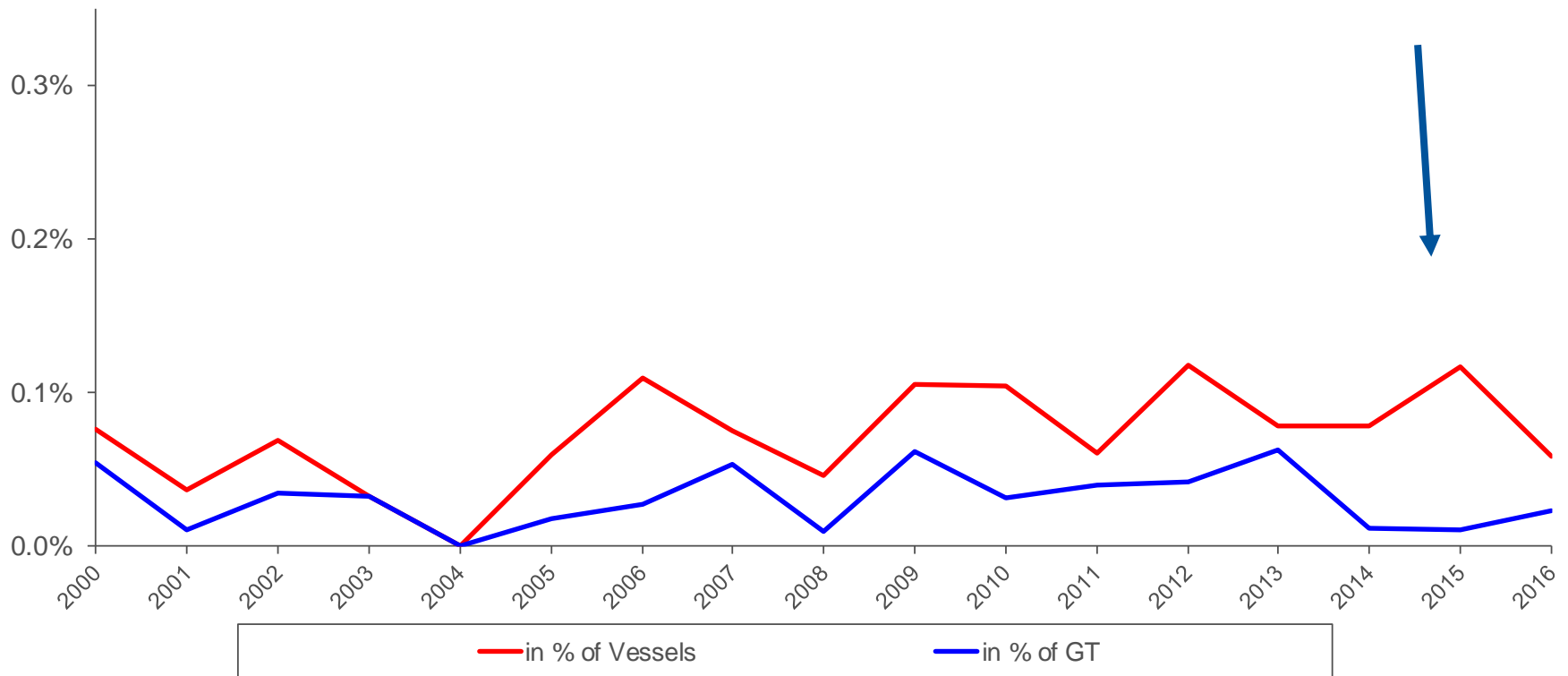
IUMI

BULKER TOTAL LOSSES 2000-2016 (LLI)

AS % OF WORLD BULKER FLEET, BULKERS > 10,000 DWT



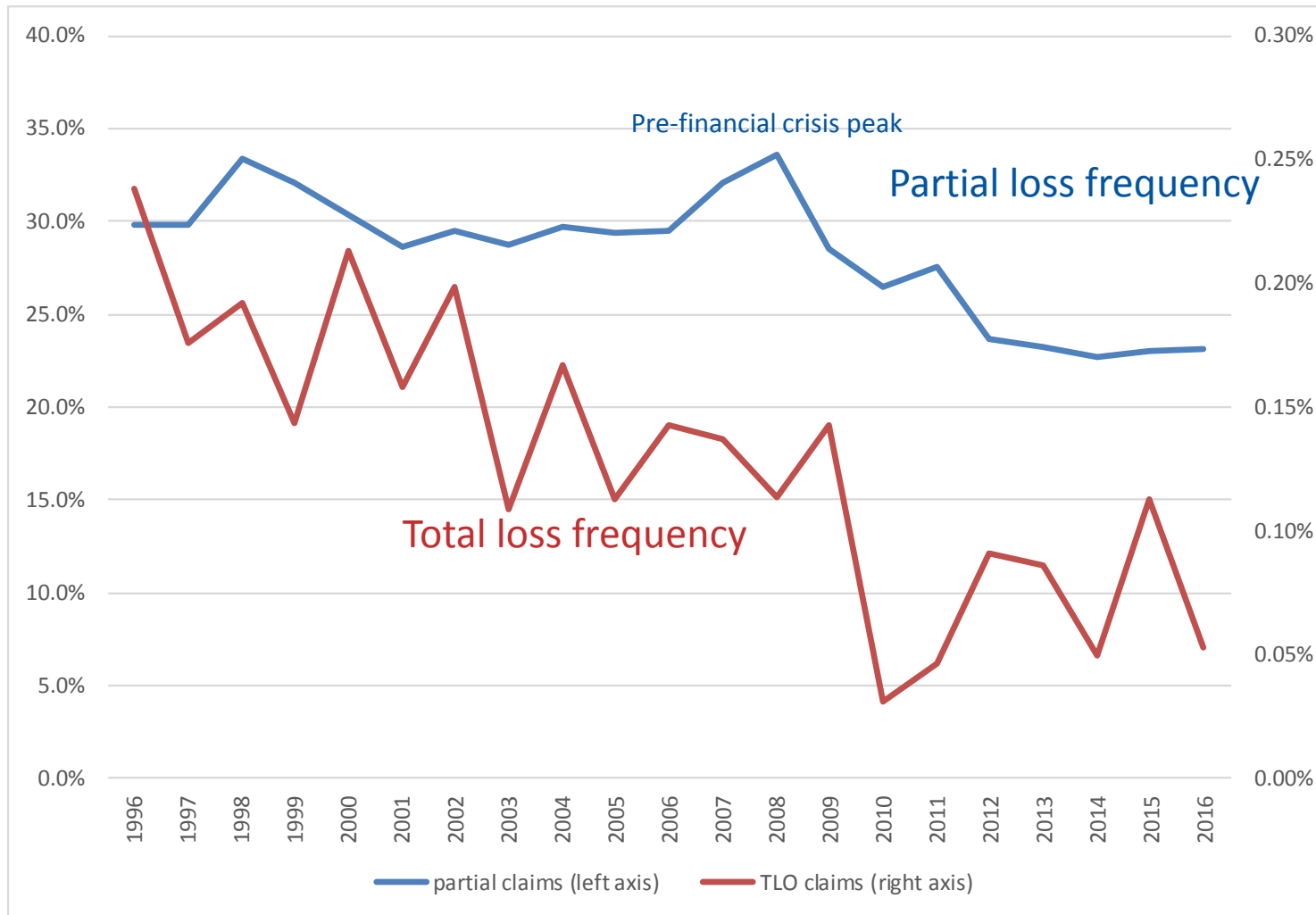
CONTAINER TOTAL LOSSES 2000-2016 (LLI) AS % OF WORLD CONTAINER FLEET



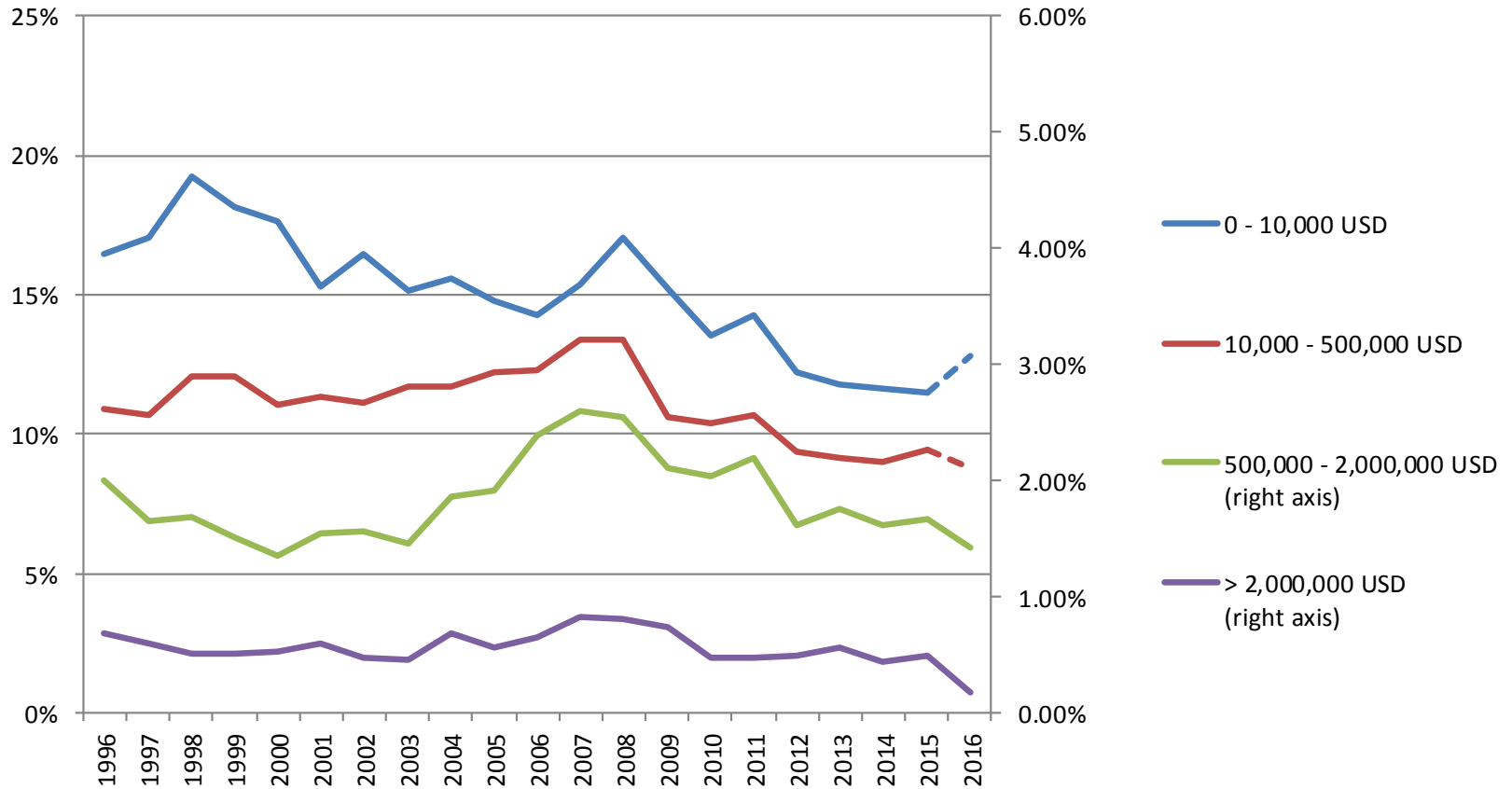
IUMI

CLAIMS FREQUENCY* (NOMIS): LONG-TERM POSITIVE TREND

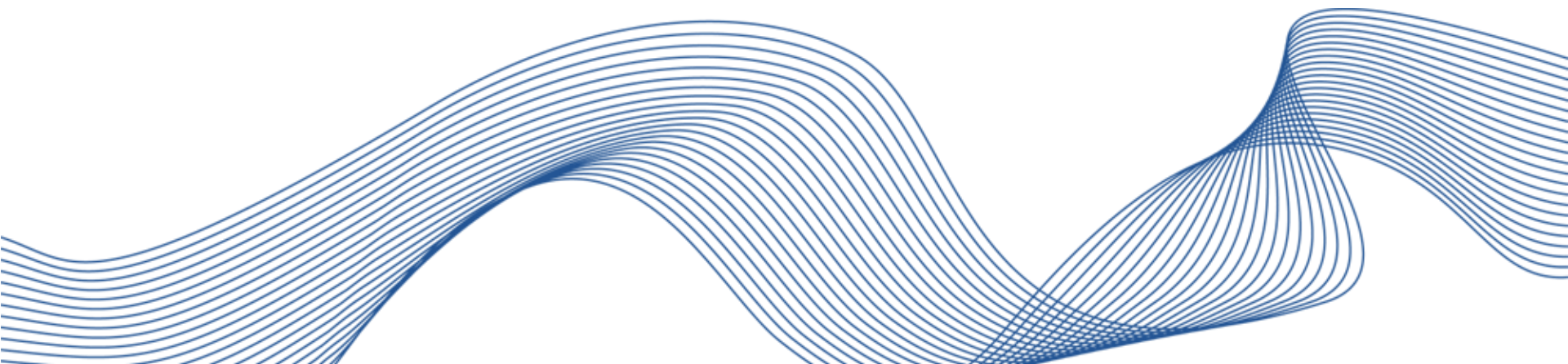
* = No. of claims divided by no. of insured vessels



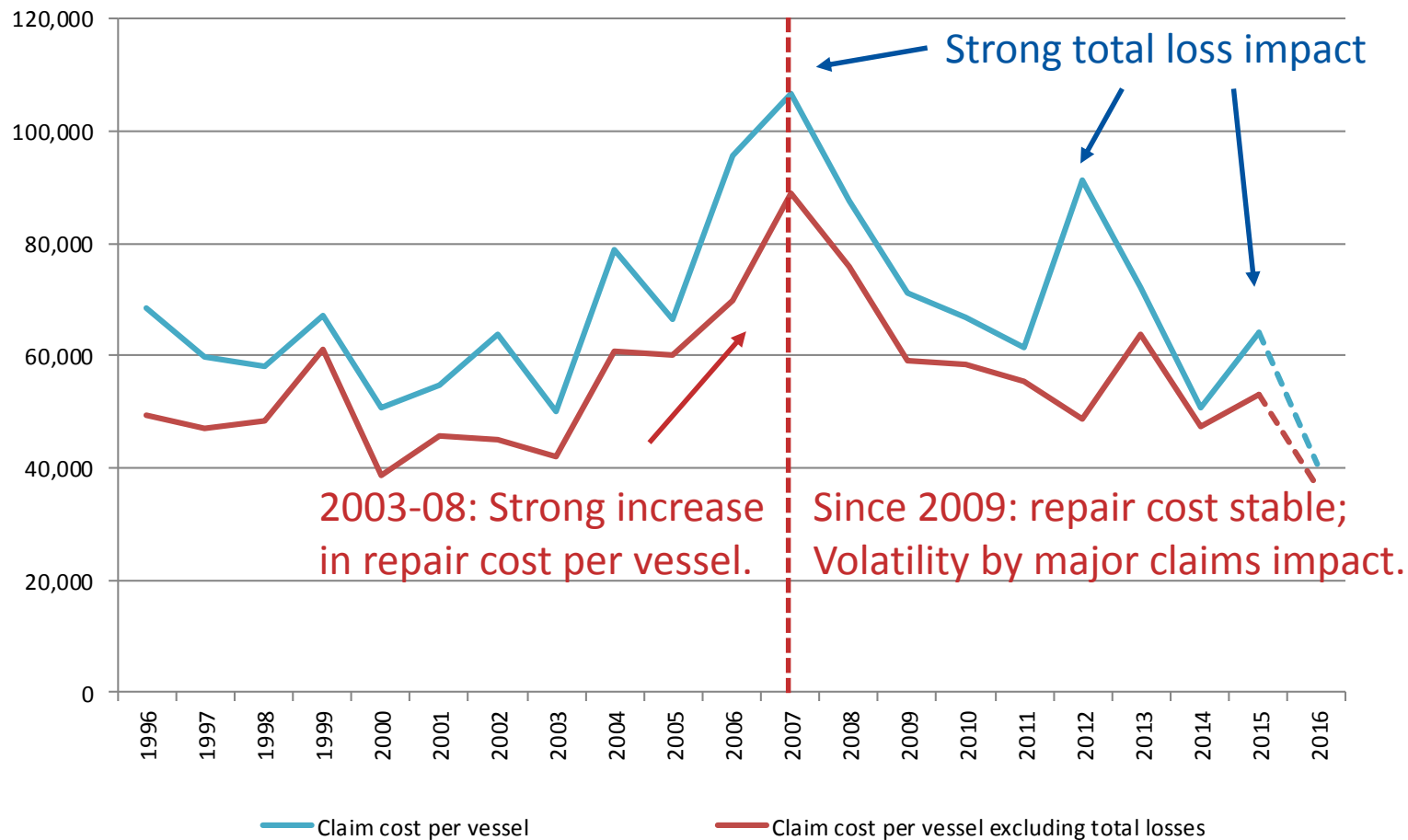
CLAIMS FREQUENCY > CERTAIN COST LEVELS: STABLE TO POSITIVE TREND



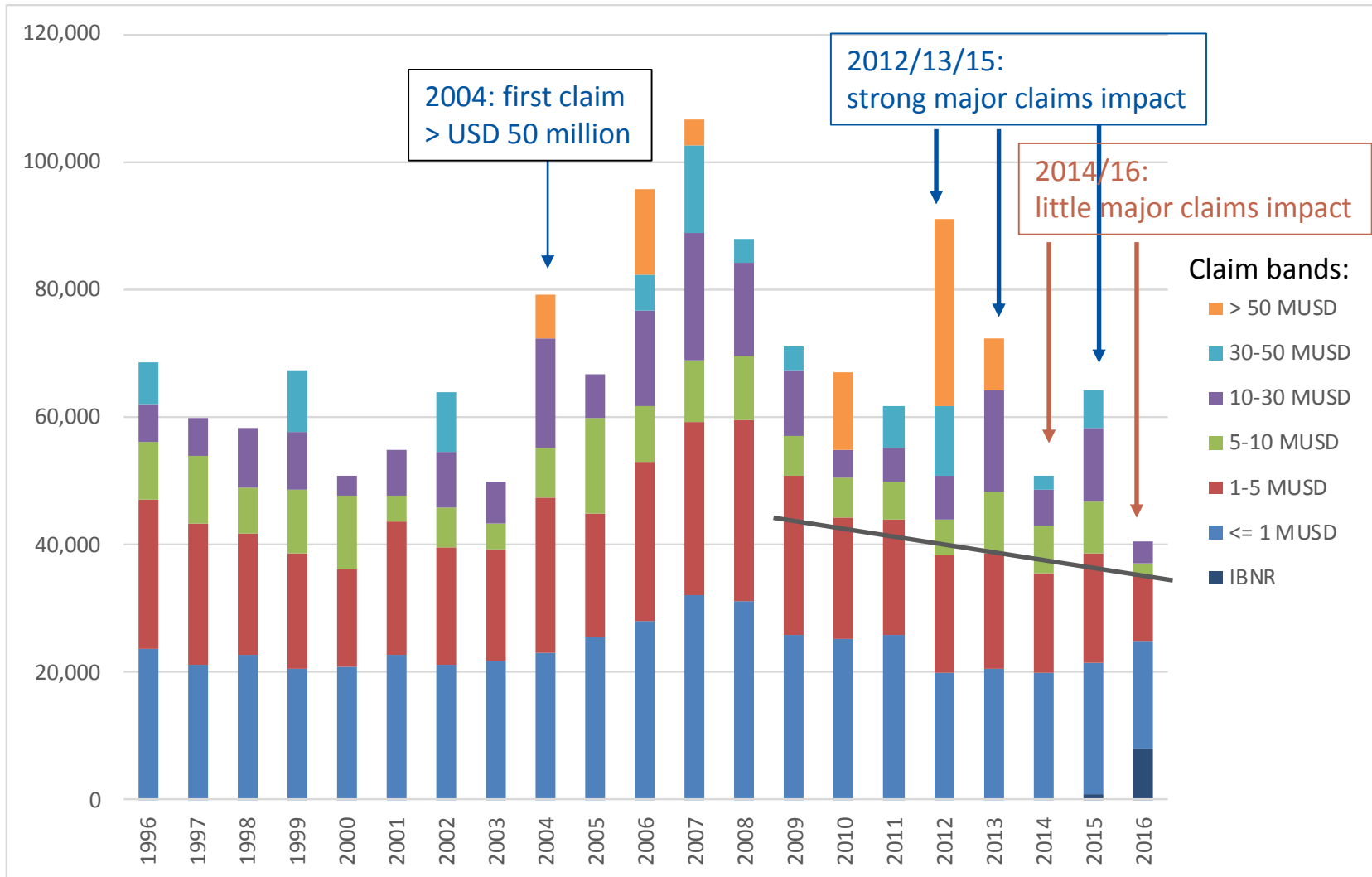
HULL CASUALTY TRENDS – COST



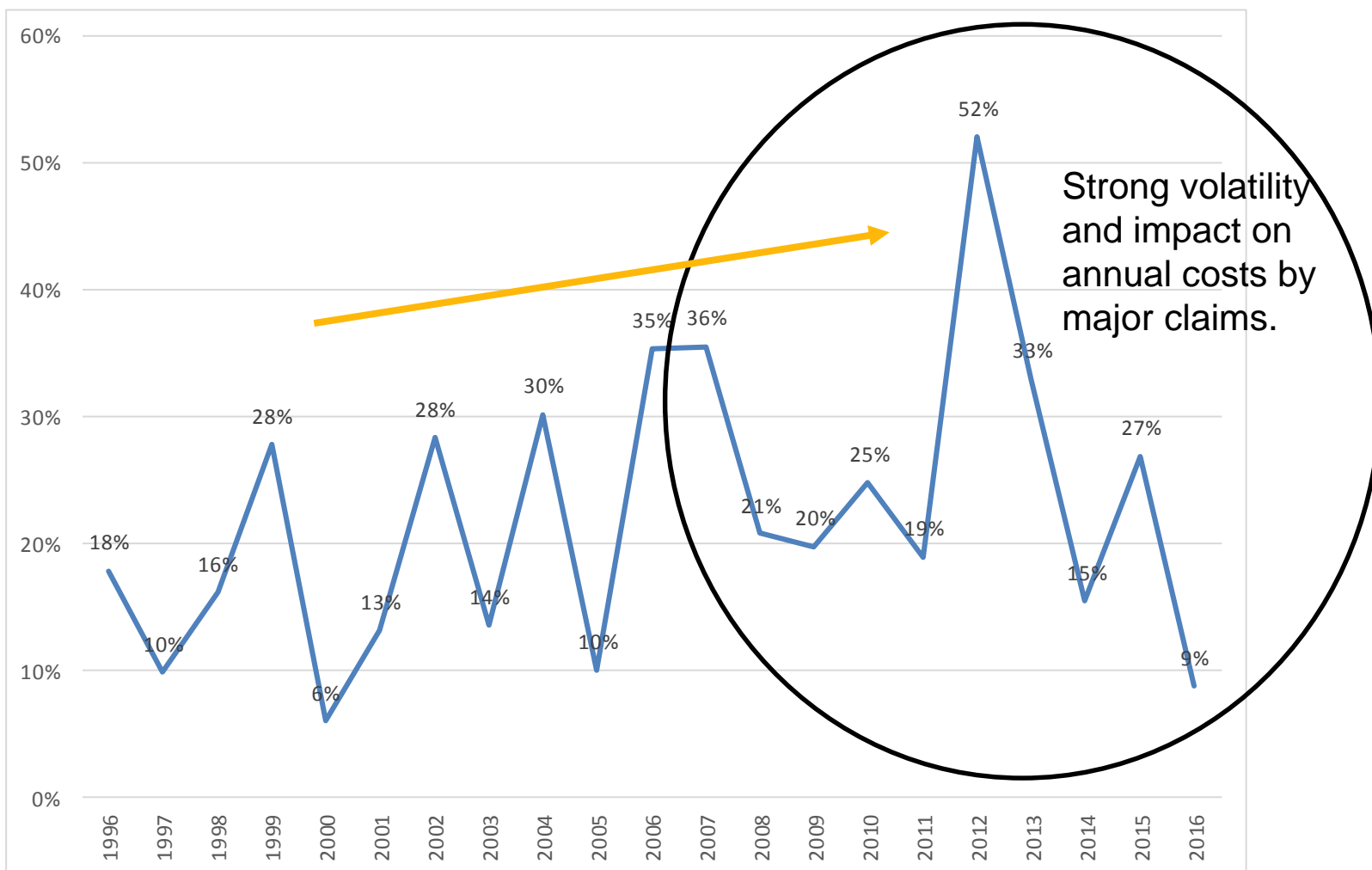
CLAIM COST PER VESSEL – INCLUDING/EXCLUDING TOTAL LOSSES



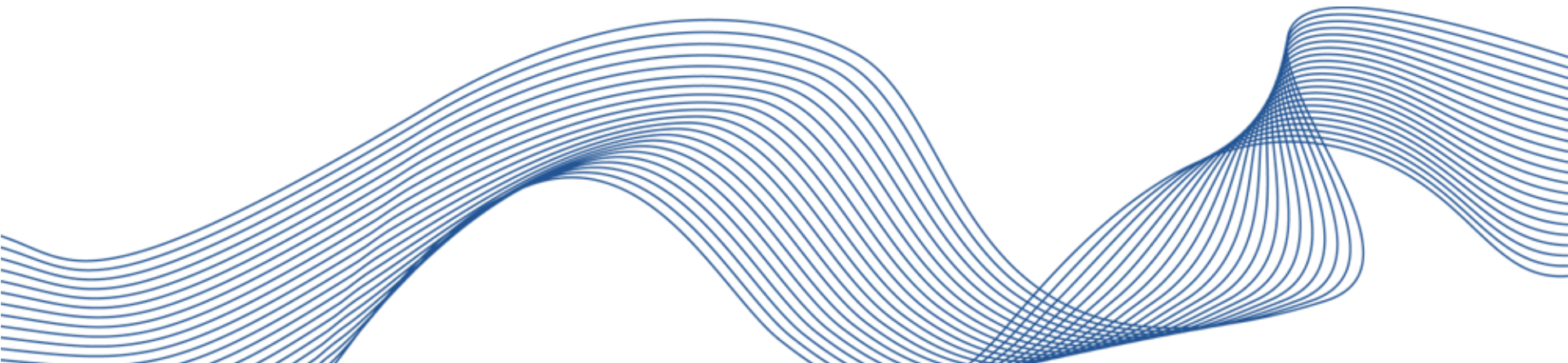
CLAIM COST PER VESSEL: INCREASING VOLATILITY BY MAJOR CLAIMS



CLAIMS EXCEEDING 10 USD MILLION AS % OF TOTAL CLAIM COST



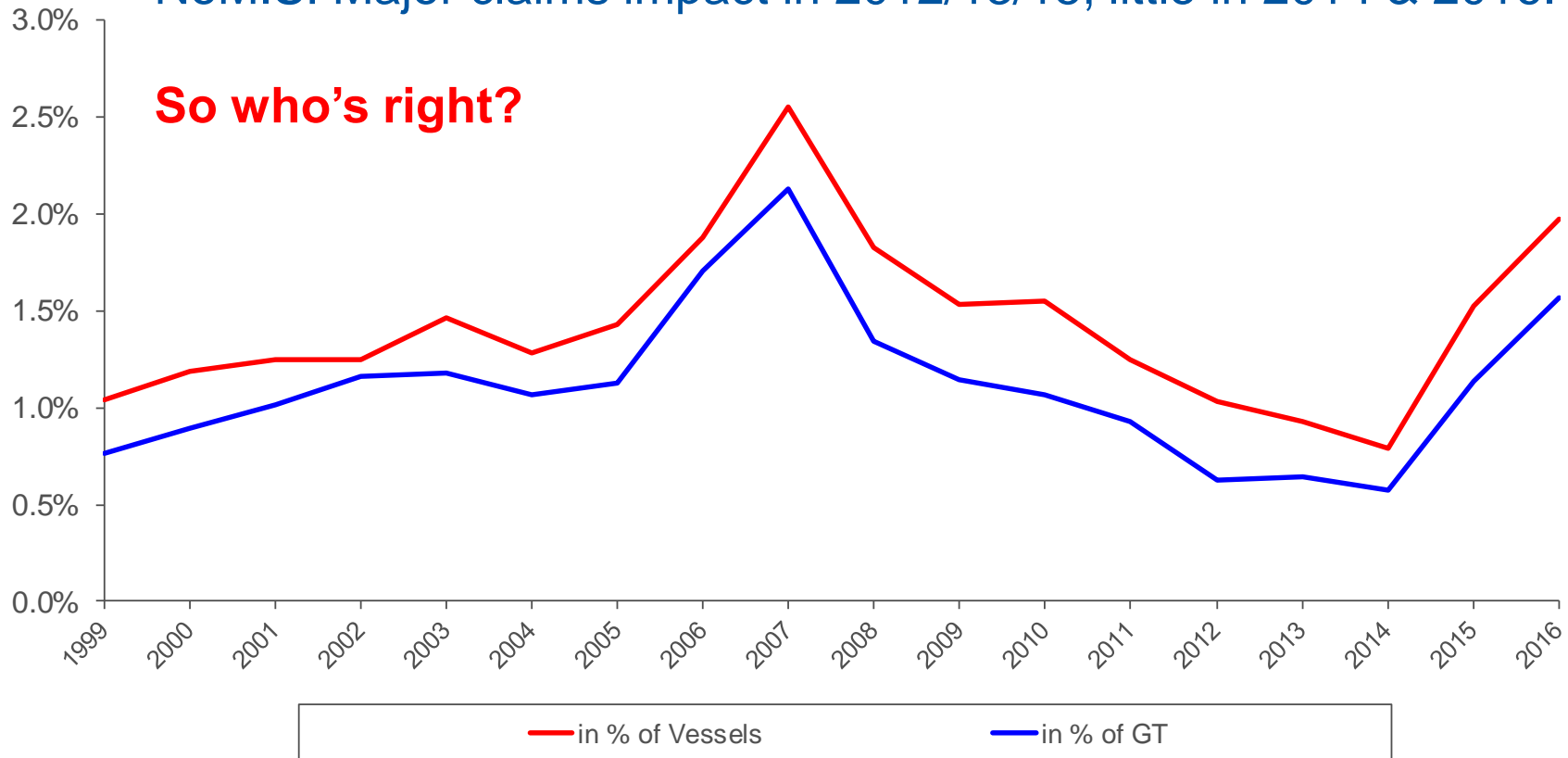
CLAIMS FREQUENCY – ALTERNATIVE FACTS (?)



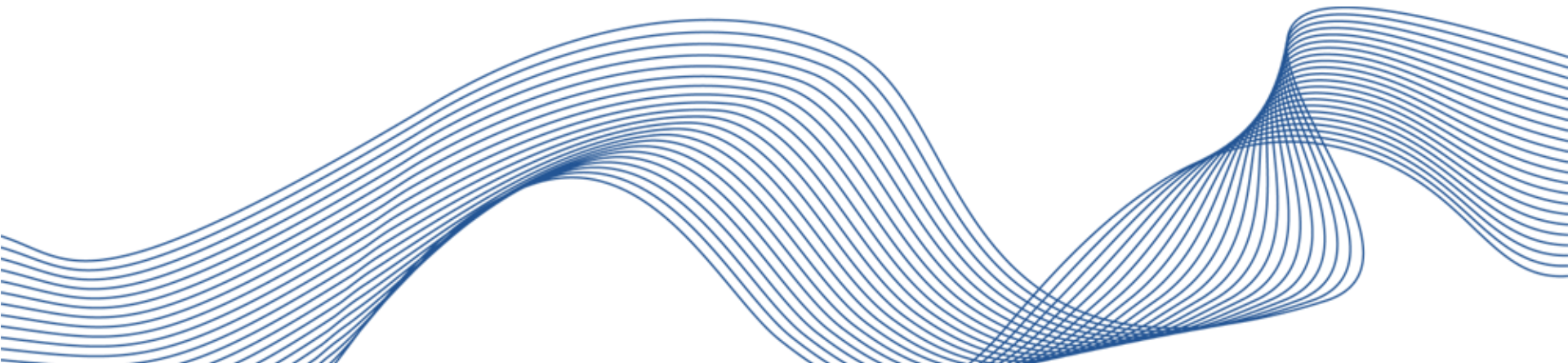
LLOYDS LIST INTELLIGENCE: 'SERIOUS' CASUALTIES AS % OF WORLD FLEET

VESSELS > 500 GT

LLI: Strong increase in 'serious' casualties in 2015 and 2016.
NoMIS: Major claims impact in 2012/13/15, little in 2014 & 2016.



ANSWER: BOTH!



BEWARE OF THE TERMINOLOGY!

- ‘**Serious**’ casualty = serious related to the **nature of the casualty** (Lloyds List Intelligence, IHS, Clarkson Research, IMO)
- ‘**Major**’ claim = extraordinary **costly** casualty, e.g. > 5 USD million (Insurer terminology)

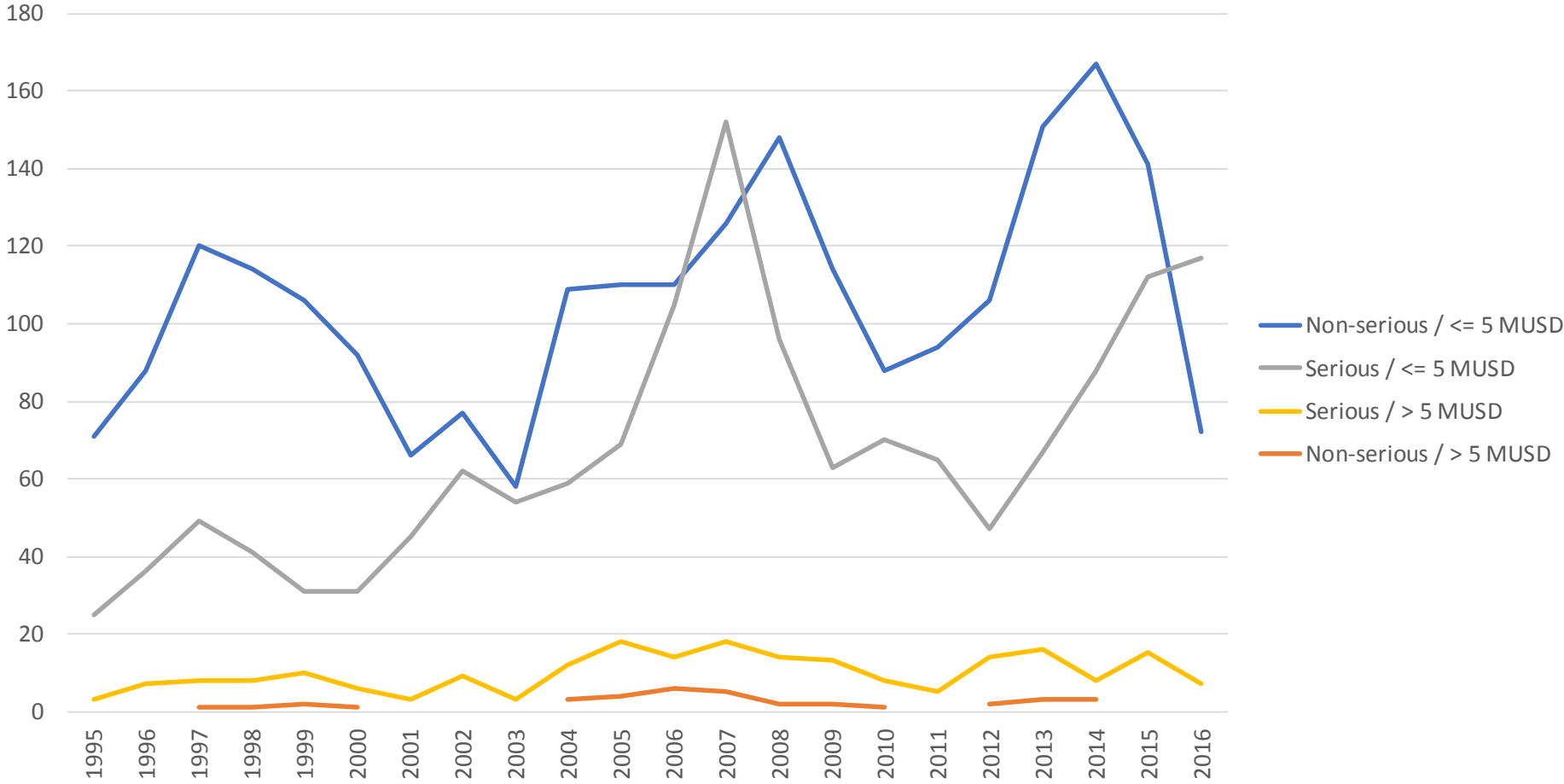
Major claims are normally the result of serious casualties, but serious casualties are not necessarily costly.

- ‘**Total loss**’ = vessel is lost or damaged beyond repair.

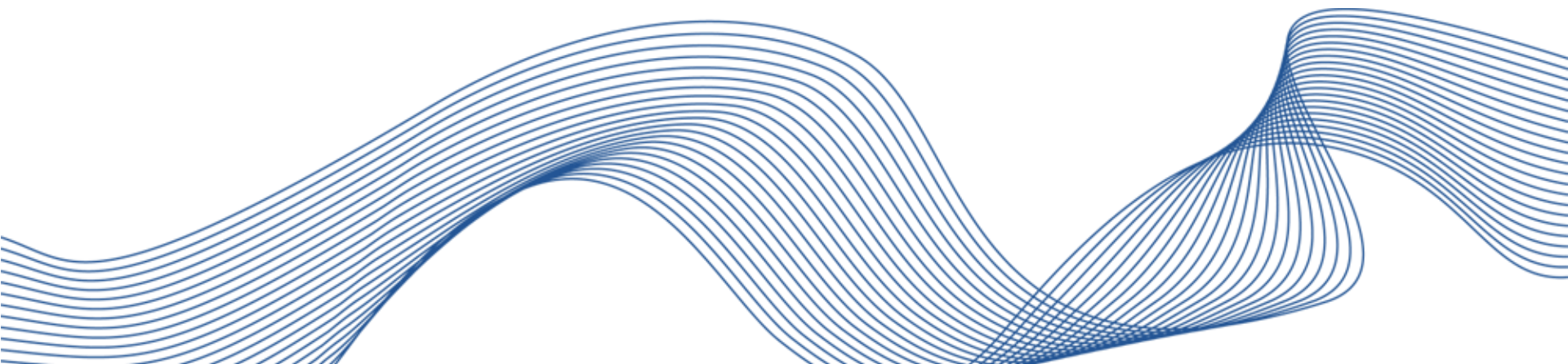
The perception of a ‘total loss’ is near equal by all parties.

For insurers, a total loss means being liable to pay the insured value of the vessel (or even more, including salvage costs and 3rd party liability). A ‘constructive total loss’ occurs when the assumed repair costs exceed e.g. 80% of the insured vessel value.

NOMIS VERSUS LLI CASUALTIES: SPLIT BY 'SERIOUS'/'NON-SERIOUS' (LLI) & 5 USD MILLION COST (NOMIS)

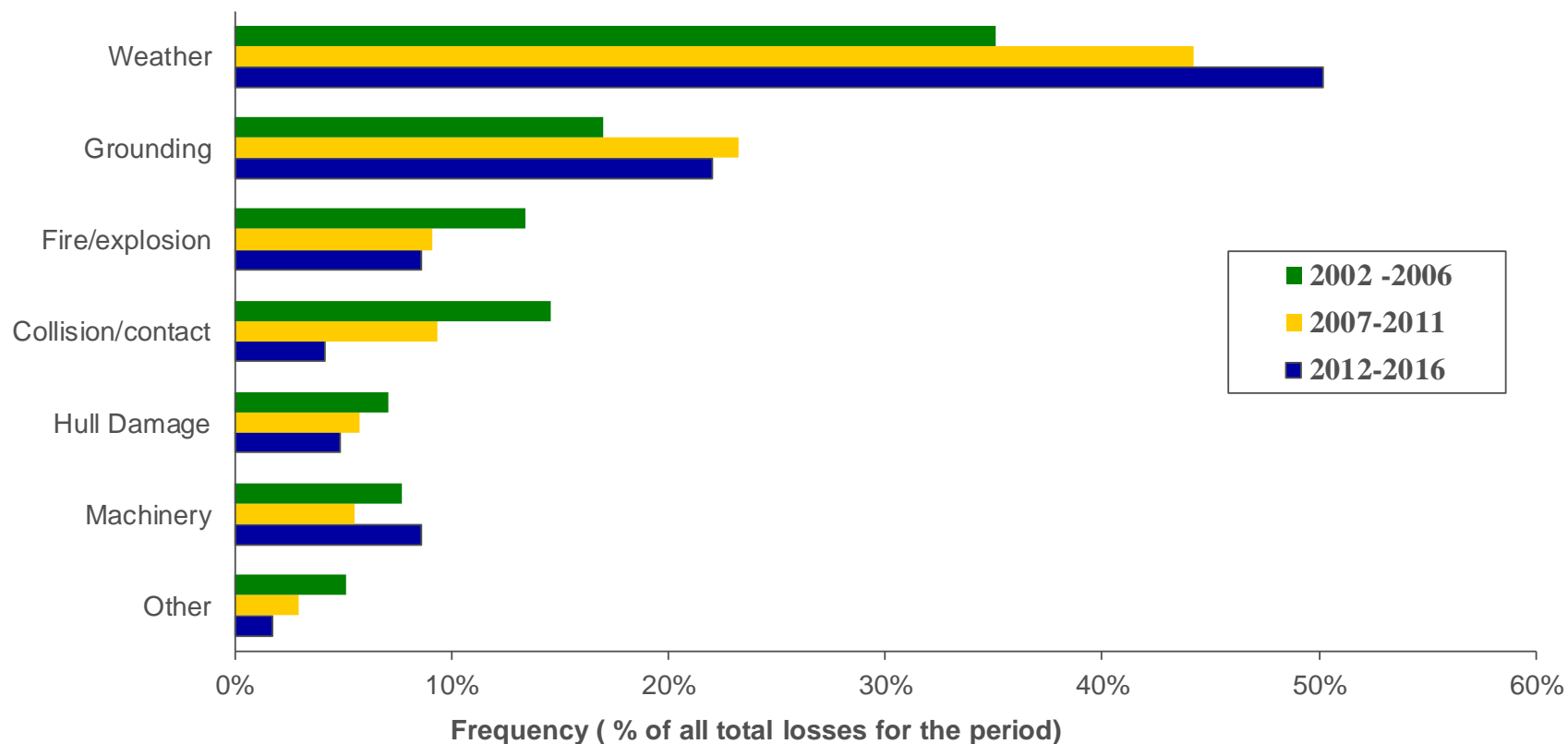


HULL CASUALTIES – BY TYPE OF CASUALTY



Total Losses 2002 – 2016

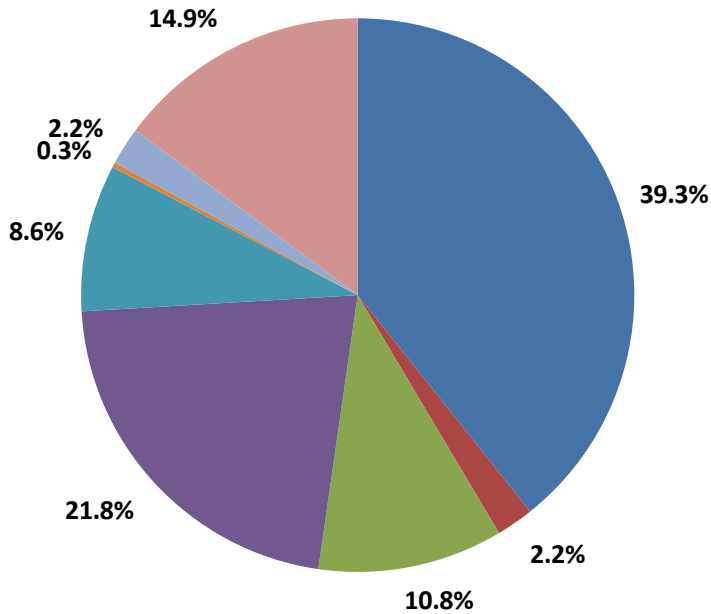
by cause, all vessel types, vessels > 500 GT



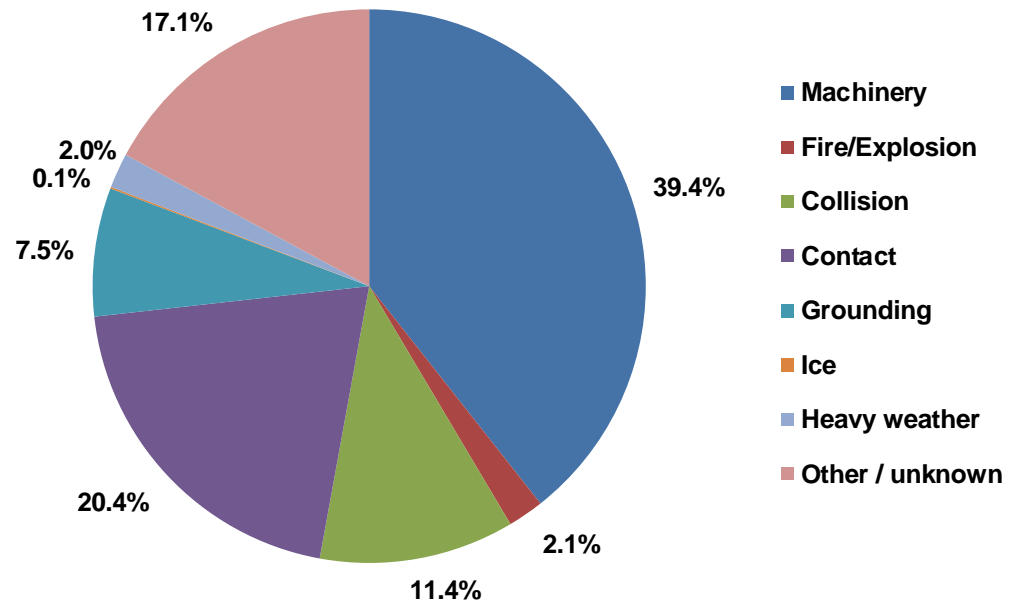
Source: LLI, total losses as reported by Lloyds List

NUMBER OF CLAIMS BY TYPE OF CASUALTY

2011-2015



2016



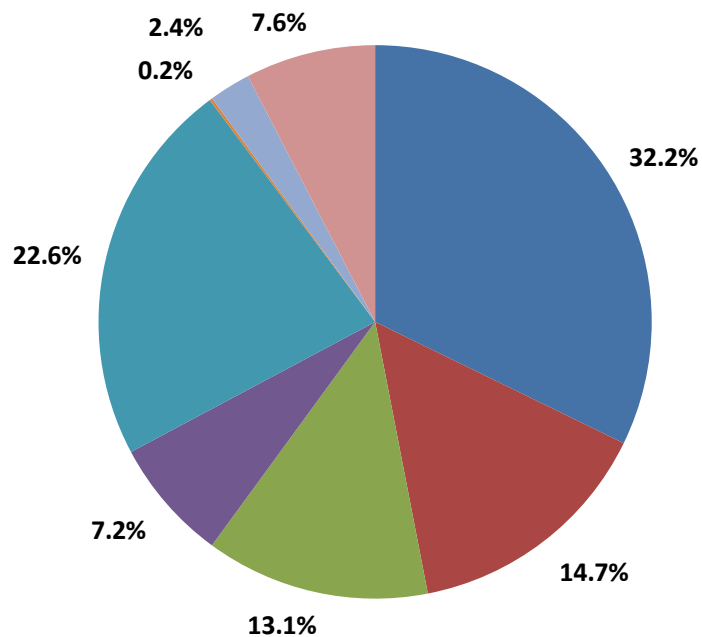
Total number of claims:

2011-2015: 16,854

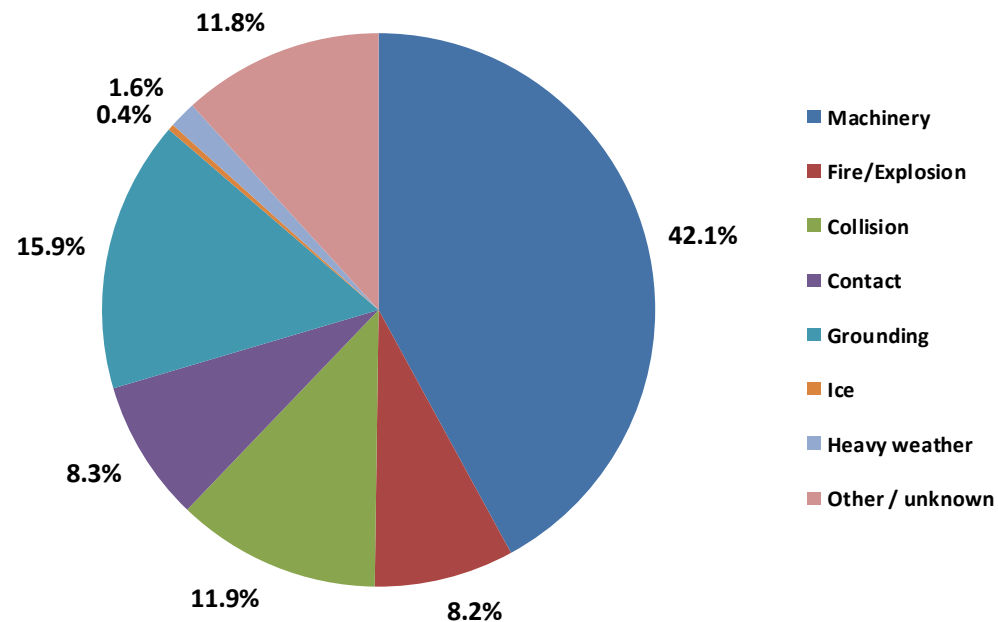
2016: 3,053

COST OF CLAIMS BY TYPE OF CASUALTY

2011-2015



2016

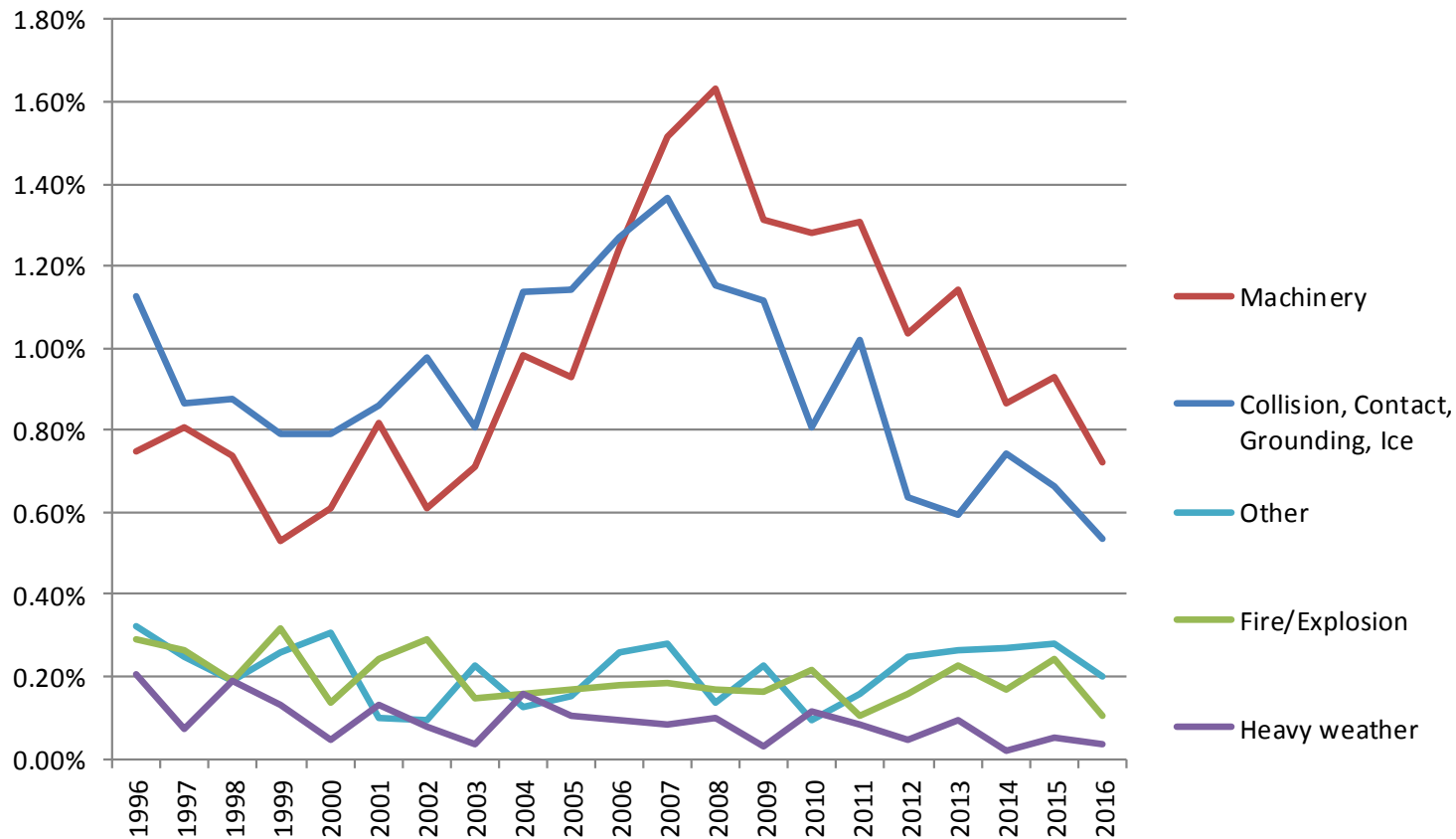


Total cost of claims in USD million:

2011-2015: 4,471.3

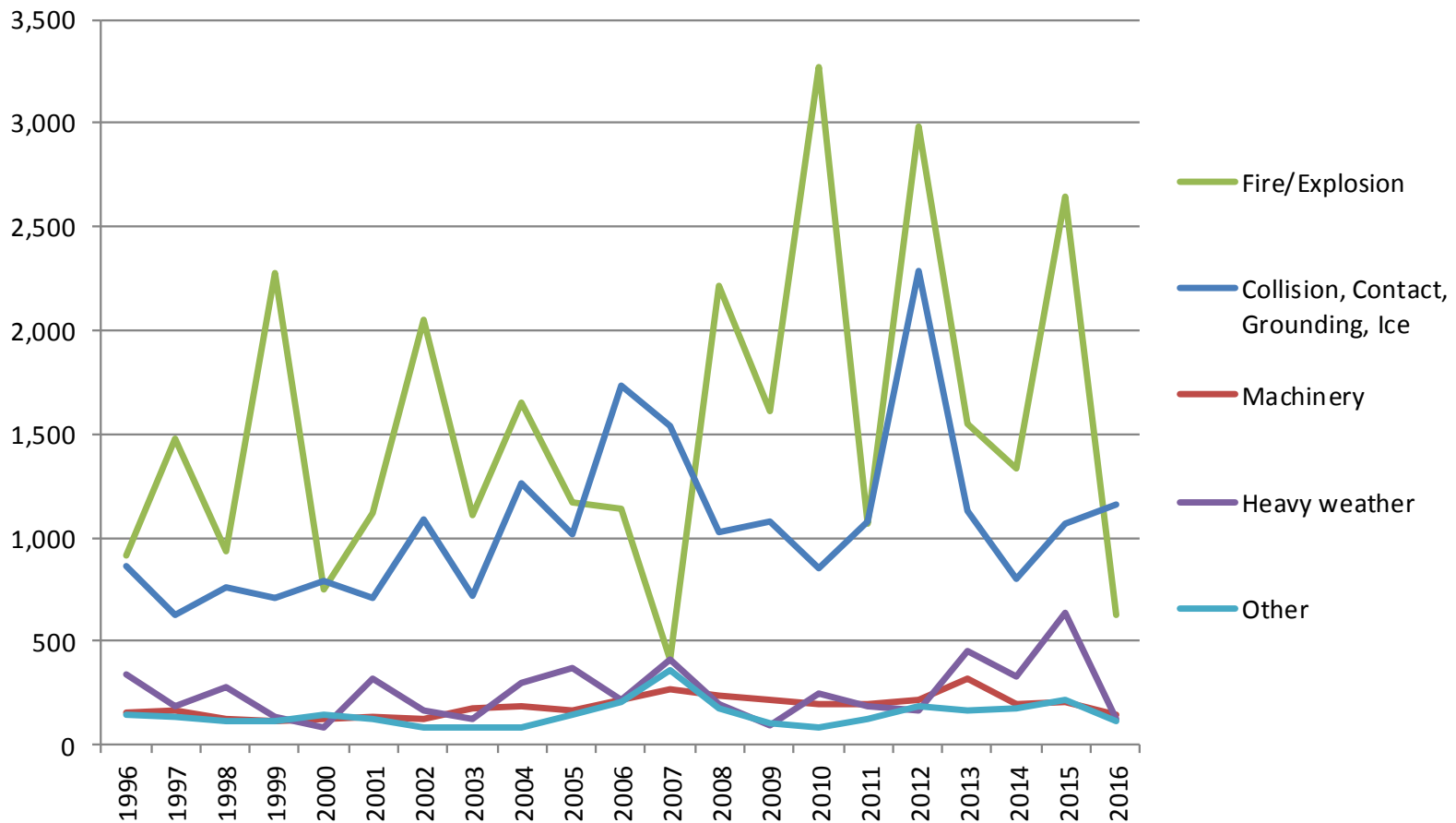
2016: 491.7

FREQUENCY OF CLAIMS > USD 500,000 BACK TO PRE-BOOM LEVEL

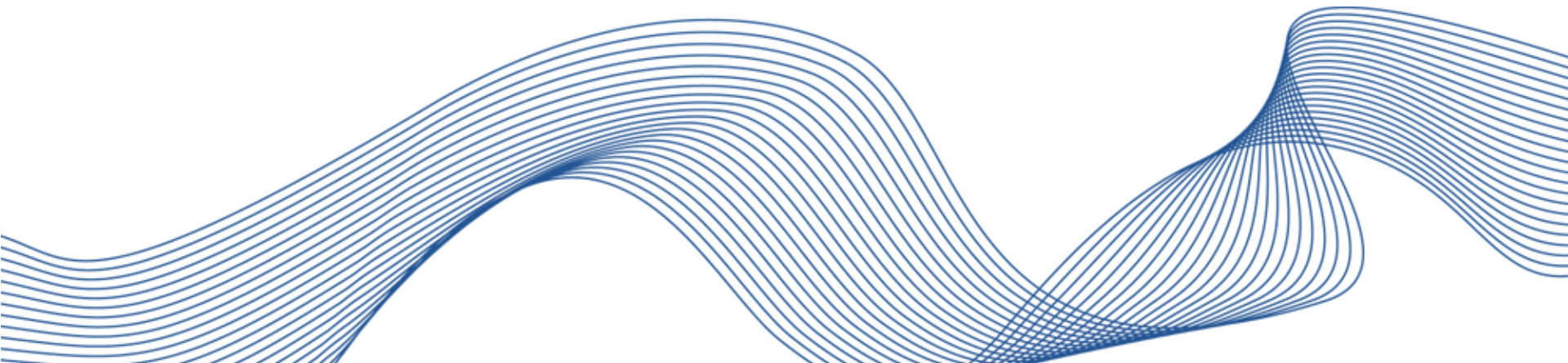


AVERAGE CLAIM COST (USD 1,000)

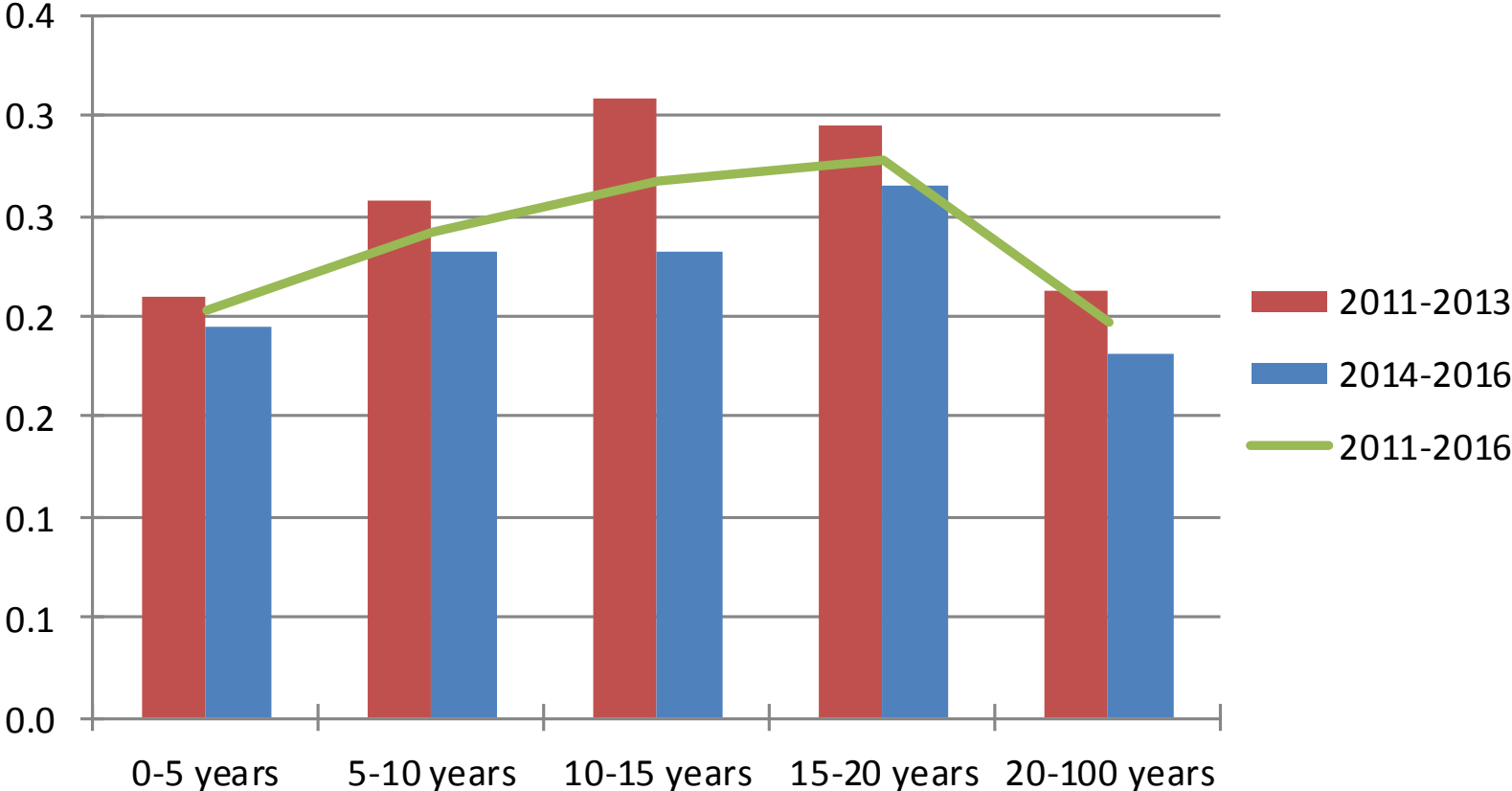
STRONG VOLATILITY OF FIRE/EXPLOSION IMPACT



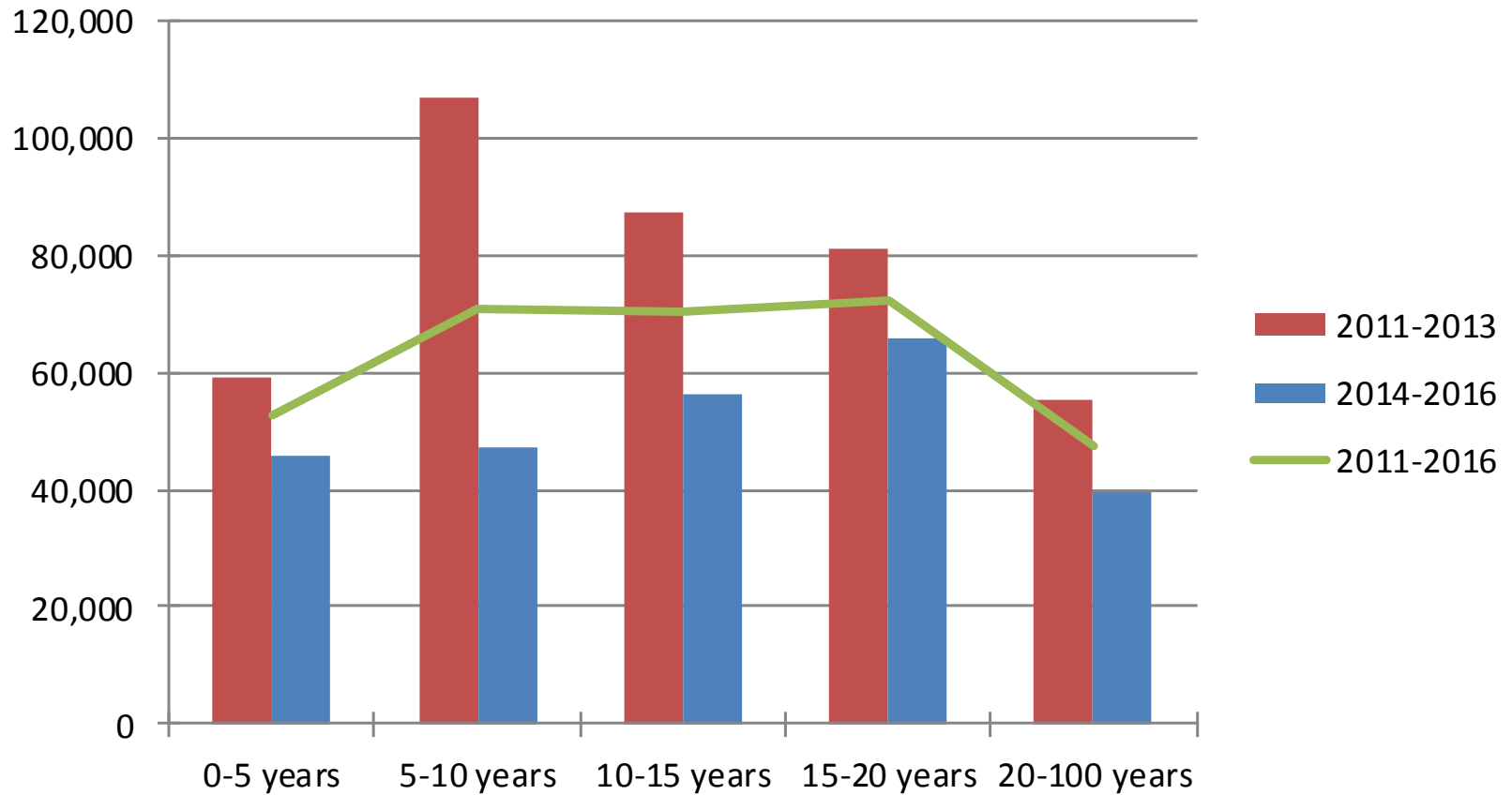
CLAIMS TRENDS BY AGE GROUP AND VESSEL TYPE



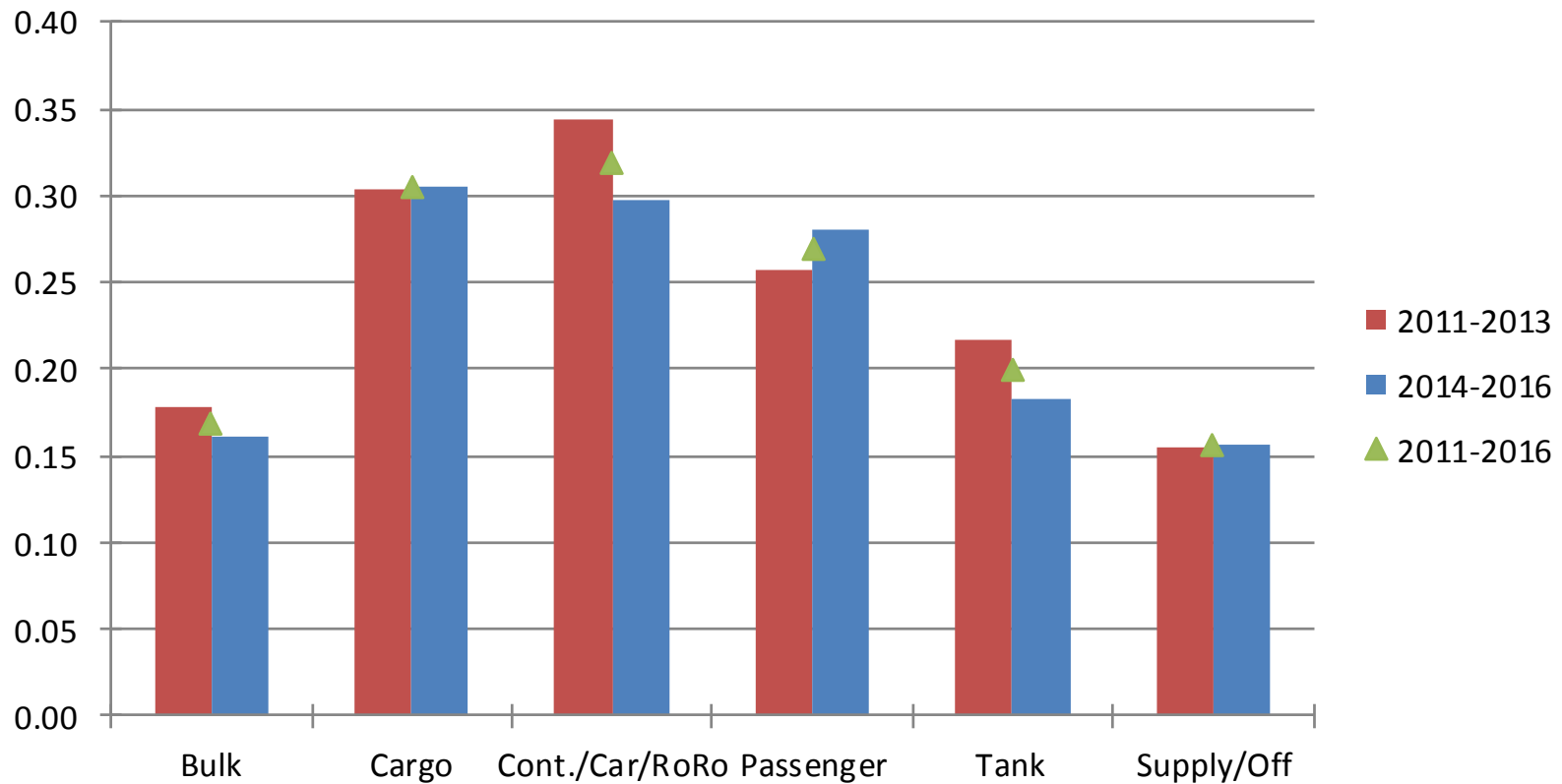
CLAIMS FREQUENCY, BY AGE GROUP



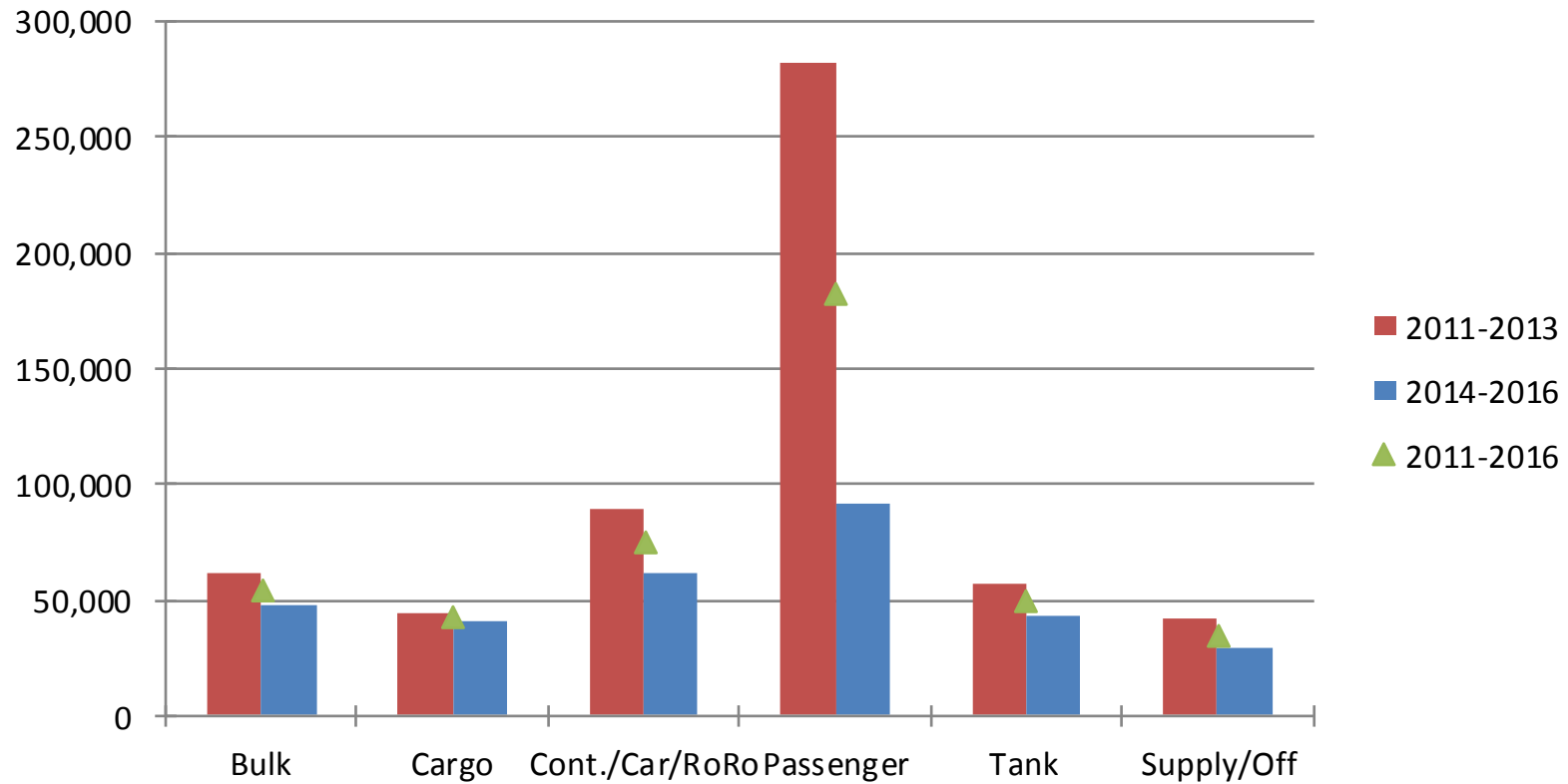
CLAIM COST PER VESSEL, BY AGE GROUP



CLAIMS FREQUENCY, BY VESSEL TYPE



CLAIM COST PER VESSEL, BY VESSEL TYPE

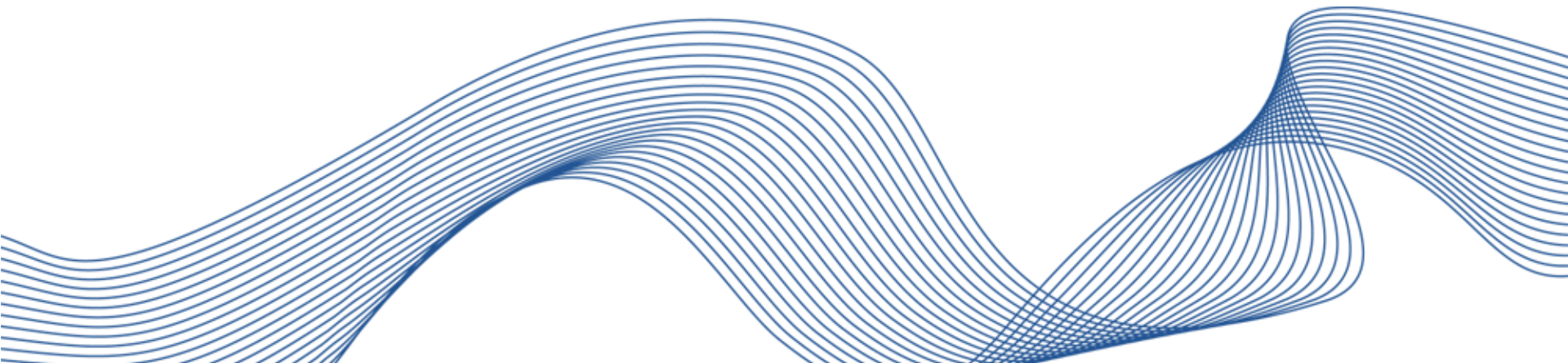


SUMMARY CASUALTY TRENDS

- **Total loss frequency:** Long-term positive trend continues in 2016 after some increase 2015.
- **Overall claims frequency:** Long-term stable to downwards trend.
- **Repair cost:** Increase before financial crisis. Since 2009 relative stable at pre-crisis level. Correlation with certain parameters (e.g. steel price, USD exchange rate, labour cost). May be positively influenced by strong USD (repairs paid in other currencies).
- **Major (=costly) claims trends:**
 - **More expensive single claims.**
(increasing vessel sizes, more complex objects)
 - **Increasing Volatility**
Strong impact in some years (2012, 2013, 2014), little in other years (2014, 2016).
Difficult to estimate major claims impact for a specific year due to random occurrence.
- **'Serious' casualties:** Strong increase in 2015 & 2016. Majority of 'serious' casualties no 'major' claims in terms of cost. **A high share of 'serious' casualties should nevertheless give rise to concern and be investigated.**
- **Lay-ups:** Does a higher share of inactive vessels keep the claims frequency/cost at bay?

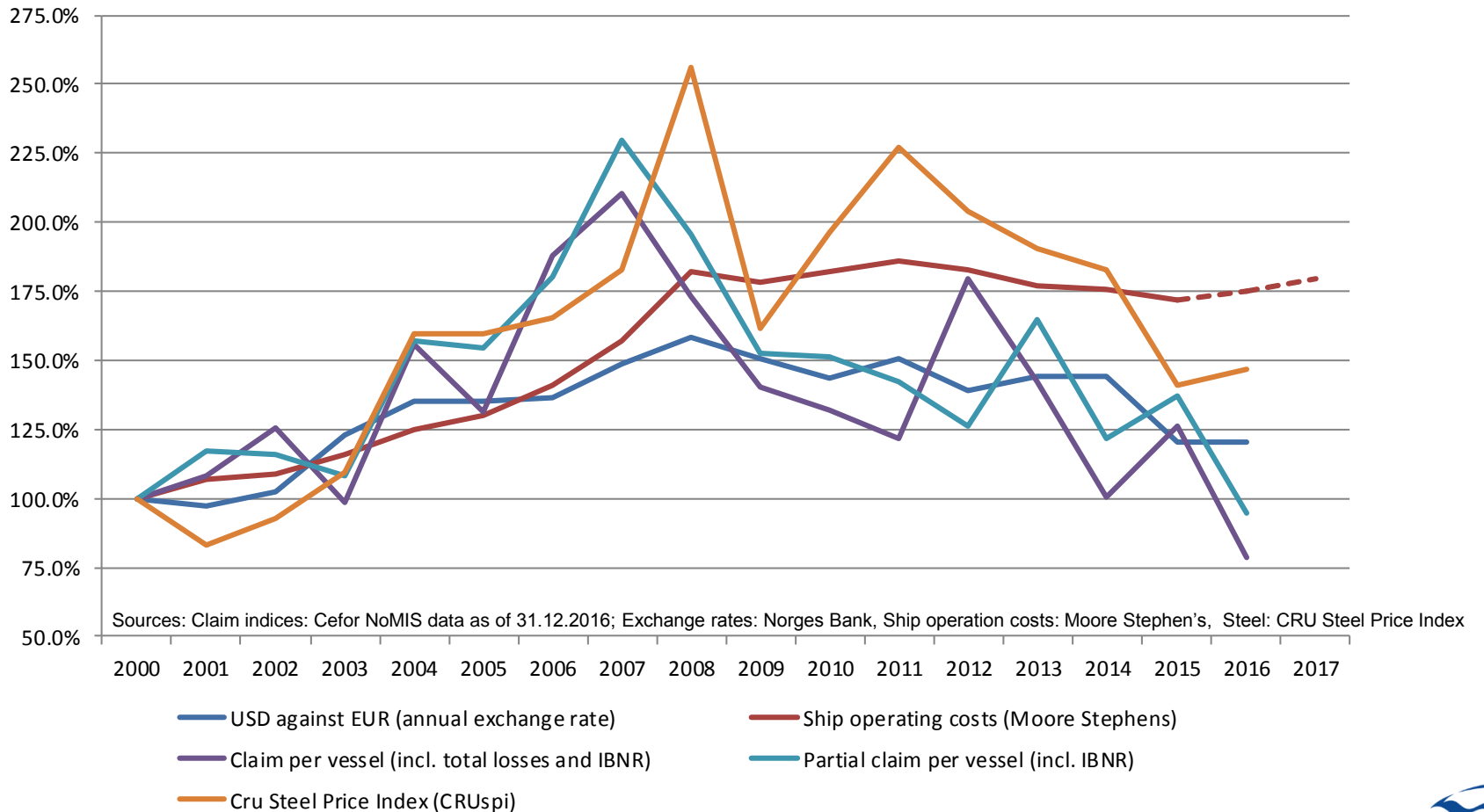
SPECIAL FOCUS:

- COST DRIVING FACTORS
- EFFECT OF LAY-UP ON CLAIMS FREQUENCY & COST

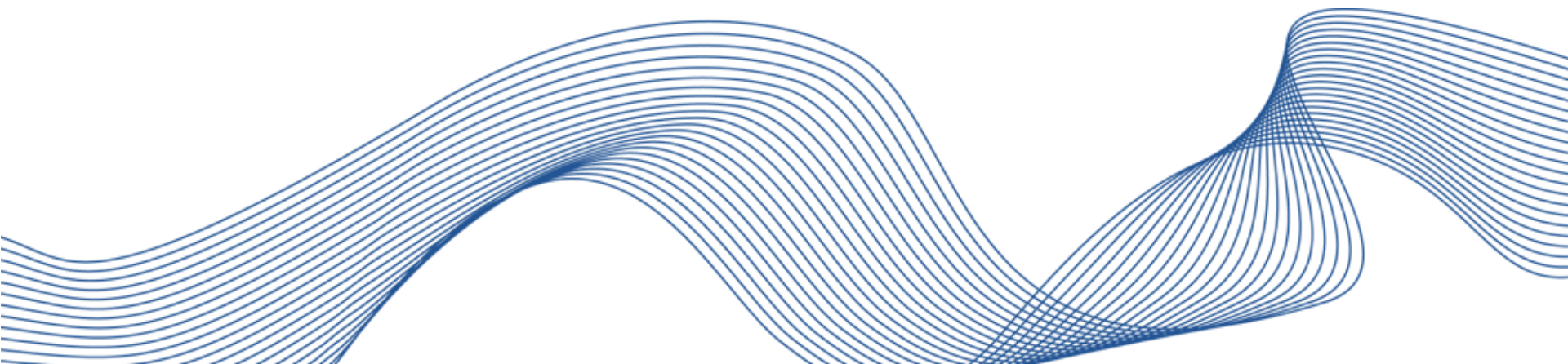


COST DRIVING FACTORS

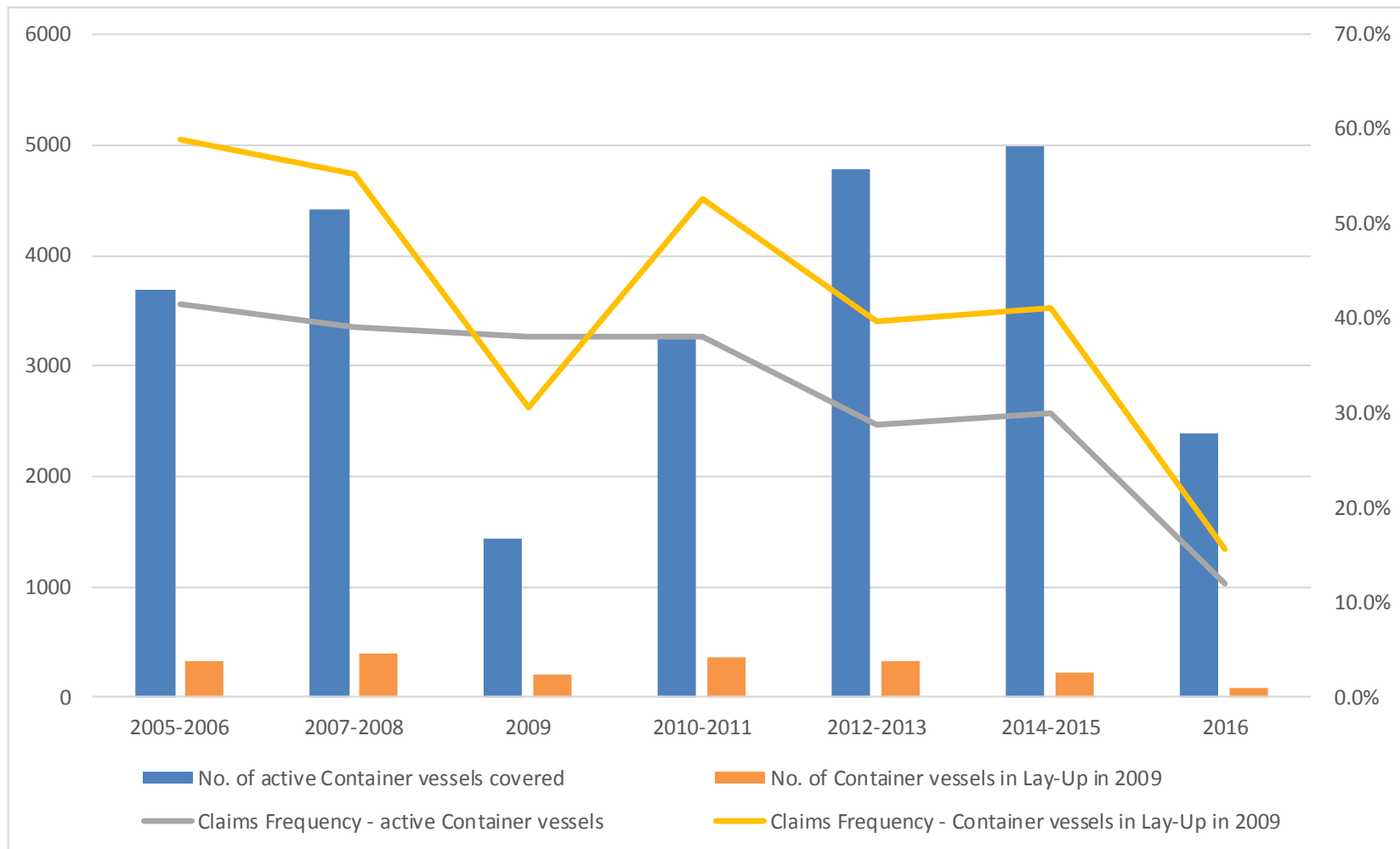
Cost driving factors inflation index, 2000 = 100%



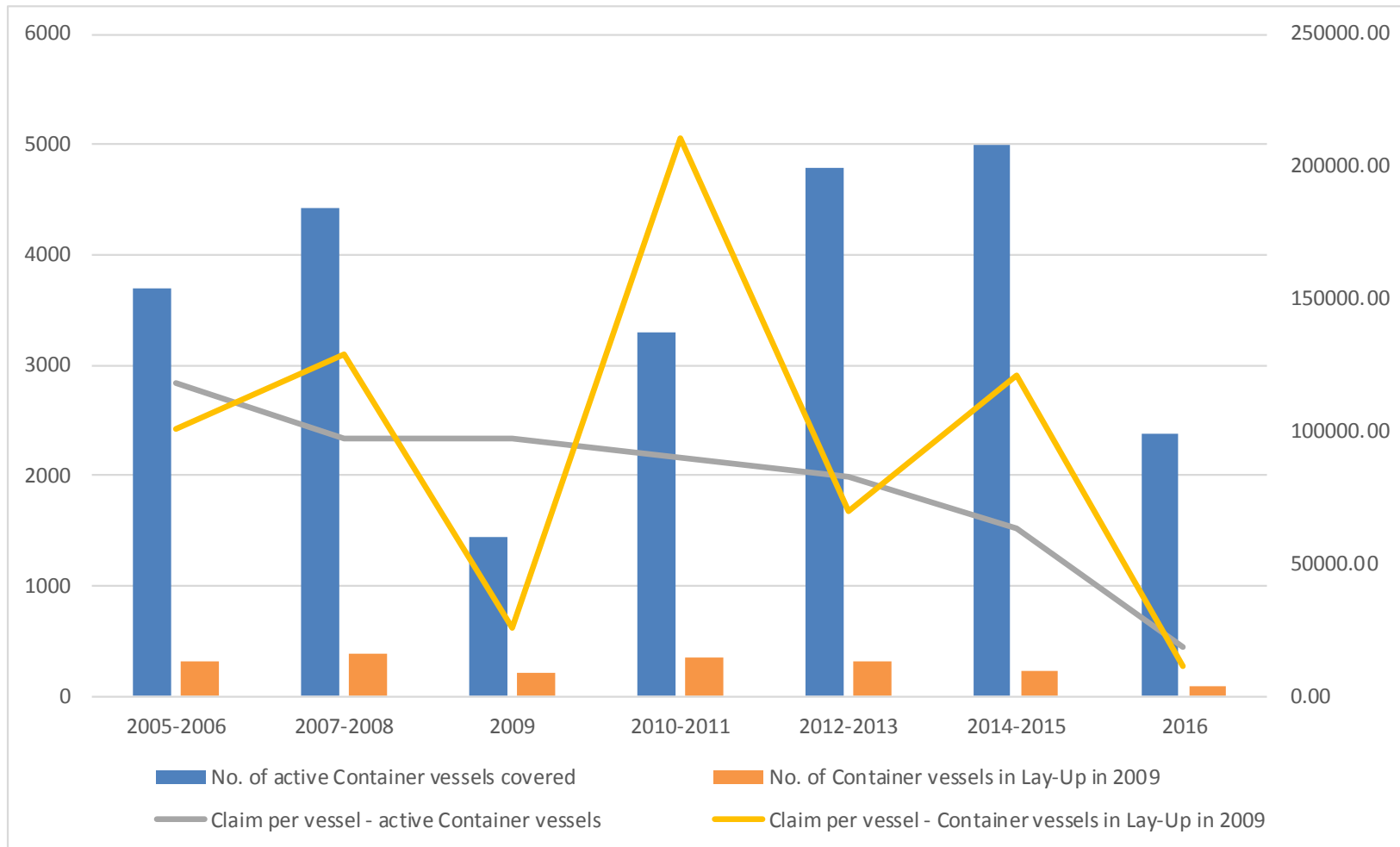
LAY-UP EFFECT – EXAMPLE: CONTAINER VESSELS LAID UP IN 2009



CLAIMS FREQUENCY OF CONTAINER V. IN LAY-UP IN 2009 VERSUS ACTIVE VESSELS



CLAIM COST PER VESSEL OF CONTAINER V. IN LAY-UP IN 2009 VERSUS ACTIVE VESSELS



SUMMARY LAY-UP EFFECT ON CLAIMS TRENDS

Container vessels in lay-up in 2009:

- Claims frequency was reduced by half during the period of inactivity.
- Claims frequency & cost were above average both before and after lay-up period!

Why also before lay-up? Substandard container vessels first put into lay-up?

Supply/Offshore vessels in lay-up in 2016:

- Claims frequency equally reduced during period of inactivity in 2016
- ...but claims frequency before lay-up period was normal!
- How claims frequency develops after lay-up period remains to be seen!
May be challenging to reactivate complex objects.

ISSUES TO MONITOR



High-value risks

Oil price, fuel quality

Changes in regulation (liabilities)

Fire on RoRo & Container vessels



Arctic risks

New technology

Internet of things/complex technologies

Navigation

Human factor/
Qualification

Climate change

Value accumulation

Cyber risk

MSC Safety discussions!



IUMI REPORTS 2016/17:

Conference publications:

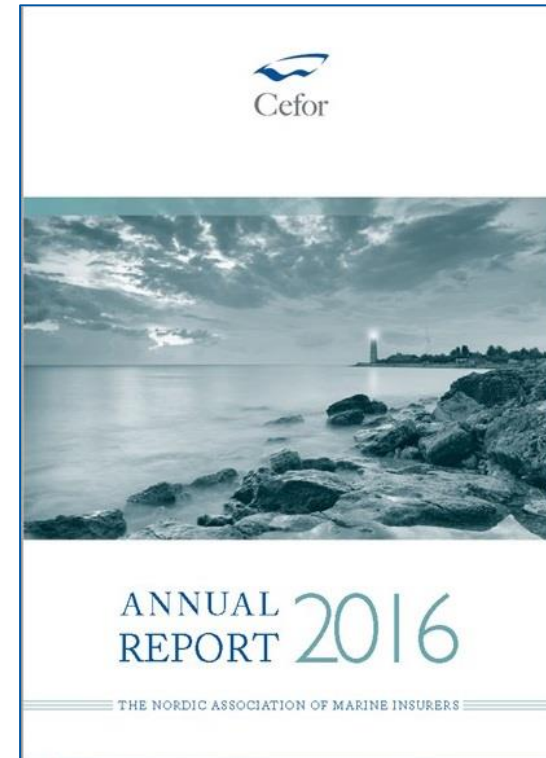
Spring statistics on Cargo, Hull, Offshore energy:



IUMI Statistics: <https://iumi.com/statistics>

CEFOR PUBLICATIONS 2017 – HULL TRENDS NORDIC MARINE INSURANCE STATISTICS (NOMIS)

Publishing date 6 April 2017:



Cefor NoMIS Statistics at <http://cefor.no/Statistics/NOMIS/>



THANK YOU.

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