Global Marine Insurance Report Astrid Seltmann









- Discovering South Korea (Astrid's non-objective fun facts)
- Global marine insurance market
- P&I
- Offshore energy
- Cargo
- Hull

• The 2021 oracle

Korean Restaurant

Discovering South Korea in Oslo, Norway (Tasting)

KOREAN FOOD

FESTIVAL

Discover

Korea

with A

Photos: Astrid Seltmann

Photo of book cover: Astrid Seltmann



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4	Ein Fluss, der teilt und verbindet	35	Kapitel 22
5	»Heidi Kang wird nicht gefoltert»	45	Kapitel 23
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17	Die Endstation	220	
18	Der Schlächter von Uiryeong		
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Der Osten

Sky, Show und Liebe Kein Platz für »Yolo»

Der Abschied

Korea als Gefühlserinnerung Im Phallus-Park Die Alpen in Asien

Erinnerungen an den Norden

Wind, Frauen und Han auf Jeju

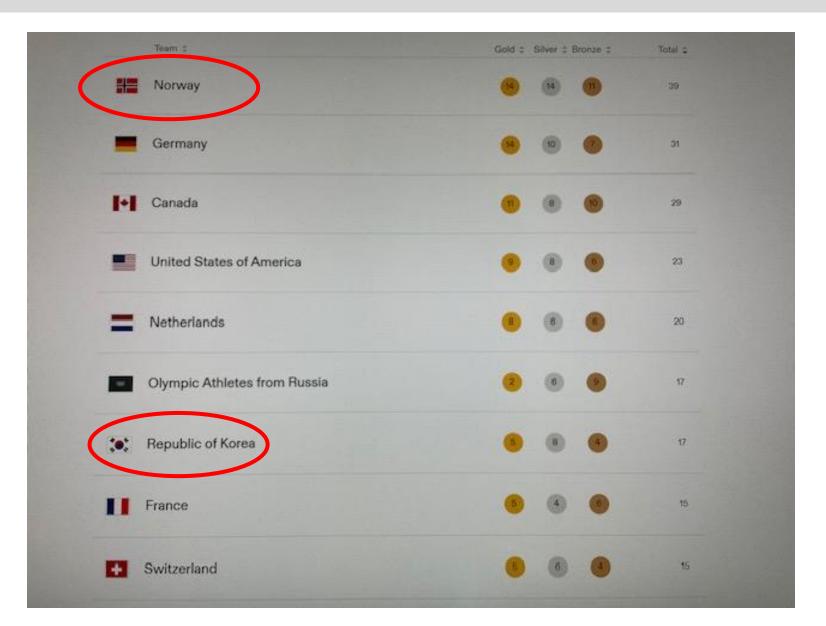
Discovering South Korea in Astrid's bookshelf (Background knowledge)

Discovering Winter Olympics – Pyeongchang 2018



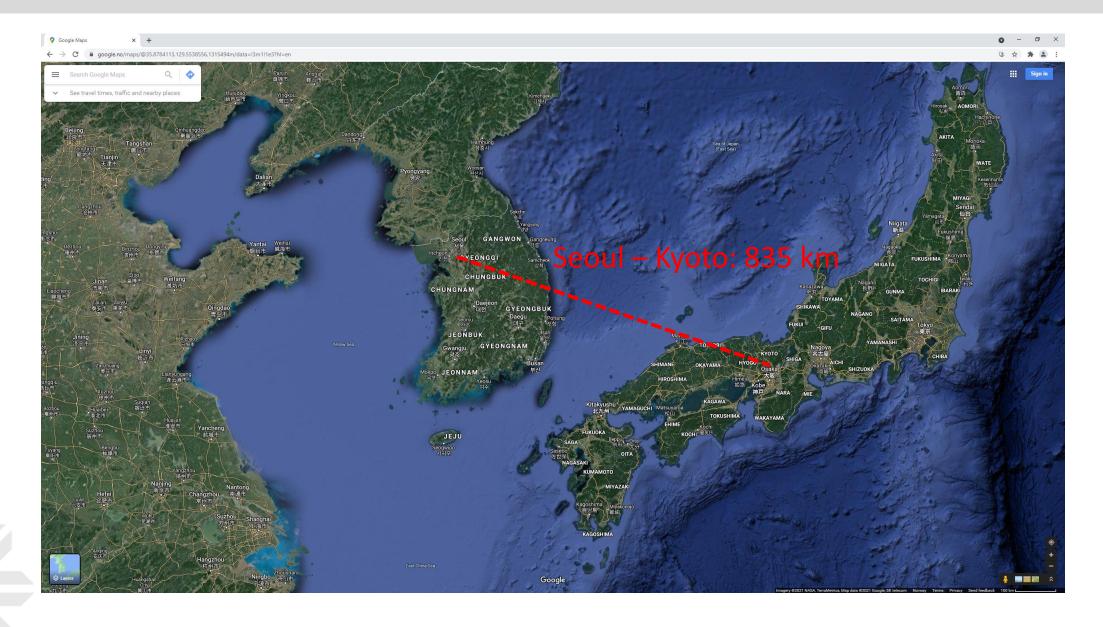
Medal table ...and the winner is:





The closest Astrid has come to Seoul: 835 km (in 2006)





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Figures reflect the 2021 state of reporting.

Part of the figures are estimates and (some) figures do change retrospectively.

Data is reported to the degree possible according to the agreed IUMI definitions (see <u>here</u>) but may not be consistent across countries.

For comparison between years, check the latest <u>updated</u> ten-year premium and loss ratio data! (for IUMI members at <u>https://iumi.com/statistics/iumi-member-statistics</u>)

Focus of this presentation is on identifying the right market <u>trends</u>. Absolute figures are subject to error margins (estimates due to reporting backlog, revision of previously reported data).

All information given is of informational and non-binding character.

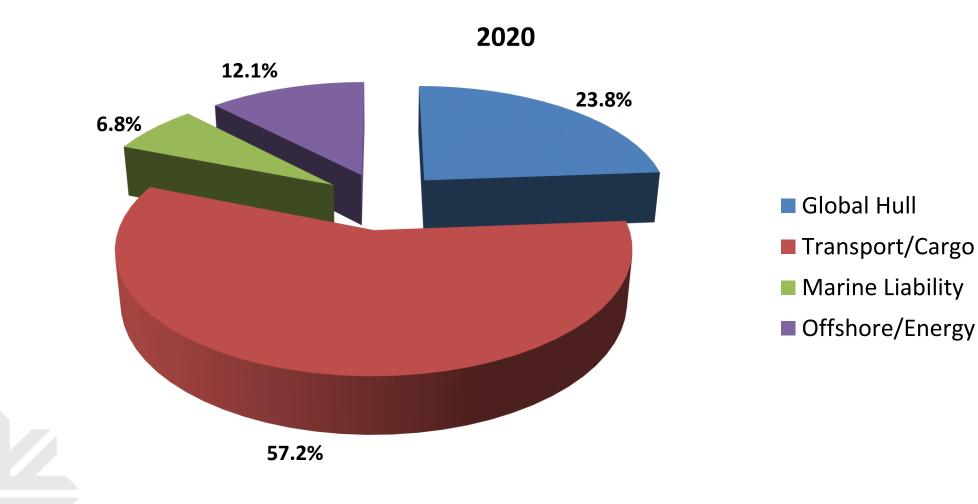
Figures related to the marine market's performance reflect <u>market averages</u>. They do <u>not</u> disclose single units' results. As with all averages, individual underwriting units may out- or underperform compared to the average.

IUMI's aim is to provide information as available and raise consciousness for the importance of a factbased evaluation of the risk exposure covered – and inspire everyone to do their own critical evaluation of real and seeming facts!

Marine premiums 2020 – by line of business

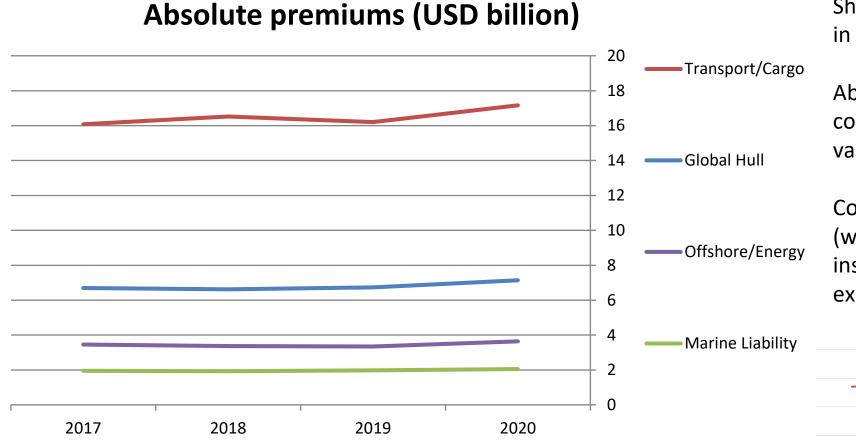


Total estimate 2020: 30.0 USD billion / Change 2019->2020: +6.1% NB: Exchange rate effects



Premiums & shares by line 2016-2020

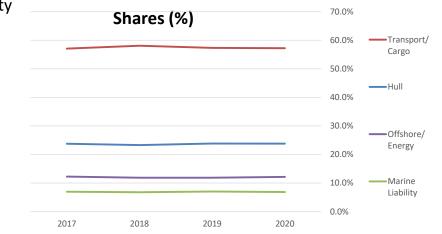




Shares relative stable but increase in premium volume in 2020.

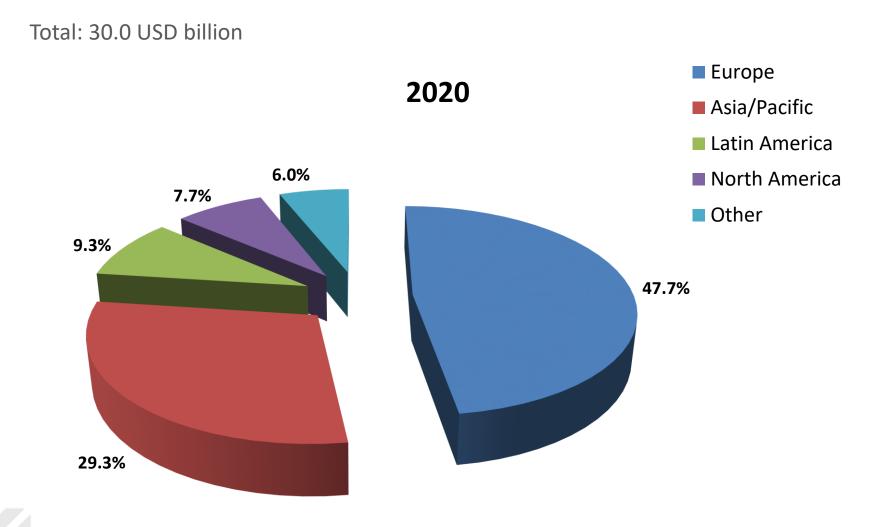
Absolute premium amount reflects combination of insured volume/ values and rates per unit.

Combination of various effects (world trade volume/ values, insurance market conditions, exchange rates).



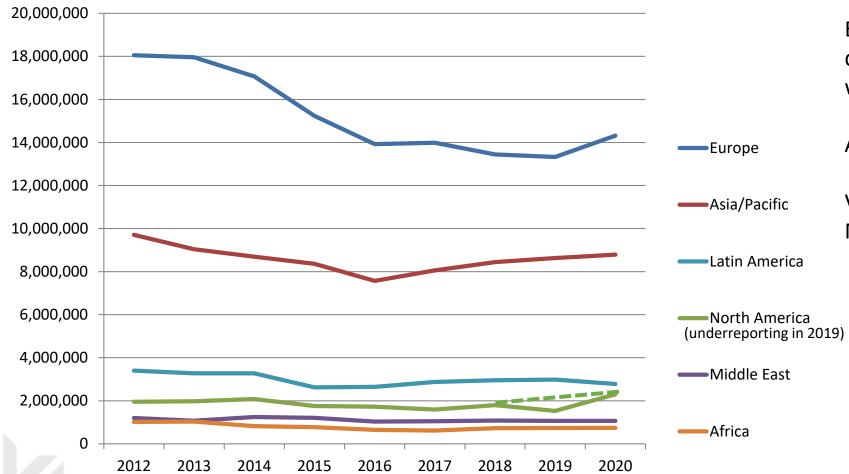
Marine premiums 2020 – by region





Premium (USD) by region 2010-2020 reporting status as of 2021





Europe: after years of premium decreases, bottom seems reached with slight upwards trend in 2020.

Asia: increase continues.

2020: 30.0 USD bill.

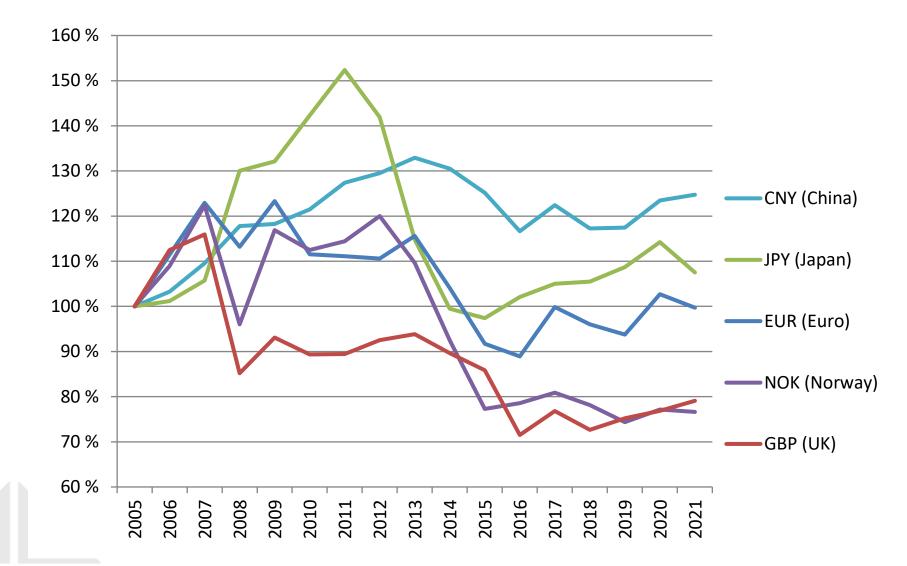
2019: 28.3 USD bill.

Various influences. Market conditions, exchange rates

USD Exchange rates 2005-2021



Index 2005=100%, against selected currencies, as of December each year (2021 as of July)



Statistics in USD are influenced by exchange rates.

Diverse developments between currencies.

Premium trends may differ in local currency, particularly for cargo.

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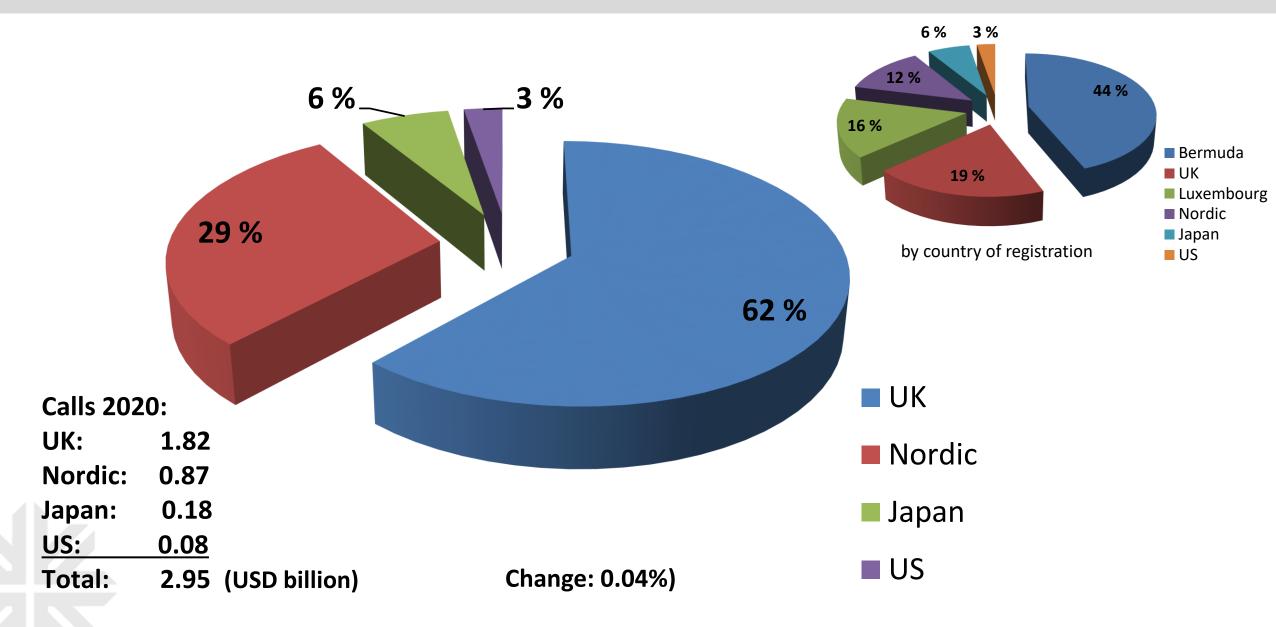
• P&I

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P&I International Group – Income

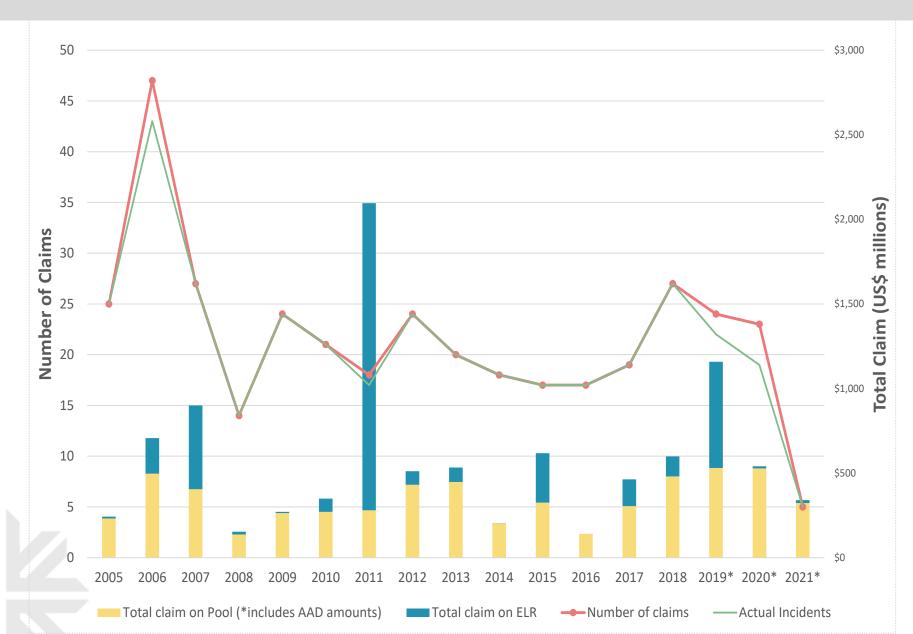
Gross calls 2020 (premiums) – by operational location, Source: Int. Group of P&I Clubs





P&I Pool claims by policy year

Source: Int. Group of P&I Clubs, claims as of 21 July 2021





2019/2020:

A number of severe casualties end period of low major claims impact.

COVID-19 impact stronger on P&I than other lines (crew, passengers).

Reporting backlog: Claims for youngest years still develop.

P&I complex business with high liabilities.

More information at www.igpandi.org

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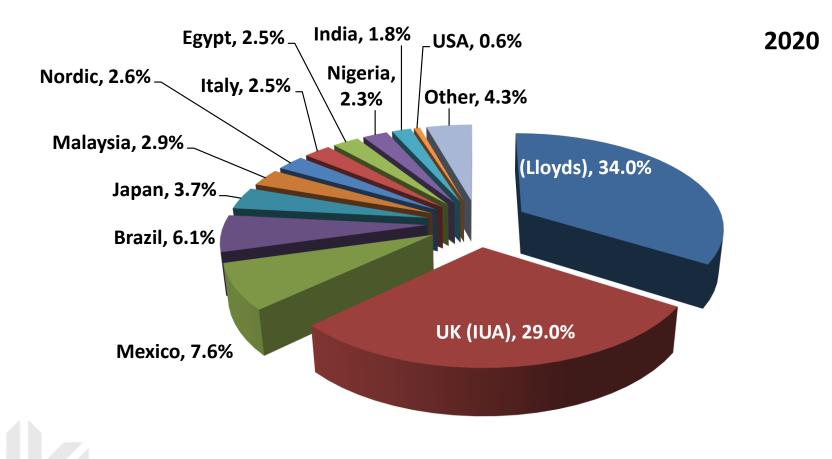


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Offshore energy premium 2020

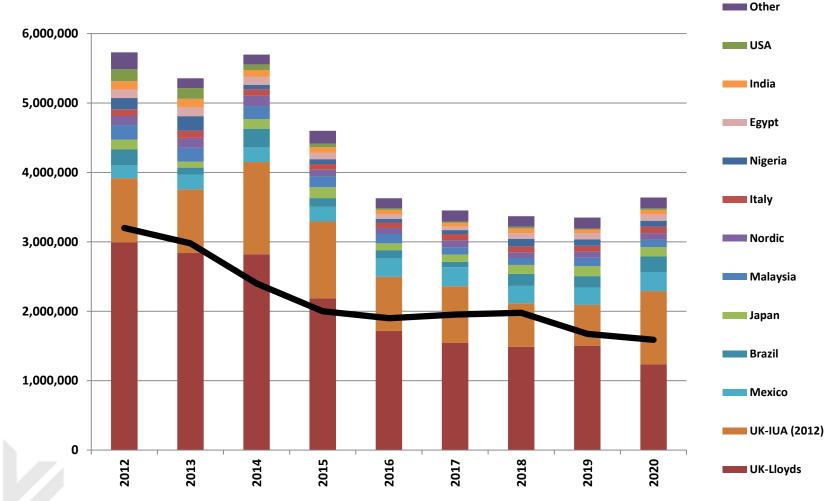


Total estimate: 3.6 USD billion / Change 2019->2020: 8.6%



Offshore energy premium 2012-2020





Kazakhstan and some other countries: no data available.

Strong decrease from 2014 but seems to have reached bottom.

IUMI: Premiums reported by associations. Some double-reporting due to global nature of business.

=> Overestimation of global premium.

Willis approach: Based on Lloyds triangulation. 100% calculated by assuming Lloyd's represents 70%. Change in market shares not taken into account.

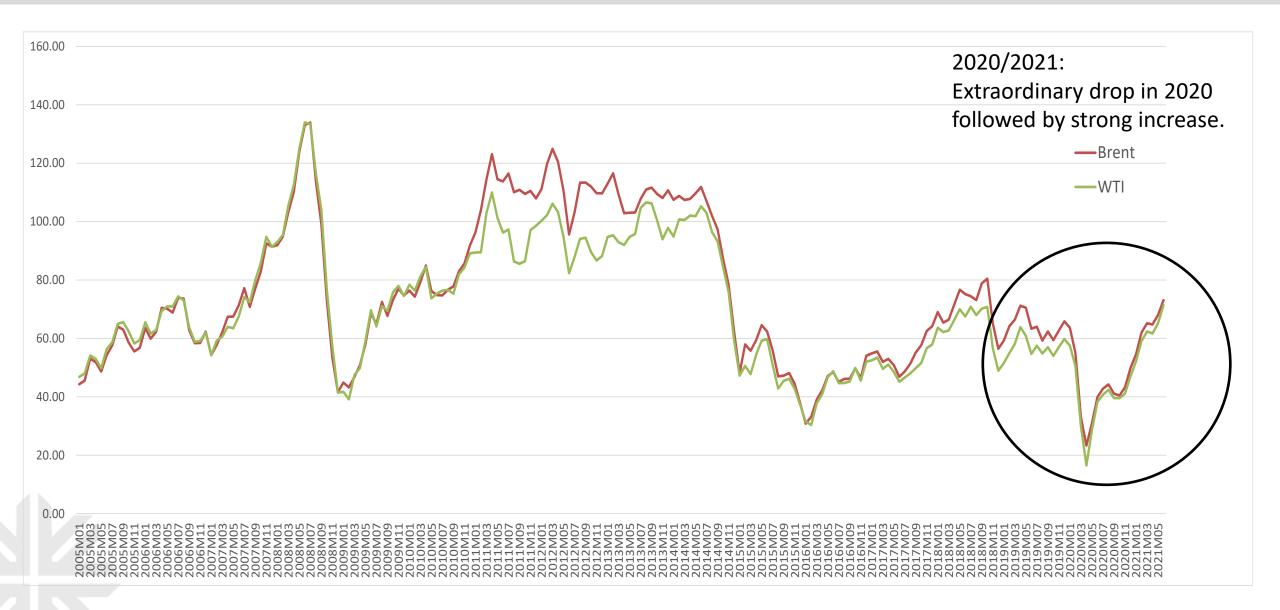
⇒ Underestimation of global premium

Willis estimated upstream premium (ajdusted retrospectively)

Average oil price per month (USD/bbl)

Source: World bank commodity price data, January 2005-August 2021

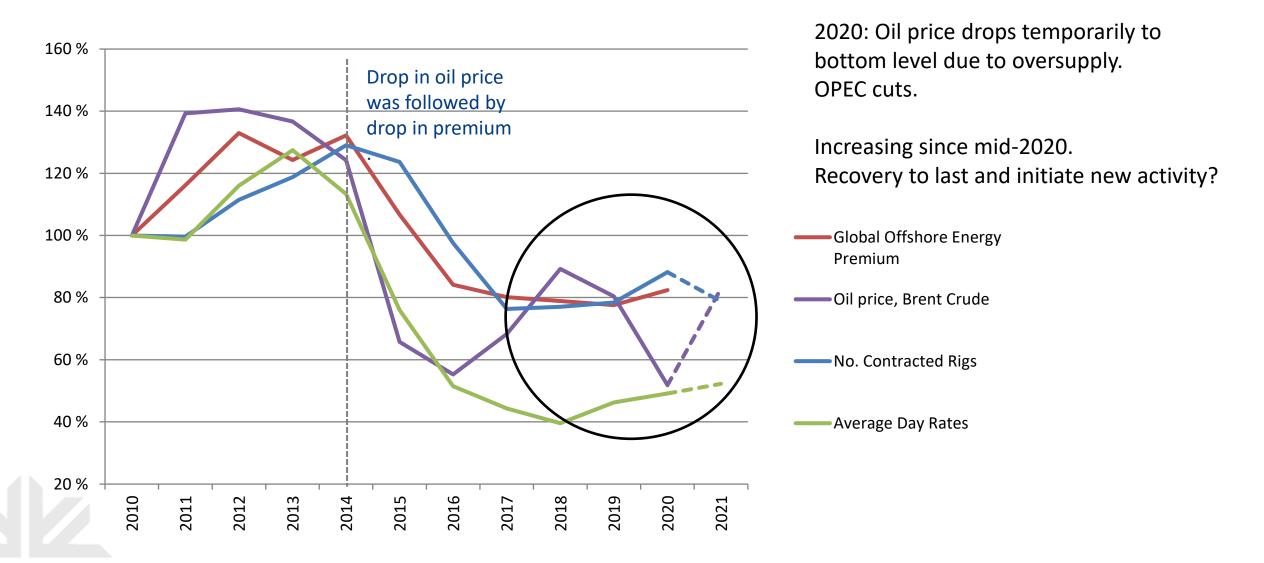




Energy premium versus mobiles, day rates, oil price

Index 2005=100% (mobiles, day rates, oil price as of July 2021)

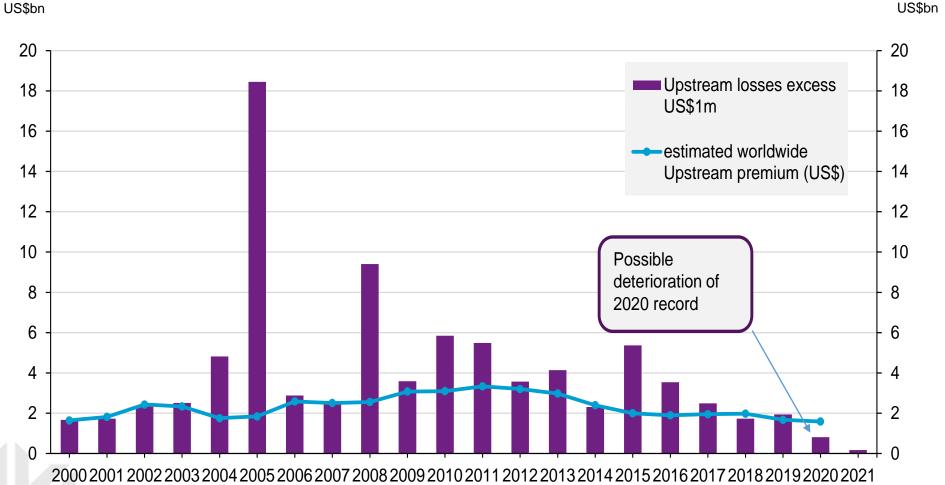




Sources: Average Day Rates, No. Contracted Rigs: Clarksons Research, Oil Price: World Bank commodity price data, Premiums: IUMI

WELD Upstream Energy losses 2000-21 versus estimated Upstream premium income

Source: Willis Towers Watson



US\$bn

Benign claims environment continues.

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2020's upstream loss record may turn out to be the lowest this century.

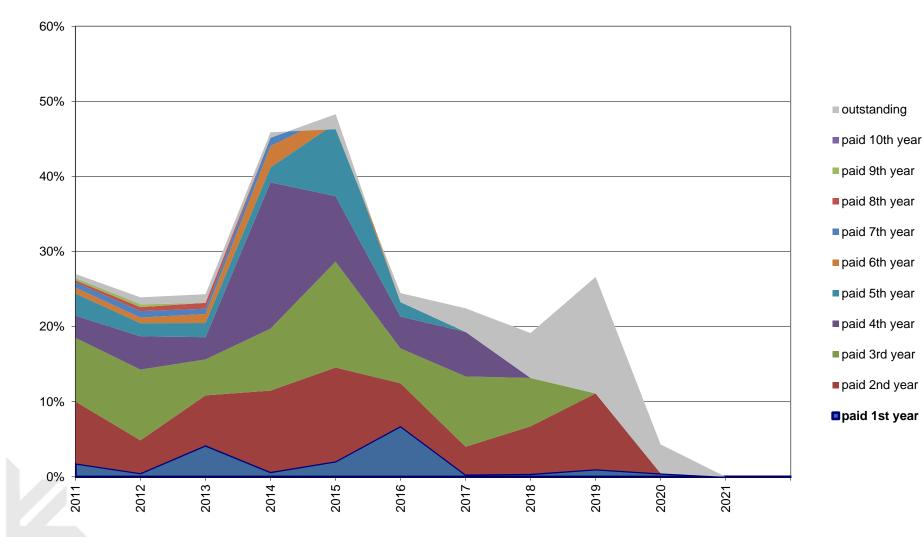
Source: WTW/WTW Energy Loss Database as of June 24 2020 (figures include both insured and uninsured losses)

Offshore energy gross loss ratios – Europe*

Underwriting years 2011-2020, incl. liability, as of Dec. 2020, paid & outstanding as reported



NB: Data included not identical with previous year's presentations (partly revised figures Europe; US figures excluded)



paid 9th year ■ paid 8th year paid 7th year paid 6th year paid 5th year ■ paid 4th year paid 3rd year ■ paid 2nd year

Claims on youngest years will still develop.

Fragile balance between reduced premiums and modest claims impact.

Offshore energy – Summary



- COVID-19 temporarily reduced demand for oil. Overcapacity led to strong drop in oil price but continuously rising since mid-2020.
 Will the upswing last and lead to an increase in activity?
- Historically 18 months time lag between improved oil price and authorisation for expenditure.
- More risk retained in recent years. Insurance capacity not equally reduced.
- Bottom in premium reduction seems to have been reached (but market capacity also on the rise again).
- Benign claims environment in recent years. Weather impact (hurricanes) reduced.
 2020 hurricane Laura did not have severe impact on claims.
 2021 hurricane Ida may contribute to further increase in oil price (production in Gulf of Mexico stopped before Ida hit)
- Fragile balance between reduced premiums and modest claims impact continues.
- Risks and claims potential arising from unit reactivation continue to be an issue.

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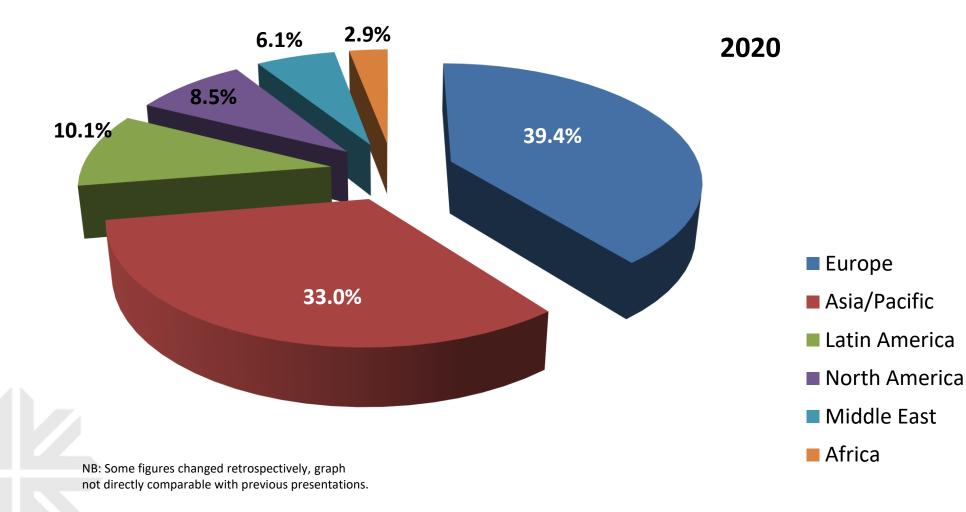
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Cargo premiums 2020 – by region



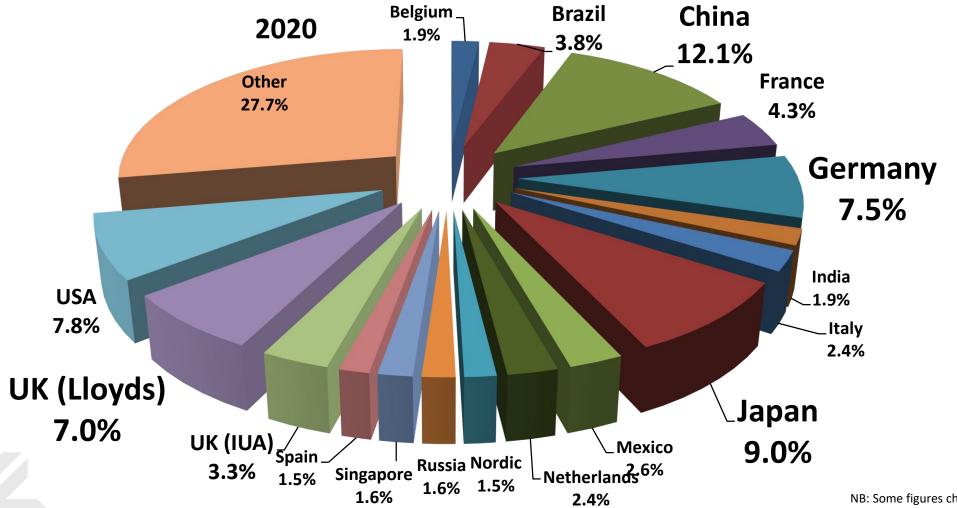
Total estimate: 17.2 USD billion / Change 2019 to 2020: 5.9% Exchange rate effects strongest on cargo premium.



Cargo premiums 2020 – by markets



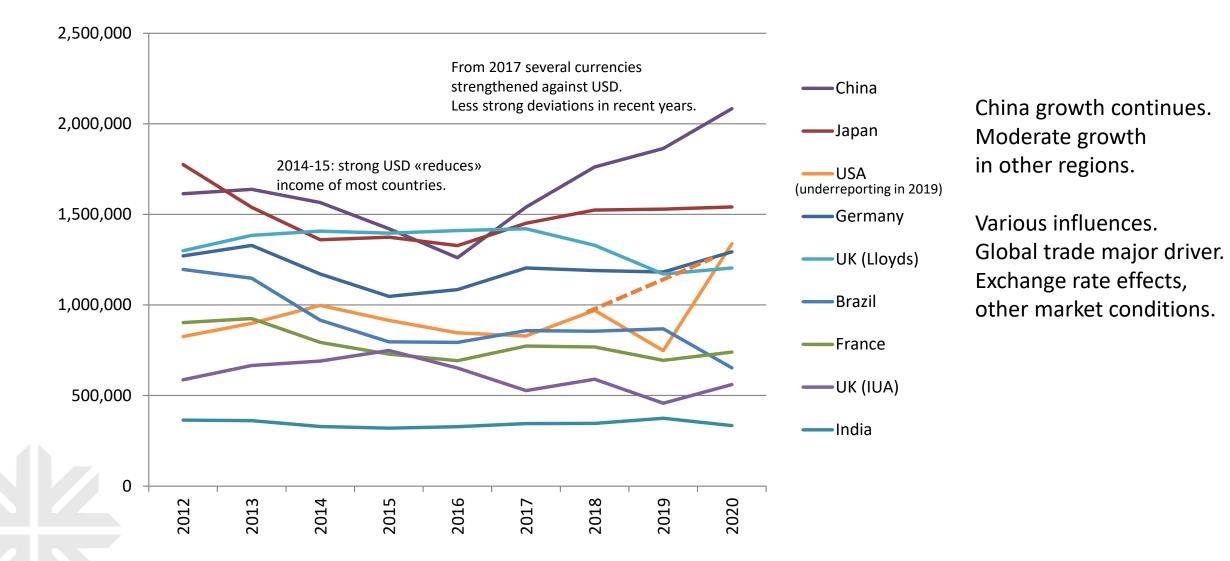
Total estimate: 17.2 USD billion



NB: Some figures changed retrospectively, graph not directly comparable with previous presentations.

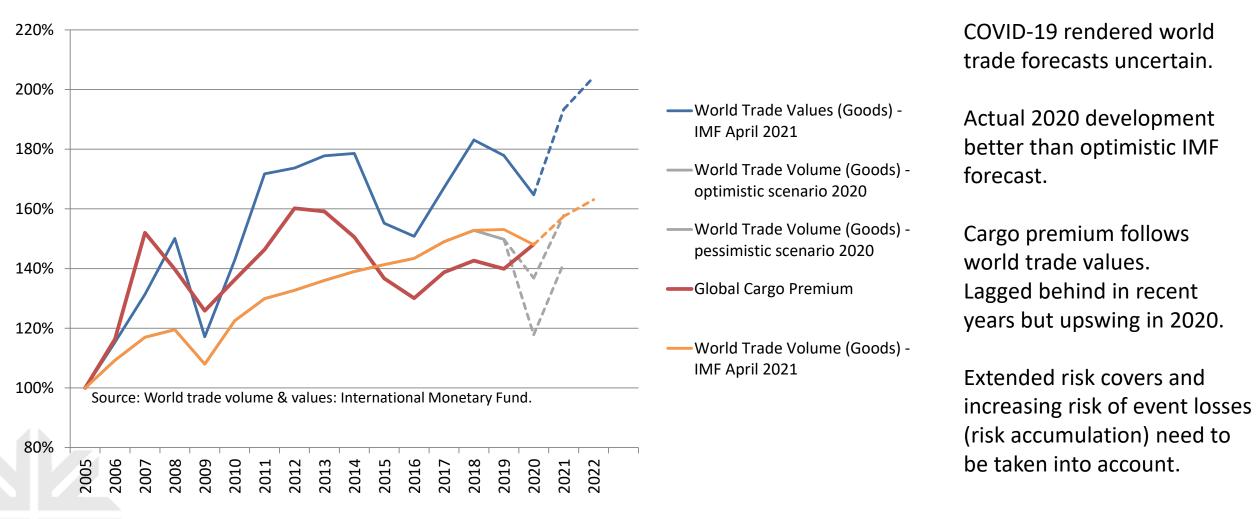
Cargo premiums 2012-2020 – Selected markets





Cargo premium versus World trade values & volume Index 2005=100%





Cargo loss ratios

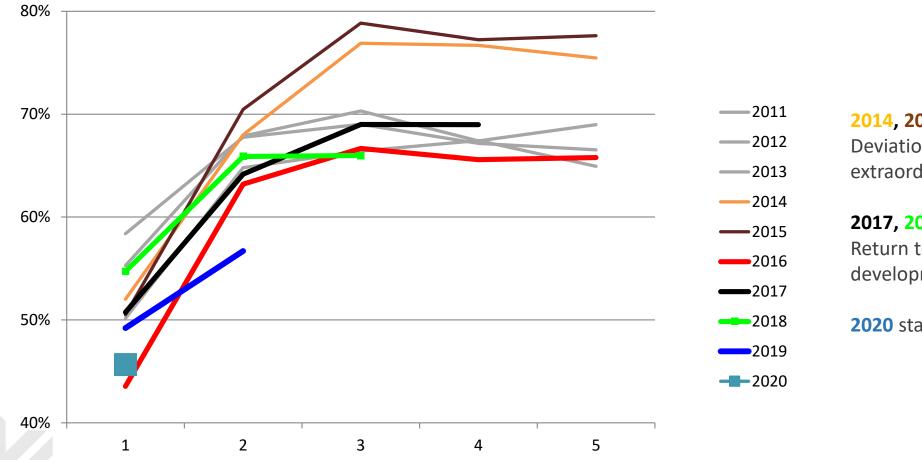




Cargo – Gross* loss ratios underwriting year – Europe**

Underwriting years 2011-20, as reported at 1,2,3,4,5 years, Gross premiums, paid+outstanding claims

NB: Data included changed compared to previous years' presentations (partly revised figures Europe; no US figures included)



2014, 2015, 2016:

Deviation from typical pattern: extraordinary steep increase in loss ratios.

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2017, 2018, 2019

Return to more 'normal' (=flatter) development pattern.

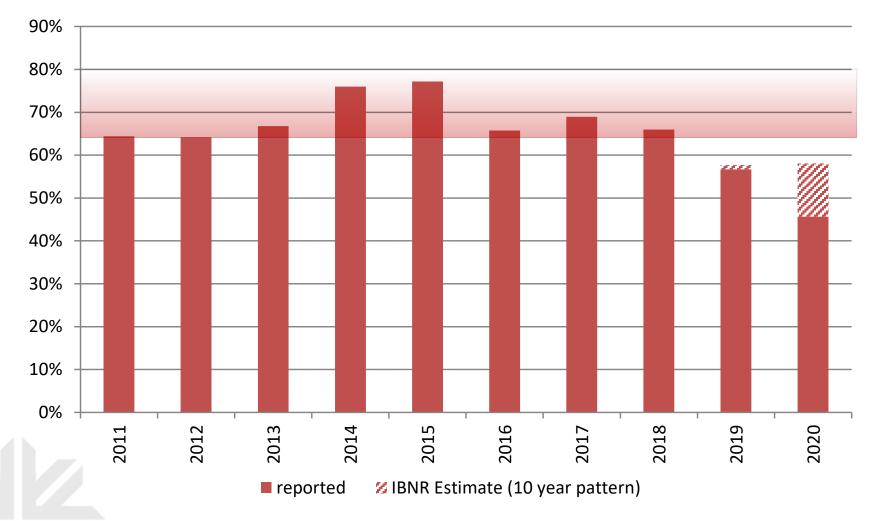
2020 starts at a low level.

* Technical break even: gross loss ratio does not exceed 100% minus the expense ratio (acquisition cost, capital cost, management expenses)
 **Data included from: Belgium, France, Germany, Netherlands, Italy, UK

Cargo – Ultimate gross* loss ratios uw year – Europe**



NB: Data included not identical with previous year's presentations (partly revised figures Europe; US figures excluded)



After a number of years with heavy event impact, some improvement from 2019.

Outlier & Nat-cat event losses: 2015: Tianjin port explosions 2016: Hanjin, Amos-6 satellite 2017: Hurricanes / Nat Cat 2018: Mærsk Honam / Hurricanes 2019: Fires, Golden Ray capsize 2020: Nashville Tornados 2021: X-Press Pearl, Ever Given (GA), Hurricane Ida

Increasing expenses a concern.

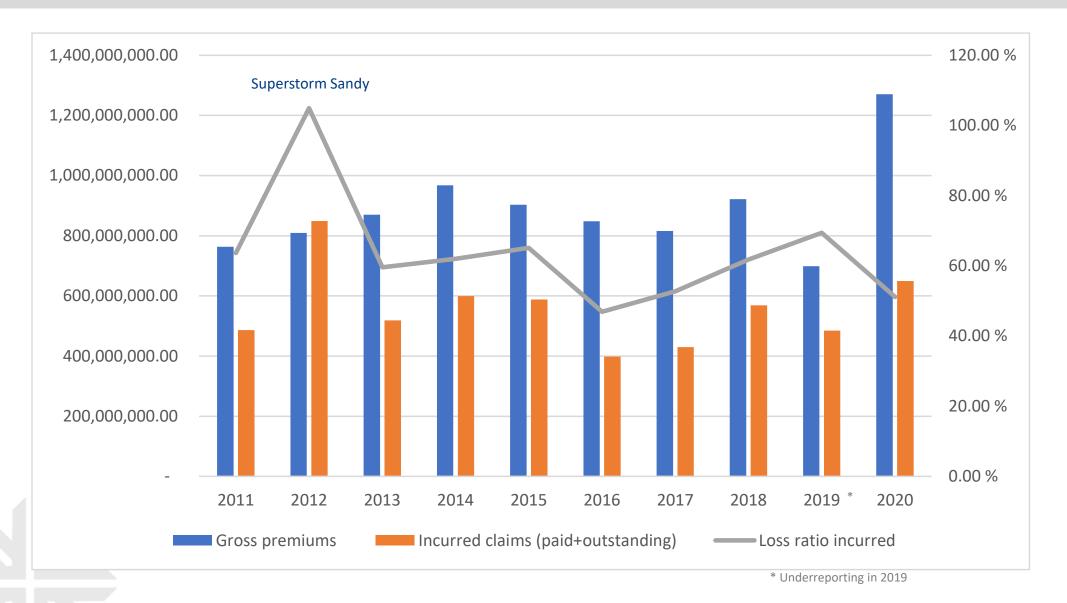
* Technical break even: gross loss ratio does not exceed 100% minus the expense ratio (acquisition cost, capital cost, management expenses)

**Data included from: Belgium, France, Germany, Netherlands, Italy, UK

Cargo – Gross loss ratios accounting year – US



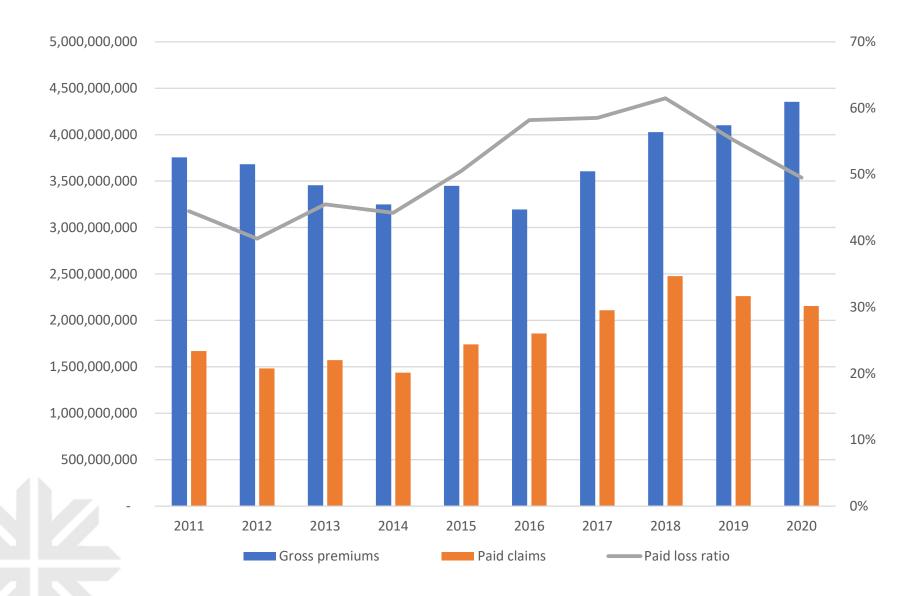
Gross premiums, paid claims



Cargo – Loss ratios accounting year – Asia*



Gross premiums, paid claims (USD)



Stable 40-45% until 2014.

Increase 2015-18. Probable impact by Tianjin port explosions & Nat Cat. losses.

Improving from 2019.

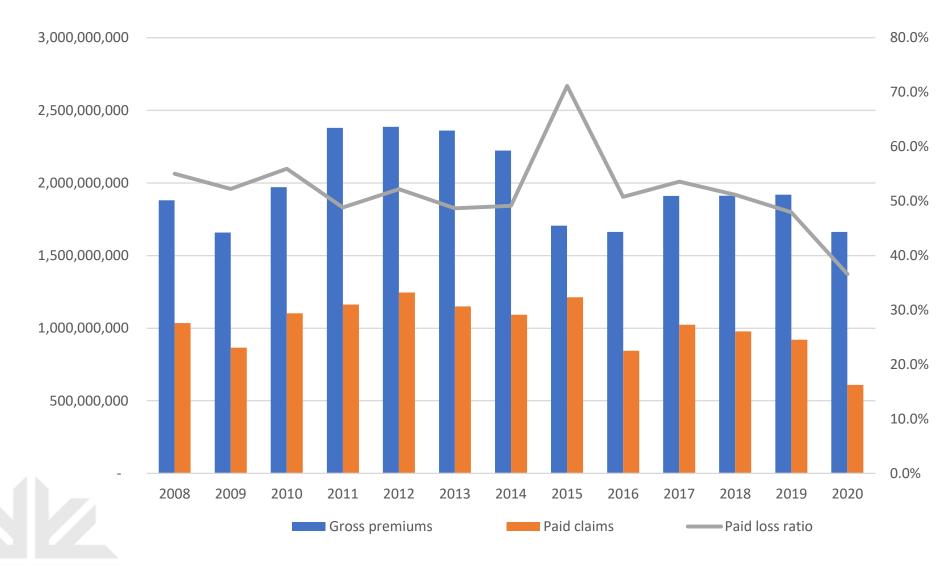
* China, Japan, Hong Kong, and India (new!) from 2015.

Singapore not included (incurred figures available but cannot be split), China, Japan, Hong Kong only paid available.

Cargo – Loss ratios accounting year – Latin America*



Gross premiums, paid claims (USD)



Stable around average 50-55%.

Peak in 2015 related to major claim impact in one country.

Improvement in 2020 but probable delay in / underreporting of claims.

*Figures included from:

Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica (from 2010), D. Republic (from 17), Ecuador, El Salvador (from 14), Guatemala, Honduras, Mexico, Panama, Paraguay (from 14), Peru, Venezuela (until 14).

Cargo – Summary



- Improvements in results across markets.
- Trade growth interrupted in 2020 due to COVID-19 but catching up rapidly.
- Port congestion (delays) due to quarantine rules, backlog after blocking of Suez Canal (& general average claim), weather impact (floods Germany, China, US).

Persisting challenges:

- Fires, particularly on container vessels.
- Misdeclared cargo
- Increased value accumulation on single sites (ports, vessels).
- Covered risks increasingly stock exposure rather than transit exposure.
- Increase in severe weather conditions (wind/wave force, floods)
- Generally increased risk of large event losses (both Nat-cat and man made).
- Geopolitical tensions

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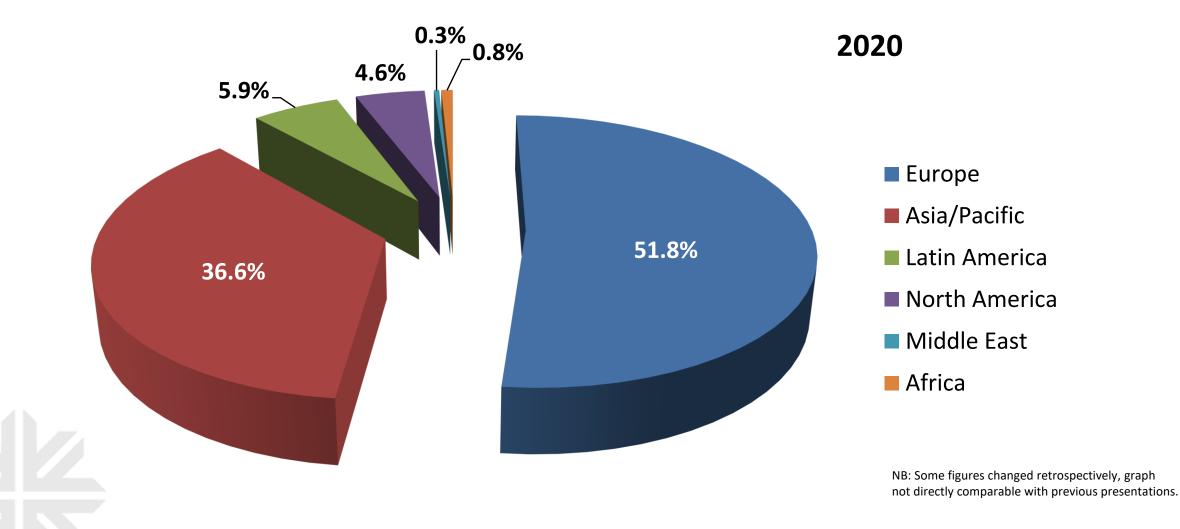


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Hull premiums 2020 – by region



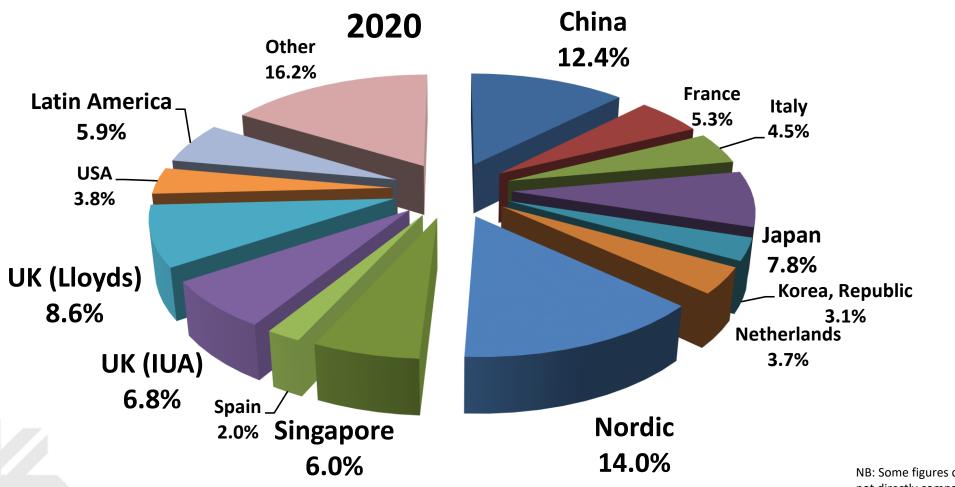
Total estimate: 7.1 USD billion / Change 2019 to 2020: 6.0%



Hull premium 2020 – by markets



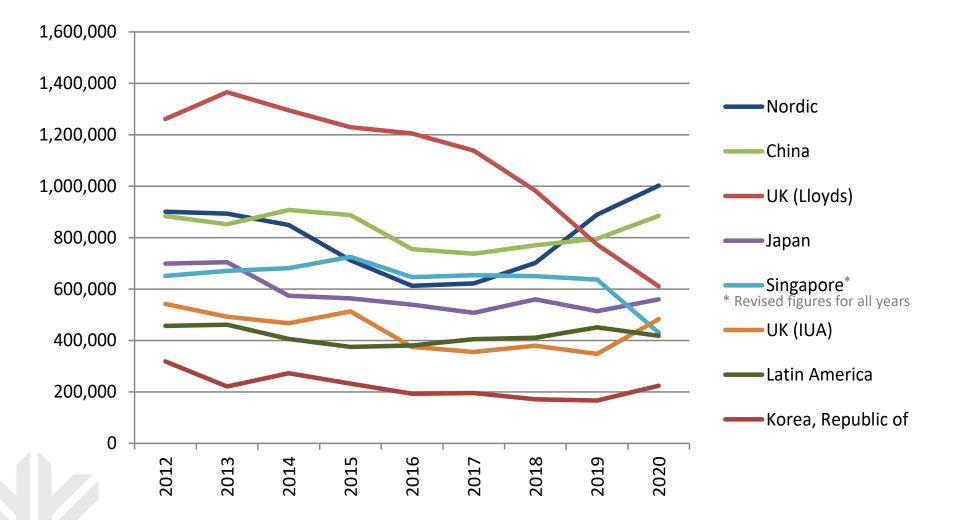
Total estimate: 7.1 USD billion



NB: Some figures changed retrospectively, graph not directly comparable with previous presentations.

Hull premium 2012-2020 – Selected markets





No comment.

Cheers!



Hull – Portfolio trends

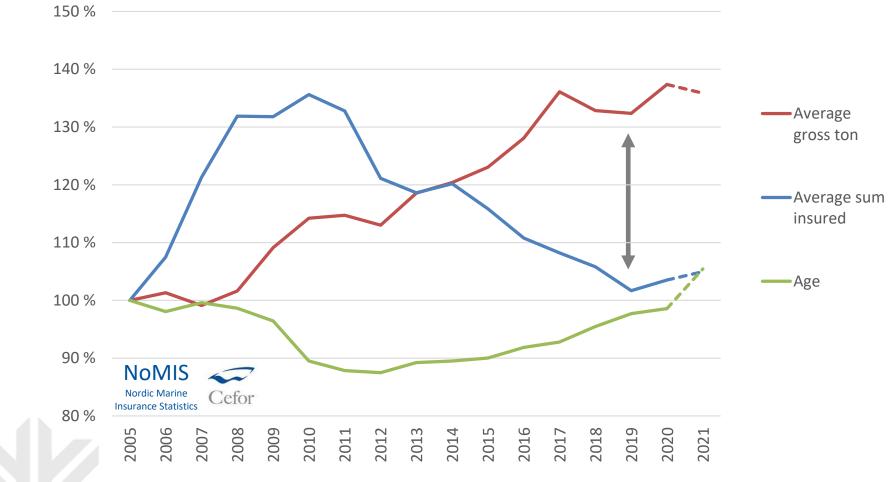




Creativity needed to reduce shipping industry emissions

Average gross ton, age & vessel values





Since 2014 increasing gap between average vessel size and insured value.

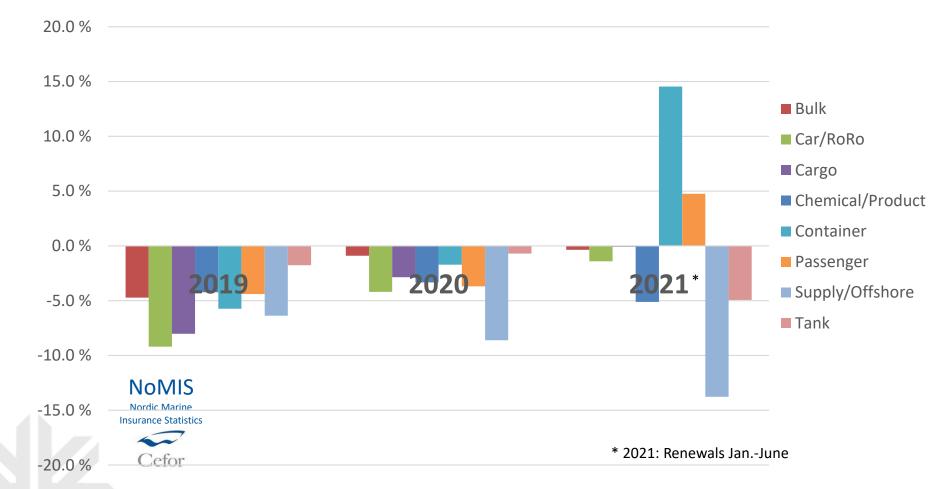
Insured values on the rise. Gap started to reduce. Will development continue?

Average vessel age continues to increase (less new builds).

Change in insured values on renewal 2019-2021*

Index, 2006 = 100%





Changes in vessel values in 2021 1st half year renewals differ strongly by vessel segment.

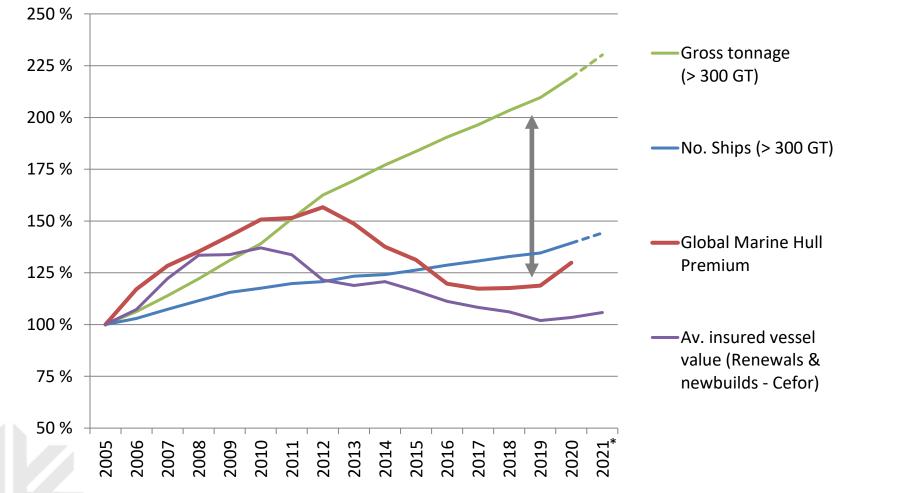
Reflect activity/demand.

Booming container market, Supply/offshore still under influence of low oil price.

Under unchanged market conditions some value reduction expected due to aging of vessel.

Hull premium versus world fleet





World fleet continues to grow, especially in size.

Downward trend in global hull premium and average vessel values came to a halt. Rising from 2019.

2012-2018 increasing gap between evolution of world fleet growth and hull premium/vessel values.

Slightly reducing in 2020.

Hull – Claims trends

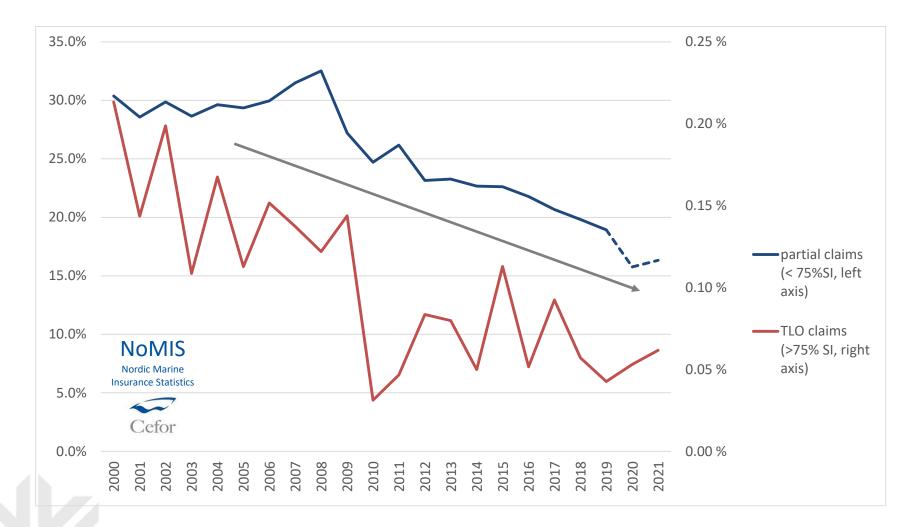




May there always be enough water beneath your keel...

Hull – Claims frequency (H&M)





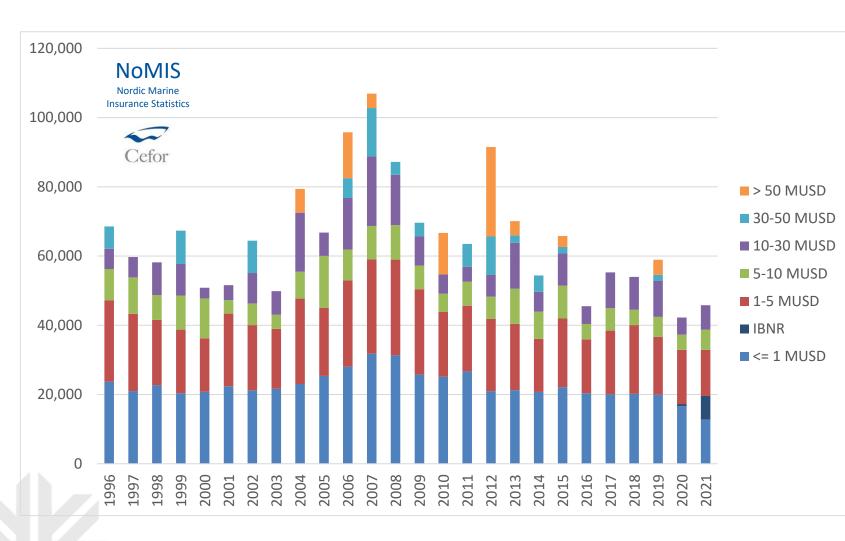
Overall claims frequency Long-term downward trend. Extraordinary drop in 2020 (COVID-19 impact: reduced shipping activity in some segments).

Total loss frequency

Long-term downward trend. Some increase but since 2010 oscillating within low level interval 0.05% - 0.1%.

Claim cost per vessel (USD) at modest level





* Figures do include total losses and represent H&M insurance. Builder's risk not included (i.e. 2018 Lürssen fire)

Major losses: Few in 2020. Some increase 1st half year 2021 but below previous years' level.

COVID-19 impact differs by segment. Reduced shipping activity in parts of 2020 (container, cruise) contributed to low major claims impact.

Exception: Fires.

Increased vessel activity (container) may change situation by year-end 2021.

EILONII HULL TRENDS AN MANNET Markana Markana Katar

Source graphs p. 42, 43, 46, 47: Cefor Hull trend report June 2021 <u>https://cefor.no/statistics/nomis/2021/2021-</u>

<u>cefor-june-hull-trends-report/</u>

Special issues of concern





Meeting expected and unexpected risks.

Special issues



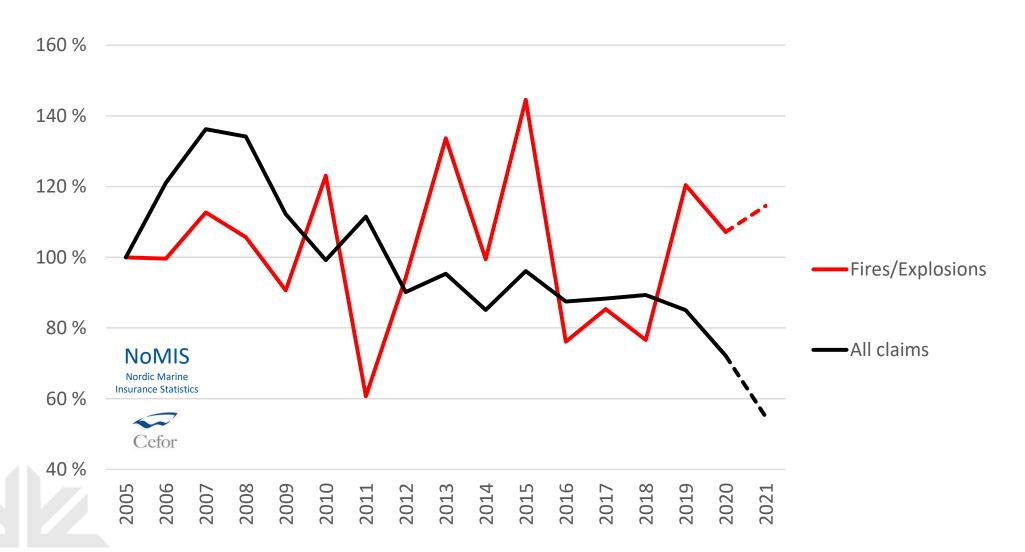
• Fires

- Very large vessels (Container fires, Ever Given grounding)
- Loss of containers
- Covid-19 impact on H&M modest and differs by vessel segment. Crew/Passenger issues and delays impact other lines
- Climate change increasing wind/wave forces, floods
- Industry targets for ESG goals / Emission reduction (propulsion, fuel types – monitor machinery claims trends)

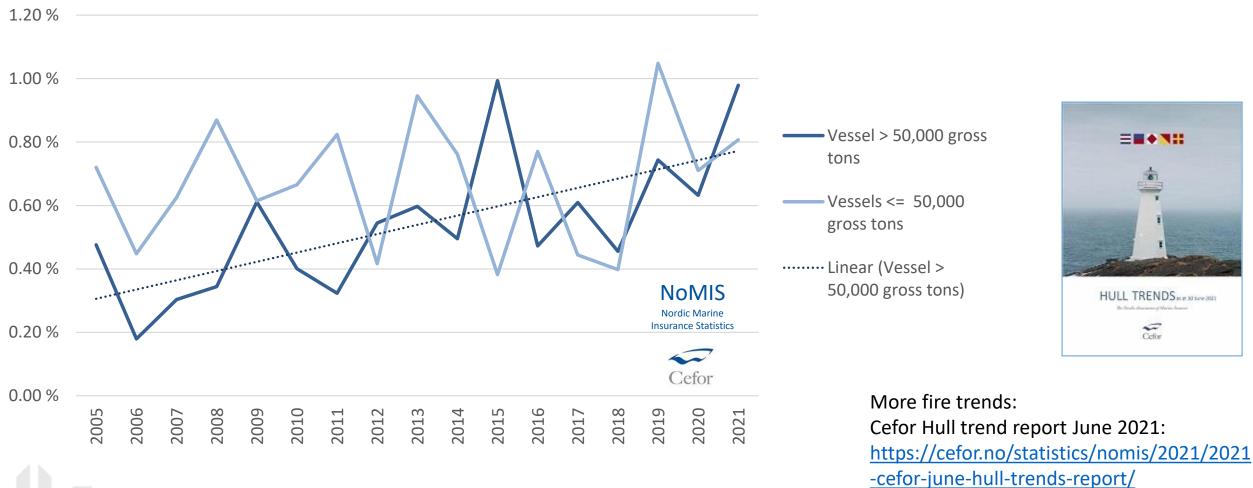
Fire frequency: No decline despite strong drop in overall claims frequency



Index, 2005 = 100%



Fire frequency on large container vessels: upwards trend



<u>-cefor-june-hull-trends-report/</u> Cefor analyses with special focus:: <u>https://cefor.no/statistics/analysis-with-spec</u> <u>ial-focus/</u>

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Hull – Loss ratios

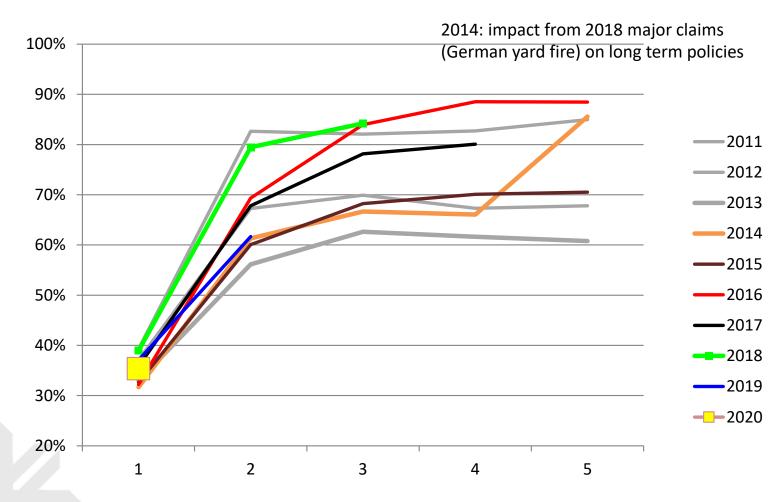




Hull – Gross* Loss ratios underwriting year – Europe

Underwriting years 2011-20, as reported at 1,2,3,4,5 years, gross premiums, paid+outstanding claims

NB: Data included changed compared to previous years' presentations (partly revised figures Europe; US excluded)



2020 starts at similar level as 2019. 2019 return to flatter development (combination of reduced claims and increasing premiums).

2018: Impact of 2019 major losses (fires, other) against eroded premium base.

2016 to 2018: Few major losses, but 2017 impacted by hurricane yacht damage. Change in loss ratio pattern, strong increase 2nd year.

* Technical break even: gross loss ratio does not exceed 100% minus the expense ratio (acquisition cost, capital cost, management expenses)

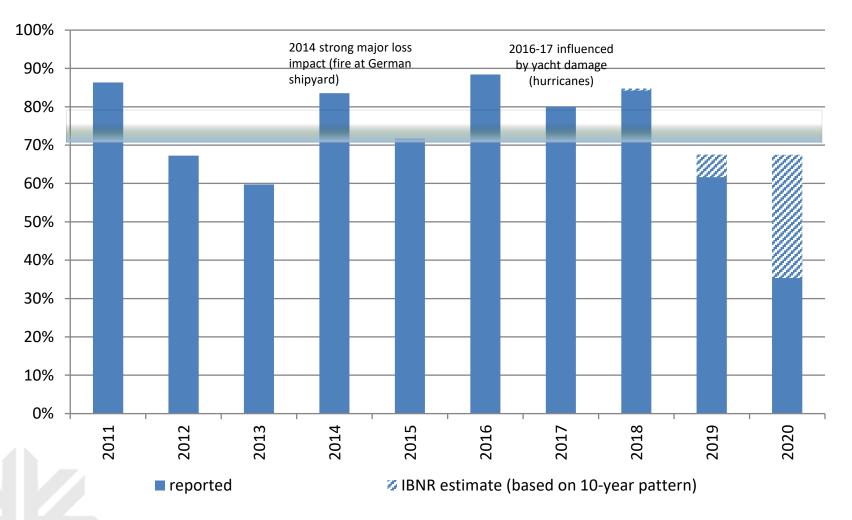
** Data included from: Belgium, France, Germany, Italy, Nordic (Cefor), UK, USA



Hull – Ultimate gross* loss ratios – Europe

Underwriting years 2011-20, gross premiums, paid+outstanding claims (USD)

NB: Data included changed compared to previous years' presentations (partly revised figures Europe; no US figures included)



*Technical break even: gross loss ratio does not exceed 100% minus the expense ratio (acquisition cost, capital cost, management expenses) ** Data included from: Belgium, France, Germany, Italy, Nordic (Cefor), UK, some US data After years of unsustainable results some improvement from 2019.

Increasing premiums and low 2020 claims impact influences 2019 and 2020 underwriting years.

2014 to 2018 overcapacity, dropping vessel values, reduced activity influenced income negatively. Yacht damage (hurricanes) impacted 2016/17.

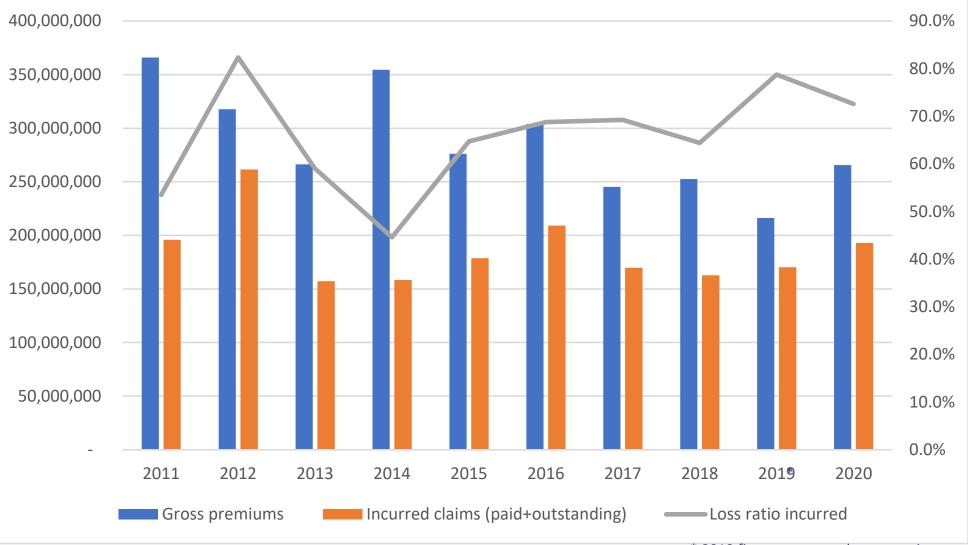
Return to sustainable results possible?

Will return to full shipping activity in 2021 impact claims trends negatively?



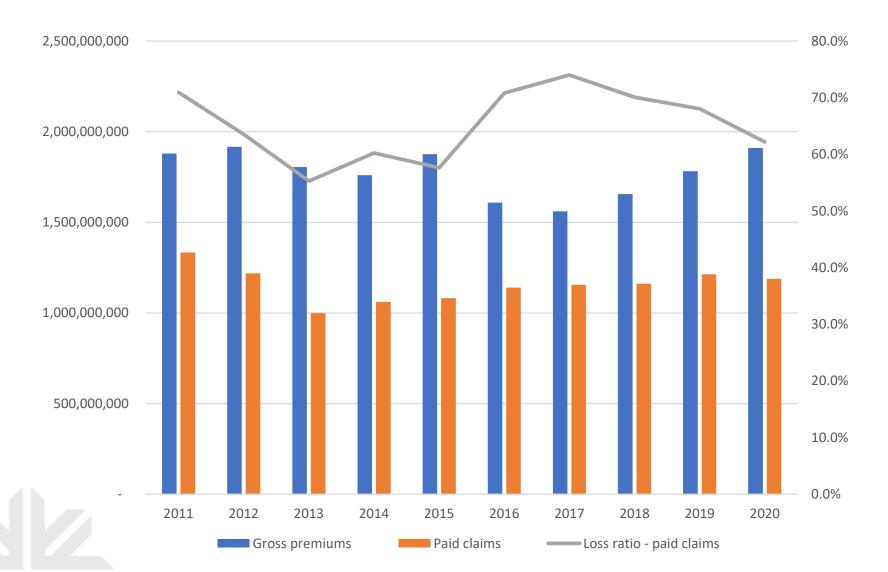
Hull – Gross loss ratios accounting year – US





* 2019 figures: no complete reporting

Hull – Gross loss ratios accounting year – Asia*



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* China, Japan, Hong Kong. India from 2015.

Singapore not included. Incurred figures available but cannot be split, for China, Japan, Hong Kong only paid available.

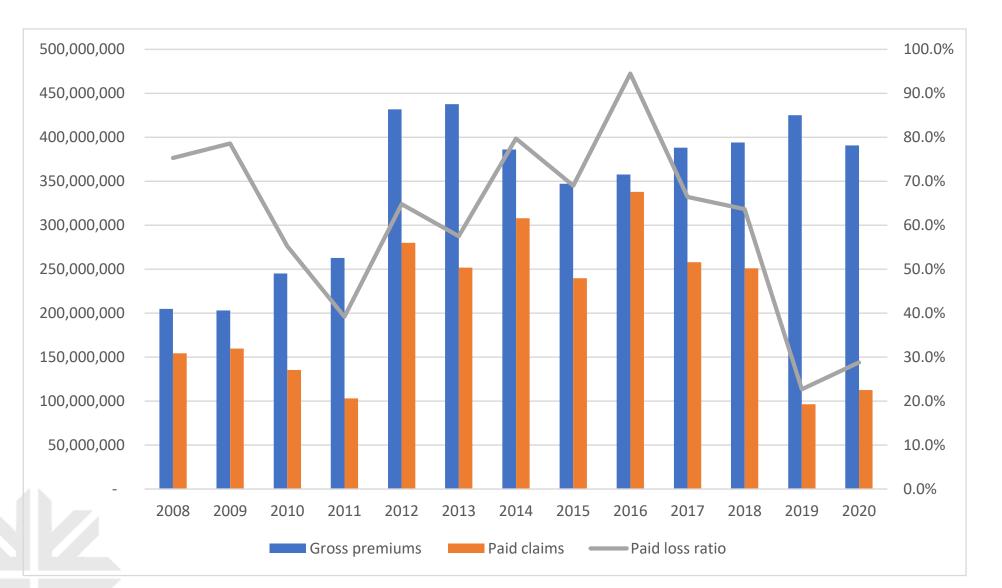
After an increase 2015-2017, loss ratios improve sligthly.

Relatively stable paid claims, from 2017 weighed against increasing premiums.

NB: accounting year: claims attaching to uw year are paid over several accounting years.

Hull – Gross* loss ratios accounting year – Latin America





After worsening loss ratios 2011 to 2016, improving results.

NB: Probable delay/ underreporting of claims in 2019/2020.

*Figures in graph include: Argentina, Bolivia, Brazil, Chile (from 2012), Colombia, Costa Rica (from 10), D. Republic (from 17), Ecuador, Guatemala, Honduras (08-16), Mexico (from 12), Panama (from 10), Paraguay (14-16), Peru, Venezuela (until 14).

Hull – Summary



Exposure

- Downward trend in premium reached bottom but gap between fleet growth and premiums / values remains.
- Insured values on the rise in some segments (container), reflect demand. Supply/offshore still depressed.
- Higher single-risk exposure (with inherent risk of unprecedented

Claims

- Claims frequency and cost reduced in 2020. Some increase in 2021 but still moderate level.
- Total loss frequency: long-term positive trend. Some fluctuation but still at low level.
- Major loss impact low in 2020. Moderate rise in 2021.
- Exception: Fires. No decline in frequency. Negative impact on hull, cargo and environment (X-Press Pearl).

Results

- Improvement starting in 2019 continues into 2020. Combination of low claims impact and rising premiums.
- How will return to full shipping activity impact claims trends going forward? How do new propulsion types
 and fuels impact machinery claims? Will market overcapacity return? Can a sustainable balance be reached?

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The 2021 Oracle – Looking into the crystal ball





2021 Outlook



- **Global trade**. Will optimistic outlook last or effect of short-term economic stimulus measures?
- **COVID-19**: back to normal or new measures?
- Cyber risk / Effects of increased use of digital means under pandemic
- Increasing Nat-cat impact: Wind/wave force, floods, Arctic
- Oil price: Will upswing last and initiate new activity?
- Emission reduction (new risks, potentially increased risk of machinery damage)
- Geopolitical tensions (sanctions, China-US trade war,...)
- Value accumulation (storage, vessels)
- Can cargo and hull markets recover in a sustainable way?

Reality – Complex issues to monitor





High-value risks



Oil price, fuel quality

Human factor/ Qualification

Climate change/ Increase in Nat-cat







Arctic risks

Value accumulation

New technology

Cyber risk

Internet of things/complex technologies

Emission reduction goals (IMO 2020 & beyond)

Changes in regulation (liabilities)

Navigation

Fires on RoRo & Container vessels



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• A glimpse behind the scenes

Facts & Figures Committee Meeting





Life in Norway under COVID-19

Photos: Astrid Seltmann



Enjoy the rest of the conference! ③







Thank you!

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Technical terms



<u>Gross premium</u> = Premium for insurance including the provision for anticipated losses (the pure premium) and for the anticipated expenses (loading), including also commission and brokerage but excluding taxes and other contributions on insurance premiums. Before deduction of any ceded reinsurance. <u>Written premium</u> = Complete premium due for insurance policies which start, i.e. "are written", in a specific year (= the underwriting year of the policy). Does not give any information on actual premium payments/instalments, i.e. the cash flow.

Paid claims = Amounts the insurer has paid for known and registered claims less recoveries.

Outstanding claims reserve = Claims reserve for reported, but not yet (fully) paid claims, of which the insurer has an estimation of the total amount to be paid. Includes loss adjustment expenses = Sum of total claims estimates minus any amounts already paid for these claims.

Total claim = Paid amounts + outstanding claims reserve for all reported claims.

IBNR = "Incurred but not reported" = additional claims reserve on top of the outstanding claims reserve, and which for claims incurred, but not yet known or registered in the insurer's system. The necessary IBNR reserve is derived by statistical methods based on historical claims ladder statistics.

Loss ratio = Claims divided by premiums. Indicator of whether premiums are calculated correctly to match claims and other expenses.

Gross loss ratio (in this presentation) = Sum of total claims (and IBNR reserves), divided by gross written premiums

<u>Underwriting year basis</u> = Insurance figures are registered with the calender year in which the insurance policy starts, and to which the covered risks accordingly attach to. Example: a policy with cover period 01.07.06-30.06.07 has underwriting year 2006. Both claims occuring in 2006 and 2007 for risks attaching to this policy are thus attributed to underwriting year 2006. The underwriting year is not closed, so underwriting year figures change as long as there are payments related to policies with this underwriting year.

<u>Accident year</u> = Claims are registered with the calendar year in which an accident happens. Claims attaching to the same policy may thus be attributed to different accident years. Example: for the policy with cover period 01.07.06-30.06.07 a claim occuring in 2007 has accident year 2007, but underwriting year 2006. The accident year is not closed, so figures will change as long as there are claims payments related to claims occured in that accident year, e.g. a claim payment made in 2009 for an accident which happened in 2007 will be attributed to accident year 2007.

Accounting year (also booking year) = Insurance figures, regardless of their original source date, are booked into that year of account which is open at the time of actually entering the figures in the books. Contrary to the underwriting and accident year, the accounting year is closed at some point in time, usually at the end of one calendar year, such that figures do not change any more once the accounting year is closed. These give the insurance results usually published in companies' annual reports.