

IUMI

2020 

STOCKHOLM

Global Marine Insurance Report

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Contents

- Stockholm feeling!
- Global marine insurance market
- P&I
- Offshore energy
- Cargo
- Hull
- What now? The 2020 oracle

Additional data for download:
- Marine premiums by line of business by country
- Loss ratios triangulations Hull, Cargo, Energy
(<https://iumi.com/statistics>)

Typical inhabitant



Foto:
Astrid
Seltmann

Typical Swedish Lifestyle



Swedish coffee break
(for 'Hygge')

LAGOM = "just enough"
Not more than necessary.

Typical Swedish
vessel (?)



IUMI
2020 
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Foto: Astrid Seltmann

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Please note & Disclaimer

Figures reflect the 2020 state of reporting. Figures will change retrospectively. Some figures are estimates. Figures are reported to the degree possible according to the IUMI definitions but may not be fully consistent for all countries.

For comparison of years, compare the updated premiums and loss ratio! (download from www.iumi.com)

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

Figures related to the marine market's performance reflect market averages.

They do not disclose single company' or local markets' 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 fact-based evaluation of the risk exposure covered –

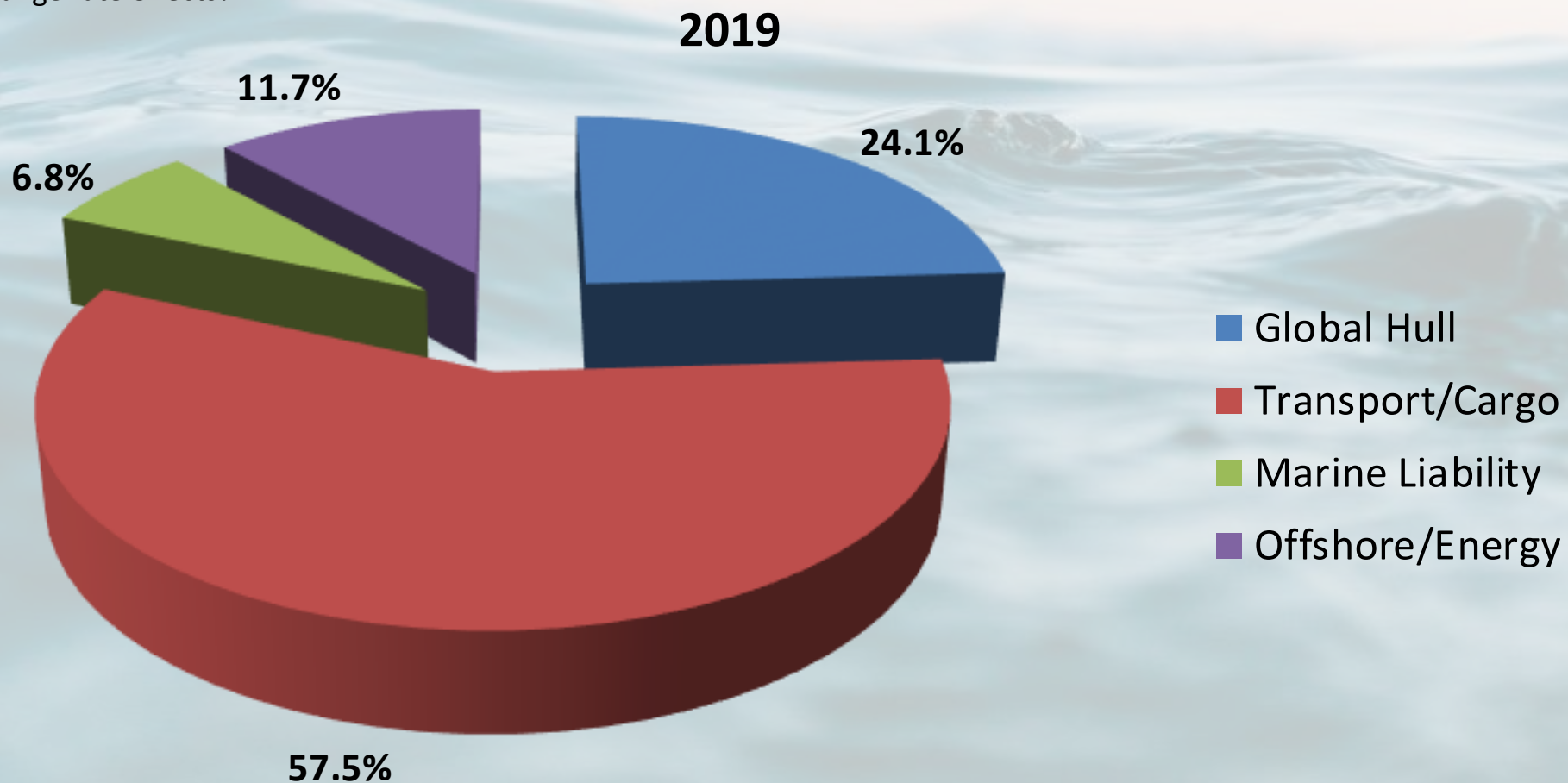
and inspire everyone to do their own critical evaluation of real and seeming facts!

Marine Premiums 2019

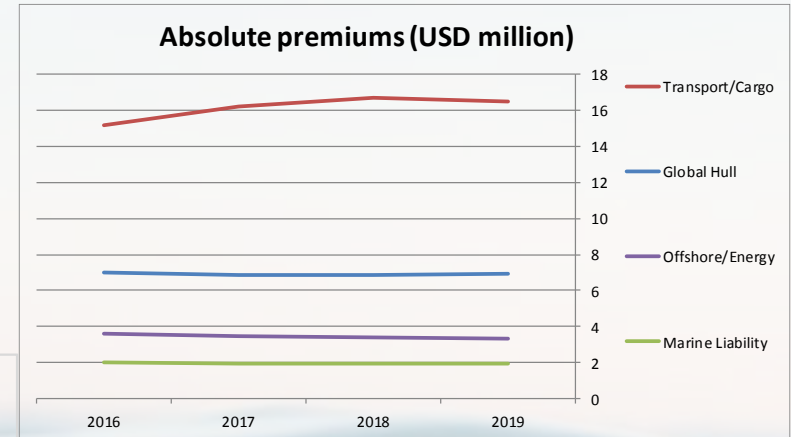
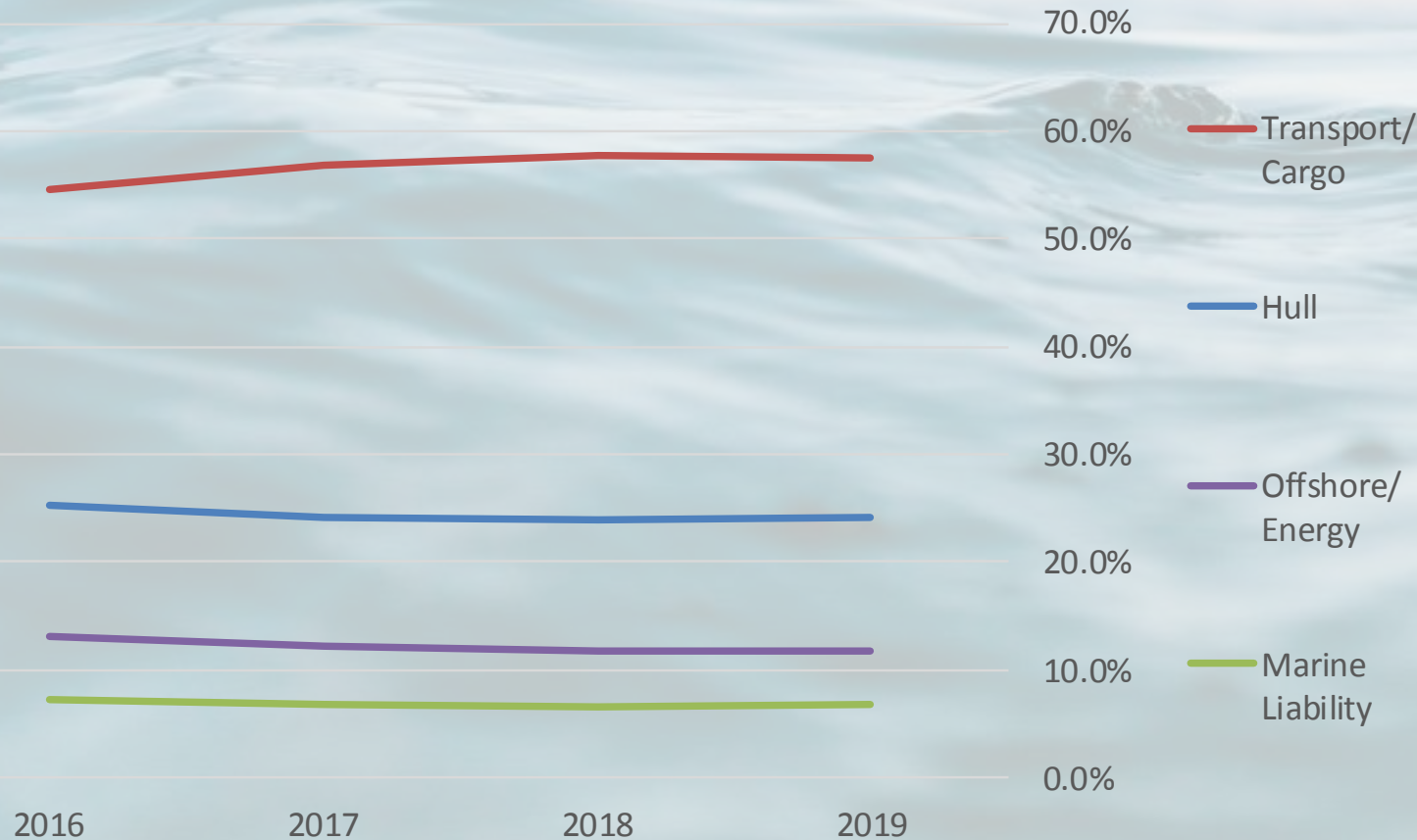
by line of business

Total estimate 2019: 28.7 USD billion / Nearly stable from 2018 to 2019 (-0.9%)

NB: Exchange rate effects!



Premium shares 2016-19



Share and volume of cargo premium increased 2016-2018. Some decrease 2019.

Combination of various effects. Increase in world trade volume, market conditions and exchange rate influences.

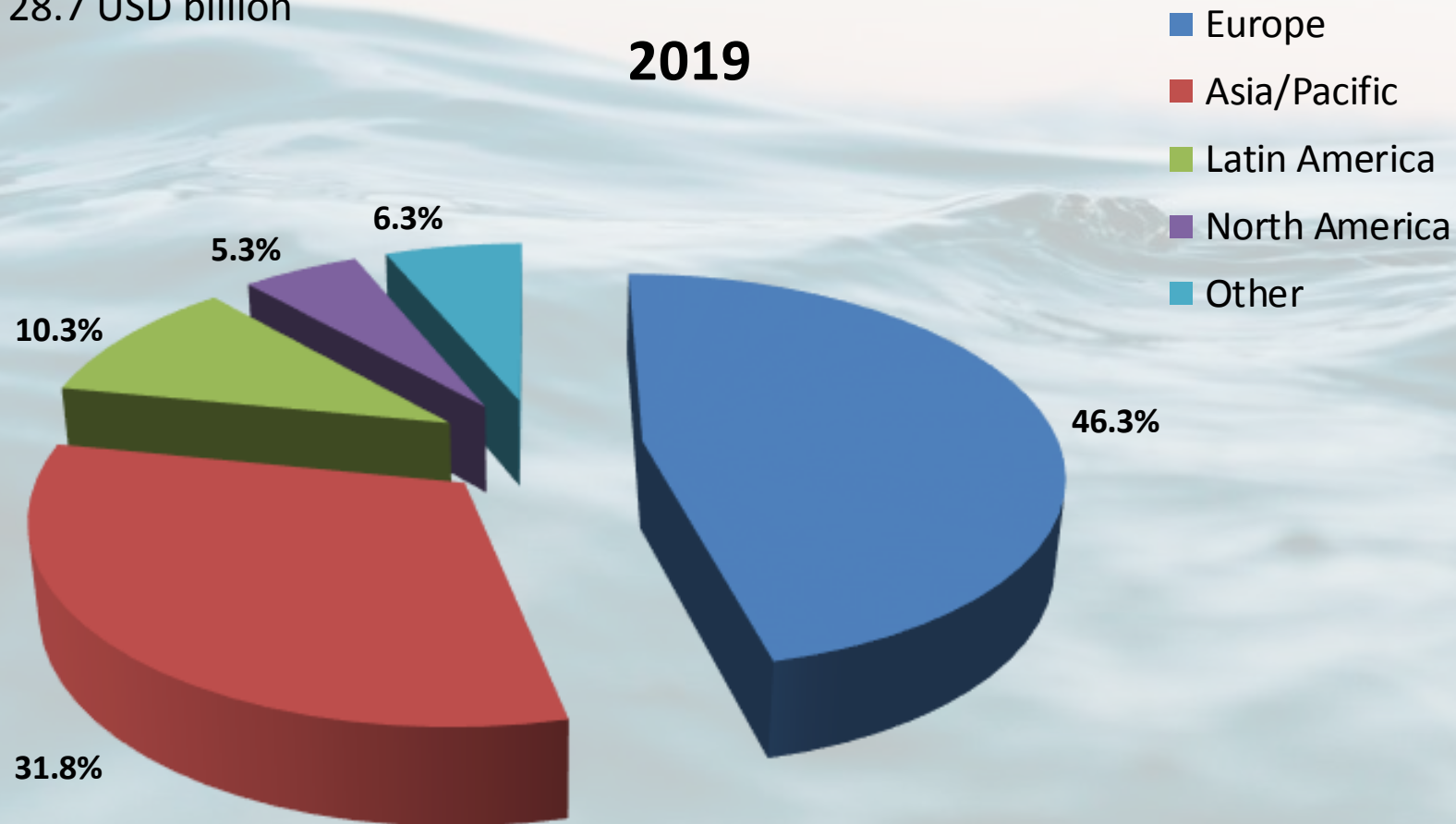
Hull premium stable despite growing world fleet.

Marine premiums 2019

by region

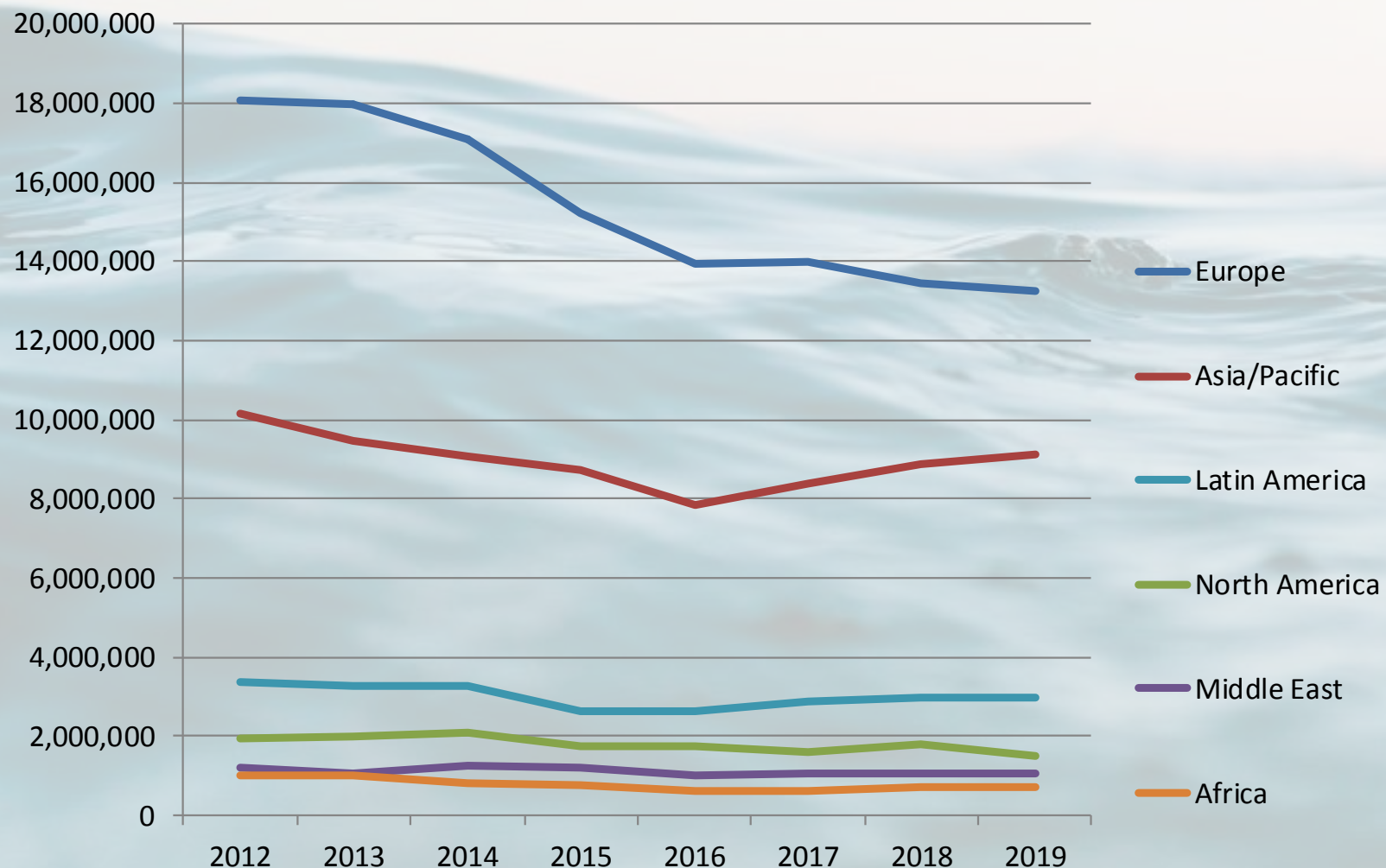
Total: 28.7 USD billion

2019



Premium (USD) by region 2010-19

Data as of 2020



Europe share decreasing,
Asia increasing.

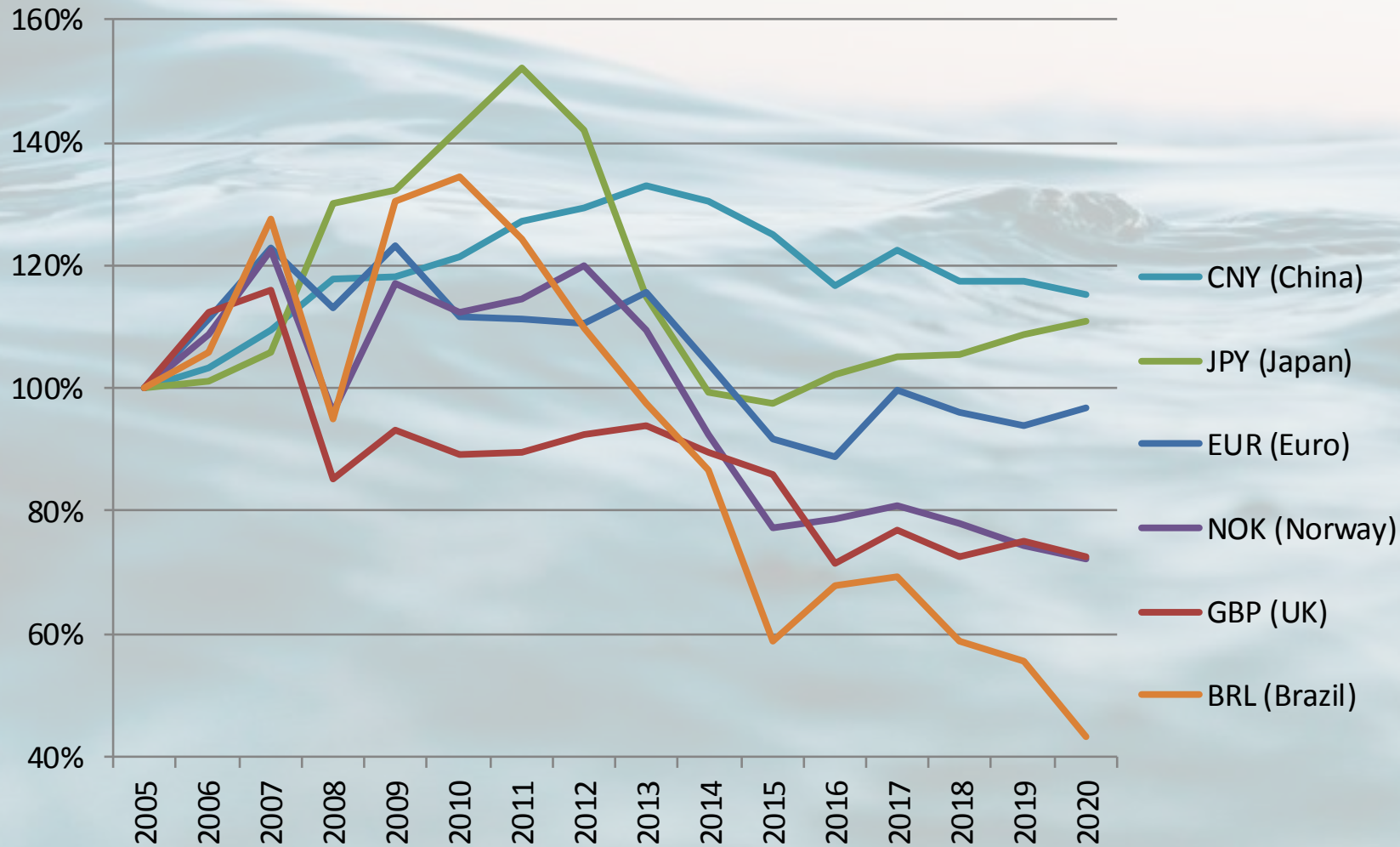
Various influences. Market
conditions, exchange rates.

2019: 28.7 USD bill.

2018: 28.9 USD bill.

USD Exchange rates 2005-2020

Index 2000=100%, against selected currencies, as of Dec. each year (2020 as of July)



USD premium amounts in this report influenced by exchange rates!

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

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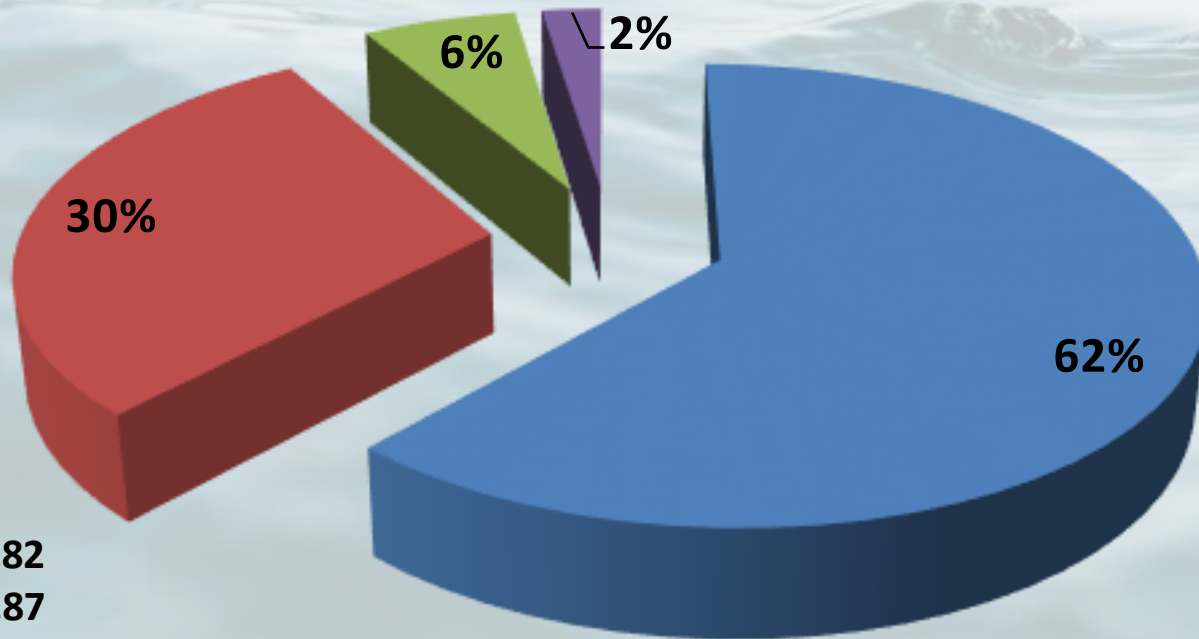
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P&I International Group – Income

Gross calls 2019 (premiums) – by operational location

Source: International Group of P&I Clubs

P&I premiums down for 5th year in a row



Calls 2019:

UK: 1.82

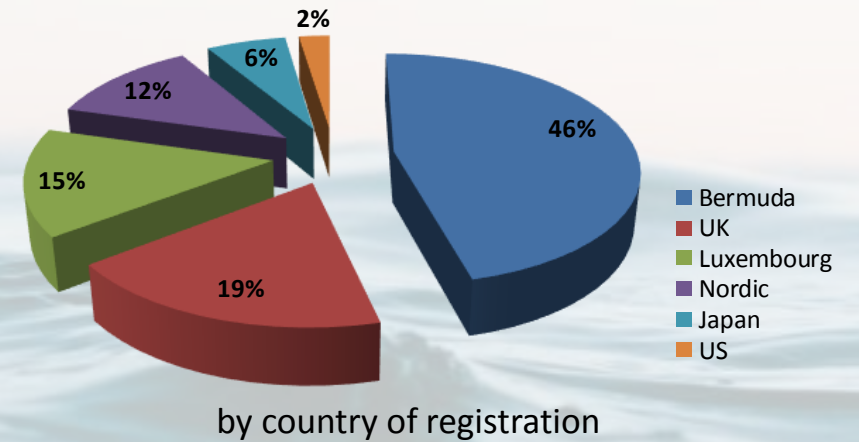
Nordic: 0.87

Japan: 0.18

US: 0.07

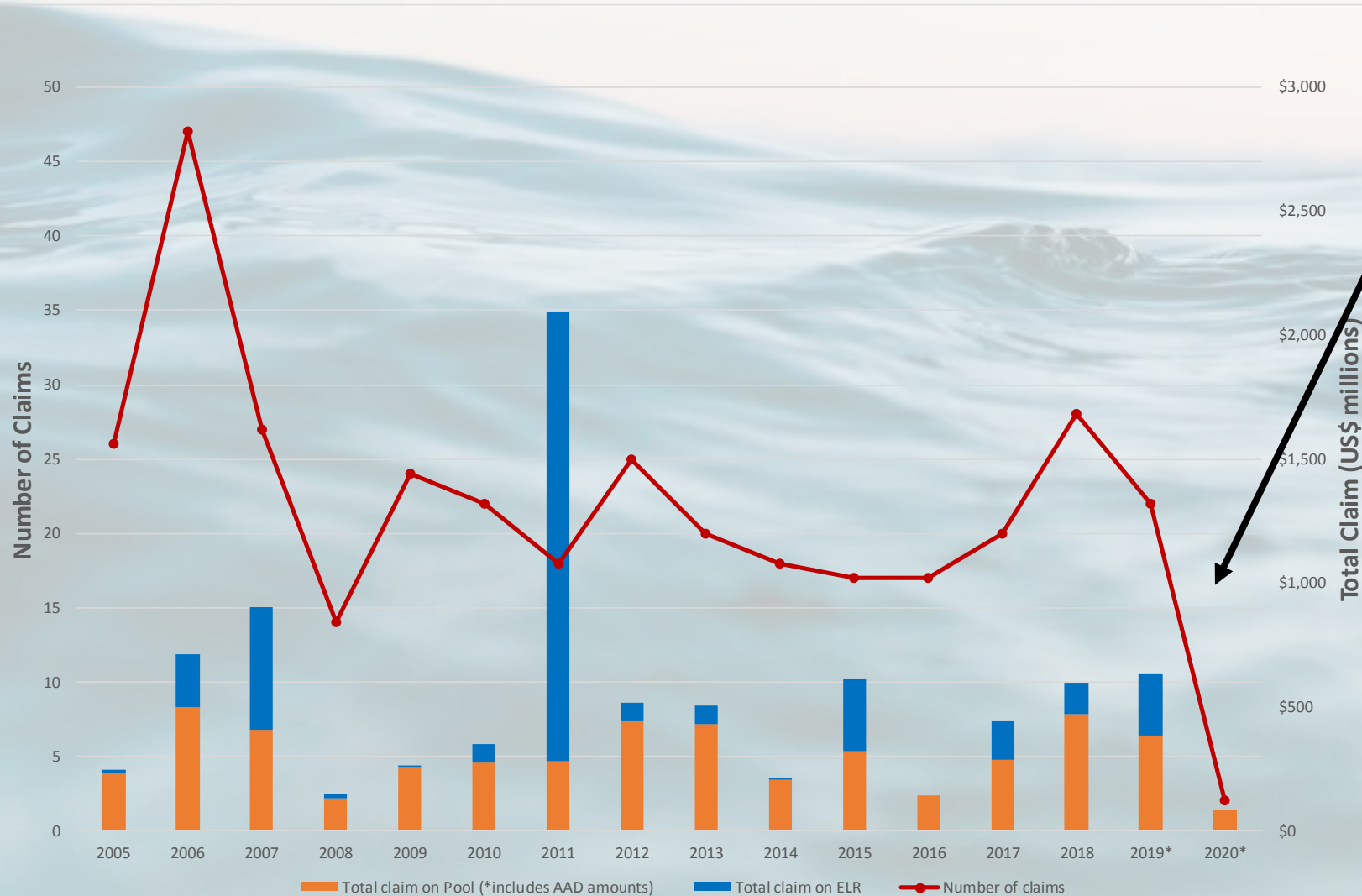
Total: 2.95 (USD billion) -5.4%

- UK
- Nordic
- Japan
- US



P&I Pool claims by policy year

Source: International Group of P&I Clubs, claims as of end June 2020



End 2019 / 1Q 2020:
A number of severe casualties end period of low major claims impact.

Reporting backlog:
Claims for youngest years not yet fully reported.

P&I is a complex business with high liabilities!

Impacted by COVID-19.

More information at www.igpandi.org

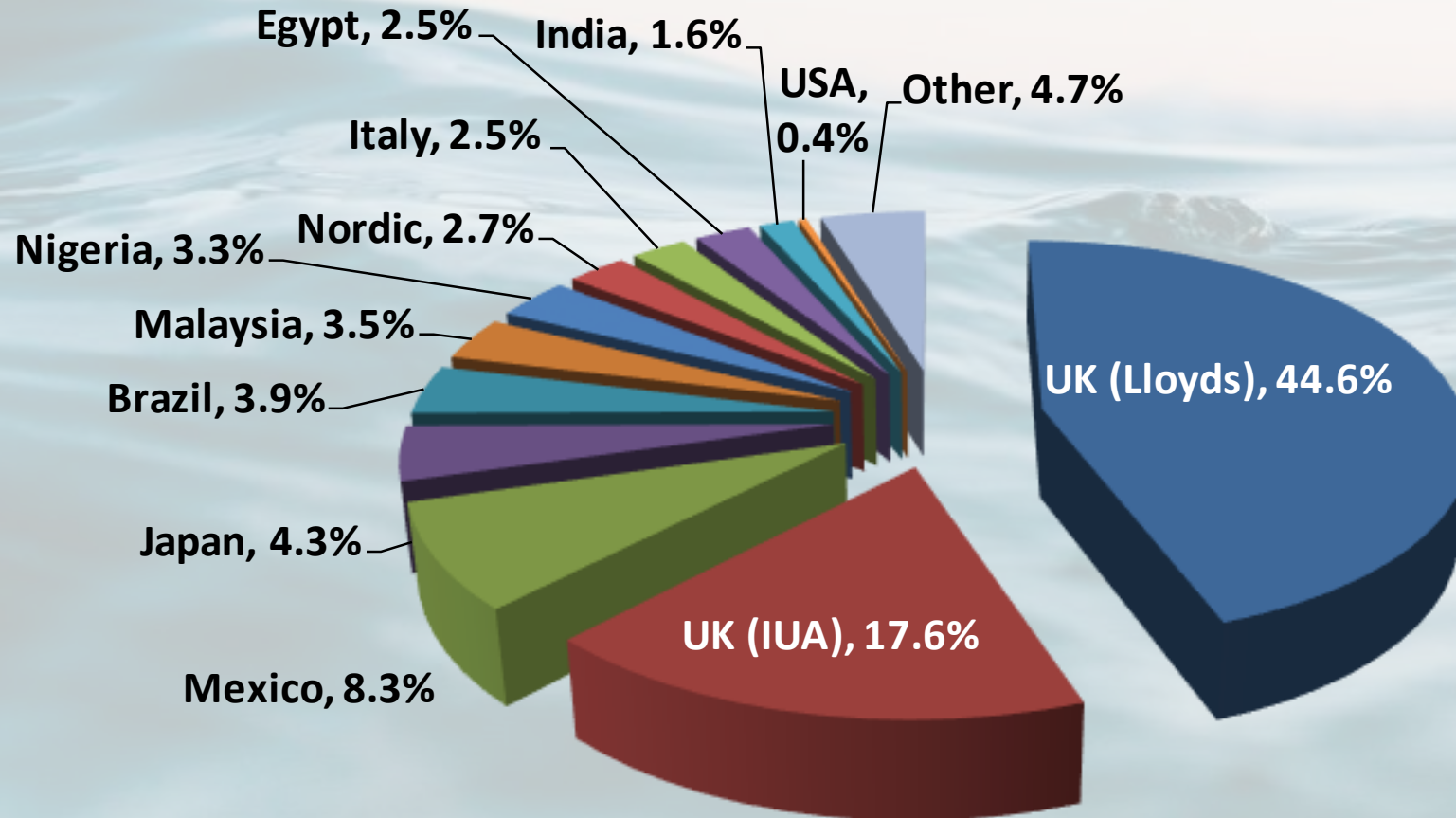


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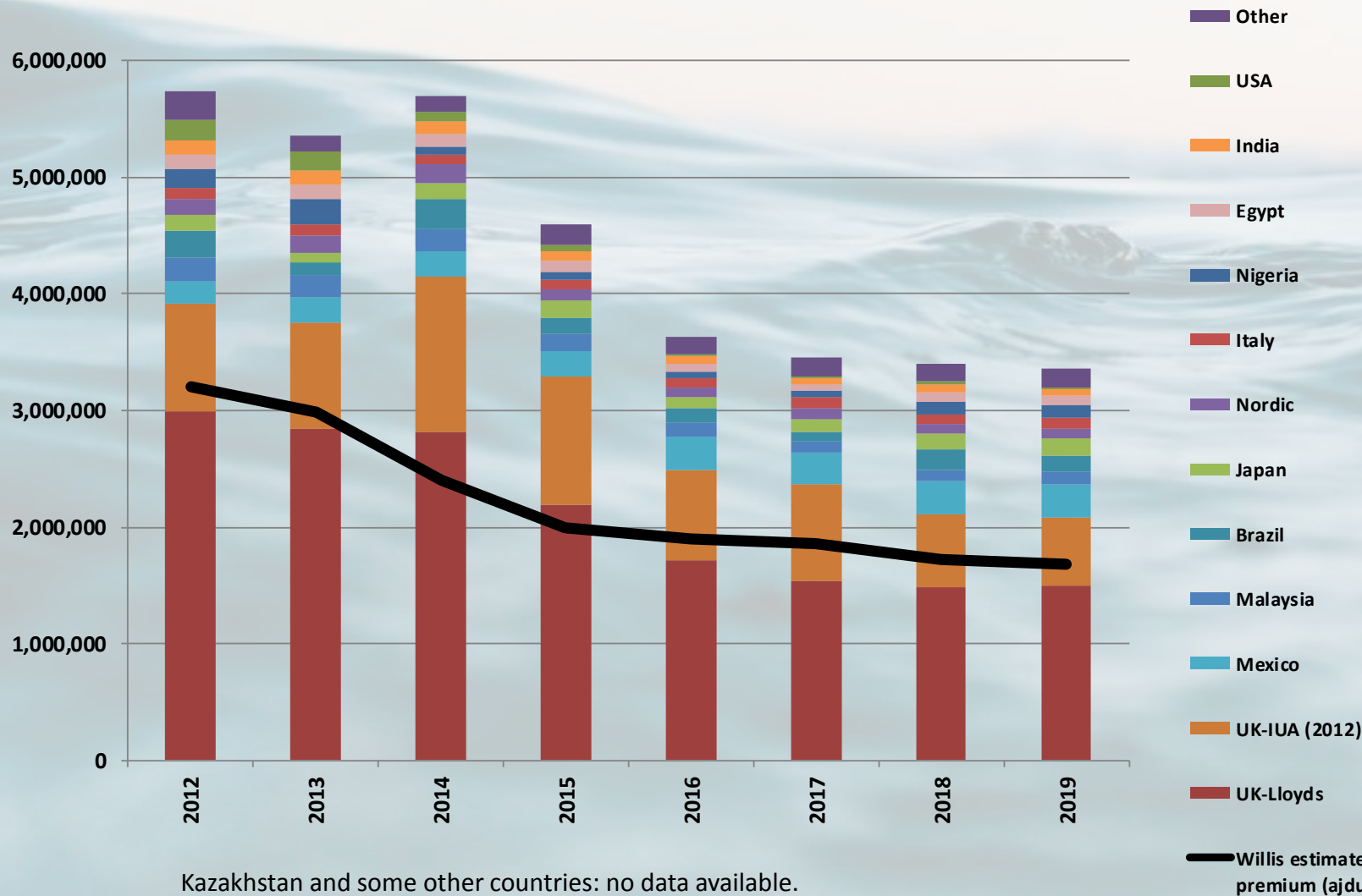
Offshore energy premiums 2019

Total estimated: 3.35 USD billion / Change 2018 to 2019: -1.4%



2019

Offshore energy premium 2012-2019



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

=> Overestimation of global premium.

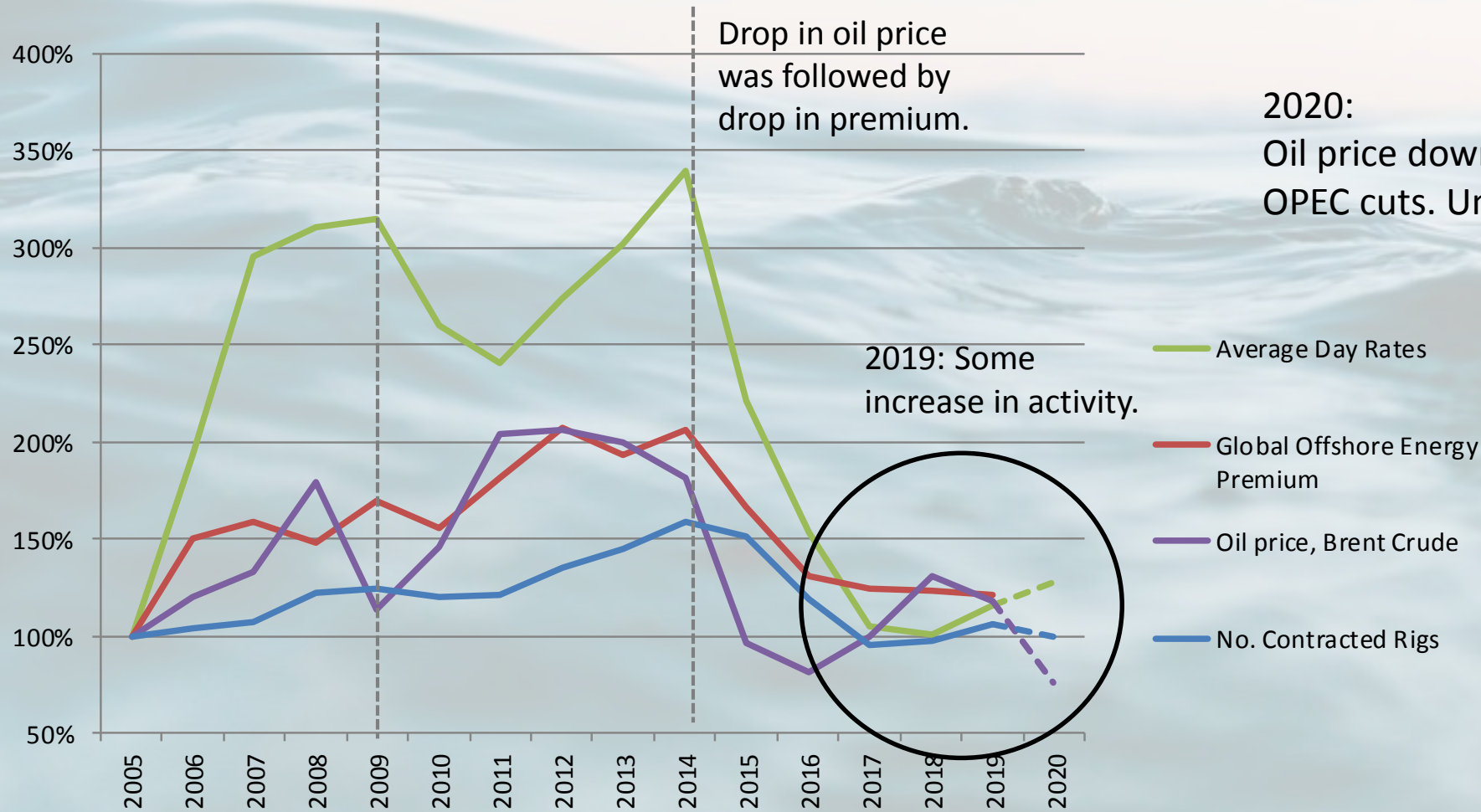
Willis approach: Lloyds premium triangulation (risk codes EC, EN, EM, EY, EZ). Grossed up to 100% by assuming Lloyd's represents 70%.

=> Underestimation of global premium

Strong decrease from 2014, has flattened out.

Offshore energy premium

Energy mobiles, day rates, oil price (as of August 2020)
Index, 2005 = 100%



Drop in oil price was followed by drop in premium.

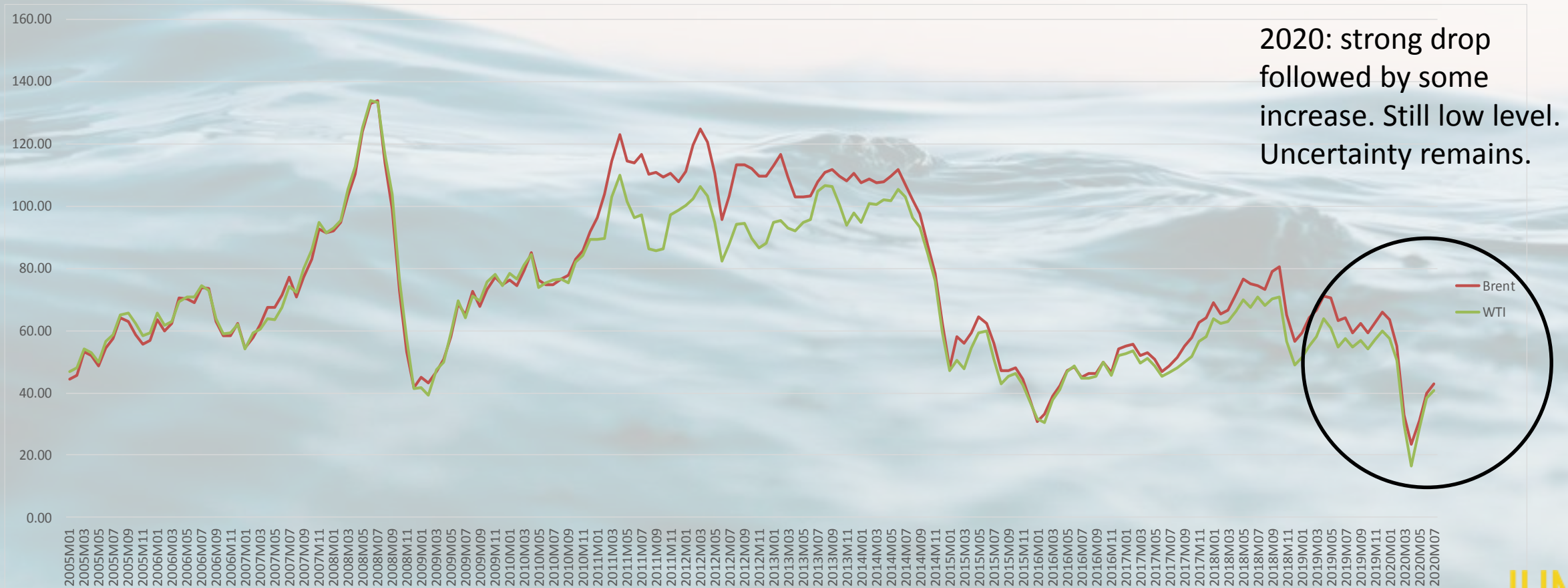
2019: Some increase in activity.

2020:
Oil price down due to oversupply.
OPEC cuts. Uncertainty remains.

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

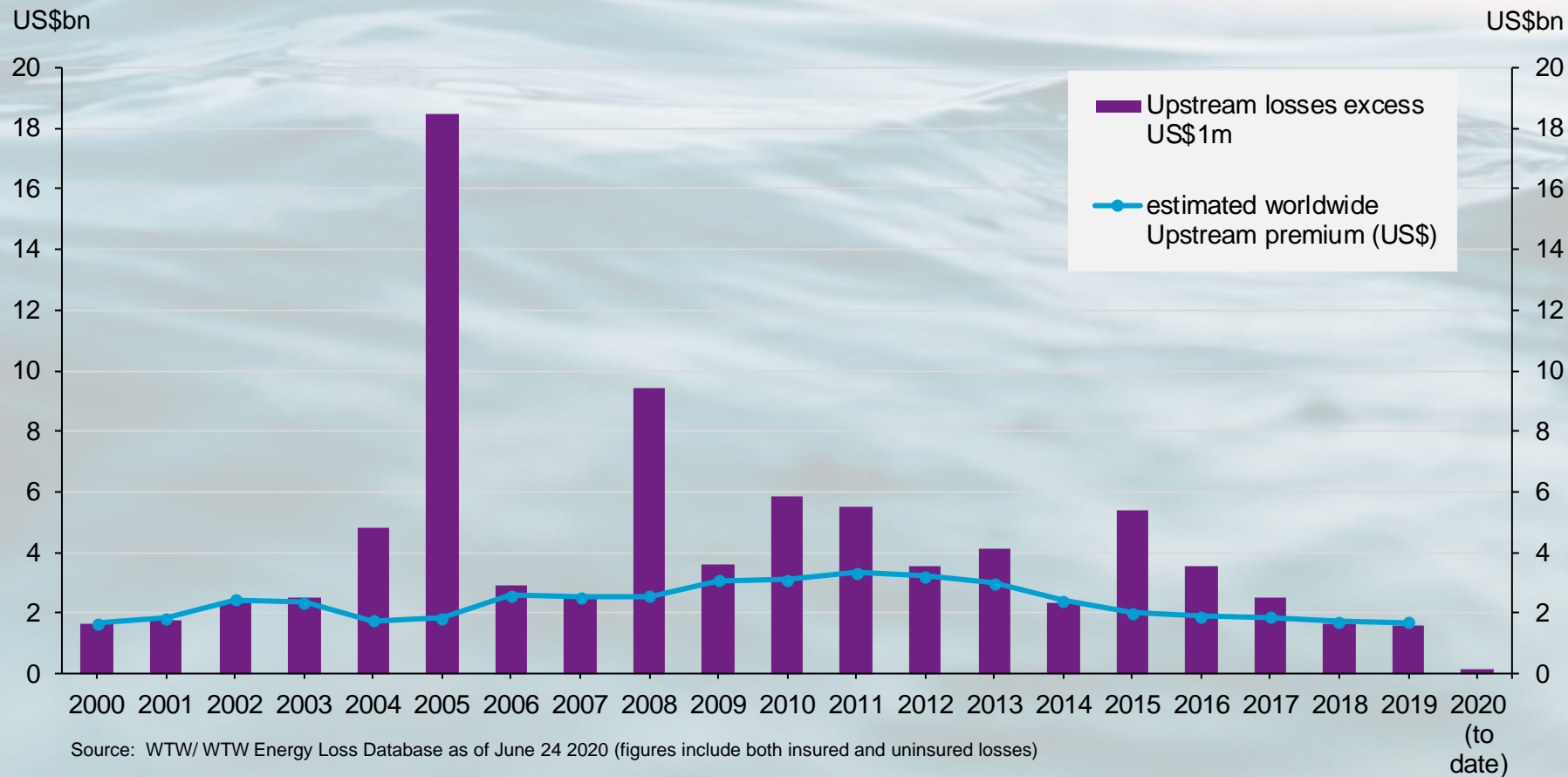
Average oil price per month (USD/bbl)

Source: World bank commodity price data, January 2005 – August 2020



WELD Upstream Energy losses 2000-20 versus estimated Upstream premium income

Source: Willis Towers Watson

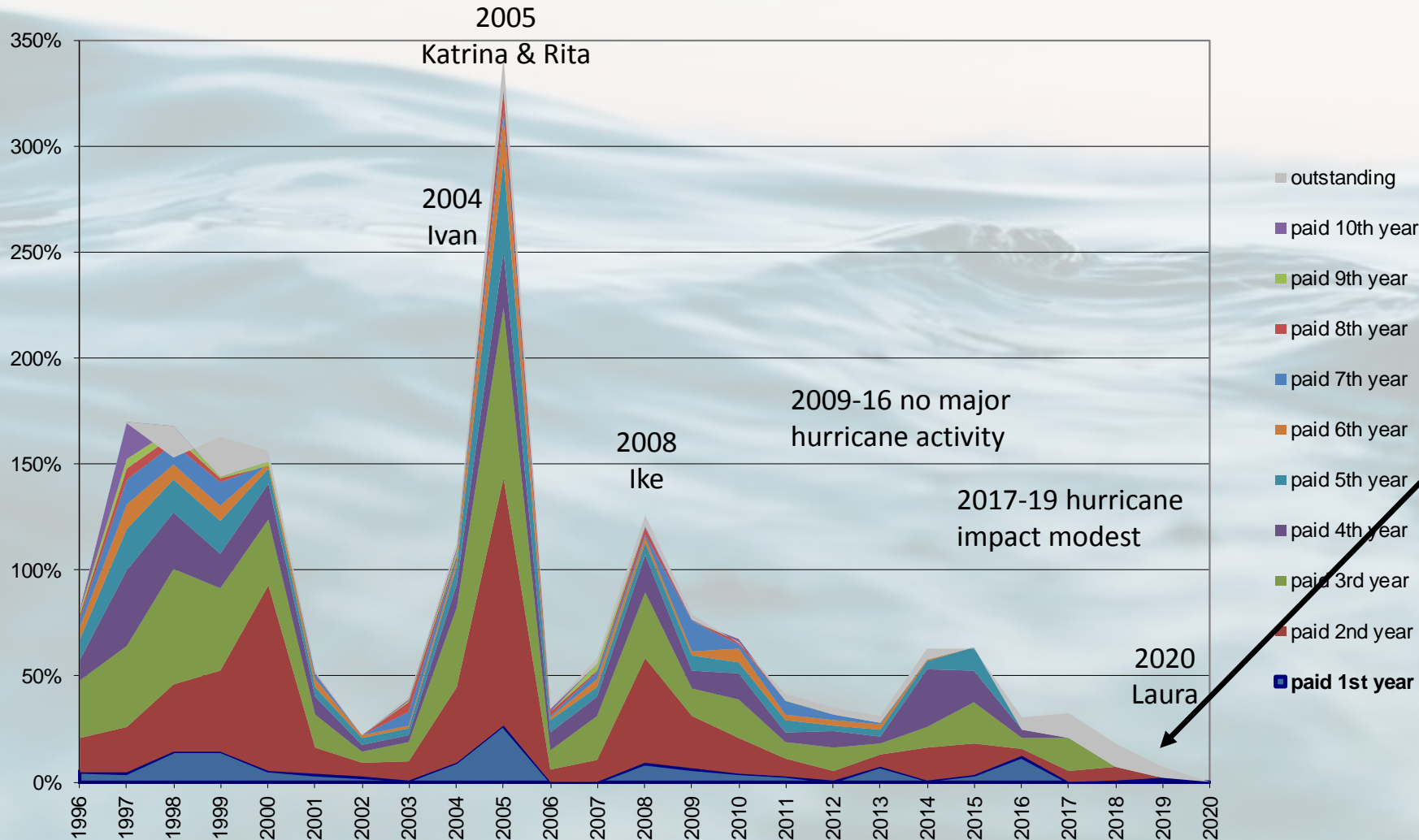


Benign claims environment continues, while offshore premium remains depleted with latest upswing in 2011.

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

Offshore energy gross loss ratios

Underwriting years 1996-2019 / incl. liability / data from UK, Nordic, some US/ as of Dec. 2019



Youngest underwriting years still develop, deteriorate over time.

2020 Hurricane Laura: Near half of the rigs and platforms in the path of Laura were evacuated (ca. 15% of US oil production). About to reactivate.

Offshore Energy – as of 2019

Market conditions

- Oil price was recovering since 2016, with some variation. Uncertain future (trade war).
- Downturn in activity started to reverse, but slowly. Historically 18 months time lag between improved oil price and authorisation for expenditure.
- More risk retained -> Mismatch between capacity and insurable objects.
- Risks and claims potential arising from unit reactivation an issue.

Income

- Strong drop in premiums following oil price reduction, flattening out since 2016.

Claims

- Recent years moderate claims impact.
- Weather impact (hurricanes) reduced since 2009.

Offshore Energy – 2020

COVID-19

- COVID-19 reduced demand. Overcapacity lead to new drop in oil price.
- New projects put on hold.
- Degree of inactivity / lay-ups increased again.

Non Covid

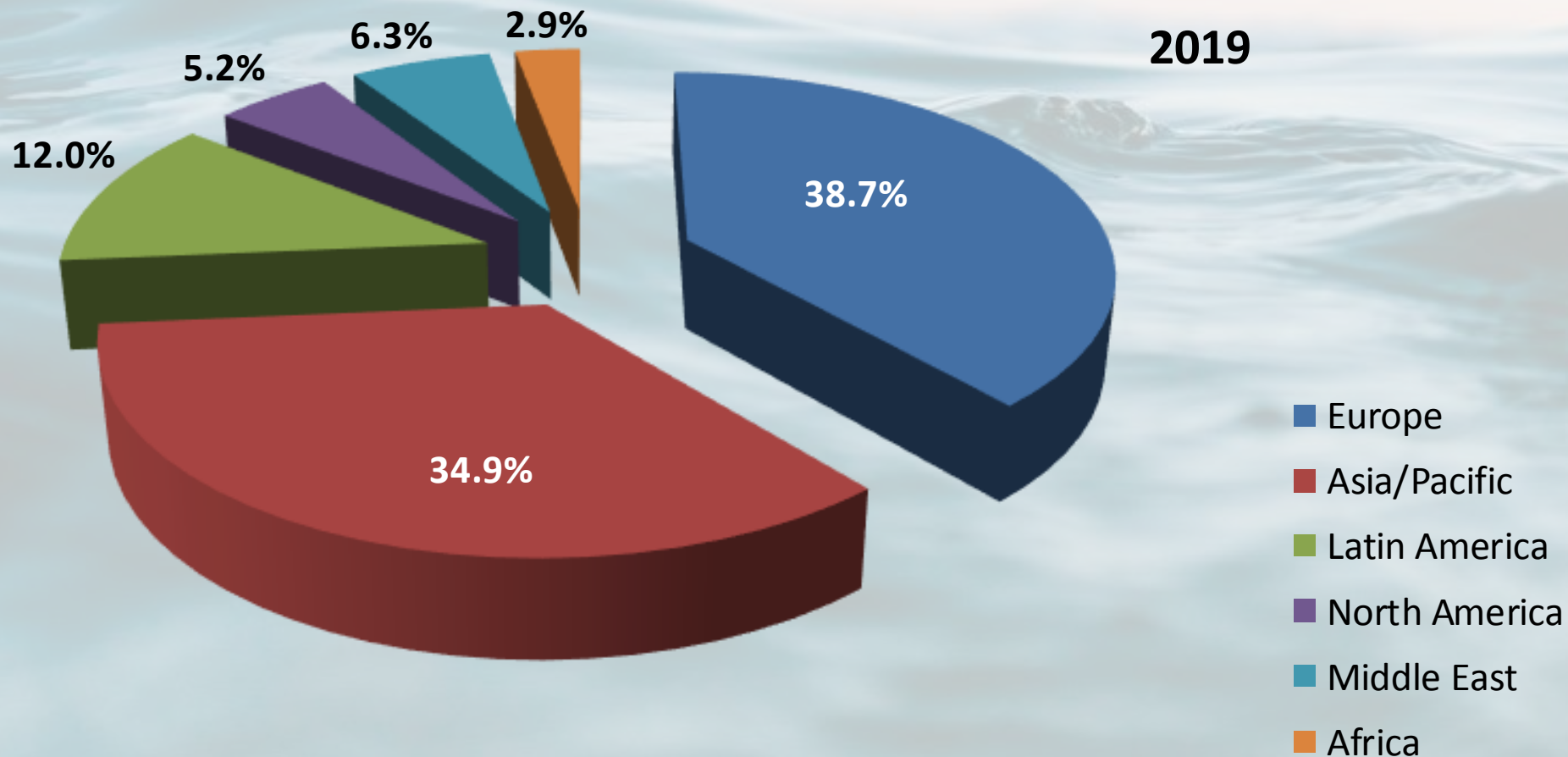
- Hurricane Laura impact?
(near half of offshore rigs and platforms evacuated before Laura)
- Fragile balance between low premium income and modest claims impact in recent years.

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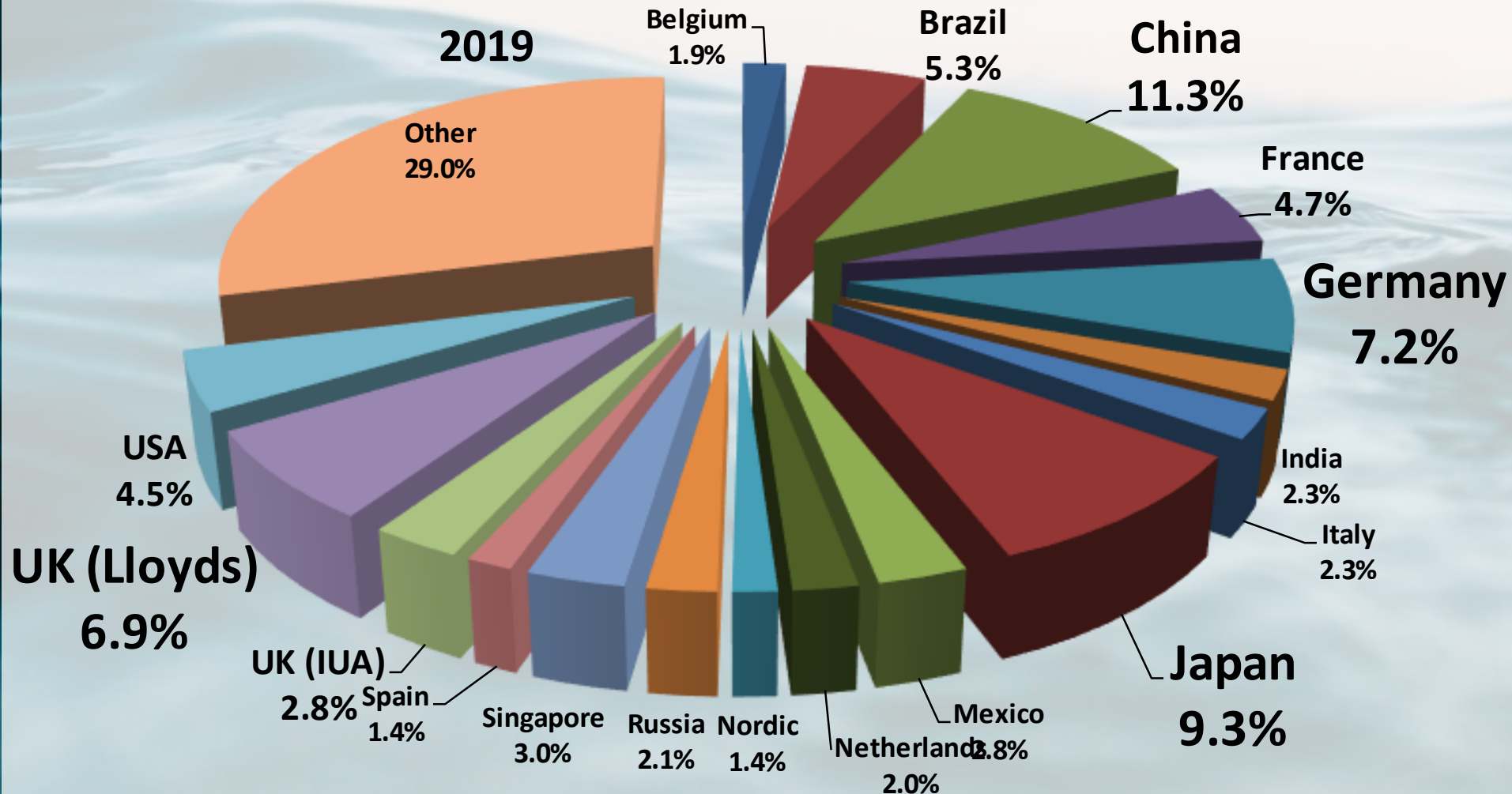
Cargo Premium 2019 – by region

Total estimate: 16.5 USD billion / Change 2018 to 2019: -1.5%
Exchange rate effects strongest on cargo premium.



Cargo Premium 2019 – by markets

Total estimate: 16.5 USD billion

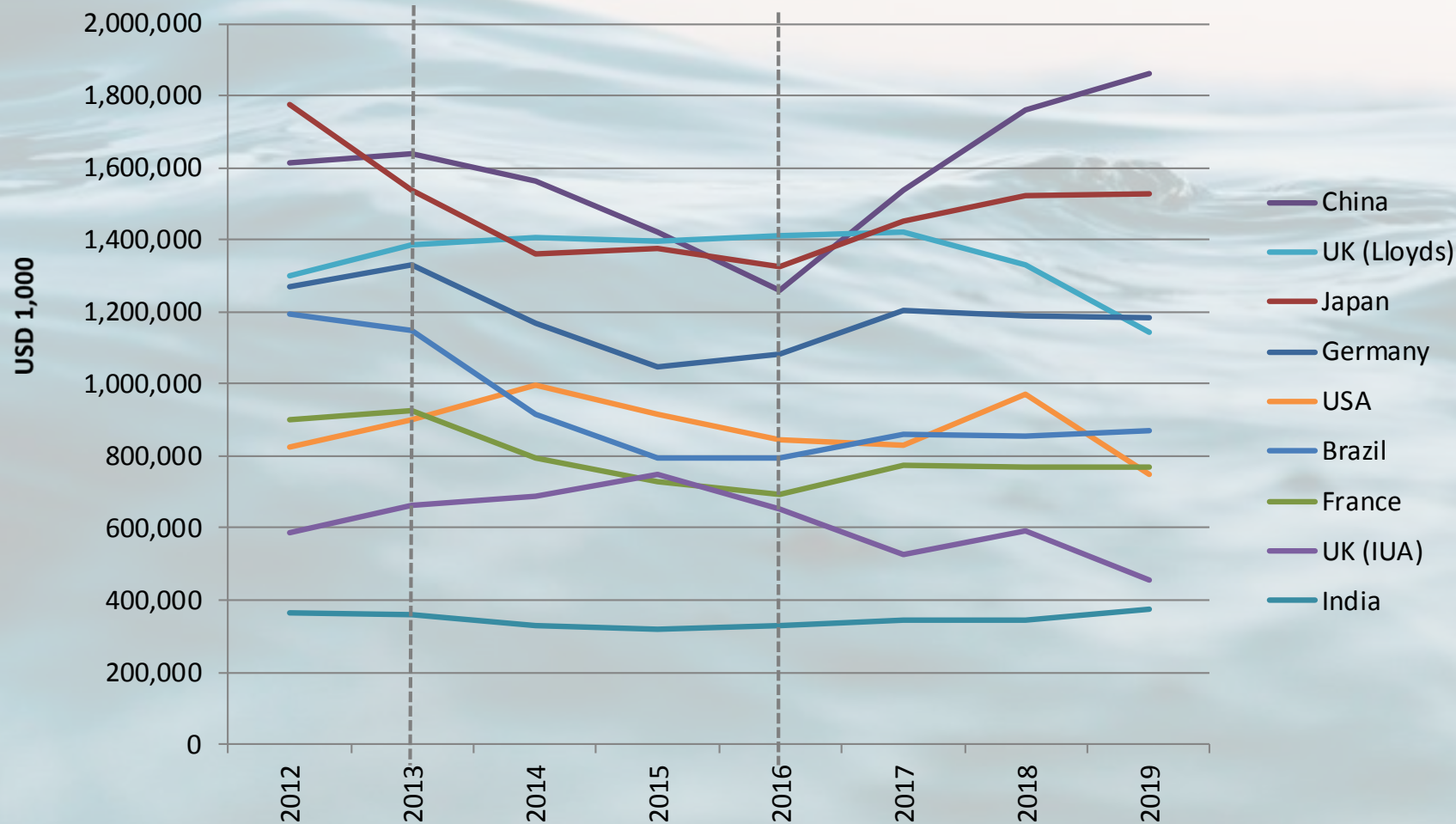


Cargo premium 2012-19

Selected markets

2014-15: strong USD «reduces» income of most countries.
Difficult to identify real market development.

From 2017 several currencies strengthened against USD.

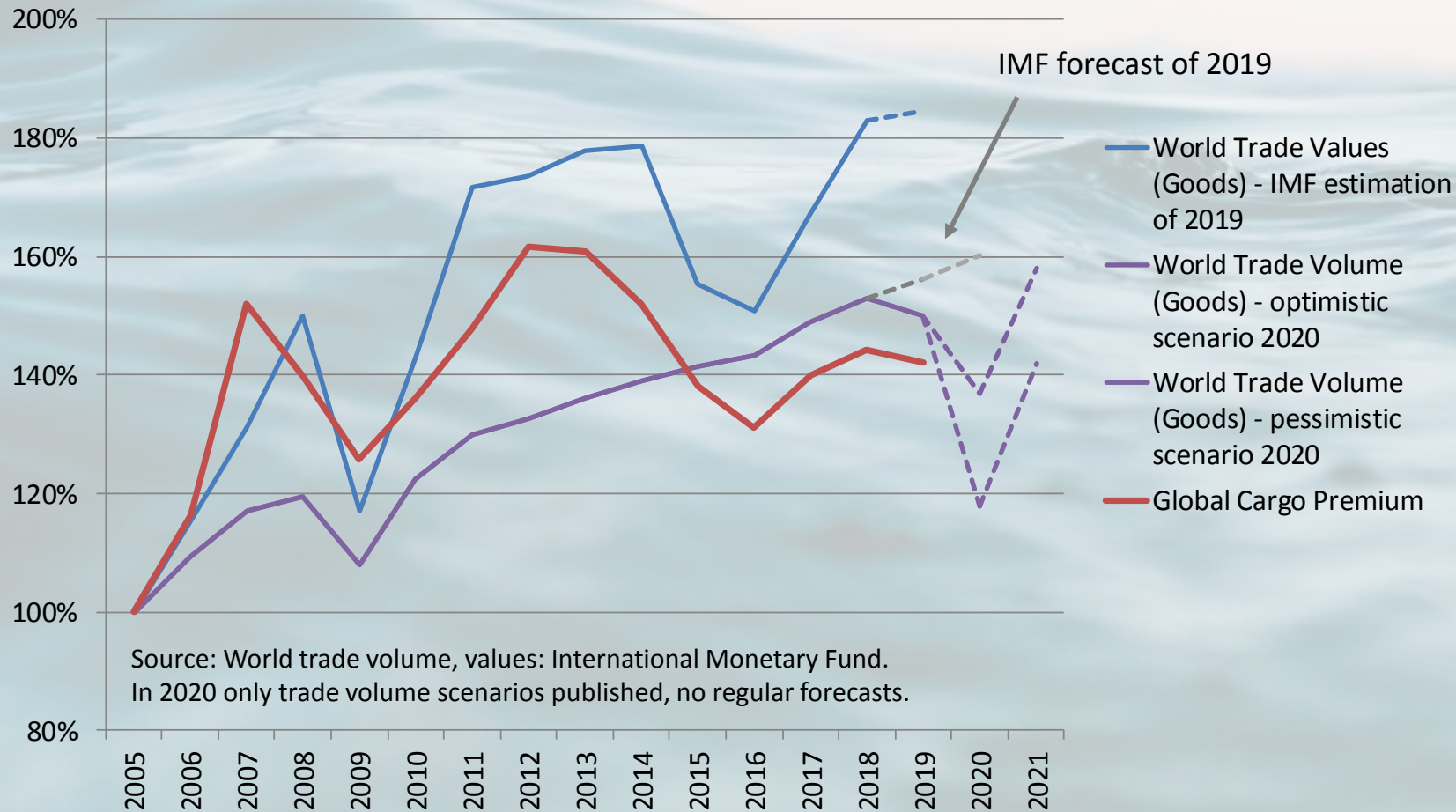


2016-2019:
Adverse developments.
Growth China, Japan,
Stagnation/drop other
regions.

Various influences.
Upswing in trade,
exchange rate effects,
other market conditions.

Cargo Premium versus World Trade Values & Volume

Index, 2005 = 100%



Cargo premium follows world trade values but lagged behind in recent years.

COVID-19 renders world trade forecasts uncertain (IMF did not publish regular 2-year forecast in 2020)

Extended risk covers and the increasing risk of event losses (risk accumulation) need to be taken into account in pricing.

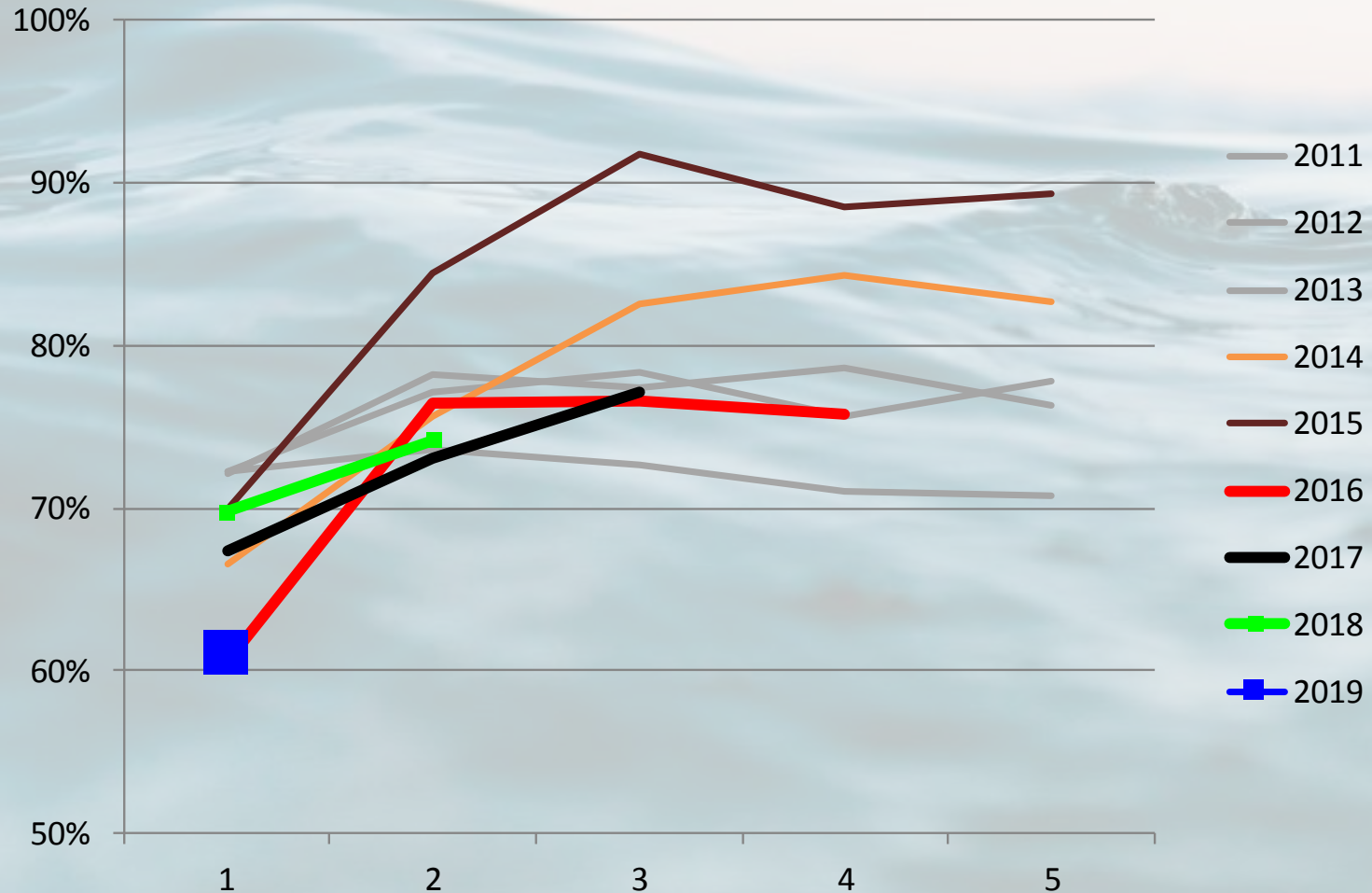
Cargo Loss ratios



Foto: Astrid Seltmann

Gross* loss ratios cargo – Europe (& partly US)

Underwriting years 2010 to 2018, as reported at 1, 2, 3, 4, 5 years, Gross premiums, paid+outstanding claims



2014, 2015, 2016:

Change in typical pattern:
extraordinary increase in loss ratios.

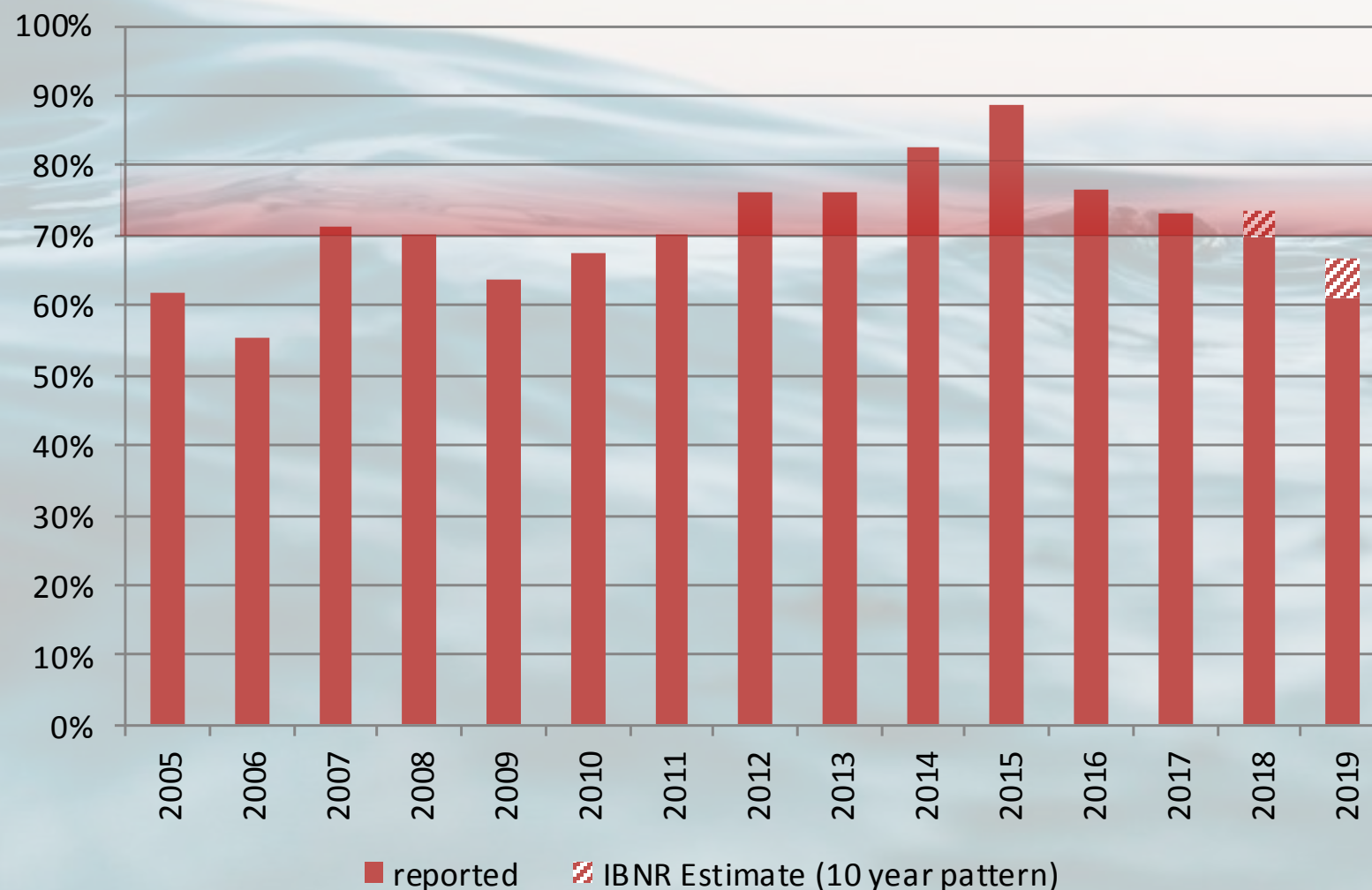
2017, 2018 started near 70%.

More 'normal' (flat) development
pattern.

2019 starts slightly above 60%,
seeming improvement.

Ultimate gross* loss ratios – Cargo Europe (& partly US)

Underwriting years 2005 to 2019, gross premiums, paid+outstanding claims



Recent years strong impact by outlier & Nat-cat event losses:

2015: Tianjin port explosions

2016: Hanjin, Amos-6 satellite

2017: Hurricanes / Nat Cat

2018: Mærsk Honam / Hurricanes
(2017/18 little US data: loss ratios may not reflect full hurricane impact)

2019: Fires on container vessels,
Golden Ray capsizes

2020: Nashville Tornado

Beirut port explosion, Hurricane Laura,
Typhoon Haishen probably less impact on insured values.

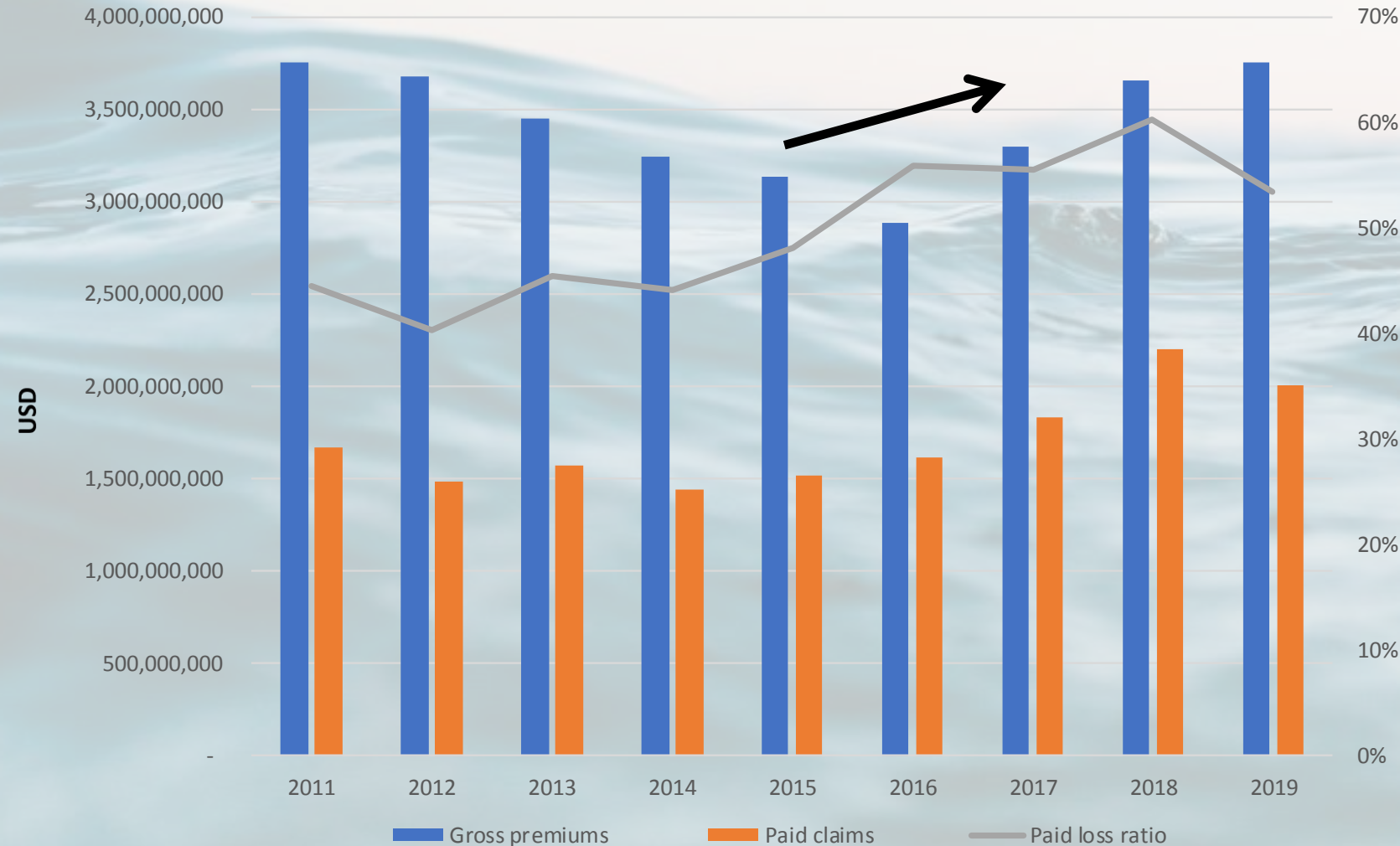
Increasing expenses a concern.

* 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, Spain (until 2007), UK, some US data

Cargo loss ratios accounting year – Cargo Asia*

Gross premiums, paid claims



Stable 40-45% until 2014.

From 2015 loss ratios increasing. Probable impact by Tianjin port explosions & Nat Cat.

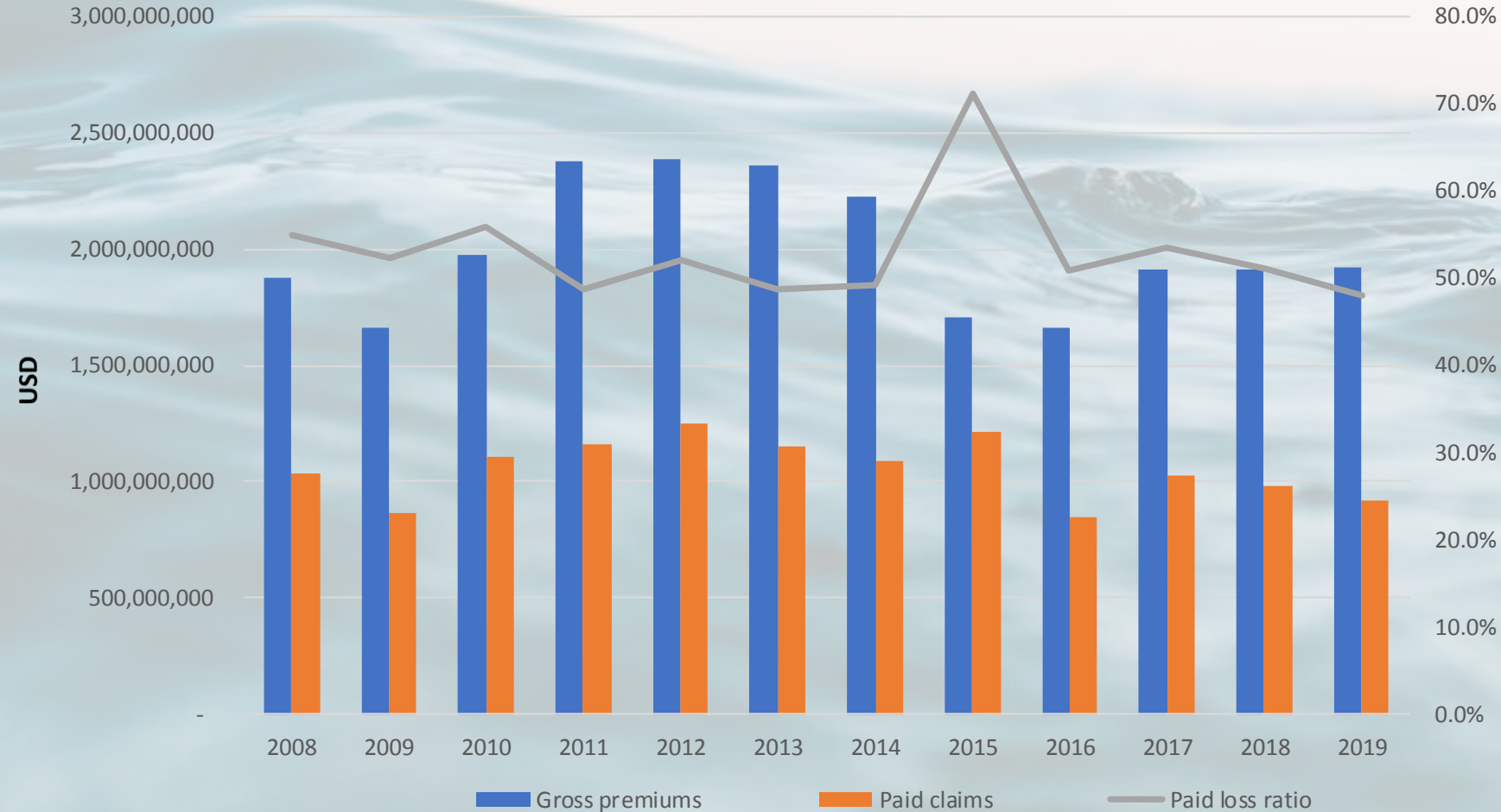
2019 some improvement.

* China, Japan, Hong Kong

Singapore not included, because only incurred (paid+outstanding) claims figures available, for other countries only 'paid'.

Gross loss ratios accounting year – Cargo Latin America*

Gross premiums, paid claims



Stable around average 50-55%.

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

*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 – as of 2019

- Some improvement in loss ratios across markets.
- Increase in **fires on container vessels** a concern, especially fires in cargo area.
- Risk of large event losses (Nat Cat and man-made) substantially increased.
- Increasing value accumulation on single sites/vessels .
- Covered risks represent increasingly stock exposure rather than transit exposure.
- Trade growth was accelerating recently but disruption in 2020.
- USD premium influenced by combination of market conditions and exchange rates.
- Market trends and results can differ substantially by region/unit.

Cargo – 2020

COVID-19 impact

- Unusual port and vessel value accumulation (congestion of vessels in certain areas, cargo accumulation due to delays in delivery)
- Cargo damage caused by delays/longer storage (e.g. refrigerated goods)
- Short-term contraction of global trade, uncertainty about speed of recovery
- Fluctuations in insured values
- Change in trading patterns? (alternative suppliers/markets)

Persisting issues

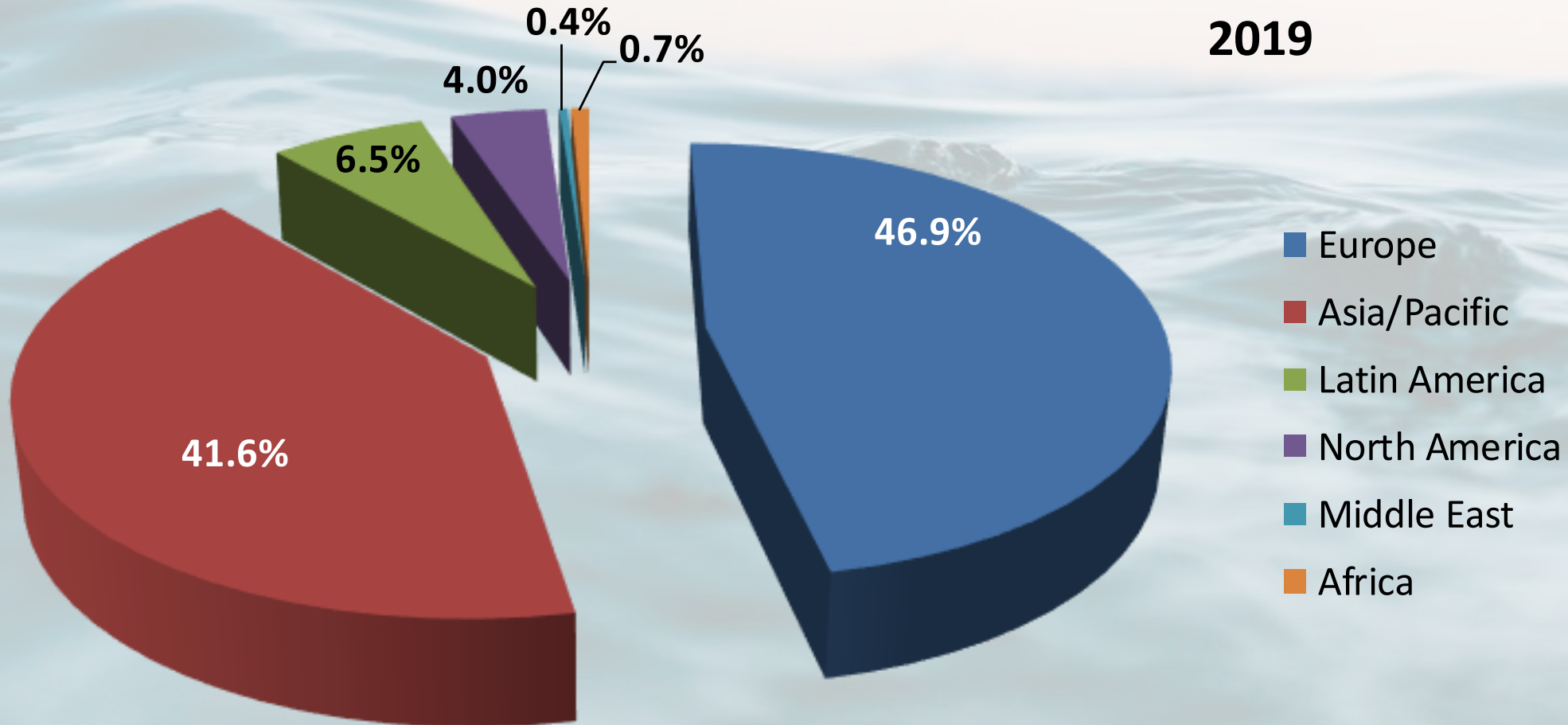
- **Fires**, especially on container vessels, but not only, continue to be a concern
- Misdeclared cargo
- **Risk of large event losses** (Nat Cat and man-made) substantially increased.
- **Value accumulation** on single sites/vessels.
- Geopolitical tensions (sanctions, US-China trade war).

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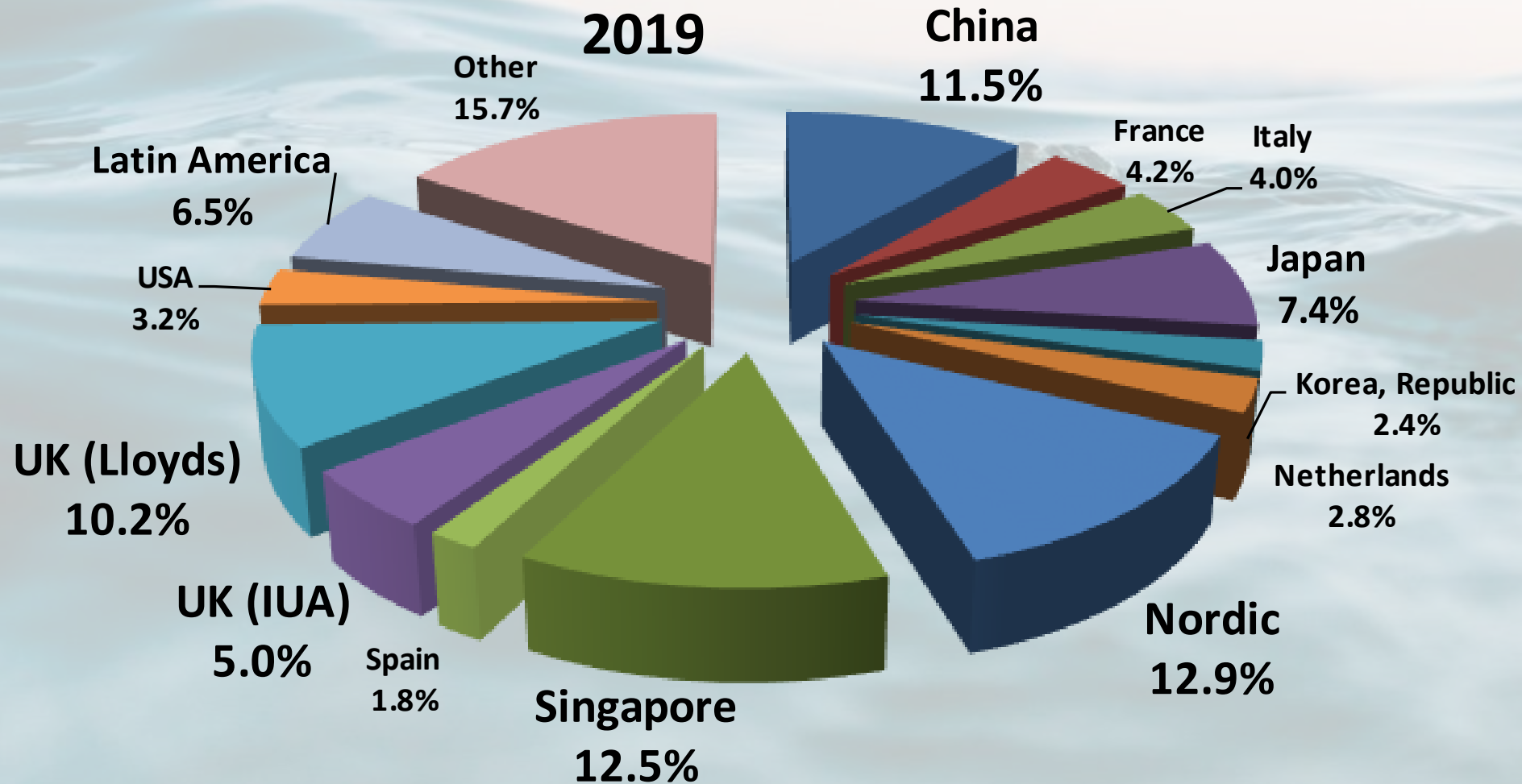
Hull Premium 2019 – by region

Total estimate: 6.9 USD billion / Stable from 2018 to 2019 (+0.2%)



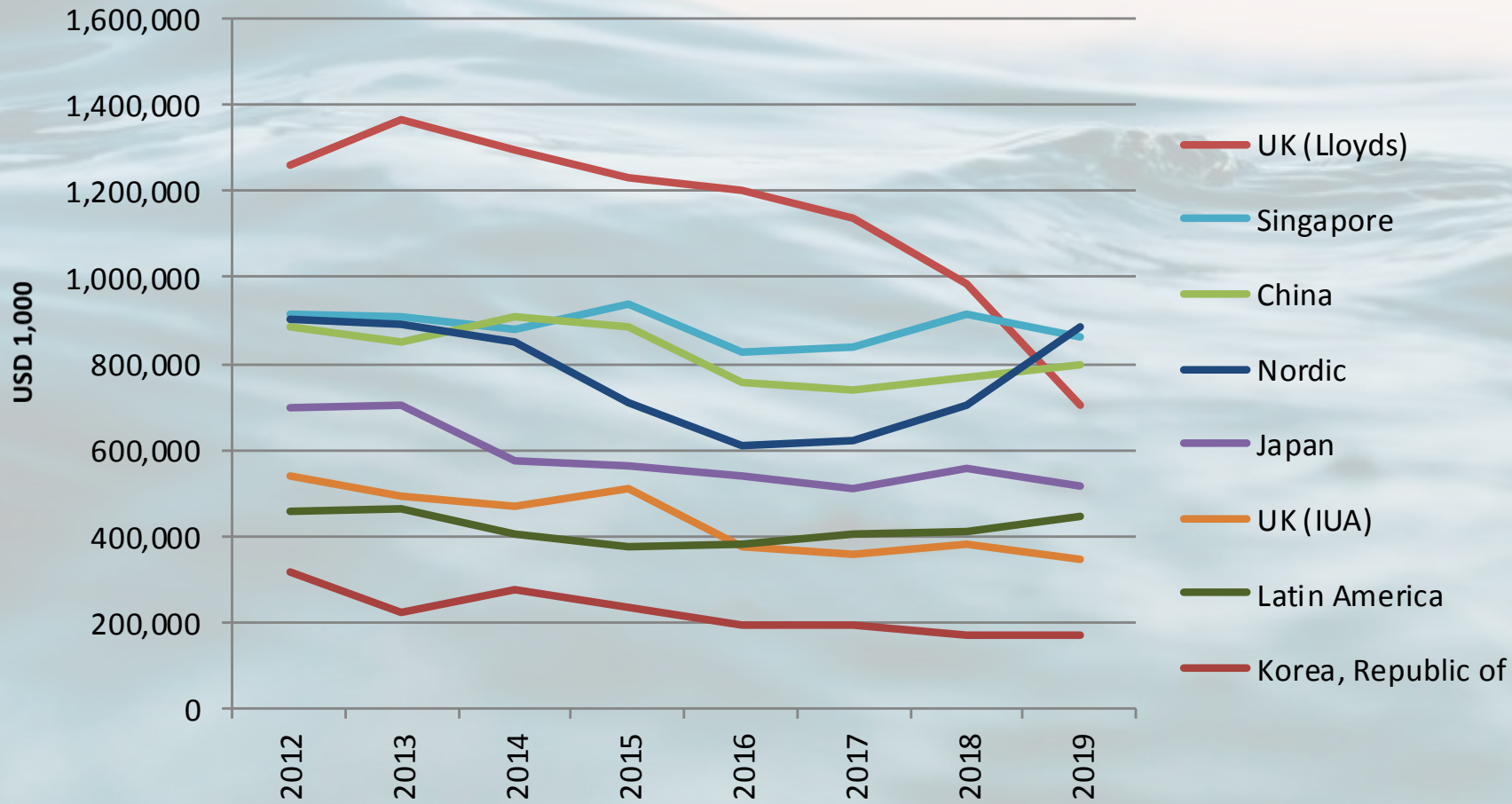
Hull Premium 2019 – by markets

Total estimate 2019: USD 6.9 billion



Hull Premium 2012-2019

Selected markets



Explanation?



Hull - Portfolio trends

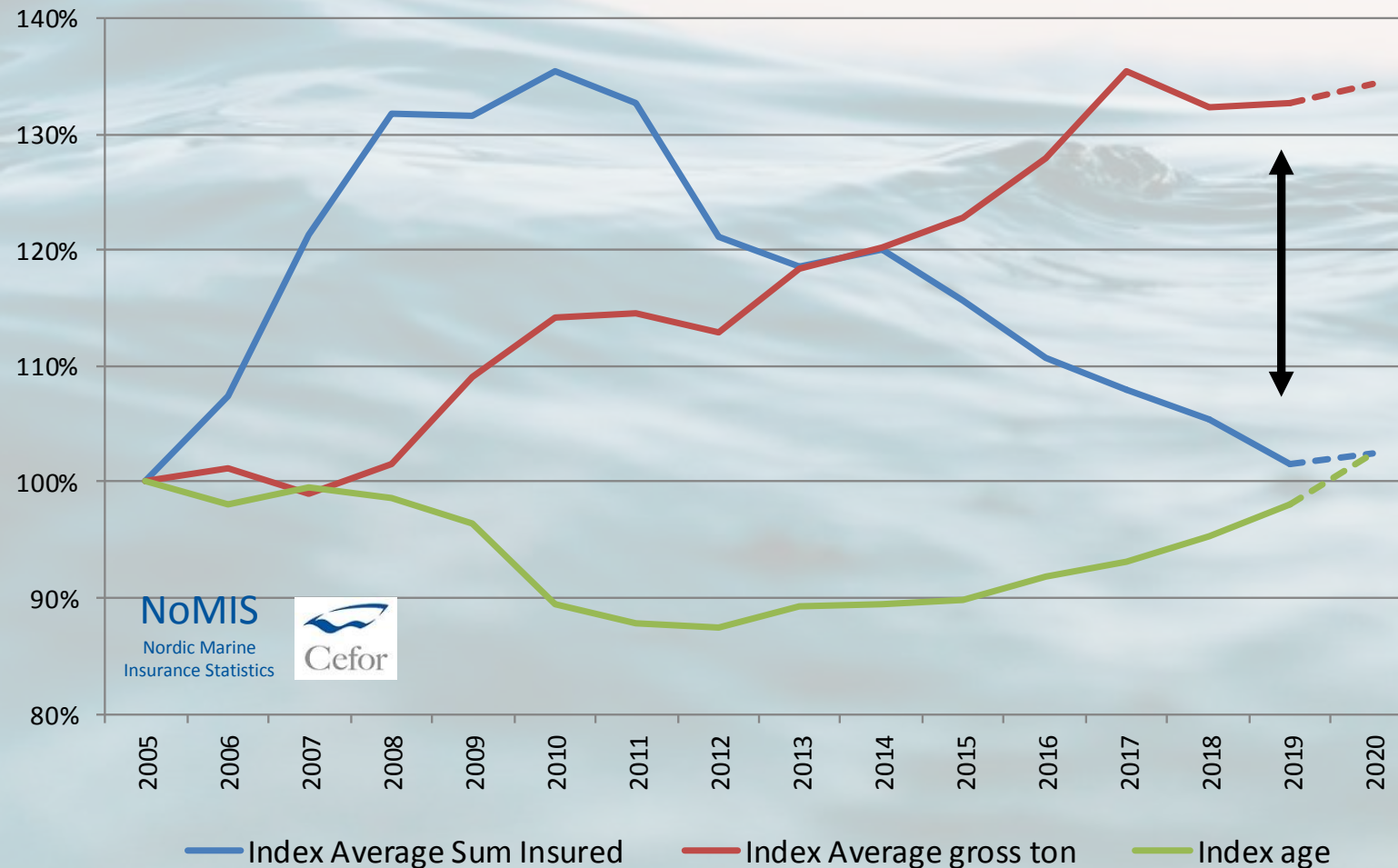


Foto: Astrid Seltmann

Some vessels
keep going...

Average gross ton, age & vessel values

Index, 2005 = 100%



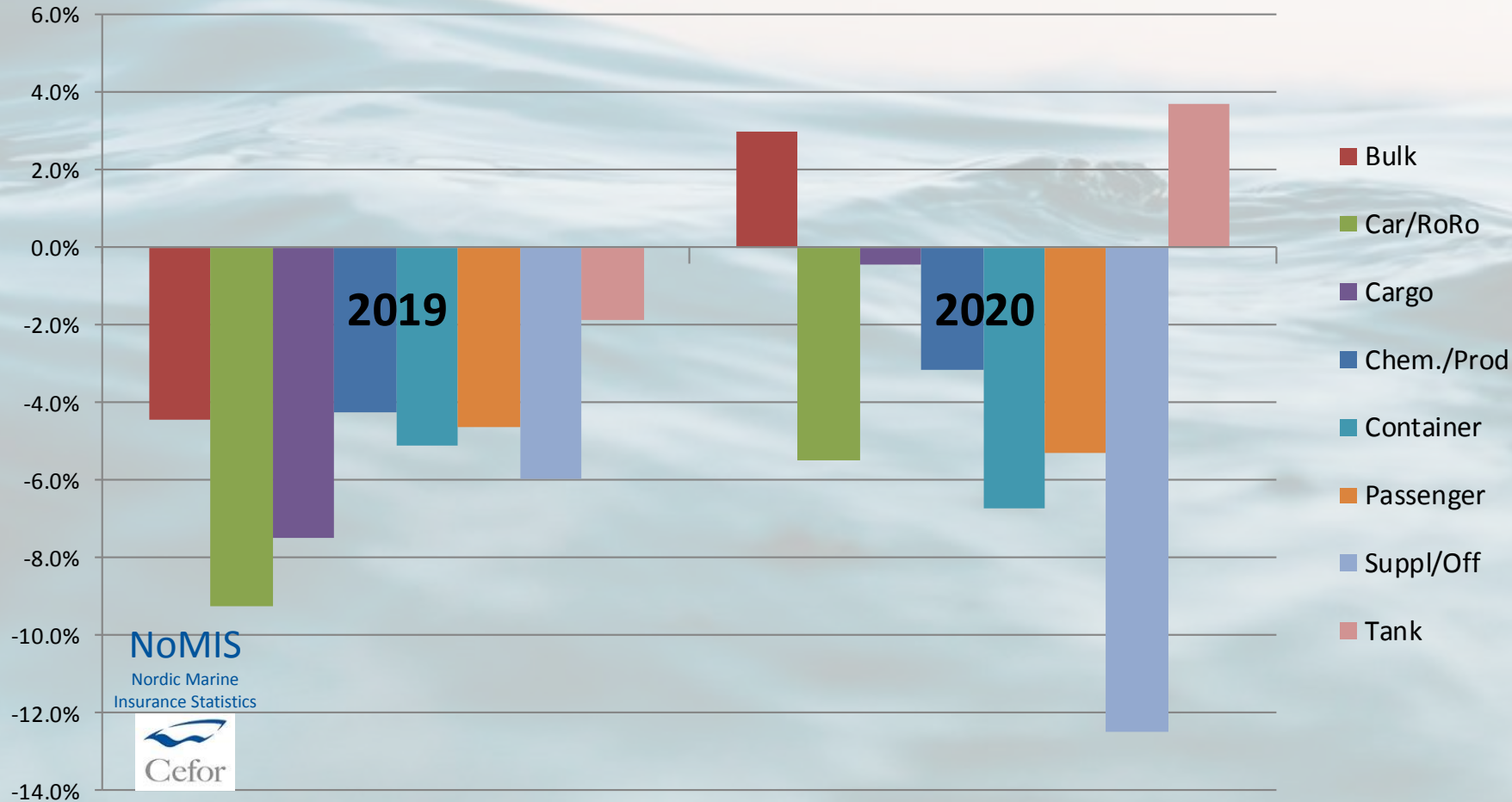
Since 2014 increasing gap between average vessel size and insured value.

Some correction in 2020, but far from closing gap

Average vessel age increasing (less new builds).

Change in insured vessel values on renewal 2019 versus 2020

Index, 2005 = 100%

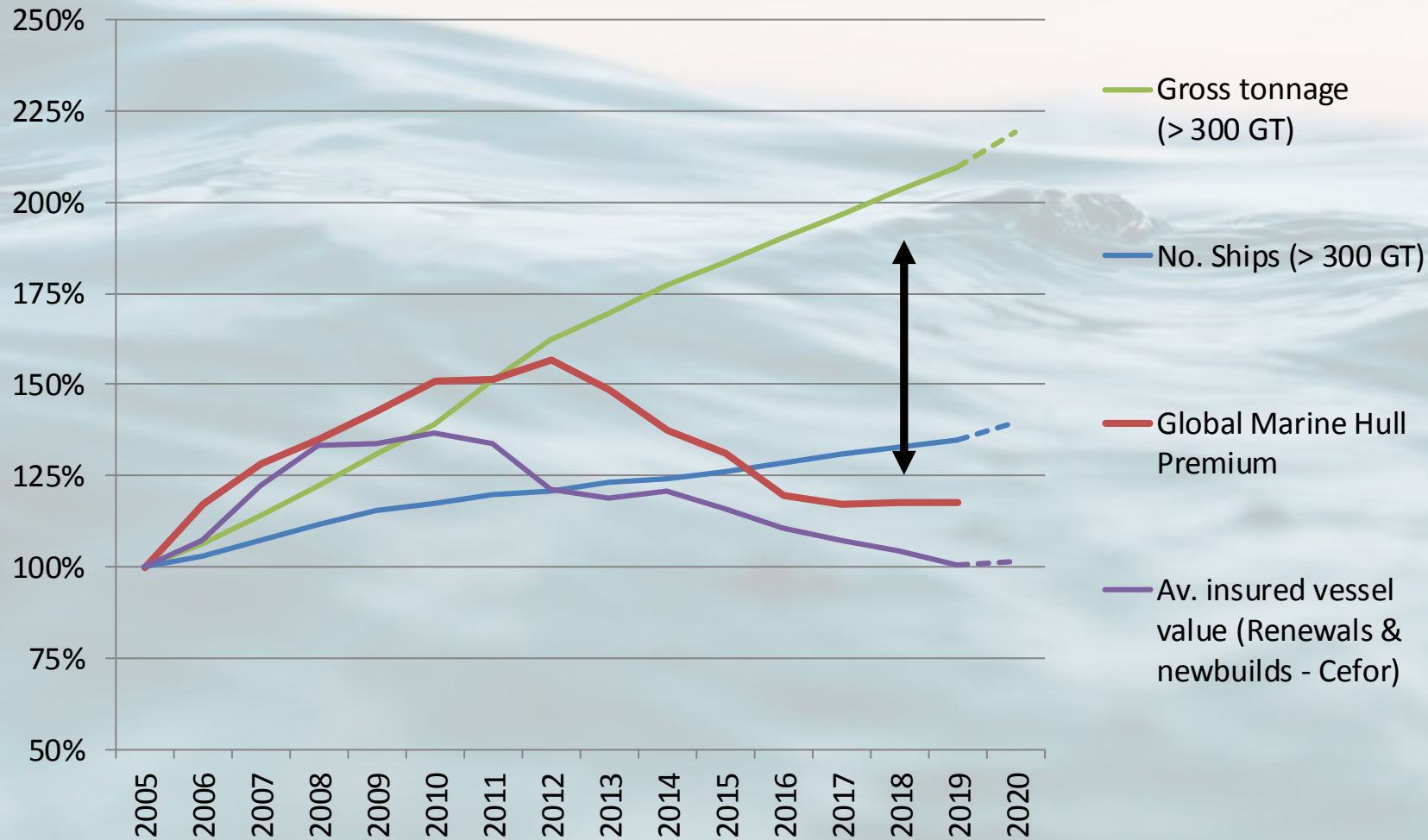


2019 renewals showed a parallel development for all vessel segments with some variations.

Renewals in 2020 reflect COVID-19 impact on different vessel segments, with strong variations.

Hull Premium versus World Fleet

Index of evolution, 2005 = 100%



World fleet continues to grow, especially in size.

Downward trend in global hull premium stopped but gap between world fleet growth and hull premium/vessel value evolution remains.

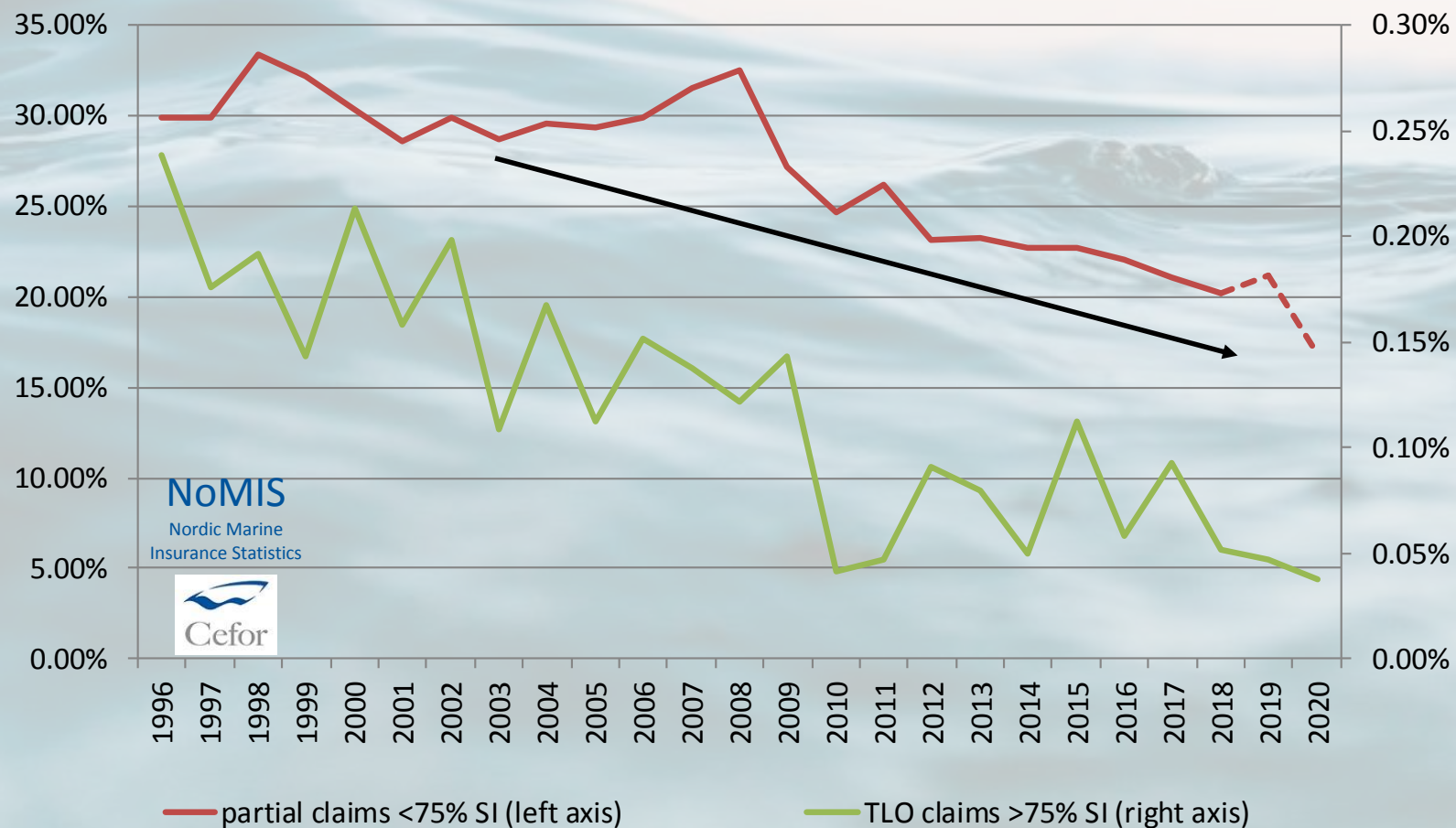
Hull – Claims trends



Foto: Astrid Seltmann

Repairs
getting
delayed...

Hull – Claims frequency (H&M)

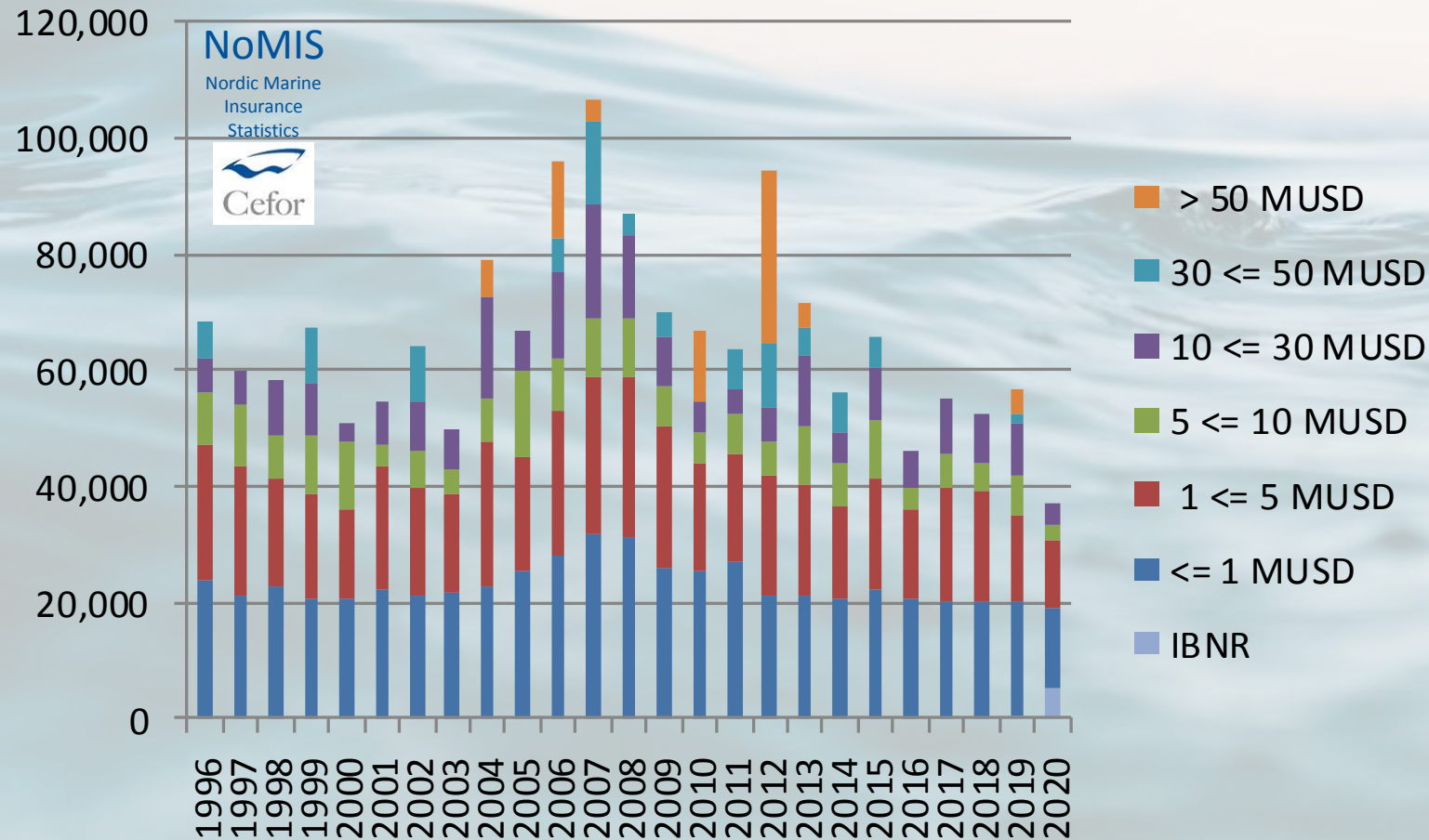


Claims frequency (all claims)
Long-term downward trend.
Strong drop in 2020
(COVID-19 impact related to large degree of inactivity).

Total losses
Long-term downward trend.
Lowest level in 2020.

Claim cost per vessel (H&M)

in bands of claim cost, by accident year, in USD



Major losses

Unusually few 2016-18, returned in 2019. Very few in 2020.

Volatility by (non-) occurrence of costly losses.

Risk of major losses with unprecedented cost remains (increasing vessel sizes, accumulation, new risks & trading areas).

COVID-19 impact:

Reduction in claims cost, especially of costly claims.

Cefor claims trend report June 2020:
<https://cefor.no/statistics/nomis/2020/2020-cefor-june-hull-trends-report/>

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

Special issues of concern



Foto: Astrid Seltmann

Secret crew change
in COVID-19 times?

Special issues of concern

- **Fires!** – not only on container vessels
Do not show reduced frequency in 2020
(contrary to other claims types)
2 severe fires in 2020 as of 8 September (Car carrier, VLCC)
- Casualties in Mississippi and Paraná river persist
- COVID-19 impact on hull trends

Analyses by the Nordic Association of marine insurers (Cefor):

<https://cefor.no/statistics/analysis-with-special-focus/>

Cefor Hull trend report as of June 2020:

<https://cefor.no/statistics/nomis/2020/2020-cefor-june-hull-trends-report/>



Foto: Astrid Seltmann

Hull – Loss ratios

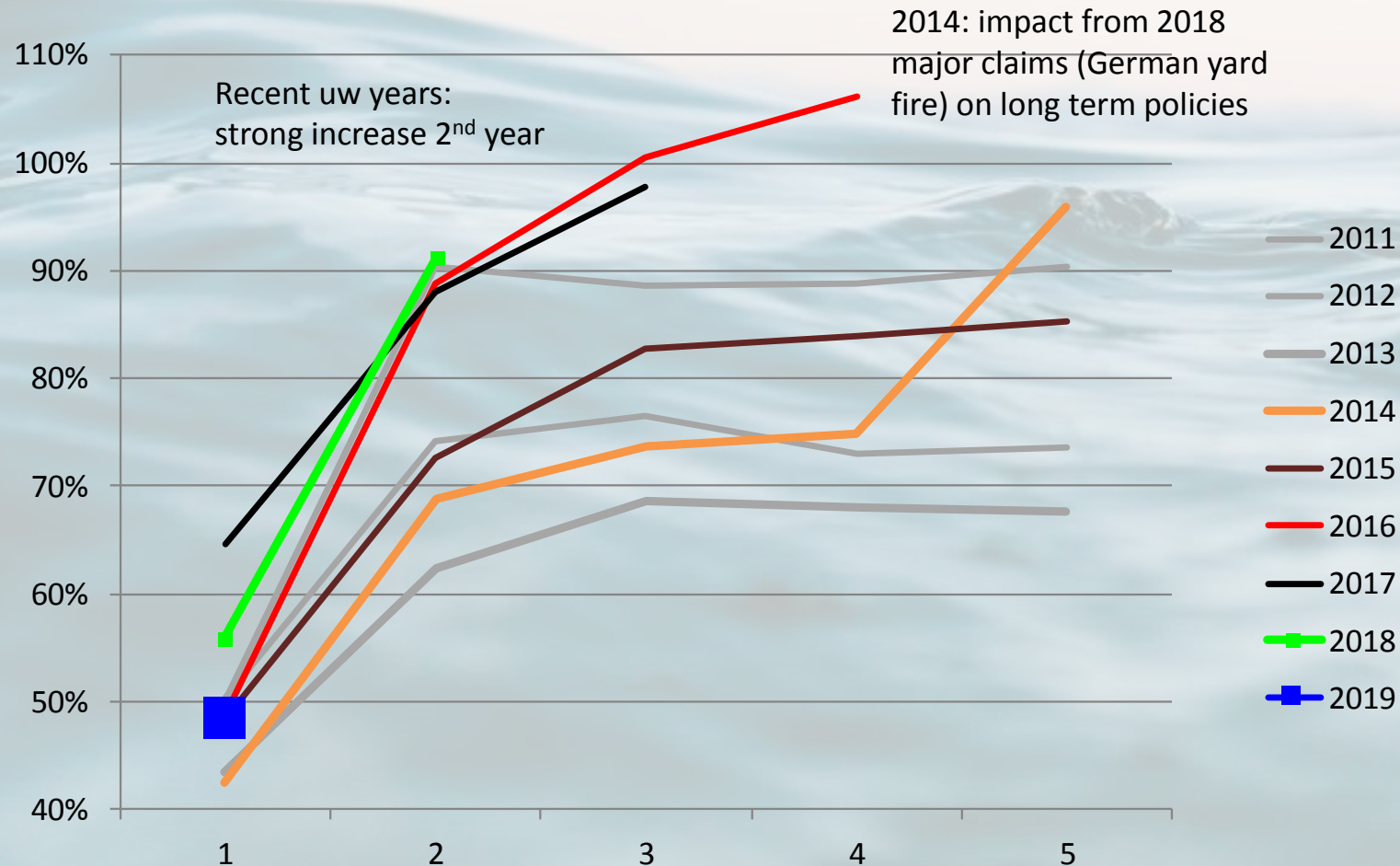


Foto: Astrid Seltmann

Is there any
hope?

Gross* loss ratios – Hull Europe** (& partly US)

Underwriting years 2010 to 2019, as reported at 1, 2, 3, 4, 5 years, gross premiums, paid+outstanding claims



2019: some improvement in ratio between premiums and claims.

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.

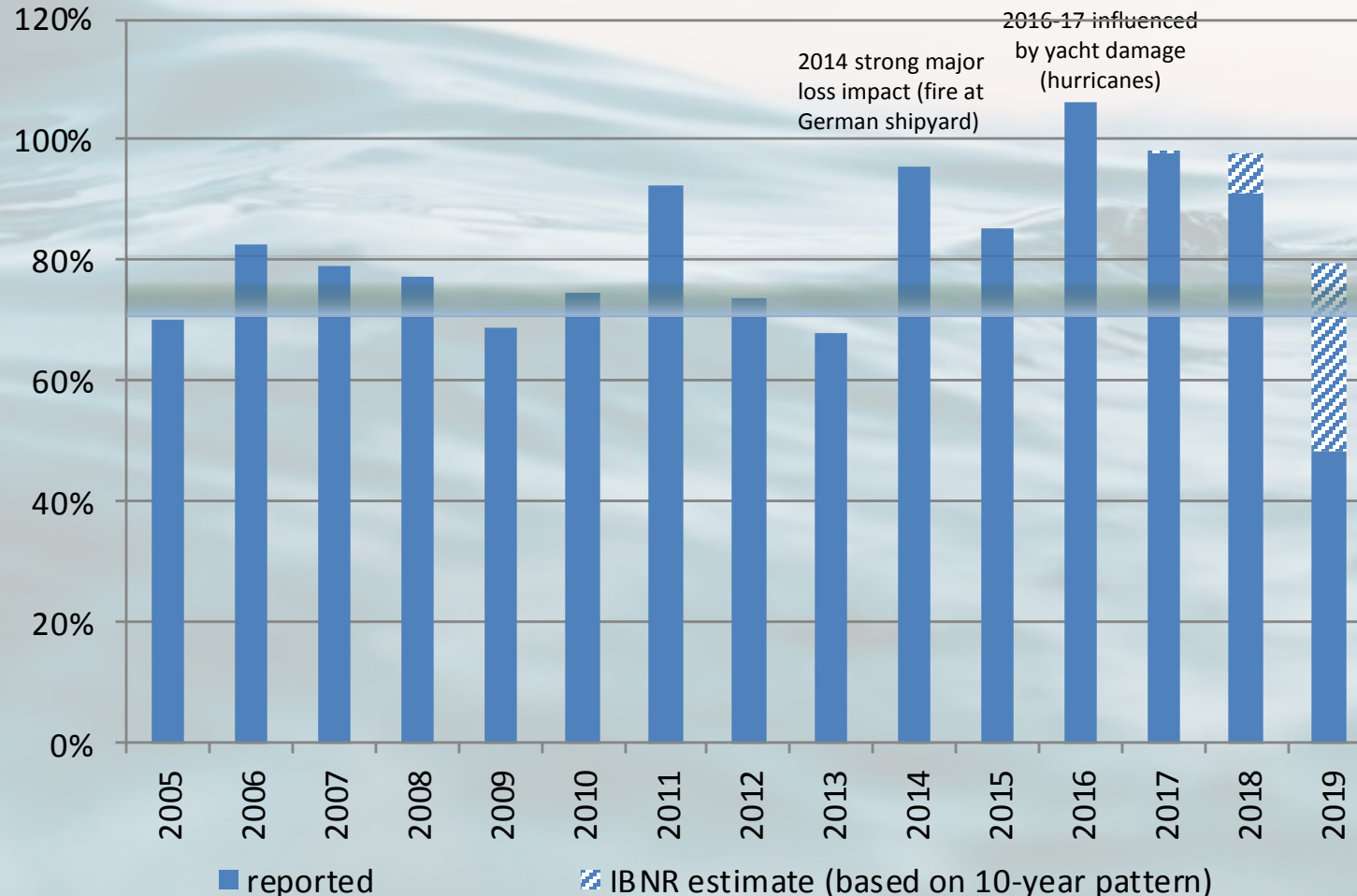
Attritional losses increasingly eroded hull premium, after a constant decrease in premiums relative to the risk (fleet).

* 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

Ultimate gross* loss ratios – Hull Europe** (& some US)

Underwriting years 2005 to 2018, gross premiums, paid+outstanding claims



*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), Spain (until 2007), UK, some US data

2014-18: Unsustainable level.

Overcapacity, dropping vessel values and reduced activity influenced income negatively.

Yacht damage (hurricanes) impacted 2016/17.

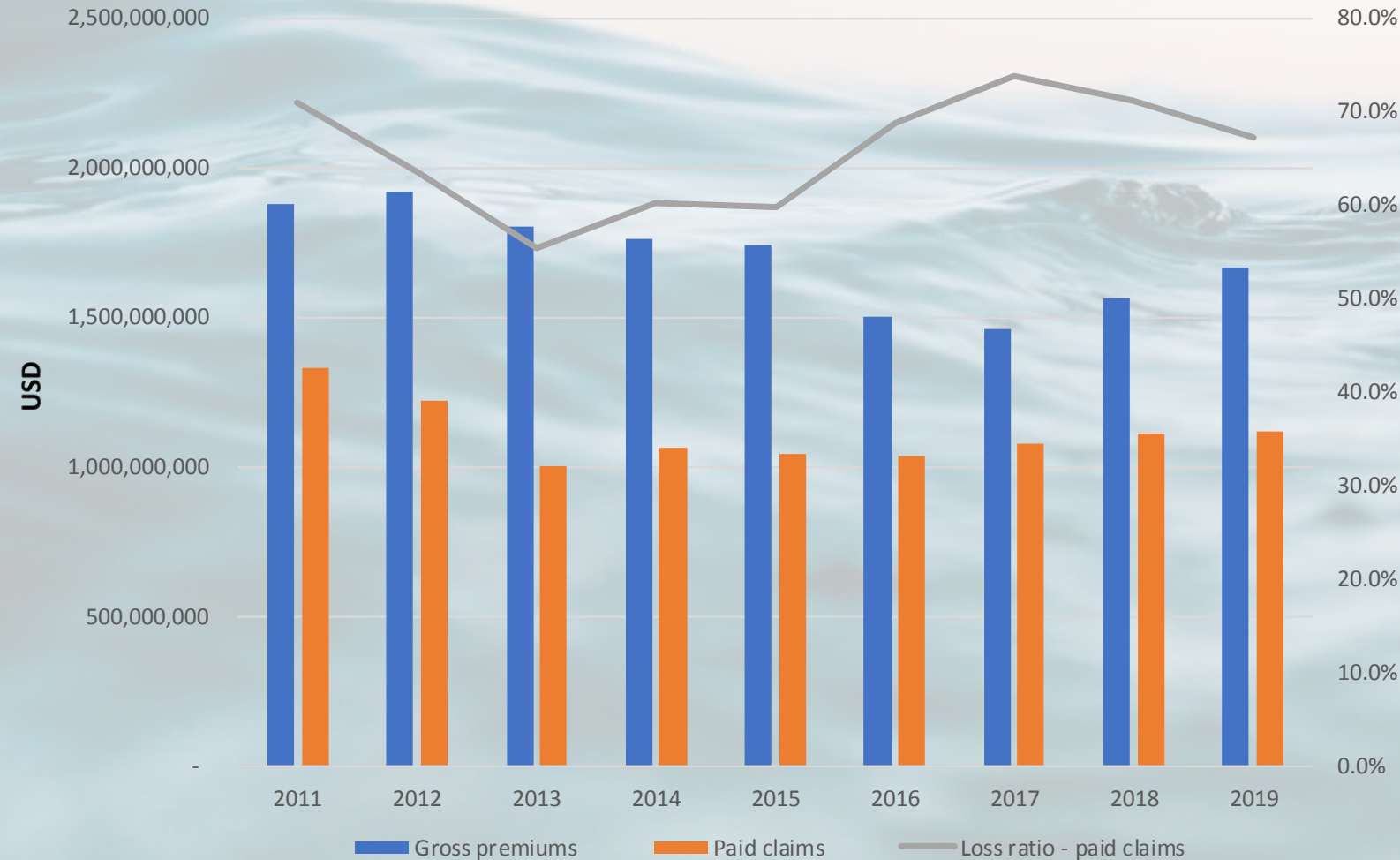
Few major claims, but attritional losses erode (reduced) income.

2019 uw year some improvement.

2019 major losses impact partly attached to 2018 uw year.

Gross loss ratios accounting year – Hull Asia*

Gross premiums, paid claims



After an increase 2015-2017, loss ratios slightly improved.

Relatively stable annual claims payments and since 2017 increasing premium volume.

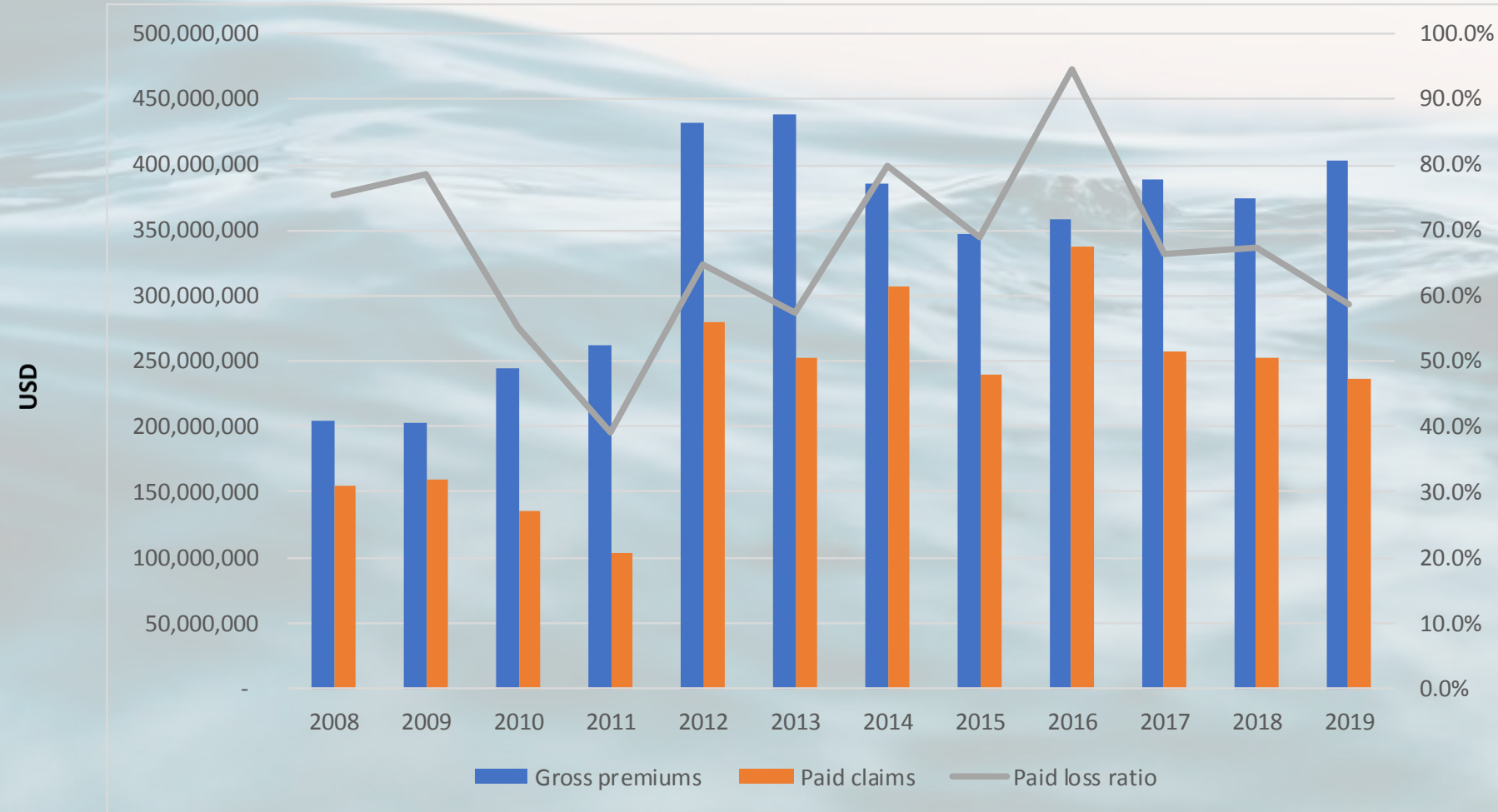
NB: accounting year: claims attaching to uw year are paid over several years.

* China, Japan, Hong Kong

Singapore not included due to different data base. Singapore reports incurred (paid+outstanding) claims figures, the other countries only 'paid'.

Gross loss ratios accounting year – Hull Latin America

Gross premiums, paid claims



After worsening loss ratios 2011 to 2016, some improvement in last three years.

*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 – as of 2019

Exposure

- Downward trend in global hull premium stopped but large gap between world fleet growth and hull premium/vessel value evolution remains.
- Higher single-risk exposure (with inherent risk of unprecedented major claims).

Claims

- Claims frequency and cost per vessel: Stable at moderate level.
- Total losses: long-term downward trend. Came to a halt with fluctuation below 0.1%.
- Major losses return in 2019 after unusually little impact 2016-2018 (except 2018 Lürssen fire impact on builder's risk).

Results

- 2016-18: Few major claims, attritional losses represented an increasing share of the total cost.
- Income did not suffice to cover expected cost (attritional losses), no buffer for major losses.
- 2019 sees some improvement across markets, but starting from very low (unsustainable) level.

Hull – 2020

COVID-19 impact

- Vessel segments affected differently (reflected by insured values on renewal).
- Claims frequency and cost reduced in connection with increased inactivity of some segments of the world fleet.
- Potential increase in repair cost for individual claims due to delay of spare parts, unavailability of crucial personnel.
- Potential for unprecedented accumulation losses due to congestions of high-value vessels (inactive cruise or supply/offshore vessels, floating storage tank vessels) in certain areas exposed to natural catastrophes (hurricanes, typhoons).
- Crew changes difficult (fatigue).
- Bunker analysis delays (IMO 2020 use of alternative low-sulphur fuels).
- Disruption to surveys, port inspection, emergency response or maintenance.
- Certificates prolonged without inspections.
- H&M as of mid-year little impacted, stronger impact on LOH.

Persisting issues

- Fires, especially on container vessels
- IMO 2020 (scrubbers, other fuel types) – potential for increase in machinery damage
- Increase in casualties in Mississippi and Paraná river (high and low water levels respectively)

Difficult to estimate combined effects on market and results. Can recovery of global hull market continue?

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The 2020 oracle

Foto: Astrid Seltmann



2020 trends

- **Disruption in global trade.** Short-term strong reduction in trade volume and values. (IMF estimate between -13% and -32%).
- Some predict quick (v-shaped) recovery. Effect of government stimulus measures?
- Different trades differently impacted. Can e.g. cruise recover?
- **Accumulation** issues (both pre-COVID and new caused by COVID-19)
- **Cyber** risk (increased use of digital means under pandemic)
- **Nat-cat:** 2020 Hurricane Laura (US), Typhoon Haishen (Japan)
- Climate change, Arctic risks
- **IMO 2020** (increased risk of machinery damage)
- **Geopolitical tensions** (sanctions, China-US trade war,...)
- **Oil price:** uncertain future development.

- Can recovery of cargo, hull continue? Started in 2019 from low (unsustainable) level.
- Offshore energy fragile balance in recent years. Oil price disturbance does not help.
- COVID-19 may impact both investment income and technical results.

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

IMO 2020

Navigation



Human factor/
Qualification

Climate change/
Increase in Nat-cat

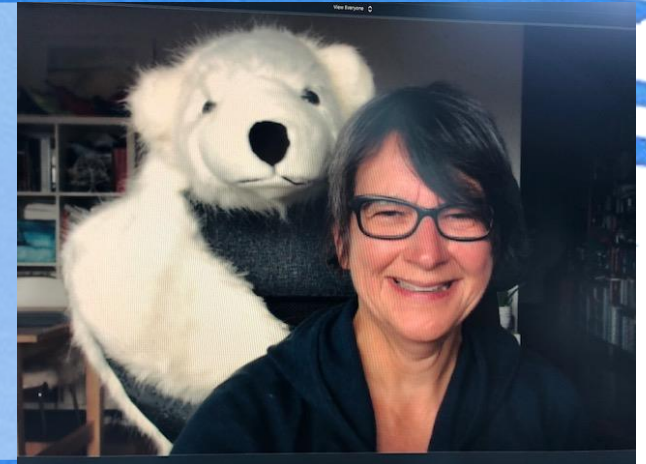
Value accumulation

Cyber risk



Thank you!

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Technical terms

Gross premium = 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.

Written premium = 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

Underwriting year basis = Insurance figures are registered with the calendar 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 occurring 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.

Accident year = 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 occurring 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 occurred 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.