



# State of the Market – Coping with Disruptive Forces in Marine Insurance

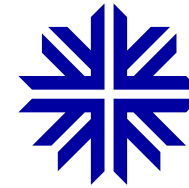
Shanghai Institute of Marine Insurers  
Shanghai, 27 November 2017

Dieter Berg  
Munich Re  
IUMI President





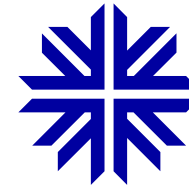
# PRESIDENT OF IUMI



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International  
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**Dieter Berg**

Senior Executive Manager,  
Global Marine Partnership  
Munich Re, Munich



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# International Union of Marine Insurance

At the forefront of marine risk



The influential and trusted voice of global marine insurance

# AGENDA

State of the Market –

Coping with Disruptive Forces in Marine Insurance



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## **1. IUMI 2017**

– Top priorities

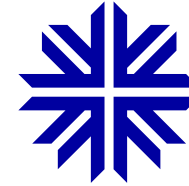
## **2. State of the global marine market**

– IUMI figures

## **3. Disruptive forces in marine insurance**

– President's view

# IUMI – STRATEGIC TARGETS



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- Intensify IUMI's presence globally

**1**  
Top Priorities 2017

- Communication strategy

**2**  
Top Priorities 2017

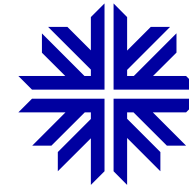
- Education program

**3**  
Top Priorities 2017



# IUMI – GROW THE GLOBAL FOOTPRINT

Focus on Asia !



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**1** Top Priorities 2017

## ► Last 18 months' activities

- Asia Roadshow 2016:  
Thailand, Malaysia, Singapore, Indonesia
- ExCo market meeting Dubai
- Hong Kong market meetings and conference
- HK Port and Maritime Board Hamburg
- ExCo market meeting and conference Mumbai
- IUMI Conference Tokyo 2017
- Hong Kong Maritime Week
- IUMI - Local Asian Conference 2018 Singapore

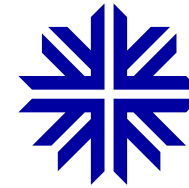


## ► IUMI officers

- 27 Asian Committee members, 2 ExCo members
- Special envoy to Asia: Mike Davies (XL Catlin Singapore)
- Special mandate of ExCo: Agnes Choi (AXA Hong Kong)

# IUMI – GROW THE GLOBAL FOOTPRINT

Focus on Asia !



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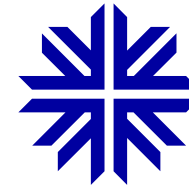
November 2016

**IUMI is proud and honoured to announce its first overseas hub in Asia – based in Hong Kong in cooperation with the HKFI !**



- ▶ HKFI (Hong Kong Federation of Insurers) reputable representative body
- ▶ HKFI in close partnership with IUMI
- ▶ Staunch support from Hong Kong Government

# COMMUNICATION STRATEGY



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**2** **Top Priorities 2017**

## Communication to the market

- ➡ IUMI is the voice of the marine insurance industry
- ➡ Media work / press / public relations
- ➡ Raise the public awareness of excellent work of the Technical Committees

## Visibility - advocate the interests of the global marine (insurance) industry

- ➡ Continuous presence in relevant forums
- ➡ Addressable and responsive



# IUMI EDUCATION

Developing an education program for the global marine insurance industry



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- ➡ War on talents
- ➡ Strong demand from IUMI members



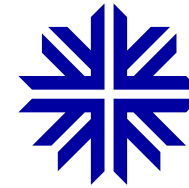
## Achievements

- ▶ Member associations' education programs
- ▶ Webinars
  - *started 6/2016: 21 webinars / 2,481 participants from 56 countries*
- ▶ IUMI website – new database
  - *statistics / former conferences' presentations*
  - *search function by keyword*
- ▶ Executive certificate in Marine Insurance
  - *developed by Hong Kong Marine Insurance Association and Hong Kong University endorsed by IUMI*
- ▶ E-learning, tutorials (*cargo & hull courses in Q1 2018*)
- ▶ In-class training (*2018/19*)



# STATE OF THE MARKET

IUMI figures of the global marine insurance markets



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## Facts & Figures: Country data collection 2016 premiums

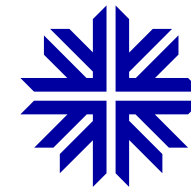


Premium volume  
of all countries  
covered in 2016

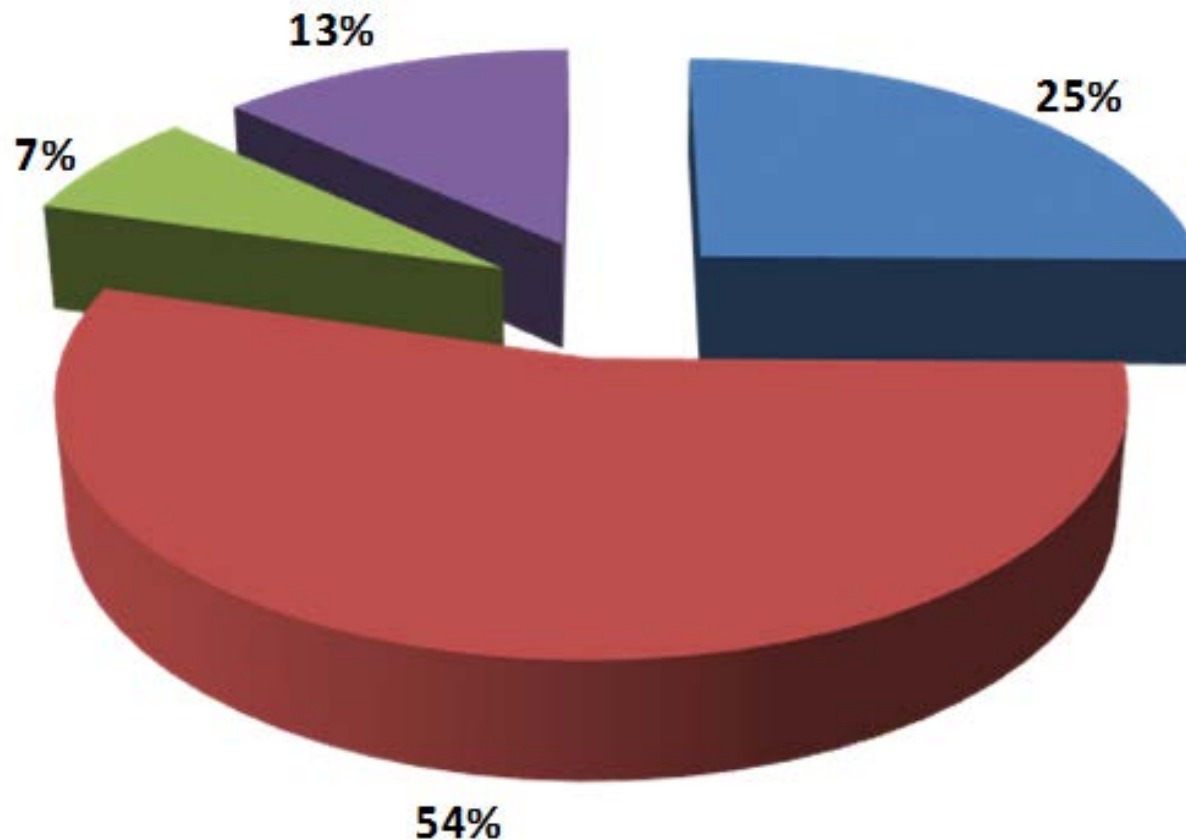
**USD 27.5bn**

# GLOBAL PREMIUM 2016

By line of business



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Total estimate 2016: 27.5  
USD billion / Change 2015 to  
2016: -9%

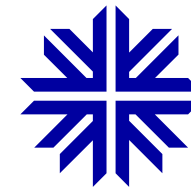
NB: Exchange rate effects due to recent  
strong USD!

- Global Hull
- Transport/Cargo
- Marine Liability
- Offshore/Energy

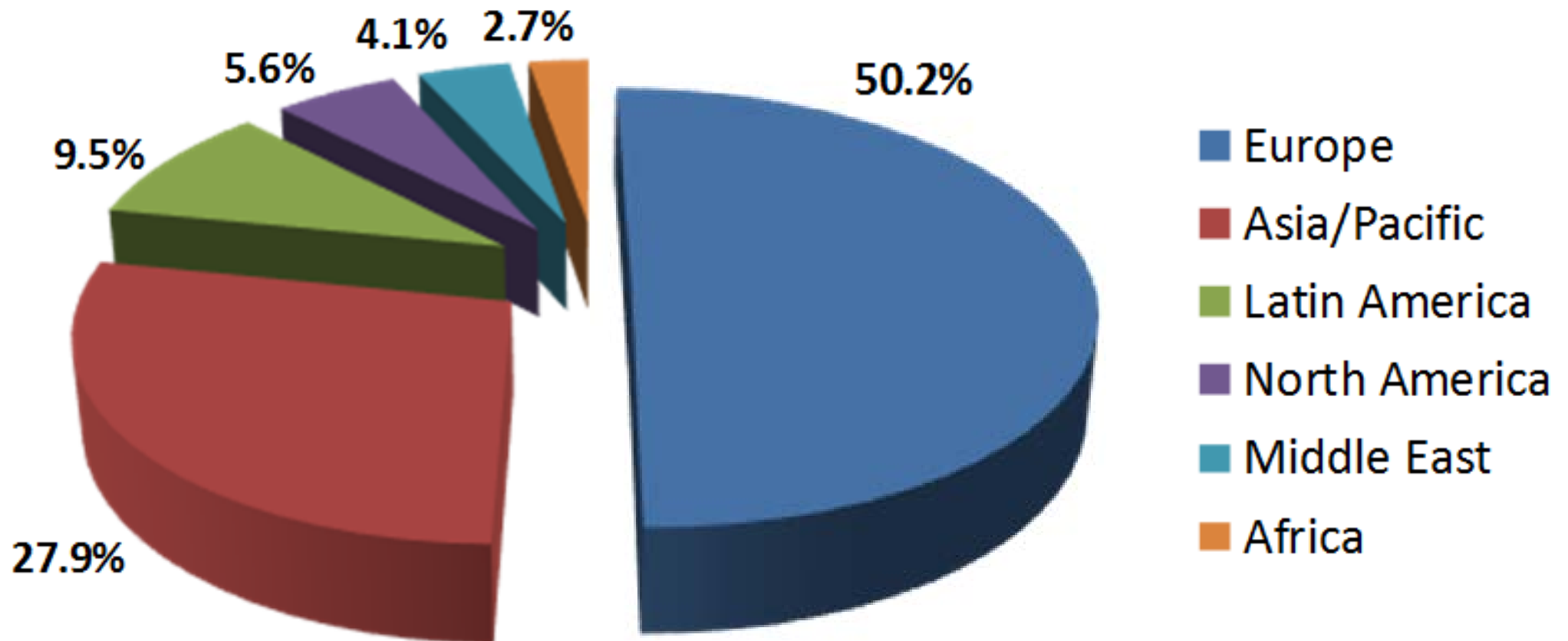
Share of offshore energy down 2%, Cargo up 2%

# GLOBAL PREMIUM 2016

By region



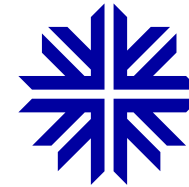
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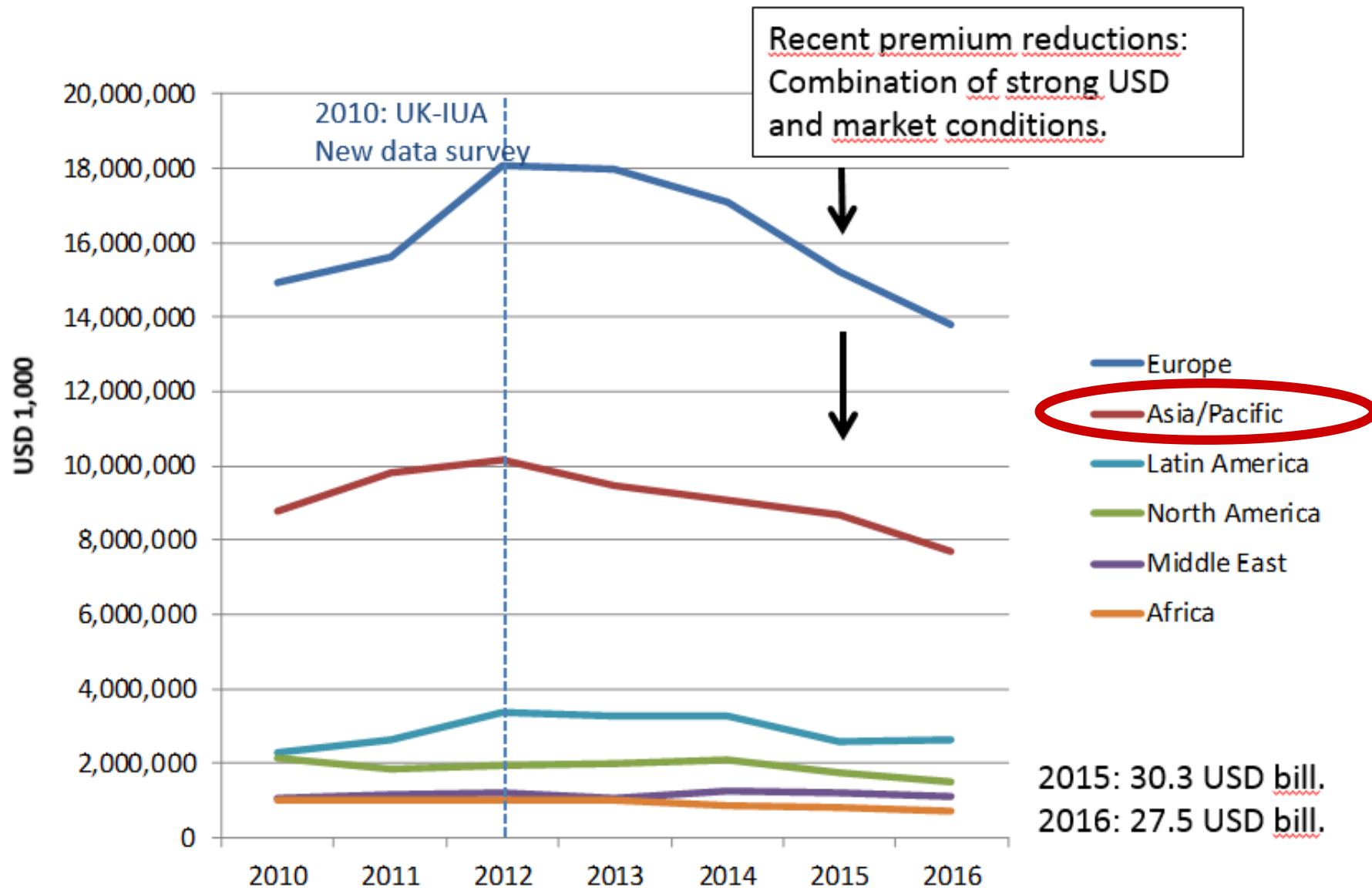
Total: 27.5 USD billion

# GLOBAL PREMIUM BY REGION 2010-16

Data as reported 2017



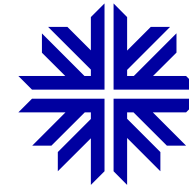
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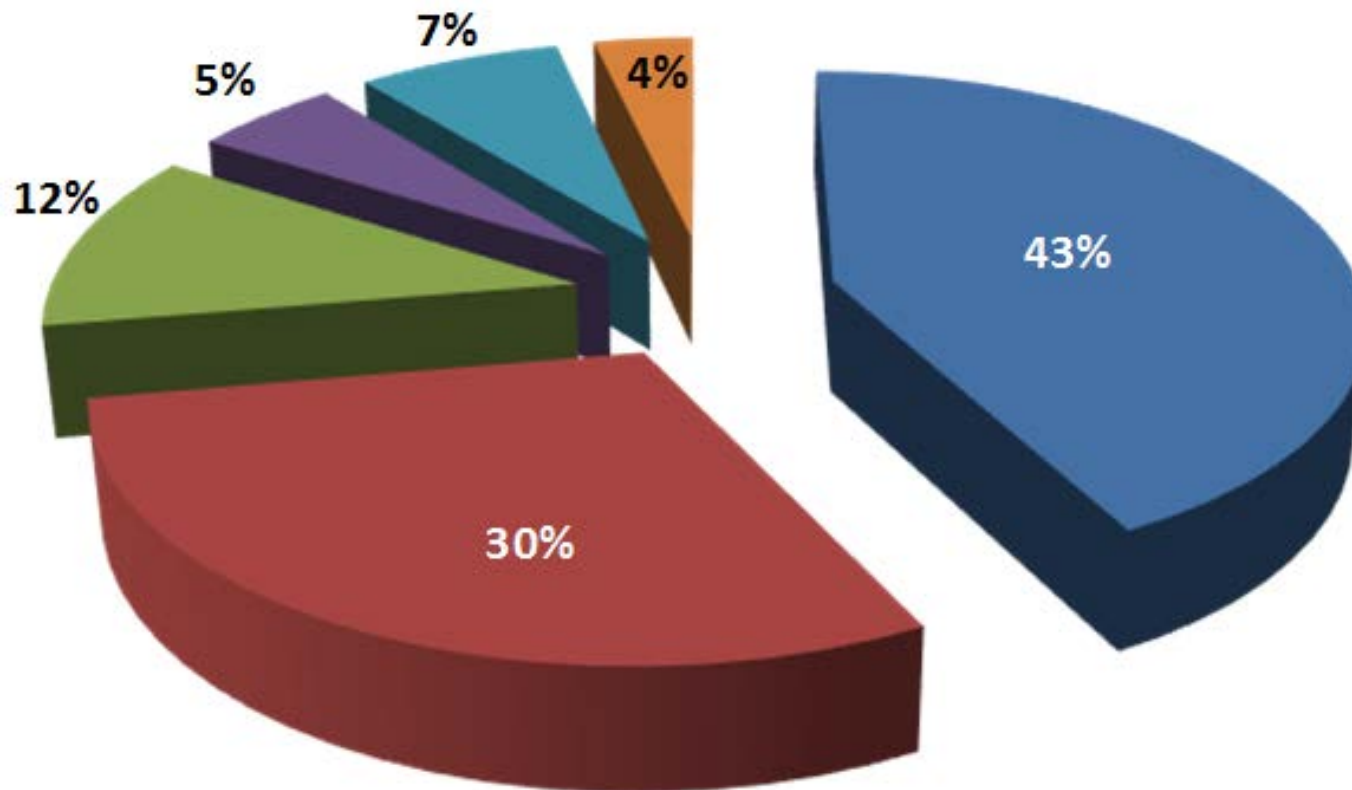


# CARGO PREMIUM 2016

By region



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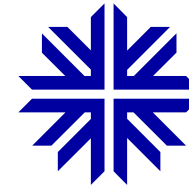


Total estimate: 15.0 USD billion / Change 2015 to 2016: -6%

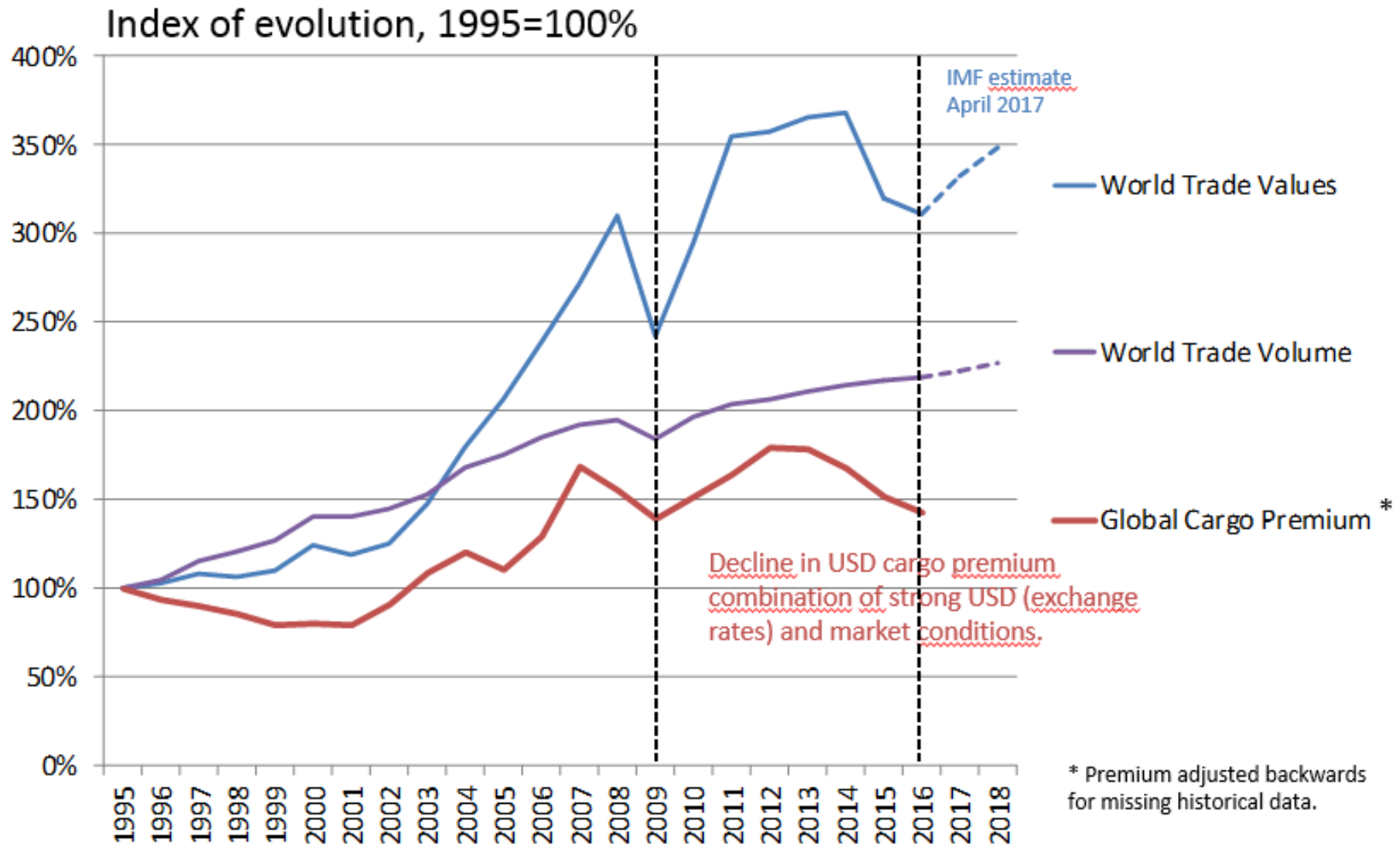
Exchange rate effects strongest on cargo premium.

- Europe
- Asia/Pacific
- Latin America
- North America
- Middle East
- Africa

# CARGO PREMIUM VS WORLD TRADE VALUES & EXPORTS



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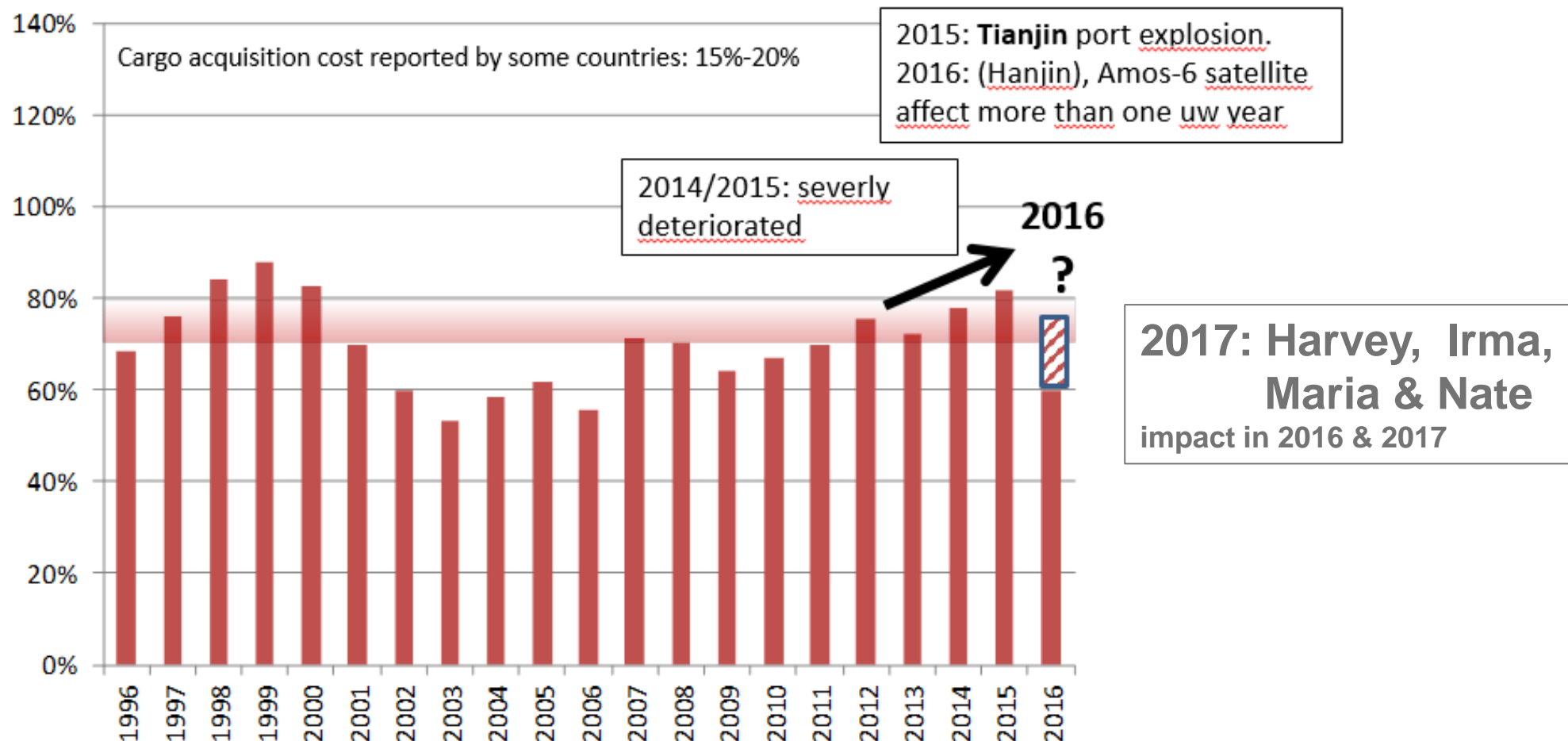


# ULTIMATE GROSS\* L/R CARGO EUROPE (and partly US)\*\*



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Underwriting years 1996 to 2016

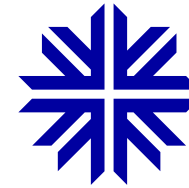


\* Technical break even: gross loss ratio does not exceed 100% minus the expense ratio (acquisition cost, capital cost, management expenses)

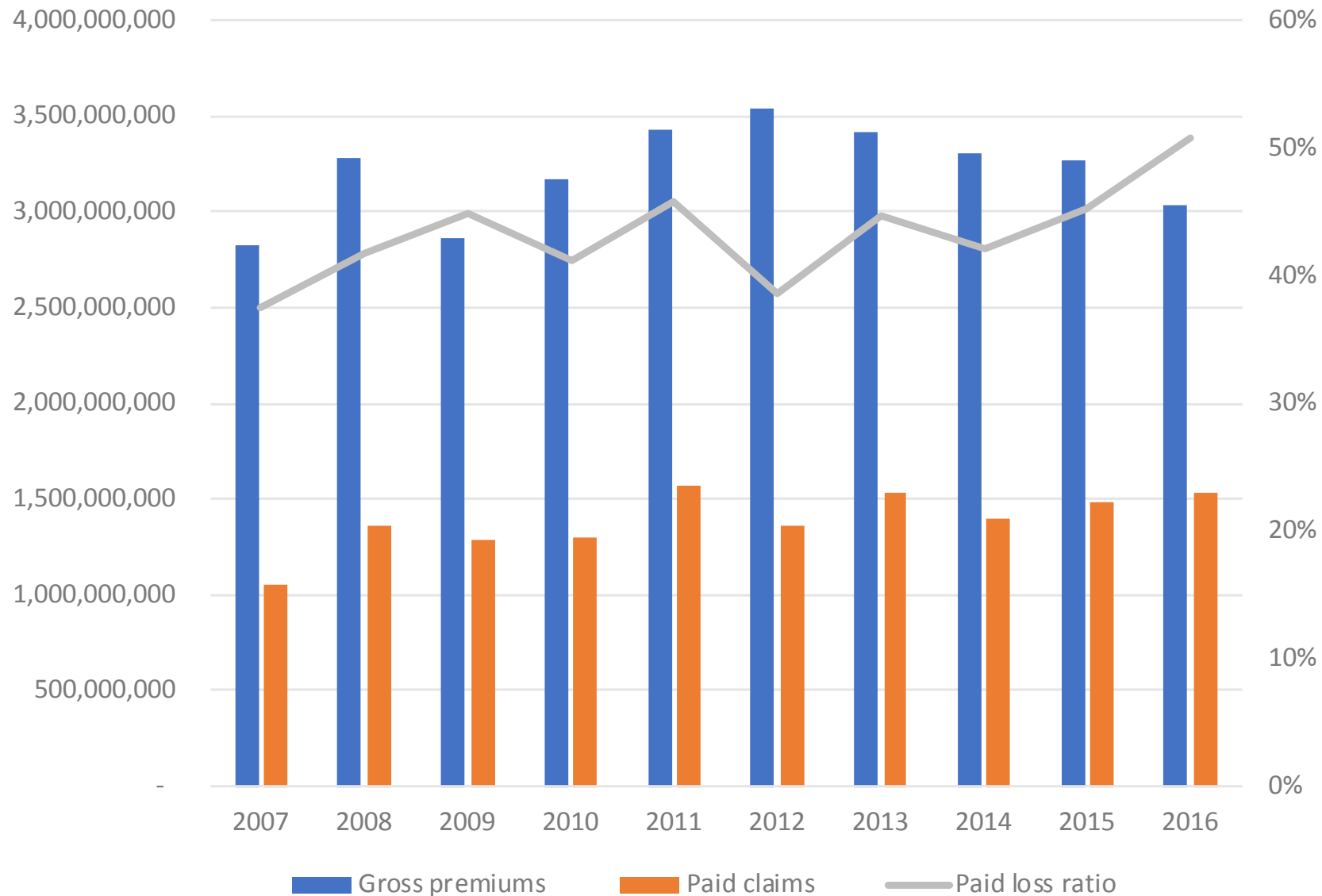
\*\*Data included from: Belgium, France, Germany, Netherlands, Italy, Spain (until 2007), UK, USA

# GROSS L/R ACCOUNTING YEAR CARGO ASIA\*

Gross premiums & paid claims

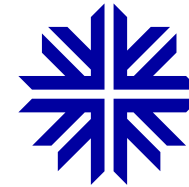


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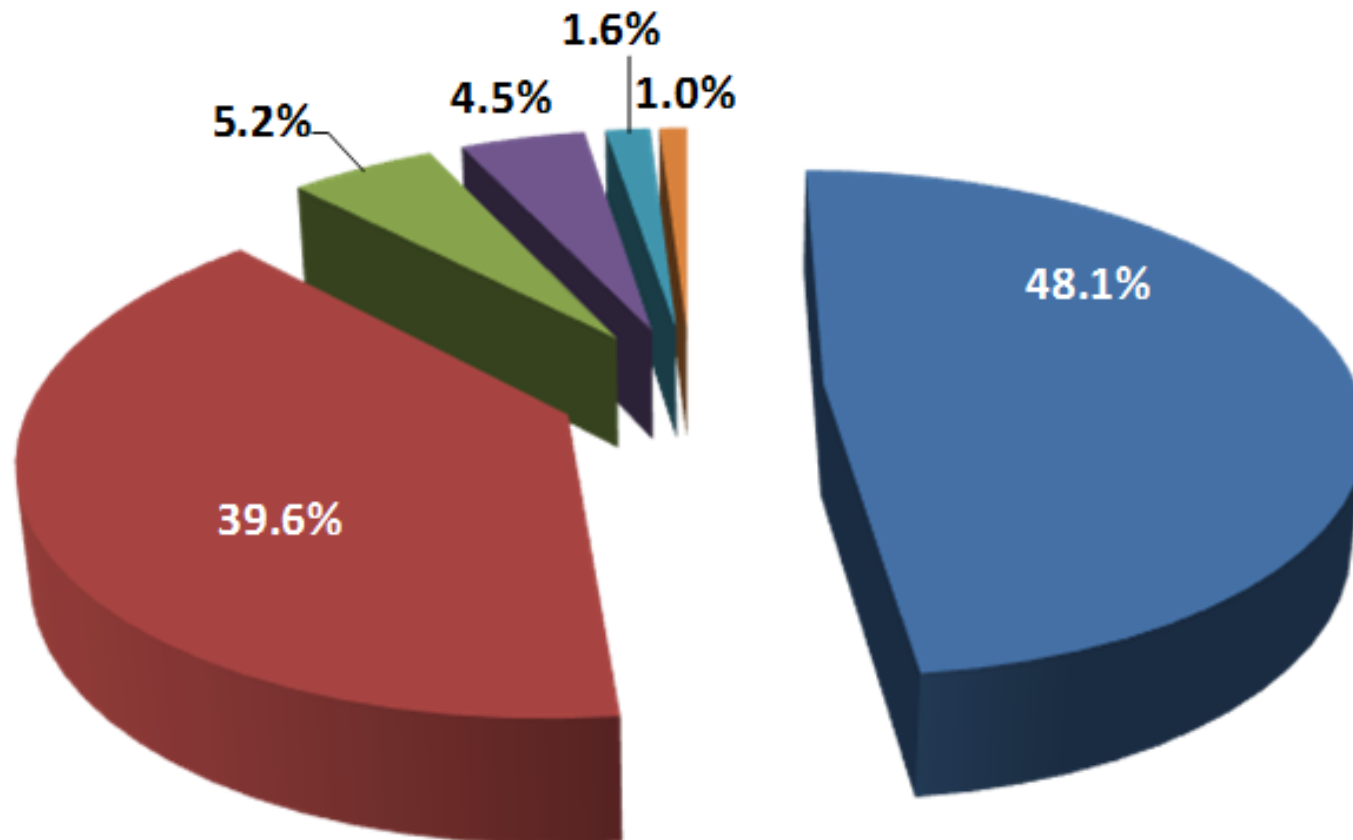


# HULL PREMIUM 2016

By region



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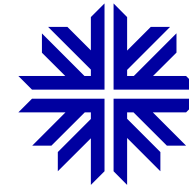
Total estimate: 7 USD billion / Change 2015 to 2016: -10%

- Europe
- Asia/Pacific
- Latin America
- North America
- Middle East
- Africa

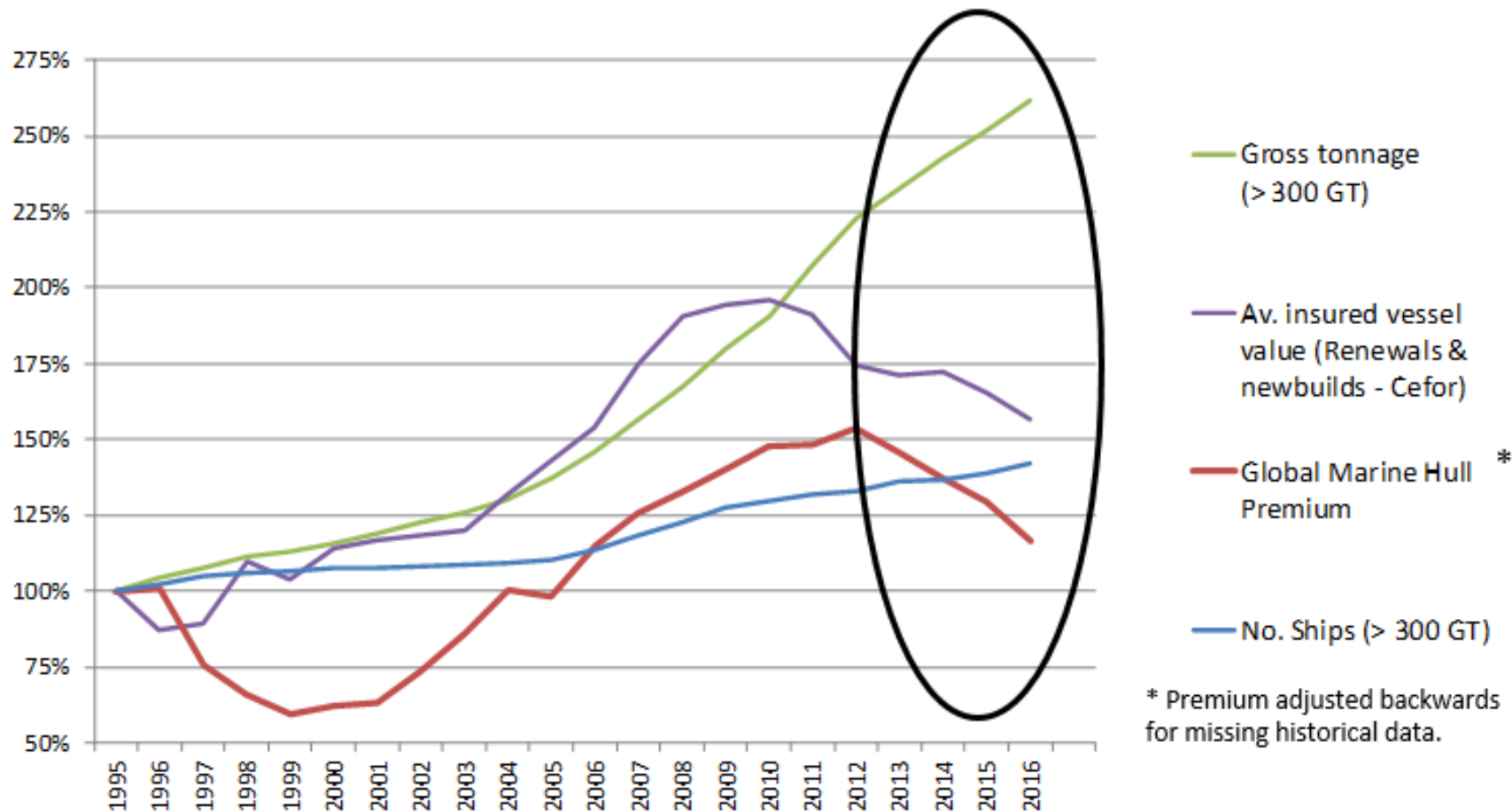


# HULL PREMIUM / WORLD FLEET

Index of evolution, 1995 = 100%



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World fleet continues to grow - especially in tonnage.

Hull premium deteriorates in line with average ship values.

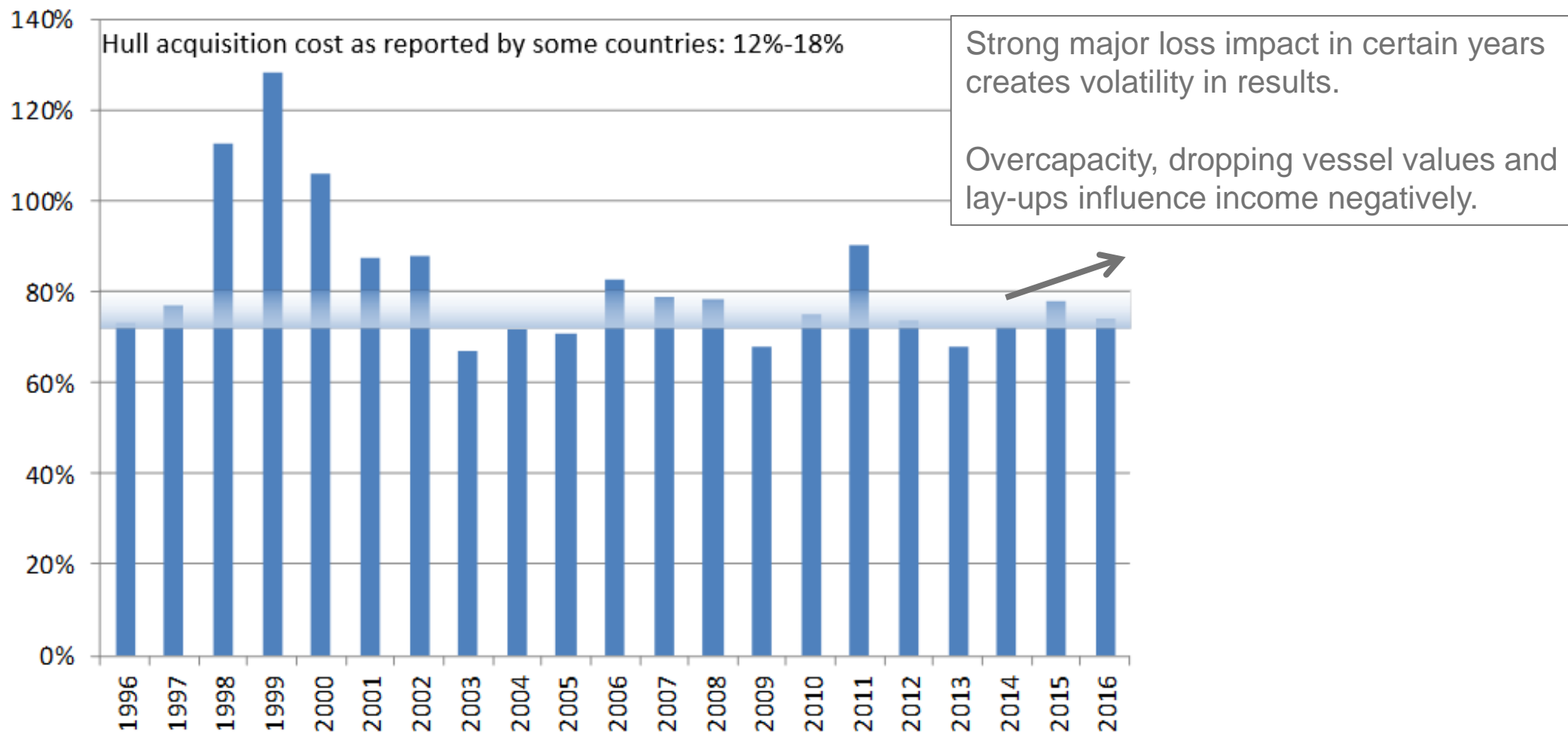
Mismatch between fleet growth and income level.

# ULTIMATE GROSS L/R HULL EUROPE (and partly US)



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Underwriting years 1996 to 2016

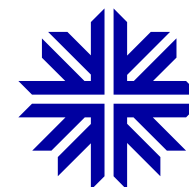


\*Technical break even: gross loss ratio does not exceed 100% minus the expense ratio (acquisition cost, capital cost, management expenses)

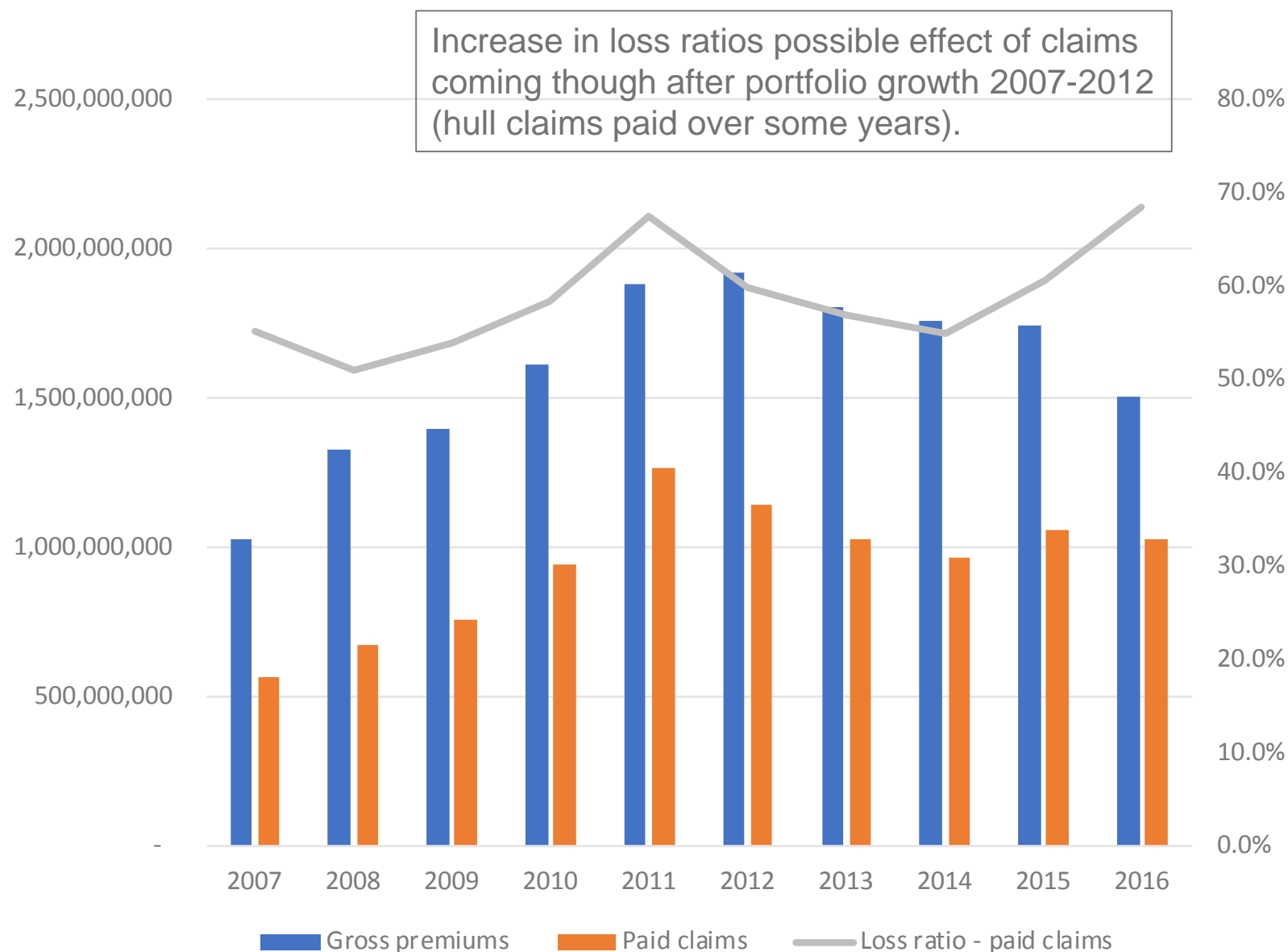
\*\* Data included from: Belgium, France, Germany, Italy, Spain (until 2007), UK, USA

# GROSS L/R ACCOUNTING YEAR HULL ASIA\*

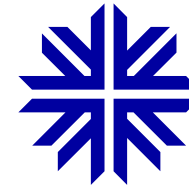
Gross premiums & paid claims



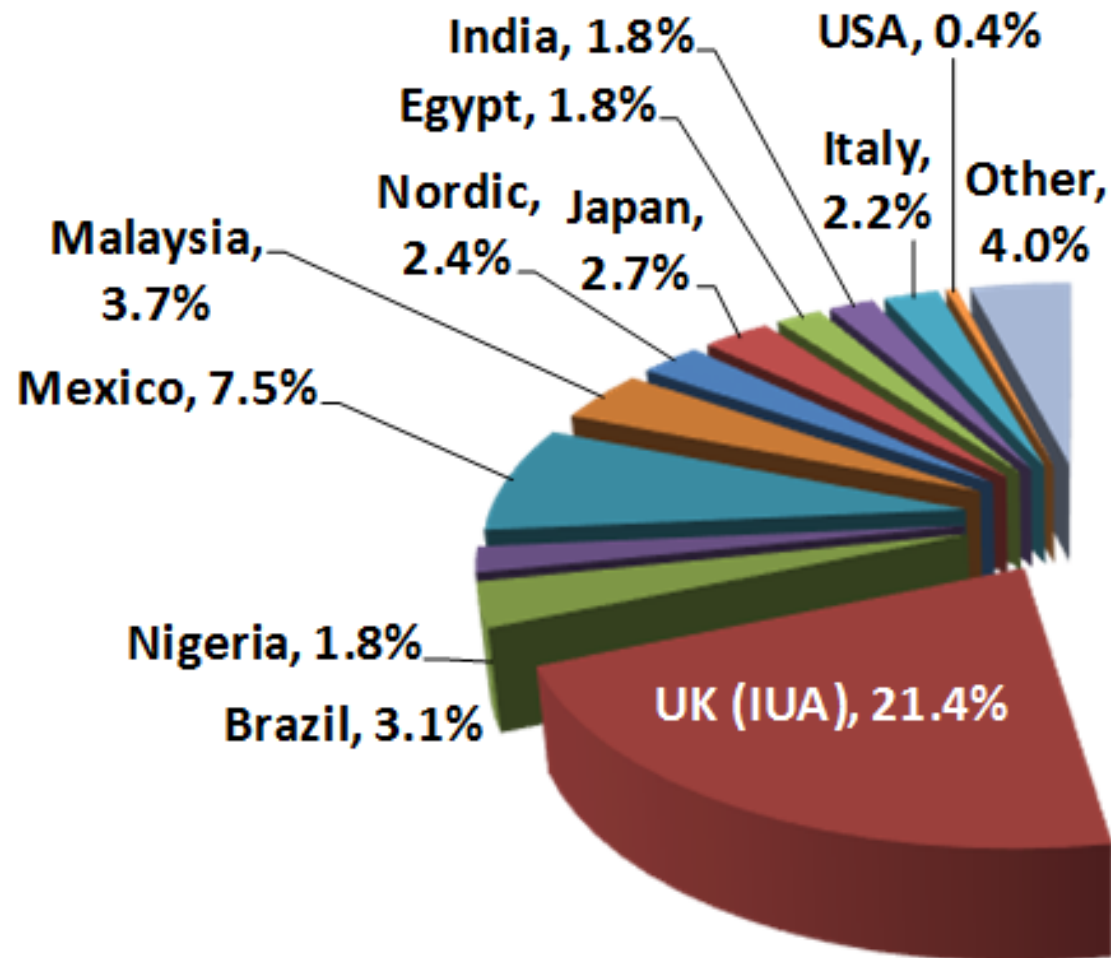
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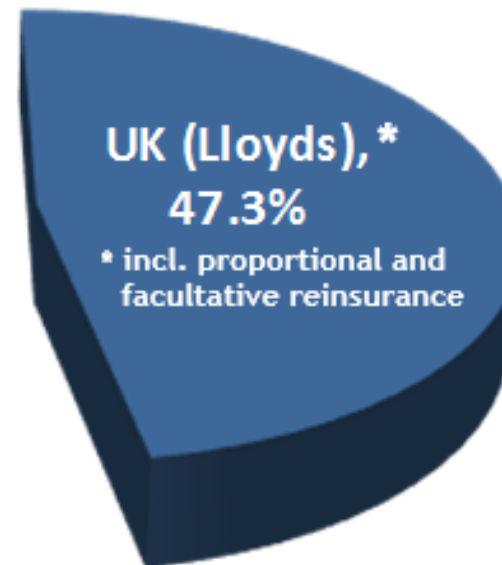
# OFFSHORE ENERGY PREMIUM 2016



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Total estimate:  
USD 3.6 billion /  
Change 2015 to  
2016: **-21%**  
(2014 to 2015:  
**-20%**)!

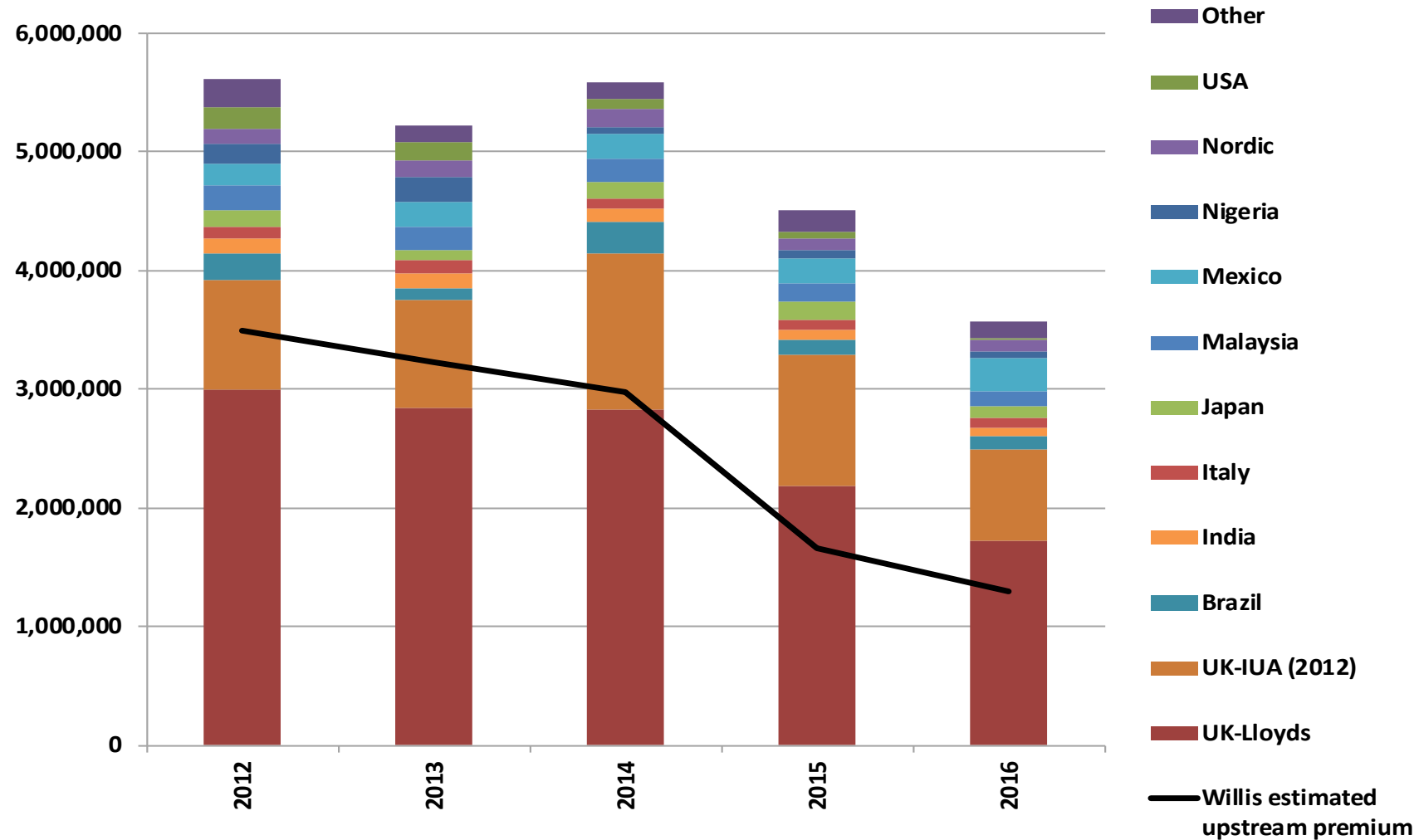


Kazakhstan and some other countries: no data available.

# OFFSHORE ENERGY PREMIUM 2012 - 2016



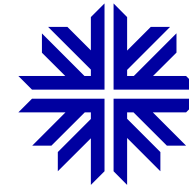
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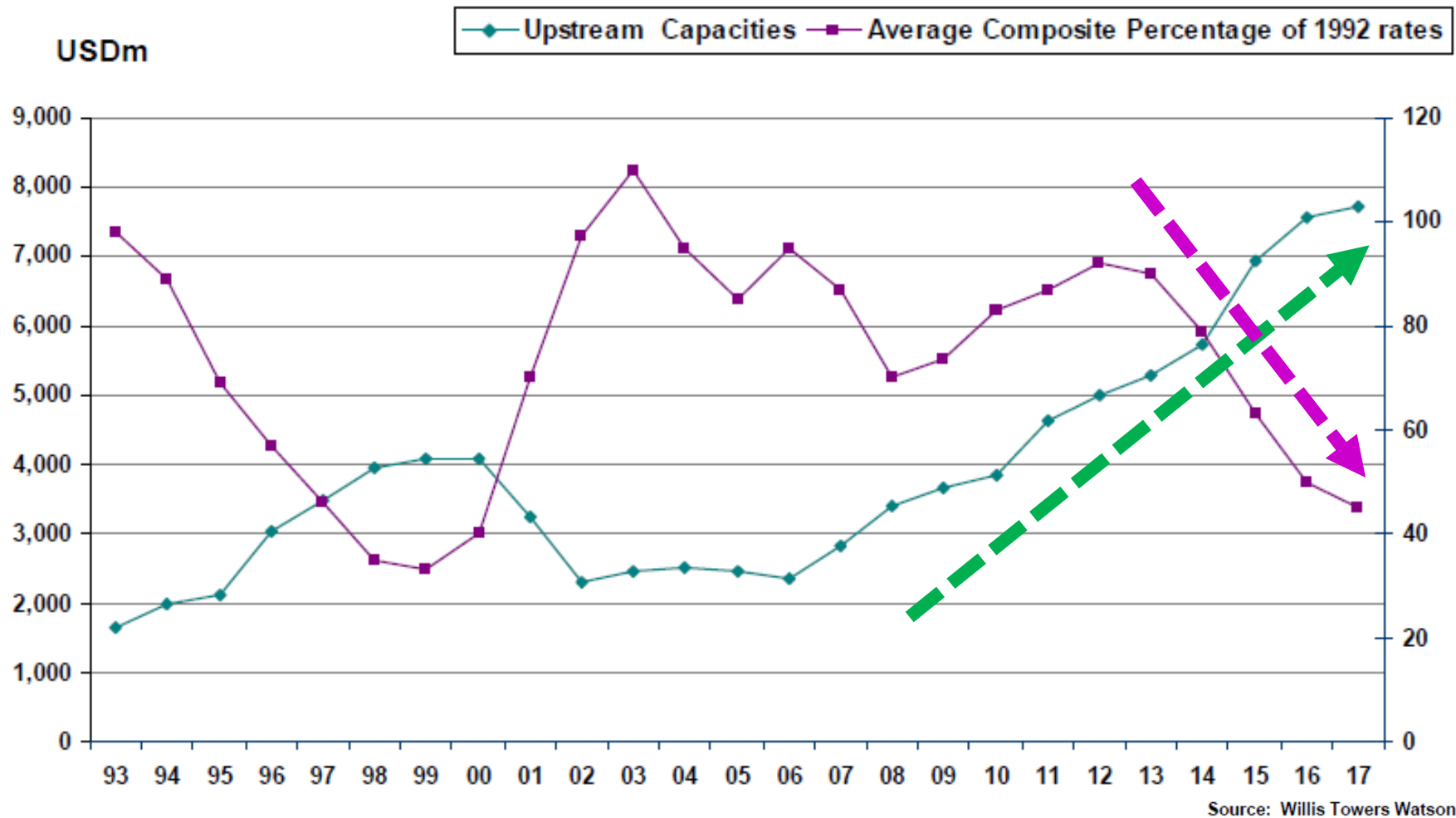
Kazakhstan and some other countries: no data available.



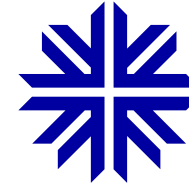
# OFFSHORE ENERGY – UPSTREAM CAPACITY VS RATING LEVEL 1993 - 2017



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# COMBINATION OF 2017 HURRICAINES – Market changing Event ?



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## **Hurricane Harvey (Cat.4 Hurricane)**

landfall coastal Texas  
estimated market loss US\$ 25 – 35bn

## **Hurricane Irma (Cat.5 Hurricane)**

landfall 10 Caribbean countries and Florida Keys  
estimated market loss US\$ 35 – 55bn (RMS)

## **Hurricane Maria (Cat.5 Hurricane)**

landfall Dominica, Virgin Island and Puerto Rico  
estimated market loss US\$ 15 – 30bn



# COMBINATION OF 2017 HURRICAINES – Market changing Event ?



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Harvey, Irma and Maria will make it into the top 10  
of the costliest events for the global insurance market

ordered by inflation adjusted insured losses

Date	Event	Affected area	Insured losses in USD mn
Aug 2005	Hurricane Katrina	Gulf of Mexico	74,300
Sep 2017	<b>Hurricane Irma</b>	<b>Caribbean, Cuba, Florida</b>	<b>35,000 – 55,000</b>
Oct 2012	Hurricane Sandy	USA (East Coast), Cuba, Caribbean	30,500
Aug 2017	<b>Hurricane Harvey</b>	<b>Gulf of Mexico, Texas</b>	<b>25,000 – 35,000</b>
Aug 1992	Hurricane Andrew	Bahamas, Florida, Gulf of Mexico	29,100
Jan 1994	Earthquake	CA, Northridge, Los Angeles, San Fernando Valley, Ventura, Orange	24,800
Sep 2017	<b>Hurricane Maria</b>	<b>Puerto Rico</b>	<b>15,000 – 30,000</b>
Sep 2008	Hurricane Ike, storm surge	Cuba, Gulf of Mexico, Bahamas	20,700
Sep 2004	Hurricane Ivan	Caribbean, Gulf of Mexico	15,000
Oct 2005	Hurricane Wilma	Bahamas, Cuba, Haiti, Jamaica, Mexico, USA	14,800

# COMBINATION OF 2017 HURRICAINES – Market changing Event ?



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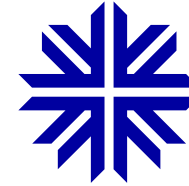
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Total insured loss > US \$100bn

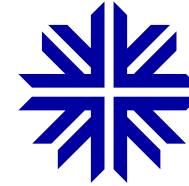
ILS market \$4bn to \$9bn ➡ \$10bn to \$12.5bn of capital lost or trapped



# Disruptive Forces in Marine Insurance



# DISRUPTIVE FORCES IN MARINE INSURANCE



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*Disruption means*

1. “ *Innovative developments*
2. ... *destroying existing business models*
3. ... *driven by technology or business innovation* “  
⇒ digital disruption (Netflix, Amazon, Uber, AirBnB)

*In the meantime effects extend far beyond the business world*

Disruptive forces affect every aspect of society

- workplace
- environment
- politics

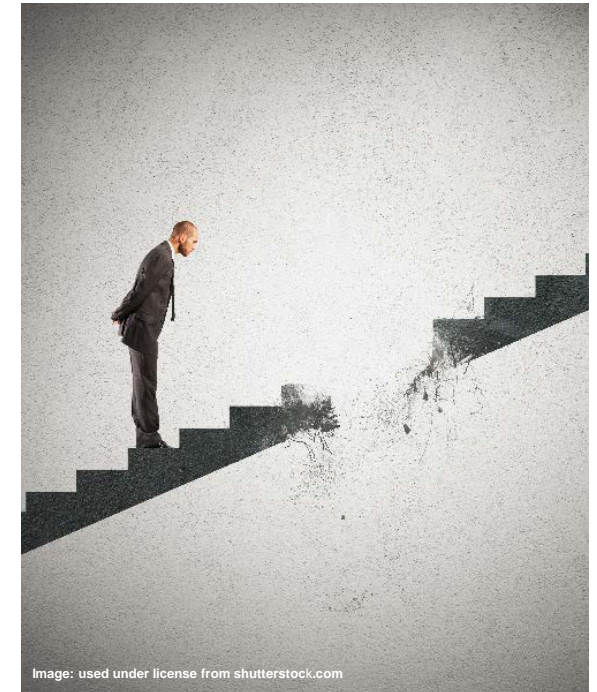
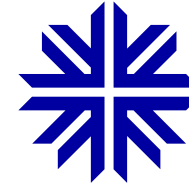


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***Both aspects will have strong impact on marine insurance business !***

# DIGITALIZATION WILL RE-DEFINE SHIPPING AND LOGISTICS



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Digitalization, data analytics, sensor technology

- ⇒ e-Navigation
- ⇒ Autonomous shipping
- ⇒ Smart port logistics
- ⇒ Intelligent containers
  - supply chain efficiency
  - just in time logistics
  - accumulation control
- ⇒ Blockchain technology



# DIGITALIZATION WILL RE-DEFINE SHIPPING AND LOGISTICS



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Digitalization, data analytics, sensor technology

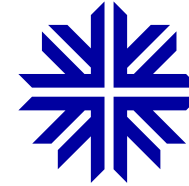
- ⇒ e-Navigation
- ⇒ Autonomous shipping
- ⇒ Smart port logistics
- ⇒ Intelligent containers
  - supply chain efficiency
  - just in time logistics
  - accumulation control
- ⇒ Blockchain technology



*New technologies come along with substantial increase of data exchange and rapidly growing cyber threats !*

# DIGITALIZATION – CYBER RISKS

Shipping / Port logistics / Offshore installations



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## **Ransomware – cyber attacks are going global**

⇒ *WannaCry*

Hundreds of thousands computers locked / >150 countries affected

⇒ *Petya*

>200.000 companies hit / Maersk booking system + container tracking down

11 APM container terminals disrupted - 75 ports affected

# DIGITALIZATION – CYBER RISKS

Shipping / Port logistics / Offshore installations



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Hundreds of thousands computers locked / >150 countries affected

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>200.000 companies hit / Maersk booking system + container tracking down

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## Cyber gets physical

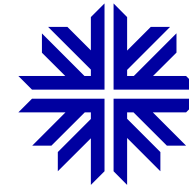
- Monetary and reputational losses + loss of data
- Increase of physical cyber attacks on control systems or operational technology

## Challenges

- ▶ Maritime port sector and ship navigation at risk
- ▶ Trade disruption or theft of high value cargo
- ▶ Unawareness of potential exposure
- ▶ Comprehensive security analysis necessary before technology goes online



# DIGITALIZATION WILL TRANSFORM EXISTING INSURANCE VALUE CHAIN



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## Distribution

- Internet based placing platforms
- New sales channels

## Changing purchasing habits: “Millennial” clients’ expectations

⇒ Convenient + automated purchase of (commercial) insurance !

- Platform-based: simple / transparent / day + night
- Short response time
- Customized solutions and products

⇒ Customer journey is key !

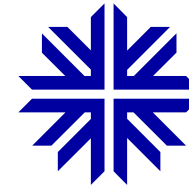
## Shortening of value chain

- Computerized underwriting for non-complex business
- Digital accounting
- Automated claims handling
- Middleman will be *gradually* cut out



# FUTURE ROLE OF INSURERS ?

## Innovation and disruptive technologies



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⇒ *Industry insurance premium volume will reduce*

- Increasing competition
- Alternative capital
- Market transparency – role of internet
- Lower claims burden through new technologies
- InsurTechs
- Big data / artificial intelligence / machine learning

⇒ *Digital technology destroys value ?!*

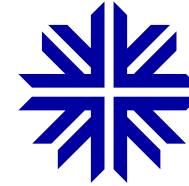
### Clients' expectations

- Assistance & services instead of financial compensation only





# MARINE INSURERS CAN COPE WITH DIGITALIZATION



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## ► Expertise

- Diversity of marine insurance products
- Broad coverage concepts
- Emerging new technologies
  - rapid development of Information Technology
  - automation and robotics
  - smart sensor technology in shipping & logistics
- Risk evaluation + risk management

**Marine is Special-ty business**

## ► Service

- Consultancy for clients in multinational business
- Preventive risk management + loss mitigation
- Claims services

**Service is the differentiator**

## ► Relationship

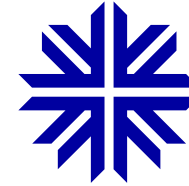
- Trust is central to insurance promise + reliability is our asset
- Customer access (connected devices to interact more often)
- Personal relationship + understanding client's needs

**Renaissance of old-fashioned values ?!**

***... the more commoditized – the easier to digitize !***

# DIGITALIZATION

## Turning disruption into opportunity



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### ► Innovation

- Monitor latent trends
- Use smart technology for risk mitigation
- Improve data analytics

### ► Customer intelligence

- Shift in customers' expectations + behavior
- Customized products + services / cater on demand
- Get close to client by using trusted position

⇒ *technical underwriting alone will not suffice !*

### ► Changing staff profiles

- Broaden the talent pool
- Adopting new culture to foster innovation

⇒ *attract & retain the right talents*





# Thank you !

Dieter Berg  
IUMI President

