

# Engineering Insurance Premium and Loss Statistics 2015 - 2017



The International Association  
of Engineering Insurers

presented by Dieter Spaar, IMIA

3<sup>rd</sup> to 5<sup>th</sup> September 2018  
Singapore

By Daniel Yao - Taipei, Taiwan

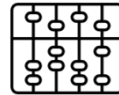
# IMIA Statistics from members 2015 - 2017



In my  
Country ?  
... ?



L/R ?



Who ?

What ?

When ?

How ?



**Sir Winston Churchill**

***“I only believe in statistics  
that I doctored myself”***

# We appreciate input

# Development of Engineering Premium 2015 – 2017

## all IMIA Members – What do we expect



Reporting standards  
to IMIA  
differ per country

### IMIA Stats: **Statistical Basis** (Trend / Country only)

→ **‘Premium Written’** i.e.: **Written = Booked** ≠ Earned  
▪ Obstacles: Earning pattern vary from “country to company”

→ **‘Claims Incurred’** i.e.: **Claims CY\* + Runoff PY\*\* + IBNR\*\*\***  
▪ Obstacles: Business Year Losses only  
incl./excl. run-off (ultimate) resp. IBNR

\* CY - Current Year  
\*\* PY - Previous Year  
\*\*\*IBNR - Incurred but not reported

# Development of Engineering Premium 2015 – 2017 all IMIA Members – What we (can) deliver



Reporting standards  
to IMIA  
differ per country

**2015-2017**

**Reports from 18 IMIA Members**

**Focus:**

All Engineering / Construction Business (Projects, Operation, IDI)

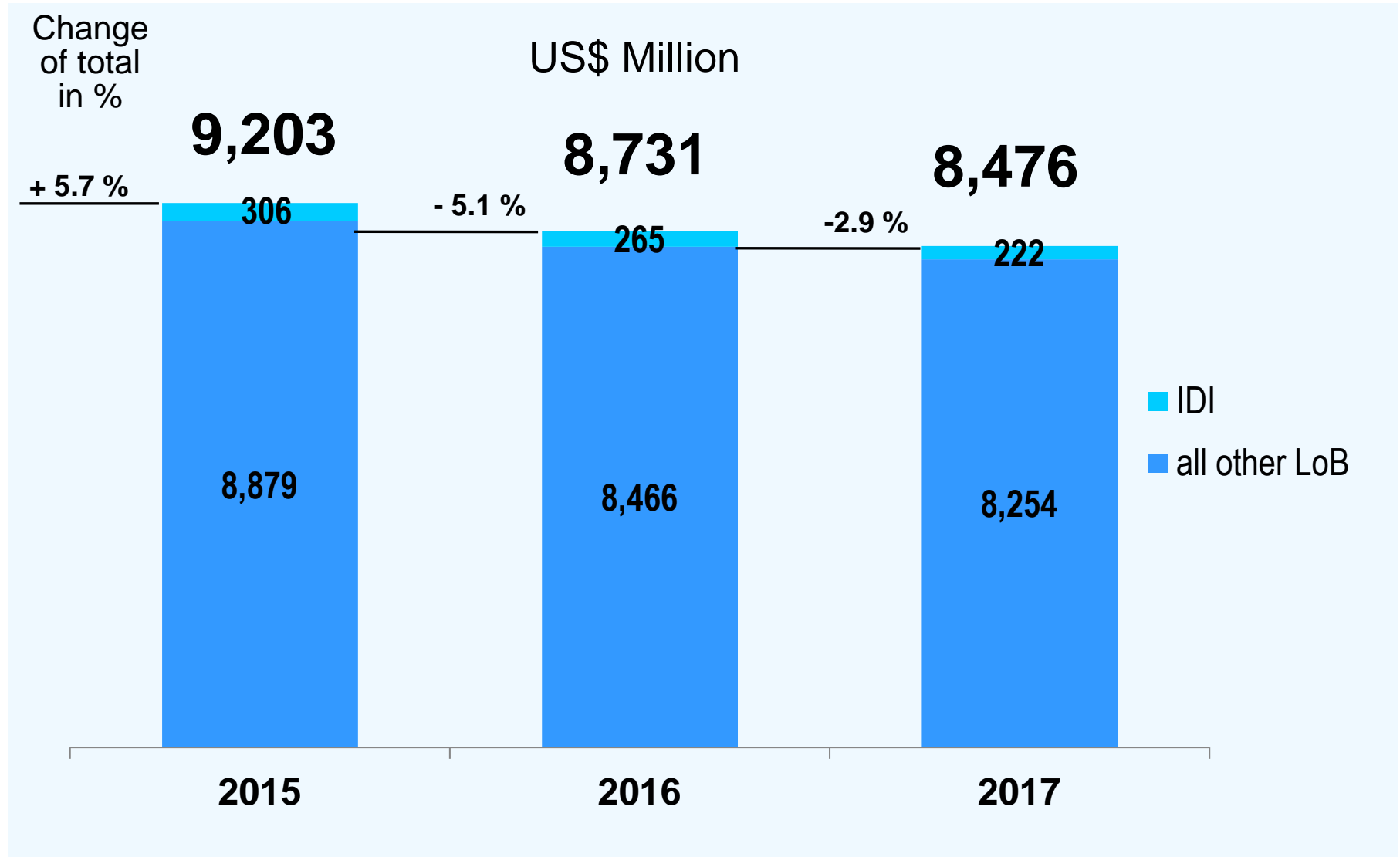
**Obstacles:**

- Direct GWP only; IP / Int'l fac is left out;
  - Some just one LoB (e.g.: USA: MB only)
  - Limited Info from regions not covered like:
    - Middle East, North-Africa → no individual country report
    - South America → Brazil only
- **Large Losses from some regions left out**

e.g.: **xs US Mio. 300 each ?!?**

- USA: Builders Risk (HIM)
- Middle East: Sandstorm damaged CCPP
- Morocco: Coal Fired PP
- Australia : LNG Claims
- Columbia: Chirajara Bridge, Ituango (2018)
- Laos Dam break (2018)
- etc.

# Development of Engineering Premium 2015 – 2017 all IMIA Members (“reported”)



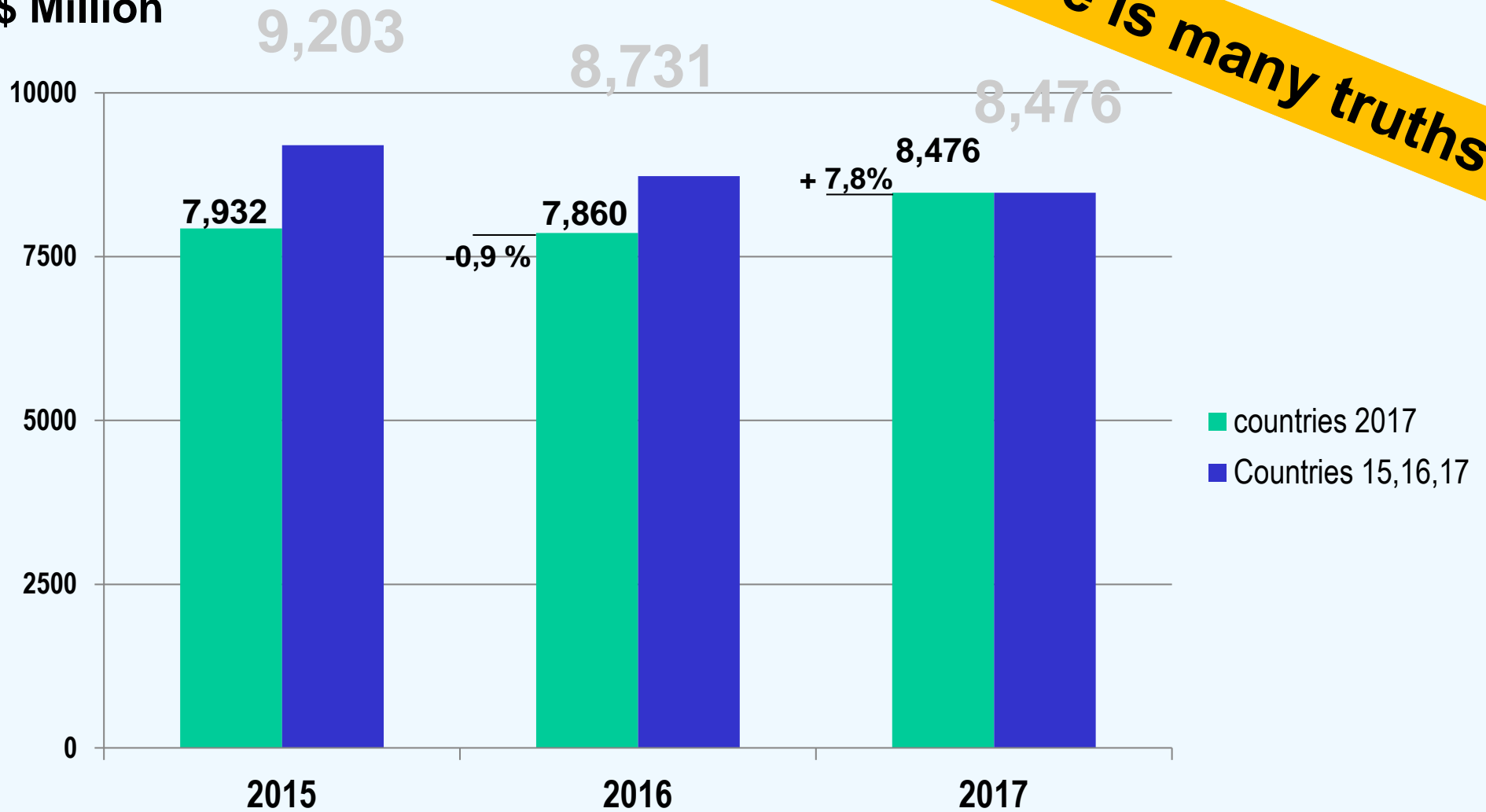
# Development of Engineering Premium 2015 – 2017

comparison (“members reported 2017 only”)

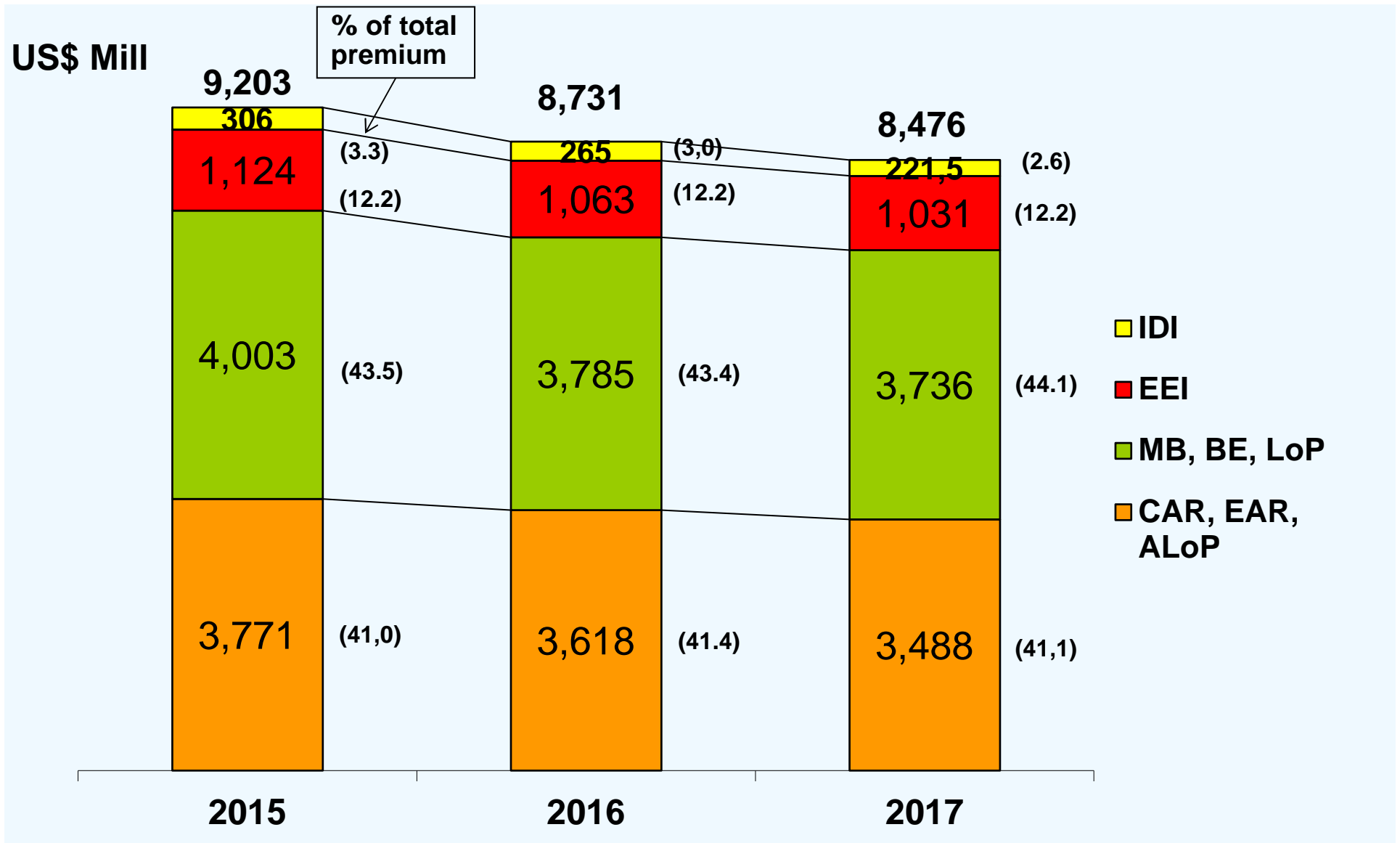


US\$ Million

**There is many truths**



# Development of Premiums 2015 – 2017 per Line of Business

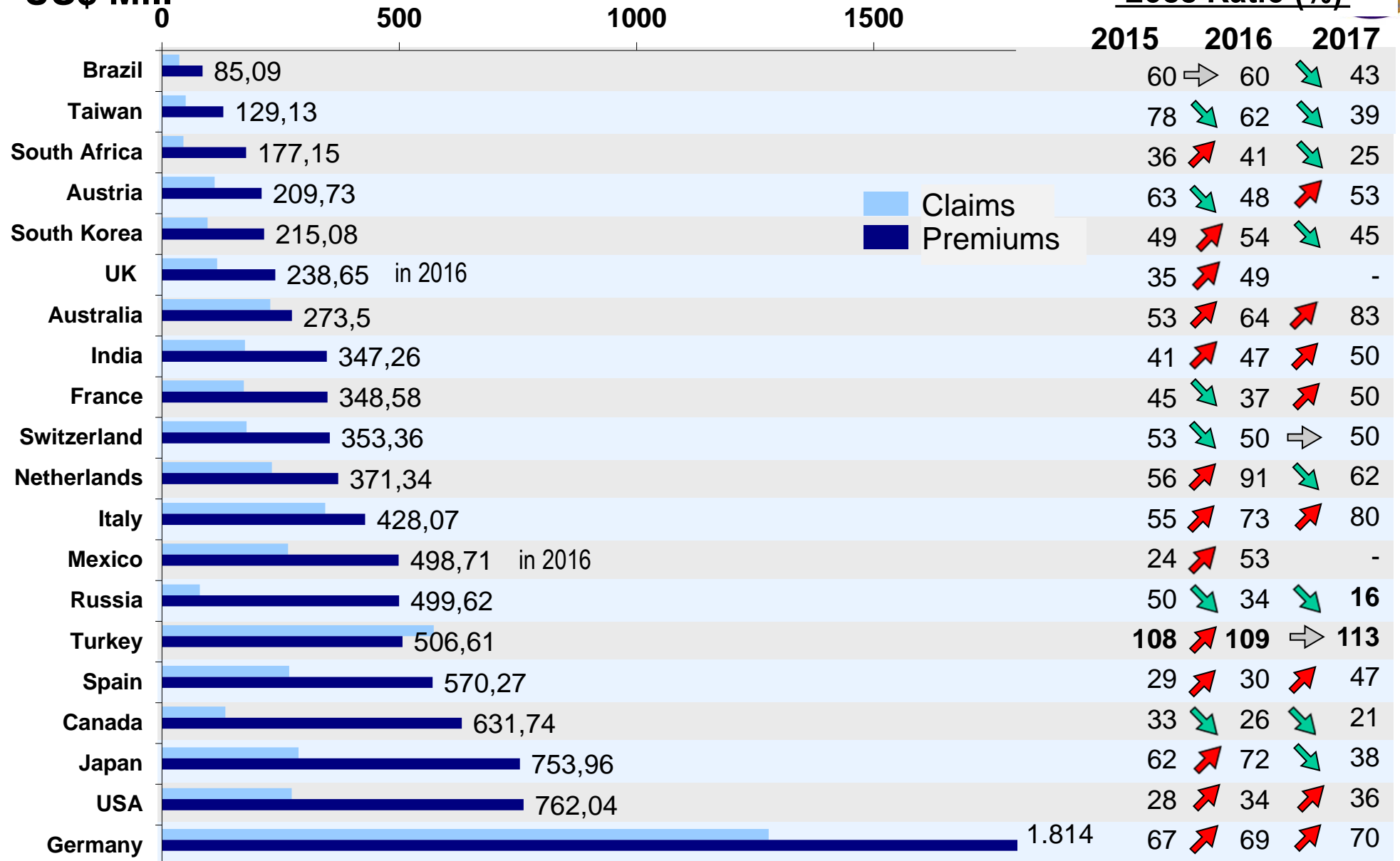


# Premiums and Claims 2017 per Country (excl. IDI)



US\$ Mill

Loss Ratio (%)

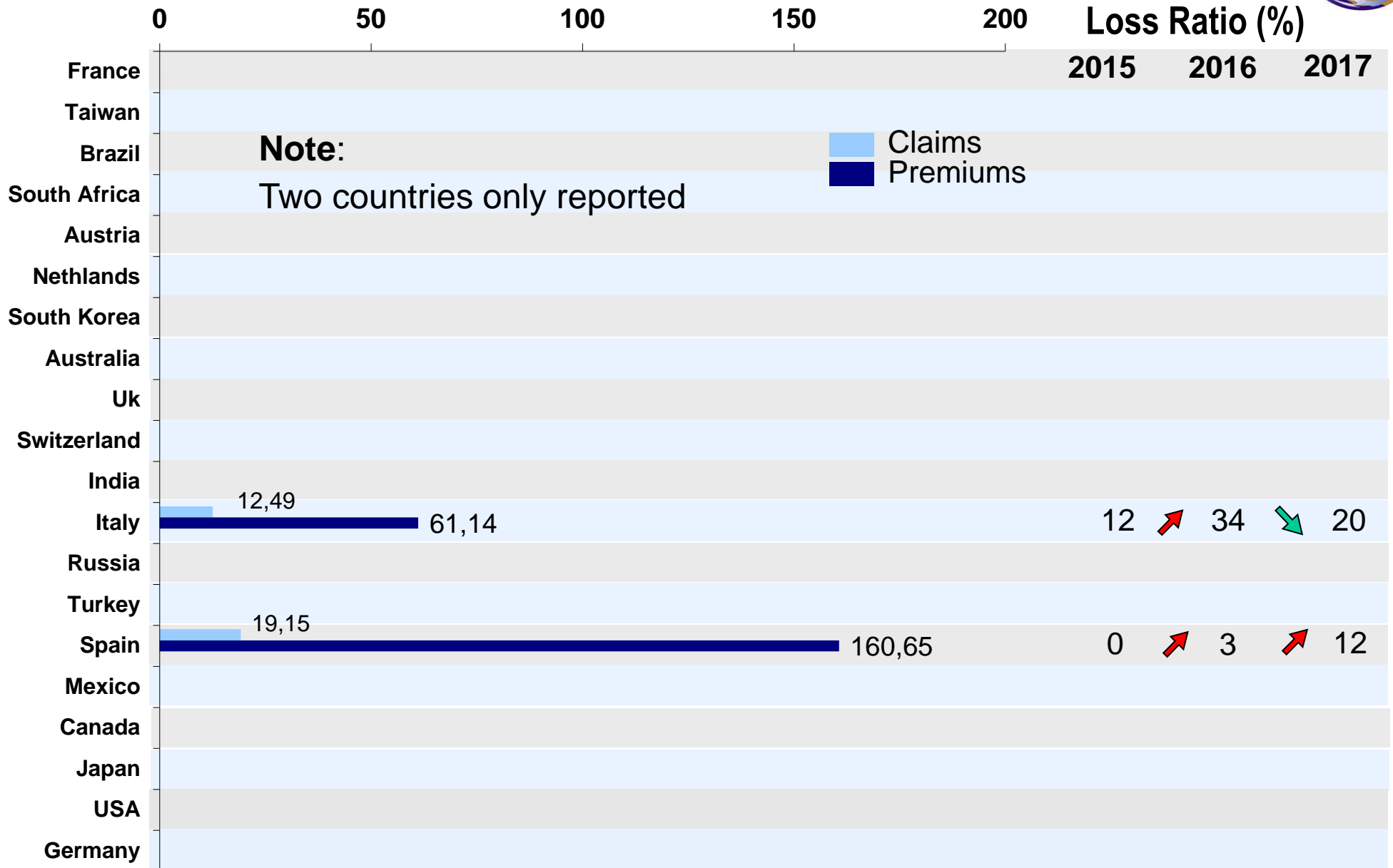




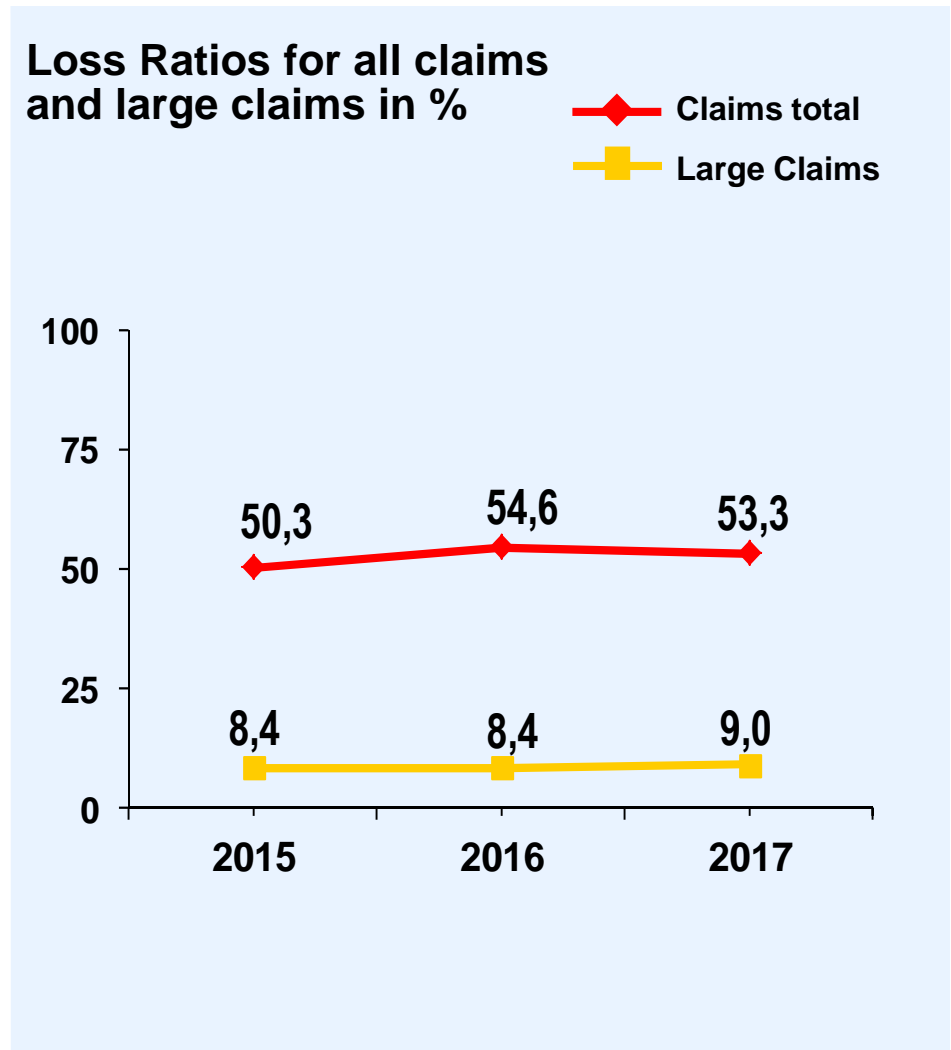
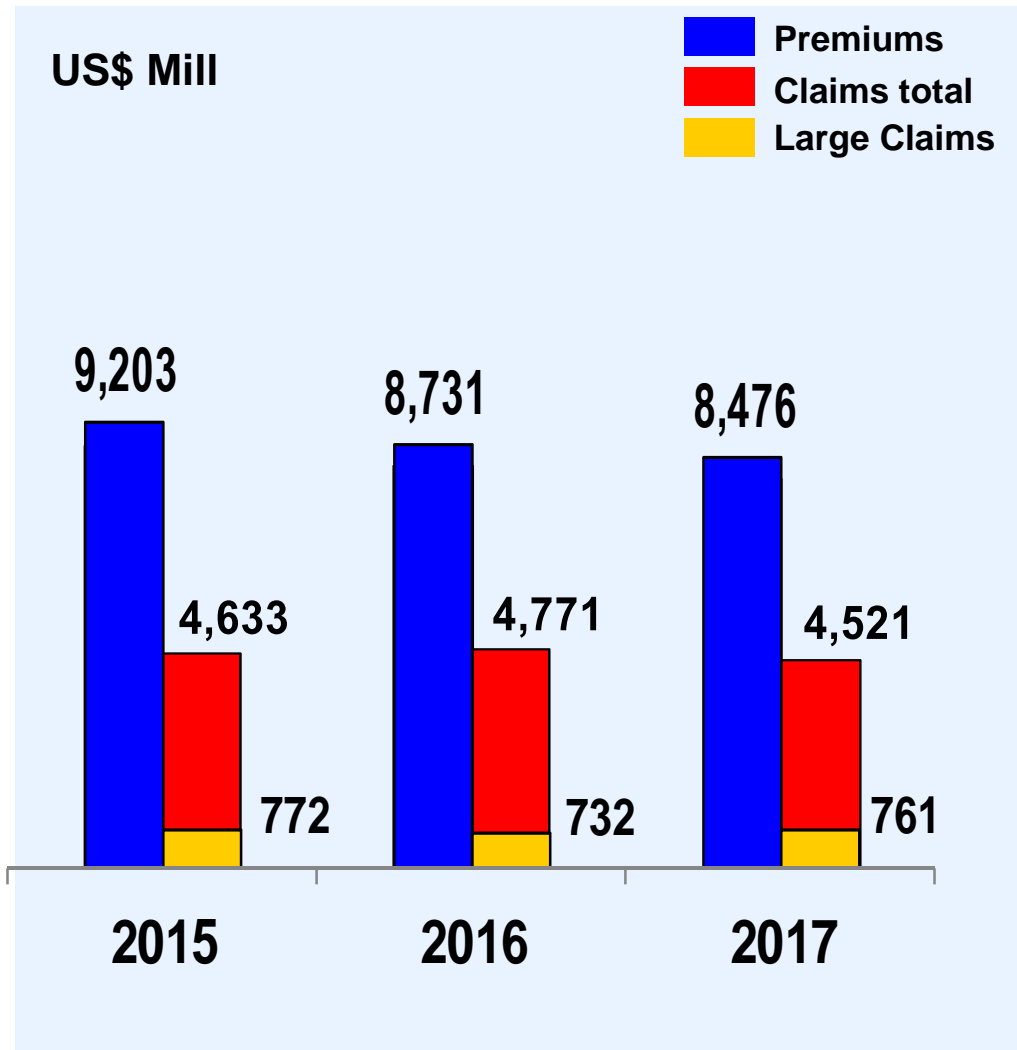
# IDI - Premiums and Claims 2017 per Country



US\$ Mill

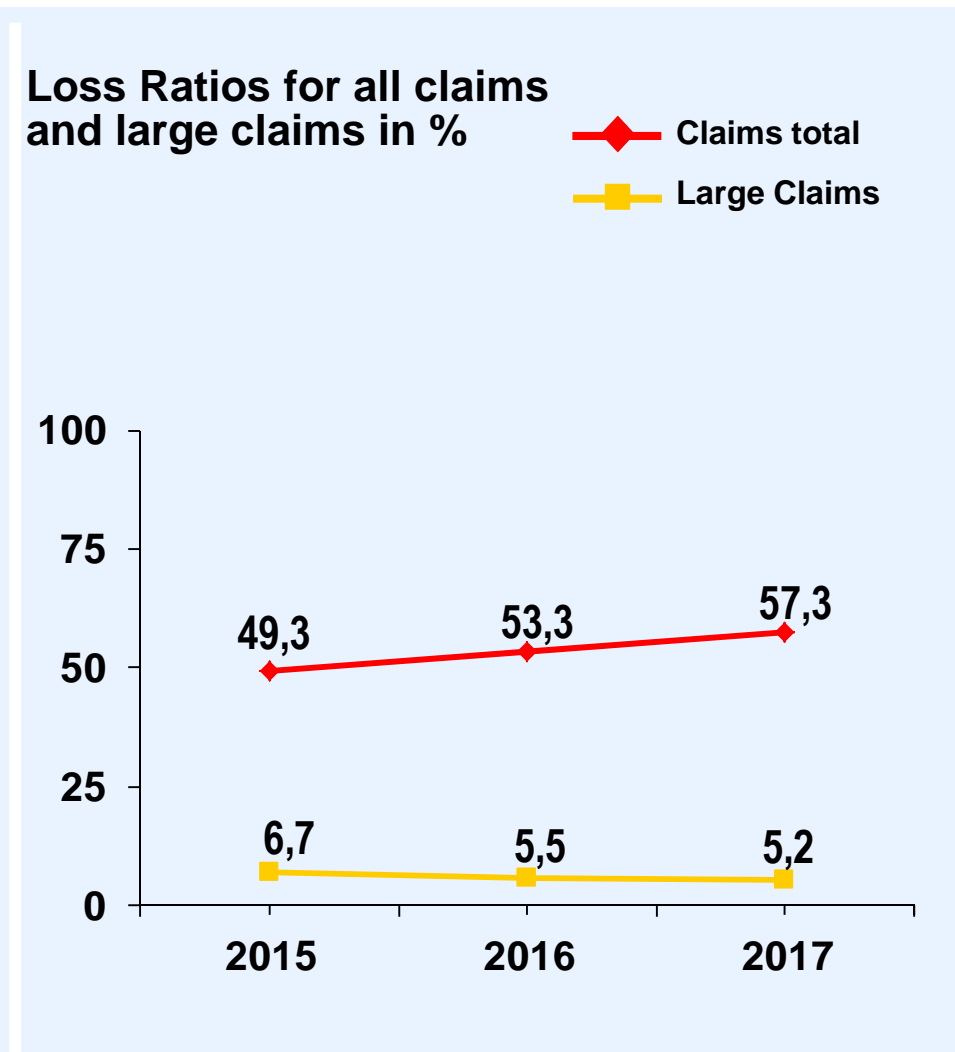
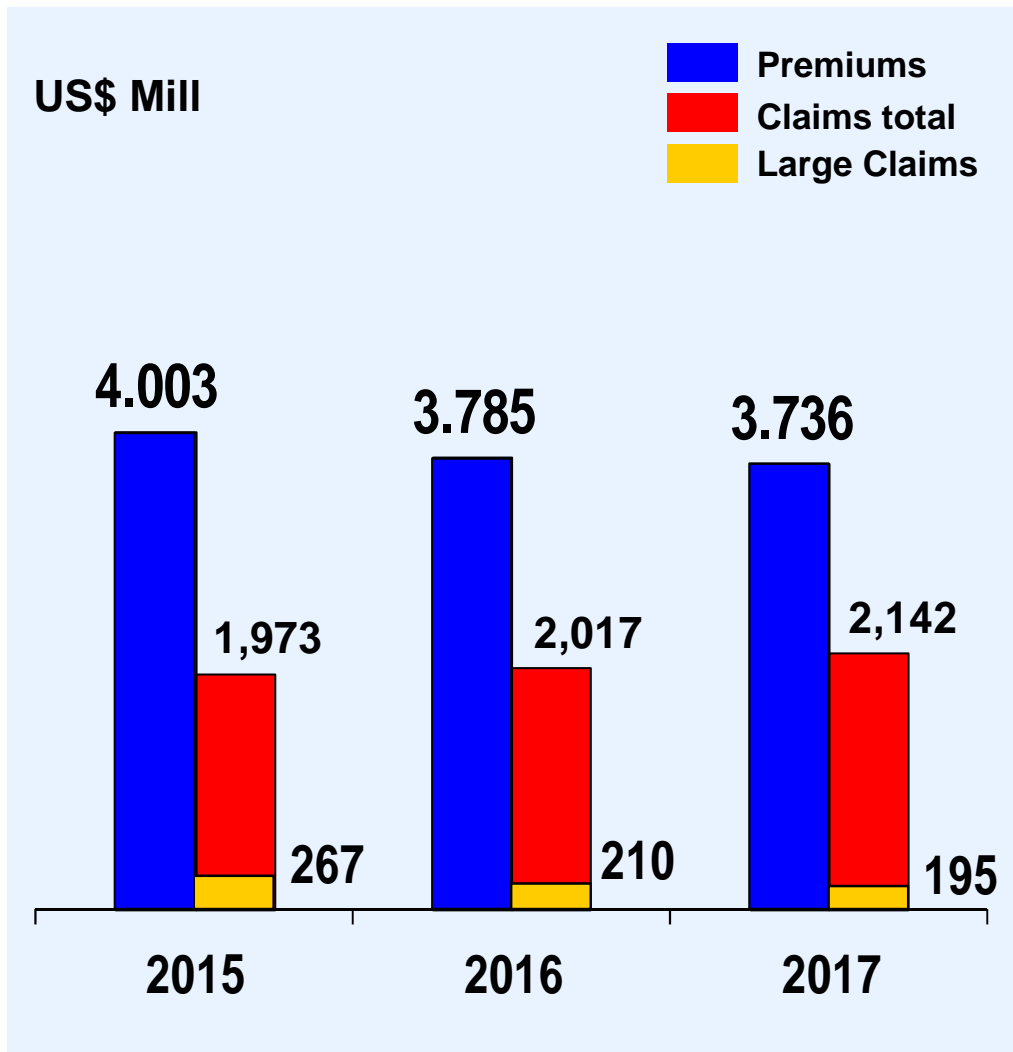


# Premiums / Claims / Large<sup>\*)</sup> Claims – Total Amount Loss Ratios – all Lines of Business (LoB) 2015 - 2017



\*) Note: Large Claims >= 1.0 Mill US\$

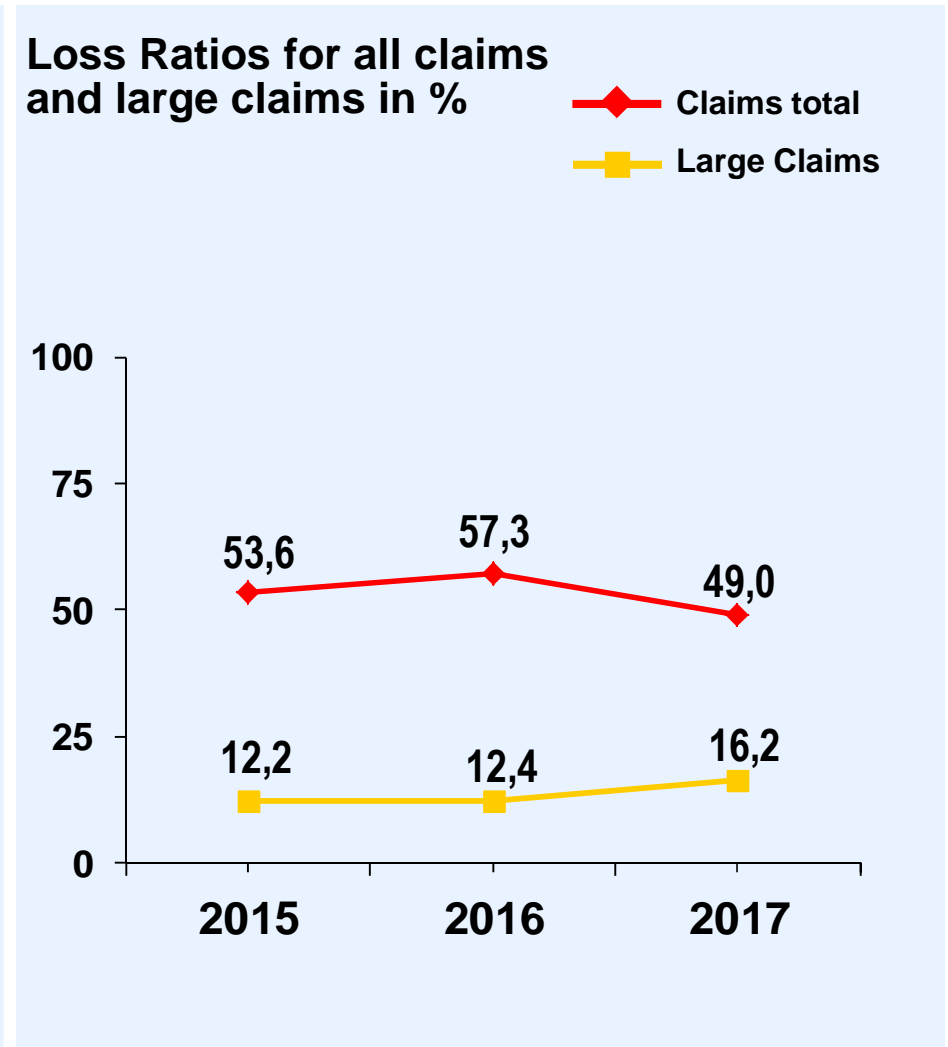
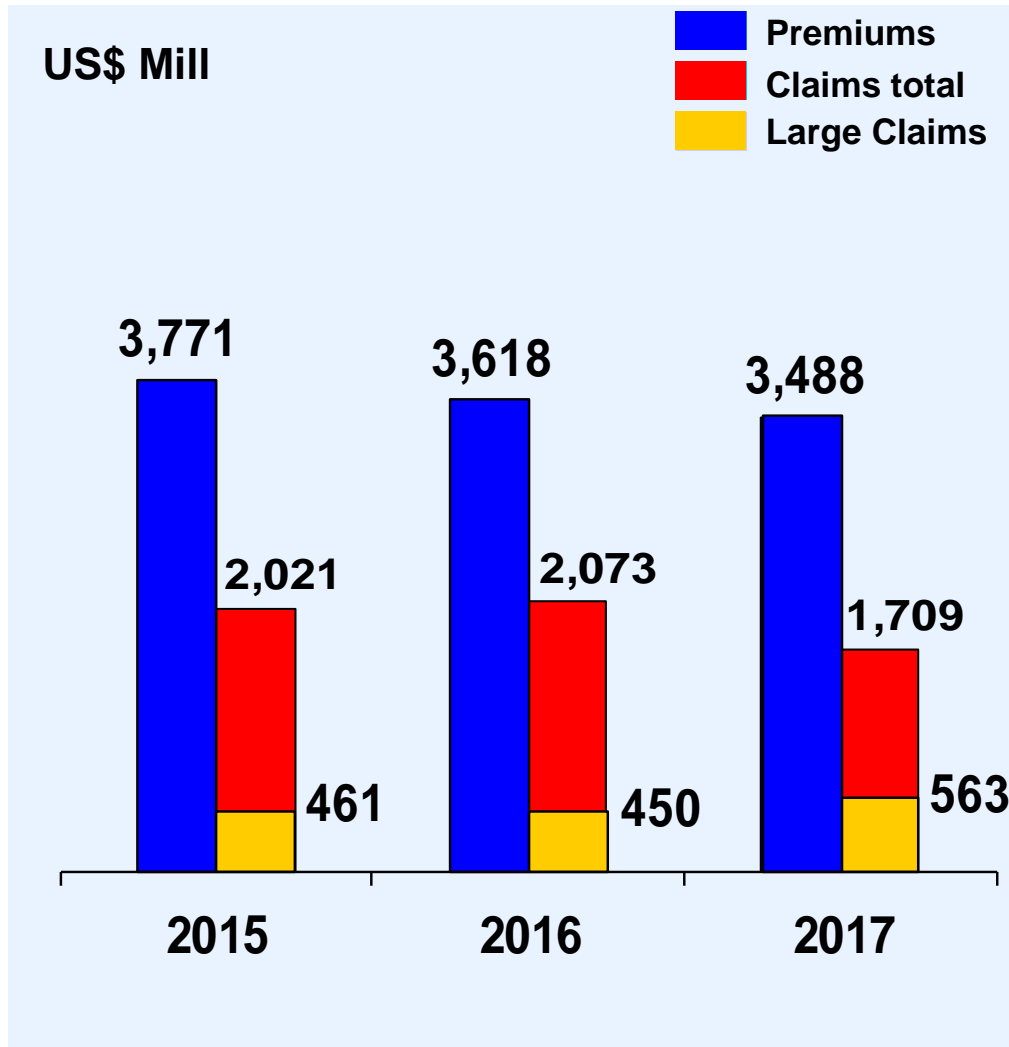
# Premiums / Claims / Large<sup>\*)</sup> Claims Loss Ratios – MB, BE, LoP, O 2015 - 2017



\*) Note: Large Claims >= 1.0 Mill US\$

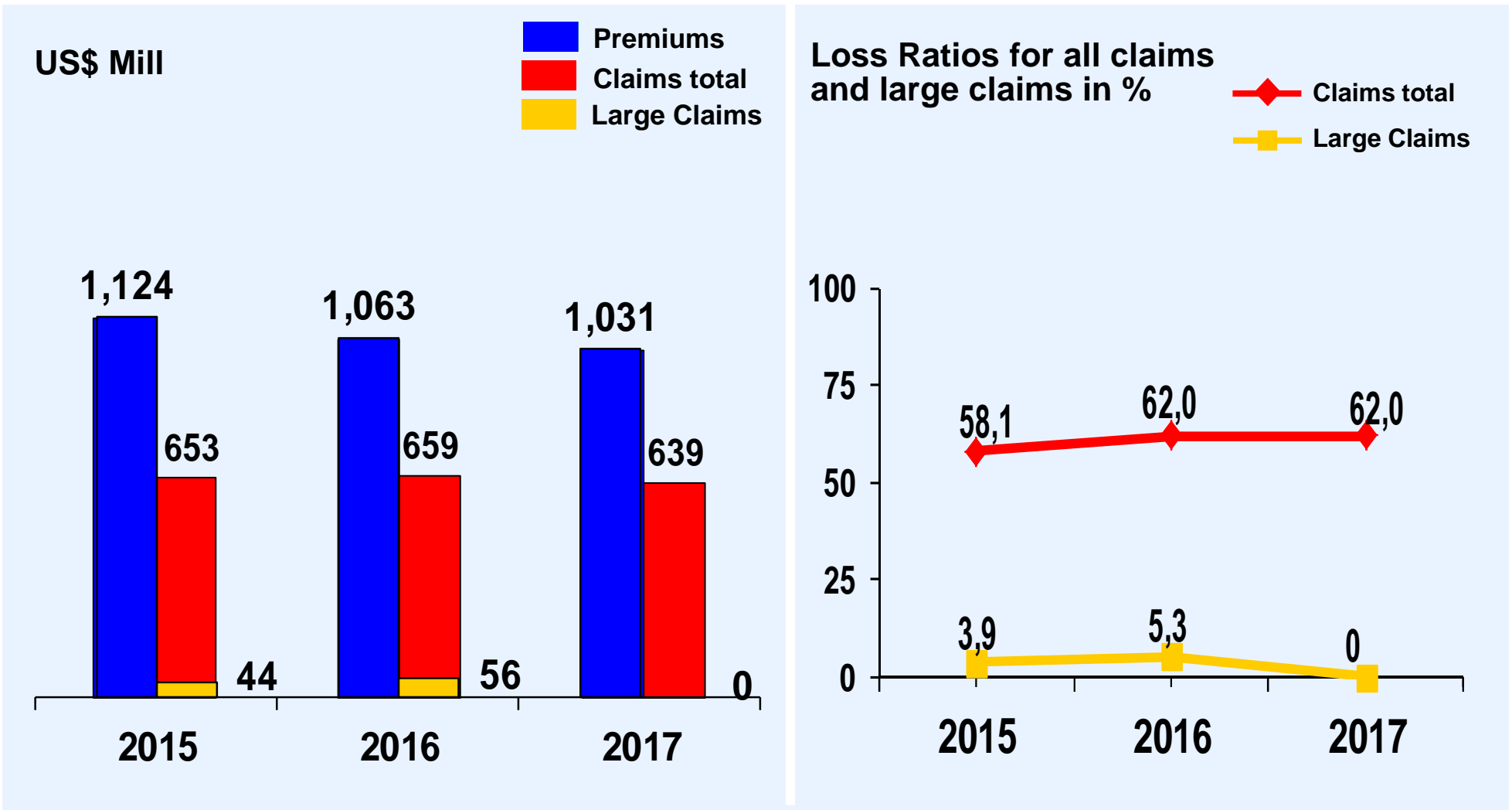
# Premiums / Claims / Large<sup>\*)</sup> Claims

## Loss Ratios – EAR, CAR, ALoP 2015 – 2017



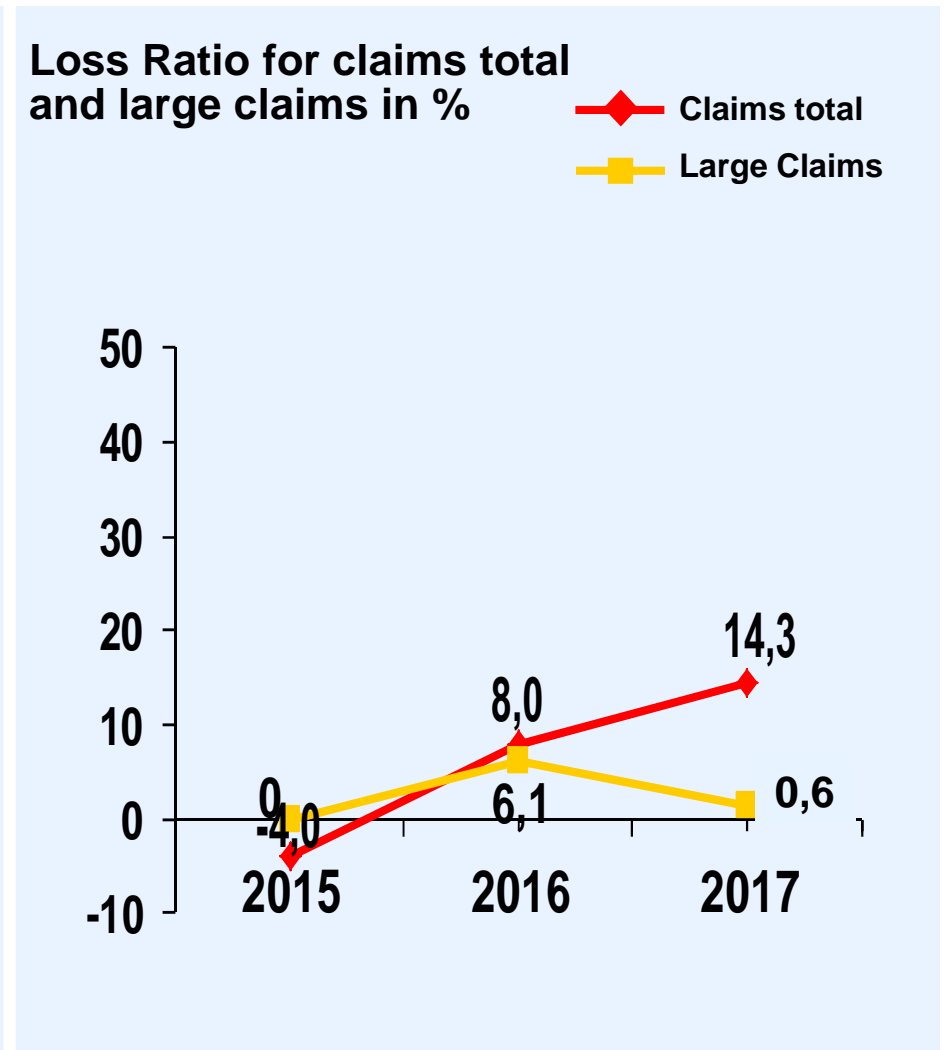
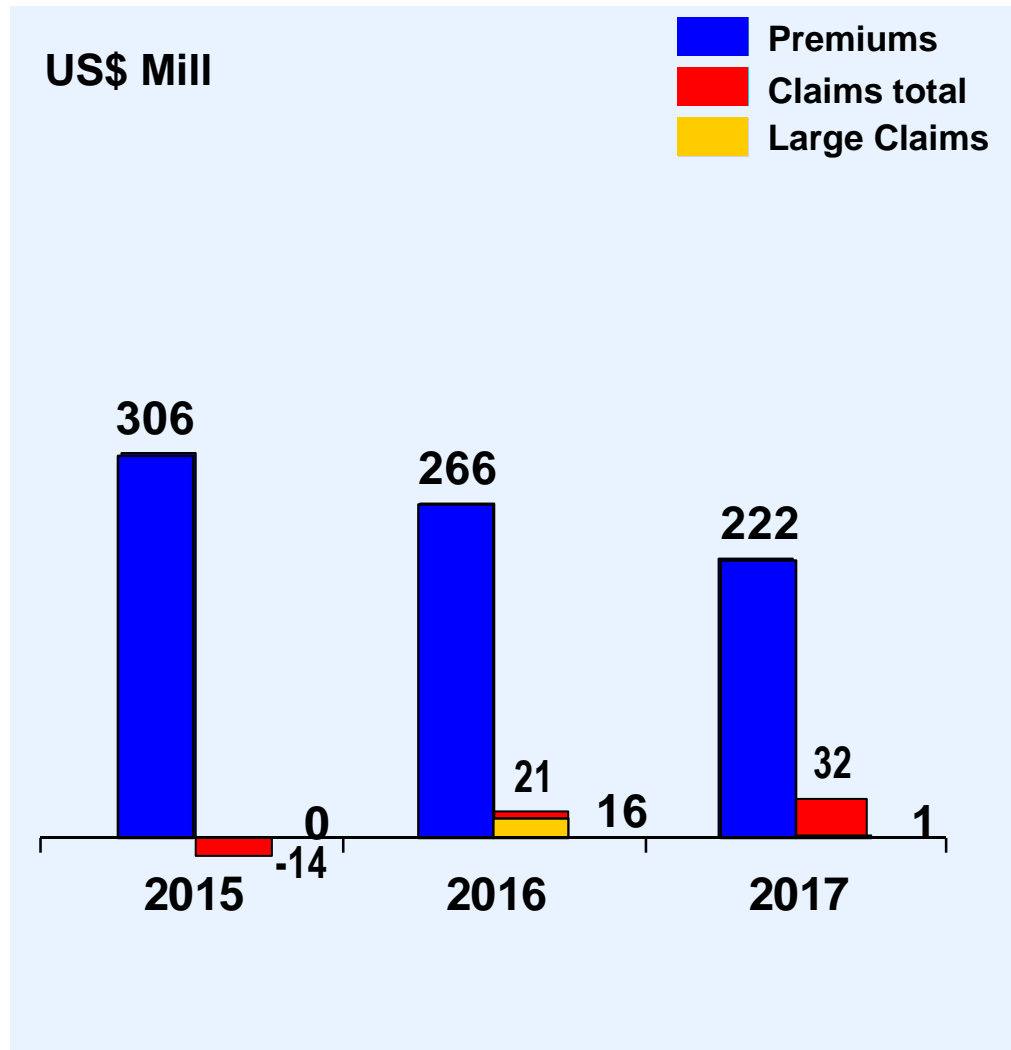
\*) Note: Large Claims >= 1.0 Mill US\$

# Premiums / Claims / Large\*) Claims Loss Ratios – EEI 2015 - 2017



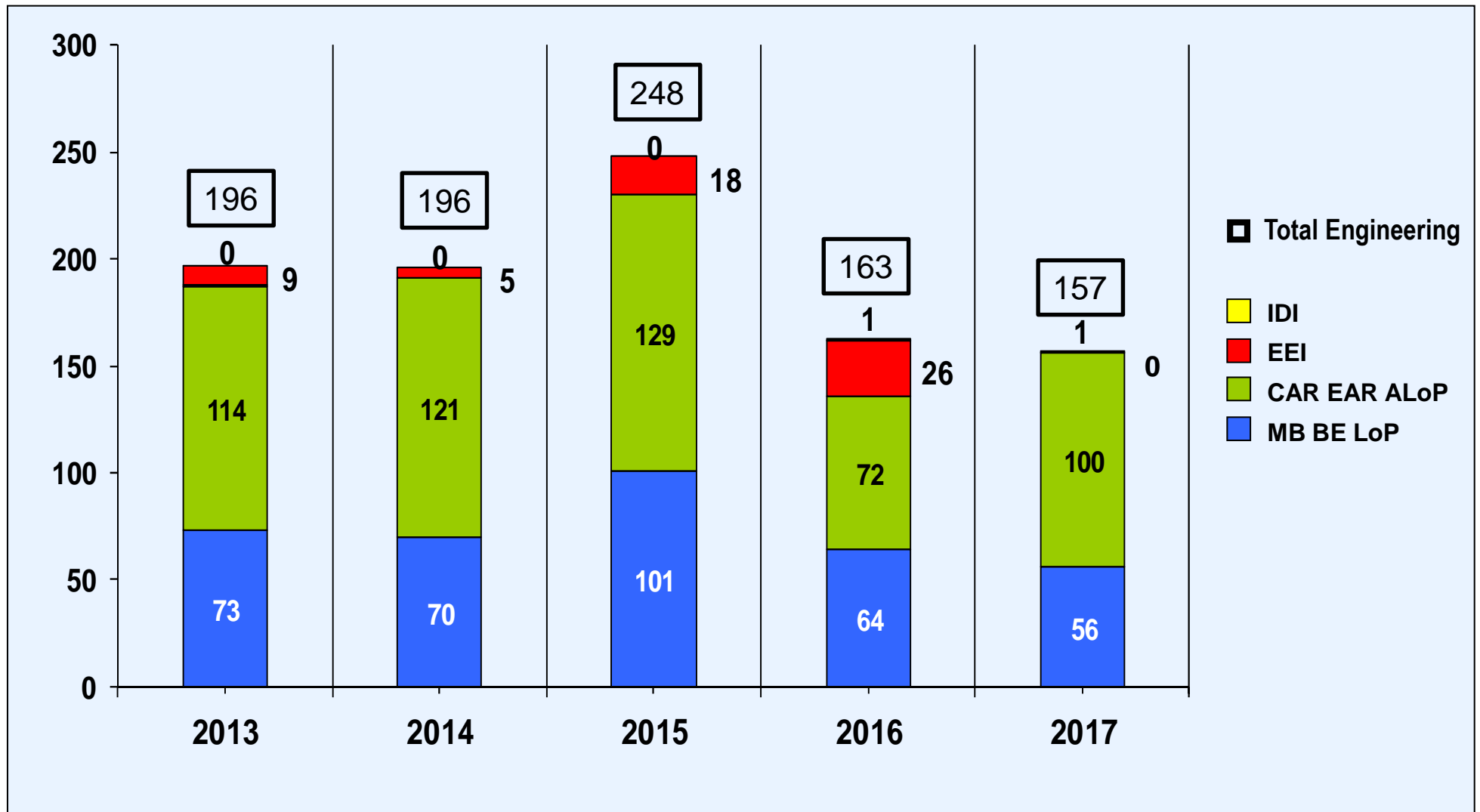
\*) Note: Large Claims >= 1.0 Mill US\$

# Premiums / Claims / Large<sup>\*)</sup> Claims Loss Ratios – IDI 2015 - 2017



\*) Note: Large Claims >= 1.0 Mill US\$

# Number of Large Claims per LoB 2013 - 2017

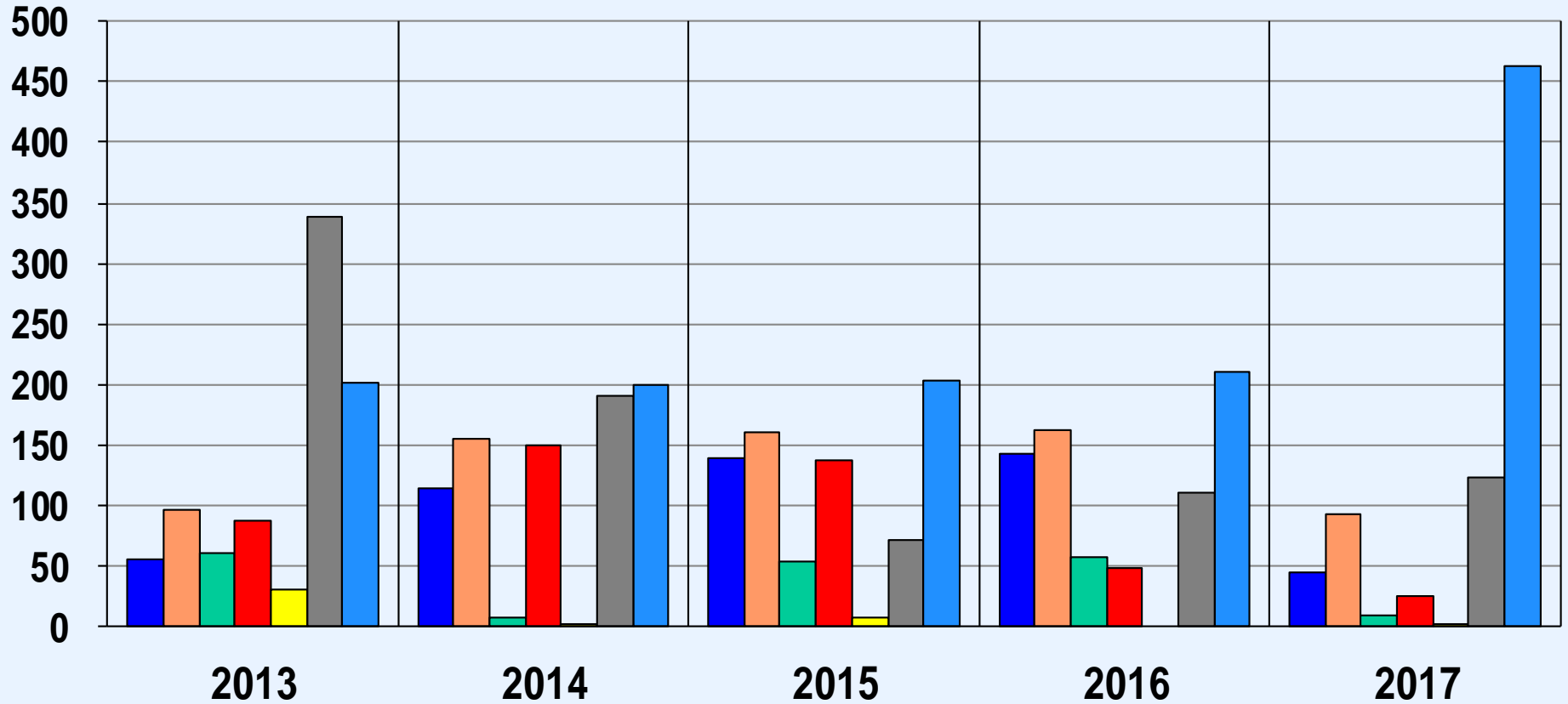


\*) Note: Large Claims >= 1.0 Mill US\$

# Large Claims - Cause of Loss: all LoB 2013 - 2017



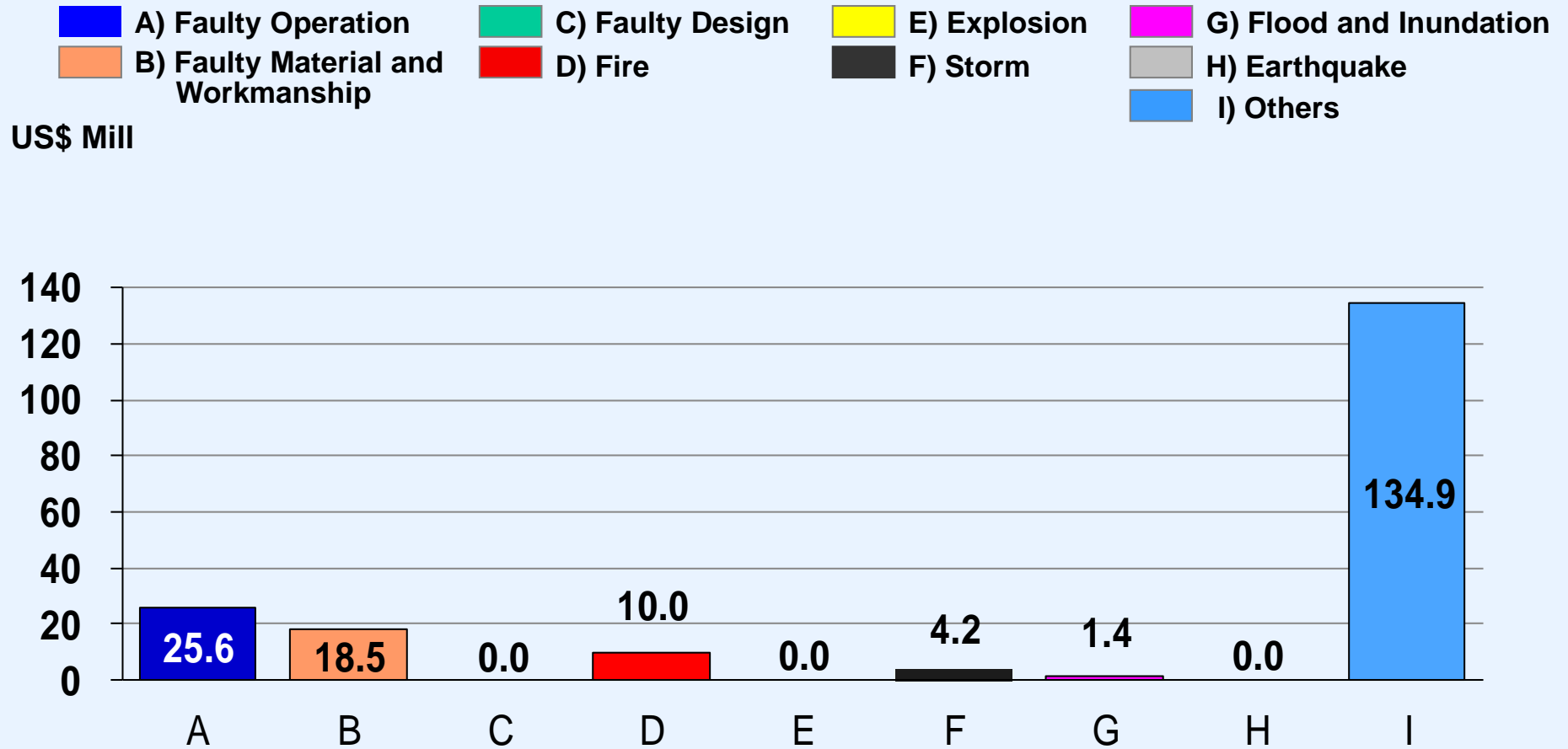
US\$ Mill



\*) Note: Large Claims  $\geq$  1.0 Mill US\$

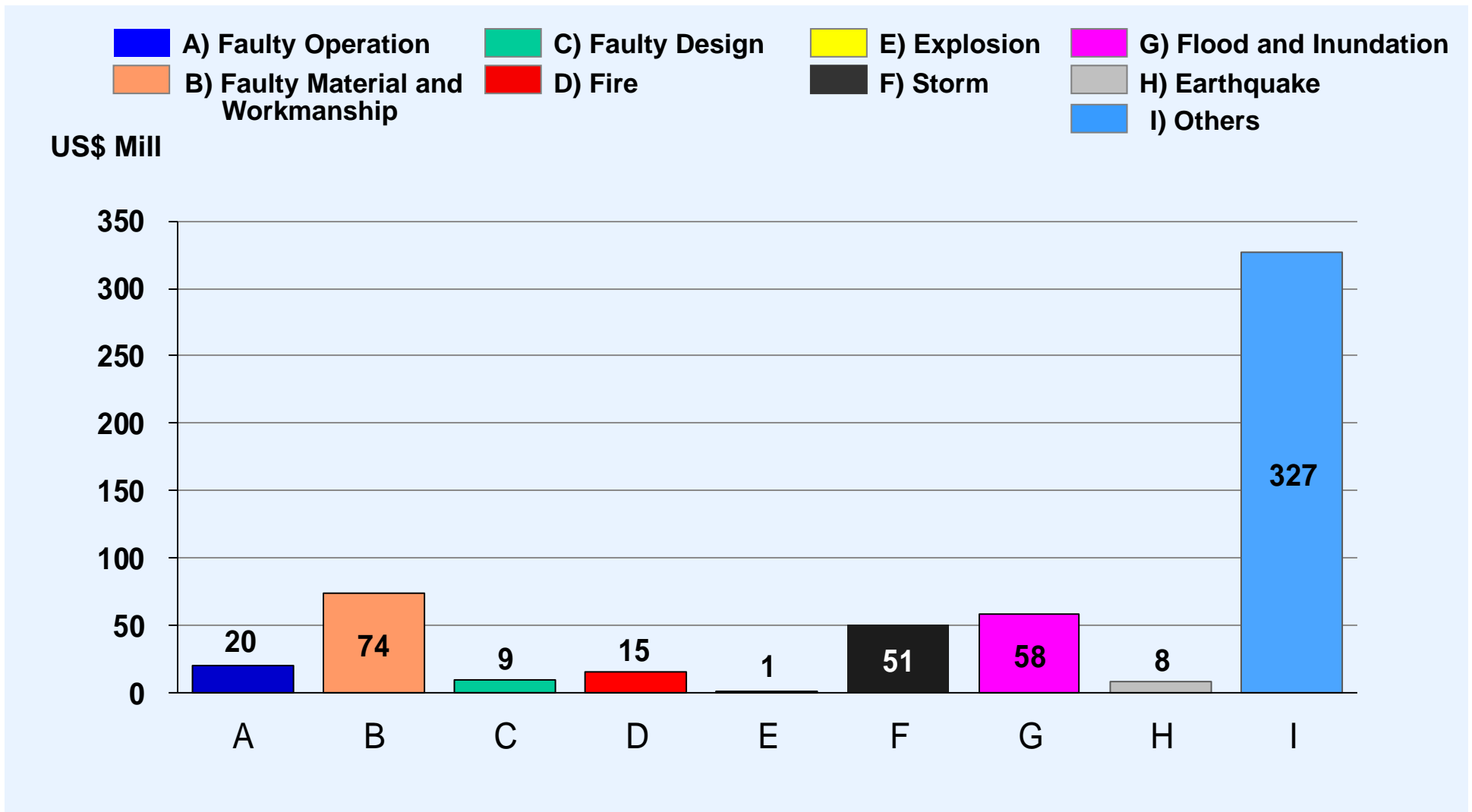


# Large Claims - Cause of Loss: MB, BE, LoP, O 2017



\*) Note: Large Claims >= 1.0 Mill US\$

# Large Claims - Cause of Loss: EAR, CAR, ALoP 2017



\*) Note: Large Claims >= 1.0 Mill US\$

# Large Claims - Cause of Loss: EEI 2017

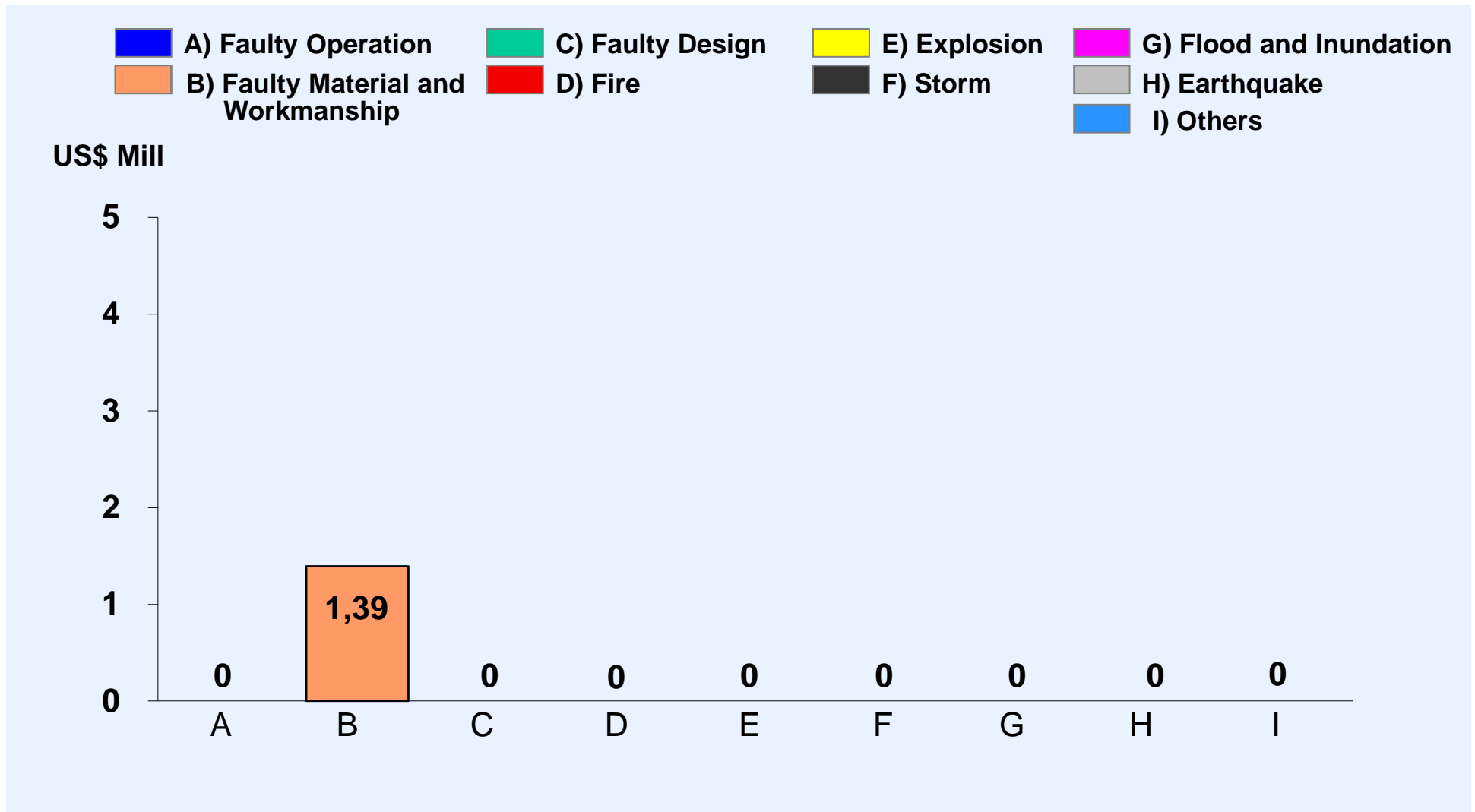
- A) Faulty Operation
- B) Faulty Material and Workmanship
- C) Faulty Design
- D) Fire
- E) Explosion
- F) Storm
- G) Flood and Inundation
- H) Earthquake
- I) Others

US\$ Mill



\*) Note: Large Claims  $\geq$  1.0 Mill US\$

# Large Claims - Cause of Loss: IDI 2017

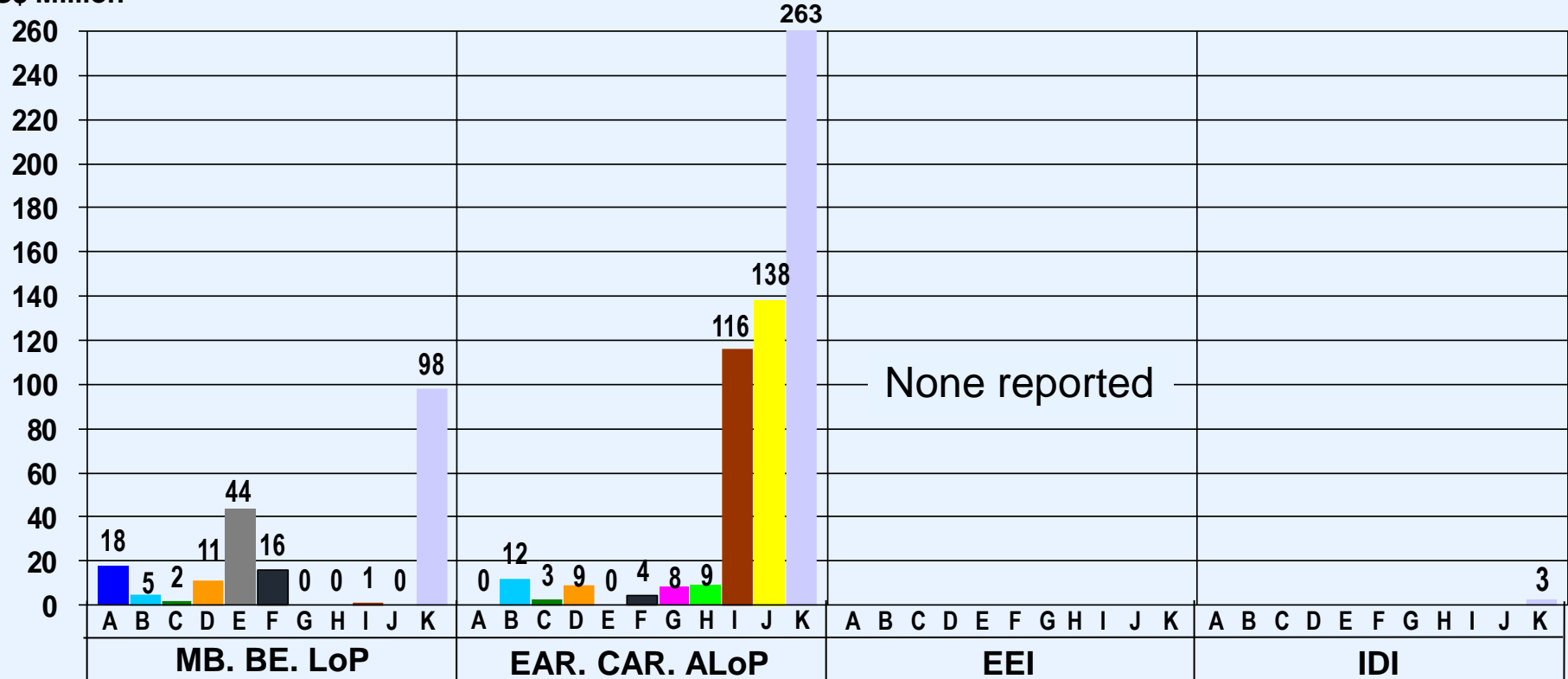


\*) Note: Large Claims  $\geq$  1.0 Mill US\$

# Large Claims – Main Items affected per LoB 2017

- A) Turbo Generator Sets
- B) Boilers and Pressure Vessels
- C) Compressors and other mechanical plants
- D) Electrical Machines and Equipment
- E) Production Machinery and Process Equipment
- F) Lifting and Transportation Equipment
- G) Chemical Plants
- H) Electronic Equipment
- I) Civil Engineering Works
- J) Erection of Plants
- K) Other Property

US\$ Million



\*) Note: Large Claims >= 1.0 Mill US\$

# IMIA Stats 2015-2017



***Sir Winston Churchill***

***„Democracy***

*is the worst form of government except  
for all those who have been tried“*

**IMIA Statistics .....**

# **We appreciate input**

# Key to the abbreviations

ALoP	Advance Loss of Profits (DSU)
BE	Boiler Explosion
CAR	Contractor's All Risks
EAR	Erection All Risks
EEI	Electronic Equipment Insurance
IDI	Inherent Defects (Decennial) Insurance
LoB	Line of Business
LoP	Loss of Profits (MLoP)
MB	Machinery Breakdown
O	Others (Operational, CPM)

## Please note

All figures are based on information supplied to IMIA by its Member countries. It should be borne in mind that these figures may not always contain IBNR provisions, and that premium patterns may vary between reporting member countries and companies.

Inherent Defects Insurance (IDI), also called Decennial Insurance in French speaking countries, is written only in a few countries. It is a compulsory class of business in some of these. Due to the different legal situation and others specifics, the scope of cover varies greatly from country to country. Therefore any attempt to make comparisons is very difficult and may lead to wrong conclusions.

Since IDI contracts grant cover for material damage caused by latent defects for a period of (usually) ten years as from completion of the contract works, special attention needs to be given to the issue of premium earning patterns during the policy duration. These patterns vary considerably from country to country and are even regulated in some of them by the insurance supervisory body. IMIA is not in a position to reflect the various regulations governing the administration of this line of business in the various countries nor can IMIA validate the method used by its members in establishing their figures.

Therefore IMIA recommends to adopt particular care when drawing conclusions from premiums, claims figures and loss ratios reported herein especially in respect of IDI. For further details it is recommended to contact the IMIA-delegate from a particular member country to obtain more accurate information on the particulars of a specific line of business in his country.