



The International Association
of Engineering Insurers

Engineering Insurance Premium and Loss Statistics per Country 2019 - 2021

presented by Dieter Spaar
21th September 2022
IMIA Conference Dublin

by Pawel Krok - Wolow, Poland

IMIA 'Country Statistics' 2019 - 2021



- ❑ Prologue
- ❑ Premium per Country & Class
- ❑ Claims
 - L/R per Country & Class
 - L/R Historically 2002 ff
 - LL Volume / Frequency
- ❑ Epilogue

**Financial / Accident Year
„Countries“**



Presentation to follow
by permanent WG Statistics

IMIA is committed to improve Eng Stats by

- ❑ **IRCI** – IMIA **R**ate **C**hange **I**ndex
- ❑ **ILORI** – IMIA **L**oss **R**atio **I**ndex
- ❑ **IMLI** – IMIA **M**ega **L**oss **I**ndex (> 30 MUS\$)
- ❑ **ITOL** – IMIA **T**ype of **L**oss **I**ndex (> 30 MUS\$)

- Various add. Indices
- World Market (indiv.companies)
- Underwriting Year

**Underwriting Year
„Companies“**

IMIA Country Stats 2019 – 2021 „Challenges“



Is there a „one and only“
uniform truth ??
SME ↔ Middle Market ↔ Multi-
Bn US\$ Sites

□ Many Market Segments (“Global vs Local”)



Different Clients: SME – Middle Market - MultiBn US\$ Programs – Prototypical / Innovative

- What do you learn from “speed average” ?

□ Many Countries with different „Engineering“ and reporting Standards

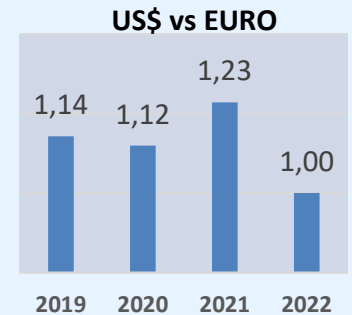
Different Market (Statistics) Composition & Size of “local Engineering” may contain

- Operational MB / EEI / AllRisk (Power, Renewables, Energy,...) + LoP / ICoW
- Construction CAR, EAR, Guarantee, IDI + ALoP

□ Uniform Currency US\$ may influence years’ comparison

□ Various Regions not reported – LL left out

- e.g.:
- London Market , Middle East, North-Africa
 - USA, South America → Brazil only (Susep)
 - Asia → Taiwan, Japan only



Statistics showing partially the average of everything

- ➔ Thorough understanding crucial – of content and limits
- ➔ You know your Country/Portfolio–composition best

IMIA 'Country Statistics' 2019 - 2021

- Prologue
- Premium** per Country & Class
- Claims**
 - L/R per Country & Class
 - L/R Historically 2002 ff
 - LL Volume / Frequency
- Epilogue

| | |
|--------------------|---|
| Austria |  |
| Brazil * |  |
| Canada * |  |
| France |  |
| Germany |  |
| Italy |  |
| Japan |  |
| Malaysia |  |
| Mexico * |  |
| Netherlands |  |
| Singapore * |  |
| South Africa |  |
| Spain |  |
| Switzerland |  |
| Taiwan |  |
| Turkey |  |
| | |
| | |



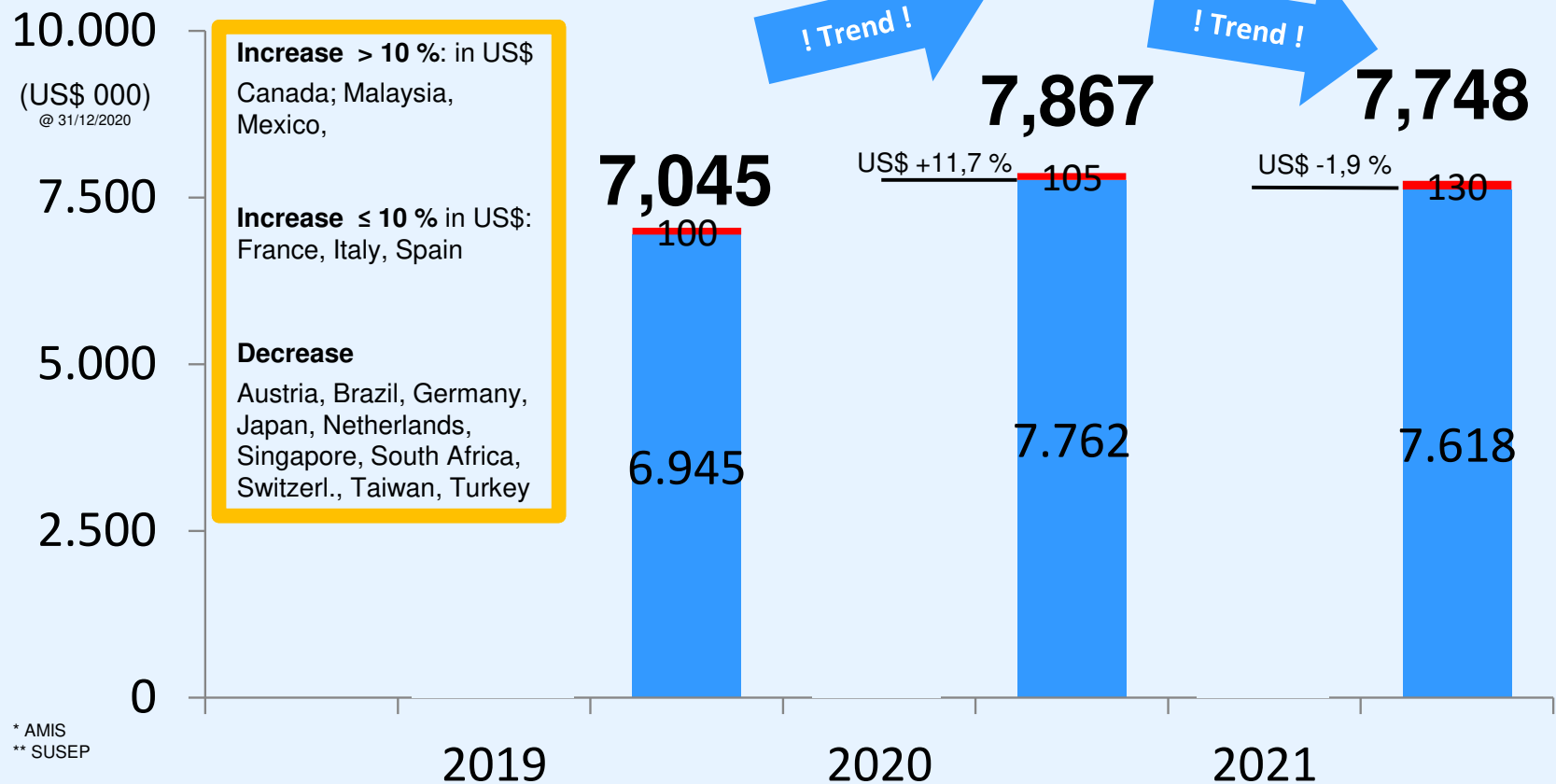
2022 :

- 16 IMIA Countries / Org
- GWP / Losses: US\$ Bn 7,7 / 4,5**
 - 53 % in Euro
- 6 rep. LL (bold)

Sources:
 Country Associations (Members)
 & local bodies
 Brazil: SUSEP
 Canada: Axco
 Malaysia: ISM
 Mexico: AMIS
 Singapore: GIA

Development of Premium 2019-2021 “reported for 2021 only”

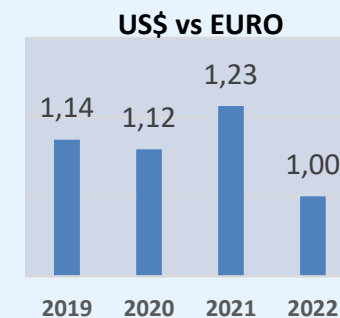
US\$



Countries reported 19/20/21

| | | |
|------|----|----|
| 2019 | 19 | 16 |
| 2020 | 18 | 16 |
| 2021 | | 16 |

- IDI only
- All ex IDI

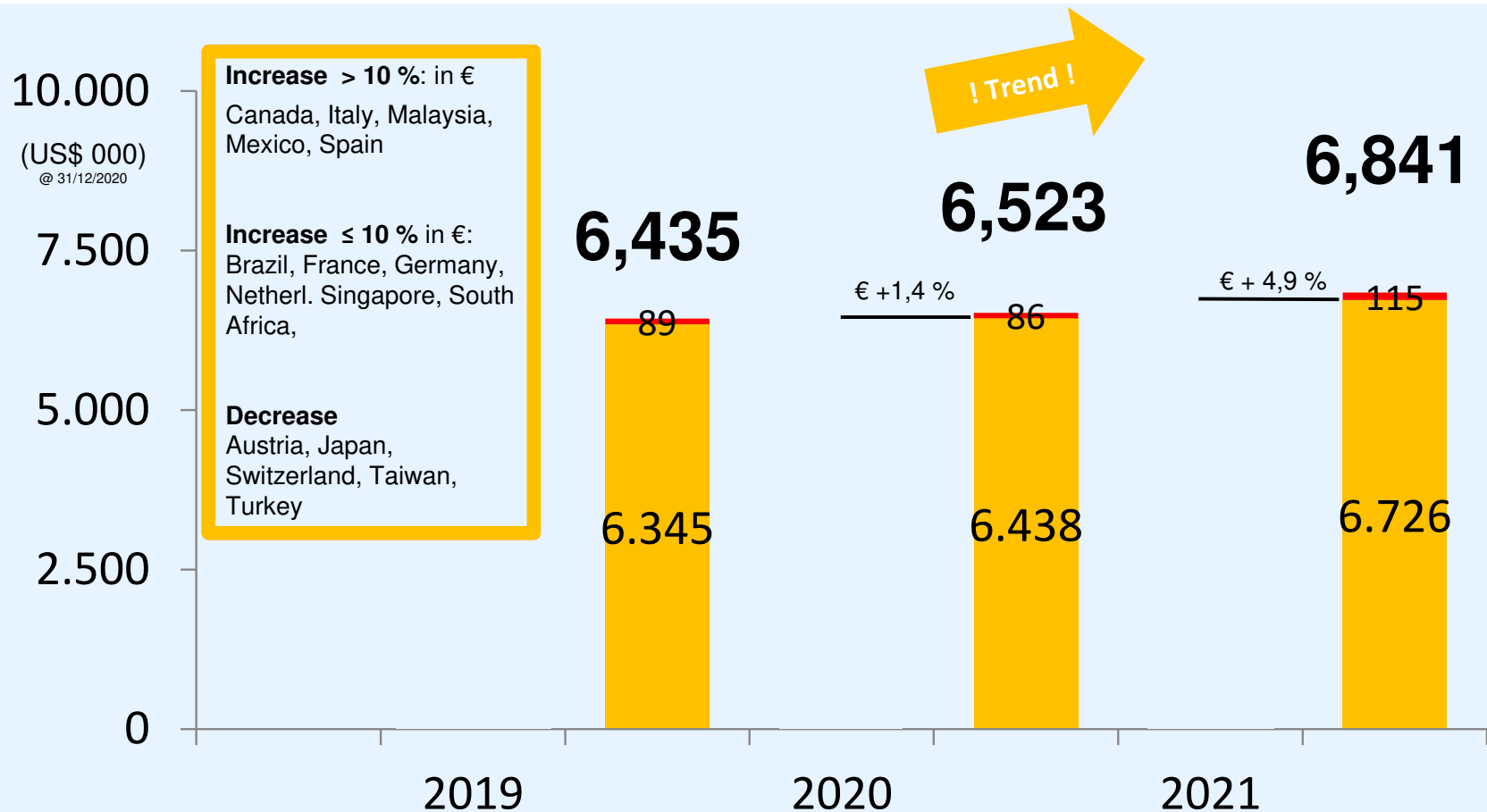


* AMIS
** SUSEP

Development of Premium 2019-2021

“reported for 2021 only”

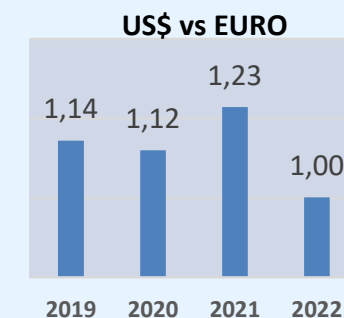
EURO



Countries reported 19/20/21

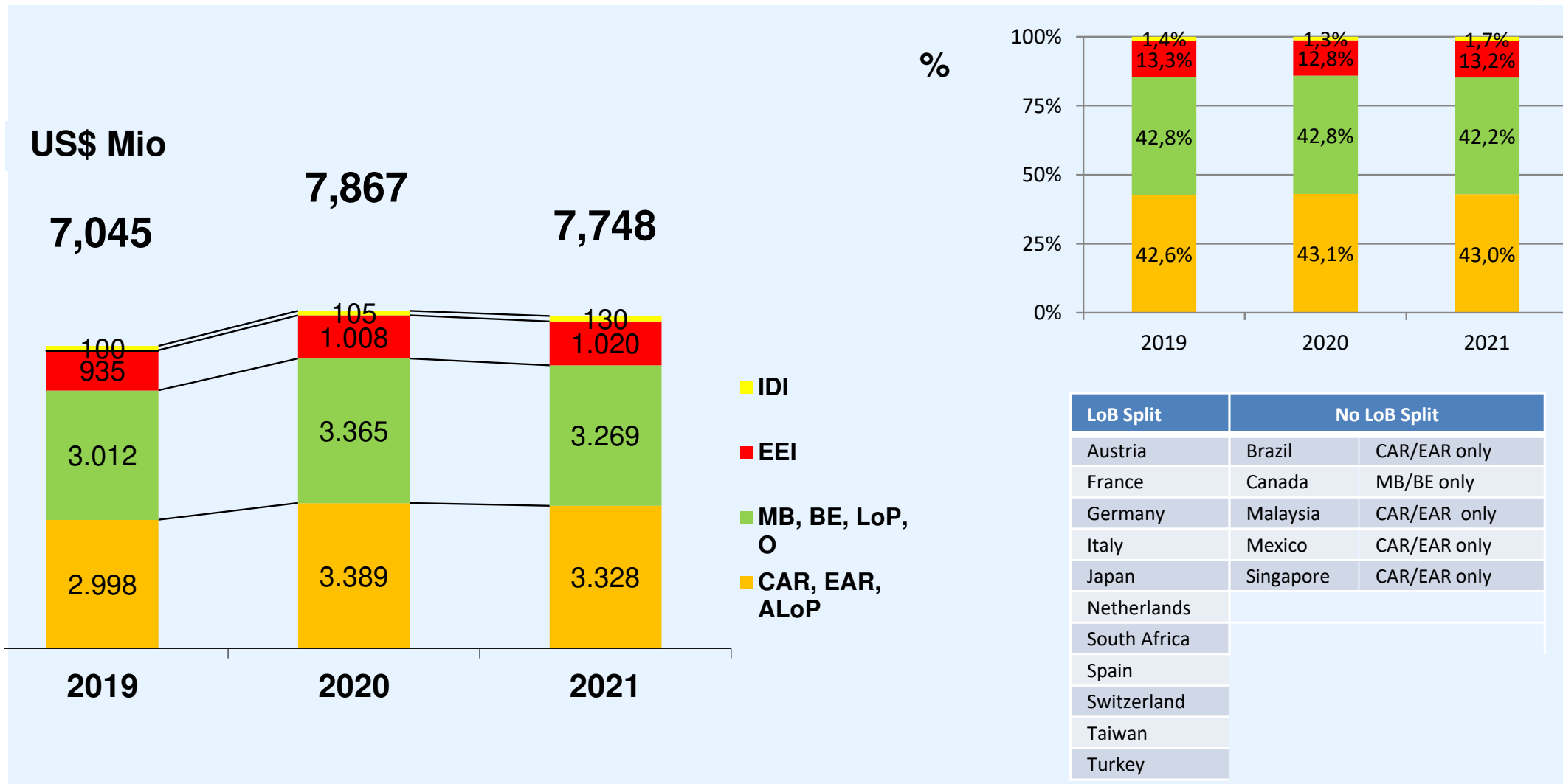
| | |
|------|----|
| 2019 | 19 |
| 2020 | 18 |
| 2021 | 16 |

- IDI only
- All ex IDI



Development of Premiums 2019 – 2021

Split per Line of Business – reported for 2021 only



IMIA 'Country Statistics' 2019 - 2021

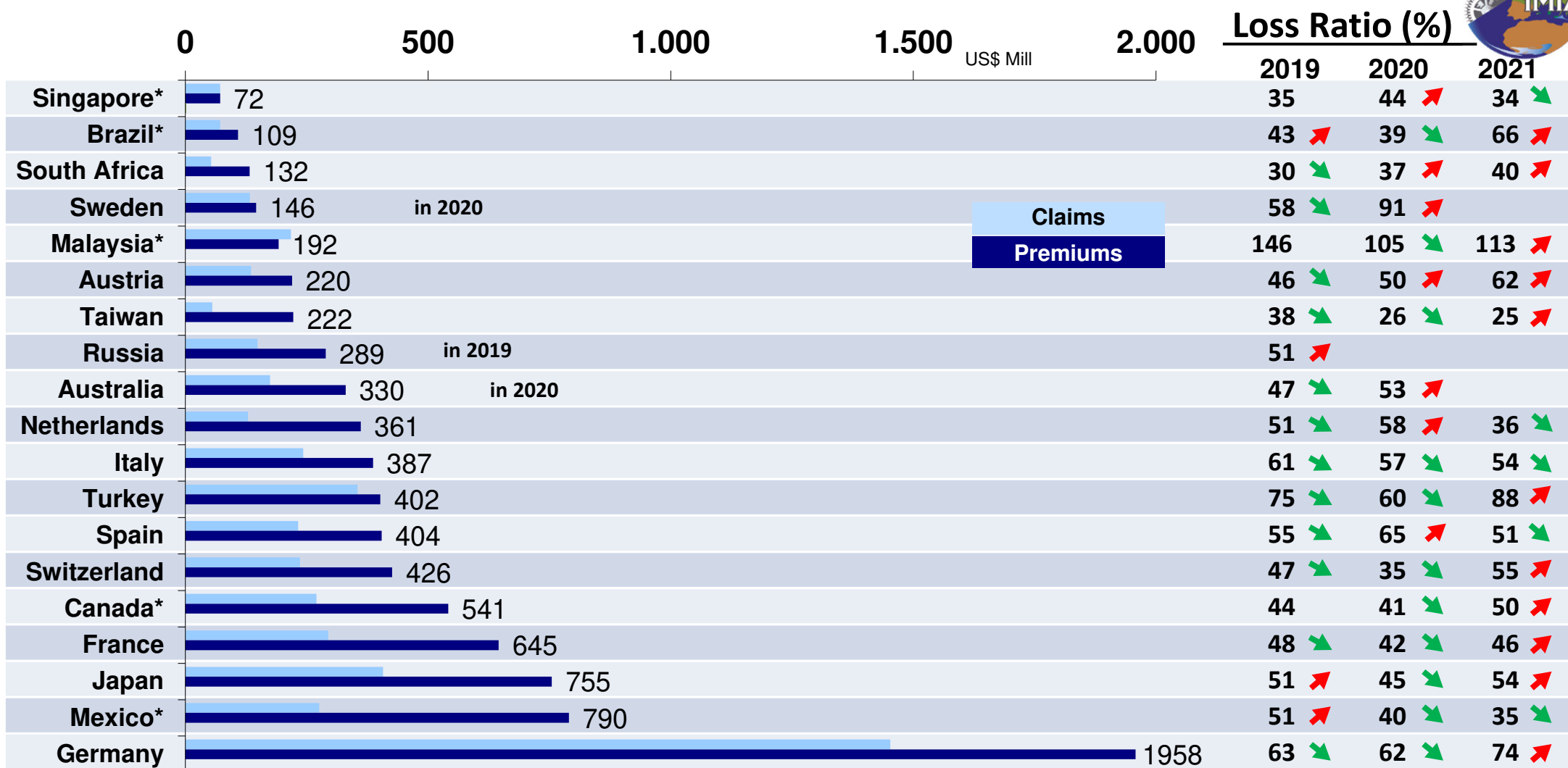


- Prologue
- Premium per Country & Class
- Claims**
 - L/R per Country & Class
 - L/R Historically 2002 ff
 - LL Volume / Frequency
- Epilogue

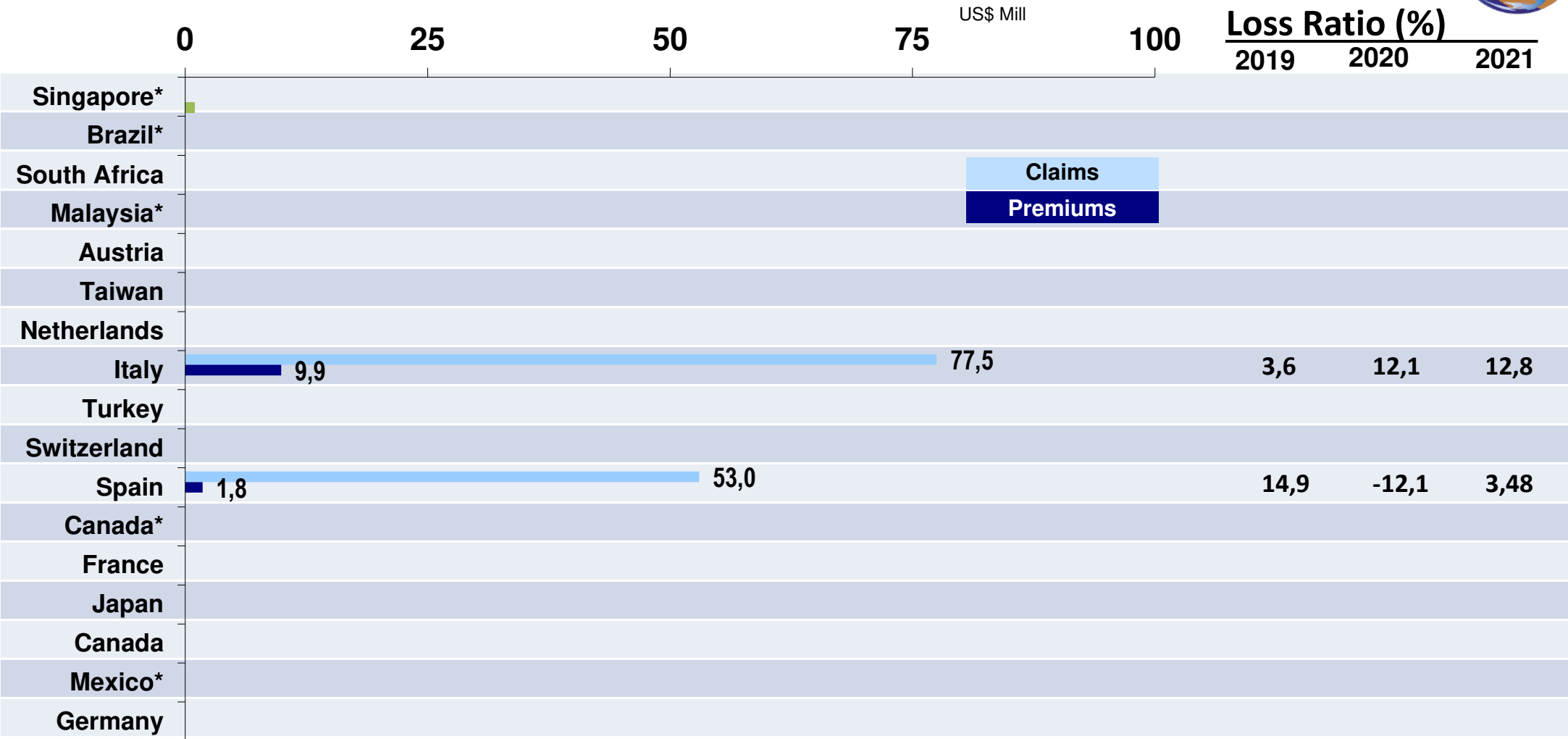


L/R – Loss Ratio
LL – Large Losses

Premiums and Claims 2021 per Country (excl. IDI)



Premiums and Claims 2021 per Country (IDI only)



Premiums / Claims / Large Claims → 2019-2021

All Lines of Business *



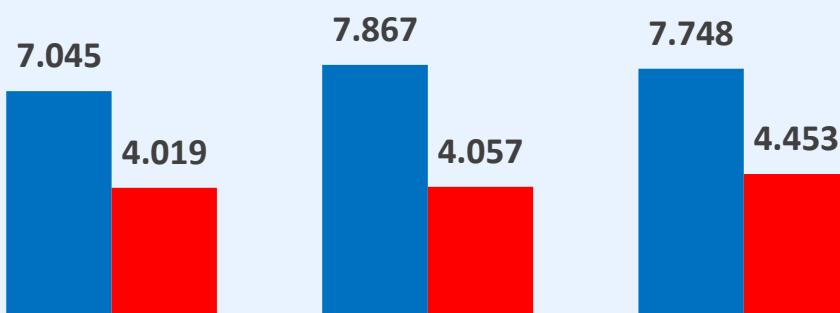
US\$ Mill

16 Countries report

GWP
All

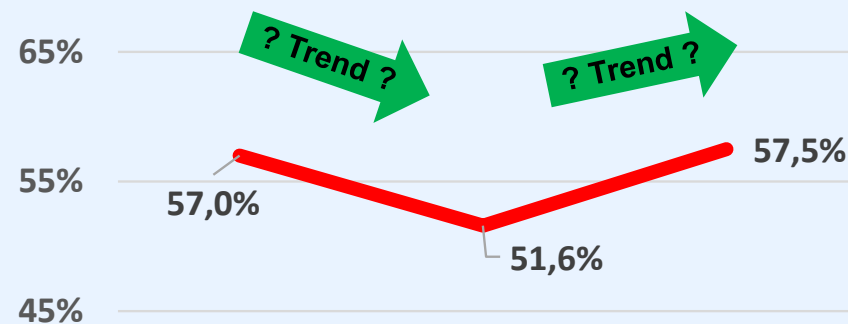
■ Premiums (GWP)
■ Claims total
■ Large Claims*)

Premium reported in 2021



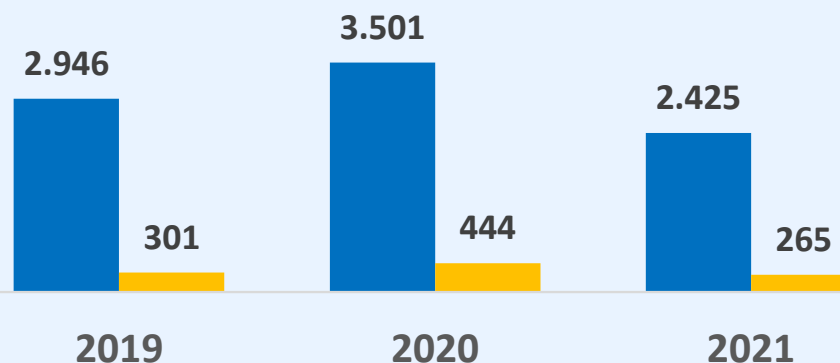
Loss Ratios for all claims and large claims in %

—◆— Claims total
—■— Large Claims

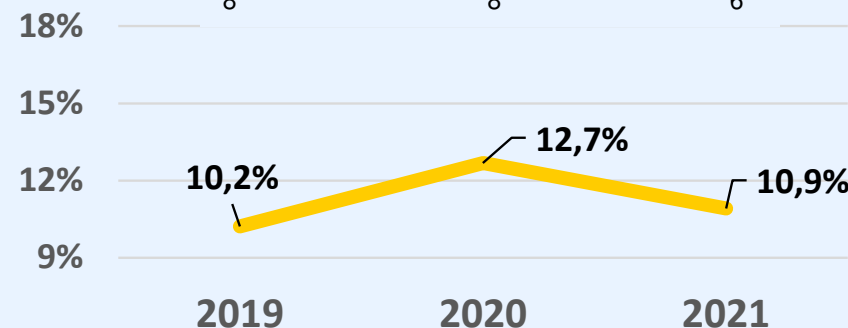


GWP
with LL

Premium reported in 2019/2020/2021



Countries reported LL



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

* Many large losses observed in Int'l CAR/EAR markets are not reported to 'IMIA Country Stats'

Premiums / Claims / Large Claims → 2019-2021

MB, BE, LoP, O

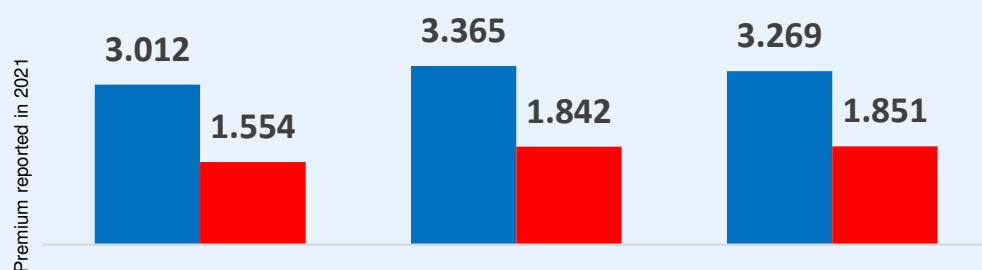


US\$ Mill

13 Countries report

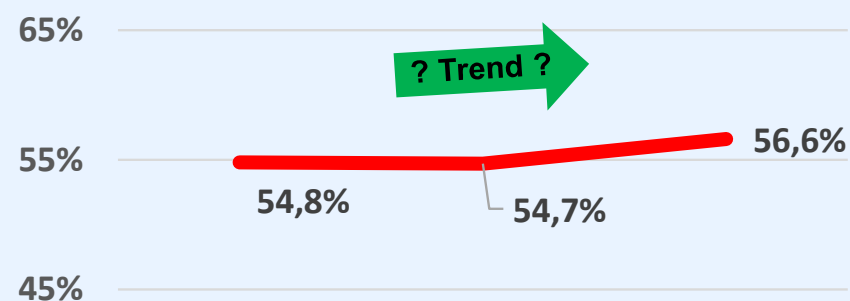
GWP
All

■ Premiums (GWP)
■ Claims total
■ Large Claims*)



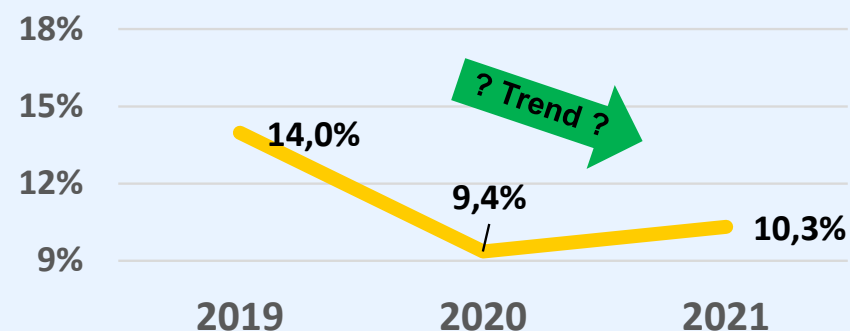
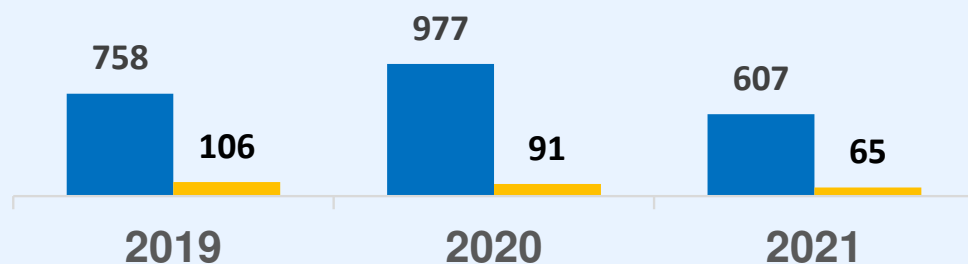
Loss Ratios for all claims and large claims in %

—◆— Claims total
—■— Large Claims



GWP
with LL

Premium reported in 2019/2020/2021



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

Premiums / Claims / Large Claims → 2019-2021

CAR, EAR, ALoP *

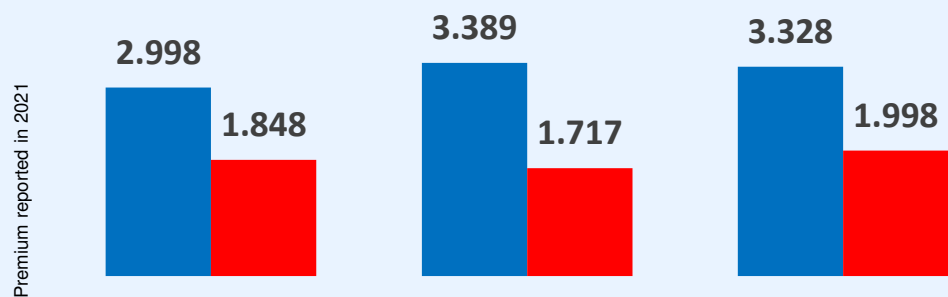


US\$ Mill

15 Countries report

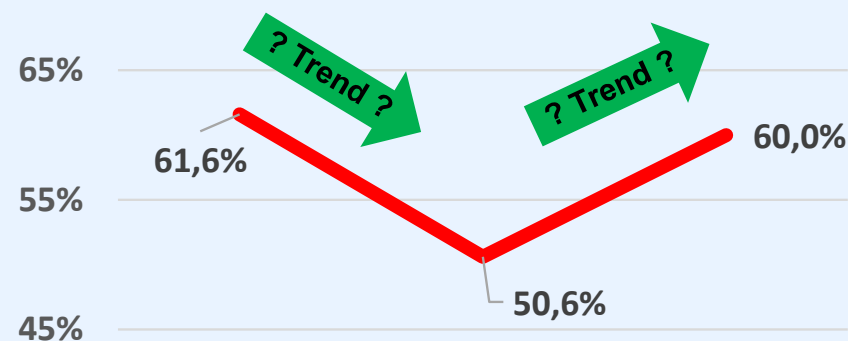
GWP
All

■ Premiums (GWP)
■ Claims total
■ Large Claims*)



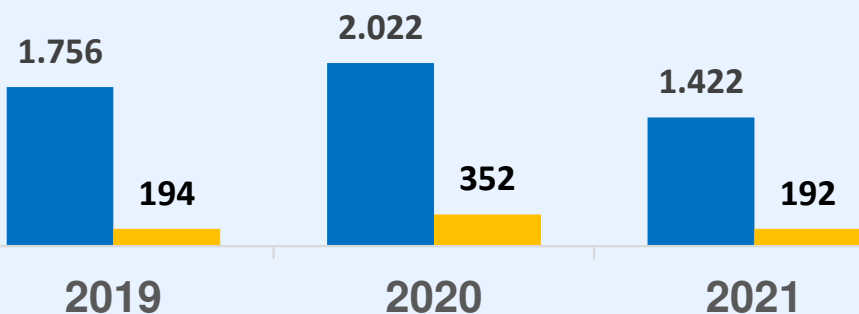
Loss Ratios for all claims and large claims in %

—◆— Claims total
—■— Large Claims



GWP
with LL

Premium reported in 2019/2020/2021



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

* Many large losses observed in Int'l CAR/EAR markets are not reported to 'Country Stats'

Premiums / Claims / Large Claims → 2019-2021

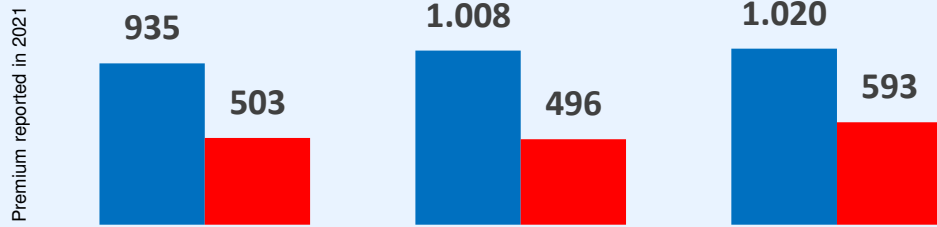
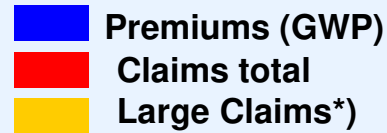


EEI

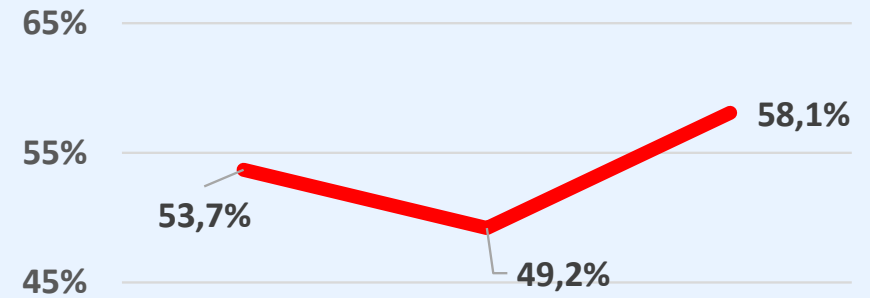
US\$ Mill

10 Countries report

GWP
All



Loss Ratios for all claims and large claims in %



GWP with LL

Premium reported in 2019/2020/2021



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

Premiums / Claims / Large Claims → 2019-2021

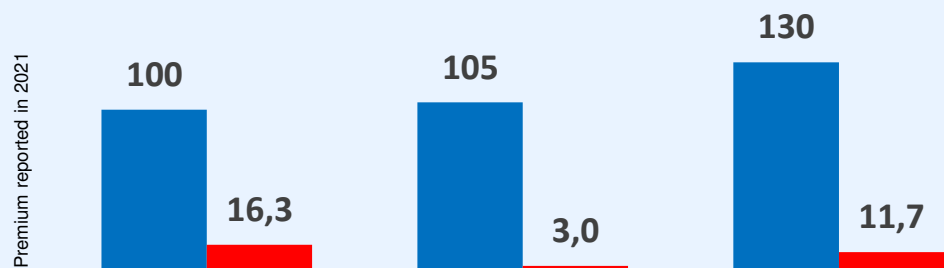
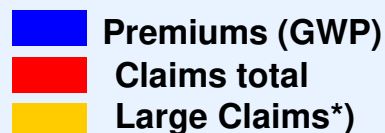


IDI

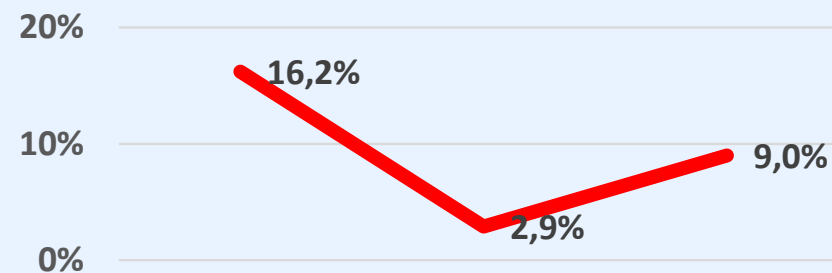
US\$ Mill

2 Countries report

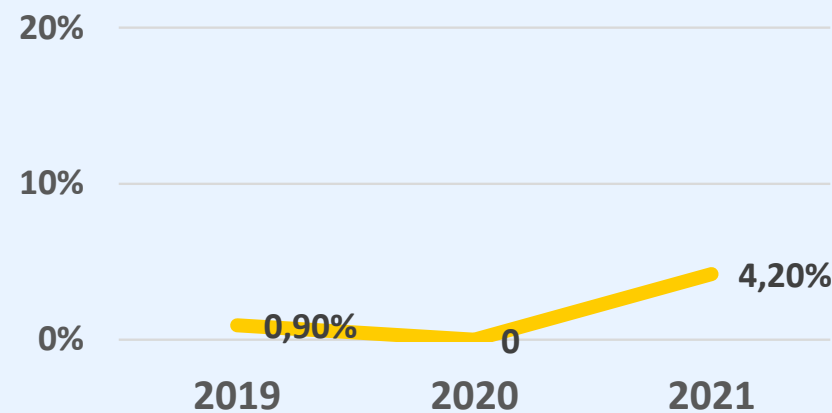
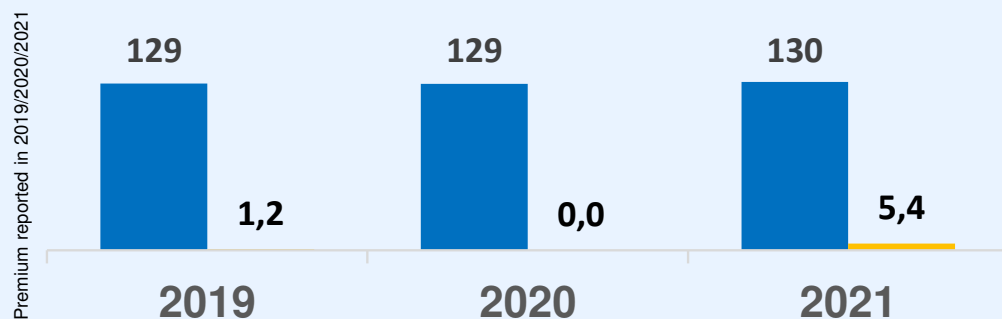
GWP
All



Loss Ratios for all claims and large claims in %



GWP
with LL

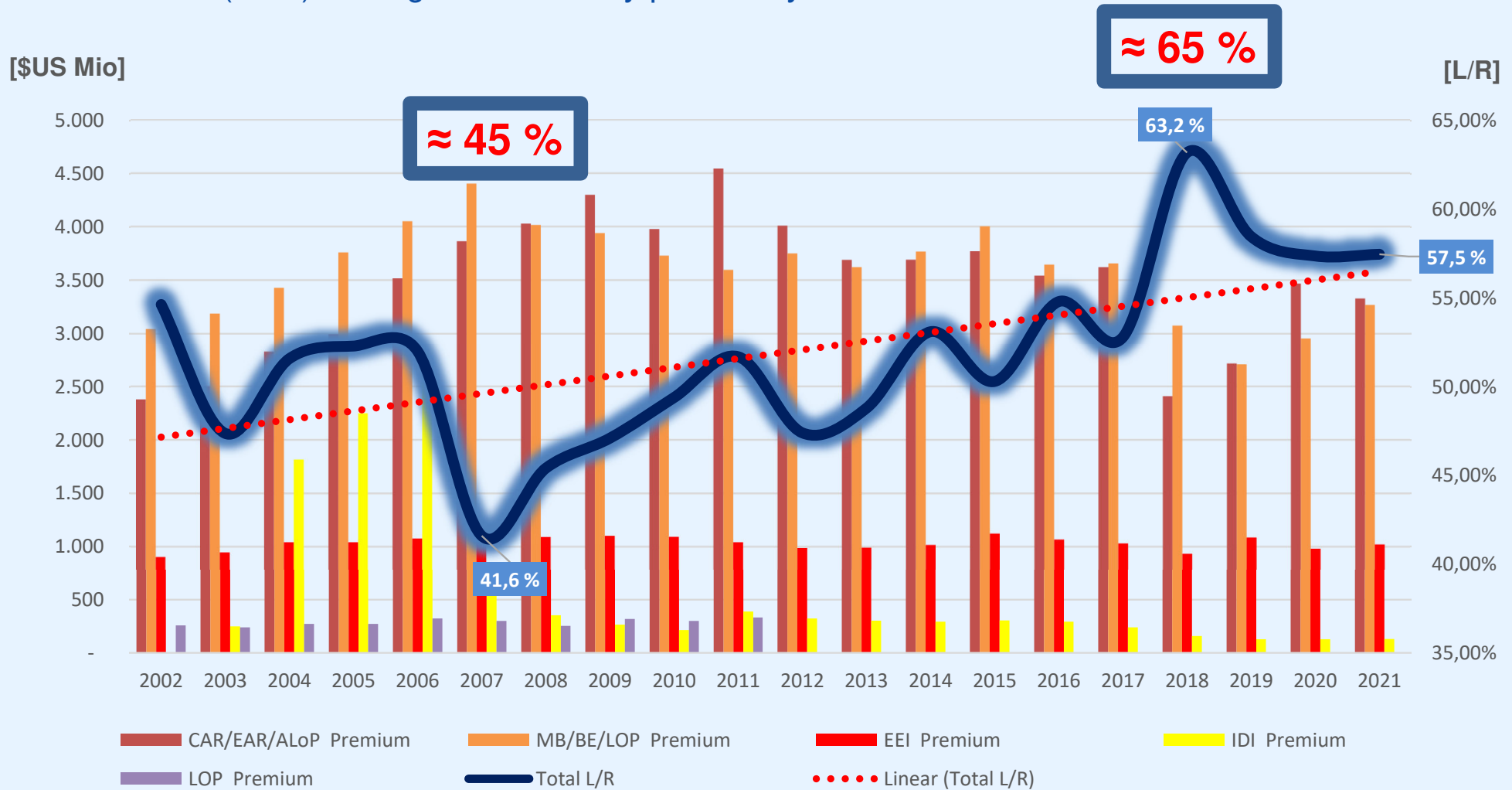


*) Note: Large Claims >= 1.0 Mill US\$

IMIA 'Country Stats' 2002-2021



- ➔ Multi-Year Trend indicates claims load increases by more than 40 % until 2018 !
- ➔ Ø L/R 2021 (FinY) still higher than many previous years !



Comments about the true value of statistics



Don't forget:

- ❑ FinY Stats are typically “hiding” UWY-Effects, i.e. in a “hardening” market = overcompensating
- ❑ „Int’l Markets“ and many large losses are missing
→ see IMLI, ITOL and ILRI.
such as e.g. „London Market“, Middle East, Africa, South-America, Asia, USA

→ In case your company is active in these other geographies ←
with int’l programs or local business further scrutiny
(premium & claims) is highly advisable

IMIA 'Country Statistics' 2019 - 2021



- Prologue
- Premium per Country & Class
- Claims**
 - L/R per Country & Class
 - L/R Historically 2002 ff
 - LL Volume / Frequency
- Epilogue



L/R – Loss Ratio
LL – Large Losses

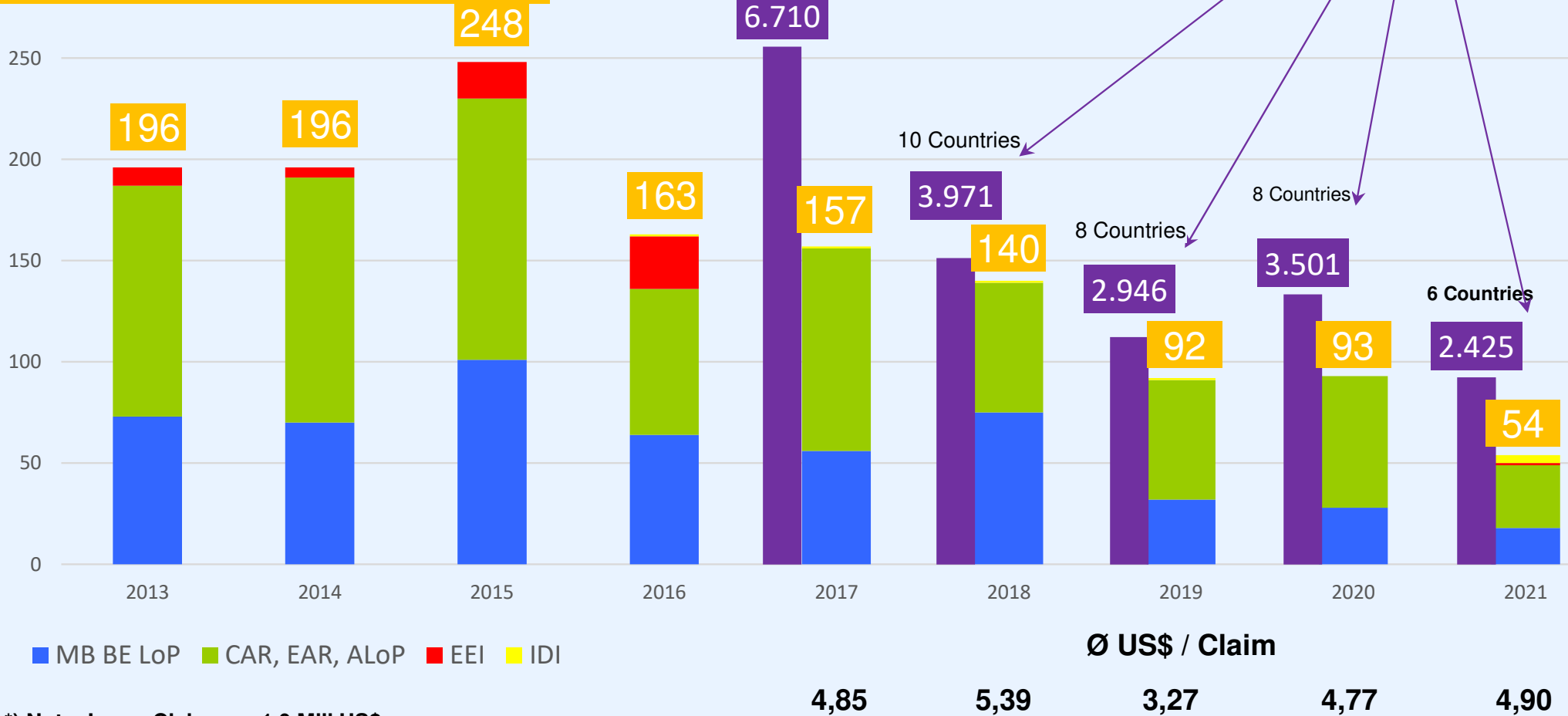
Large Claims → 2013 – 2021

No per LoB

IMLI provides more

GWP
[Mio US\$]

* Many large losses observed in Int'l markets are not reported to 'Country Stats'



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

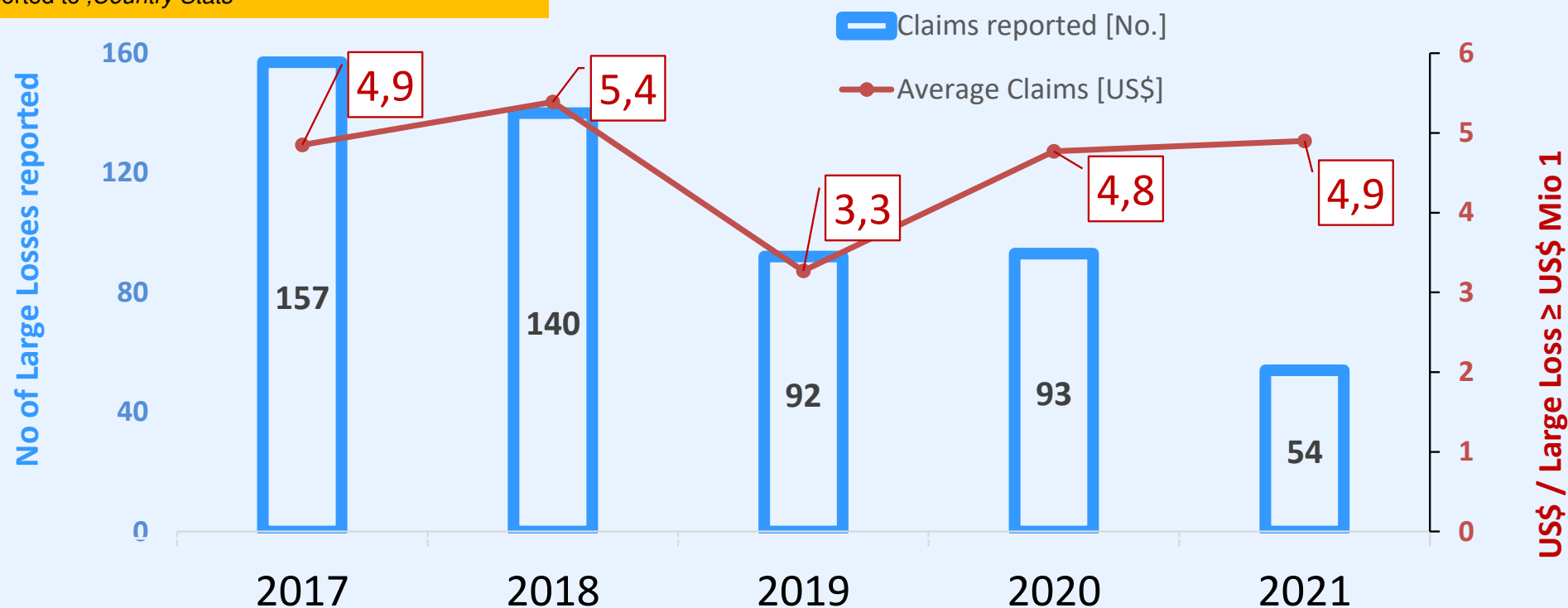
Large Claims → 2017-2021

No. & Ø/Claim

IMLI provides more



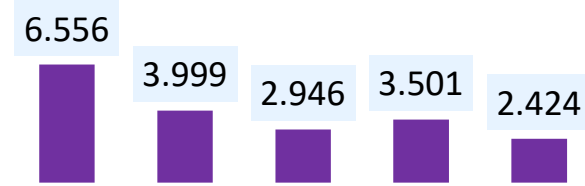
* Many large losses observed in Int'l markets are not reported to 'Country Stats'



| | | | | | |
|----------------------|-------|-------|-------|-------|-------|
| Countries | 13 | 11 | 8 | 8 | 6 |
| GWP Basis [Mio US\$] | 6,710 | 3,971 | 2,964 | 3,777 | 2,425 |

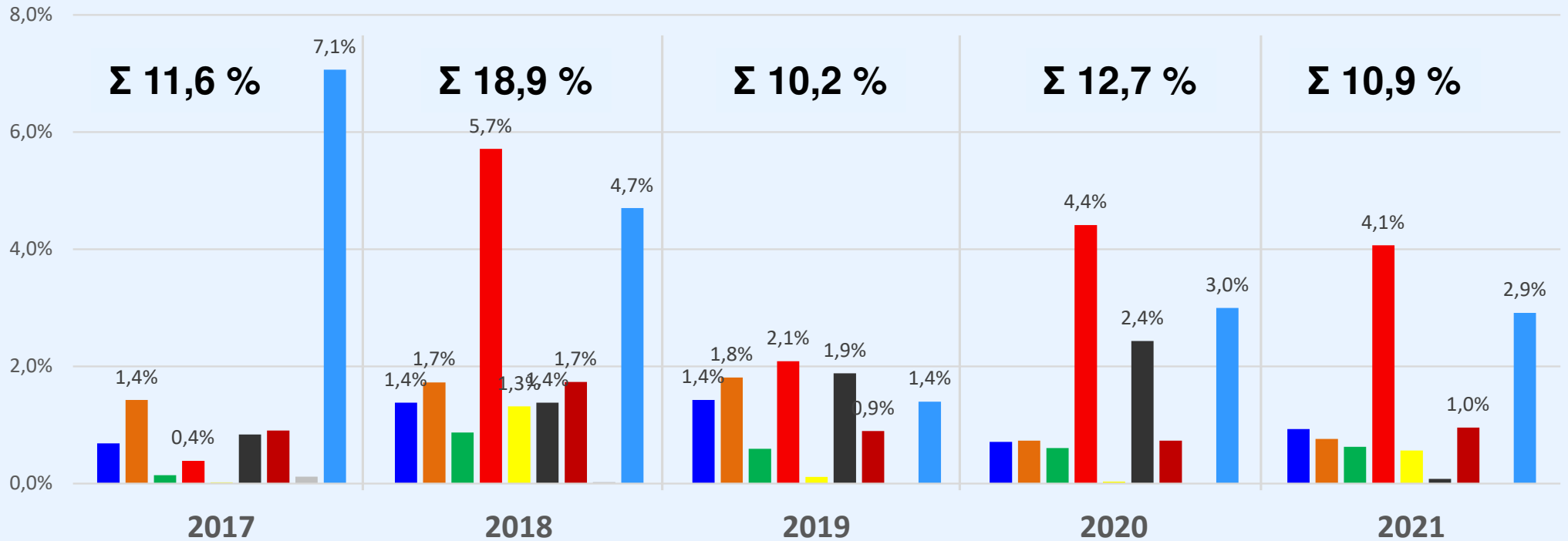
Large Claims only → 2017 – 2021

Cause of Loss → All LoB



GWP of Rep LL
[Mio us\$]

- 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



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

* Many large losses observed in Int'l markets are not reported to 'Country Stats'

Large Claims only 2021 (2020)

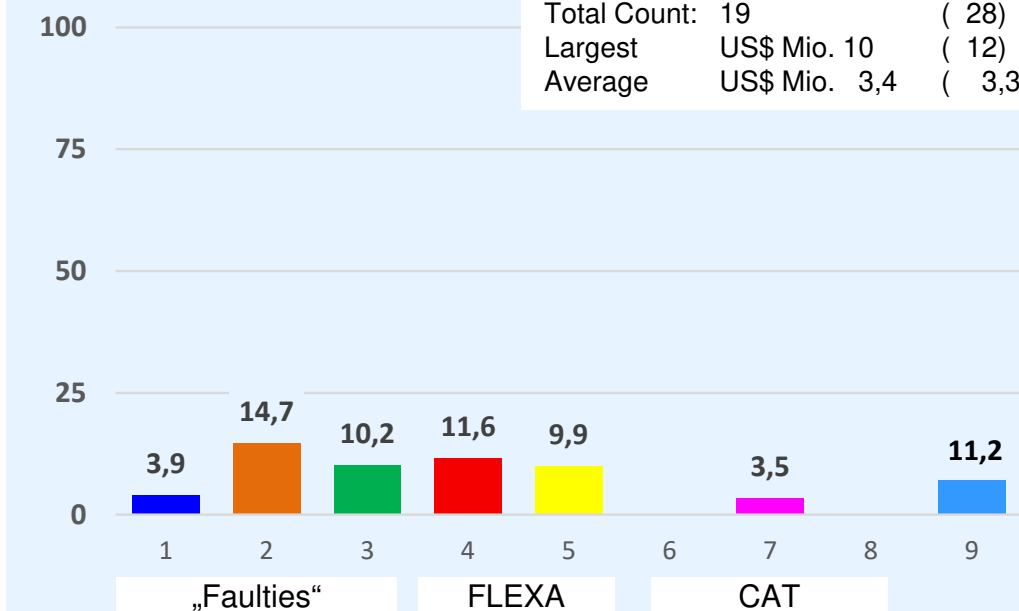
Cause of Loss → Operational / Projects



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

MB, BE, LoP, O

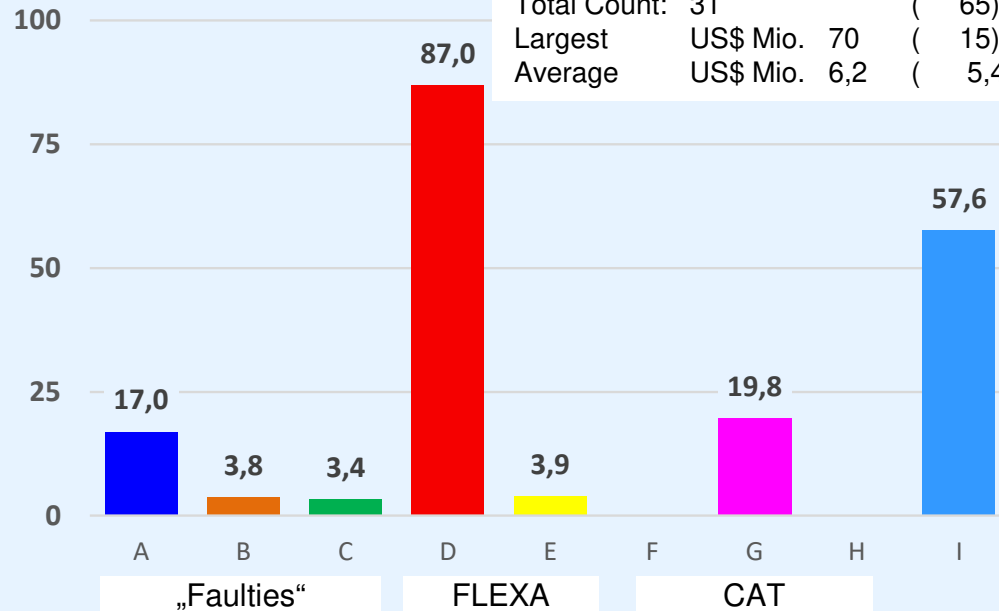
US\$ Mill



| | | |
|--------------|---------------|--------|
| GWP: | US\$ Mio.600 | (912) |
| LL Incurred: | US\$ Mio. 64 | (91) |
| Total Count: | 19 | (28) |
| Largest | US\$ Mio. 10 | (12) |
| Average | US\$ Mio. 3,4 | (3,3) |

CAR, EAR, ALoP

US\$ Mill



| | | |
|--------------|-----------------|---------|
| GWP: | US\$ Mio. 1,422 | (1,811) |
| LL Incurred: | US\$ Mio. 192 | (352) |
| Total Count: | 31 | (65) |
| Largest | US\$ Mio. 70 | (15) |
| Average | US\$ Mio. 6,2 | (5,4) |

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

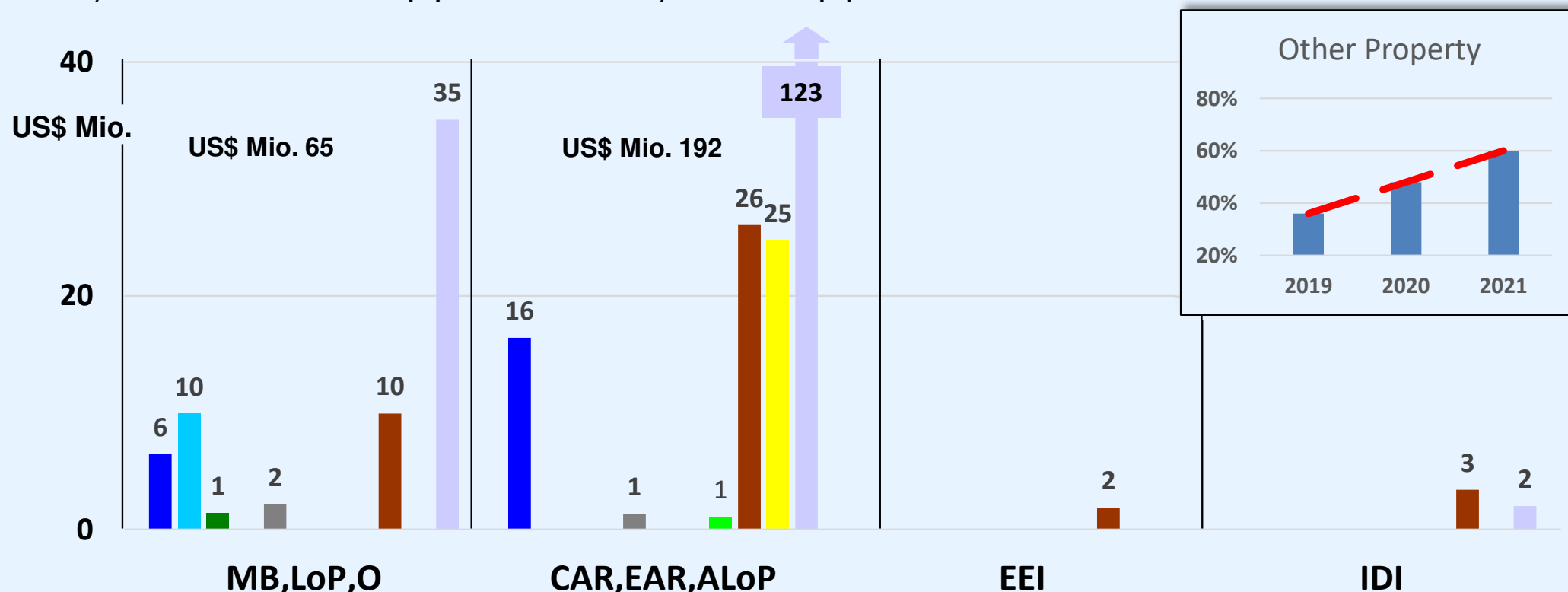
* Many large losses observed in Int'l markets are not reported to ,Country Stats'

Large Claims only 2021



Main Items affected → Operational / Projects / etc.

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



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

* Many large losses observed in Int'l markets are not reported to 'Country Stats'

IMIA 'Country Statistics' 2019 - 2021



- Prologue
- Premium per Country & Class
- Claims
 - L/R per Country & Class
 - L/R Historically 2002 ff
 - LL Volume / Frequency
- Epilogue



IMIA Stats 2019-2021

„**Democracy**

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

IMIA Statistics

...is the worst form of statistics except for all those who have been tried



IMIA is committed to improve by

- IRCI** – **IMIA Rate Change Index**
- ILRI** – **IMIA Loss Ratio Index**
- IMLI** – **IMIA Mega Index (> 30 MUS\$)**
- ITOL** – **IMIA Type of Loss Index (> 30 MUS\$)**



IMIA appreciates YOUR 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.