Munich, 04 January 2018

Press release

Natural catastrophe review: Series of hurricanes makes 2017 year of highest insured losses ever

The hurricane trio of Harvey, Irma and Maria will cost the insurance industry a record amount in 2017: the final insurance bill for those and other natural catastrophes, including a severe earthquake in Mexico, is expected to come to US$ 135bn – higher than ever before. And overall losses – i.e. including uninsured losses – amounted to US$ 330bn, the second-highest figure ever recorded for natural disasters. The only costlier year so far was 2011, when the Tohoku earthquake in Japan contributed to overall losses of US$ 354bn in today’s dollars.

![Losses from natural catastrophes](image1)

<table>
<thead>
<tr>
<th>Losses from natural catastrophes 2017</th>
<th>Less than half of the losses insured</th>
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<tbody>
<tr>
<td>US$ 330bn</td>
<td>US$135bn (41%)</td>
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![Costliest hurricane season on record](image2)

- **Costliest hurricane season on record**
  - US$ 215bn

![Floods in South Asia: a humanitarian disaster](image3)

- **Floods in South Asia: a humanitarian disaster**
  - 2,700 people killed

Torsten Jeworrek, Munich Re Board member responsible for global reinsurance business: “This year’s extreme natural catastrophes show how
important insurance is in absorbing financial losses in the wake of such
disasters. Munich Re is willing to develop this business further – we have the
necessary capacity and expertise. For me, a key point is that some of the
catastrophic events, such as the series of three extremely damaging hurricanes,
or the very severe flooding in South Asia after extraordinarily heavy monsoon
rains, are giving us a foretaste of what is to come. Because even though
individual events cannot be directly traced to climate change, our experts expect
such extreme weather to occur more often in future.”

The year’s loss figures in detail:
The overall loss figure of US$ 330bn, for all types of natural disaster, was almost
double the ten-year, inflation-adjusted average of US$ 170bn. Losses from
weather-related natural catastrophes set a new record. Insured losses were
almost three times higher than the average of US$ 49bn. Our statistics identified
a total of 710 relevant natural catastrophes, which was also significantly more
than the average of 605. Approximately 10,000 people lost their lives in natural
disasters this year, which is a slightly higher figure to last year’s, but at least
much lower than the ten-year average of 60,000. (Read more)

US losses dominate the statistics
The US share of losses in 2017 was even larger than usual: 50% as compared
to the long-term average of 32%. When considering North America as a whole,
the share rises to 83%.
Some facts about the natural disasters that affected the USA:

- In late August, Hurricane Harvey made landfall in Texas as a Category 4
  storm. After landfall, the storm stalled over the state for several days and
  was able to continue to tap moisture from the very warm Gulf of Mexico.
  This resulted in torrential rainfall of such magnitude over the city of Houston
  that, based on long-term statistics, should occur less than once in a
  thousand years. With overall losses of around US$ 85bn, Hurricane Harvey
  was the costliest natural disaster of 2017. (Read more about the hurricane
  season 2017 and about Hurricane Harvey)

- A short time later, Hurricane Irma, a Category 5 storm (the highest
category, featuring winds over 300km/h), blew a swath of destruction
  through the Caribbean before crossing the Florida Keys on 10 September
  and making landfall on the southwest coast of Florida. Considering the
  wind speeds, losses in Florida remained comparatively moderate. But,
given her larger share of insured storm damage, Hurricane Irma
  nevertheless ended up being the costliest natural disaster for insurers in
  2017, with insured losses of around US$ 32bn. (Read more)

- Hurricane María caused extreme damage to the islands of the Caribbean.
  For example, on Puerto Rico, many production facilities, including those
  used to manufacture pharmaceuticals, were affected. Infrastructure on the
  island, a territory of the United States, was almost totally crippled; six
  weeks after the storm, three-quarters of households were still without
  power. (Read more)
- A series of severe thunderstorms in the spring, with accompanying tornadoes and hail, also contributed to the heavy US losses. No less than five tornado-hail outbreaks caused insured losses in excess of US$ 1bn each.

- Paradoxically, last winter’s heavy snow and rainfall in California actually fuelled this year’s devastating brushfire season. This is because, after a long drought, the precipitation had caused many plants to sprout and grow again. The summer heat turned this increased vegetation into a veritable matchbox, leading to severe brushfires that lasted well into December. Due to the high insurance density in some impacted suburbs, overall losses for the October fires alone were US$ 10.5bn, and insured losses are expected to be around US$ 8bn. (Read more)

Tony Kuczinski, President and CEO of Munich Re, US: “This hurricane season is a stark example of the incredibly important role that Munich Re plays in helping people and communities rebuild in the wake of natural catastrophes. And we learned from these events. First, that mitigation and improved risk management, such as stronger building codes in Florida, can work to reduce losses and promote life safety. Second, there continues to be a substantial insurance gap, even in a highly developed market like the United States where, for example, the vast majority of home and small business owners do not purchase flood insurance. Our industry’s risk expertise, capital strength, and claims-handling infrastructure are critical to finding meaningful solutions, and Munich Re is an active participant in the public-private partnership that seeks to offer more flood insurance options and promote flood protection.”

Europe: Late frost after long warm period causes heavy losses
Unusually low temperatures in April caused billions in damage to European farmers since their crops had already grown robustly in an otherwise warm spring. Depending on the region and particular fruit, harvests were up to 50% smaller than usual. Another apparent paradox is that such events may start to occur more frequently in the future as a result of climate change: plants in certain regions are beginning to sprout earlier in spring, while the threat of frost often does not diminish to the same extent, so that the risk actually increases. Losses caused by the late frost amounted to US$ 3.6bn (€3.3bn), of which only US$ 650m (around €600m) was insured, given the low insurance penetration in the agricultural sector.

Asia: Heavy monsoon rains cost many human lives
Some 2,700 people lost their lives following an extremely severe monsoon in South Asia. The annual monsoon season, which brings the otherwise desperately needed rain, lasted about four weeks longer than normal in 2017. The regions most severely affected this time were the Terai lowlands in Nepal, where almost half of the Nepalese live, as well as certain Indian provinces along the Himalayas. In some districts, three-quarters of the territory was under water. The fact that only a small fraction of the US$ 3.5bn in total losses was insured contributed to the humanitarian catastrophe. (Read more)
Hermann Pohlchristoph, Munich Re Board member responsible for Asia-Pacific: “In the Asia-Pacific region, natural catastrophe losses were thankfully less severe than in previous years: at US$ 33bn, they were below both last year’s total of US$ 96bn and the ten-year average of US$ 85bn. At the same time, the numbers show how alarmingly sparse insurance cover still is in Asia: only 8% of losses there were insured. And yet appropriate insurance solutions do exist, which can significantly help get people and economies back on their feet financially after a natural disaster.”

Ernst Rauch, Head of Climate & Public Sector Business Development: “The above-average share of insured losses this year masks the reality of how little coverage many parts of the world still have. In many developing countries, losses from natural catastrophes often remain almost totally uninsured. And even in highly developed countries like the US, whose share of insured losses is significantly greater, more widespread insurance coverage would still be very beneficial to the economy. Though there was in fact a slight silver lining among all the clouds: Irma and Maria meant that some Caribbean islands were hit twice in a row by severe hurricanes this year. Yet only a few days after the events, the CCRIF (Caribbean Catastrophe Risk Insurance Facility), a public-private regional insurance pool, was able to pay out around US$ 50m in emergency funds. Munich Re supports the development of such pool solutions that can do much to help close the gaps in cover that exist in many low-income countries.”

Note for the editorial staff:
For further questions please contact

Media Relations Munich
Stefan Straub
Tel.: +49 (89) 3891-9896

Media Relations Asia Pacific
Silke Kunstreich
Tel.: +65-6318 0762
Vivien Seah
Tel.: +65-6318 9124

Media Relations North America
Beate Monastiridis-Dörr
Tel.: +1 (609) 235-8699
Sharon Cooper
Tel.: +1 (609) 243-8821

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Münchener Rückversicherungs-Gesellschaft
Aktiengesellschaft in München
Media Relations
Königinstraße 107
80802 München
Germany