



## Against a turning tide

MAJOR EVENTS SO FAR IN 2016 SUGGEST THE TIDE COULD BE TURNING AFTER FIVE YEARS OF RELATIVELY BENIGN GLOBAL NATURAL CATASTROPHE LOSSES. ON THE FRONTLINE CONSIDERS SOME OF THE IMPLICATIONS FROM A RISK, INSURANCE AND CLAIMS PERSPECTIVE

**Natural catastrophes - windstorms, earthquakes, floods and other perils -** occur each year around the world, with each event impacting the communities and businesses in the region in which they occur. From an insurance loss and claims perspective, some events have a much greater impact than others, depending on the assets at risk and insurance penetration of a region where a catastrophe strikes.

In recent years the losses have been surprisingly muted. Not that major catastrophes have not occurred, just that in comparison to average expected losses the claims have been below what is expected. Five years of below-average natural catastrophe losses (since the Tohoku Earthquake, Thai floods and Christchurch earthquake cost insurers in excess of \$100bn in 2011) also flies in the face of macro trends such as urbanization, economic growth, climate change and increasing insurance penetration in catastrophe-prone regions.

“Each year our white paper provides a modelled average annual insured loss and the last five years, apart from 2011, have all been below that number,” says Milan Simic, executive vice president and managing director of international operations at AIR Worldwide. “So you could say that in the last four years the industry has been lucky. Obviously we’ll see what this year brings and it only takes one or two events to bring

the average numbers up very quickly. Just a single U.S. hurricane could change the situation profoundly.”

While it is difficult to see how the year will ultimately unfold, events so far in 2016 - including the U.K. floods, Kumamoto Earthquake in Japan and Fort McMurray wildfire in Canada - have resulted in sizable, and in many instances, complex claims. As is the case in any major catastrophe event, loss adjusting teams are first on the scene to assess the damage and reassure those affected.

Depending on the nature of the disaster there can be a number of complexities associated with claims. With the Fort McMurray wildfires the main challenge is getting loss adjusters on the ground. As was the case with last year’s Tianjin explosion in China, access has proved to be one of the major issues, one which Crawford addressed by amassing its response team at a nearby site and making use of satellite and drone imagery to carry out initial assessments.

“The wildfires in Canada are clearly totally unexpected on that sort of scale,” says Mike Reeves, head of global technical services at Crawford. “While it took only five or six days in the case of Tianjin and only a week or two in Chile to get into the damaged areas, here we are three weeks or more from when this really started and we have only been able to gain limited access via

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Infographic:

Dec 2015 - May 2016  
Natural Catastrophe EventsFort McMurray Wildfire  
Canada

WHERE: Alberta, Canada  
 WHEN: May 1, 2016  
 INSURED LOSSES: \$3.4bn - \$6.9bn\*  
 DESTRUCTION: Over 2,400 structures destroyed (about 10% of the total)  
 HUMAN IMPACT: 2 killed (in motor accident fleeing wildfire)  
 TYPES OF CLAIMS: fire, smoke, damage and contamination

\*Source AIR

Storm Jonas  
U.S.

WHERE: 17 U.S. States  
 WHEN: January 22 to 24, 2016  
 INSURED LOSSES: \$235.4m\*  
 HUMAN IMPACT: at least 30 killed  
 TYPES OF CLAIMS: personal, commercial, motor  
 VALUE: Low

\*Source PCS

Floods  
U.K.

WHERE: Cumbria, Lancashire, Scottish Borders, Northumberland, North Wales, Yorkshire, Ireland  
 WHEN: from Dec 3, 2015  
 INSURED LOSSES: \$1.9bn\*  
 HUMAN IMPACT: 6 killed  
 OTHER IMPACTS: >45,000 homes left without power  
 TYPES OF CLAIMS: flood - household, commercial premises  
 VALUE: Reserve total \$520m

\*Source ABI

Floods  
Europe

At the time of printing 11 people had died in floods in Southern Germany and France with more downpours forecast across a band of central Europe from France to Ukraine. In Paris, the River Seine was due to rise 6 meters above its usual level and had already burst its banks in several places.

M7.0 Earthquake  
Japan

WHERE: Kumamoto Prefecture on Japan's Kyushu Island  
 WHEN: April 16, 2016  
 INSURED LOSSES: \$1.7bn - \$2.9bn\*  
 DESTRUCTION: 3,900 residences and 120 non-residential buildings were damaged or destroyed, a number of mudslides resulted, and 14 fires were attributed to the temblors\*\*  
 HUMAN IMPACT: 58 killed and >900 injured  
 OTHER IMPACTS: power and water outages; damage to highways, rail lines, bridges, and other infrastructure; short-term cancellation of some airline and train service; and significant supply-chain and production interruption for regional industries

\*Source: AIR  
 \*\*Source: The Japan Fire and Disaster Management Agency (FDMA)

M6.4 Earthquake  
Taiwan

WHERE: Southern Taiwan  
 WHEN: February 6, 2016  
 INSURED LOSSES: >\$7.6m\*  
 DESTRUCTION: 17 storey residential building collapsed  
 HUMAN IMPACT: 115 dead, hundreds injured  
 OTHER IMPACTS: HSR (High Speed Rail) service had been shut down for safety  
 TYPES OF CLAIMS: residential & commercial claims (BI, property damage)

\*Financial Supervisory Commission of Taiwan

M7.8 Earthquake  
Ecuador

WHERE: Ecuador's central coast  
 WHEN: April 14, 2016  
 INSURED LOSSES: \$325m - \$850m\*  
 DESTRUCTION: 1100 buildings destroyed and >800 damaged  
 HUMAN IMPACT: 570 killed and 4,600 injured  
 OTHER IMPACTS: lack of running water, power, and communications systems, as well as damage to highways, bridges, and the closure of Manta Airport

\*Source AIR

Floods / Landslide  
Chile

WHERE: Santiago, Chile  
 WHEN: April 17, 2016  
 INSURED LOSSES: \$80m-\$100m\*  
 HUMAN IMPACT: 2 killed and 359 injured  
 OTHER IMPACTS: 4.7 million people were left without drinking water and tens of thousands without power across central Chile  
 TYPES OF CLAIMS: relate to stores, offices, warehouses, vehicles and equipment affected by mud  
 VALUE: Low

\*Source AIR

Cyclone Winston (Cat5)  
Fiji

WHERE: Viti Levu  
 WHEN: February 20, 2016  
 DESTRUCTION: 40,000 homes damaged or destroyed  
 HUMAN IMPACT: 44 killed  
 TYPES OF CLAIMS: mostly commercial as most domestic properties were uninsured  
 VALUE: Average claim \$1.5m

Please note all amounts quoted are in U.S. dollars

special escort with other resources poised to be drafted in when clearance is given.”

“In Tianjin it was almost a perfect situation for satellite imagery,” he remembers. “There were rows and rows of cars and the satellite photography was so good that you were almost able to count the number of vehicles, so you could come up with a total loss number from that exercise.”

“I was looking at some of the imagery from Fort McMurray and again, it’s pretty clear where you have almost total losses and properties have just been burnt to the ground. What is less clear is the extent of smoke damage and contamination,” he continues. “But interestingly one of the major claims will be for the town hospital, which on an aerial photograph shows little damage. However this hides a huge amount of soot and other contamination which will require considerable restoration before the hospital can function again. This lack of medical facilities will in turn have a significant impact on the ability of the local population to return to Fort McMurray.”

While technology can be used in this way to make initial damage assessments, it does not replace on the ground expertise, thinks Reeves. “While satellite images and drones are here to stay and they are very helpful, you cannot replace having somebody actually on site. As they switched the gas and power back on in Fort McMurray there were some serious explosions because pipes etc had been ruptured, and you can’t see that kind of damage from the air.”

The bigger the disaster, the longer it typically takes to reach a settlement, he observes. “Complexity is usually about the tail - how long it takes to settle these claims - and if you look there are still claims outstanding for the Christchurch earthquake in New Zealand, flooding in Thailand and Superstorm Sandy. One thing I do know is the longer a claim goes on for, the more expensive and complex it becomes.”

AIR Worldwide estimates insured losses from the wildfire that started on May 1 will be between \$3.4bn and \$6.9bn, making it Canada’s largest-ever natural disaster. As is often the case with major events, such a catastrophe was difficult to predict and is likely to cause a shift in thinking about wildfires in general and demand for greater hazard analysis of this peril.

“Wildfire is an interesting peril because it’s one where the losses tend to be binary - you either get losses that are 100% or you get no losses, and very rarely you get something

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in between,” says Simic. “You typically see a total loss, particularly on the residential side. Where it becomes interesting is all the oil extraction industry linked to that region and how those claims will develop.”

As risk managers consider the implications of some of these recent events it is clear that disaster resilience is rising up the agenda. The M6.4 6 February 2016 Taiwan earthquake stood out for a building collapse that occurred in the southern Taiwanese city of Tainan. In a quake-prone country that typically abides by its stringent building codes, the high-rise building was found to have had serious construction flaws.

Disaster preparedness can significantly mitigate the losses from natural catastrophes. A quick comparison between the Taiwan quake, Kumamoto Earthquake on April 16 and Ecuador quake - also on April 16 - demonstrates, for instance, the value of strong building codes. The Japanese and Ecuadorian quakes were of a similar magnitude, however the death toll on Japan’s Kyushu Island was 58 in comparison to 570 in Ecuador.

From a claims complexity perspective the Kumamoto Earthquake introduces a couple of dynamics, including the confusion over whether loss occurred as a result of the M6.2 foreshock on April 14 or M7.0 mainshock. As was the case with the 2011 Tohoku Earthquake, supply chain and business interruption losses also present various challenges.

“The whole island of Kyushu is cut in half by the faulting system and where the earthquake happened was almost in the worst possible location, because

Kumamoto is home to many factories and it almost reads like a who’s who of Japanese manufacturing,” says Simic. “And if you break a production line that has implications on supply chains, and if the wording of insurance contracts is not that clear-cut, and if the nature of claims is not that clear-cut, there will inevitably be some uncertainty and possibly disputes around the type, nature and the location of the claims.”

While it is impossible to predict what the rest of the year may hold in store from a catastrophe perspective, the recent below-average claims experience should not lull risk managers into a false sense of security. Major catastrophes of the past decade - including the Thai floods, Christchurch Earthquakes, Superstorm Sandy, Tianjin explosion and Fort McMurray wildfires - have demonstrated time and again that the unexpected can and does happen.

In the aftermath of a major event there are always lessons to be learnt, thinks Simic. “The fact many companies didn’t know what exposure they had in Tianjin was effectively a failure of risk management, because there was no good electronic tracking of who had what in which location,” he points out. “Some aspects of mitigation include fire protection, strengthening buildings or doing inspections to ensure that buildings, like the one in Taiwan, don’t collapse. And then there is buying insurance to the appropriate level and using the best loss adjusting resources - that is all risk management and it’s multi-faceted.”

Excess capacity, intense competition and benign loss years have created a buyer’s market and this is unlikely to change unless the rest of 2016 produces a major US landfalling hurricane or an equivalent loss or series of losses. At present, the forecast is for another below-average season in the North Atlantic. However, as Hurricane Andrew proved in 1992, it just takes one in an otherwise quiet season to literally shake everything up.

“This loss trend could continue but we still have seven months to go so it’s a big ‘if,’” says Simic. “However, say there is another major event or two and individual losses are in excess of \$10bn, that could change the situation in terms of comparison with long-term averages. But many people have commented that it’s not really the size of the events that will drive it because it’s more the capacity of the market and the interest rate environment that are shaping the softness of the re/insurance industry.”