MAXIMIZING THE BUSINESS VALUE OF YOUR CASUALTY SCENARIO REPORTING

2021

From August 2021, Lloyd's syndicates are required to report on six likely liability scenarios. While property scenario reporting is well-established, the requirement for liability scenarios, and the scenarios themselves, are new.

At this event, Matthew was joined by Praedicat's Robert Reville and Adam Grossman and Kirsten Mitchell-Wallace from Lloyd's to discuss the scenarios and how to use emerging risk information to maximise business value from the regulatory data requirements.

Matthew Grant
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Praedicat

Speakers

Dr. Adam Grossman
Praedicat
VP of Emerging Risks

Dr. Kirsten Mitchell-Wallace
Lloyd's
Head of Portfolio
Risk Management

Dr. Robert Reville
Praedicat
CEO

Dr. Kisten Mitchell-Wallace, Head of Portfolio Risk Management, Lloyd's

Kristen, what is your responsibility at Lloyd's?

KMW: I'm the Head of Portfolio Risk Management. Part of my team's role is to understand and control the level of catastrophe risk at syndicates and for the whole market. This involves understanding risk beyond natural catastrophes. There has been a focus on this type of risk, but a large proportion of the risks underwritten at Lloyd's fall into the liability category - just over a third. The potential claims are not as high as for natural catastrophes, but it is still important to improve understanding of this risk.

What has been the reaction of the market?

KMW: The market has been welcoming but cautious. Things have been changing, systemic risk has increased, interconnectivity in society has increased, and new products are brought to market much quicker, without the risks being fully understood. Changes are also happening in the litigious environment, with plaintiffs being recruited for class actions rather than bringing their own legal case. These changes in risk are constantly happening, so Lloyd's and regulators are interested in this area.

What are you looking for when syndicates analyse risks?

KMW: It is important that they demonstrate that their chosen approach is suitable for their portfolio. Lloyd's is committed to being agnostic in terms of model vendor and approach.

What scenarios are you asking syndicates to analyse?

KMW: There are six new scenarios. They include financial product mis-selling in the UK, financial market manipulation in the US, pharmaceutical products in the US, construction products globally, chemicals in food in the US, and offshore/onshore energy in the US. These were based on what experts deemed were realistic scenarios considering the current litigious climate.

Do you ask the syndicates to provide an assessment for events that fall outside of the scenarios?

KMW: We are not looking at a single historical scenario, an emerging event or specific identifiable products or services. It is up to the syndicate to choose how they are managing their accumulations. When developing the scenarios, we have also thought about the impact on reserves, as well as the underwriting losses. We know it is an imperfect process. As with all our risks, we ask about uncertainty and model completeness. We always recommend stress testing.

Dr. Robert Reville, CEO, Praedicat

Robert, what is Praedicat doing?

RR: Praedicat is a casualty catastrophe modelling company. Casualty catastrophe and emerging risk are almost the same, so we are also a liability emerging risk analytics company. Praedicat uses AI and machine learning to identify and track emerging risks using signals from peer-reviewed science. We also use this scientific information to create simulated mass litigation events. When doing this, we connect the risks with companies that could get sued.

How has Praedicat been collaborating with Lloyd's to create the scenarios?

RR: Praedicat works with many casualty insurers, and 16 of them are Lloyd's syndicates. We've participated in the Lloyd's Lab twice - in Cohort 5, we were developing COVID liability scenarios. Lloyd's announced that it was going to be requiring scenario reporting for the Lloyds market. Praedicat was already working on this, so we reached out.

Why is casualty scenario reporting becoming a more significant issue?

RR: The liability environment in the US is as challenging as it has been since the 1980s and 90s. Initiation of mass litigation has increased. Examples include opioids and talcum powder. They have been coming one after the other in quick succession. This increased initiation of mass litigation implies increased correlation in casualty portfolios, and therefore makes it an issue for exposure management.

What are the differences between casualty modelling and property catastrophe modelling?

RR: For litigation, emerging risks must be looked at - things that have never happened before, with companies that have never been sued for these things before. Emerging risk and casualty catastrophe are inseparable, which is a key difference from property catastrophe. Time dimension is another important difference. A casualty scenario is a multi-year simulation of litigation over an emerging risk.

Dr. Adam Grossman, VP of Emerging Risks, Praedicat

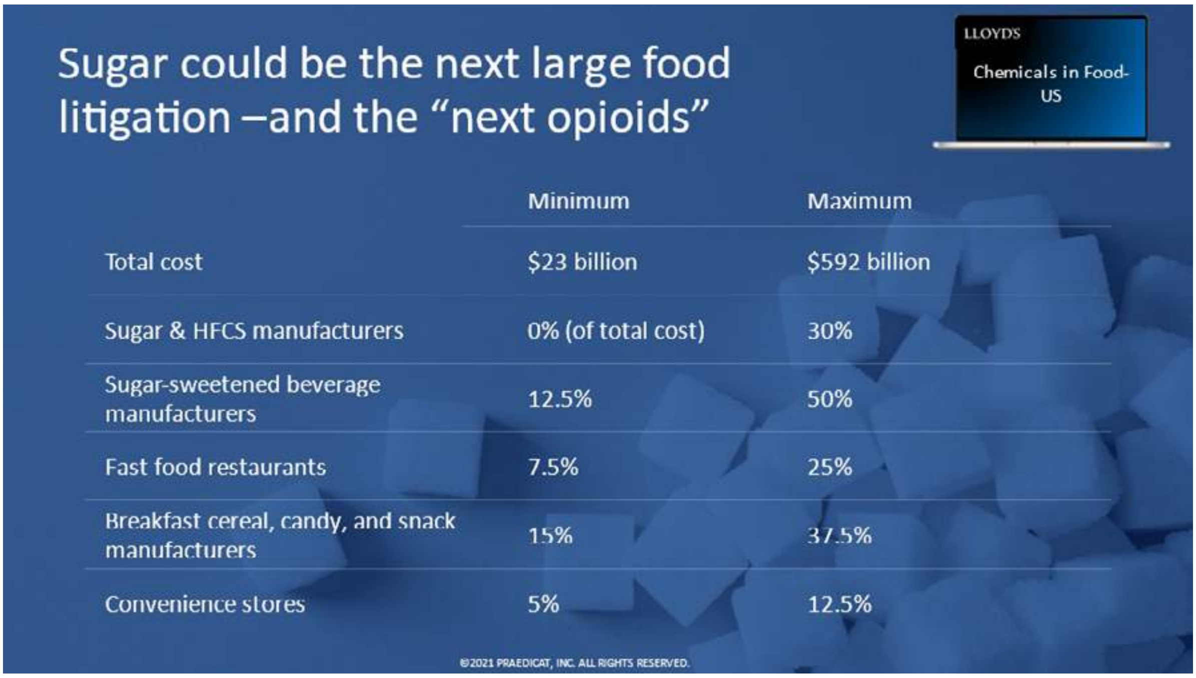
Does Praedicat identify individual companies or are companies inputted and then modelled?

AG: We model the losses that would accrue to individual companies in several steps.

We identify the ways that chemicals, products, substances, and business practices make their way through the economy. We also identify the different business activities involved, and then identify the companies that operate in those business activities and their market share.

Can you talk about Praedicat's US chemicals in food scenario?

AG: We have chosen sugar for this example. Our sugar scenario losses ranged from $23bn to $600bn in total loss, as there is a wide range of costs that could be associated with it. There is potential for fourth party litigation where the governments are the plaintiffs. Third party claims could come from people who had developed type 2 diabetes because they consumed sugar containing substances that were manipulated to be addictive. There are different ways that companies can be found responsible, depending on what the plaintiffs allege. This results in different costs. We've developed 18 variations of this scenario.



Sugar could be the next large food litigation –and the "next opioids"

LLOYD'S

Chemicals in Food-US

	Minimum	Maximum
Total cost	$23 billion	$592 billion
Sugar & HFCS manufacturers	0% (of total cost)	30%
Sugar-sweetened beverage manufacturers	12.5%	50%
Fast food restaurants	7.5%	25%
Breakfast cereal, candy, and snack manufacturers	15%	37.5%
Convenience stores	5%	12.5%

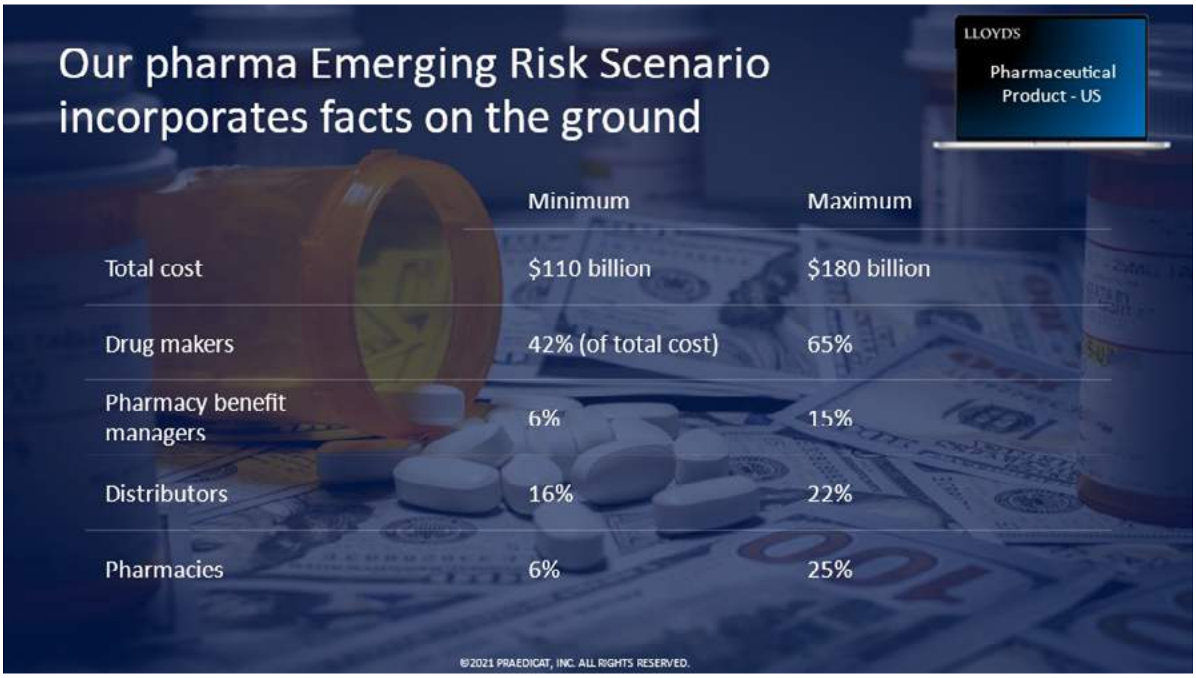
How does Praedicat tackle uncertainty?

AG: We provide a range of possible outcomes. If the scenario starts to manifest, we update our scenarios.

Tell us about your US pharmaceutical product scenario.

AG: We are starting to see the emergence of litigation around opioids against distributors and retailers. Pharmaceutical manufacturers are often uninsured, but distributors and pharmacies tend to be insured.

Another high-risk scenario within the pharmaceutical industry is over prescription and overuse of antibiotics, including in meat production. These practices cause significant amounts of antibiotic resistant infections and deaths.



What have you looked at for the global construction product scenario?

AG: PFAS (per- and polyfluoroalkyl substances) are used in carpets to keep them stain-free. Phthalates are used in vinyl tiles and paint to make them more durable. Spray foam insulation uses isocyanates, which can cause lung disease. These three building products could all result in bodily injury and property damage litigation.

PFAS in carpets is one area which could exceed the current footprint of the AFFF (firefighting foam) litigation. The cost to remediate PFAS in water in the United States is already far larger than firefighting foam. We estimate the total cost in the US is $180-420 billion.

Audience Questions

Robert, how likely is it that third party bodily injury and property damage claims could be laid at the door of fossil fuel companies due to their link to climate change?

RR: Fossil fuel companies could be involved in litigation over their greenhouse gas emissions. There have been a few failed attempts, but there is always a risk of breakthrough liability. Other forms of climate change litigation are already happening. Electric utility companies have been held responsible for sparking wildfires, or not having taken appropriate precautions. More frequent droughts are causing increased arsenic concentrations in soil, in turn causing increased concentrations in rice. This rice is then used in rice cereal, formula, milk, or baby food. In March 2021, litigation emerged in the US over arsenic in baby food.

Robert, finally what are you seeing outside of the UK with regards to scenarios?

RR: The PRA and Lloyd's are leading the way, but there is interest across the world. There is currently an elevated level of interest from the NAIC (National Association of Insurance Commissioners), which is the US regulator.

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