

EXECUTIVE INSIGHT REPORT

\$5B growth opportunity in the coming casualty catastrophe market

STRATEGIC GUIDANCE ON A FAST-FORMING MARKET

Executive summary

The casualty market is undergoing rapid transformation, driven by an unprecedented rise in complex, systemic mass litigation. Emerging risks — such as per- and polyfluoroalkyl substances (PFAS) contamination, addictive software design, microplastics, and environment-related liabilities — are reshaping the liability landscape, presenting insurers and reinsurers with daunting challenges and volatility as well as profound opportunities for growth and innovation.

Moody's insurance solutions and Aon are collaborating on an industry-leading, data-driven solution designed to address the emerging volatility of the casualty catastrophe market. By pioneering advanced analytics, AI-enabled casualty cat modeling, and targeted named peril reinsurance products, this collaboration aims to proactively shape a scalable, structured market poised for substantial growth. This report explores the rapidly evolving casualty catastrophe landscape, highlighting the strategic opportunities available to industry leaders who act decisively.

The new era of casualty risk

Over the past decade, the casualty insurance landscape has undergone a profound transformation. Mass litigation events — once rare occurrences — have grown exponentially in the United States, systematically reshaping insurers' liability exposure. Between 2014 and 2022, the industry witnessed two to three new mass torts every year, each capable of generating billion-dollar losses or higher.

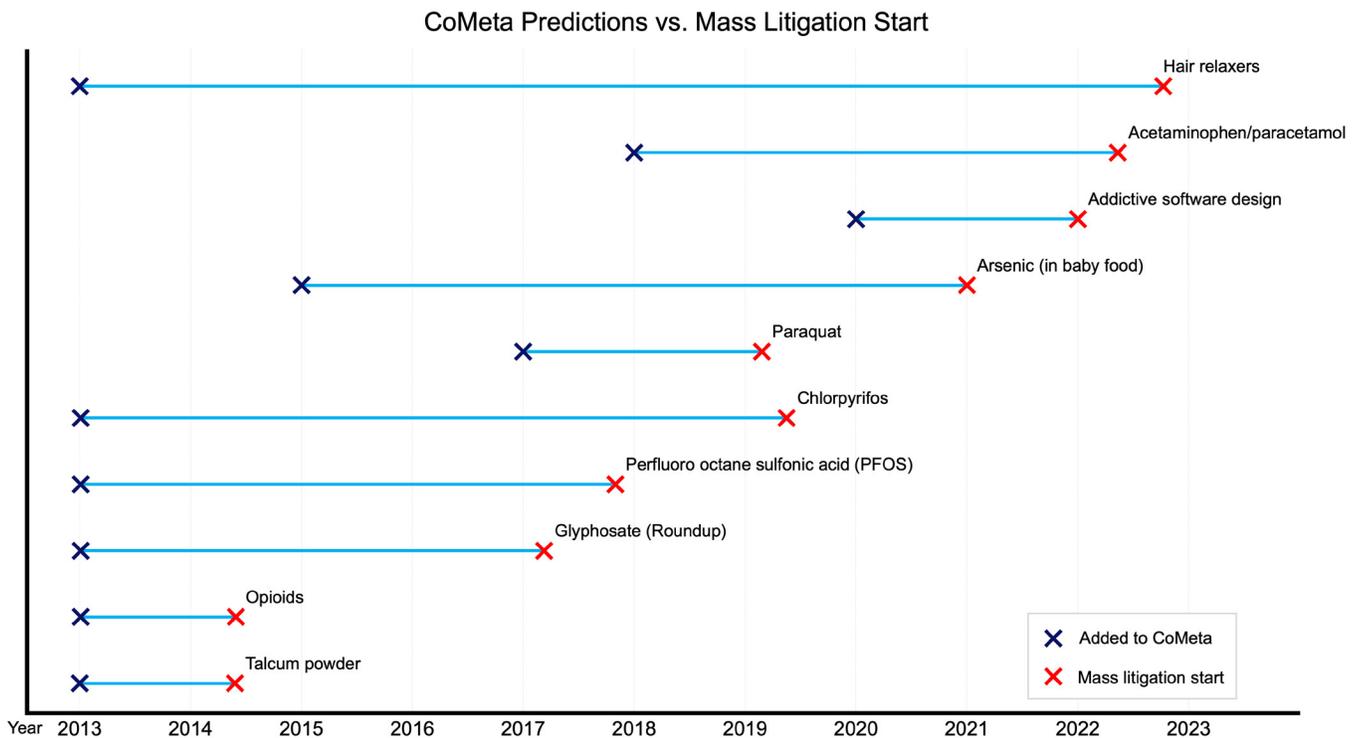
Litigation finance and sophisticated plaintiff-generation practices are driving this change. With billions in capital fueling plaintiff-side litigation, previously improbable lawsuits have become economically viable and frequent. The financial and strategic consequences are substantial. Long-tail risks such as per- and polyfluoroalkyl substances (PFAS) contamination, addictive social media platforms, microplastics, ultra-processed foods, and environment-related claims threaten the stability of insurers' reserves and challenge traditional actuarial models. Historical benchmarks, such as asbestos litigation, underscore the severity

of these risks, suggesting that current events could produce losses of comparable magnitude.

This is not simply an incremental shift — it is structural. The casualty catastrophe market, echoing the transformation seen in the property catastrophe market decades ago, is poised to evolve into a structured, scalable segment. We see this as a significant opportunity for industry leaders who strategically leverage data, analytics, and innovative risk-transfer mechanisms.

The costs are profound. As previously mentioned, between 2014 and 2022, two to three new mass litigation episodes launched annually in the US market, encompassing issues from PFAS contamination to glyphosate-based herbicides, talc, opioids, and, more recently, hair relaxers and social media addiction. Each emerging risk carries latent long-tail uncertainty reminiscent of asbestos claims, which generated nearly \$100 billion in losses. However, today’s emerging risks occur with much greater frequency and broader potential impact.

Figure 1 Frequency of every in-scope mass tort litigation recognized early by Moody’s CoMeta platform since 2013



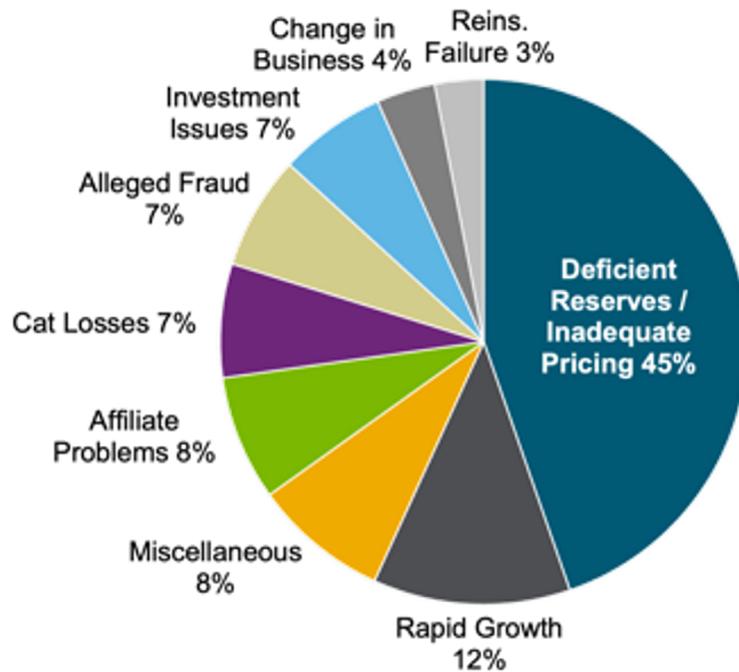
Unpacking the coming casualty insurance market

Historically, catastrophic casualty insurance losses were isolated and manageable. Today, however, the frequency, severity, and complexity of mass tort litigation present insurers with exposures akin to natural catastrophe events in the property sector. Litigation financing, social inflation, and public nuisance theories accelerate claims frequency and severity, potentially turning isolated liability events into systemic market crises.

Casualty risks have historically been significant loss drivers. Casualty has generated two of the three largest casualty events in asbestos and environmental litigation. If you consider single-year adverse loss development as a catastrophe, six out of the 13 largest loss events in the US property and casualty (P&C) industry have been casualty events. Besides generating losses, deficient reserving, which is primarily associated with casualty, has been the leading cause of insurer impairment.

Figure 2 Market size estimates for casualty catastrophe reinsurance

Primary causes of US P&C Impairments



Note(s): Situations in which a company has been placed, via court order, into conservation, rehabilitation or insolvent liquidation. Data represents impairments that have occurred since the year 2000. Source(s): A.M. Best, ISO PCS, SNL

The market response thus far has followed similar historical patterns, with the market seeking to add exclusions after the litigation begins. However, the rapid frequency and severity of new torts are accelerating the necessity for a more fundamental change. The impact of more frequent casualty catastrophe events has led to the following:

- **Increased reserve volatility**

Casualty catastrophes (emerging risks) have increased latency relative to attritional claims. This is because the legal arguments are novel, the science may be new, and, with higher stakes, the likelihood of litigation is increased. The effect on a portfolio is that when exposure to emerging risks increases, reserves based on historical claims can underestimate the reserve duration and increase the need for reserve restatements. Similarly, decreases in unobserved emerging risks can lead to over-reserving. The general effect is increased volatility with cyclical reserving crises.

- **Correlation and systemic risk**

A single mass tort litigation event, such as the widespread emergence of PFAS liabilities, now has

the potential to impact multiple companies and lines of casualty insurance simultaneously. With a rising risk of correlated exposures, this amplifies reserve volatility and makes it harder for insurers to maintain predictable financial outcomes.

- **Unsustained tort reform solutions**

Historically, tort reform measures like damage caps and limitations on class actions provided temporary relief. However, plaintiffs have adapted rapidly through mechanisms like multi-district litigation, public nuisance theories, and strategic litigation financing, often outpacing reforms and reinforcing the cyclical nature of the casualty market.

These challenges highlight the need for advanced, proactive solutions to quantify and manage emerging casualty risks effectively.

Innovative solutions to address the coming casualty cat market

The Moody's and Aon collaboration strategically aligns Moody's cutting-edge modeling capabilities with Aon's deep market insight, global distribution networks, and valuable customer relationships, positioning insurers for proactive leadership in this evolving market.

At the heart of Moody's approach is advanced casualty catastrophe modeling powered by artificial intelligence (AI), machine learning, and large language processing. These forward-looking AI-enabled tools produce exposure-based analytics that allow insurers and reinsurers to simulate potential future scenarios, price risk, and manage long-tail liabilities.

By turning uncertainty into actionable insights, casualty cat models fundamentally redefine how insurers assess and manage casualty risk and create a foundation for an entirely new, structured casualty cat market, significantly improving insurers' resilience in a volatile environment.

Named peril reinsurance

Moody's and Aon's collaboration is assisting with the advancement of named peril casualty reinsurance opportunities — a strategic innovation providing explicit coverage for precisely identified and quantified risks. Unlike broad traditional policies, named peril solutions provide clarity and coverage certainty by specifying the inclusion of emerging pre-litigation threats such as microplastics or ultra-processed foods.

The benefits of this approach are clear:

- Reduced reserving uncertainty
- Improved financial predictability through explicit exposure-based pricing
- Greater capital efficiency and simplified risk aggregation management

A named peril casualty catastrophe market has the added advantage of rapidly mobilizing capital on defendants' behalf to combat the growing litigation funding available to plaintiffs. This capital can be deployed when new mass litigation with developing scientific evidence or novel legal theories emerges. Insurers can then manage and ring-fence exposures, reducing the likelihood that jury awards translate into catastrophic indemnity losses.

The casualty cat market is now rapidly turning into a structured, scalable risk-transfer ecosystem, and these innovative solutions collectively form a solid foundation for insurers to effectively manage volatility and emerging exposures.

Latency reserving as a market growth driver

Emerging risks lead to prolonged latency periods, causing reserve deterioration and volatility. Latency reserving explicitly addresses this challenge by establishing specific reserves based on named peril exposures, effectively dividing incurred-but-not-reported reserves into conventional and latency buckets. By establishing latency reserves explicitly priced with casualty cat loads, insurers stabilize reserve estimates, reduce volatility, and promote strategic investment in growth areas.

Latency reserves have a significant additional benefit of incentivizing responsible occurrence exposure management because the development of underwriting strategies such as nonrenewal of multi-year occurrence accumulations can be followed by the release of latency reserves.

Finally, latency reserving drives market growth by stimulating runoff markets and legacy transactions, which are now viewed as strategic capital management tools rather than signs of distress.

Strategic opportunities in a developing market

The emerging casualty catastrophe market presents insurers with substantial strategic opportunities. Early estimates indicate an annual reinsurance market size of approximately \$5 billion, with significant additional growth potential from legacy liability transfers and innovative parametric structures.

Moody's and Aon's collaboration supports insurers' ability to capitalize on these opportunities. By proactively embracing innovative solutions and advanced analytics, insurers can more effectively navigate volatility, enhance profitability, and gain a competitive advantage in this rapidly developing casualty catastrophe market.



Leading the market forward

The casualty catastrophe market has reached an inflection point, with a structured, scalable market rapidly emerging. The primary question insurers face today is no longer if this market will form but who will lead its formation.

The collaboration between Moody's insurance solutions and Aon aims to help insurers move toward proactive market leadership. By leveraging advanced casualty cat modeling, innovative named peril and latency reserving solutions, and strategic financial mechanisms, the collaboration aims to help insurers not only endure but excel in the new era of casualty catastrophe.

Insurers who act decisively now will be better positioned to become the leaders of tomorrow's casualty market.

MOODY'S

In a world shaped by increasingly interconnected risks, Moody's (NYSE: MCO) data, insights, and innovative technologies help customers develop a holistic view of their world and unlock opportunities. With a rich history of experience in global markets and a diverse workforce of approximately 16,000 across more than 40 countries, Moody's gives customers the comprehensive perspective needed to act with confidence and thrive. Learn more at [moody's.com](https://www.moody's.com).

AON

Aon plc (NYSE: AON) exists to shape decisions for the better — to protect and enrich the lives of people around the world. Through actionable analytic insight, globally integrated Risk Capital and Human Capital expertise, and locally relevant solutions, our colleagues provide clients in over 120 countries with the clarity and confidence to make better risk and people decisions that help protect and grow their businesses.

Follow Aon on [LinkedIn](#), [X](#), [Facebook](#) and [Instagram](#). Stay up-to-date by visiting Aon's [newsroom](#) and sign up for news alerts [here](#).