

Cyber-Insurance: the Existential Battle for its Future

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Overview

- Recent Developments
- Hardening Cyber Insurance Market
- Australian Cyber Insurance Litigation
- Mondelez & Merck NotPetya Court Cases – Latest Developments
- Other Cyber Insurance Litigation
- Academic Analysis of the Cyber Insurance Market
- Lloyds Market Association Response
- Consequences for Cyber Insurance Policyholders

Ransomware Gangs Already Making Payouts on their Internal Bug-Bounty Programs

Lockbit representative:

“It is important to show people that I am an honest man and responsible for his words and pay for bugs.”

Source: Darkfeed: [<https://darkfeed.io/2022/09/17/lockbit-165/>]

Graff Diamonds sued its cyber insurer, Travelers, in London after it refused to pay out on a \$7.5M bitcoin payment that Graff made after being hit by Conti ransomware and a data exfiltration attack in 2021 which threatened to reveal personal information on its wealthy client base

Conti: "Our team apologizes to His Royal Highness Prince Mohammed bin Salman and any other members of the Royal families whose names were mentioned in the public for any inconvenience"



Mykhailo Fedorov ✓
@FedorovMykhailo
Ukraine government official

We are creating an IT army. We need digital talents. All operational tasks will be given here: t.me/itarmyofurraine. There will be tasks for everyone. We continue to fight on the cyber front. The first task is on the channel for cyber specialists.



t.me
Telegram: Contact @itarmyofurraine

5:38 AM · Feb 27, 2022 · Twitter for iPhone

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Anonymous & IT Army of Ukraine hacked Yandex taxi app with fake orders to re-direct all Moscow taxis into the heart of the city, creating a massive traffic jam
- 1 September 2022

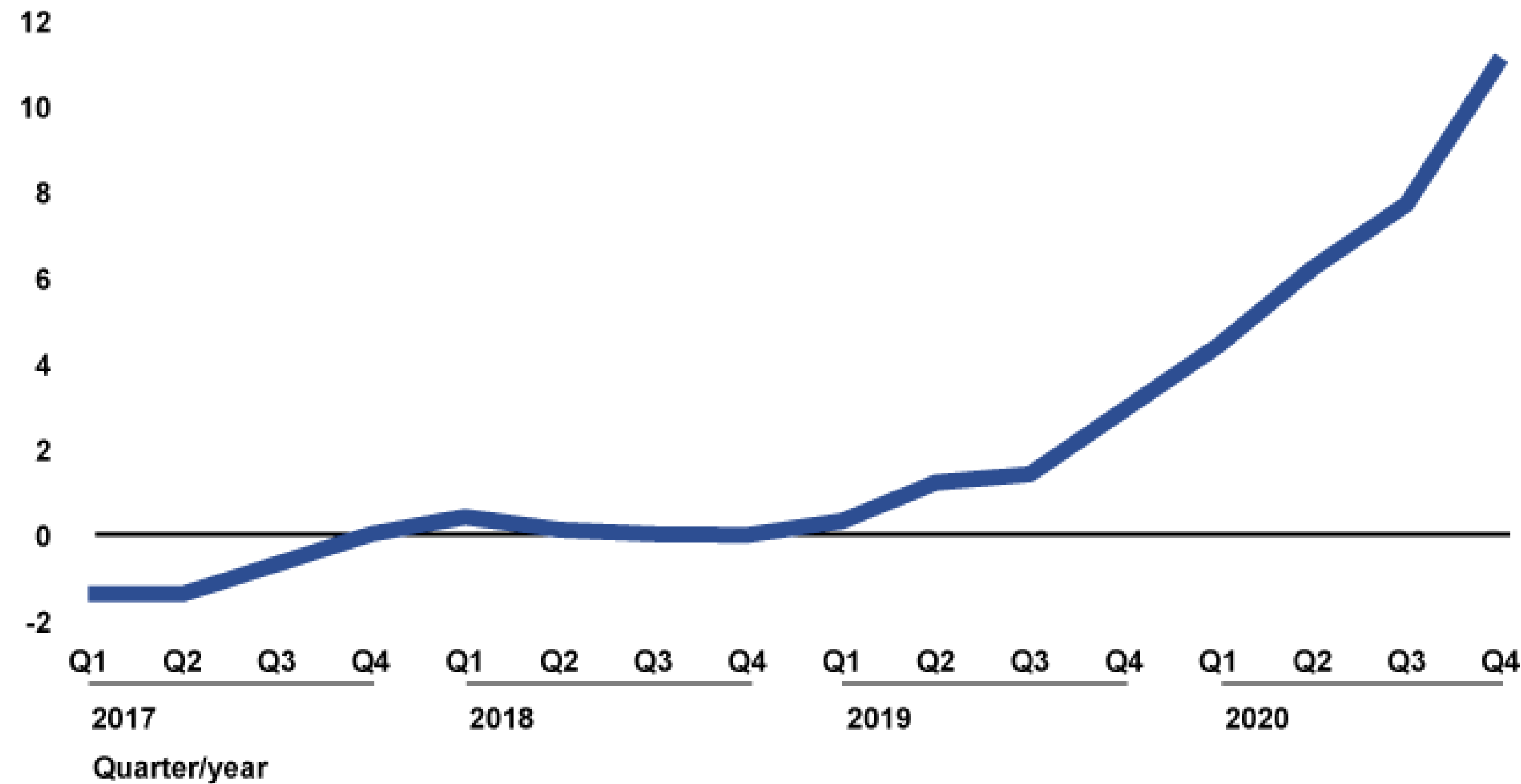
What is Driving Change in the Cyber-Insurance Marketplace?

Policyholders	Insurers
Increased volume of claims after ransomware attacks	Worsening Loss Ratios
Increased costs to recover from more sophisticated ransomware attacks	Inability to accurately understand policyholders' security posture

Sources: Panaseer Survey of 400 Global Insurers (July 2022); Sophos Cyber Insurance 2022: Reality from the InfoSec Frontline

Change in Cyber Insurance Premiums, 2017-2020

Percentage change



US GAO July 2022 Report

Hardening of the Cyber-Insurance market started in Q4, 2019

Source: GAO presentation of data from Council of Insurance Agents & Brokers. | GAO-21-477

Cyber-Insurance Market Continues to Harden

Coverage is being removed “where it hurts” – where clients believe they need it most, including business interruption and ransomware events.

“There’s not really a lot of value for them to spend that money for coverage (that doesn’t fully insure these perils).

Where ransomware or business interruption loss costs are sub-limited, co-insured, or fully removed from cyber policies they don’t feel like it’s actually protecting their operational technology risk where it may hurt the most,”

- Payal Patel

Northeast zone leader for Marsh’s cyber practice (29 June 2022)

Mondelez v Zurich

- The second count of Mondelez's claims (for \$10M) from Zurich was denied in September
- **Lesson: be careful when responding to settlement offers from your insurer**

Merck v Ace American

- Quite a few insurers settled with Merck after the initial court ruling in January declared the War or Hostile Acts exclusion to be inapplicable
- Dispute is still listed as active though – some insurers appear to be still fighting the case

Travelers Property Casualty Co. of America v. International Control Services Inc.

No. 22-cv-2145 (US Dist Ct, Central District of Illinois)

Lesson: Be Honest with your Cyber Insurer

*Inchcape Australia Ltd v Chubb
Insurance Australia Ltd*

[2022] FCA 883

RANSOMEXX

Lesson: Coverage only for Direct Losses
does *not* include coverage for
Indirect Losses

For Insurers, Losses from cyber-related events are heavy-tailed

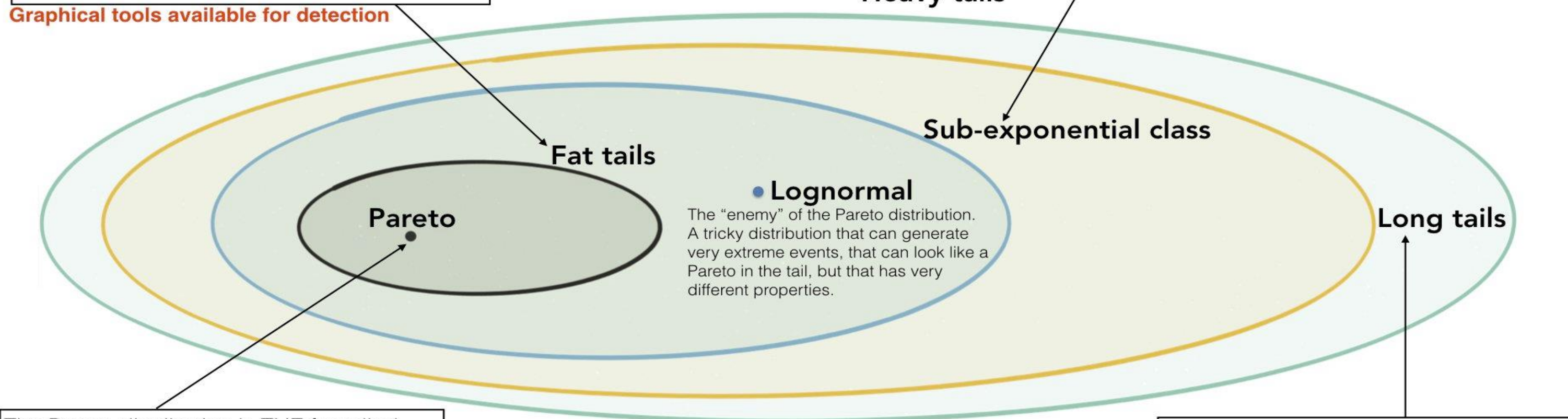
Fat-tailed distributions (technically known as regularly varying) are a class of distributions that generalize the Pareto one. Their tails mimic that of a Pareto. They are **asymptotically** (for a large number of observations) **scale invariant**. They can have infinite moments, including the mean. This is the most interesting class for modeling extreme and rare events.

Graphical tools available for detection

This is the most general class, but also the most difficult to deal with. The definition is rather technical and concerns the moment generating function. In applications, heavy tails are not easy to work with.

Graphical tools available for detection

The sub-exponential class is characterized by the **catastrophe principle**, according to which one single event generates more variability and consequences than the sum of all the others. Example: one single loss is so extreme to be more dangerous than all the other losses together.



The Pareto distribution is THE fat-tailed distribution. It is characterized by the so-called **scale invariance** principle, which also defines fractals.

Graphical tools available for detection

Not all tails are the same
A taxonomy

@DrCirillo

In long-tailed distributions if an extreme event manifests itself, the probability that a larger one will also occur (sooner or later) approaches 1. This **blow-up property** is very relevant when studying extreme and rare events.

Consequences for organisations, and suppliers of cyber security goods/services:

If your organisation cannot transfer as much risk as it had hoped to its insurer (at a reasonable price), then it can either:

- Self-insure (*risky – how resilient are you?*);
- Accept the risks and continue as normal (*even riskier*);
- Cease business activities most vulnerable to cyber attacks (can you cut the Internet out of your life?);

OR

- Invest in cyber security controls that increase your resilience capabilities so that you are less likely to suffer catastrophic losses that would otherwise have been covered by cyber insurance

Slides removed from web version.
Contact Selby@privcore.com for
further information

Questions?

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