

FARO

REPORT

Parametric Insurance *When Data Becomes the Claim*

SPECIAL ANALYSIS · INSURANCE & DATA
INFRASTRUCTURE



The industry is redefining what it means to prove a loss

Traditional insurance and parametric insurance follow different evidentiary architectures:

- Traditional: event → damage → adjustment → payment
- Parametric: event → index → payment
- The claim is not adjusted through physical verification
- The trigger is a pre-agreed, independently verifiable parameter

The innovation is not simply faster payment. It is the replacement of damage verification with **data verification**.

Traditional indemnity has physical limits

Mass events

Catastrophes, droughts and floods may generate thousands of claims at once. Adjustment capacity becomes a bottleneck.

Operational friction

Measuring each individual loss can be slower, more expensive and more contested than measuring the event itself.

Economic exposure

For sectors exposed to climate volatility, liquidity after the event may matter more than perfect indemnity after months of adjustment.

The risk remains real. The trigger changes.

Parametric insurance depends on a disciplined relationship among three elements:

- Insured: has a real economic exposure
- Index: measures the agreed event objectively
- Insurer: pays when the parameter is triggered
- Contract: links exposure, index and payout

The index does not replace the risk. **It represents it through a contractual proxy.**

Why is this not a wager?

The legal distinction is not cosmetic. A legitimate parametric policy must still preserve the insurance logic:

- Insurable interest
- Real exposure to an economic loss
- Objective and verifiable external event

Parametric insurance does not abandon indemnity. It translates it into statistical and contractual language.

The real challenge is basis risk

Basis risk appears when the index and the actual economic loss do not move perfectly together:

- Loss occurs, but the index does not trigger
- The index triggers, but the actual loss is lower
- The payout is fast, but not perfectly aligned
- The product is efficient, but never risk-free

No parametric policy eliminates risk. **It reallocates it through the design of the index.**

Without trusted data, the model does not exist

The parametric model becomes scalable when external data infrastructure becomes reliable:

- Satellite observation and geospatial analytics
- Weather stations, sensors and IoT networks
- Climate models, APIs and automated triggers
- Artificial intelligence for risk modelling and index calibration

Parametric insurance is not primarily an insurance innovation. **It is a data infrastructure innovation.**

The most complex risks are already moving

Parametric structures are gaining relevance where traditional adjustment is slow, costly or insufficiently scalable:

- Agriculture, drought and crop exposure
- Hurricanes, floods and natural catastrophe layers
- Renewable energy, infrastructure and logistics
- Reinsurance, sovereign risk and disaster liquidity

The market signal is deeper than product innovation. **It is the digitalization of evidence in insurance.**

Governance of the index matters as much as the policy

When data activates payment, supervisory attention shifts from claims handling to the integrity of the trigger:

- Who controls the index?
- How is the methodology disclosed?
- Can the data source be audited?

The more decisive the index becomes, the more critical its governance becomes. **A weak index can turn automation into regulatory exposure.**

Parametric Insurance

Insurance

≠ Damage verification

= Data verification

+ automation

+ predictive analytics

+ digital trust

- **Before underwriting:** define the index with legal and technical precision
- **Before automating:** validate the source, integrity and auditability of the data
- **Before paying:** confirm that the trigger reflects a real economic exposure
- *For decades, insurers asked whether a loss occurred. The next generation of insurance will ask whether the data can be trusted.*