RICARDO LARA
CALIFORNIA INSURANCE COMMISSIONER

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VIA EMAIL jdemediccibruneau@ceres.org

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SUBJECT: California Department of Insurance Authority and Evaluation of Parametric Products

Dear Jaclyn de Medicci Bruneau, Ph.D:

On July 30, 2026, the California Department of Insurance ("Department" and "CDI") received your request for a legal opinion regarding information and clarification on how the Department evaluates and reviews parametric products. The following General Counsel opinion letter is issued pursuant to California Insurance Code section 12921.9.[1]

Issue Presented

Do parametric products fall within the existing authority of the California Department of Insurance and if so, what are best practices for designing and implementing parametric insurance products in California?

[1] California Insurance Code Section 12921.9 states, "(a) A letter or legal opinion signed by the Commissioner or the Chief Counsel of the Department of Insurance that was prepared in response to an inquiry from an insured or other person or entity and that discusses either generally or in connection with a specific fact situation the application of the Insurance Code or regulations promulgated by the commissioner shall be made public. The department may redact the name, address, policy number, and other identifying information regarding a particular insured or other person or entity from the letter or legal opinion when it is made public.
(b) A letter or legal opinion made public pursuant to this section shall not be construed as establishing an agency guideline, criterion, bulletin, manual, instruction, order, standard of general application, rule, or regulation, as those terms are described in Sections 11340.5 and 11342.600 of the Government Code."

Summary Conclusion

Not all parametric products are parametric insurance. If parametric products meet threshold criteria for insurance, the parametric products are parametric insurance and are subject to CDI regulation and, if applicable, Proposition 103. Additionally, there are best practices for the sale and purchase of parametric insurance designed to provide assurances that consumers understand the benefits and limitations of this kind of coverage upfront, that rates are not excessive, not inadequate, and not discriminatory, pursuant to Prop. 103, and to provide consistency and clarity to insurance companies who seek to provide these products in this growing market in California.

I. Background

Parametric products are contracts that protect the contracting party against the occurrence of a specific "triggering event" by paying a set amount based on the happening or magnitude of the event, as opposed to a traditional indemnity insurance policy that pays based on the extent of the insured's covered loss or the amount of damage sustained.[2] Life insurance is a widely accepted version of an event-based product.

There is growing interest in the role and scope of parametric products as a complement to traditional indemnity insurance, particularly to address non-structural losses associated with climate-intensified disasters such as flood, fire, and extreme heat events, as well as earthquake and data breach/cybersecurity.

Parametric products are of particular interest in the immediate aftermath of a significant disaster, because payments can often be deployed swiftly without the need to undergo a detailed claims adjustment process that can leave consumers waiting for reimbursement during a time when their financial security is vulnerable and their community may be devastated. Such products can infuse resources back into the community quickly, helping to avoid downward economic spirals often observed in communities hit by major events. Increasing losses resulting from increasingly severe climate impacts continue to create challenges for consumers seeking affordable coverage in high-risk areas for numerous perils, including flooding, extreme heat, wildfire, and other catastrophe risks. As a result, California has a widening protection gap that imposes greater economic burdens on governments, households, and businesses. To help address these challenges, new strategies are needed that

[2] Parametric disaster insurance. (2023, December 21). National Association of Insurance Commissioners https://content.naic.org/cipr_topics/topic_parametric_disaster_insurance.htm.

strengthen resilience and address insurability and affordability. Parametric products have the potential to help address gaps in insurance where traditional indemnity insurance may fall short including, but not limited to, meeting indemnity insurance deductibles to help unlock access to traditional insurance benefits. Parametric products have the potential to help individuals cover expenses related to natural disasters like wildfire, flood, extreme heat, and earthquakes or other risks that may otherwise be challenging to underwrite and are not covered by their traditional indemnity policies. These types of risks are usually associated with increased complexity, wide-area impact, or costly loss assessments. There are additional benefits to parametric insurance. First, due to the need for minimal loss/damage assessments and because the payout is a set amount , parametric insurance can provide faster payouts. Additionally, these products can provide increased flexibility, in that the payouts can be used for almost anything and are not tied to living expenses or temporary repairs as with a traditional indemnity policy. Lastly, these products can reduce the risk of fraud due to their reliance on objective triggers. Parametric products provide a payment amount that is generally predetermined, standardized, and based on an independently verified trigger, minimizing opportunities for manipulation of the claims process.

These benefits, coupled with the possibility of more losses being reimbursed, less out-of-pocket costs, and upfront cost savings connected to the overall transaction, make parametric products a desirable addition to the insurance marketplace.

Since 2019, Insurance Commissioner Ricardo Lara and CDI have been committed to addressing the risks posed by climate change, and continue to push innovative insurance solutions to address those risks. Pursuant to California Insurance Code section 12922.5, Commissioner Lara established a Climate Insurance Working Group that issued a set of recommendations in 2021 to identify, assess, and recommend risk transfer approaches to reduce the risks of climate change impacts. (https://www.insurance.ca.gov/01-consumers/180-climate-change/) Among the working group's recommendations was the adoption of parametric products as a way to improve resilience to the impacts of climate-intensified perils by providing funds for unexpected disaster costs, such as the cost of evacuation, and to help state and local governments fund their own recoveries, including by replacing disrupted tax revenues and funding infrastructure rebuilding, among other costs that are not commonly covered by indemnity insurance.

Additionally, Commissioner Lara supported a pilot project in the California city of Isleton to provide community-based parametric flood insurance. The City of Isleton found itself in a situation where, due to the cost and availability of policies, more than 50% of its residents were without flood insurance, even though they were living in known flood zones. In collaboration with UC Davis and community and government stakeholders, including Commissioner Lara, the city spent over two years developing a first-of-its-kind model and funding a community-based flood insurance initiative. Community-based

flood insurance is a flexible model that positions an intermediary – such as a local government or community organization – in between the insurer and the beneficiaries. The core idea is that a community can purchase a flood insurance policy on behalf of residents to ensure more widespread financial assistance after a flood strikes.

The Department has partnered with the City of Imperial Beach on the implementation of grant funding that the City received from the California Ocean Protection Council to design an innovative insurance strategy for their community. The City is collaborating with the Department of Insurance and Scripps institution of Oceanography to understand the risk and exposure associated with coastal flooding and implementation of nature-based flood adaptation strategies. The team will continue to explore gaps in insurance, cost of action and inaction, and development of parametric insurance products to reduce risk.

Lastly, we have partnered with a number of entities, including Inclusive Action for the City, the Robert Wood Johnson Foundation, Hera (formerly Climate Resilience for All) and SwissRe to explore a parametric business interruption insurance product for street vendors in Los Angeles to address the risk of extreme heat, as well as considering the feasibility of a parametric product to insure urban forests against severe storms and emerging invasive pests.

California is not alone in taking steps to support the advancement of parametric insurance products for use by the public. Puerto Rico and the State of New York have both adopted rules defining insurance to include parametric products. In 2017, the Insurance Commissioner of Puerto Rico adopted Rule 105: Requirements for Filing and Processing Parametric Insurance.[3] In December 2024, the New York Governor signed legislation specifically authorizing parametric insurance as an official line of business in the state, subject to disclosure requirements.[4]

The California Insurance Commissioner's position on parametric products is consistent with Puerto Rico and New York.

[3] https://docs.pr.gov/files/OCS/English/Legal%20Affairs/Regulations/Insurance%20Code%20Regulations/Reglas-Rule_20105_20.pdf
[4] https://www.nysenate.gov/legislation/bills/2023/A10344

II. Discussion

A. Is it Insurance?

Not all parametric products are insurance subject to CDI regulation. In determining whether a parametric product is insurance subject to CDI regulation, CDI will consider to what extent the product meets the definition of insurance in California.

California law is currently silent as to whether parametric products meet the legal definition of insurance. California Insurance Code section 22 provides that "Insurance is a contract whereby one undertakes to indemnify another against loss, damage, or liability arising from a contingent or unknown event." The essence of insurance is that it is a contract of indemnity and is not a source of profit. (*Davis v. Phoenix Ins. Co.* (1896) 111 Cal. 409.) The essential nature of the insurance contract is shifting of risk. (*Automotive Funding Group v. Garamendi* (2003) 114 Cal. App. 4th 846.) Parametric products pay a covered policyholder upon the occurrence of an unknown event, provided the policyholder has an interest in the property covered. In short, to qualify as insurance, a parametric product must indemnify someone or organization who has an insurable interest.

California Insurance Code section 281 defines insurable interest: "[e]very interest in property, or any relation thereto, or liability in respect thereof, of such a nature that a contemplated peril might directly *damnify* the insured, is an insurable interest." (Ins. Code. § 281, italics added; See also Ins. Code § 282) [5] "[T]he measure of an insurable interest in property is the extent to which the insured might be damnified by loss or injury thereof." (Ins. Code § 284.) For a parametric product to qualify as insurance, the policyholder must stand to suffer some financial loss if the triggering event occurs. That's the insurable interest.

Some argue that parametric insurance is prohibited as a form of gambling or wagering, but that argument is not persuasive. California Insurance Code section 252 prohibits policies dependent on gaming or wagering.[6] To distinguish parametric products from gambling, most insurers require a proof of loss from the covered person before payment is made. The showing of proof required can be simple and easy to provide, such as a photo, drone image, or text message demonstrating the loss. Many providers also require a signed attestation of loss before payment is made.

[5] "Damnify" means to cause loss or damage to
[6] Insurance Code § 252 provides "A policy executed by way of gaming or wagering, is void."

So, for a parametric product to be classified as insurance, it should satisfy three legal criteria:

1. Demonstrate insurable interest: The policyholder must have an actual financial interest in the subject matter being insured (not merely an expectation) and stand to suffer a financial loss if the triggering event occurs.

2. Proof of risk transfer: The product must genuinely transfer risk from the policyholder to the insurer. The parametric trigger should be closely correlated with the policyholder's potential losses.

3. Proof of loss: Although the payout is based on the trigger event, covered persons still need to demonstrate that they have incurred a financial loss due to the event. This requirement aims to *suppress gambling* and to *curb moral hazard* by refusing to enforce insurance policies that are contrary to public policy.[7]

A parametric product that meets these legal criteria is parametric insurance subject to CDI regulation.

B. If the product is parametric insurance, it is subject to CDI regulation, the California Insurance Code, Proposition 103, and best practices.

Once a product is determined to be parametric insurance, it is subject to CDI regulation and the entire California Insurance Code, including licensing. Additionally, certain parametric insurance products are subject to Proposition 103, including requiring submission of complete rate applications for review and approval *before* transaction and use of the parametric insurance product in question.

Because parametric insurance products are relatively new to the market and operate differently from traditional indemnity insurance, these parametric insurance products must come with sufficient upfront disclosure and disclaimer information to ensure adequate consumer protection. In particular, insurers should educate consumers regarding basis risk and the fact that parametric insurance will not provide a payout unless a predetermined trigger is met.[8] Insurers should also disclose the metrics that

[7] *Wexler v. California FAIR Plan Assn.* (2021) 63 Cal.App.5th 55, 70-74. See also Ins. Code §§ 251 and 252.

[8] Basis risk in insurance refers to the mismatch between the actual financial loss experienced by a covered party and the payout that relies on objective parametes rather than direct loss adjustment. In other words, it is when the expectation of the policy from the client does not match what they thought they would be paid out. Traditional insurance often comes with similar issues created by terms that might reduce or exclude money paid upon a claim, despite client expectations, including, but are not limited to, average clauses, excesses, and exclusions.

will be used to measure when an event is triggered and clearly delineate the proof of loss they will accept before paying.

The following is recommended as best practices to ensure consistency and clarity to insurers regarding parametric insurance products, and to achieve necessary and appropriate protections for consumers:

1. Transparency
    a. Triggers should be premised on objective, verifiable, third-party data and be clearly defined, measurable, and auditable.
    b. The policy should explain to policyholders how parametric insurance differs from traditional indemnity insurance.
    c. Trigger mechanisms and payout structures should be clear to a reasonable purchaser.
    d. Product filings should include a full disclosure of how the payout will be calculated, what data sources are used, the timing of the payout, and specific information on the basis risk.

2. Minimizing Basis Risk
    a. In order to reduce basis risk, insurers should utilize high quality data and modelling.
    b. Given the near-term and future impacts of climate risk on evolving perils, periodic recalibration or review of the product is prudent.
    c. In order to limit basis risk for consumers, parametric insurance policies should be marketed and sold as complementary to, and not a replacement for, traditional indemnity insurance.

3. Consumer Protection
    a. Policyholders should be clearly informed upfront of the payout mechanism and any limitations on the payout, including the possibility that a payout may not cover their actual loss, or there may be no payout, even if they experience a significant loss, where the triggering event doesn't occur as required.
    b. Providers must design and monitor marketing materials and distribution channels to ensure that consumers are not misled and there are no misrepresentations of the products.
    c. Although there are currently no specific training requirements for parametric products as a whole, any producer, including agents, brokers, and adjusters, transacting or offering these products must comply with all existing licensing and other claims related requirements, including the prohibition against providing misleading information in connection with

policy terms, which is defined as an unfair claims practice in the California Insurance Code.[9]

4. Data Integrity, Auditability, and Depute Resolution
   a. Insurers should maintain clear documentation of trigger calculation, data source provenance, and validation methods.
   b. Insurers should provide mechanisms for policyholder recourse, such as audit rights, third-party verification, and/or rights to appeal.
   c. Insurers should be prepared to share such information with CDI in rate filings, examinations, and as part of data collections, and at any time, consistent with the Department's existing authority pursuant to Article 4 of Chapter 1, Part 2, Division 1 (commencing with California Insurance Code Section 729) and Section 12924 of the California Insurance Code.

5. General Regulatory Oversight
   a. Parametric insurance products are subject to the same prudential oversight as traditional indemnity insurance, including risk management, capital adequacy, and governance structures.
   b. Complete rate applications must be submitted for review and approval *before* transaction and use to ensure the rate is not excessive, inadequate, or unfairly discriminatory, as mandated under Prop. 103.

Conclusion

Parametric products are an important tool to narrow protection gaps in light of growing climate change issues. They can provide rapid payouts, be tailored to address specific perils, and extend coverage for losses that are often excluded from traditional indemnity insurance, such as unforeseen expenses or losses from non-damage business interruption like lost wages or revenue shortfalls. Parametric products do not require lengthy post-event loss adjustments and can reduce underwriting and loss adjustment expenses, thereby reducing premiums on consumers.

When used as a complement – not a replacement – to traditional indemnity insurance, parametric products can increase liquidity after a disaster, enhance risk management strategies, and facilitate a more comprehensive and resilient approach to protecting

[9] Insurance Code § 790.03 provides, in part: "The following are hereby defined as unfair methods of competition and unfair and deceptive acts or practices in the business of insurance. (a) Making, issuing, circulating, or causing to be made, issued or circulated, any estimate, illustration, circular, or statement misrepresenting the terms of any policy issued or to be issued or the benefits or advantages promised thereby…"

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against losses from natural catastrophes. Moreover, they can cover risks that may not otherwise be underwritten by insurers and thereby provide consumers with additional options for coverages.

Along with the benefits of parametric insurance comes the responsibility of ensuring that consumers understand the benefits and limitations of any individual policy upfront, and that the rates charged for this coverage are not excessive, inadequate, unfairly discriminatory, or otherwise unlawful.

Lastly, keep in mind that all insurance products and entities regulated by CDI are subject to the California Insurance Code and appropriate licensure by the Department is required in order to transact insurance in the state. Transacting insurance without proper authority is a violation of the Insurance Code and subject to legal action, including an Order to Cease and Desist and monetary penalties.

We trust the foregoing is responsive to your request. If, however, you have additional questions or require further information, please contact the undersigned directly.



TERESA R. CAMPBELL
General Counsel and Deputy Commissioner