Insuring CAT-Risks in These Shaky Times: The CEA’s New Financial-Diversity Initiatives

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The California Earthquake Authority

The ONLY public EQ insurer in the USA:
Publicly managed, privately financed, 100% residential risks.

>800,000 policies in force
• Largest earthquake-only insurer in USA
• 70% of earthquake-insured risks in California

Almost 10 billion USD claim-paying capacity

One of the largest buyers of reinsurance in the world
• $3 billion cover annually
CEA’s Public Management

CEA Governing Board

- Senate Rules Chair
- Insurance Commissioner
- Governor
- State Treasurer
- Assembly Speaker

- Voting member
- Non-voting member
CEA Is Privately Financed
Annual premium revenue ≈ 600 Million USD

Armed Forces Insurance
State Farm
California FAIR Plan
Golden Eagle Insurance
Liberty Mutual
USAA

Foremost
Farmers
Farmers Insurance Group

Allstate
Homesite
Commerce West

CEA California Earthquake Authority
Preserving Product Demand

• The financial crisis has made families poorer and houses worth less than their loans, and deprived many people of jobs.

• In California (as in every U.S. state), earthquake insurance is optional—only the OFFER is mandatory and ONLY in one U.S. state: California.

• How does the CEA preserve demand so successfully during a crisis?
Confidence
- Personal responsibility
- At peace
- Accomplish something important to me

Peace of mind/safety
- Personal security
- Peace of mind
- Safety

In control
- More in control
- Doing everything possible to be prepared

Survival
- Better able to move on/move forward
- Not be panicked
- Family and I less likely to be injured

Family protection
- Family and I will be safer
- I am taking care of my family

Protect Property
- Minimize property damage
- Won’t suffer financial ruin
- Protect personal items from falling and breaking

Ready and able
- Ready to react appropriately during and after
- Supplies in event of a 3-day outage

Kits and Checklists
- Emergency supplies on hand
- Have family disaster plan
- Update contact information
- Organize emergency supplies
When You Make That Shift, You Define Who You Are

<table>
<thead>
<tr>
<th>Do</th>
<th>Are</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soft drinks</td>
<td>Promoters of positive attitudes and happiness</td>
</tr>
<tr>
<td>Soap</td>
<td>Celebrators of natural beauty</td>
</tr>
<tr>
<td>Business Services</td>
<td>Champions of solving the world’s greatest problems</td>
</tr>
<tr>
<td>Theme park and movies + more</td>
<td>People who believe in magic and that <em>anything</em> is possible</td>
</tr>
</tbody>
</table>
Earthquake Preparedness
Long-Term Protection

When you are prepared and ready, you will feel more in control. You will be better able to survive, suffer less damage and injury and better able to recover and move on.

Doing these things help to prepare for an earthquake:
• Contact your homeowners insurance agent; and
• Take steps to secure your structure/protect your belongs.

When people prepare homes for earthquake they will:
• Minimize damage; and
• Prevent financial ruin.

When an earthquake hits, your family will be counting on you to get them through. You will be confident and have greater peace-of-mind knowing that you have done all you can do to prepare.

Personal Values: Confidence, Peace-of-mind / Safety

Emotional Benefits: In control, Less disruption

Functional Benefits: Protect property, No government assistance

Attributes: Actions – Insurance, Protect Structure

You can be the survival story.
Earthquake Preparedness

In-The-Moment Message Box

When you are prepared, you will feel more in control, won’t be as panicked and better able to act. You, your family will be:
- safer; and
- less likely to be injured

Doing these things could make a difference in how you survive:
- Organize / have emergency supplies on hand for 3 days;
- Have a family disaster plan;
- Update contact information; and
- Know what to do – drop, cover and hold on.

You can be the survival story.

When an earthquake hits, your family will be counting on you to get them through the moment and to help them after the event. You will be confident and have greater peace-of-mind knowing that you are ready to act and have done all you can do to prepare.

When people prepare for a natural disaster and have what they need to react, they are more likely to make it through the event, uninjured or alive.

Personal Values:
- Confidence,
- Peace-of-mind/
- Family safety

Emotional Benefits:
- In control,
- Survival

Functional Benefits:
- Have what’s needed

Attributes:
- Emergency supplies
2011 Direct Mail

CEA to Consumers:

**Personal Values** – Peace-of-mind

**Emotional Benefits** – Survive / rebuild your life, move forward, done everything possible to prepare

**Functional Benefits** – Financial resources to rebuild

**Attributes** – EQ insurance

- Reaching 1 million+ non-policyholders
- All CEA policyholders
Our policy with the CEA gave us the financial strength to rebuild! And working with our homeowners insurance agent we got back to normal.
# 2011 TV Public Service Announcements

## California Earthquake Authority

### CBS Promo Tip Script

1. **(00)** Weather Personality on camera:
   - "I know that preparing to survive and recover from California's next damaging earthquake will help keep all of us safe."

2. **(05)** Station Website Graphic:
   - "Learn about the simple steps we can take to get ready at CBS Sacramento Dot Com, or Station Website."

3. **(10)** Weather Personality on camera:
   - "Preparing today also will help us get back to normal sooner after the next big quake strikes."

4. **(15)** End graphic with "Sponsored by - CBS logo":
   - "Let's work together to be one of the (region's) next earthquake survivors stories."

5. **(20)** Station Voice Over:
   - "This message is sponsored by the California Earthquake Authority – the Strength to Rebuild."

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**Time** | **Video** | **Audio**
--- | --- | ---
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California Residential (EQ-Loss) Mitigation Program

- Mitigation Program since March 2009:
  - Scoping sessions statewide
  - Based concept on *Project Impact* (USA - FEMA)
  - Established in California’s *State Multi-Hazard Mitigation Plan*
  - Adopt first-ever related California Building Code
  - Hired “CMO” - chief mitigation officer
  - Established Joint Exercise of Powers Agreement (JPA) with California’s *Emergency Management Agency*
CEA’s Current Risk Transfer

2011 CEA Financial Structure

Rating Agencies:
• Require 1-in-500 year capacity

Reinsurance:
• Costs CEA about $200 Million each year
• Comprises 2/3 of CEA’s overall expenses
• Absorbs 40 percent of policyholder premium

Costs borne by consumers:
• Expensive premium
• High deductible (15 percent)

Total: $9.5 Billion
CEA’s Current Risk Transfer

1996-2011:
• CEA policyholders have paid $6.77 billion in premium
• CEA has paid $2.92 billion in reinsurance premium
• CEA has received $250,000 in paid reinsurance claims

Premium Received: $6.77B

$2.92 Billion Paid to Reinsurers

$2.58 Billion Accumulated as CEA Capital

$1.34 Billion: Other Expenses Paid*
• Agent Commissions
• Debt Financing
• Participating Insurer Fees
• CEA Operations

Paid to Reinsurers: $2.92B

$2.92 Billion for Reinsurance

Reinsurance claims paid to CEA: $250,000

CEA now developing additional efficient risk-transfer solutions.
CEA’s New Transformer Reinsurance Program

The CEA has accomplished **four key objectives**:

1. Accessing the **capital markets** for risk-transfer — diversifying risk-transfer counterparties.
2. Risk transfer at a **lower price** than traditional-reinsurance pricing. CEA risk only - **no traditional reinsurer** in the deal.
3. A **repeatable** deal and reinsurance contract for the future.
4. A multi-year (3 years), fully collateralized contract with Embarcadero Re.
CEA’s New Transformer Reinsurance Program

The CEA is always exploring additional sources of risk transfer to **diversify its risk-transfer** capacity. CEA seeks the highest-quality financial products, at the **best terms** and at the **lowest possible cost**.

Embarcadero Re

- Newly-formed Bermuda exempted company, licensed as a special-purpose reinsurer.
- Transfer earthquake risk to capital market.

Capital Markets

- Direct access **without use of traditional reinsurer**.
- Repeat issuances diversify CEA claim-paying resources.
- Manage price shocks from traditional reinsurance market.

The new transformer-reinsurance is provided by a contract that expressly allows the reinsurer to pass the CEA’s risk to the capital markets. This type of transaction is commonly referred to as a **transformer reinsurance catastrophe bond transaction**.
CEA Transformer - Reinsurance Structure

- California Earthquake Authority
- Reinsurance / Collateral Agreement
- Premiums
- Claim Payments
- Financial Funding
- Special Purpose Reinsurance Vehicle
- Reinsurer
- Notes: Interest & Principal
- Proceeds
- Capital Markets Investors
- Trust Claims Payments/Collateral Agreement
- Return on Capital
- Proceeds
- Trust Claim Payments

Collateral Trust Account
“Cedent’s View” of the CAT-Bond Market

- **Repeatable / Multi-year / Less costly.** Risk transfer that’s less costly than traditional reinsurance. Similar deals can access capital markets every four to six months, as long as investors interested.

- **Indemnity transfer.** Transformer CAT Bond 100% transferred CEA risk/losses to capital-market investors in a single tranche of $150 million.

- **Fully collateralized reinsurance.** Provided through CAT bond proceeds, giving 100% of limit in form of *on-shore security* to back the transformer-reinsurance transaction.

- **Diversification opportunity** for insurance-linked-security investors.

- **Repeatable / Scalable.** Use same structure for future deals — easier for investors to understand, accept terms — builds investor base to increase market capacity for follow-on deals.
CEA’s View: Why Cat-Bond Market Has Not Grown

- Each CAT bond transaction has been unique.
- Difficult to transfer risk in a way that benefits cedent.
- Difficult to find firms that will structure transaction to meet cedent’s needs directly.
- Cost for CAT bond transactions are high, pricing at highest indicated levels.
U.S. Congress is considering new law to authorize U.S. Treasury to create a limited federal guarantee of principal and interest for post-event bonds issued by eligible public earthquake-insurance programs.

Proposal limits total federal guarantee to 5 billion USD.

Other U.S. states may consider creating CEA-type insurance programs.
Risk Management Through
**Diversified Risk-Transfer**

Access to capital markets and post-event bonding capability will allow CEA to offer higher-value coverage AND will strengthen CEA’s sustainability.
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