

Obsessed to a Fault

- *Wall Street Journal*, Liam Plevin
April 19, 2006

The map on the computer screen inside GeoVera Holdings Inc. 's headquarters here glows red and orange to mark where the San Andreas Fault ruptured 100 years ago today, killing at least 3,400, knocking down city block after city block and spawning fires that burned down much of San Francisco.

The 1906 quake did \$235 million in damage -- worth nearly \$5 billion today -- wiping out the U. S. insurance industry profit for the preceding 47 years, according to Swiss Re, a major reinsurer. Today, the disaster insurance market in California is in many ways broken down. Some experts think a repeat of the 1906 quake could lead to damages of far greater than Hurricane Katrina, which cost insurers about \$40 billion. Yet less than 15% of California homeowners own quake insurance. Many find coverage too expensive and are willing to take their chances.

"An earthquake in San Francisco is probably the worst thing that can happen," says Thomas Wilson, president of Allstate Corp.

GeoVera, among the largest sellers of quake insurance to homeowners on the open market in California, is trying to buck the trend and make a profit at the same time. About 40% of its business -- worth roughly \$100 million in annual premiums -- comes from selling quake insurance there. "What sets us apart is our focus on catastrophe underwriting. That's all we do," says Kevin Nish, chief executive of the privately held company, which was spun off last year from St. Paul Travelers Cos.

The company is a case study in the broader economics of disaster insurance. In the wake of last year's hurricanes, many private insurers are pulling away from disaster-prone areas, arguing they're not allowed by state regulators to charge enough to offset potential losses. States have been trying to fill the void, but often with limited effectiveness. Florida's state-backed insurer-of-last-resort, for instance, faces a \$1.7 billion deficit. In California, a number of firms, such as State Farm Insurance Cos. and Allstate, only write earthquake insurance through a state-run entity that caps their losses.

GeoVera executives believe they can use their brains -- by devouring data on the homes it insures, and keeping a close eye on the location of its customers and the type of coverage they're buying -- to make the company profitable.

It relies on the expertise of employees such as Mr. Nish, who is a mechanical engineer, and Nesrin Basöz, GeoVera's vice president for catastrophe risk management and research. Ms. Basöz, who has a doctorate in structural engineering, joined a team of American experts to survey the damage from a 1999 quake in her native Turkey that killed more than 17,000.

"It's unreal, the force," she says.

At GeoVera, she and her colleagues analyze mounds of information about the 115,000 homes the company

insures: What are they made of? When were they built? What types of foundations do they stand on? How solid is the soil beneath them? Are they on a slope? How close are they to California's 200-odd active faults?

The answers they get help them to monitor GeoVera's exposure and to predict potential losses. Wood homes absorb shocks better than brick homes. Soft soil can magnify shock waves. So can steep slopes.

At least once a month, Ms. Basöz and her colleagues run the company's policies through models that show where its risk is concentrated and predict losses. The models indicate that a 1906 rerun would be "Comfortably within our loss expectation and our capital structure," says Mr. Nish.

"ShakeMaps," produced by the U. S. Geological Survey, help them refine those estimates by showing how past quakes affected people and buildings in areas where they have customers today. The research also helps GeoVera choose what levels of coverage to offer in different areas, though company executives declined to disclose the process in detail.

Many of GeoVera's customers have substantial equity in their homes. Robert Krol and Shirley Svorny, economics professors at California State University, Northridge, say they've got too much at stake to forgo coverage. "There are people who could walk away, but we own our home outright," says Mr. Krol.

In many ways, California's market has been shaped by the economic aftershocks of another earthquake, the 1994 Northridge quake, which cost insurers roughly \$15 billion in losses and killed 61.

The state has long required insurers that sell homeowners policies to offer separate quake policies. But after Northridge, some companies balked at writing new homeowners policies, for fear of having to offer earthquake coverage and potentially leaving themselves overexposed.

California responded by allowing sales of scaled-down policies for earthquakes, with a 15% deductible, a \$5,000 cap on damage to a home's contents and \$1,500 for living expenses. To encourage companies to keep selling regular homeowners policies, the state also formed the California Earthquake Authority, which limits what participating insurers have to pay in quake damages.

But Californians are buying less coverage. Since Northridge, participation has fallen by roughly half, to less than 15% of the state's homeowners today. While cost is part of the reason, experts believe that many homeowners are counting on government help in case of disaster.

"There's a real problem because we tend to bail people out if they don't buy insurance," says Richard Zeckhauser, professor of political economy at Harvard University. "That doesn't mean that everybody gets bailed out every time. "

The average policy written through the authority costs \$704 a year, though some customers can spend more than \$1,000. Roughly two-thirds of Californians who do buy quake insurance do so through the authority, about 753,000 homeowners.

GeoVera, which sells few homeowners policies in California, chooses to operate outside the system. Although it offers a plan similar to the authority's basic policy, most GeoVera customers buy extra coverage. "I welcome them in the market," says John Garamendi, California's insurance commissioner. "However, they are able, unlike the CEA, to be selective in who they insure. "

GeoVera's rates, which haven't changed in years, are approved by the state, and it says it rarely turns customers away. "We have remained open for business pretty much throughout the state," says Mr. Nish.

Some economists say companies like GeoVera can help to fill the growing disaster insurance void in the future.

"The private sector can do a great deal more than it's doing now," says Howard Kunreuther, a risk management expert at the Wharton School of the University of Pennsylvania -- if insurers can spread their risk, charge suitable rates and buy enough reinsurance, which is essentially insurance for insurance companies.

For now, there are few insurers rushing into the market. "Could another [private] company come by and do the same thing?" Mr. Nish asks. "Absolutely."

Write to Liam Plevin at Liam.Plevin@wsj.com

[Back to Top](#) | [Stop Loss & Reinsurance Home](#)

Copyright 2005 HealthDecisions.org