



Highlights of [GAO-07-285](#), a report to the Committee on Homeland Security and Governmental Affairs, U.S. Senate

CLIMATE CHANGE

Financial Risks to Federal and Private Insurers in Coming Decades Are Potentially Significant

Why GAO Did This Study

Weather-related events have cost the nation billions of dollars in damages over the past decade. Many of these losses are borne by private insurers and by two federal insurance programs—the National Flood Insurance Program (NFIP), which insures properties against flooding, and the Federal Crop Insurance Corporation (FCIC), which insures crops against drought or other weather disasters.

GAO was asked to (1) describe how climate change may affect future weather-related losses, (2) determine past insured weather-related losses, and (3) determine what major private insurers and federal insurers are doing to prepare for potential increases in such losses. In response, among other things, GAO reviewed key scientific assessments; analyzed insured loss data; and contacted private insurers, NFIP, and FCIC.

What GAO Recommends

GAO is recommending that the Secretaries of Agriculture and Homeland Security analyze the potential long-term fiscal implications of climate change for the FCIC and the NFIP, respectively, and report their findings to the Congress. In commenting on a draft of this report, the two agencies agreed with the recommendation. The Departments of Agriculture and Commerce made comments and suggestions on the presentation of several findings. The Department of Energy elected not to comment.

www.gao.gov/cgi-bin/getrpt?GAO-07-285.

To view the full product, including the scope and methodology, click on the link above. For more information, contact John Stephenson at (202) 512-3841 or stephensonj@gao.gov.

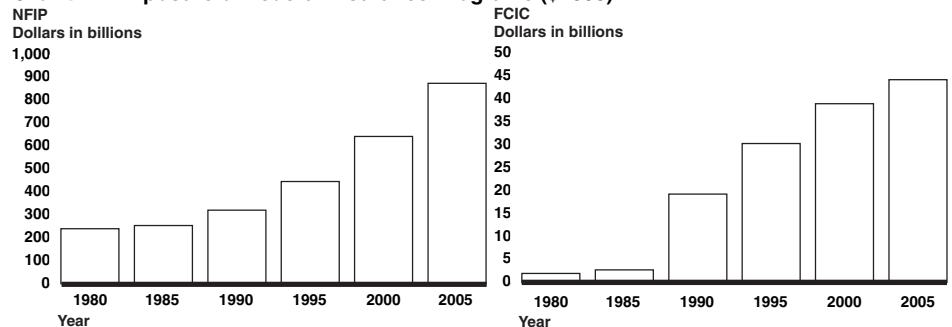
What GAO Found

Key scientific assessments report that the effects of climate change on weather-related events and, subsequently, insured and uninsured losses, could be significant. The global average surface temperature has increased by 0.74 degrees Celsius over the past 100 years and climate models predict additional, perhaps accelerating, increases in temperature. The key assessments GAO reviewed generally found that rising temperatures are expected to increase the frequency and severity of damaging weather-related events, such as flooding or drought, although the timing and magnitude are as yet undetermined. Additional research on the effect of increasing temperatures on weather events is expected in the near future, including a highly anticipated assessment of the state of climate science this year.

Taken together, private and federal insurers paid more than \$320 billion in claims on weather-related losses from 1980 to 2005. Claims varied significantly from year to year—largely due to the effects of catastrophic weather events such as hurricanes and droughts—but have generally increased during this period. The growth in population in hazard-prone areas and resulting real estate development have generally increased liabilities for insurers, and have helped to explain the increase in losses. Due to these and other factors, federal insurers' exposure has grown substantially. Since 1980, NFIP's exposure quadrupled, nearing \$1 trillion in 2005, and program expansion increased FCIC's exposure 26-fold to \$44 billion.

Major private and federal insurers are both exposed to the effects of climate change over coming decades, but are responding differently. Many large private insurers are incorporating climate change into their annual risk management practices, and some are addressing it strategically by assessing its potential long-term industry-wide impacts. The two major federal insurance programs, however, have done little to develop comparable information. GAO acknowledges that the federal insurance programs are not profit-oriented, like private insurers. Nonetheless, a strategic analysis of the potential implications of climate change for the major federal insurance programs would help the Congress manage an emerging high-risk area with significant implications for the nation's growing fiscal imbalance.

Growth in Exposure of Federal Insurance Programs (\$2005)



Source: GAO.