

## Financing Catastrophic Risk: Summary of the Homeowners' Defense Act of 2009 (S. 505 and H.R. 2555)

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## Summary

In the aftermath of Hurricane Katrina in 2005, the demand for homeowners' insurance in Atlantic and Gulf Coast states has outpaced supply, leaving policymakers and insurance regulators struggling to find ways to enhance insurer capacity to underwrite business in catastrophe-prone areas. While a consensus has yet to emerge, many insurance analysts would maintain that probable maximum losses associated with mega-catastrophes, above a 1-in-100 year expected return frequency, are beyond the global insurance and reinsurance industry's capital asset capacity. Insurers and policymakers are now pursuing alternative forms of risk transfer, such as securitization. While the securitized insurance risk market remains modest compared to traditional reinsurance, the number and value of catastrophe bond transactions increased dramatically after the 2005 hurricane season. As one would expect with a relatively new market, insurer and investor preferences as to form and structure of insurance-linked securities (ILS) continue to evolve. Investors tend to want to fully understand the nature of risk they assume while insurers tend to want to transfer at least some risks that are not easily quantified.

On February 27, 2009, Senator Bill Nelson introduced the Homeowners' Defense Act of 2009 (S. 505) that would establish a non-profit corporation, the National Catastrophe Risk Consortium, to allow eligible state insurance programs to voluntarily pool their catastrophic property insurance risk and transfer that risk to the capital markets through the issuance of insurance-linked securities (ILS). S. 505 would also establish two new federal direct loan programs – a liquidity loan and a catastrophe loan—within the Department of the Treasury for state catastrophe reinsurance programs. Liquidity loans would be available if a program faces a liquidity shortage following a natural disaster and is not able to access short-term capital at a reasonable rate in the private market. Catastrophe loans would be available if losses exceed 150% of the aggregate amount of premiums assessed for private property and casualty insurance issued in the state over the previous 12-month period. S. 505 would not establish an explicit federal reinsurance fund or authorize mitigation grants to states and local government.

On May 21, 2009, Representative Ron Klein introduced a similar measure (H.R. 2555), in terms of the Consortium, but different in that it would: (1) establish a federal natural catastrophe reinsurance fund to provide reinsurance coverage to eligible state programs; (2) create a catastrophe obligation guarantee program that guarantees debt issued by eligible state programs; and (3) provide for mitigation grants to state and local governments. The reinsurance and debt guarantee program would be established in the Treasury. The mitigation grants would be issued by the Department of Housing and Urban Development (HUD).

Proponents of a national catastrophe financing facility maintain that such a mechanism would: (1) facilitate the flow of private capital to state-sponsored insurance facilities; (2) expand private sector capacity to write business in exposed areas; and (3) stabilize the property insurance market following significant catastrophes. Critics, on the other hand, maintain the Consortium would encourage states to unnecessarily create catastrophe funds in order to access federal catastrophe risk reinsurance. Moreover, critics conclude that states are already free to pool risks and access the capital markets and, therefore, a federal program is not necessary.

This report will be updated as events warrant.

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## Natural Catastrophe Risk and Financing

The risk of a natural catastrophic event occurring in the United States is continuous and will likely increase in the future given that coastal area populations continue to increase and infrastructure continues to grow denser. Insurers, and ultimately reinsurers, support most of the financial costs of natural catastrophes. The potential destruction and economic (i.e., both insured and uninsured) damages from a mega-catastrophic event, however, is arguably beyond the resources of the private insurance and reinsurance markets. Private insurance capacity is limited. Hurricanes Katrina, Rita and Wilma in 2005 put both the national and the state relief, as well as the insurance regulatory framework, to an unprecedented test.

The issue of insurability of natural catastrophic risks and extreme events has generated widespread public attention and concern. There is no consensus as to whether any particular approach to expanding private market capacity to insurer catastrophic risks will work because of the unique nature of such risks and the financial challenges in compensating disaster victims. Some call for government intervention in insurance markets. Others express concerns about displacing the private insurance and reinsurance industry with a costly and less efficient federal government financing mechanism.

Since the early 1990s, policymakers have known that traditional insurance and reinsurance mechanisms face major challenges in coping with natural catastrophic risks. Economists observe that private insurance may not always be available or affordable because insurers might not have the claims-paying capacity to finance such risks, and they lack the ability to accurately predict risk and spread risk both geographically and over time.

Economists indicate that the risk of accumulation of insured catastrophe losses is very high given the correlation of risk exposures in a single event, say a major earthquake or hurricane. Insurers also face adverse selection in that only those facing a risk of loss will purchase the coverage. This situation reduces the insurer's ability to, again, spread the risk geographically. Moreover, the effectiveness in spreading catastrophic risks globally is limited because extreme risks occur in many places around the world and risk averse individuals and companies are all seeking coverage from the same limited global catastrophe reinsurance market.

Financial markets have become a viable alternative to traditional reinsurance. Immediately after the devastation caused by the 2005 hurricane season, reinsurance rates soared and availability contracted – a situation that led insurers and reinsurers to explore innovative ways to transfer catastrophic risk directly into the capital markets through the issuance of catastrophe bonds and other insurance linked securities (ILS) and derivatives. These instruments have become a viable and active option because of the high cost of catastrophe reinsurance and an emerging belief among many insurance market analysts that the probable maximum losses associated with megacatastrophes now exceed the amount of capital the global insurance and reinsurance industry will be able to provide to cover insured loses above the 1 in 100 year expected return frequency. Capital markets have financial capacity that is much larger in magnitude than the insurance/reinsurance industry. Questions remain, however, about what form and structure of insurance securitization would ultimately be viewed most favorably by investors and at what point the ILS market reaches "critical mass" sufficient to broaden investor interest. Investors will likely want to understand the nature of catastrophic risk they assume before seriously considering new investment opportunities in the area of securitized insurance risk.

## Summary of H.R. 2555/S. 505

On February 27, 2009, Senator Bill Nelson introduced the Homeowners' Defense Act of 2009 (S. 505) which would establish a non-profit corporation, the National Catastrophe Risk Consortium, to allow eligible state insurance programs to voluntarily pool their catastrophic property insurance risk and transfer that risk to the capital markets through the issuance of insurance-linked securities (ILS). S. 505 would also establish two new federal direct loan programs – a liquidity loan and a catastrophe loan—within the Department of the Treasury for state catastrophe reinsurance programs. Liquidity loans would be available if a program faces a liquidity shortage following a natural disaster and is not able to access short-term capital at a reasonable rate in the private market. Catastrophe loans would be available if losses exceed 150% of the aggregate amount of premiums assessed for private property and casualty insurance issued in the state over the previous 12-month period. S. 505 would not establish an explicit federal reinsurance fund or authorize mitigation grants to states and local government.

On May 21, 2009, Representative Ron Klein introduced a similar measure (H.R. 2555), in terms of the Consortium, but different in that it would: (1) establish a federal natural catastrophe reinsurance fund to provide reinsurance coverage to eligible state programs; (2) create a catastrophe obligation guarantee program that guarantees debt issued by eligible state programs; and (3) provide for mitigation loans to state and local governments. The reinsurance and debt guarantee program would be established in the Treasury. The mitigation grants would be issued by the Department of Housing and Urban Development (HUD).

#### Title I (H.R. 2555/S. 505) – National Catastrophe Risk Consortium

Both H.R. 2555 and S. 505 would establish a National Catastrophe Risk Consortium to help homeowners prepare for and recover from the damages caused by natural hazards, stabilize the catastrophe insurance market, and avoid widespread insurer insolvencies after a mega-catastrophe by encouraging the creation of state catastrophe funds to complement homeowners insurers' current reliance on private reinsurance. The Consortium would facilitate the transfer of some of the aggregated catastrophe risks assumed by individual state insurance facilities into the capital market or arrange for the risks to be reinsured in the global reinsurance market.

Operationally, the Consortium would be established to carry out six primary objectives: (1) gather and maintain an inventory of catastrophe risk obligations held by state reinsurance funds and state residual insurance market entities; (2) serve as a centralized repository of state risk information that can be assessed by private-market participants interested in underwriting ILS; (3) use a catastrophe risk database to perform research and analysis that encourages standardization of the ILS market; (4) serve as a conduit for the issuance of securities and other financial instruments linked to catastrophe risks; (5) coordinate reinsurance contracts between participating reinsurance funds and private parties; and (6) perform any other functions deemed necessary to aid in the transfer of catastrophe risks from state reinsurance programs to private parties.

**Figure 1** at the end of this report illustrates how the National Catastrophic Risk Consortium would operate by transferring catastrophic property risks from state reinsurance and state residual insurance market entities to the capital markets. First, homeowners would purchase coverage from a traditional homeowners' insurer or state residual insurance market entity. Second, the primary insurer or state-sponsored insurance entity would then cede (i.e., reinsure) all or a portion of the catastrophe risks to a state qualified reinsurance program (QRP). Third, the QRP would

utilize the Consortium as an intermediary or facilitator to transform the catastrophe risk into marketable insurance-linked securities (ILS) or to coordinate reinsurance contracts. Fourth, investors (e.g., fixed income money managers, hedge funds, banks) in the capital market would purchase the ILS (catastrophe bonds) with the help of investment professionals.

The bills would vest the Consortium with certain legal, regulatory, and contractual powers similar to other corporations. For example, the entity could sue and be sued in any court of competent jurisdiction. It could also enter into contracts and other agreements with any individual or other private or public entity, allow for the authorization of obligations, employ and fix the compensation of employees and officers, lease and own property (real, personal, or mixed), and accept gifts or donations of services.

The Consortium would be chaired by the Secretary of the Treasury and governed by a Board of Directors including the Secretary of Homeland Security, Secretary of Commerce, and one representative from each state participating in the Consortium. Consortium personnel would be prohibited from conflicts of interests and personally benefitting from the corporation. The Consortium would also hire professional staff to track state insurance risk obligations, and coordinate the issuance of ILS with private capital market participants. Under the provisions of H.R. 2555, Congress would authorize the Consortium \$20 million in operating capital for each of five years, 2010 through 2014.<sup>1</sup>

#### Title II (H.R. 2555) – Catastrophe Obligations Guarantees

H.R. 2555 would authorize the Secretary of the Treasury to establish a guarantee program for debt issued by eligible state insurance and reinsurance programs set up to assist in the financial recovery from natural catastrophes. The Treasury would charge a fee for each guarantee that could not exceed 0.5% of the outstanding indebtedness covered by each guarantee. The fee would cover the administrative costs and probable losses on the guaranteed obligations covered by the commitment to guarantee. The state programs must be authorized by state law as an insurance company that offers residential property insurance coverage or a reinsurance program created to enhance the private insurance market that offers residential property insurance coverage.

The total federal debt obligations guaranteed would be \$5 billion for eligible state programs that cover earthquake peril and \$20 billion for all other perils. The debt guarantee funds can be used by the state program only to pay the cost of issuing debt, insured losses and loss adjustment expenses incurred by the state program.

The Treasury's commitment to guarantee is for a period of three years with the possibility to extend the guarantee commitment one year on the annual anniversary of the issuance of the commitment to guarantee. To be eligible for the guarantee, the state program must submit a report outlining how it will repay the debt. The state would be prohibited from using federal funds to repay the debt. The maximum term of the debt issued by the state may not exceed 30 years.

Conditions for the eligible state program to secure the federal guarantee include (1) a showing that expected insured losses under the state program will not exceed the state program's available cash resources; and (2) a limit on the amount of the state-issued debt of 80% of the qualifying

<sup>&</sup>lt;sup>1</sup> S. 505 would authorize \$20 million for each of fiscal years 2010 through 2015.

assets of the state program as stated in the state's most recent quarterly financial statement filed with the state insurance regulator.

# Title II (S. 505)—National Homeowners' Insurance Stabilization Program

Proponents of S. 505 contend that the legislation is based upon the "actuarial" view that catastrophe risks are uninsurable – except when you take a long run risk financing perspective. Thus, the federal government would function as a "lender of last resort" to the insurance industry in exactly the same way the Federal Reserve provides temporary emergency liquidity to the banking industry. A federal liquidity (loan) program would presumably address the pattern of loss over time where insurers have difficulty matching losses each year with premiums received in that year. That is, insurers collect a more or less consistent premium each year for catastrophes but pay out catastrophe losses sporadically. In theory, because the government can take a long run view by borrowing to pay for catastrophes after an event, proponents maintain that the "timing risk" problem becomes manageable through a catastrophe fund program. The idea behind Consortium appears to be to mitigate some of the post-event catastrophe fund assessment burden on taxpayers by transferring some amount of the post-event debt-risk to the pre-event capital markets.

S. 505's loan program would provide two types of loans: liquidity loans and catastrophe loans. The purpose of these loans would be to: (1) ensure the claim-paying ability of QRP; (2) improve the availability and affordability of homeowners' insurance, and (3) spread the catastrophic risk over time and across a broader base through post-event borrowing. The Secretary of Treasury would enter into these lending arrangements with QRP upon the request of the state-sponsored insurance program after assurances that the program cannot access capital in the private lending capital markets.

#### Liquidity Loan

Under the Liquidity Loan Program, the Treasury Secretary would be required to find that a QRP has a capital liquidity shortage and is unable to obtain capital at effective rates of interest lower than those offered in the private market. Liquidity loans would have a duration of 5-10 years and bear an interest rate 3% higher than that of marketable obligations of the Treasury debt with a comparable maturity as a loan issued during the most recently completed month. Loan amounts for the reinsurance program cannot exceed the "ceiling coverage level" established by the Treasury Department.

#### Catastrophe Loans

These loans are available to QRPs following a catastrophic event that results in insured losses that exceed 150% of the aggregate amount of a participating state's direct written premiums for privately issued property and casualty losses during the calendar year preceding such event. The loan amount cannot exceed the amount by which the insured losses exceed the "ceiling coverage level" of the QRP. Catastrophe loans would be provided for 10 years or more at an annual interest rate 0.2% points higher than marketable obligations of the Treasury having a term to maturity of 10 years. The term to maturity of catastrophe loans could be extended under the same circumstances and conditions as liquidity loans.

#### Qualified Reinsurance Programs

To be a qualified state or regional program, the state authorizing the facility must have a "material, financial interest" in the facility. The facility must: (1) provide reinsurance coverage to primary insurers for "all personal real property and homeowners lines of insurance"; (2) have a governing body the majority of which are public officials; and, (3) comply with Treasury regulations which may include the regulation of organization, financial requirements, underwriting, and holding company requirements, anti-concurrent clauses, and cost savings for consumers.

#### States Without Qualified Reinsurance Programs

During the first five years after enactment, states without a QRP would be eligible to participate in the National Homeowners' Insurance Stabilization Program through their residual insurance market entity until they create a qualified reinsurance program, provided the state residual insurance market entity is in place before enactment of the legislation. The Secretary of the Treasury would be authorized to make a catastrophe loan to a Fair Access to Insurance Requirements (FAIR) Plan, or a Beach and Windstorm plan, or to a state or regional reinsurance plan if: (1) the facility cannot borrow at a lower rate in the private market; (2) the facility sustains a loss in excess of 150% of its prior year's homeowner's premium; (3) the state co-signs the loan with the borrowing facility; (4) the rate of the loan exceeds the amount available to qualified reinsurance programs; and (5) the term to maturity of the loan is shorter than the term available to qualified reinsurance programs.

#### Title III (H.R. 2555)—Federal Natural Catastrophe Reinsurance Fund

Both H.R. 2555 and S. 505 include a provision to allow state QRP to purchase one-year excessof-loss reinsurance contracts from the Treasury Department. The contracts only would pay in a 200-year (0.5% chance of occurring) catastrophic event up to 90% of insured losses in excess of aggregate retained losses that the contract requires. The maximum aggregate federal liability under the reinsurance program is \$200 billion in any single year for all contracts for reinsurance coverage. The federal reinsurance coverage would be priced on an actuarially-sound basis and not crowd out or compete with the private market.

#### Title IV (H.R. 2555) – Mitigation Grant Programs

H.R. 2555 would authorize the Secretary of the Department of Housing and Urban Affairs (HUD) to establish a mitigation grant program to develop, enhance, and maintain programs that prevent and mitigate losses from natural catastrophes.

#### Title V (H.R. 2555) – General Provisions

Section 501 requires qualified state program be exempt from federal income taxation. H.R. 2555 also includes general provisions to: (1) encourage and support programs to mitigate losses from natural catastrophes, including the enforcement of nationally recognized model building, fire, and safety codes; (2) prohibit cross-subsidization between any separate property and casualty

insurance lines covered under the state program; (3) ensure that premium rates are actuarially based to cover expected claims and loss adjustment expenses; (4) ensure the eligible state program complies with risk-based capital requirements established by the Secretary in consultation with the National Association of Insurance Commissioners (NAIC); and (5) ensure that each eligible state program submits a report to the Treasury identifying its risk-based capital (i.e., policyholders surplus).

## Conclusion

The 111<sup>th</sup> Congress is considering legislation, the Homeowners' Defense Act of 2009 (H.R. 2555 and S. 505), to enhance the capacity of eligible state insurance programs to manage and finance recovery costs of natural catastrophes. The bills have only one key provision in common—the creation of a National Catastrophe Risk Consortium to allow states to aggregate natural catastrophic risks and transfer some of that risk directly to capital market investors.

Proponents of a national catastrophe financing facility maintain that such a mechanism would: (1) facilitate the flow of private capital to state-sponsored insurance facilities; (2) expand private sector capacity to write business in exposed areas; and (3) stabilize the property insurance market following significant catastrophes. In other words, this facility would give states access to additional liquidity to enhance their claims-paying ability in the event of a mega-catastrophe or a series of very large events.

Critics of the proposal believe that the Consortium would unnecessarily encourage states to create catastrophe funds in order to access federal catastrophe risk reinsurance. They insist that natural catastrophe risk is insurable and is best left to the private marketplace and a federal reinsurance fund would encourage cross-subsidies among taxpayers in the states because only Florida has a state catastrophe fund in place. Moreover, critics conclude that states are already free to pool risks and access the capital markets and, therefore, a federal program is not necessary. Some have also expressed concern that the creation of a federal not-for-profit corporation (the Consortium) to coordinate the securitization of catastrophe risks may imply a federal guaranty of the performance of the catastrophe bonds, which would result in a federal subsidy for certain state insurance programs and policyholders and potential exposure of taxpayer money.



Figure I. National Catastrophe Risk Consortium, as Proposed in S. 505 and H.R. 2555

**Source:** Congressional Research Service.

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