



**FLORIDA CATASTROPHIC STORM
RISK MANAGEMENT CENTER**

The COLLEGE of BUSINESS • FLORIDA STATE UNIVERSITY

**Subsidies in the Property
Insurance Market**

Definition

A government-directed intervention that alters the price of the good artificially should be recognized as a subsidy* .

*Porter, Gareth, "Natural Resource Subsidies, Trade, and Environment; The Case of Forests and Fisheries," *Journal of Environment and Development*, vol. 6, no. 3, September 1997

Subsidy Concepts

- Direct (explicit) Subsidies
 - Direct subsidies involve direct payments to producers. (Example: Agriculture)
- Cross Subsidies
 - Some customers pay more so other customers receive the product for less than cost.*
(Example: Utilities)

*Richard Posner, Taxation by Regulation.

Subsidy Concepts

Temporal dimensions of subsidies:

- Benefits provided in the present.
- Costs imposed over many years in the future.

(Example, in wind pools lower premium paid now, costs will occur when future hurricane strikes)

Effects of Regulation

- Unforeseen Changes
 - Did not foresee ability to bond declining.
 - Excessive use of a good or service may be encouraged – Growth and development in high risk areas.
- Who benefits?
 - Compare characteristics of coastal vs. inland.

Coastal Characteristics vs. Remainder of State

	ALABAMA		MISSISSIPPI	
	COASTAL	STATE	COASTAL	STATE
% WHITE	87.06	71.10	79.39	61.34
% BLACK	8.86	25.93	14.02	36.33
% HISPANIC	1.24	1.63	2.39	1.33
% POVERTY	10.48	16.10	12.45	19.93
PCPI	\$22,074	\$18,189	\$19,614	\$15,853
MEDIAN HOUSE-HOLD INCOME	\$41,940	\$34,135	\$37,992	\$31,330
MEDIAN HOUSE PRICE	\$129,200	\$85,100	\$93,300	\$71,400
% HOMES OVER \$500K	3.92	0.87	1.04	0.50
% HOMES OVER \$1 MILLION	0.98	0.21	0.21	0.17

Daniel Sutter, Ensuring Disaster: State Insurance Regulation, Coastal Development, and Hurricanes, September 2007.

Florida Entities

Florida Insurance Guaranty Association

FIGA subsidizes high risk properties by reducing the need for homeowners to consider an insurers financial soundness. Insurers failed after Hurricane Andrew and the Poe Group failed in 2005. Poe's collapse resulted in \$225 million in unpaid claims and 300,000 policies transferred to Citizens.

Florida Hurricane Catastrophe Fund

- The Florida Legislature's principal purpose in establishing the FHCF was to provide additional reinsurance capacity and help stabilize Florida's property insurance market.
- The FHCF has been expanded.
- 2007 Special Session – The Legislature increased the amount of the FHCF coverage from about \$16 billion to at least \$28 billion.

Florida Hurricane Catastrophe Fund

- FHCF's assessment procedures present potential subsidy issues:
 - Policyholders in many lines of insurance are being and will be assessed who do not receive any coverage from the FHCF.
 - Because of variations in exposure to hurricane losses among lines of insurance and geographical areas, the question is whether the process of levying Emergency Assessments on total policy premium creates situations where some policyholders are subsidizing other policyholders.

Citizens Property Insurance

Deficit assessments may not be inherently unfair because:

- Citizens, by providing property insurance coverage to those who could not obtain it from private insurance companies, helps support key components of Florida's economy (home construction, real estate sales, etc.), which benefit all Floridians.
- Because property insurance premiums vary significantly throughout Florida based in part on differences in hurricane exposure, policyholders already pay substantially different amounts when they are assessed depending on where they live and the value of their properties.

Citizens Property Insurance

Citizens assessments:

- Regular Assessments – to cover smaller deficits quickly and generate an early flow of funds to Citizens when larger deficits occur. Insurance companies can recoup these assessments by adding a surcharge to premiums they charge their policyholders.

Citizens Property Insurance

- Emergency Assessments – Allow Citizens to make principal and interest payments on debt it issues to pay the claims associated with large hurricane losses. These assessments are collected when the policies subject to assessment are renewed or new policies are issued.

Citizens Property Insurance

In the 2008 Regular Session, the Legislature:

- Reduced the maximum percentage for Regular Assessments from 10% to 6% while leaving the maximum rate for Emergency Assessments at 10%.
- Retained the Citizens Policyholder Surcharge, increased the maximum rate from 10 to 15% of premium for each of Citizens' three accounts, and required that the expected amount of this surcharge reduce the amount of the deficit before Regular Assessments and Emergency Assessments were considered.

Empirical Analysis

- Purpose:
 - To examine Florida homeowners premium data to determine if a subsidy exists
 - To examine the assessment structure to determine if a subsidy exists

Data

- Citizens and 15 private insurers (~ 60% of FL homeowners market)
 - Hurricane and non-hurricane premiums
 - \$300k home example – new masonry construction
- Risk measure from Cat Fund

Lowest Average Premiums

County	Hurricane	Non-hurricane	Total	% Hurricane
Leon	\$ 264	\$ 809	\$ 1,073	25%
Clay	\$ 268	\$ 823	\$ 1,091	25%
Putnam	\$ 279	\$ 862	\$ 1,141	25%
Marion	\$ 274	\$ 873	\$ 1,147	24%
St. Johns	\$ 540	\$ 614	\$ 1,154	47%
Alachua	\$ 283	\$ 873	\$ 1,157	25%
Duval	\$ 340	\$ 840	\$ 1,181	29%
Nassau	\$ 469	\$ 726	\$ 1,194	39%
Lake	\$ 285	\$ 927	\$ 1,212	24%
Flagler	\$ 584	\$ 637	\$ 1,220	48%

* Counties in orange have the lowest Cat Fund risk rankings.

Highest Average Premiums

County	Hurricane	Non-hurricane	Total	% Hurricane
Hillsborough	\$ 666	\$ 1,564	\$ 2,230	30%
Pinellas	\$ 1,013	\$ 1,230	\$ 2,243	46%
St. Lucie	\$ 1,507	\$ 771	\$ 2,278	65%
Martin	\$ 1,641	\$ 702	\$ 2,342	69%
Indian River	\$ 1,560	\$ 798	\$ 2,358	65%
Collier	\$ 1,469	\$ 974	\$ 2,443	61%
Palm Beach	\$ 1,997	\$ 848	\$ 2,845	69%
Broward	\$ 1,912	\$ 1,132	\$ 3,044	62%
Dade	\$ 2,121	\$ 1,445	\$ 3,566	59%
Monroe	\$ 2,761	\$ 921	\$ 3,682	74%

* Counties in orange have the highest Cat Fund risk rankings.

Comparing Rankings

- Analysis 1: Compare the county rankings based on premiums to county rankings based on risk (using Cat Fund information) to determine if counties with highest exposure pay statistically significant higher premiums.

Premiums vs Risk-Adjusted Premiums

Cost of coverage is considered to be subsidized if difference between actual hurricane premium and the risk-adjusted hurricane premium is negative.

Variable	Not Subsidized		Subsidized	
	Obs	Mean	Obs	Mean
Actual hurricane	635	\$ 651	361	\$ 945
Adj. hurricane	635	\$ 372	361	\$ 1,435
Difference	635	\$ 279	361	\$ (490)
Non-hurricane	635	\$ 918	361	\$ 993
Total	635	\$ 1,569	361	\$ 1,938
Risk-Adj. Total	635	\$ 1,290	361	\$ 2,428

Comparing Assessments

- Analysis 2: Compare the total assessments using the past structure and the new structure using actual premiums and risk-adjusted premium.

Conclusion

Results indicate that:

- A pre-assessment subsidy exists, as evidenced by the differences observed when comparing actual premiums to risk-adjusted premiums
- A post-assessment exists, as evidenced by assessments made on total premiums instead of hurricane only premiums