

Considerations in Actuarially Sound Rates for Lender-Placed Property Insurance

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The Bottom Line

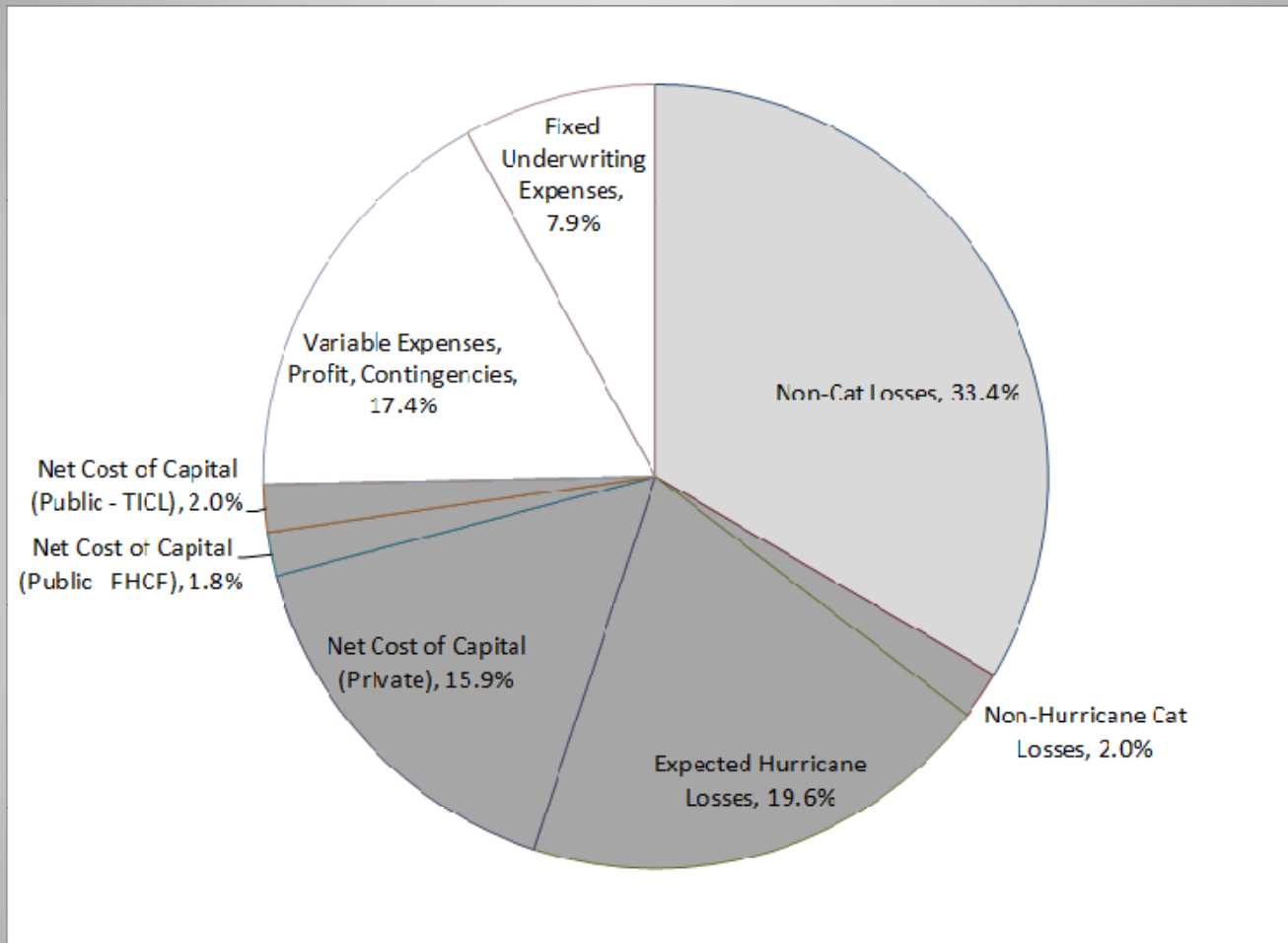
- Lender-placed property insurance (LPI) is subject to most of the same actuarial considerations and cost provisions as standard residential property insurance (RPI)
 - Rates are regulated by states; some filings (Florida) are public
- Some LPI actuarial issues need special attention and potentially higher cost provisions
 - Catastrophe expected costs
 - Contingency factors
 - Underwriting expenses
- Actuarial review of public data provides insights
 - Catastrophe costs may be plurality of entire sound rate
 - Some rate filings have extensively supported cost structure
- LPI rates should be, and have been, justified independently to regulators
 - Simple comparisons to RPI cost structure are misleading and irresponsible

Basic Actuarial Fair Premium Formula is Similar for LPI vs. RPI

$$P = \frac{L_N + L_C + R + F}{1 - v - \pi - \varepsilon}$$

- Fair premium (P) comprises several components:
 - L_N = Non-catastrophe losses per policy
 - L_C = Catastrophe losses per policy
 - R = Cost of capital backing risk (reinsurance plus retained earnings), allocated per policy
 - F = Fixed underwriting expenses per policy
 - v = Variable underwriting expenses (those charged as % of premium)
 - π = Profit loading (allowed as % of premium)
 - ε = Contingencies loading (allowed as % of premium)
- All components are expected prospective costs; no recoupment of past costs
- Catastrophe costs estimated from scientific simulation models; past data too volatile and unrepresentative of future exposure to be used as basis
- Cost of capital also tracks catastrophe exposure that can be >10x annual premium

In Risky Regions like Florida, Rates May Depend More on Catastrophic Costs than Routine Loss Ratios



Total RPI catastrophe costs are over 40% of the premium dollar, non-cat loss only 33%
LPI insurers show similar ratios in Florida rate filings

Source: Florida Office of Insurance Regulation, rate indications in 77 RPI rate filings since Jan. 2011, ratios scaled to add to 100%

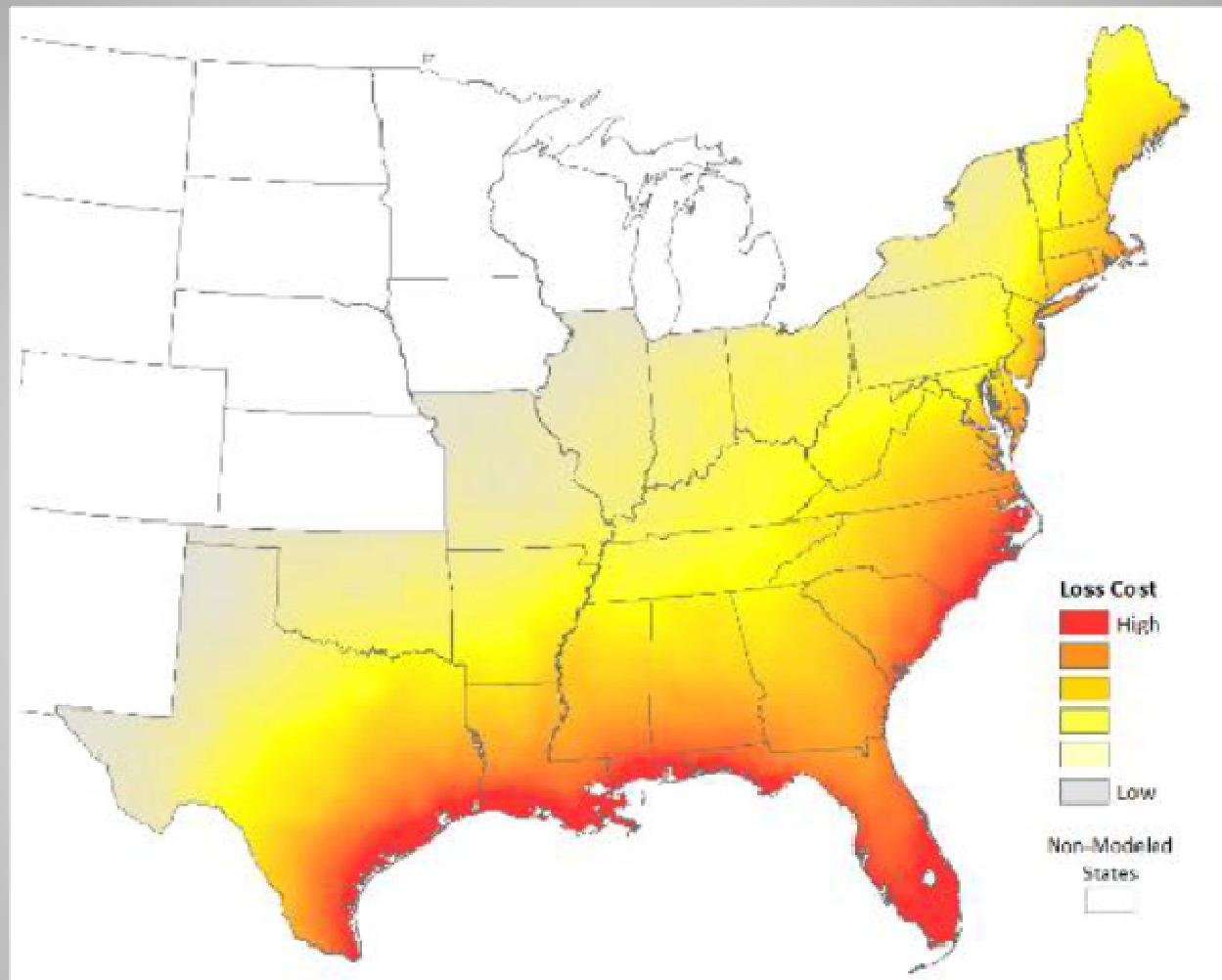
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Catastrophe Costs are Driven by Geographic Concentration, Putting LPI at Higher Risk

- Cost of capital based on relationship of Probable Maximum Loss (PML) in worst-case scenarios to average annual loss (AAL) over time
- LPI accumulates greater relative catastrophe risk than RPI
 - Entails bulk acceptance and automatic coverage, no “risk picking” to spread exposure around a region
 - Takes risks even “wind pools” don’t cover
 - Placement driven by local economic troubles, which are inherently concentrated and often overlap catastrophe-exposed areas

Catastrophe Risk is Significant Along Entire East Coast



Hurricane loss potential noticeable in many high-density areas and even inland areas

Source: AIR Worldwide, Jan. 2012 white paper "Assessing U.S. Hurricane Risk – Do Models Make Sense?"

Underwriting Contingencies are Greater for LPI

- Automatic acceptance and coverage increases the chance that actuaries “miss” expected loss estimates
 - Hazardous aspects of property are undetected
 - Coverage granted even if losses have already occurred
 - LPI placement signals financial responsibility concerns
- When property data precludes proper risk classification, contingencies factor should be higher to compensate for greater measurement error

LPI Rates Have Been Actuarially Developed and Rigorously Reviewed by Regulators

- Assurant (American Security Ins. Co.) made rate filings in Florida in 2006 and 2009 which addressed every actuarial rate component
 - Catastrophes, profit, contingencies, underwriting expenses
- Regulators approved rates after several rounds of questions regarding expense levels
- The outcome is consistent with good public policy that LPI rates should be developed and supported independently
- By contrast, comments characterizing LPI rates as “excessive”, “unreasonable”, or “a deception” are not supported by recent actuarial or regulatory reviews
 - Retrospective data, inappropriately applied, is no substitute

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