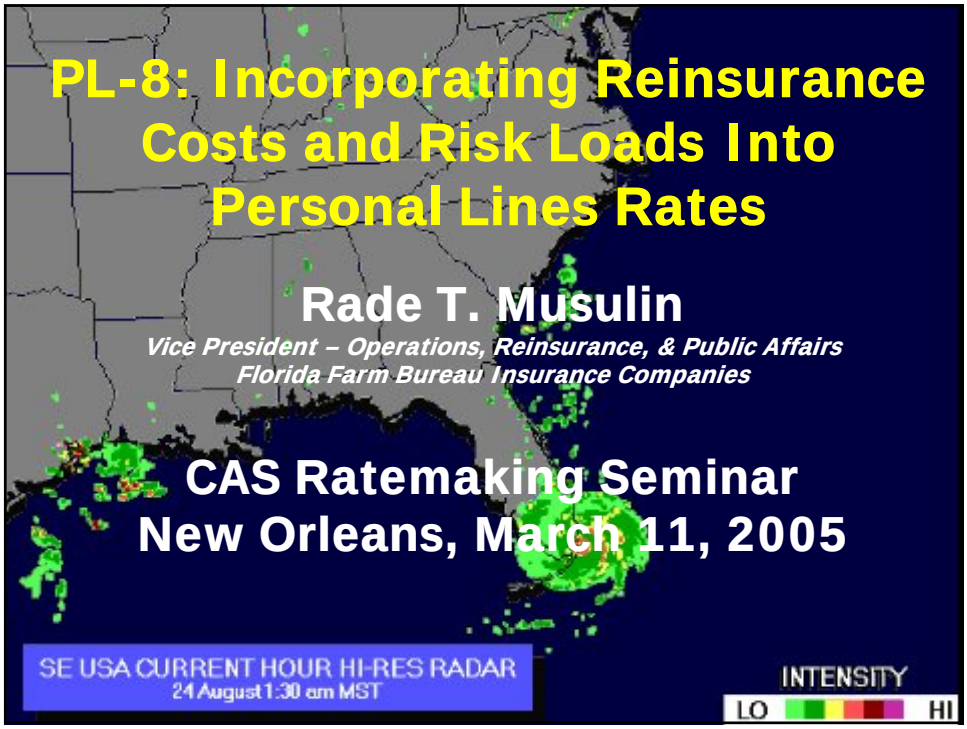
PL-8: Incorporating Reinsurance Costs and Risk Loads Into Personal Lines Rates
Rade T. Musulin
Vice President – Operations, Reinsurance, & Public Affairs
Florida Farm Bureau Insurance Companies
CAS Ratemaking Seminar
New Orleans, March 11, 2005
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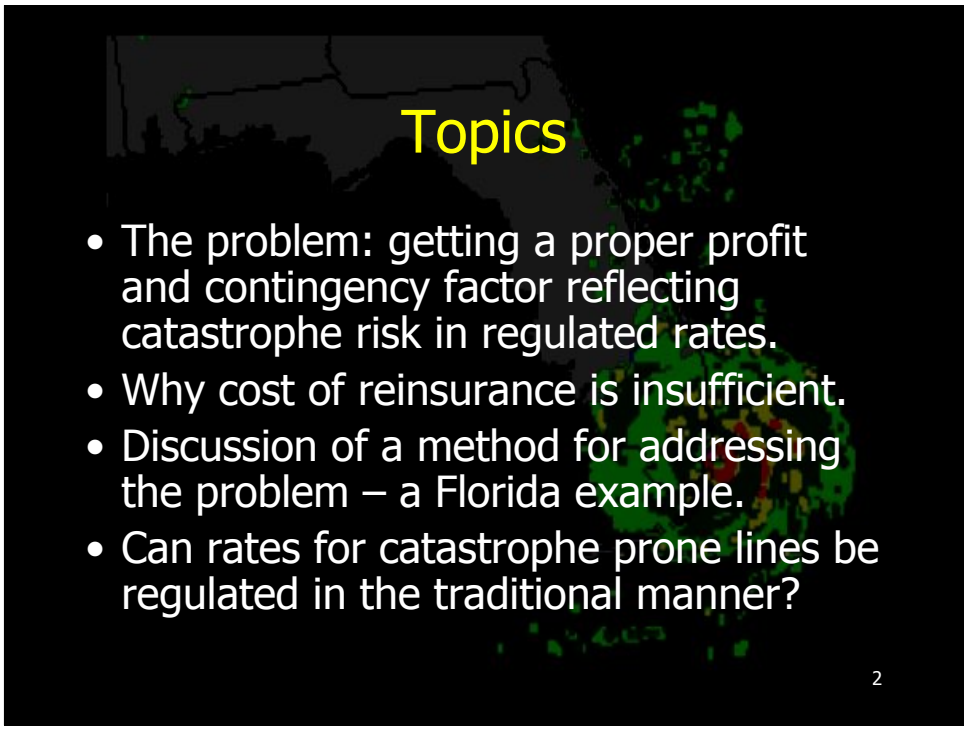
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INFORMATIONAL MEMORANDUM
OIR – 04-002M
ISSUED
June 4, 2004
Office of Insurance Regulation
Kevin M. McCarty
Director

ALL PROPERTY AND CASUALTY INSURERS AUTHORIZED TO DO BUSINESS IN FLORIDA
RULE 69O-170.003, FLORIDA ADMINISTRATIVE CODE, CALCULATION OF INVESTMENT INCOME
2004 PROFIT AND CONTINGENCY FACTORS

Pursuant to Rule 69O-170.003, Florida Administrative Code, the Department of Financial Services, Office of Insurance Regulation, annually establishes underwriting profit and contingency factors that may be used in rate filings. Insurers may use the profit and contingency factors referenced below when they are unable to produce credible profit and contingency factors from their own data. These factors can also be obtained on the Department's website at http://www.fldfs.com/companies/Memoranda/

LINE OF BUSINESS	2004 P & C FACTOR
ALLIED LINES	3.5%
BOILER & MACHINERY	1.5%
BURGLARY & THEFT	3.5%
COMMERCIAL MULTIPLE PERIL (BUSINESS OWNERS)	-0.5%
COMMERCIAL AUTO LIABILITY	-1.0%
COMMERCIAL AUTO PHYSICAL DAMAGE	4.7%
CREDIT	4.4%
EARTHQUAKE	2.9%
FARMOWNERS	3.7%
FIDELITY	1.1%
FINANCIAL GUARANTY	-0.2%
FIRE	3.3%
HOMEOWNERS	3.7%
INLAND MARINE	3.6%
MEDICAL MALPRACTICE - CLAIMS MADE	-7.4%
MEDICAL MALPRACTICE – OCCURRENCE	-15.1%
MORTGAGE GUARANTY	0.1%
OTHER LIABILITY - CLAIMS MADE	-5.5%
OTHER LIABILITY – OCCURRENCE	-7.7%
PERSONAL LIABILITY	-6.0%
PRODUCTS LIABILITY - CLAIMS MADE	-10.7%
PRODUCTS LIABILITY – OCCURRENCE	-8.9%
SURETY	3.0%

If you have any questions, please contact Sri Ramanujam, Actuary, Bureau of Property and Casualty Forms and Rates, at (850) 413-5354.

Example

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Reins. Cost	0	0	2,310,000
Needed Rate	1,050,000	1,900,000	2,460,000
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Allowed ROE	10.0%	0.6%	10.0%

Assumes no expenses and no investment income.

Reins. Cost for reinsured example = E(ceded loss) + (15% * Capital). Higher due to frictional costs.

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- Inadequate supply of capital.
- Availability problems.
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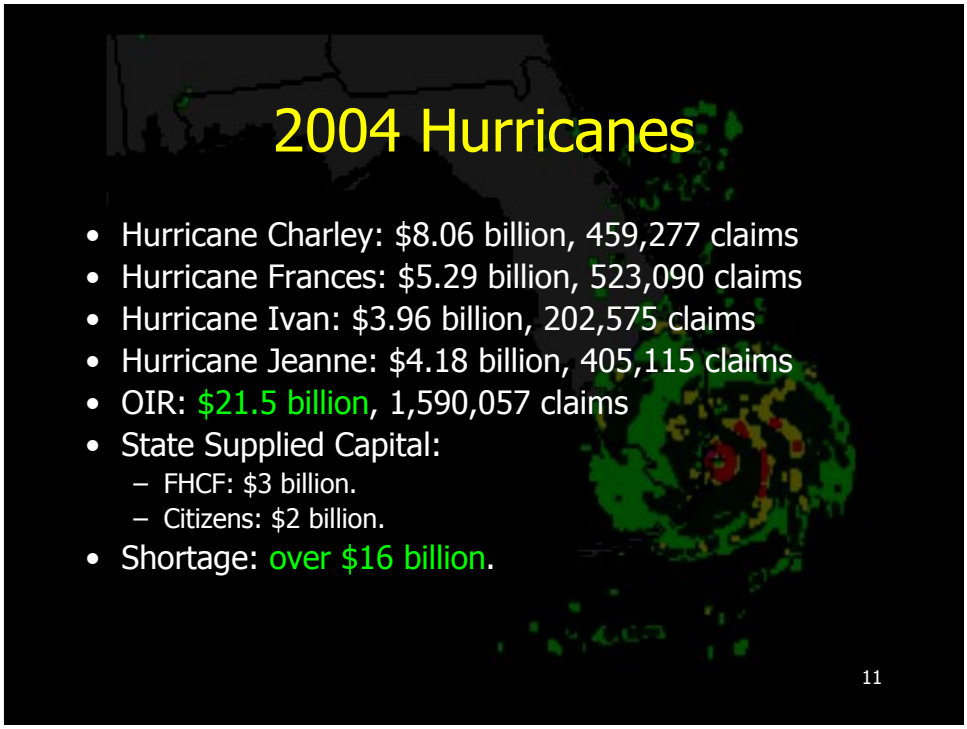
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Allstate.
You're in good hands

Phone: 727-573-6825 Email: GGRAWE@Allstate.com Fax: 727-573-6924
780 Carillon Parkway
Suite 400
St. Petersburg, FL 33716-1106

George Grawe
Counsel
Florida Region

March 24, 2004

Lisa Miller
Office of Insurance Regulation
Larson Building
200 East Gaines Street
Tallahassee, Florida 32399-0330

Re: Profit and Contingency Factor Rule

Dear Mrs. Miller:

With this letter you will find a memorandum discussing Florida's current regulatory practice relative to permissible "profit and contingency factors" in the rate making process. This material was developed through a cooperative effort with Florida Farm Bureau. We hope that this is helpful and look forward to working with the Office of Insurance Regulation to benefit Florida's insurance consumers by increasing the availability of affordable homeowner coverage.

Sincerely,

George Grawe

Cc: Rade Musulin, Florida Farm Bureau

Regulatory Improvement for Florida Consumers

A Proposal to Benefit Consumers and Bring More Capacity to the Market

Introduction

Hurricane Andrew struck more than ten years ago, causing havoc for the people, businesses and economy of Florida. Andrew served as a brutal reminder that the business of insuring property in our state differs dramatically from other kinds of insurance business, and even differs dramatically from property insurance in other states. The differences between the economics of Florida property insurance and other kinds of insurance, together with regulatory policies that do not fully account for these differences, create a market environment that often works against the interests of consumers to have premiums that are as low as economically viable and discourages long-term market growth that can provide availability and affordability of coverage for all Florida property owners.

Unlike other lines of insurance, where average expected annual losses are relatively stable and predictable, the probable maximum loss (PML) for property insurers, due to hurricanes, can be far greater than average expected annual losses. A property insurer's average expected annual losses and hurricane PML must be funded, yet current regulatory practice assumes insurers need only enough capital to meet statutory premium to surplus ratio tests. These tests, which do not accurately reflect the capital structure of a modern property insurer, do not allow an insurer to fund hurricane PML[1].

This paper will describe how changes to current regulatory practices could improve conditions for Florida's property insurance consumers:

1. Rates may be favorably impacted
2. Insurers may be more willing to offer coverage, decreasing the number of risks in Citizens Property Insurance Corporation (Citizens)
3. Market may no longer skew towards thinly capitalized and highly reinsured firms.

By reforming rules governing how insurers calculate acceptable profit margins, the Florida Office of Insurance Regulation (OIR) could encourage well-capitalized insurers to risk their internal capital. This would reverse the adverse effects of the current system to the benefit of Florida's consumers. A firm's internal capital is almost always less expensive than rented capital (reinsurance) because a firm's internal capital is not subject to frictional costs associated with risk transfer.

Current Situation

Much has been done to encourage capital investment in Florida's voluntary property market since Hurricane Andrew. The Florida Hurricane Catastrophe Fund (FHCF) has been developed to provide insurers with low cost capital backed by assessment authority on Florida

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[1] The Office of Insurance Regulation requires an annual demonstration from each property insurer, of the insurer's plan to fund the 100-year PML. In addition, A. M. Best requires adequate capitalization and funding of PML in order to secure a rating acceptable to mortgage companies.

consumers. A uniform building code has been enacted by Florida's legislature that serves as an important step to lower PML enabling better alignment with capital resources. The Florida Property Joint Underwriting Association and the Wind Pool have evolved into Citizens, also backed by assessment authority. These systems have created a strong public/private partnership to fund the State's large PML. In spite of these efforts, Florida's PML has grown to unsustainable levels due to:

1. Substantial population growth
2. Exploding building costs
3. Increasing property values
4. Increased building and development in coastal areas

Proposed Solutions

Florida must take action to grow the capital base supporting its property insurance system by billions of dollars to keep up with growth. One critical component is the proposed enhancement of the FHCF. However, increasing the capacity of the FHCF requires that potential assessments on Florida's consumers be increased and exposes future generations to funding past losses, which places limits on how much the state can rely on this source of capital. Unless additional sources of capital are found, there will be no way to fund the State's increasing PML without ruinous rate increases, intolerable assessment burdens, or a halt to the development that fuels the State's economy.

Fortunately, there is a large source of capital readily available to meet this need: internally generated insurer surplus. Nationally, the insurance industry has a capital base of approximately $291 billion[2]. The majority of this surplus is controlled outside of the State, meaning that the State cannot force it to be committed. However, by reforming its regulatory practices, the State can provide the proper economic incentives to insurers to invest this capital in Florida.

Economic Barriers to Industry Capital

One consequence of Hurricane Andrew is that the traditional approach to rate regulation will, now and into the future, discourage the capital investment that the Florida insurance market needs. Insurance rates involve three critical factors: expected losses, expenses, and profit. Profit is needed to compensate investors who provide capital (surplus) to support insurance operations. Traditionally, insurance rates have included a 5% profit factor. This traditional profit factor was likely based on a simple rule of thumb that if an insurer writes at a 2:1 premium to surplus ratio and needs a 10% return on surplus, a profit factor of 5% of premium would be sufficient. Hurricane Andrew has shown us that rate regulation for property insurance must recognize that this "one size fits all" approach to the profit factor discourages private capital investment.

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[2] The total policyholders' surplus for the Property and Casualty industry, according to Best's Aggregates and Averages 2003 edition, is $290,904,810.

An example of how current property rate regulation discourages capital investment may be helpful. Consider Greenacre Insurance Company (Greenacre), which writes two lines of insurance in Florida, automobile and homeowners. In order to keep this example simple, we assume there are no expenses and ignore investment income (meaning premium equals expected loss plus profit). Greenacre's actuaries estimate that the average expected annual loss from each line of business is $1,000,000. At the assumed 2:1 surplus ratio, required capital based on expected annual losses is $500,000 for both auto and homeowners. Greenacre's shareholders require a 10% return on exposed capital. The automobile riskline's exposure is limited to the expected annual losses; however, the homeowner's riskline is also subject to catastrophic risk, quantified as PML of $10 million. This excess risk requires $9 million in capital excess of expected annual losses. At a 10% required "shareholder" return, it must compensate its investors $50,000 in Auto and $900,000 in Homeowners.

However, under Florida's presumed profit factor rule (Rule 4-170.003), Greenacre will only be able to "justify" a maximum 5% profit on the expected annual loss of $1,000,000 for each riskline. This amounts to a $50,000 profit for the auto riskline and a 10% rate of return on invested capital. Unfortunately, the 5% ceiling imposed on homeowner's profit calculated against the expected annual losses does not take into account the $9 million in excess capital funded by Greenacre to cover the $10 million PML. Therefore the restricted $50,000 in profit results in a 0.56% rate of return on the $9 million investment.

	Auto	Homeowners
Expected Annual Losses	$1,000,000	$1,000,000
Probable Maximum Loss	$0	$10,000,000
Maximum Loss	**$1,000,000**	**$10,000,000**
Required Annual Loss Capital	$500,000	$500,000
Excess Capital Requirements	$0	$8,500,000
Total Invested Capital	**$500,000**	**$9,000,000**
Maximum "Regulated" Return	$50,000	$50,000
Return on Capital	10.00%	0.56%
Required Shareholder Return	10.00%	10.00%
Gap	**0.00%**	**-9.44%**

Assumptions

- **Premium to Surplus Ratio:** 2 to 1
- **Required Shareholder Return:** 10%
- **PML:** $10 Million
- **Maximum "Regulated" Return:** 5% (Rule 4-170.003)

Why would rational investors expose $9 million to losses for $50,000 in compensation? For such risk, a savvy investor knows that far greater returns are possible in many alternative investments, including the "junk bond" market. Bonds provide an interesting contrast to Florida's property insurance market. When the risk of losing money on a given bond is higher, the yield on that bond must be higher, which is why Treasury bills have lower yields then so called "junk bonds". However, under current Florida property insurance rate regulation, the return allowed (presumed factor under Rule 4-170.003) is the same maximum 5%, regardless of the amount of risk.

Imagine a bond market where every bond had the same yield. Treasury bills and corporate bonds, with a higher probability of default, would yield the same rate of return.

Further imagine that the regulated yield was the Treasury bill rate. In time, there would be an availability crisis for bonds other than Treasuries needed to fund businesses with a higher probability of risk because investors would flee from that market.

The bond market offers another important analogy to our discussion. A critical consideration for investors is liquidity: can one get one's money out? In the bond market, investors can buy and sell their shares, and when the bond matures the investor's principal is returned. Consider what might happen if a bond investor bought a security with a one-year term where a regulator could force the investor to buy the security next year at a regulated interest rate and prevent the investor from taking the interest to use as the investor chose. Such a bond market would not have many investors, and interest rates would be much higher, if any investors could be found at all.

A key to attracting investor capital to Florida's insurance market is the investor's ability to remove that capital at the end of the investment term and to keep its interest to use as it pleases. Reinsurance allows this; the reinsurer issues a fixed-term contract at the end of which its capital is freed and the premium (interest) is kept. Investor provided insurance capital must be subject to the same type of liquidity. Efforts to require that capital be indefinitely tied up in Florida (such as through a non-renewal moratorium) or interest (profits) be held for a future hurricane, place investor capital at a disadvantage as compared with reinsurance and create a strong incentive for insurers to keep minimal investor capital in the state. This drives up rates, reduces availability, and leads to thinly capitalized insurers. It leads to a market where insurers can only generate capacity through retained Florida earnings, which guarantees market crises following every large hurricane as retained earnings are depleted and the supply of capital becomes extremely out of balance with demand.

Let us return to our Greenacre discussion. Greenacre's actuaries prepare a filing according to OIR rules and find a problem. Florida's OIR says it can only approve $1,050,000 in premium in every line (Greenacre would actually charge something like $1,030,000 in Homeowners and $997,000 in Auto, due to investment income). In Auto that premium would be adequate, but in Property it would be grossly inadequate.

One way Greenacre might deal with this is to notice that under Florida's rating law it can include "reinsurance costs" in its rates. The actuaries would recommend to management that it buy reinsurance for the $9 million in excess exposure (PML minus expected annual losses) as an alternative to holding capital. Since the reinsurers must make a return on capital exposed to loss and since they have expenses, excise taxes, and such, the market rate for reinsurance might be a 15% "rate on line", or $1,350,000. Thus, if Greenacre bought reinsurance to cover the exposure/PML, it could "justify" a premium of $2,350,000. Note that this is higher than the premium it would need to fund the loss through investor capital.

Greenacre management notices another problem with the actuaries' recommendation: until Greenacre actually buys the reinsurance, the regulator will not allow its cost to be included in rates. After it buys the reinsurance, it must lose money for a year or more until it can file for rates reflecting reinsurance costs, secure approval and implement over 12 months. One way around this would be to form a new insurance company that placed reinsurance before writing the business, which is what some investors have done in Florida. Alternatively,

Greenacre might simply take its investment capital to insurance markets where rates of return reflecting required capital can be expected.

Rule Change Could Significantly Benefit Consumers

The Greenacre example is simplistic but it demonstrates how current Florida property rate regulation can lead to higher rates for consumers and drive capital investment from the state. Major companies that do not buy reinsurance cannot "justify" actuarially sound rates, as the return allowed on internal (investor) capital does not properly reflect the risk. Thus, insurers are discouraged from bringing in new capital, and the market shifts to Citizens and to companies relying on reinsurance. Companies relying on reinsurance, under existing rate regulation, can "justify" rates to include such reinsurance costs. Generally, investor capital will be less expensive than reinsurance capital. If insurers could file and receive approval for a profit and contingency factor that properly reflects risk they could achieve a rate level that would justify investors providing capacity through capital, reducing the need for expensive reinsurance.

Property rate regulation could be modified to allow for the real differences in capitalization that exist with other lines of insurance. A possible solution could be the creation of a more economically viable formula and clear procedures to allow the "presumed factor", currently described in Rule 4-170.003, to be adjusted in recognition of rational "risk loads" associated with this vital segment of the insurance market. Florida Statute 627.062 allows for such "risk" in ratemaking and as such a legislative change does not appear necessary. The FHCF annually engages in an analysis relative to the standard deviation of annual hurricane losses in the calculation of FHCF premiums. It may be useful to study this process while considering whether the creation of a rational "risk load" formula/procedure seems an appropriate solution.

The Greenacre illustration also demonstrates the importance of the FHCF. Since FHCF uses post-event "assessment capital", it can avoid holding all the capital required to meet its obligations[3] and avoid charging any proper risk load. Further, the FHCF can provide AAL coverage with no risk load as the FHCF can levy assessments while the voluntary property market has no such assessment authority. As a result the voluntary property market must have a proper risk load in its rates in order to pre-fund such losses. FHCF rates are far below the reinsurance market because it charges premiums that reflect only loss costs discounted for investment income, which, except for the 5% "presumed factor" prescribed by Rule 4-170.003, is the manner in which the OIR currently regulates primary property insurer rates. FHCF rates approximate what the OIR is allowing in primary property rates, which is why expanding FHCF capacity is one necessary step to maintain balance in the market.

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[3] The FHCF currently has capacity to reimburse up to $11 billion of hurricane losses during a single season. At the end of last year, FHCF has only $5.5 billion in invested assets. The remaining $5.5 billion would be funded by post-event bond issues financed through assessments on all P&C insurers.

Conclusion

Florida's current regulatory practices in property insurance encourage insurers to rent (purchase of reinsurance) rather than own (investing insurer capital), and the resulting shortage of capital forces the State to borrow the difference and pass the bill along to future generations as assessments. This is completely opposite from government polices in other sectors of our economy designed to encourage ownership of assets. In housing, this is the equivalent of allowing consumers to deduct rent from their taxes but not mortgage interest.

Florida's regulatory practices need to be restructured to create a level playing field between reinsurance and investor supplied capital. This requires that risk loads be allowed as an alternative to the cost of reinsurance and that investor capital, and reasonable profits thereon, are afforded the same degree of liquidity as reinsurance capital. The actuarial profession offers Florida regulators tools that can address this situation. There are generally accepted methods for calculating "risk loads" on lines of insurance subject to catastrophic loss. Working toward incorporating these methodologies into its regulatory paradigm is a critical component of a strategy to build a strong property insurance system for the benefit of Florida's consumers. The current rule has the effect of giving reinsurers a significant financial advantage while sacrificing the interests of consumers because it requires consumers to pay higher premiums, limits the amount of capacity to support the market and discourages depopulation of Citizens.

We hope that this information is helpful, and we welcome the opportunity to work with the OIR in creating workable solutions for the benefit of consumers.

69O-170.003 Calculation of Underwriting Profit Factor ~~Investment Income~~.

(1) The purpose of this rule is to specify the manner in which insurers shall calculate underwriting profit ~~investment income~~ attributable to property/casualty insurance policies written in Florida, to be incorporated within rate filings submitted to the Office ~~and the manner in which such investment income is used in the calculation of insurance rates by the development of an underwriting profit and contingency factor compatible with a reasonable rate of return~~.

(2) As used herein:

(a) "Insurance" means all classes of insurance subject to Section 627.062, F.S., and Section 627.0651, F.S.

(b) "Insurer" includes rating organizations licensed in Florida. ~~"Subline" means a type of insurance uniquely identified for purposes of establishing rates under Section 627.062, F.S.~~

(c) "Loss" shall include allocated loss adjustment expense. ~~"Property insurance subline" means insurance as defined in Section 624.604, F.S.~~

(d) "Loss payment pattern" shall be represented by a set of percentages which total to 100.0%. These percentages shall reflect the projection of paid loss as a percentage of ultimate loss for loss payment years during and subsequent to an accident year or report year. ~~Insurer includes rating organizations licensed in Florida.~~

(e) "PPAPD" shall denote the Private Passenger Automobile Physical Damage subline which is considered the type of insurance with minimal investment income as well as minimal underwriting risk. ~~An underwriting profit and contingency factor can be positive or negative.~~

(f) “P/S” shall denote premium-to-surplus ratio.

(g) “Subline” means a type of insurance uniquely identified for purposes of establishing rates under Section 627.062, F.S. or Section 627.0651, F.S.

(h) “Underwriting profit” is expressed as a percentage of premium, can be positive or negative, and shall be deemed to include a provision for contingencies. (However, for Private Passenger Automobile sublines, underwriting profit must be positive, pursuant to Section 627.0651(2)(d), F.S.)

(3) Three different approaches to estimating underwriting profit shall be permissible, depending on the availability and appropriateness of credible data for the given insurer:

(a) Use of Office Benchmarks. When the insurer does not have its own data or appropriate industry data, it may use the benchmark underwriting profit factors referred to in subsection (4) of this rule.

(b) Use of Standard Methodologies. When the insurer has available and credible investment income yield and payment pattern data of its own, and does not believe that the Office benchmarks referred to in subsection (3)(a) are appropriate for its use, it may use its own data in conjunction with the standard methodologies set forth in subsections (5) through (9) of this rule. However, the appropriate P/S value shown in subsection (9) must be used for a given subline.

(c) Use of Insurer’s Own Methodology. When the insurer is able to demonstrate that the standard methodologies result in an unreasonable rate of return for its book of business, it may use its own methodologies (and its own parameterizing data) pursuant

to subsection (10) of this rule. The Office will evaluate the result from this approach in accordance with subsection (10).

~~Each insurer shall determine separately for each subline of insurance the expected patterns of loss payments over time associated with insurance written in Florida. The determination shall be made using Florida accident year or policy year loss payment patterns, and must fairly represent the insurance loss transaction of the insurer. If Florida data is not credible or is inappropriate, the insurer may exercise reasonable actuarial judgment in utilizing other relevant data or procedures or may use the underwriting profit and contingency factors referred to in subsection (9) of this rule.~~

(4) For use as permitted in subsection (3)(a) of this rule, the Office shall annually establish underwriting profit factors for the sublines identified in subsection (9) of this rule. Such factors shall be derived by using the methodologies described in subsections (5) through (9), in conjunction with available and actuarially reasonable industry data. The factors shall be established by informational memorandum and provided to all affected insurers prior to the date their use is required. These factors can be used without further justification by companies which do not have credible data of their own. Factors distributed for the previous year shall remain in effect until new factors are published.

~~Each insurer shall determine YA, the expected investment income yield on invested assets representing unearned premium and loss reserves. The expected investment income yield, YA, shall be calculated using the quantities and formula below:~~

~~YA = YnWn + YoWo~~

Where:

~~Yn = Expected investment income yield on assets newly invested or reinvested during the time the new rates are expected to be in effect.~~

~~Yo = Expected investment income yield on assets invested prior to the time the new rates are expected to be in effect.~~

~~Wn = Proportion of assets, held during the time the new rates are expected to be in effect, that is expected to be newly invested or reinvested.~~

~~Wo = 1 – Wn~~

~~The above expected investment income yield, YA, shall be used for purposes of this rule unless evidence is presented that this quantity is not the investment income yield reasonably expected by the insurer.~~

(5) The standard methodology for selecting a loss payment pattern shall be as follows. Each insurer shall determine separately for each subline the expected loss payment pattern associated with insurance written in Florida. The determination shall be made using Florida accident year or report year loss payment patterns, and must fairly represent the insurance loss transaction of the insurer.

~~Separately for each subline, each insurer shall, using the average date of premium remittance by the insured, determine the discounted value of the expected loss payment pattern determined in subsection (3) using the expected investment income yield, YA, calculated in subsection (4). The undiscounted pattern minus the discounted pattern for each subline is to be expressed as a percent of the expected subline premium that is associated with the series of loss payments over time. This difference is the investment income opportunity associated with the subline.~~

(6) The standard methodology for selecting an investment income yield shall be as follows. Each insurer shall determine Y_A, the expected after-tax investment income yield on invested assets representing unearned premium and loss reserves. The expected after-tax investment income yield, Y_A, shall be calculated using the quantities and formula below:

$$Y_A = Y_N W_N + Y_o W_o$$

Where:

Y_N = Expected investment income yield on assets newly invested or reinvested during the time the new rates are expected to be in effect

Y_O = Expected investment income yield on assets invested prior to the time the new rates are expected to be in effect

W_N = Proportion of assets, held during the time the new rates are expected to be in effect, that is expected to be newly invested or reinvested

$W_O = 1 - W_N$

~~The investment income opportunities calculated in subsection (5) shall be used as follows to develop the underwriting profit allowance, to be used in rate filings:~~

~~(a) Select and specify the underwriting profit and contingency factor to be used in rate filings for the property insurance subline with the smallest investment income opportunity as calculated in subsection (5). If an insurer does not write property insurance in Florida, it shall use relevant data for such property insurance subline from areas other than Florida or shall use industry data, as determined by reasonable~~

~~actuarial judgment. The selected underwriting profit and contingency factor is presumed to give due recognition to property insurance investment income. An underwriting profit and contingency factor greater than the quantity five percent is prima facie evidence of an excessive expected rate of return and unacceptable, unless supporting evidence is presented demonstrating that an underwriting profit and contingency factor included in the filing that is greater than this quantity is necessary for the insurer to earn a reasonable expected rate of return. In such case, the criteria presented in subsection (7) shall be used by the Department of Insurance in evaluating this supporting evidence.~~

~~(b) Determine the investment income differential between the property insurance subline and any other subline by subtracting the investment income opportunity for the property insurance subline as calculated in subsection (5) from the investment income opportunity for any other subline as calculated in subsection (5).~~

~~(c) The underwriting profit and contingency factor for any subline other than that specified in paragraph (6)(a) shall be the underwriting profit and contingency factor for the subline from paragraph (6)(a), minus the investment income differential from paragraph (6)(b). An underwriting profit and contingency factor greater than this quantity is prima facie evidence of an excessive expected rate of return and unacceptable, unless supporting evidence is presented demonstrating that an underwriting profit and contingency factor included in the filings that is greater than this quantity is necessary for the insurer to earn a reasonable rate of return. In such cases, the criteria presented in subsection (7) shall be used by the Office in evaluating this supporting evidence.~~

(7) For any given subline, each insurer shall determine the discounted value of the expected loss payment pattern determined in subsection (5) using the expected

investment income yield, Y_A, calculated in subsection (6). Mathematically speaking, let d_{PPAPD} denote the resulting discounted value for PPAPD and $d_{SUBLINE}$ denote such value for a given other subline.

~~An underwriting profit and contingency factor calculated in accordance with this rule is considered to be compatible with a reasonable expected rate of return on net worth. If a determination must be made as to whether an expected rate of return is reasonable, the following criteria shall be used in that determination:~~

~~(a) An expected rate of return for Florida business is to be considered reasonable if, when sustained by the insurer for its business during the period for which the rates under scrutiny are in effect, it neither threatens the insurer's solvency nor makes the insurer more attractive to policyholders or investors from a corporate financial perspective than the same insurer would be had this rule not been implemented, all other variables being equal; or~~

~~(b) Alternatively, the expected rate of return for Florida business is to be considered reasonable if it is commensurate with the rate of return anticipated for other industries having corresponding risk and it is sufficient to assure confidence in the financial integrity of the insurer so as to maintain its credit and, if a stock insurer, to attract capital, or if a mutual or reciprocal insurer, to accumulate surplus reasonably necessary to support growth in Florida premium volume reasonably expected during the time the rates under scrutiny are in effect.~~

(8) The discounted values d_{PPAPD} and $d_{SUBLINE}$ calculated in subsection (7) shall be used as follows to develop the underwriting profit allowance for a given subline:

(a) Select and specify an appropriate underwriting profit factor for PPAPD. Mathematically, let u_{PPAPD} denote this value. If an insurer does not write PPAPD in Florida, it shall use relevant data from areas other than Florida or shall use industry data, as determined by reasonable actuarial judgment. A u_{PPAPD} value greater than five percent is prima facie evidence of an excessive expected rate of return and unacceptable, unless supporting evidence is presented to the contrary.

(b) For a given subline, adjust the PPAPD underwriting profit factor (u_{PPAPD}) from subsection (8)(a) to reflect differences in underwriting risk between PPAPD and the given subline. This is to be accomplished by multiplying the value u_{PPAPD} by the P/S ratio for PPAPD (denoted by P/S_{PPAPD}) and then dividing the result by the P/S ratio for the given subline (denoted by $P/S_{SUBLINE}$). The Office's P/S ratios for the various property/casualty sublines are set forth in subsection (9) of this rule. Mathematically, the result of this calculation is:

$$u_{PPAPD} \times P/S_{PPAPD} / P/S_{SUBLINE}$$

(c) Determine the investment income differential (denoted by $IID_{SUBLINE}$) between PPAPD and the given subline by subtracting the discounted value of loss payments for the given subline as calculated in subsection (7) from the discounted value of loss payments for PPAPD as calculated in subsection (7), and then dividing the result by the discounted value of loss payments for the given subline. Mathematically:

$$IID_{SUBLINE} = (d_{PPAPD} - d_{SUBLINE}) / d_{SUBLINE}$$

(d) Determine the investment income offset (denoted $IIO_{SUBLINE}$) between PPAPD and the given subline by multiplying the investment income differential from subsection (8)(c) by the permissible loss ratio for the given subline (denoted by $PLR_{SUBLINE}$). (The

permissible loss ratio is the complement of the expense and underwriting profit provision as a percentage of premium. For this purpose, u_{PPAPD} from subsection (8)(a) can serve as a reasonable temporary proxy for the underwriting profit provision for the given subline, since the final such value is not as yet determined.) Mathematically:

$$IIO_{SUBLINE} = IID_{SUBLINE} \times PLR_{SUBLINE}$$

(e) The underwriting profit factor for the given subline (denoted by $u_{SUBLINE}$) shall be the result from subsection (8)(b), minus the investment income offset from subsection (8)(d). Mathematically:

$$u_{SUBLINE} = u_{PPAPD} \times P/S_{PPAPD} / P/S_{SUBLINE} - IIO_{SUBLINE}$$

$$= u_{PPAPD} \times P/S_{PPAPD} / P/S_{SUBLINE} - IID_{SUBLINE} \times PLR_{SUBLINE}$$

$$= u_{PPAPD} \times P/S_{PPAPD} / P/S_{SUBLINE} - (d_{PPAPD} - d_{SUBLINE}) / d_{SUBLINE} \times PLR_{SUBLINE}$$

~~Each insurer filing insurance rates in Florida shall use an underwriting profit and contingency factor for each subline that is developed in accordance with this rule. The combined profit and contingency factor shall be quantified and stated as a single percentage factor. The entire factor and the component parts of the factors shall be justified by the insurer proposing to use the factor.~~

(9) For purposes of subsection (8), the $P/S_{SUBLINE}$ ratios for the various property/casualty sublines are shown below.

Subline	P/S
Allied Lines (Commercial)	1.40
Allied Lines (Personal)	1.40
Boiler & Machinery	1.40
Burglary & Theft	1.60
Commercial Auto Physical Damage	1.80
Commercial Auto Liability	1.60
Commercial Multi Peril	1.40

Credit	1.80
Earthquake	0.80
Farmowners	1.40
Fidelity	1.40
Financial Guaranty	1.20
Fire (Commercial)	1.40
Fire (Personal)	1.40
Homeowners	1.40
Inland Marine (Commercial)	1.40
Inland Marine (Personal)	1.40
Medical Malpractice – Claims-Made	1.00
Medical Malpractice - Occurrence	0.80
Mortgage Guaranty	1.20
Other Liability – Claims-Made	1.40
Other Liability – Occurrence (Commercial)	1.20
Other Liability – Occurrence (Personal)	1.20
Private Passenger Auto Physical Damage	2.00
Private Passenger Auto Liability	1.80
Products Liability – Claims-Made	1.00
Products Liability – Occurrence	0.80
Surety	1.40

~~For use as permitted in subsection (3) of this rule, the Office shall annually establish appropriate underwriting profit and contingency factors by annual statement lines or classes subject to this rule. Such factors shall be derived by using available and actuarially reasonable industry data. The factors shall be established by order and provided to all affected insurers prior to the date their use is required. Factors distributed for the previous year shall remain in effect until new factors are published.~~

(10) A filed underwriting profit factor greater than that determined in subsection (8)(e) is prima facie evidence of an excessive expected rate of return and unacceptable, unless supporting evidence is presented demonstrating that such greater value is necessary for the insurer to earn a reasonable rate of return. The following criteria shall be used in determining whether an expected rate of return is reasonable:

(a) An expected rate of return for Florida business is to be considered reasonable if, when sustained by the insurer for its business during the period for which the rates under scrutiny are in effect, it neither threatens the insurer's solvency nor makes the insurer more attractive to shareholders or investors from a corporate financial perspective than the same insurer would be had this rule not been implemented, all other variables being equal; or

(b) Alternatively, the expected rate of return for Florida business is to be considered reasonable if it is commensurate with the rate of return anticipated for other industries having corresponding risk and it is sufficient to assure confidence in the financial integrity of the insurer so as to maintain its credit and, if a stock insurer, to attract capital, or if a mutual or reciprocal insurer, to accumulate surplus reasonably necessary to support growth in Florida premium volume reasonably expected during the time the rates under scrutiny are in effect.

Specific Authority 624.308(1), 627.062(2)(b)4., 627.0651(2)(d),. FS. Law Implemented 624.307(1), 627.062(2)(b)4., 627.0651(2)(d),. FS. History–New 4-9-87, Amended 1-30-91, Formerly 4-72.003, 4-170.003, Amended: _____.