Incorporating a Primary Insurer’s Risk Load into the Property Rate

Kevin Burke

Alfa Mutual Insurance Company

Montgomery, AL

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Opening Remarks

- Winter 2009 CAS *E-Forum*
- Practical Approach
- Regulatory Scrutiny

Simple (Unrealistic) Example

- Expected Hurricane Loss=100
- Expected Other Peril Loss = 250
- Fixed Expense =25
- Variable Expense = 22% of Premium
- Profit and Contingencies = 3% of Premium
- Reinsurance Cost = 50% of Ceded Loss
- Two Scenarios
  - 0% Reinsurance
  - 100% Reinsurance

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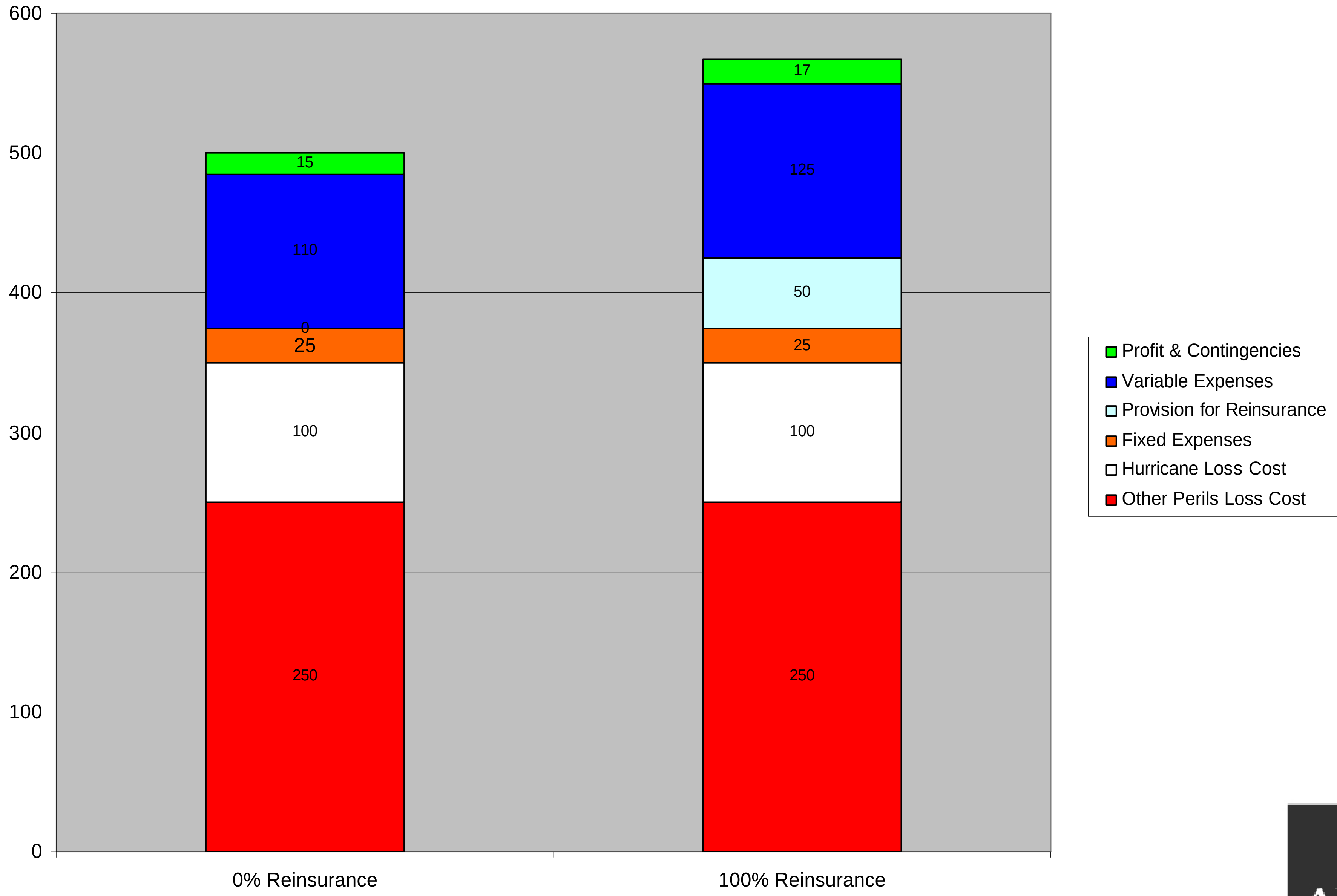
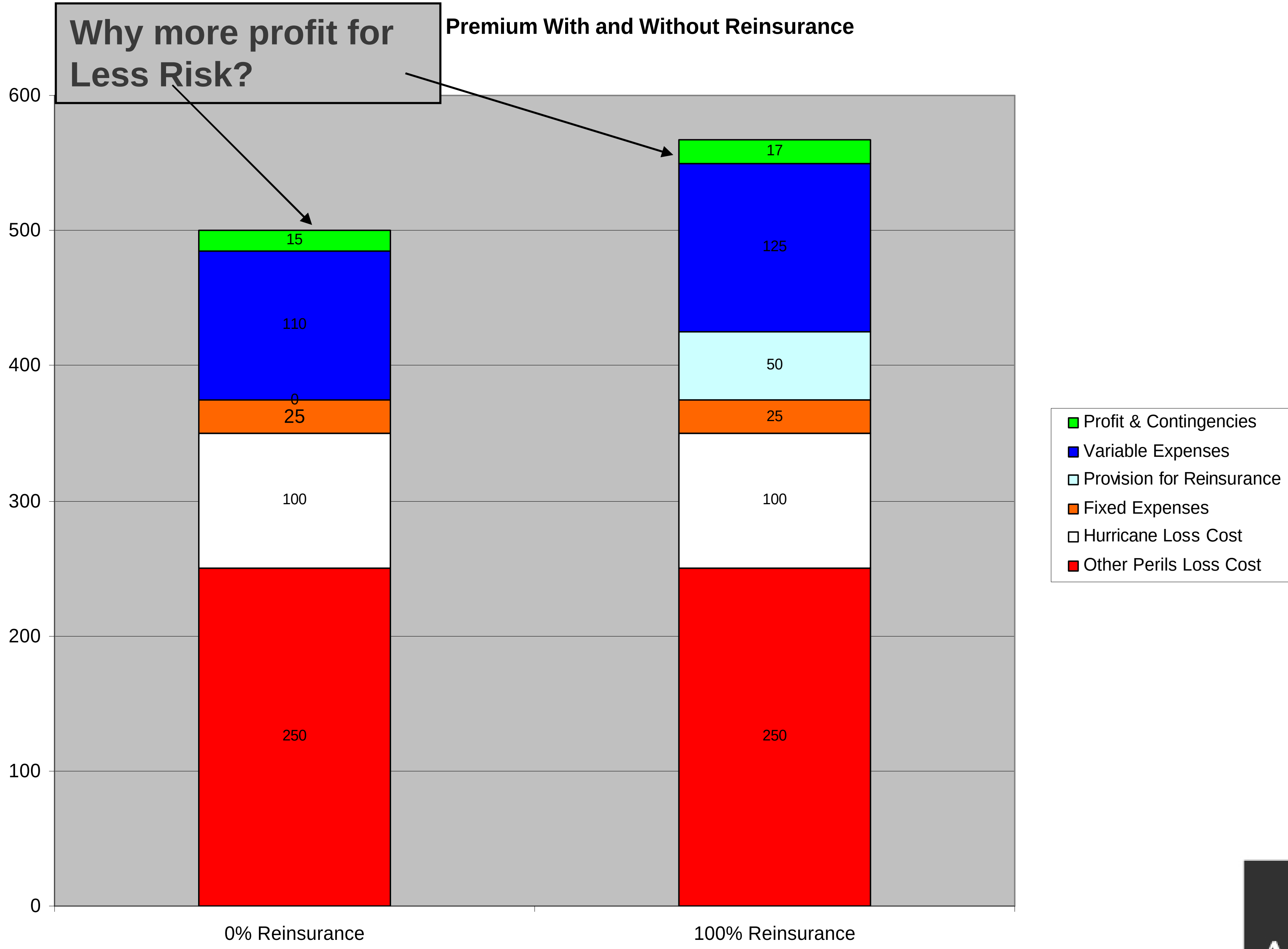
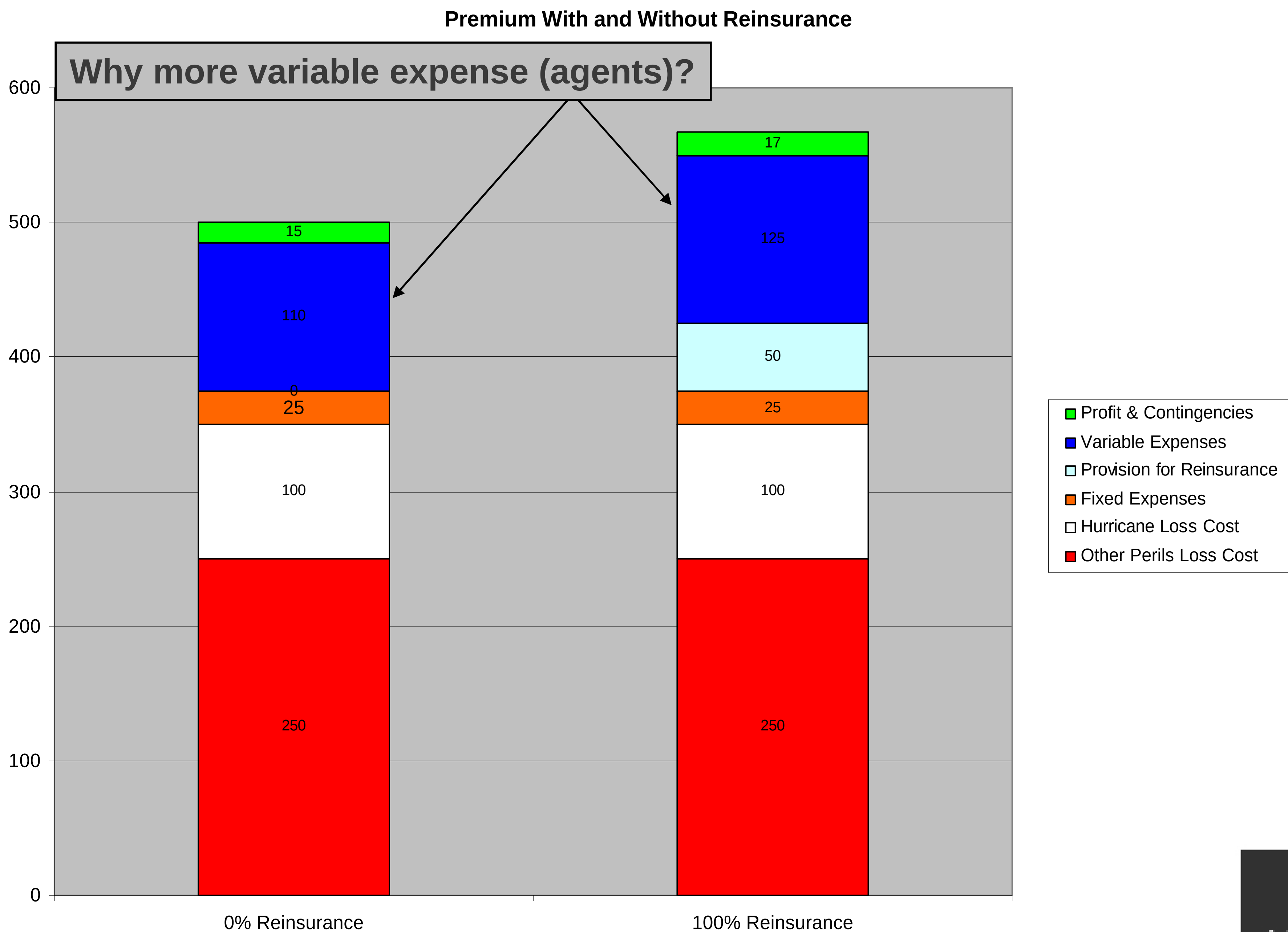
Premium With and Without Reinsurance





Why more profit for Less Risk?
Premium With and Without Reinsurance
600
500
400
300
200
100
0
15
110
0
25
100
250
17
125
50
25
100
250
0% Reinsurance
100% Reinsurance
Profit & Contingencies
Variable Expenses
Provision for Reinsurance
Fixed Expenses
Hurricane Loss Cost
Other Perils Loss Cost



Premium With and Without Reinsurance
Why more variable expense (agents)?
600
500
400
300
200
100
0
15
110
0
25
100
250
17
125
50
25
100
250
0% Reinsurance
100% Reinsurance
Profit & Contingencies
Variable Expenses
Provision for Reinsurance
Fixed Expenses
Hurricane Loss Cost
Other Perils Loss Cost

Why Does This Matter?

- Statement of Principles Regarding Property and Casualty Insurance Ratemaking
- Standard of Practice 30: “Treatment of Profit and Contingency Provisions and the Cost of Capital in Property Casualty Insurance Ratemaking”
- Statutory Considerations

CAS Statement of Principles

- “A rate provides for all costs associated with the transfer of risk.”

(Need to include reinsurance costs.)

- “A rate provides for the costs associated with individual risk transfer.”

(Coastal policyholders should pay their share.)

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Standard of Practice 30

"Property/Casualty insurance rates should provide for all expected costs, including a appropriate cost of capital associated with the specific risk transfer"

(If you keep some of the risk, you're entitled to a risk load for putting your surplus at risk.)

Statutory Considerations

Florida Statutes 627.062

"… For that portion of the rate covering the risk of hurricanes and other catastrophic losses for which the insurer has not purchased reinsurance and has exposed its capital and surplus to such risk, the office must approve a rating factor that provides the insurer a reasonable rate of return that is commensurate with such risk."

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0% Reinsurance Indication

[A]	Average Loss & LAE Ratio	70%
[B]	Fixed UW Expenses	5% (of premium)
[C]	Variable UW Expenses	22%
[D]	(Variable) Profit and Contingency Factor	3%
[E]	Indicated Rate Change	0%

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100% Reinsurance Indication

[A]	Average Loss & LAE Ratio	70%
[B]	Fixed UW Expenses	5% (of premium)
[B1]	Fixed Reinsurance Cost	???
[C]	Variable UW Expenses	22%
[D]	(Variable) Profit and Contingency Factor	3%
[E]	Indicated Rate Change	???

Reinsurance Provision

[1]	Direct Earned Premium	500
[2]	Hurricane Loss Cost	100
[3]	Reinsurance Premium	150
[4]	Reinsured Loss Cost	100
[5]= [3]-[4]	Reinsurance Expense	50
[6]= [5]/[1]	Provision for Fixed Reinsurance Expense	10%

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100% Reinsurance Indication

[A]	Average Loss & LAE Ratio	70%
[B]	Fixed UW Expenses	5% (of premium)
[B1]	Fixed Reinsurance Cost	10%
[C]	Variable UW Expenses	22%
[D]	(Variable) Profit and Contingency Factor	3%
[E]	Indicated Rate Change	13.3%

Cede 80% to Reinsurer

[1]	Direct Earned Premium	500
[2]	Hurricane Loss Cost	100
[3]	Reinsurance Premium	120
[4]	Reinsured Loss Cost	80
[5]= [3]-[4]	Reinsurance Expense	40
[6]= [5]/[1]	Provision for Fixed Reinsurance Expense	8%

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80% Ceded Indication

[A]	Avg Loss & Expense Ratio	70%
[B]	Fixed UW Expenses	5% (of premium)
[B1]	Fixed Reinsurance Cost	8%
[C]	Variable UW Expenses	22%
[D]	(Variable) Profit and Contingency Factor	3%
[E]	Indicated Rate Change	10.7%

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80% Ceded Indication

[A]	Average Loss & LAE Ratio	70%
[B]	Fixed UW Expenses	5% (of premium)
[B1]	Fixed Reinsurance Cost	8%
[B2]	Provision for Primary Company Risk	???
[C]	Variable UW Expenses	22%
[D]	(Variable) Profit and Contingency Factor	3%
[E]	Indicated Rate Change	???

Primary Company Risk Load

Reinsurer collects a risk load of

40/80=50% of expected loss

Primary insurer is entitled to less than that.

Select 30% of retained loss

0.30 x 20=6

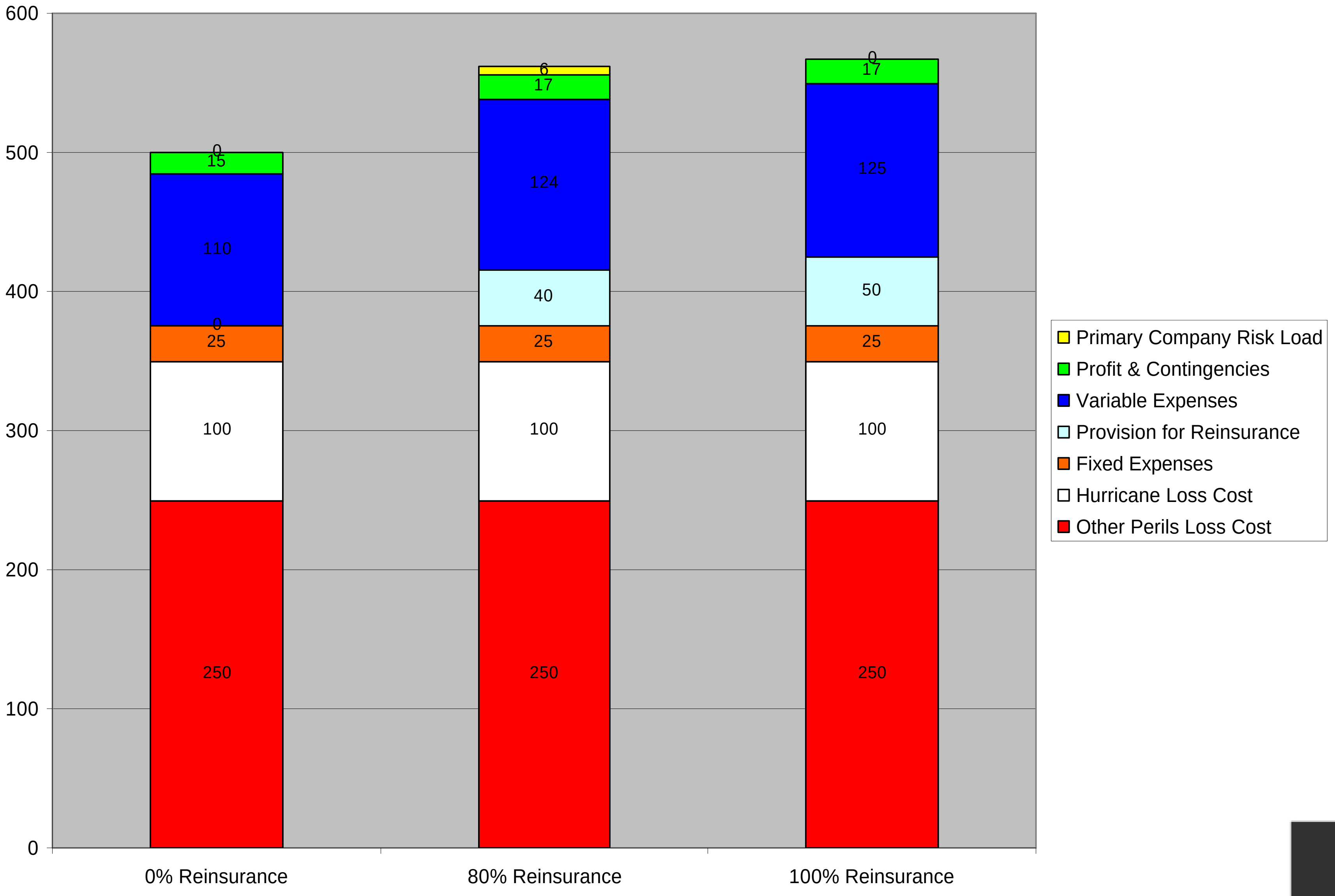
Provision for Primary insurer risk is

(6/500)=1.2%

80% Ceded Indication

[A]	Average Loss & LAE Ratio	70%
[B]	Fixed UW Expenses	5% (of premium)
[B1]	Fixed Reinsurance Cost	8%
[B2]	Provision for Primary Company Risk	1.2%
[C]	Variable UW Expenses	22%
[D]	(Variable) Profit and Contingency Factor	3%
[E]	Indicated Rate Change	12.3%

Premium With and Without Reinsurance



Closing Remarks

- Example in paper blends risk loads by layer.
- Need to allocate to territory.
- Questions?
- kburke@alfains.com