

CRM Risk Financing

Section 4

Loss Sensitive Transfer Options

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Red Slides

- Red Slides indicate information not in the notebook
- Created by me to help the learning process
- Available online at:

Sovereign.ky or DaleFenwick.com

Look for the “CRM” button.

Florida Windstorm Financing - 2008

- Florida Cat Fund
 - \$8 Billion in Assets
 - \$29 Billion in Potential Reinsurance Liabilities
- Pays \$224 Million to Berkshire Hathaway
 - BH Agrees to buy \$4 Billion in Bonds
 - 30 Years – 6.5% Interest Rate
- FL's then CFO, was swayed by the "enormous amount of difficulty" the state had securing \$625 Million in bonds to pay off 2005 hurricane losses.

Why not multiply by 1.3?

$$\$2,000,000 \times 1.3 = \$2,600,000$$

$$30\% \text{ of } \$2,600,000 = \$780,000$$

$$70\% \text{ of } \$2,600,000 = \$1,820,000$$

$$\text{But losses} = \$2,000,000$$

Why divide by .7?

$$\$2,000,000 / .7 = \$2,857,143$$

$$30\% \text{ of } \$2,857,143 = \$857,143$$

$$70\% \text{ of } \$2,857,143 = \$2,000,000$$

$$2,000,000 + 857,143 = \$2,857,143$$

How to Determine Retentions?

Look for Predictability

City of Apopka

Workers Compensation Cost Analysis and Forecast

Policy Start	Payroll	Incurred Losses	Loss Development Factor	Developed Losses	Trend Factor	Trended and Developed Losses	Loss Rate
10/1/2010	20,467,366	119,683	1.00	119,683	1.28	152,749	0.75%
10/1/2011	21,568,660	114,364	1.20	137,237	1.22	166,813	0.77%
10/1/2012	22,023,527	47,585	1.30	61,861	1.16	71,611	0.33%
10/1/2013	23,182,481	73,452	1.50	110,178	1.10	121,471	0.52%
10/1/2014	23,774,380	87,419	2.00	174,838	1.05	183,580	0.77%
10/1/2015	22,684,959					142,508	0.63%

Letter of Credit Sample

To Whom It May Concern,

Whereby establish our Irrevocable Letter of Credit No. _____ in your favor for the account of the above referenced applicant in an aggregate amount not to exceed One Million Dollars (\$1,000,000), to be available for payment of your draft or drafts drawn at sight on us when accompanied by this letter of credit and the following document:

A statement signed by an authorized representative of the participant, (Insert carrier name here), Lakeland, Florida, indicating that, “We hereby certify that funds are required to cover liability, loss, cost, expense or unpaid premiums incurred by us under a bond or undertaking on behalf of _____.”

Letter of Credit Sample (cont.)

It is a condition of this letter of Credit that it shall be deemed automatically extended without amendment for one year from its present or each future expiration date unless sixty (60) days prior to any expiration date, we send notice to you by registered mail that we elect not to consider this Letter of Credit renewed for any such additional period.

Another Collateral Stacking Example

Assumptions:

1. Large Deductible
2. Projected Losses = \$500,000
 - a. Limited by the Deductible
3. First Policy Begins on 1/1/2010
4. All Quotes
 - a. New and Renewal
 - b. Received 30 days Before Policy Begins

1st Collateral Calculation (12/1/2009)

Policy	Expected Losses	Incurred Losses	Loss Development Factor	Developed Losses	Paid Losses	Remaining Losses
1/1/2010	500,000	-	-	-	-	500,000
Total Collateral						500,000

2nd Collateral Calculation (12/1/2010) Part 1

Policy	Expected Losses	Incurred Losses	Loss Development Factor	Developed Losses	Paid Losses	Remaining Losses
1/1/2010	500,000	300,000	1.5	450,000	(100,000)	350,000
	-	-	-	-	-	-
Total Collateral						350,000

2nd Collateral Calculation (12/1/2010) Part 2

Policy	Expected Losses	Incurred Losses	Loss Development Factor	Developed Losses	Paid Losses	Remaining Losses
1/1/2010	500,000	300,000	1.5	450,000	(100,000)	350,000
1/1/2011	500,000	-	-	-	-	500,000
Total Collateral						850,000

3rd Collateral Calculation (12/1/2011)

Policy	Expected Losses	Incurred Losses	Loss Development Factor	Developed Losses	Paid Losses	Remaining Losses
1/1/2010	500,000	400,000	1.2	480,000	(250,000)	230,000
1/1/2011	500,000	300,000	1.5	450,000	(100,000)	350,000
1/1/2012	500,000	-	-	-	-	500,000
Total Collateral						1,080,000

6th Collateral Calculation (12/1/2014)

Policy	Expected Losses	Incurred Losses	Loss Development Factor	Developed Losses	Paid Losses	Remaining Losses
1/1/2010	500,000	450,000	1.00	450,000	(450,000)	-
1/1/2011	500,000	550,000	1.05	577,500	(450,000)	127,500
1/1/2012	500,000	450,000	1.10	495,000	(400,000)	95,000
1/1/2013	500,000	400,000	1.20	480,000	(300,000)	180,000
1/1/2014	500,000	300,000	1.50	450,000	(150,000)	300,000
1/1/2015	500,000					500,000
Total Collateral						1,202,500

Retro Formula Example

Standard Premium (SP) = \$1,000,000

Basic Factor (BF) = 30%

Losses at 18 months after inception = \$500,000

Losses at 30 months after inception = \$700,000

Loss Conversion Factor (LCF) = 1.10

Tax Factor = 5%

Retro Formula Example (18 Months)

$$\text{IRP} = (\text{Basic Premium} + \text{Converted Losses}) \times \text{Tax Multiplier}$$

$$\begin{aligned}\text{Basic Premium} &= \text{Standard Premium} \times \text{Basic Factor} \\ \text{Basic Premium} &= 1,000,000 \times 30\% \\ \text{Basic Premium} &= 300,000\end{aligned}$$

$$\begin{aligned}\text{Converted Losses} &= \text{Losses} \times \text{Loss Conversion Factor} \\ \text{Converted Losses} &= 500,000 \times 1.10 \\ \text{Converted Losses} &= 550,000\end{aligned}$$

$$\begin{aligned}\text{Tax Multiplier} &= 1.00 + \text{Tax Factor} \\ \text{Tax Multiplier} &= 1.00 + .05 = 1.05\end{aligned}$$

$$\text{IRP} = (300,000 + 550,000) \times 1.05 = 892,500$$

Retro Formula Example (30 Months)

$$\text{IRP} = (\text{Basic Premium} + \text{Converted Losses}) \times \text{Tax Multiplier}$$

$$\begin{aligned}\text{Basic Premium} &= \text{Standard Premium} \times \text{Basic Factor} \\ \text{Basic Premium} &= 1,000,000 \times 30\% \\ \text{Basic Premium} &= 300,000\end{aligned}$$

$$\begin{aligned}\text{Converted Losses} &= \text{Losses} \times \text{Loss Conversion Factor} \\ \text{Converted Losses} &= 700,000 \times 1.10 \\ \text{Converted Losses} &= 770,000\end{aligned}$$

$$\begin{aligned}\text{Tax Multiplier} &= 1.00 + \text{Tax Factor} \\ \text{Tax Multiplier} &= 1.00 + .05 = 1.05\end{aligned}$$

$$\text{IRP} = (300,000 + 770,000) \times 1.05 = 1,123,500$$

Retro Formula Example

Retro Adjustment = 1,123,500 – 892,500

Retro Adjustment = 231,000 (additional premium)

FIN Section 4 - Things to Know

- A. 2 Different Pricing Models – When to Use
- B. Characteristics, Advantages and Disadvantages of:
 1. Large Deductibles
 2. Retros (Be able to use the Retro Formula)
 3. Self Insurance
- C. Be able to compare and contrast the 3 strategies.
- D. Collateral – What is it? Where do I get it?

Week 2 Discussion Question

This week we looked at 4 different Loss Sensitive strategies; Large Deductible, Incurred-Loss Retro, Paid-Loss Retro, and Self Insurance.

Which one would you or one of your clients most likely use? Explain why the chosen plan is “right” for you or your client.

If you or your clients are not “large enough” to use a Loss Sensitive strategy, try to imagine being large enough.

Thank you!

Section 4

Alternative Financing Options

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