Filing at a Glance

Company:	NCCI
Product Name:	E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula
State:	Missouri
TOI:	16.0 Workers Compensation
Sub-TOI:	16.0004 Standard WC
Filing Type:	Rule
Date Submitted:	08/02/2011
SERFF Tr Num:	NCCI-127336056
SERFF Status:	Closed-APPROVED
State Tr Num:	
State Status:	APPROVED
Co Tr Num:	E-1402 (LC)
Effective Date Requested (New):	01/01/2013
Effective Date Requested (Renewal):	01/01/2013
Author(s):	Lesley O'Brien, Alison Herwig, Frank Gnolfo, Roy Wood, Robert Dalton
Reviewer(s):	David Cox (primary), Karen Rimel
Disposition Date:	06/20/2012
Disposition Status:	APPROVED
Effective Date (New):	01/01/2013
Effective Date (Renewal):	01/01/2013

State Filing Description:

State: Missouri **Filing Company:** NCCI
TOI/Sub-TOI: 16.0 Workers Compensation/16.0004 Standard WC
Product Name: E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula
Project Name/Number: /

General Information

Project Name:
Project Number:
Reference Organization:
Reference Title:
Filing Status Changed: 06/20/2012
State Status Changed: 06/20/2012
Created By: Frank Gnolfo
Corresponding Filing Tracking Number:
State TOI: 16.0 Workers Compensation

Status of Filing in Domicile:
Domicile Status Comments:
Reference Number:
Advisory Org. Circular:
Deemer Date:
Submitted By: Frank Gnolfo
State Sub-TOI: 16.0004 Standard WC

Filing Description:

The purpose of this item is to adjust the primary/excess loss split point and the maximum debit modification formula used in NCCI's Experience Rating Plan (Plan) in order to maintain the Plan's optimal performance. These changes require revisions to NCCI's Experience Rating Plan Manual for Workers Compensation and Employers Liabiltiy Insurance (Experience Rating Plan Manual) Rule 2 - Experience Rating Elements and Formula

Company and Contact

Filing Contact Information

Roy Wood, State Relations Executive
11430 Gravois Road
Suite 310
St. Louis, MO 63126

roy_wood@ncci.com
314-843-4001 [Phone]
314-842-3188 [FAX]

Filing Company Information

NCCI
901 Peninsula Corporate Circle
Boca Raton, FL 33487
(561) 893-3186 ext. [Phone]

CoCode:
Group Code:
Group Name:
FEIN Number: 65-0439698

State of Domicile: Florida
Company Type:
State ID Number:

Filing Fees

Fee Required? No
Retaliatory? No
Fee Explanation:

State Specific

NAIC Number: RO99985
Have you reviewed the General Instructions document? (yes/no)(General Instructions updated 9/14/07): Yes
If this is a rate filing, was rate data added on the rate/rule schedule? (yes/no): No

SERFF Tracking #:	*NCCI-127336056*	***State Tracking #:***		***Company Tracking #:***	*E-1402 (LC)*

State:	*Missouri*	***Filing Company:***	*NCCI*
TOI/Sub-TOI:	*16.0 Workers Compensation/16.0004 Standard WC*		
Product Name:	*E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula*		
Project Name/Number:	*/*		

Correspondence Summary

Dispositions

Status	Created By	Created On	Date Submitted
APPROVED	Karen Rimel	06/20/2012	06/20/2012

Objection Letters and Response Letters

Objection Letters

Status	Created By	Created On	Date Submitted
PENDING INDUSTRY RESPONSE	Karen Rimel	12/23/2011	12/23/2011

Response Letters

Responded By	Created On	Date Submitted
Frank Gnolfo	01/13/2012	01/13/2012

Amendments

Schedule	Schedule Item Name	Created By	Created On	Date Submitted
Supporting Document	Response and Exhibits for1/16/12 E-mail Inquiry	Robert Dalton	01/27/2012	06/12/2012
Supporting Document	Amendment	Frank Gnolfo	06/12/2012	06/12/2012
Supporting Document	Submitting Response to Email of 12/6/11 and 12/12/11 to keep filing info intact	Frank Gnolfo	01/11/2012	01/11/2012

Filing Notes

Subject	Note Type	Created By	Created On	Date Submitted
Response to 1-16-12 Inquiry	Note To Reviewer	Robert Dalton	01/27/2012	01/27/2012

SERFF Tracking #:	*NCCI-127336056*	***State Tracking #:***		***Company Tracking #:***	*E-1402 (LC)*

State:	*Missouri*	***Filing Company:***	*NCCI*
TOI/Sub-TOI:	*16.0 Workers Compensation/16.0004 Standard WC*		
Product Name:	*E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula*		
Project Name/Number:	*/*		

Disposition

Disposition Date: 06/20/2012
Effective Date (New): 01/01/2013
Effective Date (Renewal): 01/01/2013
Status: APPROVED

Comment:

Rate data does NOT apply to filing.

Schedule	Schedule Item	Schedule Item Status	Public Access
Supporting Document	Filing Memorandum	REVIEWED	Yes
Supporting Document	E-1402 Informational Exhibits	REVIEWED	Yes
Supporting Document	Submitting Response to Email of 12/6/11 and 12/12/11 to keep filing info intact	REVIEWED	Yes
Supporting Document	Response and Exhibits for 12/23/11 objection	REVIEWED	Yes
Supporting Document	Response and Exhibits for1/16/12 E-mail Inquiry	REVIEWED	Yes
Supporting Document	Amendment	REVIEWED	Yes
Rate	Exhibit 1	APPROVED	Yes

State: Missouri **Filing Company:** NCCI
TOI/Sub-TOI: 16.0 Workers Compensation/16.0004 Standard WC
Product Name: E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula
Project Name/Number: /

Objection Letter

Objection Letter Status	PENDING INDUSTRY RESPONSE
Objection Letter Date	12/23/2011
Submitted Date	12/23/2011
Respond By Date	01/20/2012

Dear Roy Wood,

Introduction:

Thank you for the filing recently submitted to this Department. Upon preliminary review, the following issues raised concerns and need clarification:

Objection 1

Comments: Please provide representative examples of experience rating worksheets illustrating the impact of the change in split-point.

Objection 2

Comments: Please identify the actuary responsible for the filing. Please provide the actuary's report documenting the actuary's data, methods and assumptions.

Objection 3

Comments: Please provide the information needed to estimate the impact of the proposed change in split-point on an individual policyholder during 2013. Specifically, this information includes expected loss ratios and d-ratios by class, weighting values and ballast values. Please state any assumptions used to determine the plan parameters.

Conclusion:

Please respond to this letter by the above date. This submission will be held in suspense pending your response. Feel free to contact me should you have any questions or concerns.

Sincerely,

Karen Rimel

SERFF Tracking #:	NCCI-127336056	**State Tracking #:**		**Company Tracking #:**	E-1402 (LC)

State:	Missouri	**Filing Company:**	NCCI
TOI/Sub-TOI:	16.0 Workers Compensation/16.0004 Standard WC		
Product Name:	E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula		
Project Name/Number:	/		

Response Letter

Response Letter Status	Submitted to State
Response Letter Date	01/13/2012
Submitted Date	01/13/2012

Dear David Cox,

Introduction:

Hello,

Response 1

Comments:

Response and exhibits, etc are in supporting doc folder

Related Objection 1

Comments: Please provide representative examples of experience rating worksheets illustrating the impact of the change in split-point.

Changed Items:

No Supporting Documents changed.

No Form Schedule items changed.

No Rate/Rule Schedule items changed.

Response 2

Comments:

Response and exhibits, etc are in supporting doc folder

Related Objection 2

Comments: Please identify the actuary responsible for the filing. Please provide the actuary's report documenting the actuary's data, methods and assumptions.

Changed Items:

No Supporting Documents changed.

No Form Schedule items changed.

No Rate/Rule Schedule items changed.

SERFF Tracking #:	*NCCI-127336056*	***State Tracking #:***		***Company Tracking #:***	*E-1402 (LC)*

State:	*Missouri*	***Filing Company:***	*NCCI*
TOI/Sub-TOI:	*16.0 Workers Compensation/16.0004 Standard WC*		
Product Name:	*E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula*		
Project Name/Number:	*/*		

Response 3

Comments:

Response and exhibits, etc are in supporting doc folder

Related Objection 3

Comments: Please provide the information needed to estimate the impact of the proposed change in split-point on an individual policyholder during 2013. Specifically, this information includes expected loss ratios and d-ratios by class, weighting values and ballast values. Please state any assumptions used to determine the plan parameters.

Changed Items:

Supporting Document Schedule Item Changes	
Satisfied - Item:	Response and Exhibits for 12/23/11 objection
Comments:	
Attachment(s):	MO Final Response 12-23-11 SERFF Objections.pdf Exhibit Objection 1.pdf Exhibit Objection 3 .pdf IRRWG1.pdf IRRWG2.pdf IRRWG8.pdf IRRWG6.pdf IRRWG3.pdf IRRWG4.pdf IRRWG5.pdf IRRWG7.pdf

No Form Schedule items changed.

No Rate/Rule Schedule items changed.

Conclusion:

Sincerely,
Frank Gnolfo

SERFF Tracking #:	*NCCI-127336056*	***State Tracking #:***		***Company Tracking #:***	*E-1402 (LC)*

State:	*Missouri*	***Filing Company:***	*NCCI*
TOI/Sub-TOI:	*16.0 Workers Compensation/16.0004 Standard WC*		
Product Name:	*E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula*		
Project Name/Number:	*/*		

Amendment Letter

Submitted Date: 06/12/2012

Comments:

Amendment letter submitted.

Changed Items:

No Form Schedule Items Changed.

No Rate Schedule Items Changed.

Supporting Document Schedule Item Changes	
Satisfied - Item:	Response and Exhibits for1/16/12 E-mail Inquiry
Comments:	
Attachment(s):	MO Response 1.16.12 Email Questions.pdf Exhibit for Question 21.pdf Question 13 - 50 Random Sample Mods - Excel version.xlsx

Satisfied - Item:	Amendment
Comments:	
Attachment(s):	E-1402 MO Amendments - 6-12-12.pdf

SERFF Tracking #:	*NCCI-127336056*	***State Tracking #:***		***Company Tracking #:***	*E-1402 (LC)*

State:	*Missouri*	***Filing Company:***	*NCCI*
TOI/Sub-TOI:	*16.0 Workers Compensation/16.0004 Standard WC*		
Product Name:	*E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula*		
Project Name/Number:	*/*		

Amendment Letter

Submitted Date: 01/11/2012

Comments:

Responses to email objections have been uploaded in SERFF as well.

Changed Items:

No Form Schedule Items Changed.

No Rate Schedule Items Changed.

Supporting Document Schedule Item Changes	
Satisfied - Item:	Submitting Response to Email of 12/6/11 and 12/12/11 to keep filing info intact
Comments:	
Attachment(s):	MO Response 2nd Set of Questions.pdf Exhibit for Response 8.pdf Exhibit for Response 9 .pdf Exhibit for Response 10.pdf

State: Missouri **Filing Company:** NCCI
TOI/Sub-TOI: 16.0 Workers Compensation/16.0004 Standard WC
Product Name: E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula
Project Name/Number: /

Note To Reviewer

Created By:

Robert Dalton on 01/27/2012 08:46 AM

Last Edited By:

Karen Rimel

Submitted On:

06/20/2012 08:28 AM

Subject:

Response to 1-16-12 Inquiry

Comments:

Attached are the response and exhibits for 1-16-12 email inquiry from AMI Risk Consultants, Inc. The files have also been placed in the Supporting Documentation tab.

State: Missouri **Filing Company:** NCCI
TOI/Sub-TOI: 16.0 Workers Compensation/16.0004 Standard WC
Product Name: E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula
Project Name/Number: /

Attachment Question 13 - 50 Random Sample Mods - Excel version.xlsx is not a PDF document and cannot be reproduced here.

National Council on Compensation Insurance, Inc.

Roy Wood
State Relations Executive
Regulatory Service Division

January 26, 2012

John M. Huff, Director
Missouri DIFP
P.O. Box 690
Jefferson City, MO 65102-0690

Attn: Gail Flannery
Consulting Actuary
AMI Risk Consultants, Inc.

RE: Item E-1402—Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula
SERFF Tracking Number: NCCI-127336056

Dear Ms. Flannery:

We are in receipt of your additional questions (numbers 11 through 21) regarding the above noted filing, and offer the following responses.

Question 11:
Why are large deductible policies excluded from exhibits such as Informational Exhibits 5 & 6?

Response 11:
They were excluded for several reasons, including the following:

- Large deductible policies are excluded from financial call data and from the determination of the overall aggregate filing indication.
- The final charged premium on large deductible policies is significantly different than the manual premium charge (perhaps only 20% of the manual charge) and the impact that the experience rating mod has on the final charged premium may be different than it is for other (non-deductible) policies.
- There are very few intrastate policies written on a large deductible policy.
- Their treatment in the ER Plan varies across states.

Question 12:
According to Response #10 there are 23,043 Missouri risks that are intrastate experience rated among mods effective 6/1/11 to 5/31/12. How many Missouri risks are:

- Interstate experience rated?
- Not subject to experience rating?

Can you also provide the total payroll for each of the three groups?

11430 Gravois Road • Suite 310 • St. Louis, Missouri 63126
Telephone: 314-843-4001 • Fax: 314-842-3188 • E-mail: Roy_Wood@NCCI.com

Response 12:
The following estimates are based on data excluding large deductibles. Expected losses are provided as an indication of the volume of business rather than payroll as that is not readily available.

- The 23K intrastate risks represent approximately 48% of expected loss volume.
- There are approximately 16K interstate risks representing approximately 42% of expected loss volume.
- There are approximately 40K non-rated risks representing approximately 10% of expected loss volume.

Question 13:
Could the "Exhibit for Response 9" previously provided, please be sent in Excel? How were the 50 sample risks selected? Could we have the complete list instead of just a sample?

Response 13:
The Exhibit for Response 9 is being provided in Excel. The 50 sample risks were randomly chosen, they happened to be the first 50 risks in the spreadsheet.

Question 14:
What does bootstrap sampling mean? Can you please describe the sampling process that was used?

Response 14:
The entire set of observations (465,639) was sampled **with replacement**. The size of the sample was set equal to the size of the entire population. Thus, each sample contained 465,639 observations.

Because the sampling was done with replacement, some observations within each individual sample would be repeated while other observations (from the entire population) would not be present. Repeating this over 100 samples and comparing the results (from the different samples) provides a sense of variability in the data (e.g. are a few super-large outliers driving the results?).

Question 15:
If each marker on Informational Exhibits 2 and 3 is the result of 100 samples of several hundred thousand risks, could you please provide the total resulting sample size for each range of mods depicted as well as the total population size for that range?

Response 15:
The total population size and the total sample size (all ranges combined) for **each** of the 100 samples is 465,639. Each range of mods, referred to as a quintile, contains 20% of the observations. So for each sample, each quintile contains 20% of 465,639 (=93,128).

Over all 100 samples, the total observations would be 465,639 x 100 = 46,563,900 and each quintile would represent 20% of 46,563,900 (=9,312,800).

Question 16:
As a follow-up to your response to question #1 from our December 12th email: Are you using some variance statistic, mean squared error or other measurement to quantify the improvement in the plan performance using the $15,000 split point? If so, could we please have those values for $5,000, $10,000, $15,000, $18,000 (or whatever split points were tested for the 2002 and 2006 policy years) in order to demonstrate optimality of the $15,000 selection and also to quantify the improvement in the plan performance over the current $5,000 split point ?

Response 16:
Please see pages 33-35 of the April 14, 2010 presentation entitled **Analysis Of Alternative Split Points** as well as pages 8-11 of the November 3, 2010 presentation entitled **Split Point Indexing and D-Ratios** that were both previously provided.

Note that lower values indicate better performance under the old test statistic while higher values indicate better performance under the new test statistic. Also, note that the split point values being tested do NOT reflect any de-trending. Thus, these split point values would need to be trended to 1/1/13.

Question 17:
What are the 5% , 50% and 95% percentile relative loss ratios for each of the experience mod groups (both before and after experience rating) shown on Informational Exhibits 2 and 3?

Response 17:
The relative loss ratios for each group (quintile) are shown below:

Informational Exhibit 2: 5,000 split point, indexed for severity inflation

	Before experience rating					After experience rating				
50th percentile	0.70	0.92	1.07	1.01	1.31	0.91	1.02	1.14	1.02	1.06
95th percentile	0.72	0.99	1.19	1.05	1.35	0.94	1.09	1.27	1.06	1.09
5th percentile	0.66	0.86	0.99	0.95	1.26	0.86	0.96	1.05	0.96	1.03

Informational Exhibit 3: 15,000 split point, indexed for severity inflation

	Before experience rating					After experience rating				
50th percentile	0.67	0.86	0.94	0.99	1.31	0.96	1.03	1.05	1.00	1.00
95th percentile	0.70	0.93	1.02	1.04	1.36	1.01	1.11	1.14	1.05	1.03
5th percentile	0.64	0.79	0.87	0.94	1.26	0.92	0.95	0.98	0.95	0.97

Question 18:
As a follow-up to Question #2, what did Policy Year 2002 look like under the $5,000 split point?

Response 18:
Please see page 15 of the previously provided April 14, 2010 presentation entitled **Analysis Of Alternative Split Points**. The split points underlying these results have NOT been de-trended. A split point of $2500 in 2002 is equivalent to a $5000 split point in 2013.

Question 19:
On what basis were 2002 and 2006 selected as the test years for the experience rating studies?

Response 19:
During the time period of our analysis, PY 2002 represented the most recent data available at a 5th report and PY 2006 represented the most recent data available at a 1st report. While PY 2002 was older than 2006, it was also more mature (developed). Thus, there was value in reviewing both of these policy years.

Question 20:
How were the parameters for the proposed mod cap formula selected?

Response 20:
From a purely actuarial standpoint, there is little support for the general concept of capping. Because of this, a less restrictive minimum cap (10%) is being proposed. 10% was judgmentally selected as being

less than or equal to a typical credit or debit in workers compensation and in other lines of insurance. The 0.0004 factor was selected to minimize the change versus the current mod cap on small insureds.

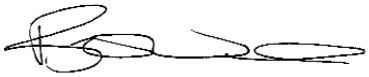
The other primary reason for the change in the formula was to fully account for differences across states in claim severities. Two identical employers operating in two different states should ideally be subject to the same cap. The proposed formula achieves this by dividing the employer's expected losses (E) by the state's average claim cost (G). This normalizes severities across states. The current formula falls short in this respect because it includes an expected loss term (E) that is not divided by G.

Question 21:
Could a column please be inserted on each page of "Exhibit for Response 10" to show the number of risks that would reach the current mod cap under the $10k and $15k split points?

Response 21:
Please see the attached exhibits. Due to updates in the underlying data, the total number of risks shown is slightly different than on previously submitted exhibits.

Thank you for consideration of this item.

Respectfully submitted,



Roy Wood
State Relations Executive

Missouri ER Mod Cap Impact Analysis

Impact of Mod Caps on MO Intrastate Mods Effective Between 6/1/2011-5/31/2012

Expected Losses [E]		Total Intrastate Risks	Number of Risks Reaching Current Mod Cap @ 5K Split Point	Number of Risks Reaching Current Mod Cap @ 10K Split Point
1	1,000	-	-	-
1,000	5,000	3,900	146	335
5,000	10,000	8,148	90	288
10,000	20,000	5,795	10	44
20,000	50,000	3,723	1	3
50,000	100,000	1,192	-	-
100,000	200,000	462	-	-
200,000	500,000	185	-	-
over	500,000	39	-	-
Total		**23,444**	**247**	**670**
Percentage		**100.0%**	**1.1%**	**2.9%**

Note: excludes large deductible policies.

Missouri ER Mod Cap Impact Analysis

Impact of Mod Caps on MO Intrastate Mods Effective Between 6/1/2011-5/31/2012

Expected Losses [E]		Total Intrastate Risks	Number of Risks Reaching Current Mod Cap @ 5K Split Point	Number of Risks Reaching Current Mod Cap @ 15K+index Split Point
1	1,000	-	-	-
1,000	5,000	3,900	146	335
5,000	10,000	8,148	90	568
10,000	20,000	5,795	10	119
20,000	50,000	3,723	1	6
50,000	100,000	1,192	-	-
100,000	200,000	462	-	-
200,000	500,000	185	-	-
over	500,000	39	-	-
Total		**23,444**	**247**	**1,028**
Percentage		**100.0%**	**1.1%**	**4.4%**

Note: excludes large deductible policies.

SERFF Tracking #:	*NCCI-127336056*	***State Tracking #:***		***Company Tracking #:***	*E-1402 (LC)*

State:	*Missouri*	***Filing Company:***	*NCCI*
TOI/Sub-TOI:	*16.0 Workers Compensation/16.0004 Standard WC*		
Product Name:	*E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula*		
Project Name/Number:	*/*		

Rate/Rule Schedule

Item No.	Schedule Item Status	Exhibit Name	Rule # or Page #	Rate Action	Previous State Filing Number	Attachments
1	APPROVED 06/20/2012	Exhibit 1	Rule 2	Replacement	E-1379	Exhibit 1 Countrywide Only - E-1402.pdf

ITEM E-1402—REVISIONS TO THE EXPERIENCE RATING PLAN PRIMARY/EXCESS SPLIT POINT VALUE AND MAXIMUM DEBIT MODIFICATION FORMULA

EXHIBIT 1
EXPERIENCE RATING PLAN MANUAL—2003 EDITION
RULE 2–EXPERIENCE RATING ELEMENTS AND FORMULA
C. ELEMENTS OF EXPERIENCE RATING FORMULA AND WORKSHEET
(Applies in: AL, AR, AZ, CT, DC, FL, HI, IA, ID, IL, IN, KS, KY, MD, ME, MO, MS, MT, NC, NE, NH, NM, NV, OK, RI, SC, SD, TN, UT, VA, VT, WV)

6. Actual Primary Losses

Actual Primary Losses are the portion of the actual incurred losses that are used at full value in the experience rating calculation. For each actual incurred loss, the amount up to ~~$5,000~~ the applicable state primary/excess split point value is considered primary.

Refer to the Experience Rating Values state pages of this Plan for the applicable state primary/excess split point value.

For each medical-only claim, the primary amount is reduced by 70%.

EXHIBIT 1
EXPERIENCE RATING PLAN MANUAL—2003 EDITION
RULE 2–EXPERIENCE RATING ELEMENTS AND FORMULA
C. ELEMENTS OF EXPERIENCE RATING FORMULA AND WORKSHEET
(Applies in: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WV)

7. Expected Excess Losses

Expected Excess Losses are determined by subtracting the total expected primary losses from the total expected losses. Within the experience rating modification calculation, the expected excess losses represent the benchmark level of losses in total, for the portion of all claims in excess of ~~$5,000~~ the applicable state primary/excess split point value. It is against this benchmark that individual employers are compared, based on their actual excess losses.

Refer to the Experience Rating Values state pages of this Plan for the applicable state primary/excess split point value.

ITEM E-1402—REVISIONS TO THE EXPERIENCE RATING PLAN PRIMARY/EXCESS SPLIT POINT VALUE AND MAXIMUM DEBIT MODIFICATION FORMULA

EXHIBIT 1
EXPERIENCE RATING PLAN MANUAL—2003 EDITION
RULE 2–EXPERIENCE RATING ELEMENTS AND FORMULA
C. ELEMENTS OF EXPERIENCE RATING FORMULA AND WORKSHEET
12. RATABLE EXCESS
(Applies in: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WV)

b. Actual Ratable Excess Losses

Actual Ratable Excess Losses are determined by multiplying the weighting value times the actual excess losses. The result is rounded to the nearest whole number. For each actual incurred loss exceeding ~~$5,000~~ the applicable state primary/excess split point value, only a portion of the loss amount above ~~$5,000 (the excess portion)~~ the applicable state primary/excess split point value is used. Within the experience rating calculation, the actual ratable excess losses represent, in total, the amount of actual excess losses to be used.

Refer to the Experience Rating Values state pages of this Plan for the applicable state primary/excess split point value.

ITEM E-1402—REVISIONS TO THE EXPERIENCE RATING PLAN PRIMARY/EXCESS SPLIT POINT VALUE AND MAXIMUM DEBIT MODIFICATION FORMULA

EXHIBIT 1
EXPERIENCE RATING PLAN MANUAL—2003 EDITION
RULE 2–EXPERIENCE RATING ELEMENTS AND FORMULA
C. ELEMENTS OF EXPERIENCE RATING FORMULA AND WORKSHEET
13. LIMITATION OF LOSSES EMPLOYED IN A RATING
(Applies in: AK*, AL, AR, AZ, CO*, CT, DC, FL, GA*, HI, IA, ID, IL, IN, KS, KY, LA*, MA*, MD, ME, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR*, RI, SC, SD, TN, UT, VA, VT, WV)
(*See Exhibit 2 State Exceptions to the Basic Loss Limitation Table in AK, CO, GA, LA, MA, OR)

a. Single and Multiple Claim Limitation

Basic Loss Limitation Table

If . . .	Then . . .
A medical-only loss (injury type 6) exists	The actual incurred loss, actual primary loss, and actual excess loss amounts are reduced by 70%
An accident involves only one person	• The loss is subject to the per claim accident limitation • The actual primary loss is subject to the maximum primary value of ~~$5,000~~ the applicable state primary/excess split point value, even if the loss does not exceed the per claim accident limitation
An employers liability-only loss exists	• The loss is subject to the employers liability per claim accident limitation • The actual primary loss is subject to the maximum primary value of ~~$5,000~~ the applicable state primary/excess split point value, even if the loss does not exceed the employers liability per claim accident limitation

Loss Limitations for Accidents Involving Two or More Persons Table 1

If an accident involves two or more persons, and . . .	Then . . .
The total of the losses exceeds the multiple claim accident limitation	• The total losses are subject to the multiple claim accident limitation • The actual primary loss for these accidents is limited to ~~$10,000~~ two times the applicable state primary/excess split point value, even if the losses do not exceed the multiple claim accident limitation
The total of the losses **does not** exceed the multiple claim accident limitation, and none of the individual losses within the total exceeds the state per claim accident limitation	• The individual losses are used at full value • The total actual primary losses for the accident are limited to ~~$10,000~~ two times the applicable state primary/excess split point value

EXHIBIT 1 (CONT'D)
EXPERIENCE RATING PLAN MANUAL—2003 EDITION
RULE 2–EXPERIENCE RATING ELEMENTS AND FORMULA
C. ELEMENTS OF EXPERIENCE RATING FORMULA AND WORKSHEET
13. LIMITATION OF LOSSES EMPLOYED IN A RATING
(Applies in: AK*, AL, AR, AZ, CO*, CT, DC, FL, GA*, HI, IA, ID, IL, IN, KS, KY, LA*, MA*, MD, ME, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR*, RI, SC, SD, TN, UT, VA, VT, WV)
(*See Exhibit 2 State Exceptions to the Basic Loss Limitation Table in AK, CO, GA, LA, MA, OR)

Loss Limitations for Accidents Involving Two or More Persons Table 2

If an accident involves two or more persons, and the total of the losses does not exceed the multiple claim accident limitation, but an individual loss within the total exceeds the state per claim accident limitation, and . . .	**Then the individual loss is limited to the state per claim accident limitation and . . .**
The total of the remaining losses exceeds ~~$5,000~~ the applicable state primary/excess split point value	• The remainder of the losses are used at full value • The total actual primary losses for the accident are limited to ~~$10,000~~ two times the applicable state primary/excess split point value
The total of the remaining losses **does not** exceed ~~$5,000~~ the applicable state primary/excess split point value	• The remainder of the losses are used at full value • The actual primary loss is limited to ~~$5,000~~ the applicable state primary/excess split point value for the individually limited loss • No actual primary loss limitation applies for the remainder of the losses

Refer to the **User's Guide** *for examples.*

ITEM E-1402—REVISIONS TO THE EXPERIENCE RATING PLAN PRIMARY/EXCESS SPLIT POINT VALUE AND MAXIMUM DEBIT MODIFICATION FORMULA

EXHIBIT 1
EXPERIENCE RATING PLAN MANUAL—2003 EDITION
RULE 2–EXPERIENCE RATING ELEMENTS AND FORMULA
C. ELEMENTS OF EXPERIENCE RATING FORMULA AND WORKSHEET
13. LIMITATION OF LOSSES EMPLOYED IN A RATING
(Applies in: AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WV)

b. Disease Loss Limitation

Disease losses are subject to per claim and multiple claim limitations. A limitation on total disease losses may also apply to an individual policy. This is in addition to the claim limitations already applied to individual disease losses under Rule 2-C-13-a.

(1) To apply the disease loss policy limitation:

(a) Determine if a risk's individual policy total limited and nonlimited actual incurred disease losses exceed the policy disease limit of triple the per claim accident limitation shown in the Tables of Weighting Values, plus 120% of the risk's total expected losses for the experience period. If the risk-specific threshold is exceeded, the disease losses are limited to such threshold, and

(b) The actual primary losses are limited to ~~$10,000~~ two times the applicable state primary/excess split point value, plus 40% of the risk's total expected primary losses for the experience period.

(c) Round the result of (b) to the nearest whole number.

(2) A policy's total disease losses may not meet the risk-specific policy limitation amount as determined in (1)(a) above, but exceed the limitation shown in (1)(b). In such circumstances, Rule 2-C-13-a applies.

*Refer to the **User's Guide** for examples.*

(3) For risks that do not have an experience period of 36 months, determine policy disease losses as follows:

To determine the . . .	**Combine the disease losses of all policies within the experience period having an effective date . . .**
Most recent policy year	Within 24 months prior to the rating effective date
Middle policy year	More than 24 months but not exceeding 36 months prior to the rating effective date
Oldest policy year	More than 36 months prior to the rating effective date

EXHIBIT 1
EXPERIENCE RATING PLAN MANUAL—2003 EDITION
RULE 2–EXPERIENCE RATING ELEMENTS AND FORMULA
D. EXPERIENCE RATING FORMULA
(Applies in: AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, WV)

2. Maximum Debit Modification

Experience rating modification factors determined by the formula in Rule 2-D-1 are subject to a cap if the debit modification exceeds a specific amount. The risk-specific maximum debit modification is determined as follows:

Maximum Debit Modification = 1.10 + (0.0004 x E/G)~~1 + {(0.00005)[(Total Expected Losses) + (2)(Total Expected Losses)/(G)]}~~

The maximum debit modification for an interstate risk is limited to the cap for the state with the largest amount of expected losses.

"E" is the risk's total expected losses.

"G" is a ~~factor~~value equal to a state's average cost per claim for losses used in experience rating, divided by 1000. "G" is located in the Experience Rating Values state pages of this Plan.

*Refer to the **User's Guide** for an example.*

SERFF Tracking #:	*NCCI-127336056*	***State Tracking #:***		***Company Tracking #:***	*E-1402 (LC)*

State:	*Missouri*	***Filing Company:***	*NCCI*
TOI/Sub-TOI:	*16.0 Workers Compensation/16.0004 Standard WC*		
Product Name:	*E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula*		
Project Name/Number:	*/*		

Supporting Document Schedules

Satisfied - Item:	Filing Memorandum
Comments:	
Attachment(s):	Filing Memorandum.pdf
Item Status:	REVIEWED
Status Date:	06/20/2012

Satisfied - Item:	E-1402 Informational Exhibits
Comments:	
Attachment(s):	ER ESP Info Exhibits 1-6.pdf
Item Status:	REVIEWED
Status Date:	06/20/2012

Satisfied - Item:	Submitting Response to Email of 12/6/11 and 12/12/11 to keep filing info intact
Comments:	
Attachment(s):	MO Response 2nd Set of Questions.pdf Exhibit for Response 8.pdf Exhibit for Response 9 .pdf Exhibit for Response 10.pdf
Item Status:	REVIEWED
Status Date:	06/20/2012

Satisfied - Item:	Response and Exhibits for 12/23/11 objection
Comments:	

SERFF Tracking #:	*NCCI-127336056*	***State Tracking #:***		***Company Tracking #:***	*E-1402 (LC)*

State:	*Missouri*	***Filing Company:***	*NCCI*
TOI/Sub-TOI:	*16.0 Workers Compensation/16.0004 Standard WC*		
Product Name:	*E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula*		
Project Name/Number:	*/*		

Attachment(s):	MO Final Response 12-23-11 SERFF Objections.pdf Exhibit Objection 1.pdf Exhibit Objection 3 .pdf IRRWG1.pdf IRRWG2.pdf IRRWG8.pdf IRRWG6.pdf IRRWG3.pdf IRRWG4.pdf IRRWG5.pdf IRRWG7.pdf
Item Status:	REVIEWED
Status Date:	06/20/2012

Satisfied - Item:	Response and Exhibits for1/16/12 E-mail Inquiry
Comments:	
Attachment(s):	MO Response 1.16.12 Email Questions.pdf Exhibit for Question 21.pdf Question 13 - 50 Random Sample Mods - Excel version.xlsx
Item Status:	REVIEWED
Status Date:	06/20/2012

Satisfied - Item:	Amendment
Comments:	
Attachment(s):	E-1402 MO Amendments - 6-12-12.pdf
Item Status:	REVIEWED
Status Date:	06/20/2012

State: Missouri **Filing Company:** NCCI
TOI/Sub-TOI: 16.0 Workers Compensation/16.0004 Standard WC
Product Name: E-1402 Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula
Project Name/Number: /

Attachment Question 13 - 50 Random Sample Mods - Excel version.xlsx is not a PDF document and cannot be reproduced here.

FILING MEMORANDUM

ITEM E-1402—REVISIONS TO THE EXPERIENCE RATING PLAN PRIMARY/EXCESS SPLIT POINT VALUE AND MAXIMUM DEBIT MODIFICATION FORMULA

PURPOSE

The purpose of this item is to adjust the primary/excess loss split point and the maximum debit modification formula used in NCCI's Experience Rating Plan (Plan) in order to maintain the Plan's optimal performance. These changes require revisions to NCCI's ***Experience Rating Plan Manual for Workers Compensation and Employers Liability Insurance*** (***Experience Rating Plan Manual***) Rule 2—Experience Rating Elements and Formula.

BACKGROUND

Primary/Excess Split Point

The dollar value that splits a loss into its primary and excess portions is known as the primary/excess split point. Currently, in the Plan, the first $5,000 of a loss is considered primary, and the portion of the loss above $5,000 is considered excess. This is an important distinction because actual primary losses are given full weight in the experience rating formula. Actual excess losses only receive partial weight.

The $5,000 split point has not changed for approximately 20 years. During this time, the Plan has seen the average dollar amount per claim approximately triple, as shown in **Informational Exhibit 1**. Because of this, the portion of each claim that flows into the experience rating formula at full value (primary loss amount) is much smaller than what it used to be 20 years ago. The result is that the Plan is giving less weight to each employer's actual experience. Consequently, the Plan formula has become less responsive, and individual employer experience rating modifications have gravitated toward the all-risk average over time.

Recent performance tests of the Plan confirm the above observation. This testing generally shows that the group of employers receiving a credit should receive a slightly larger credit and the group of employers receiving a debit should receive a slightly larger debit. **Informational Exhibit 2** provides the results from NCCI's standard quintile test for Policy Year (PY) 2006 and can be interpreted as follows:

- Risks are placed into one of five groups based on their 2006 experience rating modification, with the risks on the left receiving the lowest experience rating modifications and the risks on the right receiving the highest experience rating modifications.
- While the 2006 experience rating modification would have been based on experience from 2002–2004, this exhibit is showing the PY 2006 experience that actually emerged. The five groups on the left half of this exhibit are shown **prior to** the application of the experience rating modification. The five groups on the right half of this exhibit are shown **after** the application of the experience rating modification.
- The left half of this exhibit reveals that the Plan was generally able to identify the better-than-average and worse-than-average risks. The risks receiving the lowest experience rating modifications subsequently had the best experience. The risks receiving the highest experience rating modifications subsequently had the worst experience. The left half of this exhibit also shows that the Plan was not as successful in distinguishing between the middle three groups of employers.
- If the Plan were performing at an optimal level, the loss ratios shown on the right half of this exhibit would be 100% for all five groups. This is because employers that had 20% lower losses (for example) would receive a 20% experience rating credit. Because the left-most group (on the right half of this exhibit) is significantly less than 100%, this indicates that this group did not receive a large enough experience

rating credit (their standard premium was too high). In a similar fashion, the right-most group (on the right half of this exhibit) is significantly greater than 100%, indicating that this group did not receive a large enough experience rating debit (their standard premium was too low).

Maximum Debit Modification Formula

Currently, under ***Experience Rating Plan Manual*** Rule 2-D-2, experience rating modifications are subject to the following risk-specific cap where "E" refers to the expected losses for an individual risk, and the value of "G" is the statewide average cost of a claim in units of 1,000:

$1 + [\ 0.00005 \times (E + 2E/G)\ ]$

Currently, only 2% of risks in the Plan reach this cap.

From inspection, it is evident that this formula has a hard minimum of 1.00. That is, this formula approaches a cap value of 1.00 for very small risk sizes. Given that this formula places a **maximum** cap on experience rating modifications, a value that approaches 1.00 seems too restrictive.

Also, to be optimal, this formula could better account for differences across states in claim severities. For example, two identical employers in two different states would ideally be subject to the same experience rating modification cap. The current formula only partially addresses this issue.

PROPOSAL

The following changes are proposed to NCCI's Experience Rating Plan:

1. Increase the primary/excess split point to an inflation-adjusted $15,000 over a three-year transition period, and continue to increase this amount thereafter on an annual basis using a countrywide inflation index.
   a. In year one, initially increase the primary/excess split point to $10,000, to become effective concurrently with each state's approved rate/loss cost filing on or after January 1, 2013
   b. In year two, increase the primary/excess split point to $13,500, concurrently with each state's approved rate/loss cost filing
   c. In year three, and annually thereafter, concurrent with each state's approved rate/loss cost filing, increase the primary/excess split point to the indexed value for $15,000. The index would estimate annual countrywide severity changes between the average loss date for experience rating modifications in the initial year of implementation and the effective year.

Informational Exhibit 3 restates the results from NCCI's standard quintile test for PY 2006 using the proposed $15,000 split point. Comparing this exhibit to **Informational Exhibit 2**, it is apparent that the $15,000 split point is superior at distinguishing between the middle three groups (see left side of both exhibits). The right side of these exhibits also reveals the superiority of the $15,000 split point since the **Informational Exhibit 3** loss ratios are much closer to 100% for all groups, indicating that the magnitude of the credits and debits using a $15,000 split point is appropriate. **Informational Exhibit 2** shows that the credits and debits using the current $5,000 split point are too small.

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The applicable primary/excess split point value will be shown on each state's Experience Rating Values pages.

2. Revise the maximum debit modification formula to **1.10 + 0.0004 x E/G**. This proposed formula improves on the current formula in both of the areas noted in the **Background** section of this filing memorandum as follows:
   a. The proposed formula has a hard minimum of 1.10 rather than 1.00. A maximum debit that approaches 10% is more reasonable than a 0% debit.
   b. The proposed formula more fully accounts for differences across states in claim severities. The variable term in this formula (0.0004 x E/G) incorporates the G-value and produces an experience rating modification cap that fully accounts for state differences in claim severities. Under the proposed formula, two identical employers in two different states would be subject to the same experience rating modification cap.

Informational Exhibit 4 provides a comparison of the current and proposed experience rating modification caps for various G-values. The experience rating modification caps would continue to vary by state. The exhibit also shows the G-values that had been filed as of March 1, 2011 in each state.

IMPACT

Primary/Excess Split Point

There is no overall statewide premium impact from the proposed change to the primary/excess split point.

The average experience rating modification across all employers will not change due to these increases in the split point. This is because there will be corresponding changes to the Discount Ratio (D ratio), which determines the expected excess losses used in the experience rating modification formula. In general, both experience rating credits and experience rating debits will become larger. These credits and debits will offset each other on a statewide basis. In addition, the overall average experience rating modification (the experience rating off-balance) is monitored on a state-by-state basis. Experience rating values are adjusted in the annual rate/loss cost filings to achieve the targeted overall experience rating modification value.

On an individual risk basis, most employers currently receiving credit experience rating modifications will receive larger credits under the proposal. Most employers currently receiving debit experience rating modifications will receive larger debits under the proposal.

Informational Exhibit 5 provides an estimate of what the Plan's distribution of risks, payroll, and expected losses by experience rating modification change would be under the initial $10,000 split point. This exhibit shows that 93% of risks will receive less than a 10-point change in their experience rating modification under the initial $10,000 split point. This exhibit also reflects the proposed change to the maximum debit modification formula.

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ITEM E-1402—REVISIONS TO THE EXPERIENCE RATING PLAN PRIMARY/EXCESS SPLIT POINT VALUE AND MAXIMUM DEBIT MODIFICATION FORMULA

Maximum Debit Modification Formula

The overall statewide premium impact from the proposed change to the maximum debit modification formula is negligible.

Informational Exhibit 4 provides a comparison of the current and proposed caps for various G-values. **Informational Exhibit 6** shows the estimated number of risks in the Plan that would be impacted by the maximum debit modification formula change.

IMPLEMENTATION

In order to implement this item, the attached exhibits detail the changes required in NCCI's ***Experience Rating Plan Manual***:

- **Exhibit 1** contains national rule changes
- **Exhibit 2** contains state-specific rule changes
- **Informational Exhibits 1–6** provide additional, nonfiled technical information related to the proposed changes

This item will become effective concurrently with each state's approved rate/loss cost filing effective on or after January 1, 2013. For example, this item will become effective January 1, 2013 with approved rate/loss cost filings that have a January 1, 2013 effective date. Similarly, this item will become effective July 1, 2013 with approved rate/loss cost filings that have a July 1, 2013 effective date.

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ITEM E-1402—REVISIONS TO THE EXPERIENCE RATING PLAN PRIMARY/EXCESS SPLIT POINT VALUE AND MAXIMUM DEBIT MODIFICATION FORMULA

The following chart shows the proposed effective dates for each state:

State	Proposed Effective Date*
Alabama	March 1, 2013
Alaska	January 1, 2013
Arizona	January 1, 2013
Arkansas	July 1, 2013
Colorado	January 1, 2013
Connecticut	January 1, 2013
District of Columbia	November 1, 2013
Florida	January 1, 2013
Georgia	March 1, 2013
Hawaii	January 1, 2013
Idaho	January 1, 2013
Illinois	January 1, 2013
Indiana	January 1, 2013
Iowa	January 1, 2013
Kansas	January 1, 2013
Kentucky	October 1, 2013
Louisiana	May 1, 2013
Maine	January 1, 2013
Maryland	January 1, 2013
Massachusetts	TBD
Mississippi	March 1, 2013
Missouri	January 1, 2013
Montana	July 1, 2013
Nebraska	February 1, 2013
Nevada	March 1, 2013
New Hampshire	January 1, 2013
New Mexico	January 1, 2013

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ITEM E-1402—REVISIONS TO THE EXPERIENCE RATING PLAN PRIMARY/EXCESS SPLIT POINT VALUE AND MAXIMUM DEBIT MODIFICATION FORMULA

State	Proposed Effective Date*
North Carolina	April 1, 2013
Oklahoma	January 1, 2013
Oregon	January 1, 2013
Rhode Island	June 1, 2013
South Carolina	July 1, 2013
South Dakota	July 1, 2013
Tennessee	March 1, 2013
Utah	December 1, 2013
Vermont	April 1, 2013
Virginia	April 1, 2013
West Virginia	November 1, 2013

* Subject to change

Changes in Average Claim Cost Over Time

Experience Rating Plan losses at first report

Midpoint of Experience	Average Claim Cost
12/15/88	$2,527
11/11/89	$2,777
01/07/91	$3,157
11/20/91	$3,321
12/11/92	$3,418
11/28/94	$3,409
08/29/95	$3,432
10/28/96	$3,571
10/15/97	$3,693
08/08/98	$3,850
01/14/00	$4,306
06/22/00	$4,508
03/05/02	$5,349
02/15/03	$5,861
03/26/04	$6,267
03/02/05	$6,419
03/24/06	$6,803
03/06/07	$7,224
--	--
01/01/11	$8,787 *

Note:

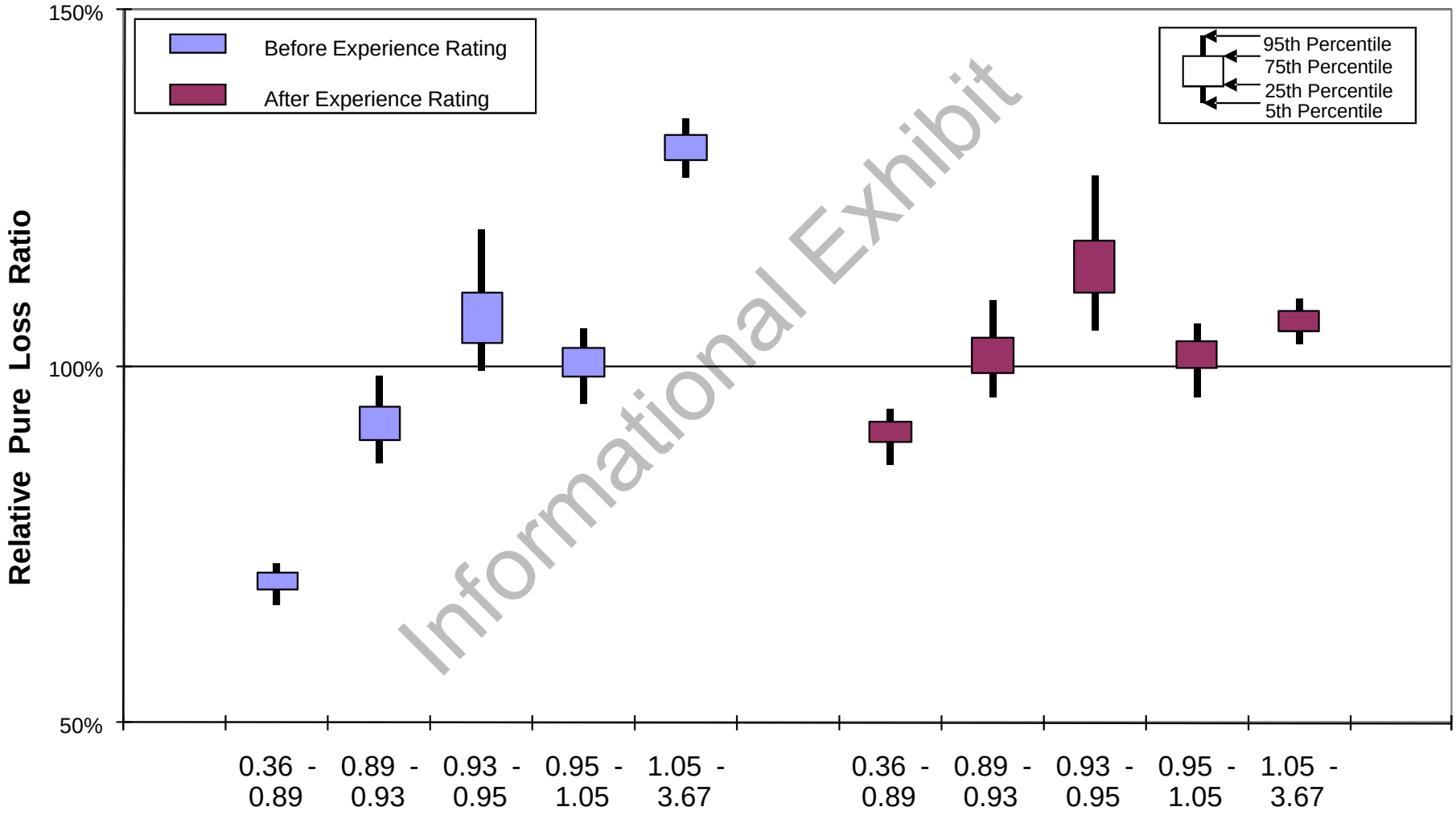
- 12/15/88 is approximately the average loss date for experience ratings when the split point was last changed
- 1/1/11 is the average loss date for experience ratings under the proposed split point in states where this filing becomes effective on 1/1/13
- Over this time period, claim costs have more than tripled, from $2,527 to $8,787

* Assuming a 5.25% annual trend from 3/6/07 to 1/1/11

Informational Exhibit 2

Quintile Analysis: Current $5,000 Split Point

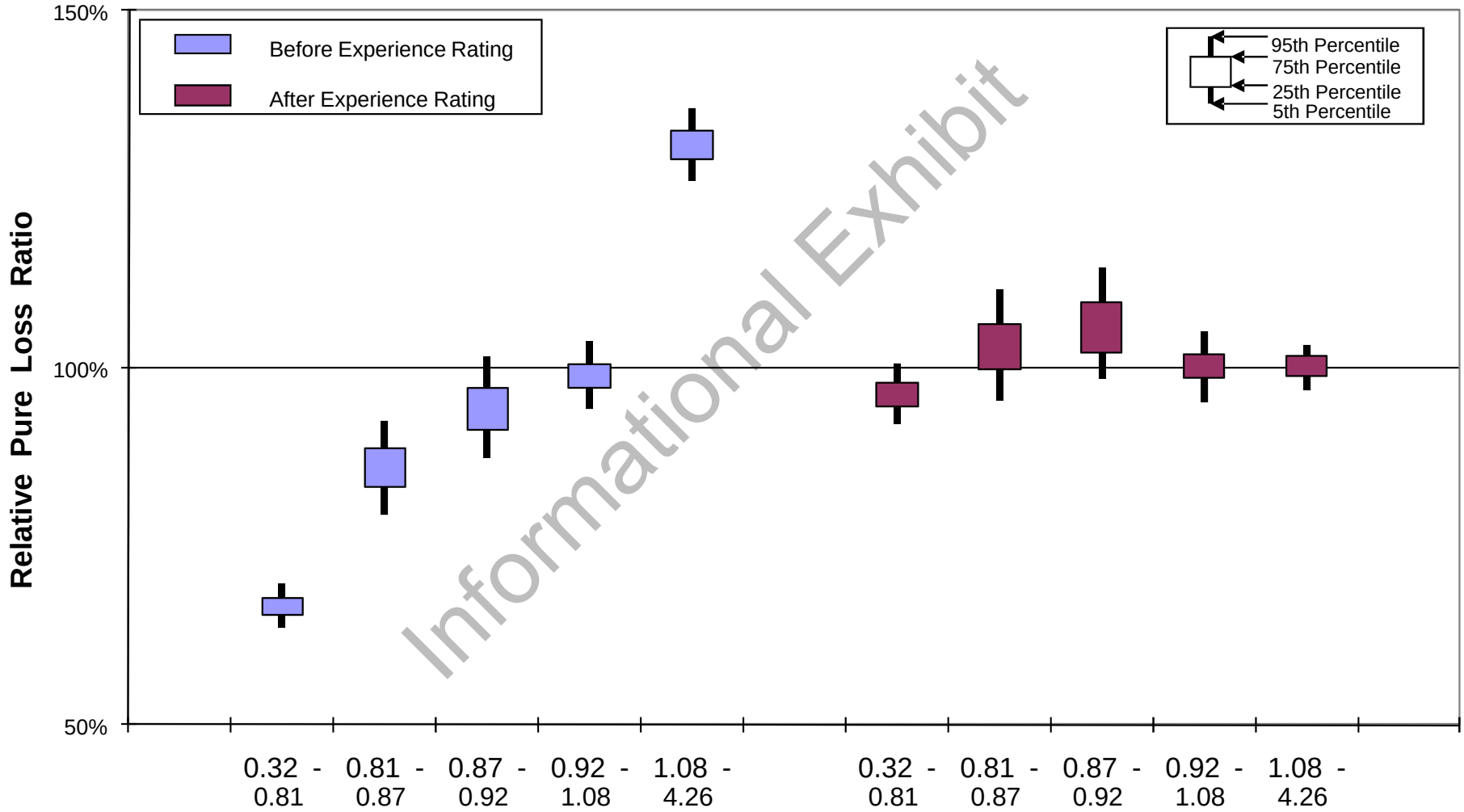
Policy Year 2006 experience under NCCI's ER Plan, indexed for severity inflation



Informational Exhibit 3

Quintile Analysis: Indicated $15,000 Split Point

Policy Year 2006 experience under NCCI's ER Plan, indexed for severity inflation



ER Mod Caps - Current and Proposed

Informational Exhibit 4

Current Formula: 1 + 0.00005(E+2E/G)

Proposed Formula: 1.1 + 0.0004(E/G)

Expected Losses (E)	G (SACC) = 5		G (SACC) = 7		G (SACC) = 10	
	Current	Proposed	Current	Proposed	Current	Proposed
500	1.04	1.14	1.03	1.13	1.03	1.12
1,000	1.07	1.18	1.06	1.16	1.06	1.14
2,500	1.18	1.30	1.16	1.24	1.15	1.20
5,000	1.35	1.50	1.32	1.39	1.30	1.30
6,667	1.47	1.63	1.43	1.48	1.40	1.37
7,500	1.53	1.70	1.48	1.53	1.45	1.40
10,000	1.70	1.90	1.64	1.67	1.60	1.50
15,000	2.05	2.30	1.96	1.96	1.90	1.70
20,000	2.40	2.70	2.29	2.24	2.20	1.90
25,000	2.75	3.10	2.61	2.53	2.50	2.10
30,000	3.10	3.50	2.93	2.81	2.80	2.30
40,000	3.80	4.30	3.57	3.39	3.40	2.70
50,000	4.50	5.10	4.21	3.96	4.00	3.10
75,000	6.25	7.10	5.82	5.39	5.50	4.10
100,000	8.00	9.10	7.43	6.81	7.00	5.10

The G-value is the State Average Claim Cost (SACC) in units of 1,000. These are the latest G-values by state: (as of 3/1/11)

State Code	G (SACC)	State Code	G (SACC)	State Code	G (SACC)
AL	7	KY	6.35	OR	6.1
AZ	5.5	LA	13	RI	6.85
AR	5.6	ME	5.3	SC	11.35
CO	6.85	MD	8.9	SD	6
CT	9.25	MS	8.75	TN	8.15
DC	11.5	MO	9.55	UT	4.45
FL	7.2	MT	8.45	VT	7.45
GA	9.55	NE	7.75	VA	7.9
ID	5.9	NV	6.5	WV	6.2
IL	14.8	NH	7.3	HI	8.5
IA	7.9	NM	8.3	AK	11.15
KS	7.05	OK	11.65		

Distribution of Differences Between Old and New Mod Values

Impact of $10,000 Split Point on NCCI's ER Plan 2009 Intrastate Mods

Impact of changing the split point to $10,000 and implementing new cap formula on intrastate mods effective in 2009; split points indexed for severity inflation

Change in Mod	Percentage of			Average Mod	
	Risks	Payroll	Expected Losses	Current	Proposal
Change < -0.25	0.0%	0.0%	0.0%	---	---
-0.25 <= Change < -0.20	0.0%	0.0%	0.0%	---	---
-0.20 <= Change < -0.15	0.0%	0.0%	0.0%	---	---
-0.15 <= Change < -0.10	0.0%	0.0%	0.0%	1.31	1.19
-0.10 <= Change < -0.05	8.1%	12.5%	13.8%	0.83	0.77
-0.05 <= Change < -0.02	38.3%	31.9%	33.0%	0.89	0.85
-0.02 <= Change <= 0.02	35.8%	33.6%	33.5%	0.99	0.98
0.02 < Change <= 0.05	4.3%	8.4%	8.0%	1.14	1.18
0.05 < Change <= 0.10	6.5%	7.4%	6.8%	1.21	1.29
0.10 < Change <= 0.15	4.5%	3.6%	2.9%	1.30	1.42
0.15 < Change <= 0.20	1.6%	1.4%	1.1%	1.40	1.58
0.20 < Change <= 0.25	0.5%	0.6%	0.5%	1.50	1.73
0.25 < Change	0.4%	0.5%	0.4%	1.69	2.01

Note: excludes large deductible policies

Informational Exhibit 6

ER Mod Cap Impact Analysis

Impact of Mod Caps on NCCI's ER Plan 2009 Intrastate Mods

Proposed includes new mod cap formula and 10K split point; split points indexed for severity inflation

Expected Loss (E)		Total Intrastate Risks	Number of Risks Reaching Current Mod Cap	Number of Risks Reaching Proposed Mod Cap
1	1,000	187	10	2
1,000	5,000	128,904	6,788	8,646
5,000	10,000	166,352	3,154	5,316
10,000	20,000	120,013	312	1,048
20,000	50,000	85,418	8	64
50,000	100,000	30,323	0	1
100,000	200,000	13,815	0	0
200,000	500,000	5,950	0	0
Over	500,000	1,284	0	0
Total		**552,246**	**10,272**	**15,077**
Percentage		**100.0%**	**1.9%**	**2.7%**

Note: excludes large deductible policies

National Council on Compensation Insurance, Inc.

Roy Wood
State Relations Executive
Regulatory Service Division

January 11, 2012

John M. Huff, Director
Missouri DIFP
P.O. Box 690
Jefferson City, MO 65102-0690

Attn: Gail Flannery
Consulting Actuary
AMI Risk Consultants, Inc.

RE: Item E-1402—Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula
SERFF Tracking Number: NCCI-127336056

Dear Ms. Flannery:

Per our previous response letter dated December 15, 2011, this letter provides our responses to your remaining questions (numbers 4, 8, 9, and 10) as you originally submitted via email on December 6, 2011 and December 12, 2011.

Question 4:
Please explain in some detail what data underlies Informational Exhibits 2 and 3 and how it is indexed for severity inflation.

Response 4:
Risks are grouped into one of five categories according to a 2006 experience rating mod calculated under either a $5,000 split point (Informational Exhibit 2) or a $15,000 split point (Informational Exhibit 3). While the 2006 mod is calculated using loss experience from 2002-2004, these exhibits are showing the **PY 2006** loss experience that actually emerged, as reported on WCSP units. Data from all NCCI states is included.

Informational Exhibits 2 and 3 show the results from the bootstrap sampling methodology that was used. This methodology is useful because it provides an indication of the variability in the data. Each symbol represents the result of 100 samples, each containing several hundred thousand observations.

Two major adjustments are made to the parameters/data:

1. The split point being tested has been indexed for severity inflation. This is necessary because PY 2006 data is being used for the testing but the effective date of the initial change in the split point is 2013. To address this issue, the split point in each exhibit has been "de-trended" at approximately 30% (e.g. a split point of $10,000 was actually applied to the PY 2006 data as a proxy for testing a $15,000 split point on PY 2013 data). Based on actual and anticipated changes in severity (approximately 5-6% per year), a $10,000 split point in PY 2006 is equivalent to a $15,000 split point in PY 2013.

2. The loss ratios have been normalized (scaled) to average 100%.

Question 8:
Please provide exhibits similar to Informational Exhibit 5 for Missouri only showing the impact of the $10,000 and $15,000 split point on the most recent intrastate mods available.

Response 8:
The requested exhibits are attached.

The first exhibit shows the estimated impacts of going from a $5,000 split point to a $10,000 split point during the first year of the transition.

The second exhibit shows the estimated impacts of going from the Year 1 $10,000 split point to the Year 3 $15,000 *plus inflation index* split point during the third year of the transition. Thus, the changes shown represent a **two-year** cumulative change. These changes would not occur in any one year since our filing proposes a Year 2 split point of $13,500. The $15,000 split point in Year 3 will also include a severity inflation indexed adjustment and the estimated impacts shown in the attached exhibit include this adjustment.

Question 9:
Please provide some detail on the characteristics of Missouri employers who will be most impacted by the change in split point.

Response 9:
The largest decreases will generally occur for employers that are larger and have no claims exceeding $5,000. The largest increases will generally occur for employers that have a relatively large number of claims of $10,000 or more.

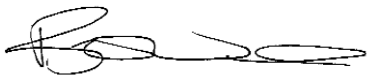
The attached exhibit provides sample experience rating modifications under the current ($5,000) and initially proposed ($10,000) split points for various MO risks. The underlying detail for these risks is also provided on a separate exhibit. These experience rating modifications are estimated since the D-ratios and other experience rating values under the proposed $10,000 split will not become effective until 1-1-13 and are not yet available. Premium has also been estimated for these risks to be equal to 3 years of expected losses.

Question 10:
Please provide two exhibits similar to Informational Exhibit 6 for Missouri only and the most recent intrastate mods – one exhibit for the $10,000 split point and one for the $15,000 split point.

Response 10:
The requested exhibits are attached.
.

Thank you for consideration of this item.

Respectfully submitted,



Roy Wood
State Relations Executive

Missouri Distribution of Differences Between Old and New Mod Values

Impact of $10,000 Split Point on MO Intrastate Mods Effective Between 6/1/2011-5/31/2012

Impact of changing the split point from $5,000 to $10,000 and implementing new cap formula

Change in Mod	Percentage of			Average Mod	
	Risks	Payroll	Expected Losses	Current	Proposal
Change < -0.25	0.0%	0.0%	0.0%	---	---
-0.25 <= Change < -0.20	0.0%	0.0%	0.0%	---	---
-0.20 <= Change < -0.15	0.0%	0.0%	0.0%	---	---
-0.15 <= Change < -0.10	0.0%	0.0%	0.0%	---	---
-0.10 <= Change < -0.05	8.1%	16.9%	16.2%	0.85	0.79
-0.05 <= Change < -0.02	45.8%	33.7%	34.1%	0.90	0.87
-0.02 <= Change <= 0.02	28.2%	23.3%	24.0%	0.96	0.96
0.02 < Change <= 0.05	4.2%	10.2%	9.8%	1.08	1.12
0.05 < Change <= 0.10	6.7%	8.3%	8.8%	1.14	1.22
0.10 < Change <= 0.15	5.1%	5.0%	4.5%	1.23	1.36
0.15 < Change <= 0.20	1.0%	1.5%	1.6%	1.35	1.53
0.20 < Change <= 0.25	0.6%	0.7%	0.6%	1.39	1.61
0.25 < Change	0.2%	0.3%	0.4%	1.58	1.91

Note: excludes large deductible policies.

Missouri Distribution of Mod Differences - 10K vs 15K+index Split Points

2-Year impact of changing the split point from $10K to $15K+index and new cap formula on MO intrastate Mods effective between 6/1/2011-5/31/2012

2-Year Change in Mod	Percentage of			Average Mod	
	Risks	Payroll	Expected Losses	10K Split Pt	15K+indx Split Pt
Change < -0.25	0.0%	0.0%	0.0%	---	---
-0.25 <= Change < -0.20	0.0%	0.0%	0.0%	---	---
-0.20 <= Change < -0.15	0.0%	0.0%	0.0%	---	---
-0.15 <= Change < -0.10	0.0%	0.0%	0.0%	---	---
-0.10 <= Change < -0.05	3.7%	10.7%	10.8%	0.77	0.72
-0.05 <= Change < -0.02	45.2%	40.0%	40.0%	0.87	0.84
-0.02 <= Change <= 0.02	37.6%	25.9%	26.1%	0.98	0.98
0.02 < Change <= 0.05	3.7%	10.3%	9.7%	1.13	1.17
0.05 < Change <= 0.10	5.9%	8.3%	8.5%	1.24	1.32
0.10 < Change <= 0.15	3.0%	2.9%	3.2%	1.38	1.50
0.15 < Change <= 0.20	0.7%	1.2%	1.2%	1.54	1.72
0.20 < Change <= 0.25	0.2%	0.3%	0.3%	1.69	1.92
0.25 < Change	0.1%	0.2%	0.2%	1.94	2.25

Note: excludes large deductible policies.

Sample MO Experience Rating Mods
Under Split Points of 5K and 10K

	(1)	(2)	(3)	(4)	(5)	(6)
	Estimated		= (1) x (2)		= (1) x (4)	= (5)/(3) -1
	Manual	Using 5K Split Point		Using 10K Split Point		
Risk	Premium	Mod	Stnd Prem	Mod	Stnd Prem	% Impact
1	10,319	0.92	9,493	0.89	9,184	-3.3%
2	7,016	0.94	6,595	0.92	6,455	-2.1%
3	6,068	0.95	5,765	0.93	5,643	-2.1%
4	14,503	0.91	13,198	0.87	12,618	-4.4%
5	23,196	0.87	20,181	0.83	19,253	-4.6%
6	22,879	0.93	21,277	0.89	20,362	-4.3%
7	13,591	1.23	16,717	1.43	19,435	16.3%
8	3,825	0.98	3,749	0.96	3,672	-2.0%
9	6,444	1.11	7,153	1.13	7,282	1.8%
10	9,594	0.94	9,018	0.92	8,826	-2.1%
11	10,475	1.13	11,837	1.24	12,989	9.7%
12	5,736	0.96	5,507	0.94	5,392	-2.1%
13	10,386	1.07	11,113	1.14	11,840	6.5%
14	3,952	0.98	3,873	0.97	3,833	-1.0%
15	13,928	0.91	12,674	0.87	12,117	-4.4%
16	16,235	0.91	14,774	0.87	14,124	-4.4%
17	24,199	1.11	26,861	1.16	28,071	4.5%
18	9,794	1.07	10,480	1.05	10,284	-1.9%
19	11,920	1.08	12,874	1.17	13,946	8.3%
20	8,071	0.96	7,748	0.94	7,587	-2.1%
21	25,371	0.91	23,088	0.87	22,073	-4.4%
22	4,183	0.97	4,058	0.96	4,016	-1.0%
23	46,174	0.82	37,863	0.75	34,631	-8.5%
24	5,935	0.97	5,757	0.95	5,638	-2.1%
25	9,993	1.15	11,492	1.25	12,491	8.7%
26	6,887	1.15	7,920	1.28	8,815	11.3%
27	70,974	0.81	57,489	0.74	52,521	-8.6%
28	7,964	0.94	7,486	0.91	7,247	-3.2%
29	10,323	0.92	9,497	0.89	9,187	-3.3%
30	31,483	0.99	31,168	1.03	32,427	4.0%
31	113,596	0.86	97,693	0.81	92,013	-5.8%
32	12,839	1.30	16,691	1.53	19,644	17.7%
33	102,496	0.93	95,321	0.91	93,271	-2.2%
34	8,343	0.93	7,759	0.91	7,592	-2.2%
35	7,450	0.94	7,003	0.92	6,854	-2.1%
36	10,630	0.94	9,992	0.90	9,567	-4.3%
37	6,641	0.96	6,375	0.94	6,243	-2.1%
38	8,161	1.11	9,059	1.23	10,038	10.8%
39	7,295	0.95	6,930	0.92	6,711	-3.2%
40	19,704	0.92	18,128	0.87	17,142	-5.4%
41	57,272	0.88	50,399	0.83	47,536	-5.7%
42	8,762	1.22	10,690	1.33	11,653	9.0%
43	6,234	0.95	5,922	0.93	5,798	-2.1%
44	8,080	0.96	7,757	0.94	7,595	-2.1%
45	6,582	0.97	6,385	0.95	6,253	-2.1%
46	3,844	0.96	3,690	0.94	3,613	-2.1%
47	7,875	1.31	10,316	1.41	11,104	7.6%
48	3,549	0.98	3,478	0.97	3,443	-1.0%
49	8,455	0.93	7,863	0.91	7,694	-2.2%
50	18,127	0.90	16,314	0.86	15,589	-4.4%

Sample MO Experience Rating Mods
Underlying Detail

						5K split point					10K split point				
Risk	PAYROLL	EXP_LOSS	ACT_LOSS	W	B	EXP_PRIM	EXP_EXCE	ACT_PRIM	ACT_EXCE	MOD	EXP_PRIM	EXP_EXCE	ACT_PRIM	ACT_EXCE	MOD
1	1661143	10319	0	0.06	25000	2364	7955	0	0	0.92	3342	6633	0	0	0.89
2	535931	7016	0	0.05	25000	1608	5408	0	0	0.94	2318	4506	0	0	0.92
3	696349	6068	412	0.05	25000	1638	4430	412	0	0.95	2402	3460	412	412	0.93
4	686529	14503	0	0.06	25000	2707	11796	0	0	0.91	4380	9647	0	0	0.87
5	4223715	23196	809	0.08	25000	5567	17629	809	0	0.87	7743	15032	809	809	0.83
6	1325722	22879	1569	0.08	25000	3203	19676	1569	0	0.93	5315	16822	1569	1569	0.89
7	2832915	13591	54692	0.06	25000	3663	9928	10346	44346	1.23	5584	7732	54692	20346	1.43
8	565753	3825	0	0.05	25000	547	3278	0	0	0.98	906	2797	0	0	0.96
9	650904	6444	7003	0.05	25000	1740	4704	5284	1719	1.11	2624	3625	7003	7003	1.13
10	602072	9594	0	0.06	25000	1462	8132	0	0	0.94	2417	6863	0	0	0.92
11	531010	10475	13347	0.06	25000	1584	8891	6458	6889	1.13	2625	7522	13347	11458	1.24
12	543145	5736	0	0.05	25000	980	4756	0	0	0.96	1619	3941	0	0	0.94
13	939437	10386	8691	0.06	25000	2282	8104	5000	3691	1.07	3519	6545	8691	8691	1.14
14	174869	3952	0	0.05	25000	475	3477	0	0	0.98	801	3012	0	0	0.97
15	948626	13928	0	0.06	25000	2922	11006	0	0	0.91	4448	9029	0	0	0.87
16	801751	16235	0	0.07	25000	2761	13474	0	0	0.91	4561	11164	0	0	0.87
17	2208401	24199	48053	0.08	25000	5061	19138	8781	39272	1.11	7716	15733	48053	13781	1.16
18	4258207	9794	5304	0.06	25000	2253	7541	5304	0	1.07	3185	6183	5304	5304	1.05
19	1289641	11920	27887	0.06	25000	3210	8710	5266	22621	1.08	4846	6716	27887	10266	1.17
20	165961	8071	0	0.05	25000	968	7103	0	0	0.96	1640	6171	0	0	0.94
21	524470	25371	336	0.08	25000	3046	22325	336	0	0.91	5159	19397	336	336	0.87
22	168948	4183	0	0.05	25000	589	3594	0	0	0.97	977	3073	0	0	0.96
23	4583403	46174	0	0.09	25000	9235	36939	0	0	0.82	14731	29908	0	0	0.75
24	218171	5935	0	0.05	25000	718	5217	0	0	0.97	1215	4524	0	0	0.95
25	878236	9993	38887	0.06	25000	2067	7926	5681	33206	1.15	3153	6512	38887	10681	1.25
26	489522	6887	23197	0.05	25000	976	5911	5256	17941	1.15	1621	5065	23197	10256	1.28
27	4269058	70974	1119	0.11	30000	14274	56700	1119	0	0.81	21908	46838	1119	1119	0.74
28	594305	7964	0	0.05	25000	1832	6132	0	0	0.94	2607	5060	0	0	0.91
29	2010192	10323	0	0.06	25000	2340	7983	0	0	0.92	3392	6619	0	0	0.89
30	1408073	31483	21115	0.09	25000	4420	27063	5000	16115	0.99	7326	23116	21115	10000	1.03
31	3756438	113596	8271	0.13	35000	15916	97680	8271	0	0.86	26418	83574	8271	8271	0.81
32	436187	12839	74176	0.06	25000	1785	11054	10000	64176	1.30	2965	9468	74176	20000	1.53
33	3998513	102496	74907	0.12	35000	12333	90163	5000	69907	0.93	20838	78150	74907	10000	0.91
34	2390623	8343	0	0.05	25000	1918	6425	0	0	0.93	2728	5297	0	0	0.91
35	1207081	7450	0	0.05	25000	1666	5784	0	0	0.94	2429	4806	0	0	0.92
36	1007799	10630	343	0.06	25000	2126	8504	343	0	0.94	3388	6879	343	343	0.90
37	274220	6641	0	0.05	25000	932	5709	0	0	0.96	1548	4882	0	0	0.94
38	1344899	8161	19688	0.05	25000	1668	6493	5000	14688	1.11	2573	5361	19688	10000	1.23
39	5664062	7295	130	0.05	25000	1459	5836	130	0	0.95	2395	4882	130	130	0.92
40	1291360	19704	714	0.07	25000	3352	16352	714	0	0.92	5543	13556	714	714	0.87
41	31057333	57272	3768	0.1	30000	8863	48409	3483	285	0.88	14543	40778	3768	3768	0.83
42	5604832	8762	48877	0.06	25000	1763	6999	7096	41781	1.22	2852	5839	48877	12096	1.33
43	417448	6234	0	0.05	25000	1394	4840	0	0	0.95	2031	4033	0	0	0.93
44	315630	8080	0	0.05	25000	970	7110	0	0	0.96	1637	6159	0	0	0.94
45	458513	6582	0	0.05	25000	798	5784	0	0	0.97	1349	5014	0	0	0.95
46	513140	3844	0	0.05	25000	1030	2814	0	0	0.96	1515	2201	0	0	0.94
47	1261058	7875	43952	0.05	25000	2000	5875	10674	33278	1.31	3053	4608	43952	20674	1.41
48	154988	3549	0	0.05	25000	426	3123	0	0	0.98	719	2706	0	0	0.97
49	890030	8455	0	0.05	25000	1945	6510	0	0	0.93	2784	5404	0	0	0.91
50	12949870	18127	0	0.07	25000	3082	15045	0	0	0.90	5050	11783	0	0	0.86

Missouri ER Mod Cap Impact Analysis

Impact of Mod Caps on MO Intrastate Mods Effective Between 6/1/2011-5/31/2012

Proposed includes new mod cap formula and **10K** split point

Expected Losses [E]		Total Intrastate Risks	Number of Risks Reaching Current Mod Cap	Number of Risks Reaching Proposed Mod Cap
1	1,000	-	-	-
1,000	5,000	3,802	136	317
5,000	10,000	8,003	89	327
10,000	20,000	5,708	10	100
20,000	50,000	3,668	1	8
50,000	100,000	1,181	-	-
100,000	200,000	460	-	-
200,000	500,000	184	-	-
over	500,000	37	-	-
Total		**23,043**	**236**	**752**
Percentage		**100.0%**	**1.0%**	**3.3%**

Note: excludes large deductible policies.

Missouri ER Mod Cap Impact Analysis

Impact of Mod Caps on MO Intrastate Mods Effective Between 6/1/2011-5/31/2012

Proposed includes new mod cap formula and **15K+index** split point

Expected Losses [E]		Total Intrastate Risks	Number of Risks Reaching Current Mod Cap	Number of Risks Reaching Proposed Mod Cap
1	1,000	-	-	-
1,000	5,000	3,802	136	315
5,000	10,000	8,003	89	657
10,000	20,000	5,708	10	193
20,000	50,000	3,668	1	18
50,000	100,000	1,181	-	-
100,000	200,000	460	-	-
200,000	500,000	184	-	-
over	500,000	37	-	-
Total		**23,043**	**236**	**1,183**
Percentage		**100.0%**	**1.0%**	**5.1%**

Note: excludes large deductible policies.

National Council on Compensation Insurance, Inc.

Roy Wood
State Relations Executive
Regulatory Service Division

January 13, 2012

John M. Huff, Director
Missouri DIFP
P.O. Box 690
Jefferson City, MO 65102-0690

Attn: Karen Rimel

RE: Item E-1402—Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula
SERFF Tracking Number: NCCI-127336056

Dear Ms. Rimel:

Thank you for your December 23, 2011 comments regarding the above referenced item filing. After review and consideration, we offer the following response to your objection.

Objection 1:
Please provide representative examples of experience rating worksheets illustrating the impact of the change in split-point.

Response 1:
The attached exhibit provides sample experience rating modifications under the current ($5,000) and initially proposed ($10,000) split points for various MO risks. The underlying detail for these risks is also provided on a separate exhibit. These experience rating modifications are the result of rerating the most recent risks utilizing the experience rating values provided in response 3. Premium has also been estimated for these risks to be equal to 3 years of expected losses.

Objection 2:
Please identify the actuary responsible for the filing. Please provide the actuary's report documenting the actuary's data, methods and assumptions.

Response 2:
The actuary with primary responsibility for Item E-1402 is Tony DiDonato, FCAS, MAAA. This filing is the result of a multi-year review of the Experience Rating Plan that was conducted in conjunction with the Individual Risk Rating Working Group (IRRWG), a subcommittee of NCCI's Actuarial Committee. The Agendas and Minutes of the IRRWG and Actuarial Committee provide the full documentation for this review, containing more than 50+ items over the entire time period. Attached are several of the items that are the most relevant to the proposed changes contained in Item E-1402.

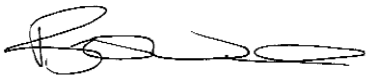
11430 Gravois Road • Suite 310 • St. Louis, Missouri 63126
Telephone: 314-843-4001 • Fax: 314-842-3188 • E-mail: Roy_Wood@NCCI.com

Objection 3:
Please provide the information needed to estimate the impact of the proposed change in split-point on an individual policyholder during 2013. Specifically, this information includes expected loss ratios and d-ratios by class, weighting values and ballast values. Please state any assumptions used to determine the plan parameters.

Response 3:
The attached exhibit displays the 1/1/12 ELRs and D-ratios calculated under the current $5,000 split point and under a $10,000 split point. The proposed changes to the split point do not impact the weighting values and ballast values so the current 1/1/12 weights and ballasts can be used in conjunction with both sets of ELRs and D-ratios.

Thank you for consideration of this item.

Respectfully submitted,



Roy Wood
State Relations Executive

Sample MO Experience Rating Mods
Under Split Points of 5K and 10K

	(1)	(2)	(3)	(4)	(5)	(6)
	Estimated		= (1) x (2)		= (1) x (4)	= (5)/(3) -1
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21	25,371	0.91	23,088	0.87	22,073	-4.4%
22	4,183	0.97	4,058	0.96	4,016	-1.0%
23	46,174	0.82	37,863	0.75	34,631	-8.5%
24	5,935	0.97	5,757	0.95	5,638	-2.1%
25	9,993	1.15	11,492	1.25	12,491	8.7%
26	6,887	1.15	7,920	1.28	8,815	11.3%
27	70,974	0.81	57,489	0.74	52,521	-8.6%
28	7,964	0.94	7,486	0.91	7,247	-3.2%
29	10,323	0.92	9,497	0.89	9,187	-3.3%
30	31,483	0.99	31,168	1.03	32,427	4.0%
31	113,596	0.86	97,693	0.81	92,013	-5.8%
32	12,839	1.30	16,691	1.53	19,644	17.7%
33	102,496	0.93	95,321	0.91	93,271	-2.2%
34	8,343	0.93	7,759	0.91	7,592	-2.2%
35	7,450	0.94	7,003	0.92	6,854	-2.1%
36	10,630	0.94	9,992	0.90	9,567	-4.3%
37	6,641	0.96	6,375	0.94	6,243	-2.1%
38	8,161	1.11	9,059	1.23	10,038	10.8%
39	7,295	0.95	6,930	0.92	6,711	-3.2%
40	19,704	0.92	18,128	0.87	17,142	-5.4%
41	57,272	0.88	50,399	0.83	47,536	-5.7%
42	8,762	1.22	10,690	1.33	11,653	9.0%
43	6,234	0.95	5,922	0.93	5,798	-2.1%
44	8,080	0.96	7,757	0.94	7,595	-2.1%
45	6,582	0.97	6,385	0.95	6,253	-2.1%
46	3,844	0.96	3,690	0.94	3,613	-2.1%
47	7,875	1.31	10,316	1.41	11,104	7.6%
48	3,549	0.98	3,478	0.97	3,443	-1.0%
49	8,455	0.93	7,863	0.91	7,694	-2.2%
50	18,127	0.90	16,314	0.86	15,589	-4.4%

Sample MO Experience Rating Mods
Underlying Detail

						5K split point					10K split point				
Risk	PAYROLL	EXP_LOSS	ACT_LOSS	W	B	EXP_PRIM	EXP_EXCE	ACT_PRIM	ACT_EXCE	MOD	EXP_PRIM	EXP_EXCE	ACT_PRIM	ACT_EXCE	MOD
1	1661143	10319	0	0.06	25000	2364	7955	0	0	0.92	3342	6633	0	0	0.89
2	535931	7016	0	0.05	25000	1608	5408	0	0	0.94	2318	4506	0	0	0.92
3	696349	6068	412	0.05	25000	1638	4430	412	0	0.95	2402	3460	412	412	0.93
4	686529	14503	0	0.06	25000	2707	11796	0	0	0.91	4380	9647	0	0	0.87
5	4223715	23196	809	0.08	25000	5567	17629	809	0	0.87	7743	15032	809	809	0.83
6	1325722	22879	1569	0.08	25000	3203	19676	1569	0	0.93	5315	16822	1569	1569	0.89
7	2832915	13591	54692	0.06	25000	3663	9928	10346	44346	1.23	5584	7732	54692	20346	1.43
8	565753	3825	0	0.05	25000	547	3278	0	0	0.98	906	2797	0	0	0.96
9	650904	6444	7003	0.05	25000	1740	4704	5284	1719	1.11	2624	3625	7003	7003	1.13
10	602072	9594	0	0.06	25000	1462	8132	0	0	0.94	2417	6863	0	0	0.92
11	531010	10475	13347	0.06	25000	1584	8891	6458	6889	1.13	2625	7522	13347	11458	1.24
12	543145	5736	0	0.05	25000	980	4756	0	0	0.96	1619	3941	0	0	0.94
13	939437	10386	8691	0.06	25000	2282	8104	5000	3691	1.07	3519	6545	8691	8691	1.14
14	174869	3952	0	0.05	25000	475	3477	0	0	0.98	801	3012	0	0	0.97
15	948626	13928	0	0.06	25000	2922	11006	0	0	0.91	4448	9029	0	0	0.87
16	801751	16235	0	0.07	25000	2761	13474	0	0	0.91	4561	11164	0	0	0.87
17	2208401	24199	48053	0.08	25000	5061	19138	8781	39272	1.11	7716	15733	48053	13781	1.16
18	4258207	9794	5304	0.06	25000	2253	7541	5304	0	1.07	3185	6183	5304	5304	1.05
19	1289641	11920	27887	0.06	25000	3210	8710	5266	22621	1.08	4846	6716	27887	10266	1.17
20	165961	8071	0	0.05	25000	968	7103	0	0	0.96	1640	6171	0	0	0.94
21	524470	25371	336	0.08	25000	3046	22325	336	0	0.91	5159	19397	336	336	0.87
22	168948	4183	0	0.05	25000	589	3594	0	0	0.97	977	3073	0	0	0.96
23	4583403	46174	0	0.09	25000	9235	36939	0	0	0.82	14731	29908	0	0	0.75
24	218171	5935	0	0.05	25000	718	5217	0	0	0.97	1215	4524	0	0	0.95
25	878236	9993	38887	0.06	25000	2067	7926	5681	33206	1.15	3153	6512	38887	10681	1.25
26	489522	6887	23197	0.05	25000	976	5911	5256	17941	1.15	1621	5065	23197	10256	1.28
27	4269058	70974	1119	0.11	30000	14274	56700	1119	0	0.81	21908	46838	1119	1119	0.74
28	594305	7964	0	0.05	25000	1832	6132	0	0	0.94	2607	5060	0	0	0.91
29	2010192	10323	0	0.06	25000	2340	7983	0	0	0.92	3392	6619	0	0	0.89
30	1408073	31483	21115	0.09	25000	4420	27063	5000	16115	0.99	7326	23116	21115	10000	1.03
31	3756438	113596	8271	0.13	35000	15916	97680	8271	0	0.86	26418	83574	8271	8271	0.81
32	436187	12839	74176	0.06	25000	1785	11054	10000	64176	1.30	2965	9468	74176	20000	1.53
33	3998513	102496	74907	0.12	35000	12333	90163	5000	69907	0.93	20838	78150	74907	10000	0.91
34	2390623	8343	0	0.05	25000	1918	6425	0	0	0.93	2728	5297	0	0	0.91
35	1207081	7450	0	0.05	25000	1666	5784	0	0	0.94	2429	4806	0	0	0.92
36	1007799	10630	343	0.06	25000	2126	8504	343	0	0.94	3388	6879	343	343	0.90
37	274220	6641	0	0.05	25000	932	5709	0	0	0.96	1548	4882	0	0	0.94
38	1344899	8161	19688	0.05	25000	1668	6493	5000	14688	1.11	2573	5361	19688	10000	1.23
39	5664062	7295	130	0.05	25000	1459	5836	130	0	0.95	2395	4882	130	130	0.92
40	1291360	19704	714	0.07	25000	3352	16352	714	0	0.92	5543	13556	714	714	0.87
41	31057333	57272	3768	0.1	30000	8863	48409	3483	285	0.88	14543	40778	3768	3768	0.83
42	5604832	8762	48877	0.06	25000	1763	6999	7096	41781	1.22	2852	5839	48877	12096	1.33
43	417448	6234	0	0.05	25000	1394	4840	0	0	0.95	2031	4033	0	0	0.93
44	315630	8080	0	0.05	25000	970	7110	0	0	0.96	1637	6159	0	0	0.94
45	458513	6582	0	0.05	25000	798	5784	0	0	0.97	1349	5014	0	0	0.95
46	513140	3844	0	0.05	25000	1030	2814	0	0	0.96	1515	2201	0	0	0.94
47	1261058	7875	43952	0.05	25000	2000	5875	10674	33278	1.31	3053	4608	43952	20674	1.41
48	154988	3549	0	0.05	25000	426	3123	0	0	0.98	719	2706	0	0	0.97
49	890030	8455	0	0.05	25000	1945	6510	0	0	0.93	2784	5404	0	0	0.91
50	12949870	18127	0	0.07	25000	3082	15045	0	0	0.90	5050	11783	0	0	0.86

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D-Ratios & ELRs as Approved using $5K split point vs Unlimited Theoretical D-Ratios & ELRs using $10K split point

Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
0005	0.21	0.33	2.27	2.20
0008	0.17	0.29	1.28	1.24
0016	0.14	0.24	2.50	2.42
0034	0.21	0.33	1.47	1.43
0035	0.23	0.34	1.34	1.29
0036	0.21	0.33	4.10	3.98
0037	0.17	0.29	2.25	2.18
0042	0.17	0.29	3.41	3.30
0050	0.21	0.33	3.70	3.59
0059	0.11	0.19	0.04	0.04
0065	0.14	0.24	0.01	0.01
0066	0.14	0.24	0.01	0.01
0067	0.14	0.24	0.01	0.01
0079	0.14	0.24	2.76	2.67
0083	0.21	0.33	2.89	2.80
0106	0.12	0.21	6.80	6.58
0113	0.21	0.33	2.30	2.23
0170	0.21	0.33	1.63	1.58
0251	0.21	0.33	2.67	2.59
0400	0.17	0.30	3.82	3.70
0401	0.12	0.21	4.35	4.21
0908	0.20	0.33	95.41	92.40
0909	0.20	0.33	95.41	92.40
0912	0.21	0.33	257.78	249.69
0913	0.21	0.33	257.78	249.69
0917	0.23	0.34	2.16	2.10
1005	0.11	0.19	2.57	2.48
1164	0.11	0.19	2.70	2.62
1165	0.12	0.21	2.15	2.08
1320	0.12	0.22	2.96	2.86
1322	0.12	0.21	4.43	4.29
1430	0.14	0.24	4.40	4.26
1438	0.12	0.21	2.66	2.57
1452	0.14	0.24	1.62	1.57
1463	0.12	0.21	6.54	6.33
1472	0.12	0.21	2.01	1.94
1624	0.12	0.21	2.22	2.15

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D-Ratios & ELRs as Approved using $5K split point vs Unlimited Theoretical D-Ratios & ELRs using $10K split point

Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
1642	0.14	0.24	2.78	2.69
1654	0.14	0.24	4.94	4.78
1655	0.14	0.24	2.12	2.05
1699	0.14	0.24	1.87	1.81
1701	0.14	0.24	2.79	2.70
1710	0.14	0.24	5.63	5.45
1741	0.11	0.19	1.66	1.61
1747	0.14	0.24	2.19	2.12
1748	0.14	0.24	2.15	2.08
1803	0.12	0.21	3.61	3.49
1852	0.12	0.19	1.40	1.36
1853	0.18	0.30	1.78	1.72
1860	0.21	0.35	1.37	1.33
1924	0.22	0.35	2.82	2.74
1925	0.17	0.29	3.88	3.76
2001	0.21	0.33	2.39	2.32
2002	0.22	0.34	2.22	2.15
2003	0.21	0.33	2.39	2.32
2014	0.14	0.24	2.99	2.89
2016	0.23	0.34	1.52	1.48
2021	0.17	0.29	1.98	1.92
2039	0.22	0.35	1.91	1.85
2041	0.22	0.34	2.01	1.95
2065	0.20	0.33	2.21	2.14
2070	0.20	0.33	2.75	2.66
2081	0.20	0.33	4.82	4.67
2089	0.21	0.32	2.63	2.55
2095	0.21	0.33	2.24	2.17
2105	0.23	0.34	1.57	1.52
2110	0.22	0.35	1.61	1.56
2111	0.23	0.34	1.36	1.31
2112	0.23	0.35	1.99	1.92
2114	0.22	0.35	1.42	1.38
2121	0.20	0.33	1.10	1.06
2130	0.21	0.33	1.64	1.59
2131	0.20	0.33	2.09	2.02

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D-Ratios & ELRs as Approved using $5K split point vs Unlimited Theoretical D-Ratios & ELRs using $10K split point

Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
2143	0.23	0.34	1.70	1.64
2156	0.20	0.33	4.19	4.06
2157	0.20	0.33	4.19	4.06
2172	0.17	0.30	1.18	1.14
2174	0.22	0.35	1.92	1.86
2211	0.14	0.24	3.45	3.34
2220	0.21	0.33	1.73	1.68
2286	0.23	0.34	1.41	1.36
2288	0.22	0.35	1.68	1.63
2300	0.28	0.43	1.51	1.47
2302	0.20	0.33	1.13	1.09
2305	0.17	0.30	1.86	1.80
2352	0.21	0.36	4.47	4.33
2361	0.20	0.33	0.98	0.95
2362	0.20	0.33	1.88	1.82
2380	0.20	0.33	1.74	1.68
2386	0.21	0.35	1.17	1.13
2388	0.23	0.34	1.37	1.33
2402	0.14	0.24	1.58	1.53
2413	0.21	0.33	1.64	1.59
2416	0.20	0.33	1.15	1.12
2417	0.20	0.33	1.31	1.27
2501	0.21	0.33	1.61	1.56
2503	0.22	0.35	0.81	0.78
2534	0.23	0.34	2.79	2.70
2570	0.22	0.35	2.68	2.59
2585	0.23	0.34	2.53	2.45
2586	0.21	0.33	1.84	1.79
2587	0.23	0.35	2.83	2.75
2589	0.21	0.33	1.26	1.22
2600	0.21	0.35	1.10	1.06
2623	0.17	0.29	3.19	3.09
2651	0.23	0.34	1.51	1.47
2660	0.23	0.34	1.45	1.41
2670	0.27	0.42	1.40	1.35
2683	0.24	0.34	1.59	1.54

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D-Ratios & ELRs as Approved using $5K split point vs Unlimited Theoretical D-Ratios & ELRs using $10K split point

Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
2688	0.23	0.34	1.82	1.77
2701	0.14	0.24	4.64	4.49
2702	0.11	0.19	12.27	11.88
2709	0.14	0.24	9.12	8.83
2710	0.13	0.21	6.48	6.27
2714	0.23	0.34	2.93	2.85
2731	0.14	0.24	1.92	1.86
2735	0.23	0.35	2.75	2.67
2747	0.27	0.42	1.75	1.69
2759	0.24	0.34	4.65	4.51
2790	0.23	0.34	1.64	1.59
2791	0.28	0.44	1.20	1.16
2797	0.17	0.29	2.79	2.70
2799	0.17	0.29	1.62	1.57
2802	0.17	0.29	2.79	2.70
2812	0.21	0.33	2.15	2.08
2835	0.27	0.42	1.85	1.79
2836	0.27	0.42	1.80	1.74
2841	0.24	0.34	2.92	2.83
2881	0.27	0.42	1.93	1.86
2883	0.21	0.33	2.15	2.08
2913	0.28	0.42	2.83	2.74
2915	0.17	0.29	2.10	2.04
2916	0.13	0.21	1.99	1.92
2923	0.22	0.35	1.52	1.47
2942	0.28	0.44	3.59	3.48
2960	0.21	0.33	3.37	3.26
3004	0.14	0.24	1.94	1.88
3018	0.14	0.24	2.37	2.29
3022	0.22	0.35	2.27	2.20
3027	0.14	0.24	1.88	1.82
3028	0.20	0.33	3.42	3.31
3030	0.14	0.24	4.28	4.15
3040	0.14	0.24	4.92	4.77
3041	0.20	0.33	2.36	2.29
3042	0.17	0.29	2.65	2.57

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D-Ratios & ELRs as Approved using $5K split point vs Unlimited Theoretical D-Ratios & ELRs using $10K split point

Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
3064	0.20	0.33	3.15	3.05
3066	0.23	0.34	1.80	1.75
3069	0.14	0.24	2.21	2.14
3076	0.23	0.34	1.80	1.75
3081	0.14	0.24	3.38	3.27
3082	0.14	0.24	4.29	4.16
3085	0.14	0.24	3.26	3.15
3110	0.20	0.33	2.29	2.22
3111	0.20	0.33	1.82	1.77
3113	0.21	0.33	1.56	1.51
3114	0.20	0.33	1.79	1.73
3118	0.23	0.35	1.39	1.35
3119	0.28	0.43	1.53	1.48
3122	0.23	0.34	1.64	1.59
3126	0.21	0.33	1.77	1.71
3131	0.21	0.33	1.04	1.01
3132	0.21	0.33	2.78	2.70
3145	0.21	0.33	1.99	1.93
3146	0.21	0.33	1.46	1.41
3169	0.21	0.33	2.31	2.24
3175	0.21	0.33	1.79	1.74
3179	0.23	0.34	1.78	1.72
3180	0.23	0.34	1.67	1.62
3188	0.22	0.35	1.44	1.40
3220	0.20	0.33	1.30	1.26
3223	0.27	0.42	2.29	2.21
3224	0.21	0.35	2.13	2.06
3227	0.23	0.34	2.66	2.58
3240	0.23	0.34	0.98	0.95
3241	0.21	0.33	2.74	2.65
3255	0.27	0.42	1.19	1.15
3257	0.21	0.33	2.43	2.35
3270	0.21	0.33	2.10	2.04
3300	0.20	0.33	3.83	3.71
3303	0.22	0.35	1.51	1.46
3307	0.21	0.33	2.93	2.84

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D-Ratios & ELRs as Approved using $5K split point vs Unlimited Theoretical D-Ratios & ELRs using $10K split point

Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
3315	0.22	0.35	2.56	2.48
3334	0.20	0.33	2.18	2.11
3336	0.14	0.24	1.64	1.59
3365	0.14	0.24	3.90	3.78
3372	0.17	0.29	1.55	1.50
3373	0.21	0.33	3.52	3.41
3383	0.23	0.35	0.92	0.89
3385	0.23	0.34	0.57	0.55
3400	0.17	0.29	2.74	2.65
3507	0.21	0.33	2.30	2.22
3515	0.20	0.33	1.35	1.31
3548	0.20	0.33	1.06	1.03
3559	0.21	0.33	1.55	1.50
3574	0.23	0.34	0.85	0.82
3581	0.22	0.35	1.05	1.02
3612	0.17	0.29	1.27	1.23
3620	0.14	0.24	2.47	2.39
3629	0.22	0.35	1.27	1.23
3632	0.17	0.29	2.23	2.16
3634	0.22	0.35	1.16	1.12
3635	0.20	0.33	2.10	2.04
3638	0.22	0.35	2.94	2.85
3642	0.20	0.33	0.66	0.64
3643	0.20	0.33	1.84	1.78
3647	0.17	0.29	1.79	1.73
3648	0.23	0.34	1.20	1.17
3681	0.23	0.34	0.95	0.92
3685	0.22	0.34	0.84	0.81
3719	0.11	0.19	0.94	0.91
3724	0.12	0.21	2.47	2.39
3726	0.11	0.19	3.31	3.21
3803	0.20	0.33	1.24	1.20
3807	0.21	0.35	1.50	1.45
3808	0.17	0.29	2.24	2.17
3821	0.17	0.29	2.94	2.85
3822	0.18	0.30	5.77	5.58

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D-Ratios & ELRs as Approved using $5K split point vs Unlimited Theoretical D-Ratios & ELRs using $10K split point

Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
3824	0.17	0.29	2.44	2.36
3826	0.20	0.33	0.51	0.49
3827	0.17	0.29	0.98	0.95
3830	0.17	0.30	0.65	0.63
3851	0.23	0.34	4.17	4.04
3865	0.28	0.43	1.44	1.40
3881	0.21	0.33	2.83	2.75
4000	0.12	0.21	2.60	2.52
4018	0.14	0.24	2.24	2.17
4021	0.14	0.24	2.85	2.76
4034	0.14	0.24	4.02	3.89
4036	0.14	0.24	1.47	1.43
4038	0.27	0.42	3.44	3.33
4053	0.21	0.33	1.84	1.78
4061	0.22	0.35	4.32	4.19
4062	0.21	0.33	1.55	1.50
4101	0.17	0.29	1.66	1.61
4109	0.22	0.35	0.98	0.95
4110	0.20	0.34	2.50	2.42
4111	0.23	0.34	2.72	2.64
4112	0.20	0.34	2.50	2.42
4113	0.20	0.33	1.03	1.00
4114	0.20	0.33	1.87	1.81
4130	0.21	0.33	2.49	2.41
4131	0.23	0.34	2.36	2.29
4133	0.23	0.34	1.76	1.70
4149	0.27	0.42	0.97	0.93
4150	0.27	0.42	0.97	0.93
4206	0.20	0.33	2.22	2.15
4207	0.14	0.24	0.70	0.68
4239	0.14	0.24	1.59	1.54
4240	0.22	0.35	1.46	1.41
4243	0.20	0.33	1.87	1.82
4244	0.21	0.33	2.38	2.31
4250	0.20	0.33	0.91	0.88
4251	0.20	0.33	2.38	2.31

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D-Ratios & ELRs as Approved using $5K split point vs Unlimited Theoretical D-Ratios & ELRs using $10K split point

Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
4263	0.22	0.32	3.07	2.98
4273	0.21	0.33	1.94	1.88
4279	0.21	0.33	2.20	2.14
4282	0.21	0.35	1.53	1.48
4283	0.21	0.33	2.62	2.54
4299	0.23	0.34	1.37	1.33
4304	0.17	0.29	2.54	2.46
4307	0.27	0.42	1.72	1.67
4351	0.20	0.33	1.00	0.97
4352	0.23	0.34	1.09	1.06
4360	0.21	0.35	0.74	0.72
4361	0.22	0.34	0.70	0.68
4362	0.21	0.35	0.74	0.72
4410	0.20	0.33	2.22	2.15
4420	0.12	0.21	2.40	2.32
4431	0.28	0.43	0.99	0.95
4432	0.27	0.42	1.25	1.21
4439	0.17	0.29	1.06	1.03
4452	0.21	0.33	1.84	1.78
4459	0.21	0.33	1.50	1.45
4470	0.20	0.33	2.33	2.25
4484	0.21	0.33	2.08	2.01
4493	0.20	0.33	2.01	1.95
4511	0.17	0.29	0.24	0.23
4557	0.23	0.34	1.30	1.26
4558	0.21	0.33	1.33	1.29
4561	0.17	0.29	1.06	1.03
4568	0.14	0.24	2.75	2.66
4581	0.12	0.21	0.98	0.95
4583	0.12	0.21	2.29	2.22
4597	0.21	0.35	0.67	0.65
4611	0.23	0.34	0.89	0.86
4635	0.11	0.19	1.51	1.46
4653	0.21	0.35	1.15	1.11
4665	0.14	0.24	5.52	5.35
4670	0.14	0.24	3.10	3.01

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D-Ratios & ELRs as Approved using $5K split point vs Unlimited Theoretical D-Ratios & ELRs using $10K split point

Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
4683	0.20	0.33	1.94	1.88
4686	0.14	0.24	0.95	0.92
4692	0.22	0.35	0.42	0.41
4693	0.20	0.33	0.39	0.38
4703	0.20	0.33	1.56	1.51
4716	0.21	0.35	3.82	3.70
4717	0.28	0.43	1.15	1.11
4720	0.20	0.33	1.37	1.32
4740	0.14	0.24	0.73	0.70
4741	0.21	0.32	2.20	2.13
4751	0.14	0.24	1.32	1.28
4771	0.12	0.19	1.34	1.30
4777	0.12	0.19	2.48	2.40
4825	0.14	0.24	0.45	0.44
4828	0.17	0.29	1.37	1.33
4829	0.13	0.21	0.67	0.65
4902	0.23	0.34	2.19	2.12
4923	0.21	0.33	0.73	0.70
4940	0.14	0.25	1.29	1.25
5020	0.14	0.24	2.50	2.42
5022	0.12	0.21	3.88	3.75
5037	0.11	0.20	14.31	13.85
5040	0.11	0.19	10.86	10.51
5057	0.11	0.19	4.26	4.12
5059	0.11	0.19	21.74	21.05
5067	0.11	0.19	3.33	3.22
5069	0.11	0.19	15.54	15.04
5102	0.12	0.21	3.14	3.04
5146	0.14	0.24	3.47	3.36
5160	0.12	0.21	1.59	1.54
5183	0.14	0.24	2.45	2.37
5188	0.14	0.25	2.32	2.25
5190	0.14	0.24	1.67	1.61
5191	0.20	0.33	0.48	0.46
5192	0.20	0.33	2.06	1.99
5213	0.12	0.21	2.91	2.82

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Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
5215	0.17	0.29	2.84	2.75
5221	0.14	0.24	2.81	2.72
5222	0.12	0.21	4.20	4.06
5223	0.14	0.24	4.24	4.10
5348	0.14	0.24	2.83	2.74
5402	0.21	0.35	2.09	2.02
5403	0.12	0.21	3.25	3.15
5437	0.14	0.24	3.00	2.90
5443	0.20	0.33	2.12	2.05
5445	0.12	0.21	2.29	2.21
5462	0.14	0.24	2.56	2.48
5472	0.11	0.19	2.83	2.74
5473	0.11	0.19	3.62	3.50
5474	0.12	0.21	2.92	2.82
5478	0.14	0.24	3.30	3.20
5479	0.17	0.29	3.25	3.14
5480	0.12	0.21	3.11	3.01
5491	0.12	0.21	1.26	1.22
5505	0.14	0.25	2.61	2.53
5506	0.11	0.19	2.75	2.66
5515	0.17	0.29	2.60	2.51
5535	0.14	0.24	2.68	2.60
5537	0.14	0.24	2.35	2.28
5538	0.14	0.24	2.56	2.48
5551	0.11	0.19	8.30	8.04
5606	0.12	0.21	0.99	0.96
5610	0.20	0.33	3.51	3.40
5645	0.12	0.21	4.98	4.82
5651	0.12	0.21	4.98	4.82
5703	0.14	0.24	7.82	7.57
5705	0.14	0.24	5.67	5.49
5951	0.23	0.34	0.39	0.37
6003	0.14	0.24	3.63	3.51
6005	0.14	0.24	6.98	6.76
6045	0.14	0.24	0.88	0.85
6204	0.12	0.21	4.45	4.30

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D-Ratios & ELRs as Approved using $5K split point vs Unlimited Theoretical D-Ratios & ELRs using $10K split point

Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
6206	0.11	0.19	1.69	1.64
6213	0.12	0.21	1.04	1.01
6214	0.11	0.19	1.59	1.53
6216	0.13	0.19	3.98	3.86
6217	0.12	0.21	2.56	2.47
6229	0.12	0.21	2.64	2.55
6233	0.12	0.21	1.83	1.77
6235	0.11	0.19	4.09	3.96
6236	0.14	0.24	6.30	6.10
6237	0.14	0.24	0.85	0.83
6251	0.12	0.21	5.61	5.43
6252	0.11	0.19	5.58	5.40
6260	0.11	0.20	2.57	2.49
6306	0.12	0.21	3.41	3.30
6319	0.12	0.21	1.41	1.37
6325	0.12	0.21	2.20	2.12
6400	0.17	0.30	3.55	3.44
6503	0.22	0.35	1.38	1.34
6504	0.22	0.35	1.38	1.34
6702	0.14	0.24	5.07	4.91
6704	0.14	0.24	5.63	5.45
6834	0.17	0.29	2.52	2.44
6835	0.12	0.19	1.68	1.62
6836	0.14	0.24	3.23	3.13
6882	0.11	0.19	2.33	2.26
6884	0.11	0.20	4.81	4.65
7016	0.11	0.20	1.49	1.44
7024	0.11	0.20	1.66	1.60
7038	0.11	0.19	3.30	3.19
7046	0.13	0.19	6.61	6.40
7090	0.11	0.19	3.67	3.55
7098	0.13	0.19	7.35	7.11
7133	0.12	0.21	2.24	2.17
7151	0.12	0.21	2.72	2.64
7153	0.12	0.21	3.02	2.92
7207	0.15	0.26	5.95	5.75

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D-Ratios & ELRs as Approved using $5K split point vs Unlimited Theoretical D-Ratios & ELRs using $10K split point

Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
7222	0.14	0.25	3.42	3.31
7228	0.14	0.24	3.67	3.55
7229	0.12	0.21	4.34	4.20
7230	0.17	0.29	3.47	3.36
7231	0.17	0.30	5.69	5.51
7232	0.12	0.21	3.26	3.15
7250	0.13	0.19	3.19	3.09
7333	0.11	0.20	1.85	1.79
7335	0.11	0.20	2.06	1.99
7360	0.14	0.24	3.71	3.60
7370	0.20	0.33	2.71	2.63
7380	0.17	0.29	2.72	2.63
7382	0.20	0.33	2.21	2.14
7390	0.20	0.33	4.54	4.40
7394	0.11	0.20	6.38	6.17
7395	0.11	0.20	7.09	6.86
7402	0.20	0.33	0.12	0.12
7403	0.14	0.24	2.57	2.48
7405	0.14	0.24	0.49	0.48
7409	0.11	0.20	12.41	12.00
7418	0.11	0.19	1.12	1.09
7420	0.11	0.20	12.41	12.00
7421	0.12	0.21	0.67	0.65
7422	0.11	0.19	1.12	1.09
7423	0.14	0.24	2.57	2.48
7425	0.11	0.20	1.66	1.60
7431	0.11	0.20	0.93	0.90
7502	0.14	0.24	2.62	2.53
7515	0.12	0.18	0.74	0.72
7520	0.21	0.33	2.66	2.58
7538	0.11	0.19	5.16	4.99
7539	0.12	0.21	2.02	1.95
7540	0.11	0.19	1.89	1.83
7580	0.14	0.24	1.42	1.38
7590	0.17	0.29	2.68	2.60
7600	0.14	0.24	1.44	1.40

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Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
7601	0.12	0.21	1.74	1.69
7605	0.14	0.24	1.23	1.19
7610	0.17	0.29	0.37	0.36
7611	0.14	0.24	1.82	1.77
7612	0.14	0.24	2.34	2.26
7613	0.14	0.24	1.84	1.78
7705	0.19	0.29	3.00	2.90
7720	0.14	0.24	1.72	1.66
7855	0.14	0.24	4.17	4.04
8001	0.23	0.34	1.05	1.02
8002	0.20	0.33	1.63	1.58
8006	0.21	0.33	1.35	1.30
8008	0.23	0.34	0.60	0.58
8010	0.23	0.34	1.08	1.05
8013	0.21	0.33	0.35	0.34
8015	0.21	0.33	0.37	0.36
8017	0.23	0.34	0.88	0.85
8018	0.23	0.34	1.57	1.52
8021	0.21	0.33	1.41	1.37
8031	0.21	0.33	1.46	1.41
8032	0.23	0.34	1.14	1.11
8033	0.21	0.33	1.08	1.05
8034	0.20	0.33	1.84	1.78
8037	0.23	0.34	0.88	0.85
8039	0.24	0.34	0.95	0.92
8044	0.17	0.29	1.93	1.87
8045	0.23	0.34	0.27	0.26
8046	0.21	0.33	1.18	1.14
8047	0.23	0.34	0.65	0.63
8058	0.21	0.33	1.54	1.49
8061	0.20	0.33	1.18	1.14
8072	0.24	0.34	0.49	0.47
8102	0.24	0.34	1.88	1.83
8103	0.17	0.29	1.55	1.50
8105	0.22	0.35	1.97	1.91
8106	0.14	0.24	3.40	3.29

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Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
8107	0.14	0.24	2.05	1.98
8111	0.20	0.33	1.48	1.43
8116	0.20	0.33	1.78	1.73
8203	0.21	0.33	3.81	3.69
8204	0.14	0.24	1.85	1.79
8209	0.21	0.33	2.05	1.99
8215	0.14	0.24	2.28	2.21
8227	0.11	0.19	1.89	1.83
8232	0.14	0.24	3.41	3.30
8233	0.14	0.25	2.65	2.56
8235	0.21	0.33	2.48	2.40
8263	0.17	0.29	4.89	4.74
8264	0.14	0.24	3.29	3.19
8265	0.12	0.21	4.07	3.94
8279	0.13	0.21	3.17	3.07
8288	0.14	0.24	3.80	3.68
8291	0.17	0.29	2.69	2.60
8292	0.21	0.33	2.95	2.85
8293	0.14	0.24	4.80	4.64
8304	0.14	0.24	3.55	3.43
8350	0.12	0.21	3.86	3.74
8353	0.14	0.24	2.15	2.08
8370	0.14	0.24	1.82	1.76
8381	0.17	0.29	1.15	1.11
8385	0.14	0.24	1.41	1.37
8387	0.17	0.29	1.68	1.62
8391	0.17	0.29	1.62	1.57
8392	0.21	0.33	2.00	1.94
8393	0.20	0.33	1.16	1.12
8500	0.14	0.24	3.20	3.10
8601	0.17	0.29	0.29	0.28
8602	0.17	0.29	0.29	0.28
8603	0.20	0.33	0.12	0.12
8606	0.12	0.21	1.74	1.68
8719	0.11	0.19	1.35	1.31
8720	0.14	0.24	0.85	0.82

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Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
8721	0.14	0.24	0.14	0.14
8723	0.20	0.33	0.12	0.12
8725	0.14	0.24	0.85	0.82
8728	0.14	0.24	0.22	0.21
8734	0.22	0.24	0.30	0.29
8737	0.22	0.24	0.27	0.26
8742	0.14	0.24	0.22	0.21
8745	0.17	0.29	3.58	3.46
8748	0.17	0.29	0.45	0.43
8755	0.14	0.24	0.23	0.23
8799	0.21	0.33	0.86	0.84
8800	0.27	0.42	1.13	1.10
8803	0.14	0.24	0.05	0.05
8805	0.22	0.33	0.16	0.16
8810	0.20	0.33	0.12	0.12
8814	0.22	0.33	0.15	0.14
8820	0.17	0.30	0.14	0.13
8824	0.23	0.34	1.79	1.74
8825	0.27	0.42	1.08	1.05
8826	0.21	0.33	1.23	1.20
8829	0.21	0.33	1.29	1.25
8831	0.22	0.32	1.08	1.04
8832	0.20	0.33	0.21	0.20
8833	0.21	0.33	0.69	0.67
8835	0.21	0.33	1.28	1.24
8855	0.20	0.33	0.12	0.12
8856	0.20	0.33	0.12	0.12
8861	0.21	0.32	0.88	0.86
8868	0.23	0.34	0.23	0.22
8869	0.24	0.34	0.62	0.60
8871	0.21	0.35	0.13	0.12
8901	0.17	0.30	0.09	0.09
9012	0.17	0.29	0.66	0.64
9014	0.21	0.33	1.82	1.76
9015	0.21	0.33	1.97	1.91
9016	0.21	0.33	2.51	2.43

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E-1402 interrogatory for filing effective 1/1/2012

D-Ratios & ELRs as Approved using $5K split point vs Unlimited Theoretical D-Ratios & ELRs using $10K split point

Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
9019	0.14	0.24	1.11	1.07
9033	0.20	0.33	1.23	1.19
9040	0.24	0.34	2.58	2.50
9044	0.23	0.34	0.89	0.86
9052	0.23	0.34	1.28	1.24
9058	0.27	0.42	0.93	0.90
9059	0.24	0.34	0.62	0.60
9060	0.23	0.34	0.95	0.92
9061	0.27	0.42	1.01	0.98
9062	0.27	0.42	1.15	1.12
9063	0.24	0.34	0.55	0.54
9082	0.27	0.42	0.99	0.96
9083	0.27	0.41	0.88	0.85
9084	0.21	0.33	0.94	0.91
9089	0.23	0.34	0.80	0.78
9093	0.23	0.34	0.80	0.77
9101	0.23	0.34	2.40	2.33
9102	0.21	0.33	1.76	1.71
9110	0.22	0.32	2.13	2.06
9154	0.21	0.33	1.06	1.03
9156	0.17	0.29	1.10	1.07
9170	0.19	0.19	2.14	2.07
9180	0.14	0.24	2.98	2.89
9182	0.22	0.32	1.80	1.75
9186	0.12	0.21	4.19	4.05
9220	0.17	0.29	3.03	2.93
9402	0.14	0.24	2.42	2.34
9403	0.12	0.21	4.42	4.28
9410	0.21	0.33	2.62	2.54
9501	0.17	0.29	1.67	1.61
9505	0.17	0.29	1.63	1.58
9516	0.14	0.24	2.75	2.66
9519	0.14	0.24	2.09	2.02
9521	0.14	0.24	2.46	2.39
9522	0.21	0.33	1.86	1.80
9534	0.12	0.21	2.55	2.46

National Council on Compensation Insurance, Inc.

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E-1402 interrogatory for filing effective 1/1/2012

D-Ratios & ELRs as Approved using $5K split point vs Unlimited Theoretical D-Ratios & ELRs using $10K split point

Note - F-class, Underground coalmine, A-rated, Non-ratable and Specially handled class codes excluded.

	D-Ratios		ELRs	
Class Code	5K split point Approved	10K split point Theoretical	5K split point Approved	10K split point Theoretical
9554	0.12	0.21	5.06	4.89
9586	0.27	0.42	0.49	0.48
9600	0.21	0.35	1.21	1.17
9620	0.17	0.29	0.59	0.57

National Council on Compensation Insurance, Inc.

Indexation of the Split Point

Jon Evans

Individual Risk Rating Working Group
January 27, 2010

Overview

- Background
- Indexation Of The Split Point In ERA
- Time Series For The Index
- Indexation Of The Split Point And Experience Rating Plan Performance
- Implementing Indexation
- Discussion

Background

- The Experience Rating Adjustment (ERA), filed as Item E-1339 first effective in 1998, allowed for indexation of the split point.

- Recent testing of the performance of the NCCI Experience Rating Plan has demonstrated evidence of positive slope in quintile testing, which may indicate the split point should be raised.

Currently Approved Rating Plans by State

State	Plan	State	Plan	State	Plan
Alabama	ERA	Iowa	GERT	North Carolina	ERA
Alaska	RERP	Kansas	ERA	Oklahoma	ERA
Arizona	ERA	Kentucky	ERA	Oregon	GERT
Arkansas	ERA	Louisiana	GERT	Rhode Island	ERA
Colorado	ERA	Maine	ERA	South Carolina	ERA
Connecticut	ERA	Maryland	ERA	South Dakota	ERA
District of Columbia	ERA	Mississippi	ERA	Tennessee	ERA
Florida	ERA	Missouri	GERT	Utah	ERA
Georgia	GERT	Montana	ERA	Vermont	ERA
Hawaii	ERA	Nebraska	ERA	Virginia	ERA
Idaho	ERA	Nevada	ERA	West Virginia	ERA
Illinois	ERA	New Hampshire	ERA		
Indiana	ERA	New Mexico	GERT		

ERA – Experience Rating Adjustment – Item Filing E-1339

RERP – Revised Experience Rating Plan – Item Filing E-1235

GERT – Graduated Experience Rating Tabulation

The Item E-1339 (ERA) Provision For Indexation

"3. Indexing the Split Point For Countrywide Inflation ---- Our quintiles testing confirms that the current split point of $5,000 is appropriate. Exhibit 3 shows the changes in the Countrywide Average Cost per Case evaluated at third report. Using 1992 as our indexing year, the current split point of $5,000 is proportional to Countrywide Average Cost per Case of approximately $4,000. As countrywide trend increases the average cost per workers compensation claim, changes will be made in increments of $500 as indicated. Preliminary analysis of policy year 1993 continues to indicate no change in the current split point."

The Time Series For The Index

Values For The Index Time Series Presented in Item E-1339 Exhibit 3

Third Report Losses

Midpoint of Experience	Average Cost Per Case (ACC)	Change
01/04/86	$2,267	
11/09/86	$2,551	12.5%
11/18/87	$2,739	7.4%
01/14/89	$3,131	14.3%
12/17/89	$3,463	10.6%
12/13/90	$3,745	8.1%
11/20/1991*	$3,911	4.4%
12/11/1992**	$3,967	1.4%

* 2nd Report developed to 3rd Report.

** 1st Report developed to 3rd Report.

The Time Series For The Index

More Recent Values

Third Report Losses

Midpoint of Experience	Average Cost Per Case (ACC)	Change
11/09/86	$2,551	
11/18/87	$2,739	7.4%
01/14/89	$3,131	14.3%
12/17/89	$3,463	10.6%
12/13/90	$3,745	8.1%
11/28/92	$4,146	10.7%
08/23/93	$4,034	-2.7%
10/28/94	$3,976	-1.4%
10/10/95	$4,040	1.6%
10/9/1996*	$4,103	1.6%
10/15/1997**	$4,273	4.1%

Third Report Losses

Midpoint of Experience	Average Cost Per Case (ACC)	Change
08/23/93	$4,034	
10/28/94	$3,976	-1.4%
10/10/95	$4,040	1.6%
08/05/96	$4,147	2.7%
01/21/98	$4,396	6.0%
06/30/98	$4,471	1.7%
03/06/00	$5,322	19.0%
02/15/01	$5,957	11.9%
03/21/02	$6,601	10.8%
02/28/03	$7,219	9.4%
03/26/04	$7,553	4.6%
3/24/2005*	$7,818	3.5%
3/24/2006**	$8,452	8.1%

* 2nd Report developed to 3rd Report.

** 1st Report developed to 3rd Report.

Comments

Editorial note:
10,500 is the 2006 value ...
trending to 2013 yields 15,000

- Recent average claims costs indicate that the split point should be raised to approximately 10,500 ≈ 5,000 x (8,452 / 3,967) .
- The severity index referenced in the filing, in connection with the split point, is still produced by NCCI. It is very similar to G-value/SAL/SACC index used to index the W and B values, loss limit, and mod cap.
- Raising the split point based on this indication, without any change in W and B values, might eliminate positive slope in performance testing.
- Quintile testing results for alternative split points will be presented at an upcoming IRRWG meeting.

Indexation Of The Split Point And Experience Rating Performance

- Indexation of the credibility values, W and B, maintains constant credibility for risk size based upon implicit frequency.
- Indexation of the loss limit and split point maintains the same severity distributions within the primary and excess layers, respectively.
- If the split point is not indexed over time the proportion of loss in the primary layer will decrease, as evidenced by a declining D-ratio. This will result in a decrease in overall effective credibility and consequently a positive slope in performance testing.

Implementing Indexation

- The split point could be raised all at once or raised in a stair step fashion over several years.
- Subsequent to a single large increase, more frequent subsequent index based increases would preempt the need for another large increase.
  - A larger minimum increment than 500 might also be warranted in the future.
- The index specified for the split point under ERA is effectively the same over time as the severity indices used for W and B values, loss limits, and mod caps.
  - This consistency is justified by statistical theory and any significant change in one index should be mirrored in the other.

Discussion

National Council on Compensation Insurance, Inc.

Analysis Of Alternative Split Points

Chris Poteet

Individual Risk Rating Working Group
April 14, 2010

Overview

- Background
- Severity Index Time Series
- Data and Recalculation For Alternative Split Points
- Quintile Test Charts and Tables Of Statistics
- Observations

Background

- The Experience Rating Adjustment (ERA), filed as Item E-1339 first effective in 1998, allowed for indexation of the split point.
- The split has remained at 5,000 since the mid 1990s, in the wake a plateau in the severity index and a series of well performing quintile tests.
- More recent testing of the performance of the NCCI Experience Rating Plan has demonstrated evidence of positive slope in quintile testing, which may indicate the split point should be raised.
- Also in more recent years the severity index referenced in Item E-1339 has more than doubled since the original filing, indicating a split point of around 10,500.

Editorial note:
10,500 is the 2006 value ...
trending to 2013 yields 15,000

The Time Series For The Index

Values For The Index Time Series Presented in Item E-1339 Exhibit 3

3rd Report Losses

Midpoint of Experience	Average Cost Per Case (ACC)	Change	Annualized Change
01/04/86	$2,267		
11/09/86	$2,551	12.5%	15.0%
11/18/87	$2,739	7.4%	7.2%
01/14/89	$3,131	14.3%	12.2%
12/17/89	$3,463	10.6%	11.5%
12/13/90	$3,745	8.1%	8.2%
11/20/1991*	$3,911	4.4%	4.7%
12/11/1992**	$3,967	1.4%	1.3%

Note: Costs include total indemnity and medical losses

* 2nd Report developed to 3rd Report.

** 1st Report developed to 3rd Report.

The Time Series For The Index

More Recent Values

3rd Report Losses

Midpoint of Experience	Average Cost Per Case (ACC)	Change	Annualized Change
08/23/93	$4,034		
10/28/94	$3,976	-1.4%	-1.2%
10/10/95	$4,040	1.6%	1.7%
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03/06/00	$5,322	19.0%	10.9%
02/15/01	$5,957	11.9%	12.6%
03/21/02	$6,601	10.8%	9.8%
02/28/03	$7,219	9.4%	10.0%
03/26/04	$7,553	4.6%	4.3%
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3rd Report Losses

Midpoint of Experience	Average Cost Per Case (ACC)	Change	Annualized Change
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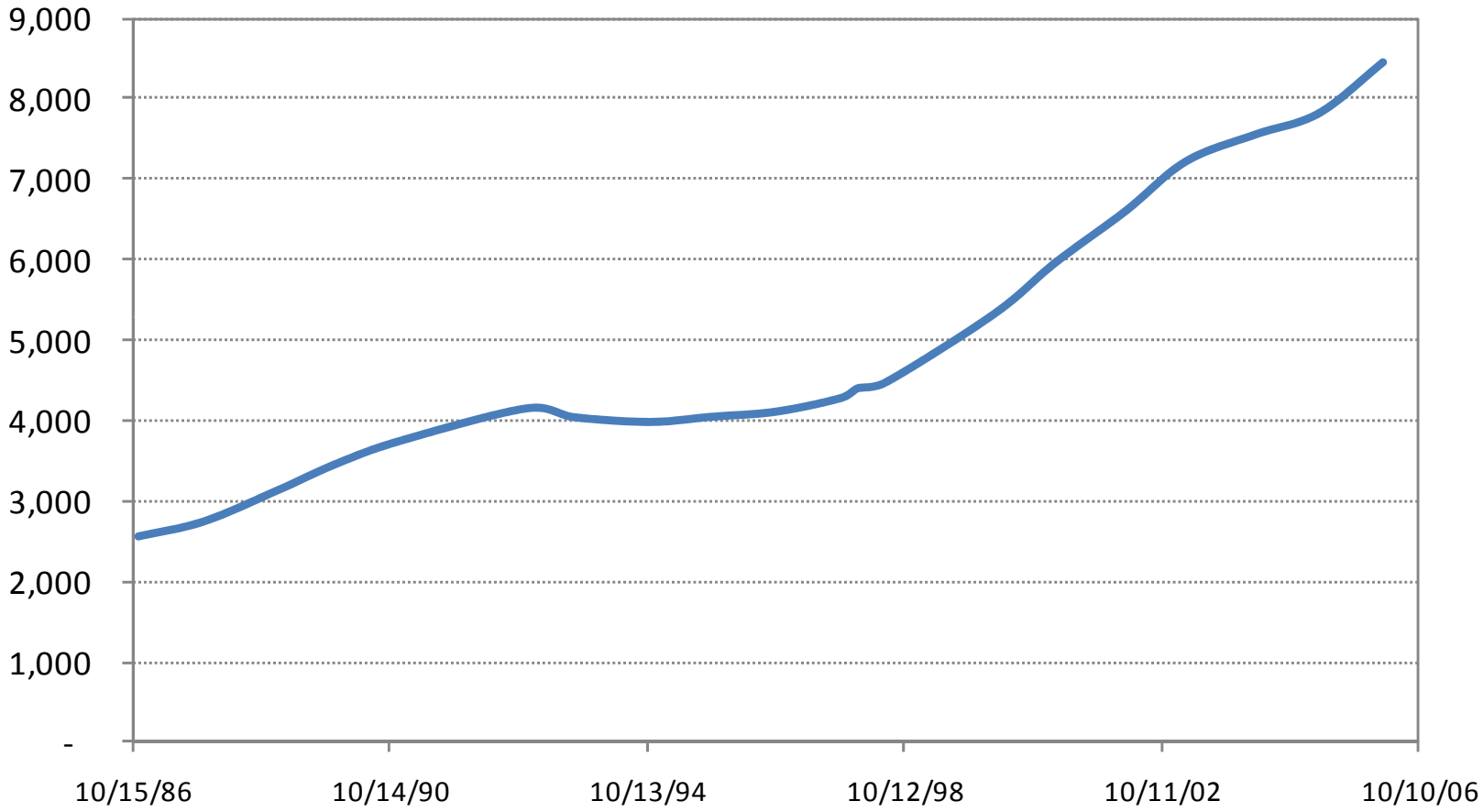
Note: Costs include total indemnity and medical losses

* 2nd Report developed to 3rd Report.

** 1st Report developed to 3rd Report.

Countrywide 3rd Report
Average Indemnity and Medical Cost Per Case



Midpoint Of Experience

Underlying Data For Quintile Testing

- Effective Years and Reports:
  - 2002 5th
  - 2006 1st
- Experience period actual and expected loss, both primary and excess, and W and B values used to calculate current mods.
- Actual primary experience period losses recalculated for several different split points.
- Effective period individual claim actual losses are developed to ultimate by injury type and open/closed status.
- Effective period expected loss normalized to equal total actual reported loss for each Hazard Group and state combination.

Recalculation Of Actual And Expected Losses For Alternative Split Points

- Actual losses from the experience period are split into primary and excess for a set of different split points:
  - 2500, 3750, 5000, 7500, 10000, 15000, 20000, 25000, 50000
- The expected primary experience period losses, already calculated under the current split point, are rescaled, for each HG and state combination, by the ratio of total actual primary loss under the alternative split point to total actual primary loss currently in the system.
- Expected excess experience period losses are then recalculated as the total expected ratable losses, already calculated, minus the expected primary loss for the alternative split point.

Hypothetical Example Of Recalculation Of Expected Losses For Alternative Split Points

State X

Hazard Group K

Total Experience

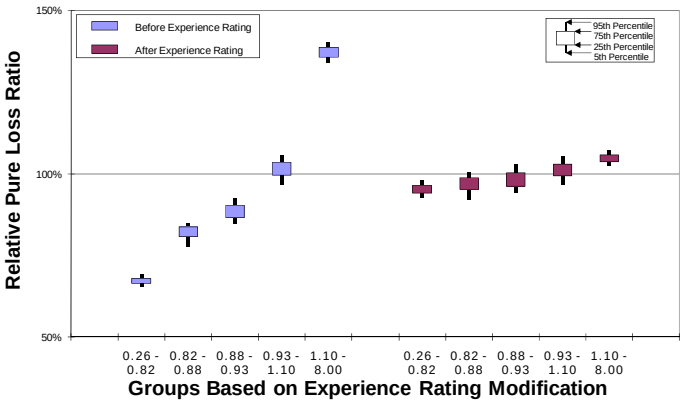
Split Point	Total Experience Period Primary Actual Loss	Scale Factor
5,000	2,000,000	1.00
10,000	3,000,000	1.50

Individual Risk Z

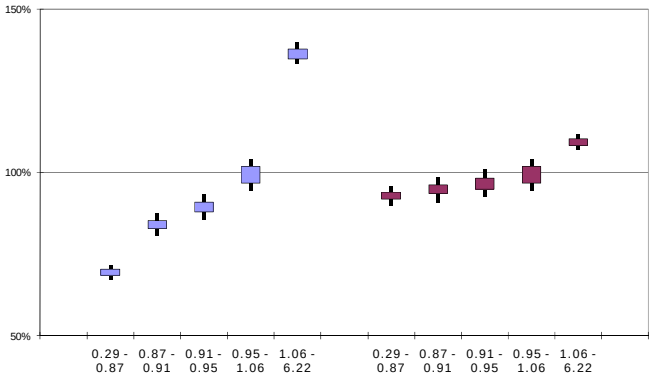
E fixed	Ep rescaled	Ex = E - Ep	A fixed	Ap recalculated	Ax = A - Ap
10,000	3,000	7,000	100,000	6,500	93,500
10,000	4,500	5,500	100,000	11,500	88,500

Quintile Tests by Split Point and Risk Size

PY 2002 Countrywide Split Point 5000



PY 2002 Countrywide Split Point 2500



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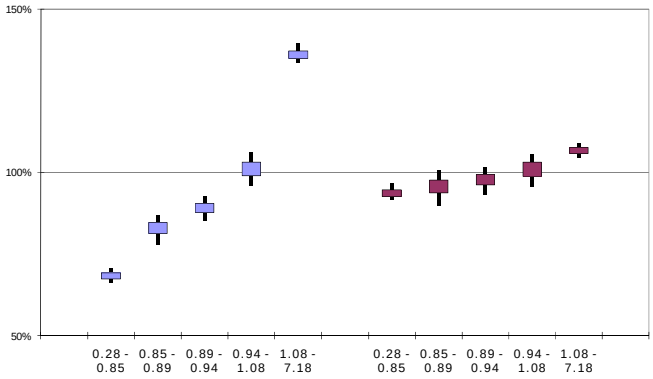
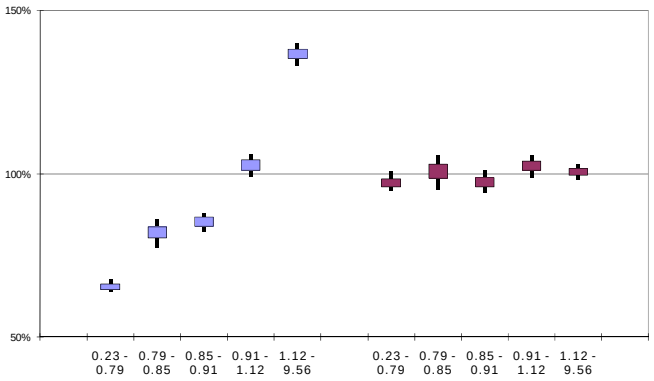
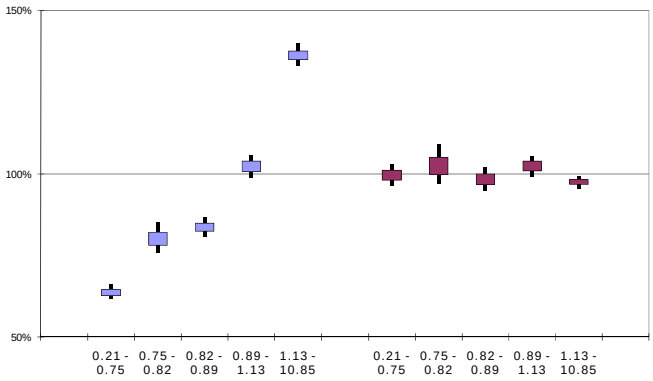


PY 2002 Countrywide Split Point 7500



PY 2002 Countrywide Split Point 10000



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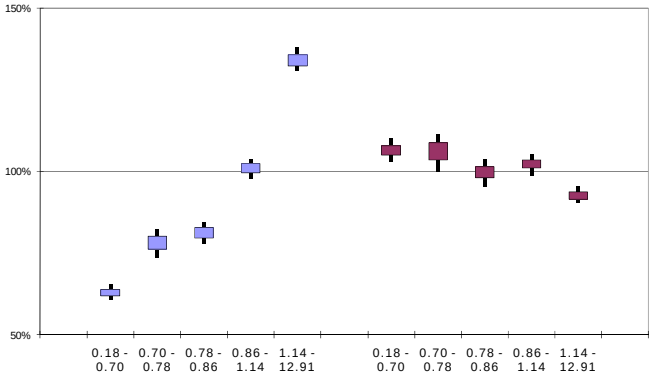

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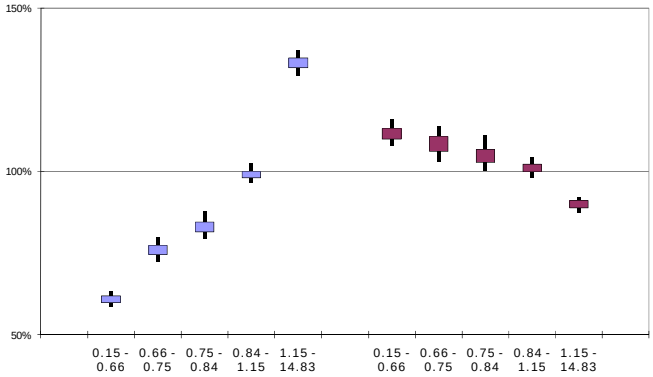

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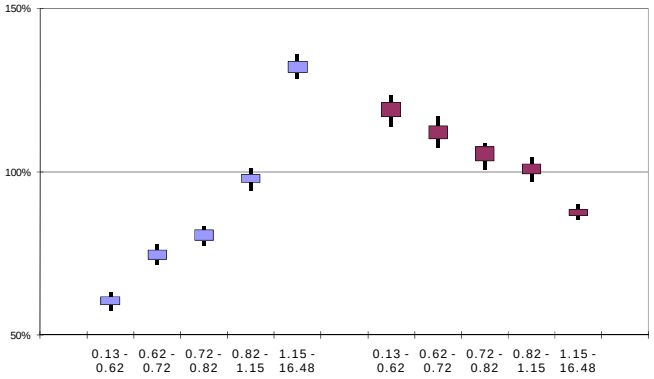

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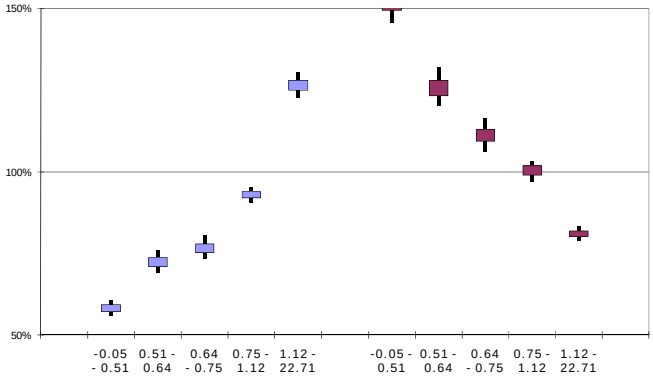

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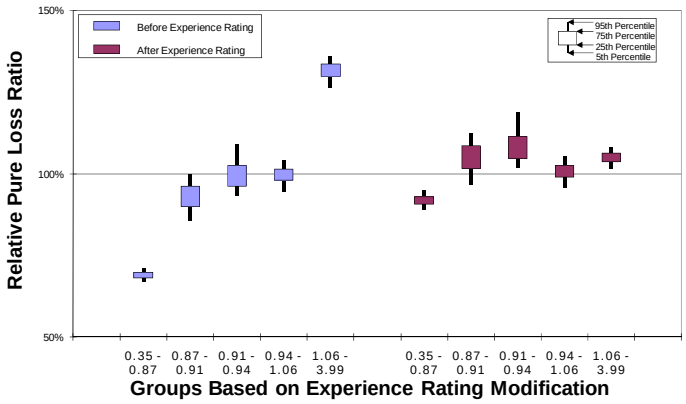

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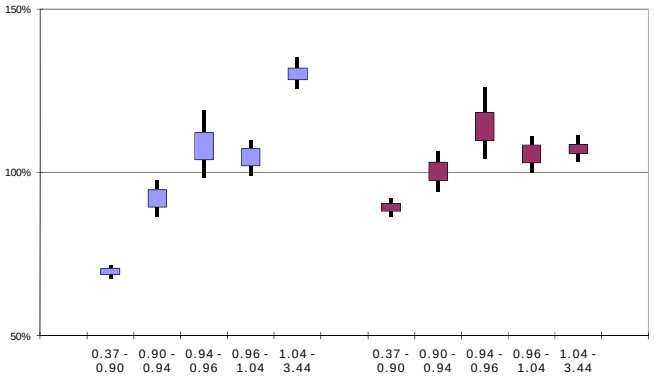

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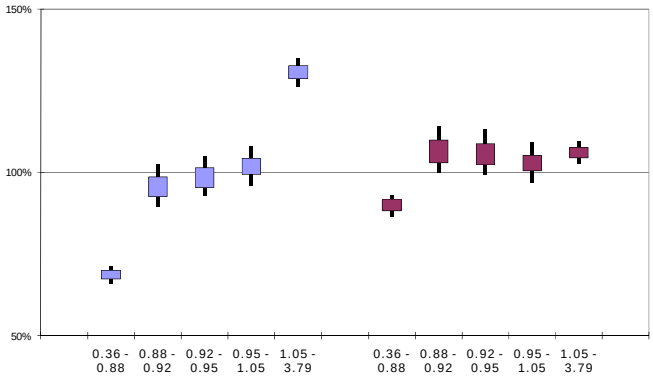

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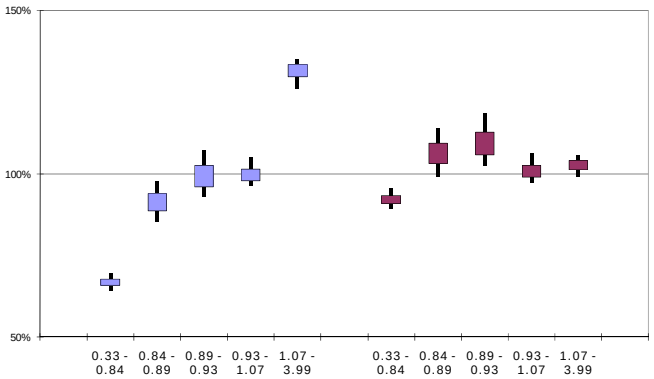

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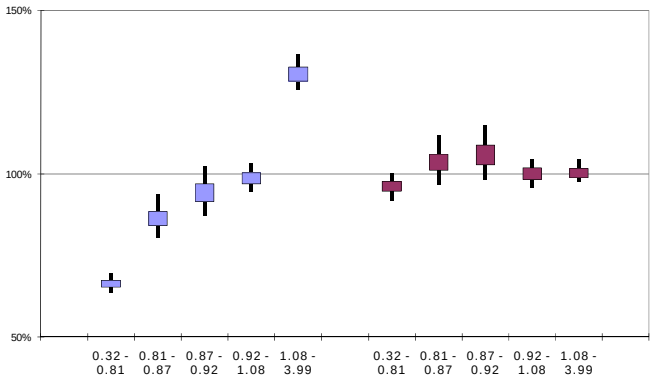

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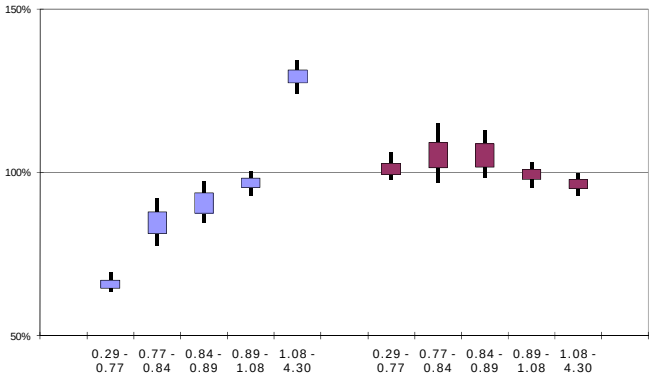

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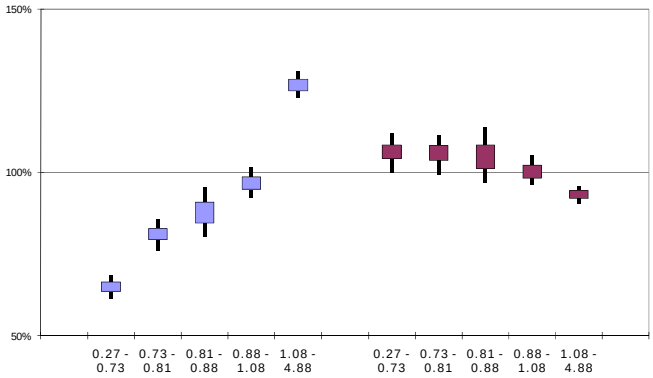

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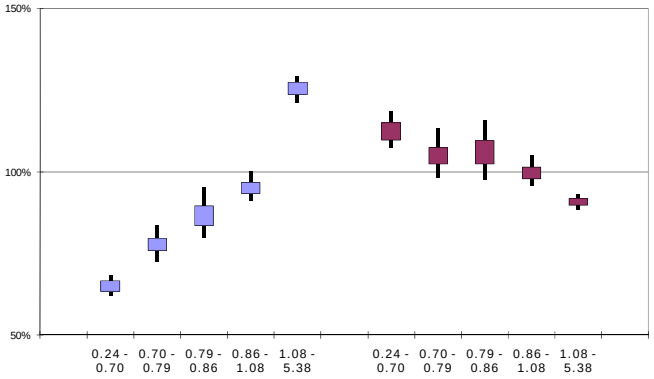

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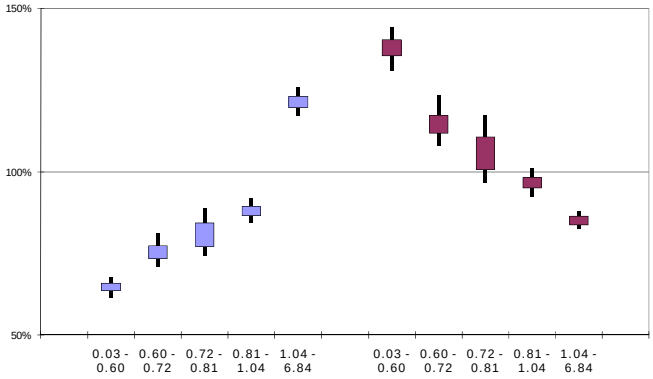

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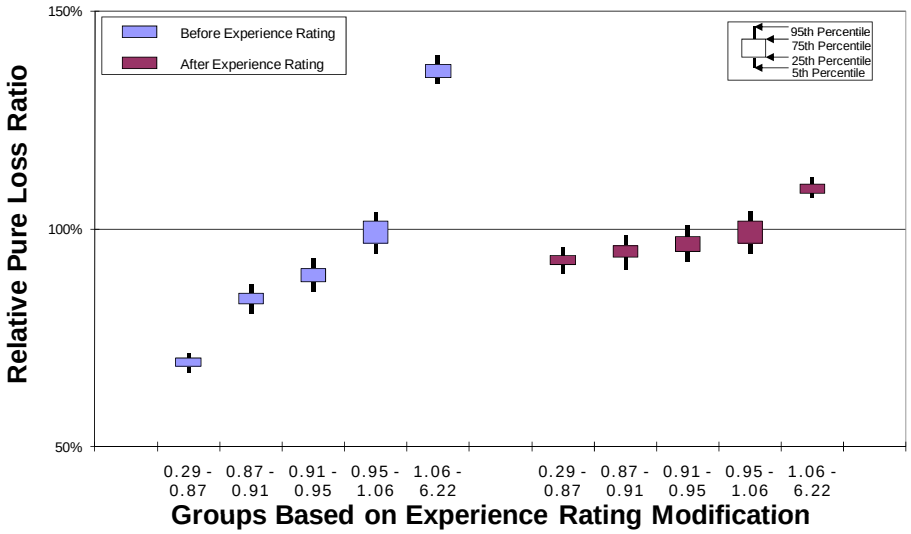

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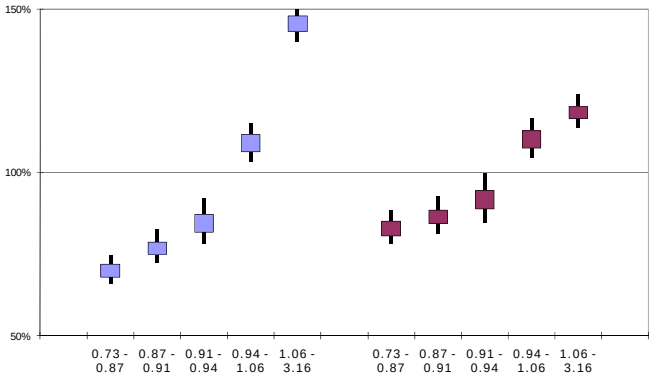

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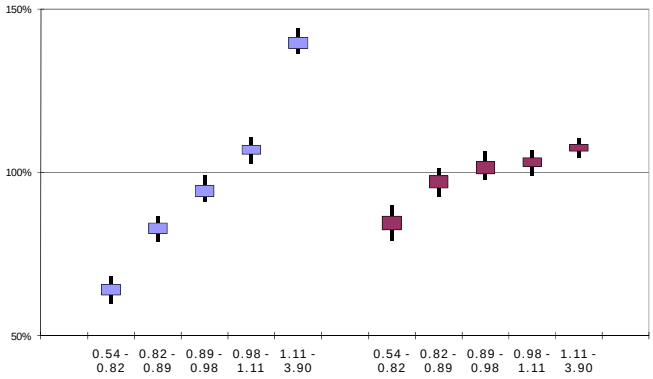

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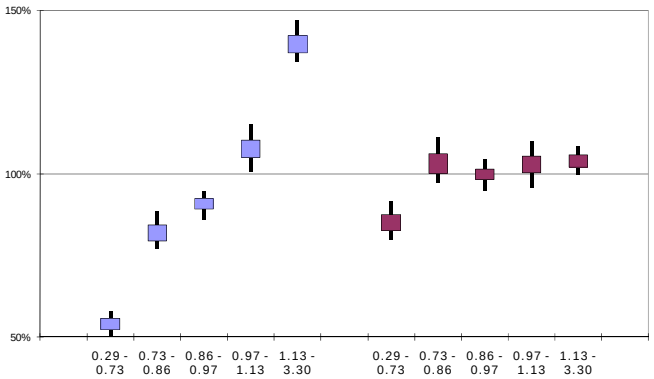

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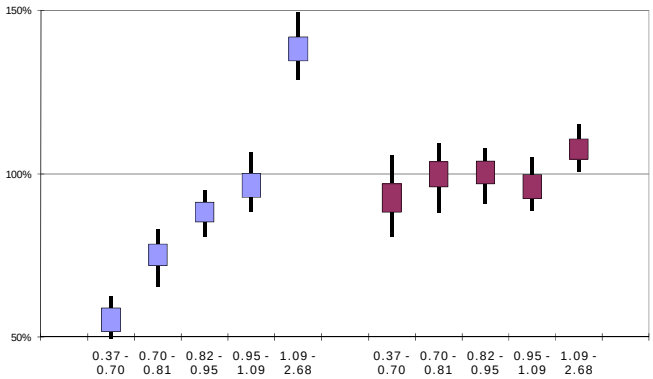

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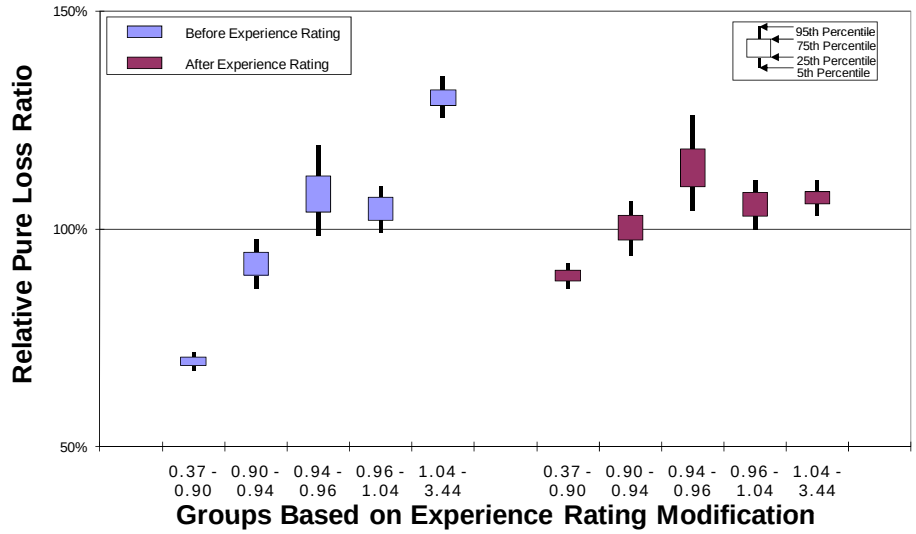

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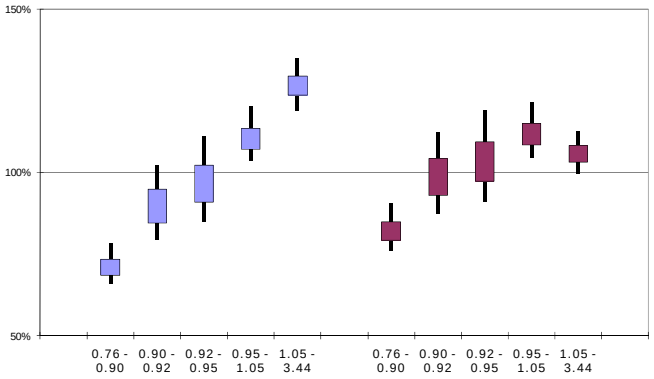
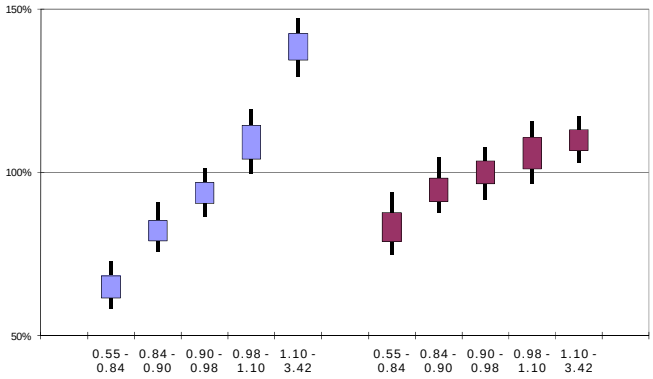
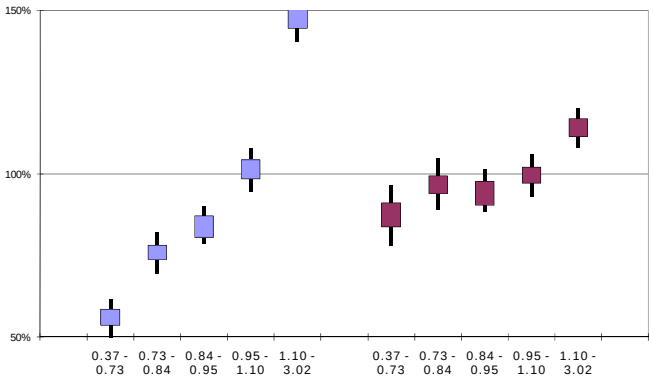


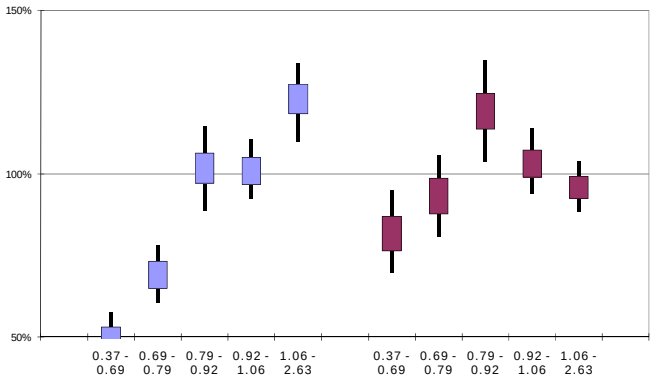
PY 2006 Risk Size 10,000 to 100,000 Split Point 2500



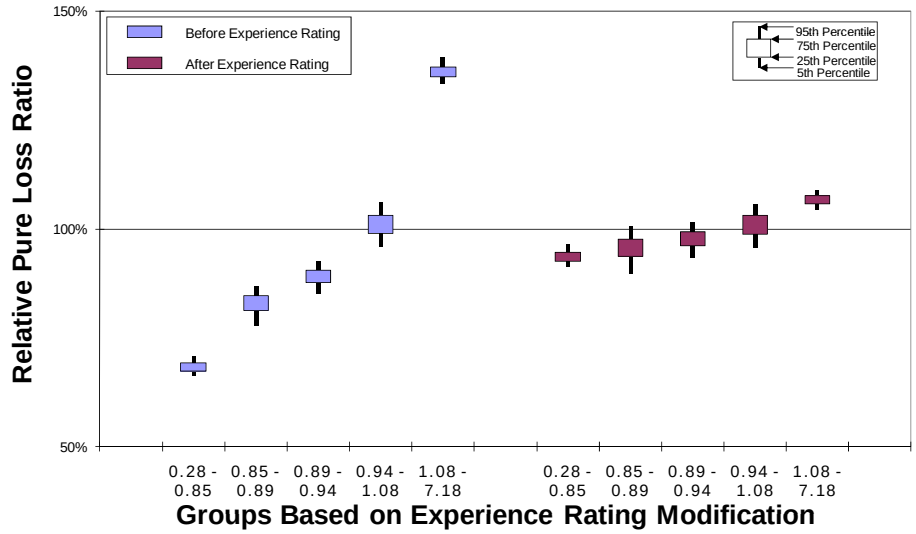
PY 2006 Risk Size 100,000 to 1M Split Point 2500



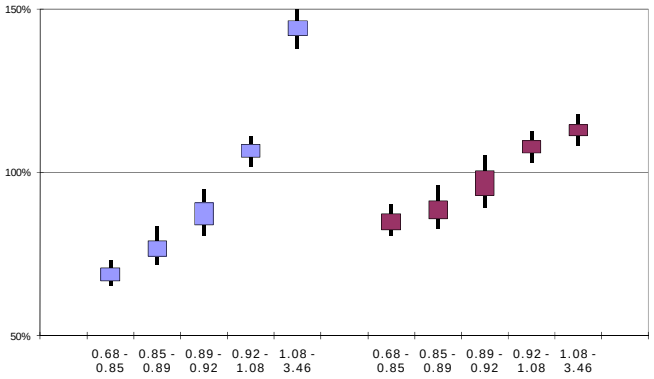
PY 2006 Risk Size 1M to 10M Split Point 2500



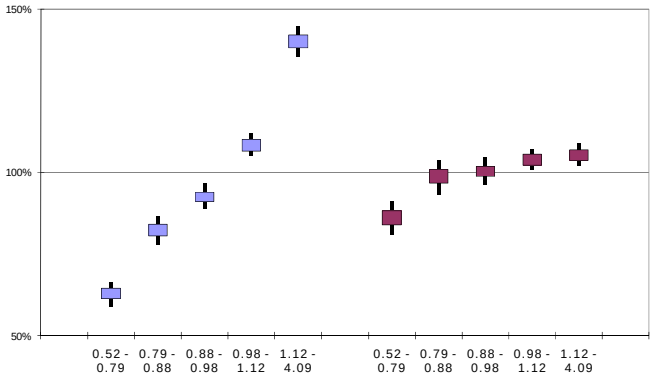
PY 2002 Countrywide Split Point 3750



PY 2002 Risk Size 1000 to 10,000 Split Point 3750



PY 2002 Risk Size 10,000 to 100,000 Split Point 3750



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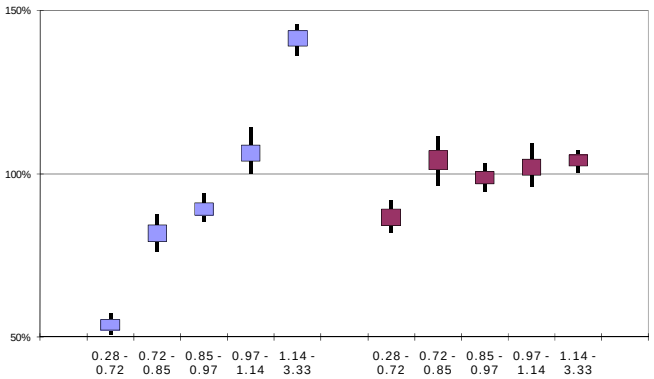
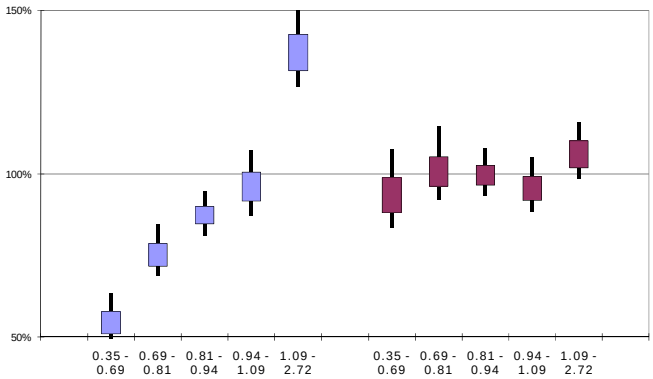


PY 2002 Risk Size 1M to 10M Split Point 3750



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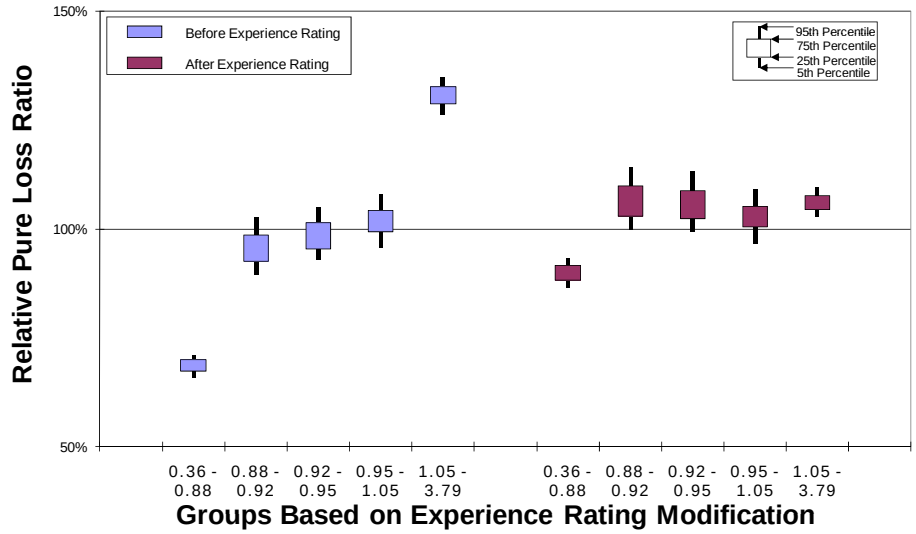

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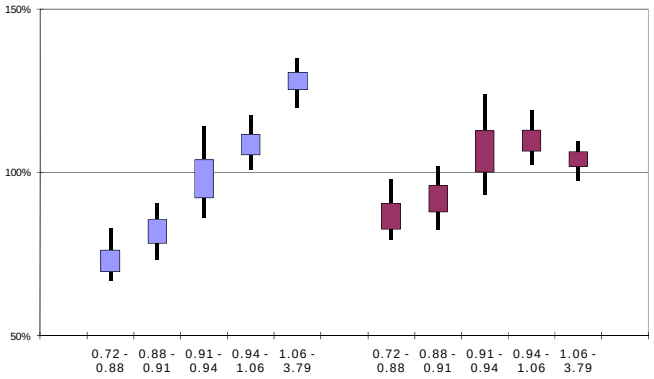

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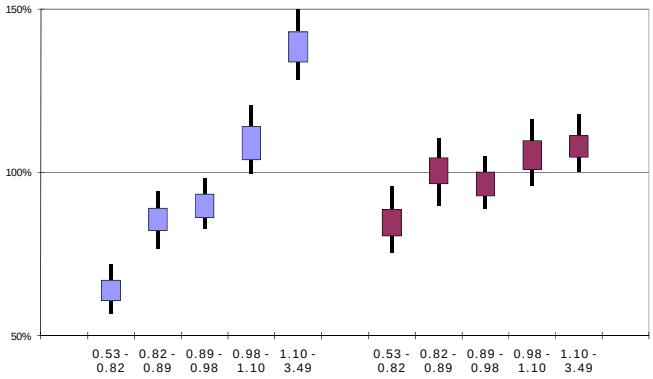
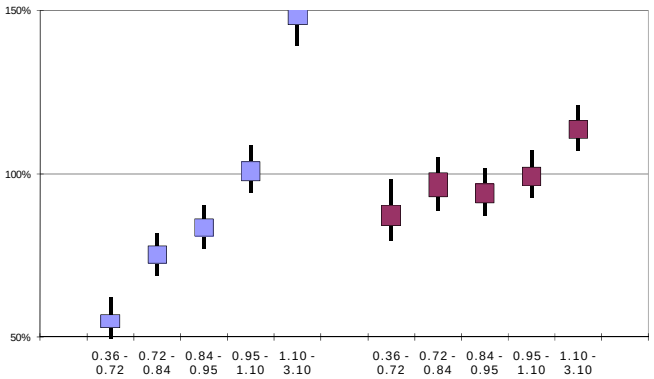
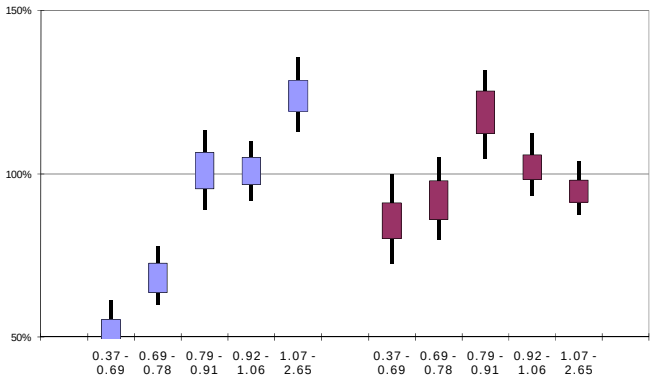


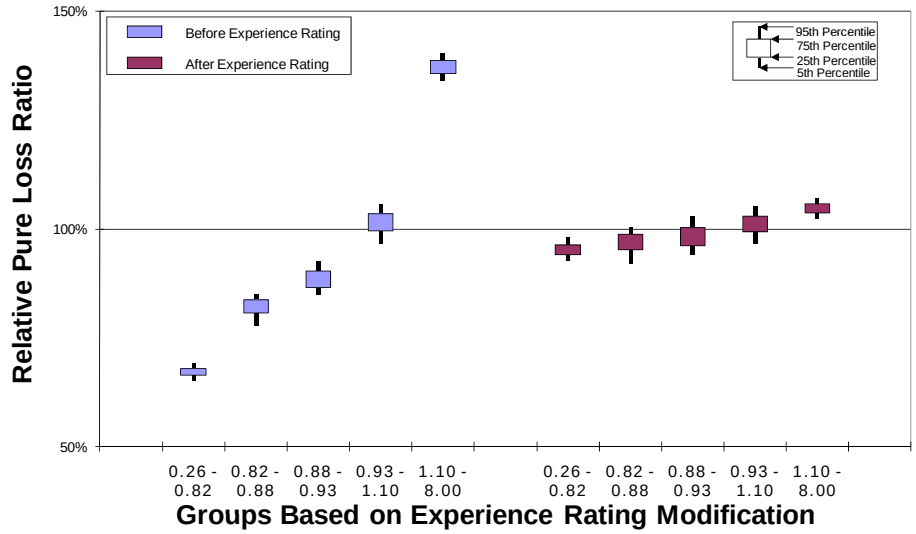
PY 2006 Risk Size 100,000 to 1M Split Point 3750



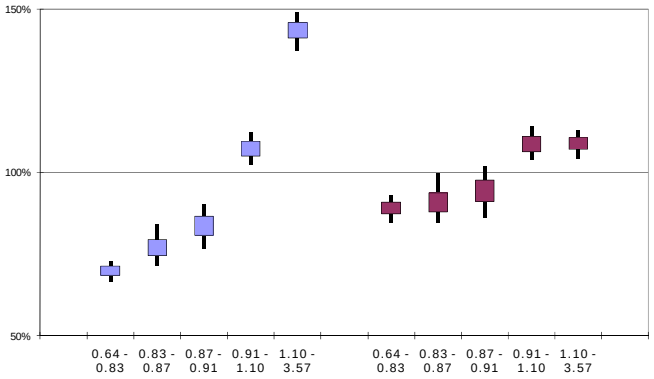
PY 2006 Risk Size 1M to 10M Split Point 3750



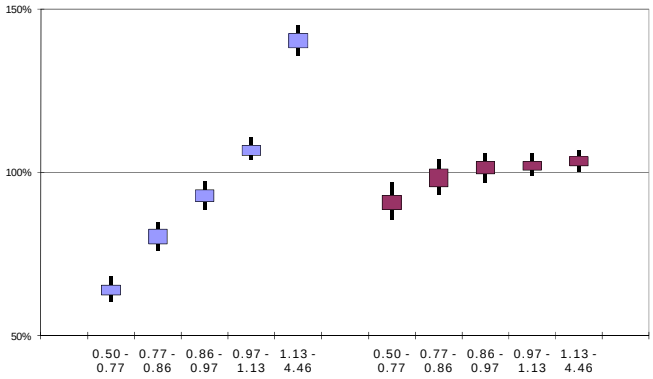
PY 2002 Countrywide Split Point 5000



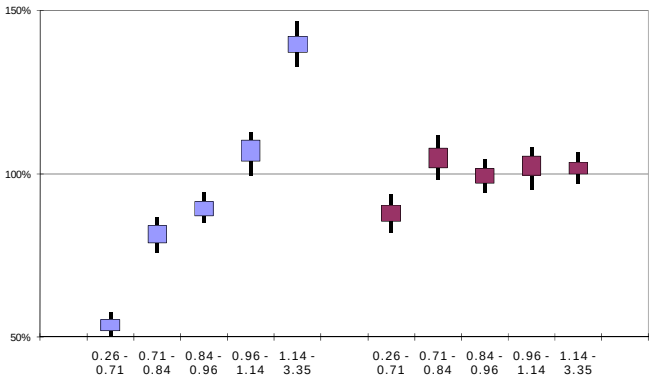
PY 2002 Risk Size 1000 to 10,000 Split Point 5000



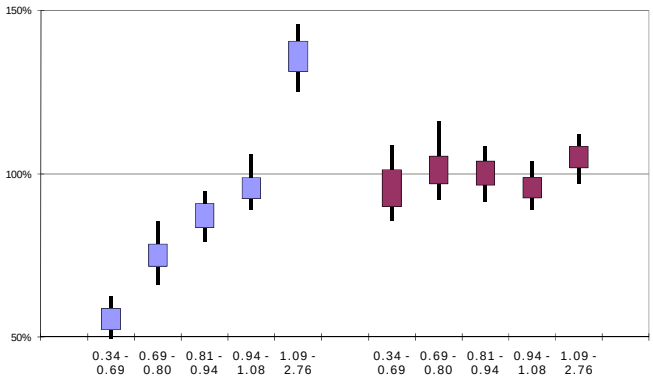
PY 2002 Risk Size 10,000 to 100,000 Split Point 5000



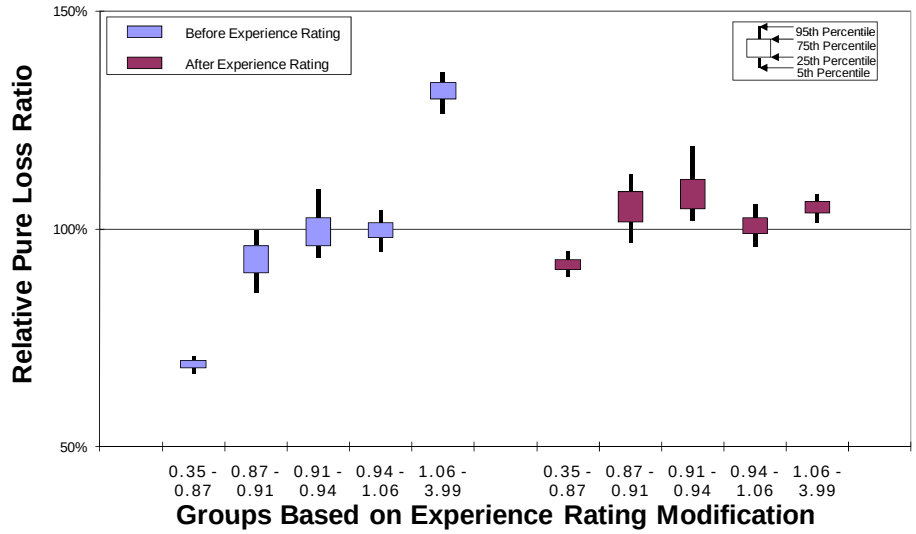
PY 2002 Risk Size 100,000 to 1M Split Point 5000



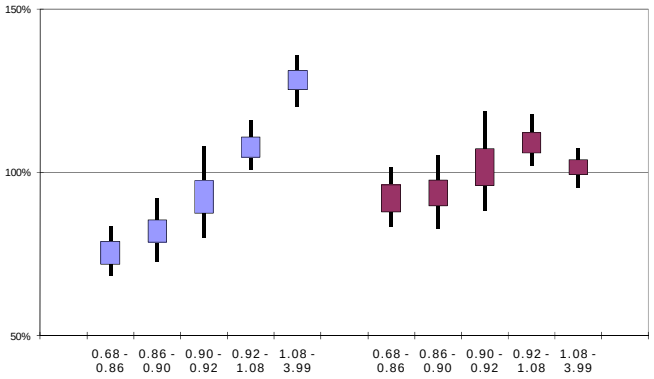
PY 2002 Risk Size 1M to 10M Split Point 5000



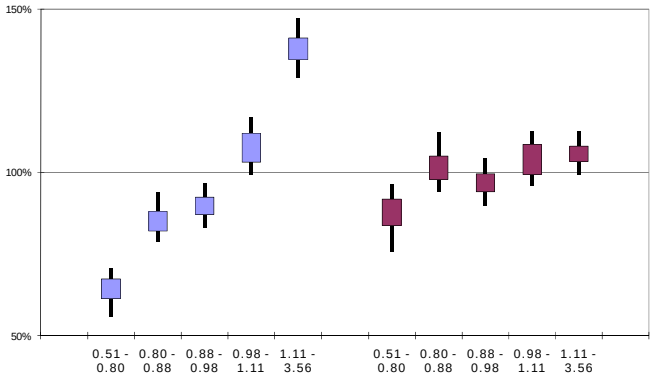
PY 2006 Countrywide Split Point 5000



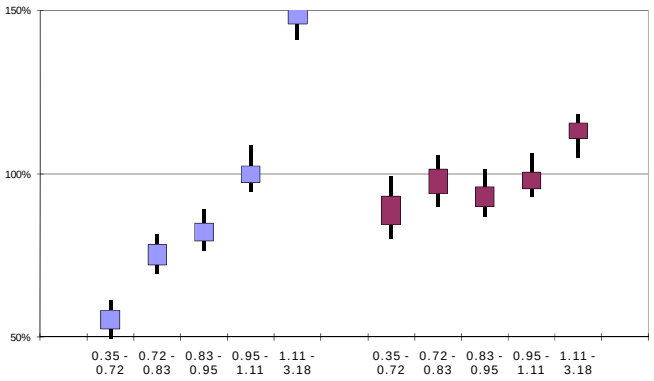
PY 2006 Risk Size 1000 to 10,000 Split Point 5000



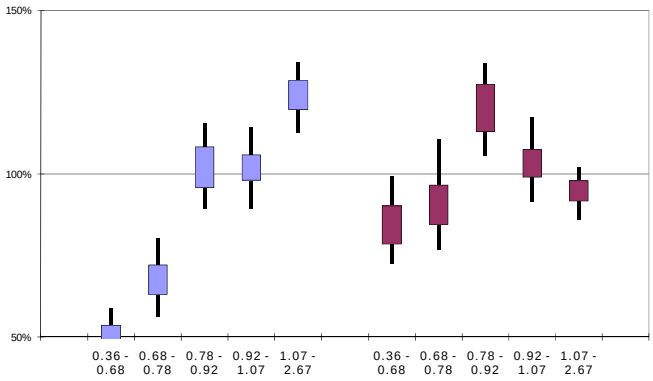
PY 2006 Risk Size 10,000 to 100,000 Split Point 5000



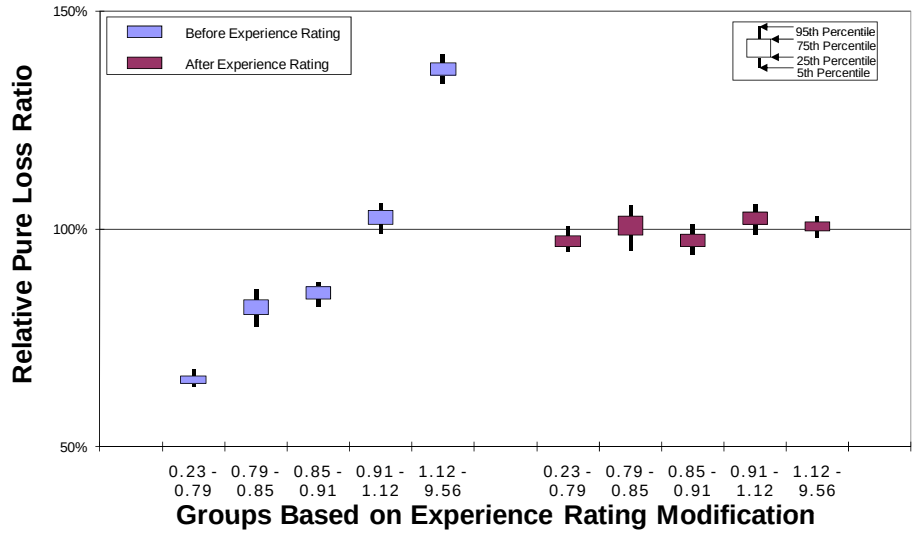
PY 2006 Risk Size 100,000 to 1M Split Point 5000



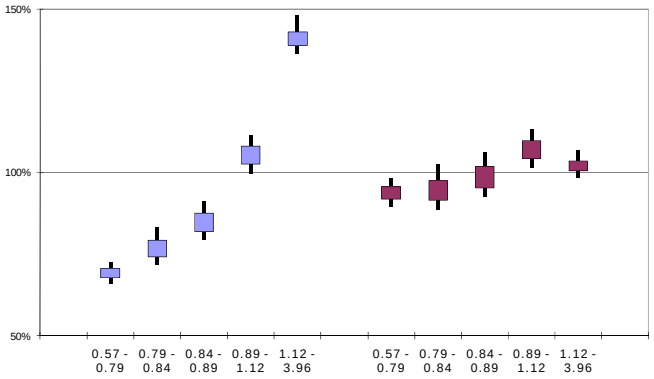
PY 2006 Risk Size 1M to 10M Split Point 5000



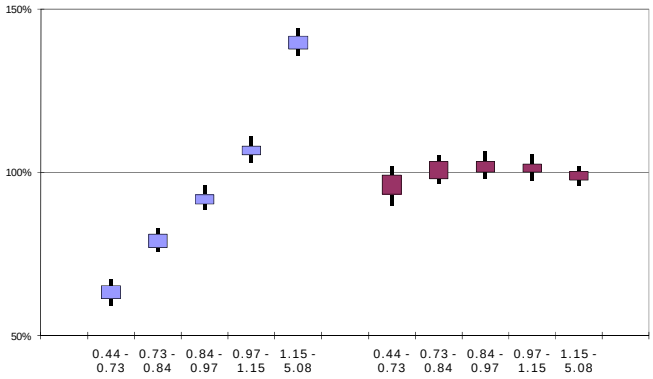
PY 2002 Countrywide Split Point 7500



PY 2002 Risk Size 1000 to 10,000 Split Point 7500



PY 2002 Risk Size 10,000 to 100,000 Split Point 7500



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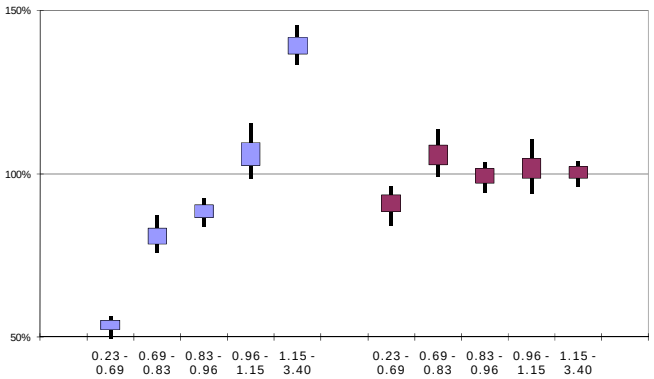
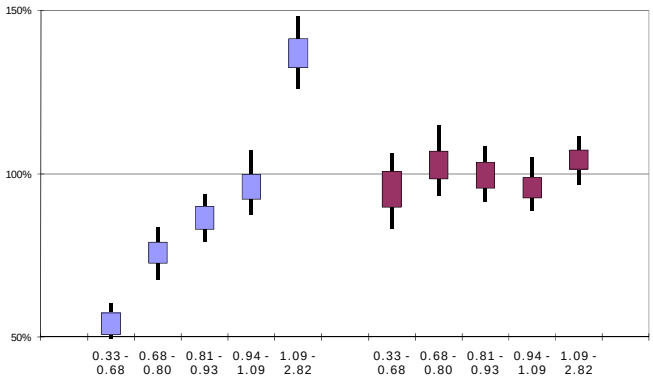


PY 2002 Risk Size 1M to 10M Split Point 7500



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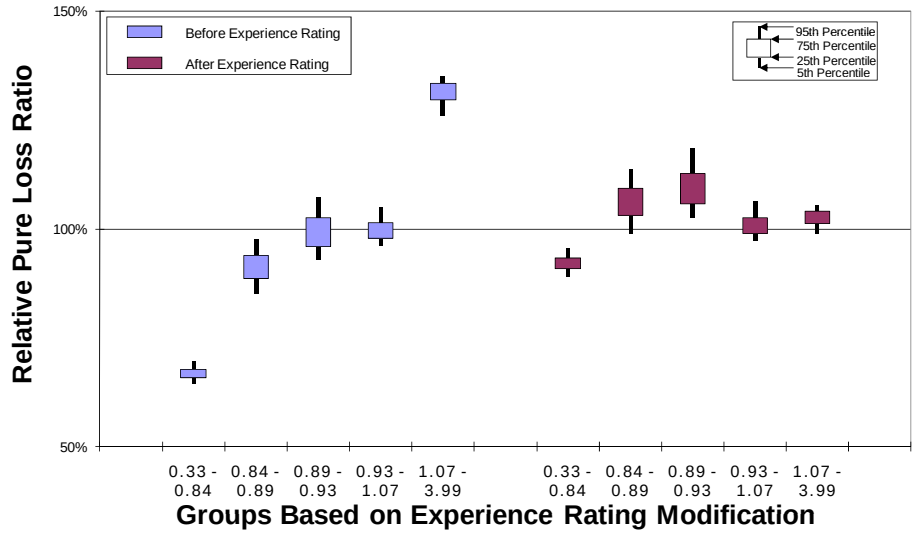

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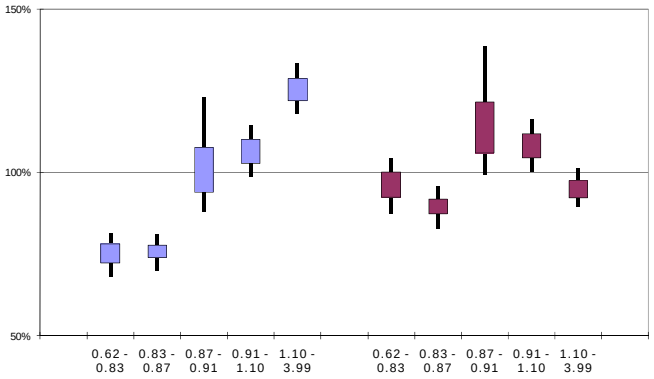

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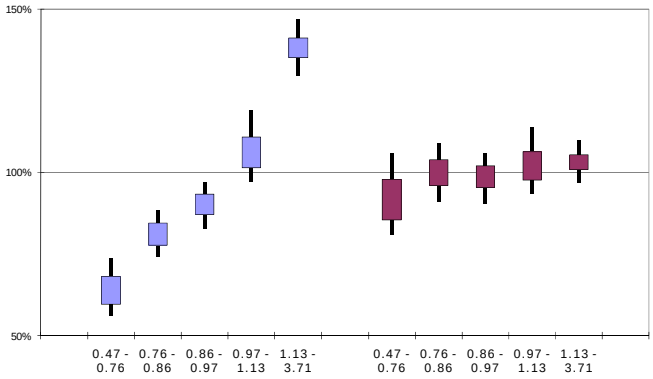

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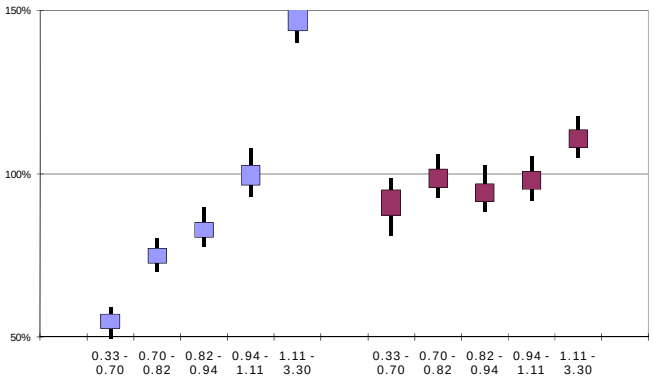

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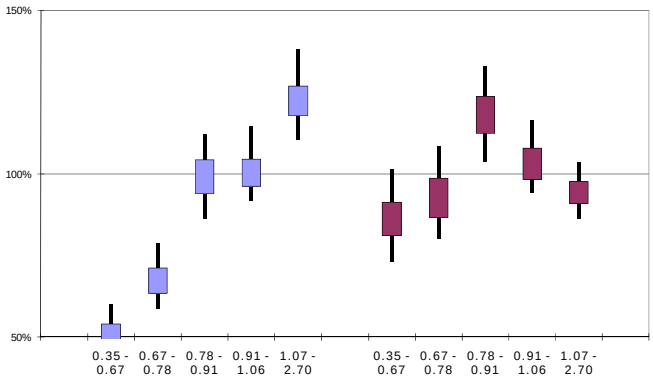
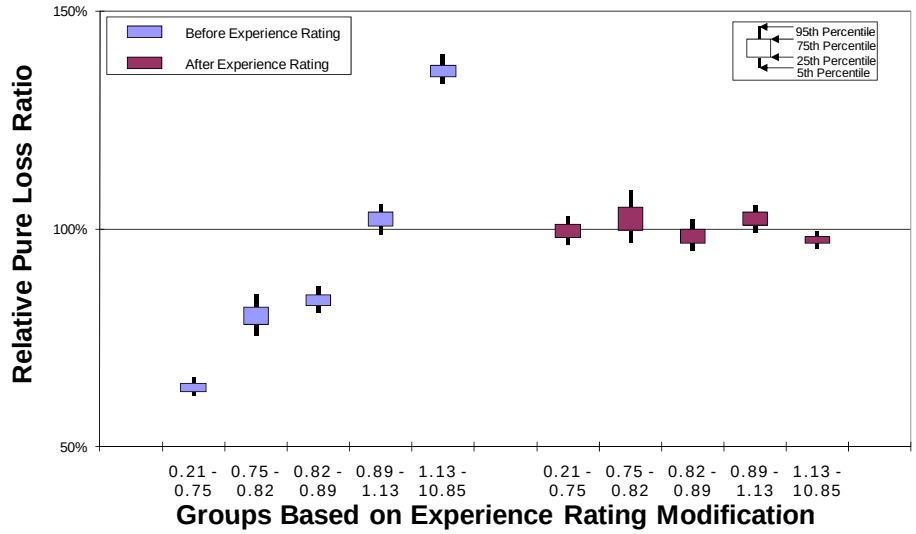


PY 2002 Countrywide Split Point 10000



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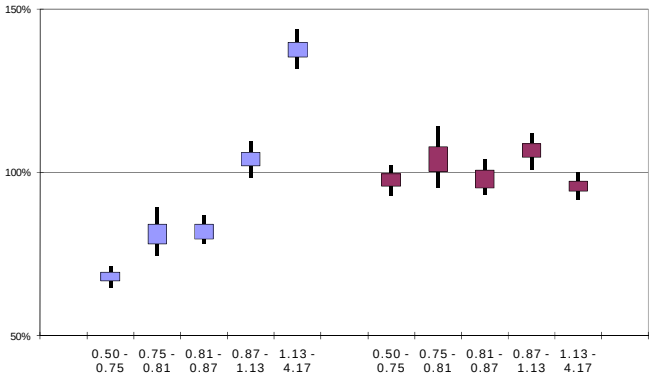
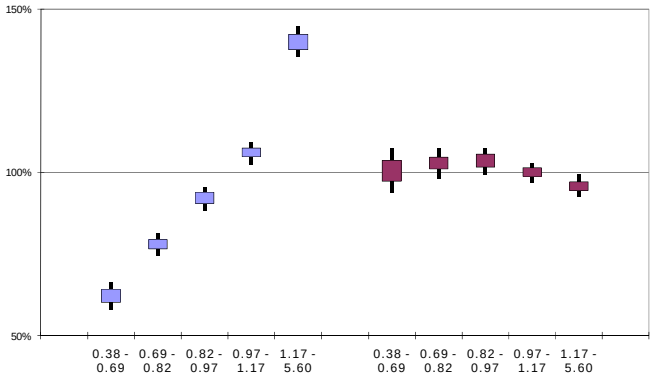


PY 2002 Risk Size 10,000 to 100,000 Split Point 10000



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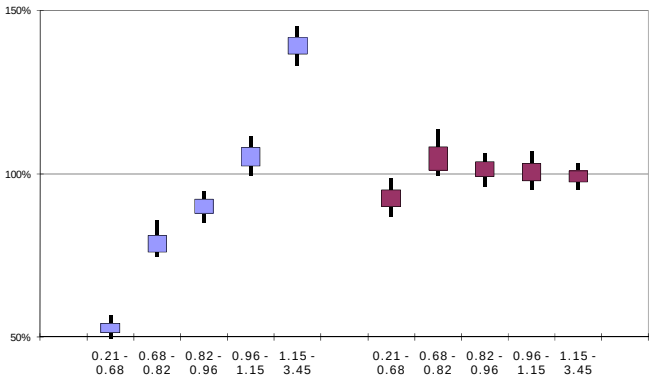

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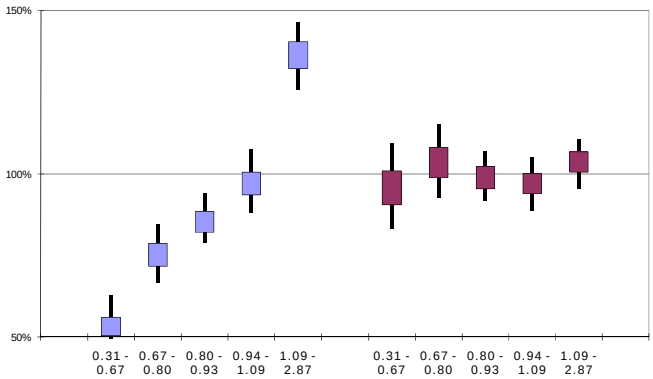

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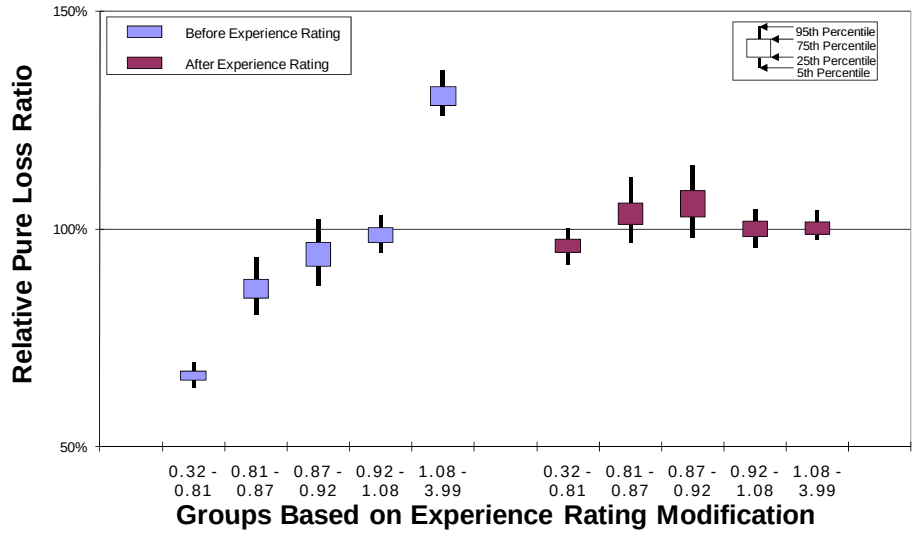

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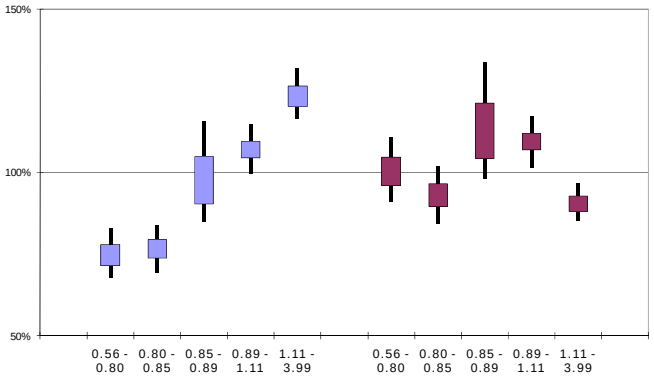
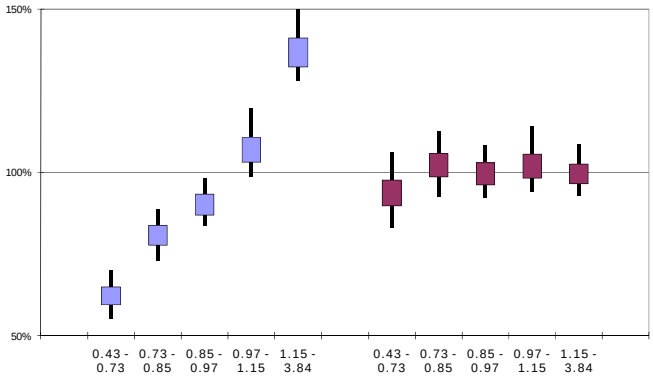


PY 2006 Risk Size 10,000 to 100,000 Split Point 10000



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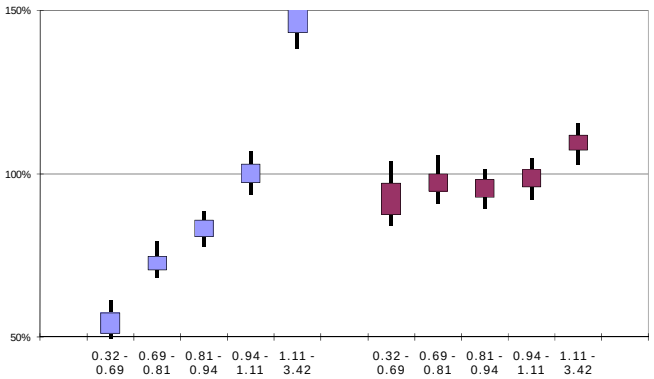

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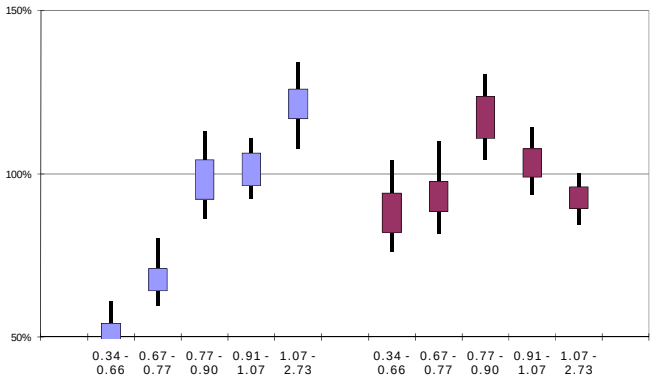
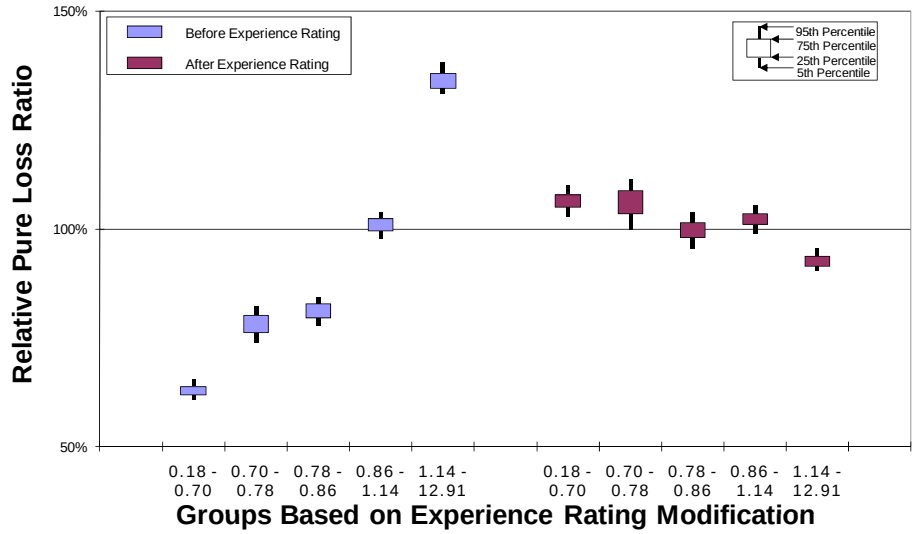


PY 2002 Countrywide Split Point 15000



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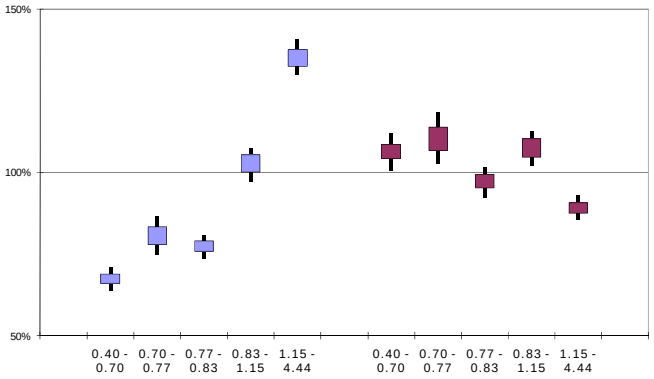

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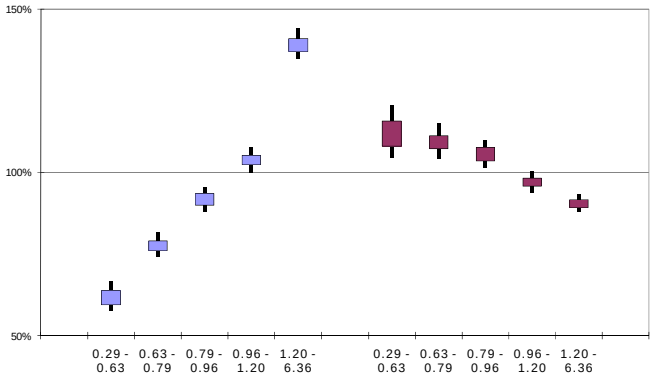

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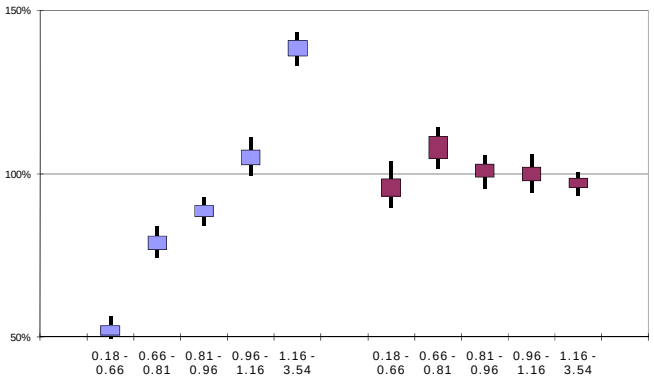

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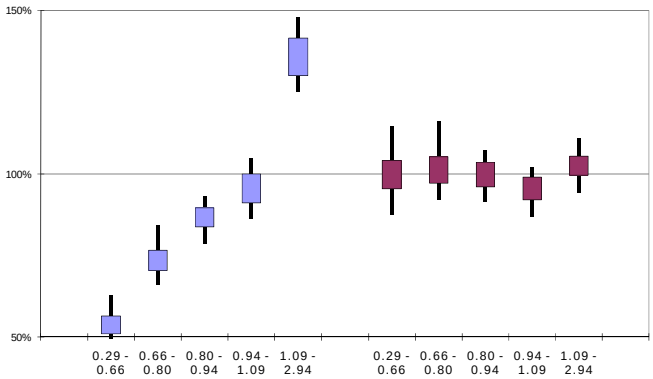

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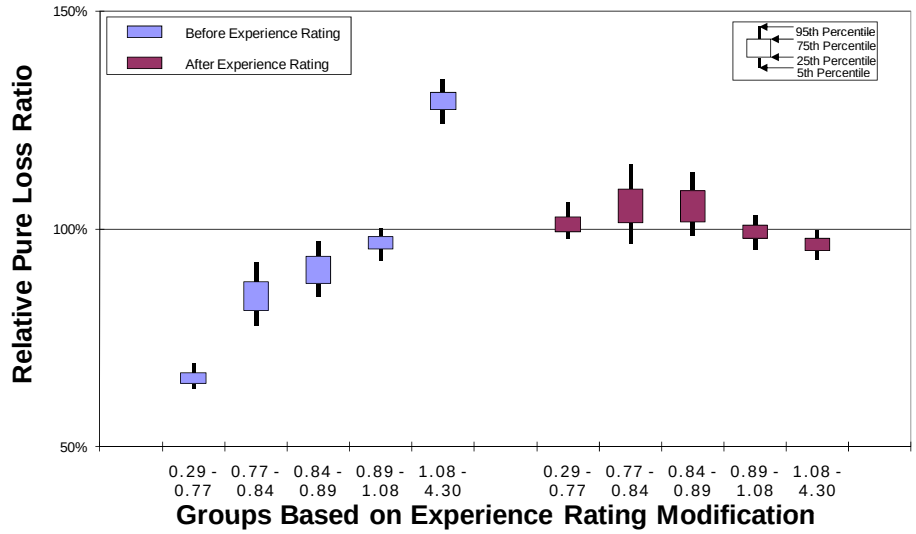

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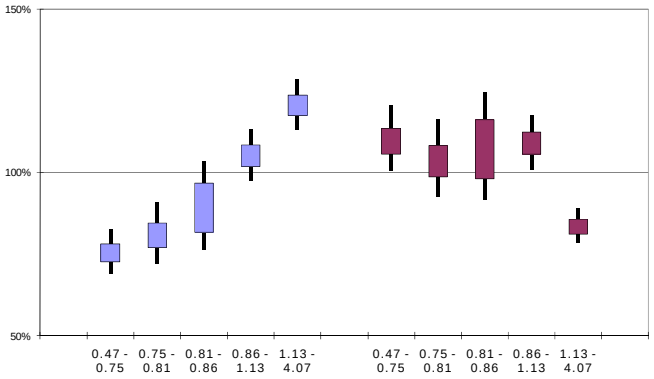

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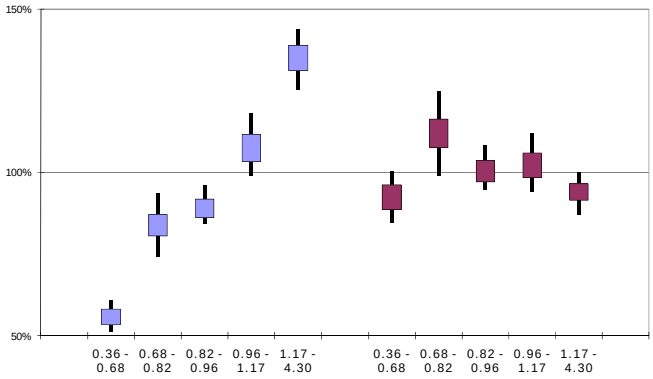
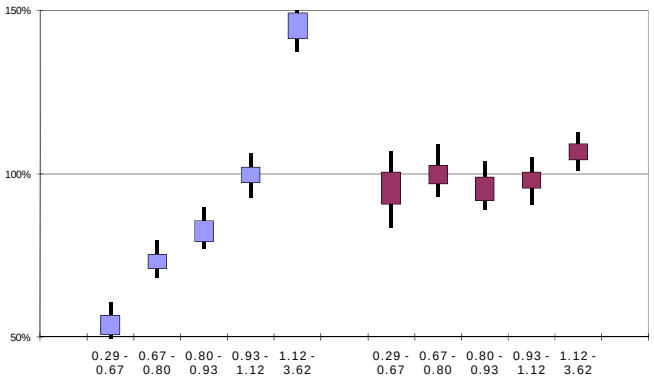
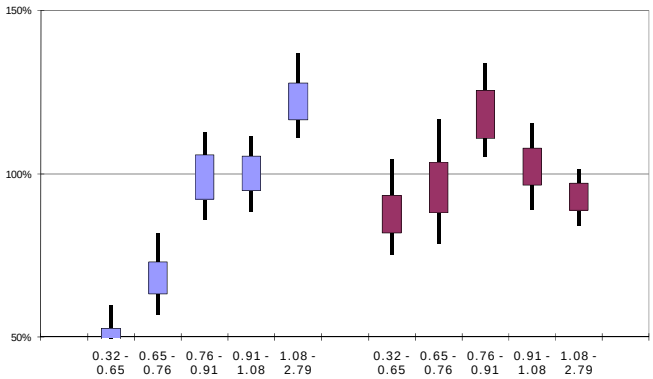


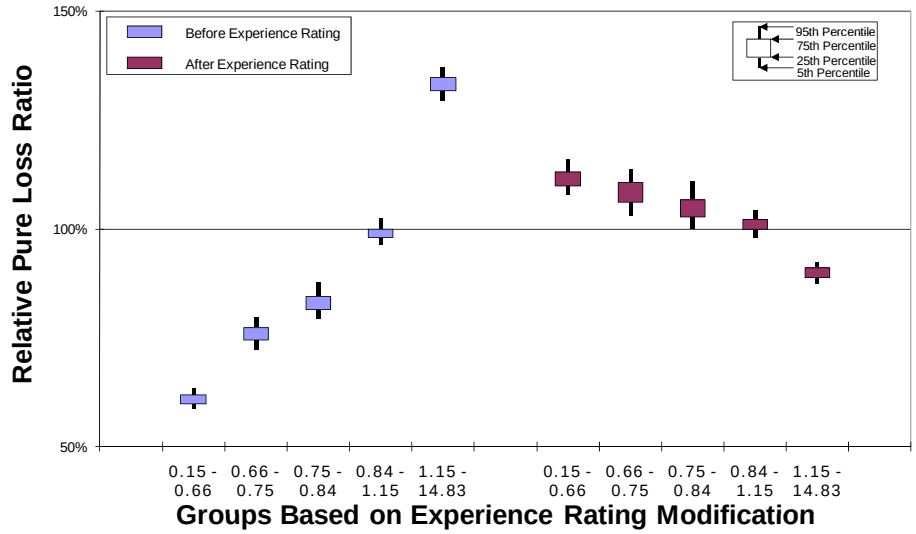
PY 2006 Risk Size 100,000 to 1M Split Point 15000



PY 2006 Risk Size 1M to 10M Split Point 15000



PY 2002 Countrywide Split Point 20000



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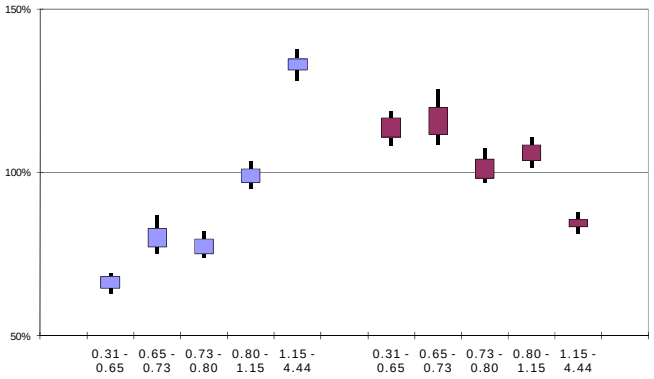

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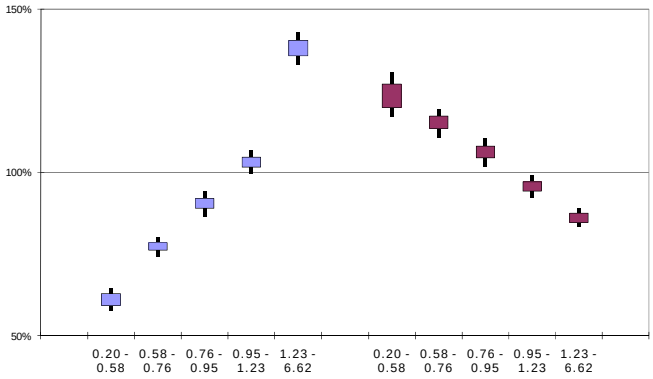

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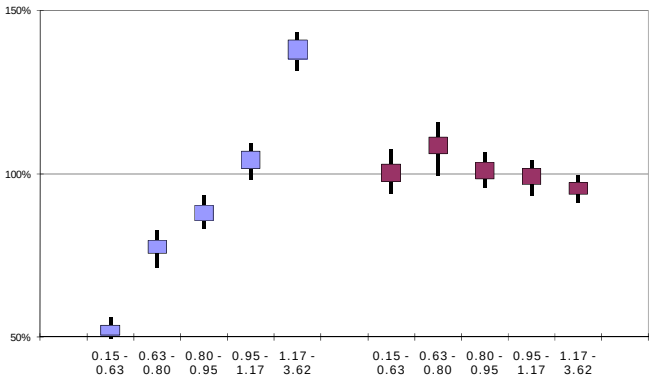
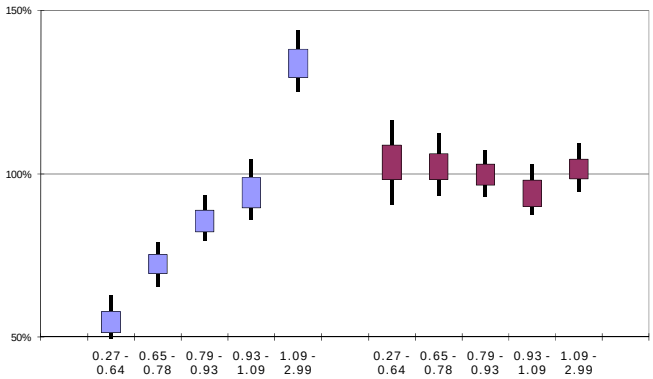
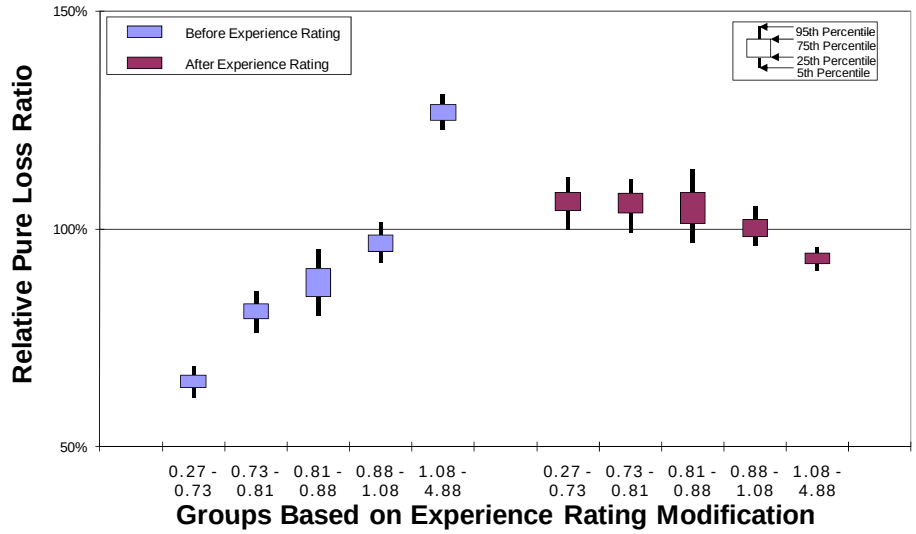


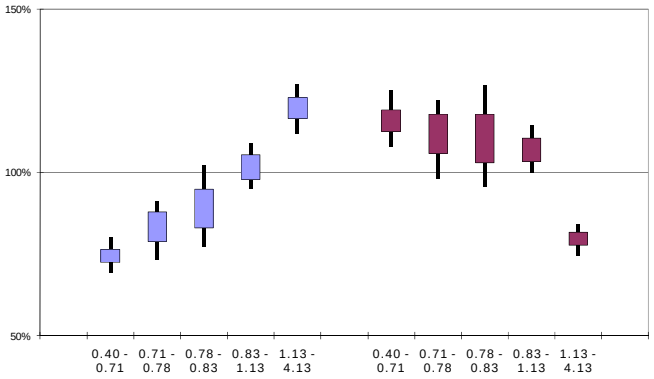
PY 2002 Risk Size 1M to 10M Split Point 20000



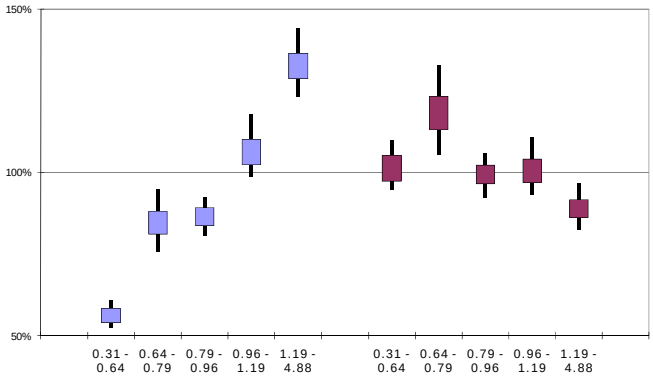
PY 2006 Countrywide Split Point 20000



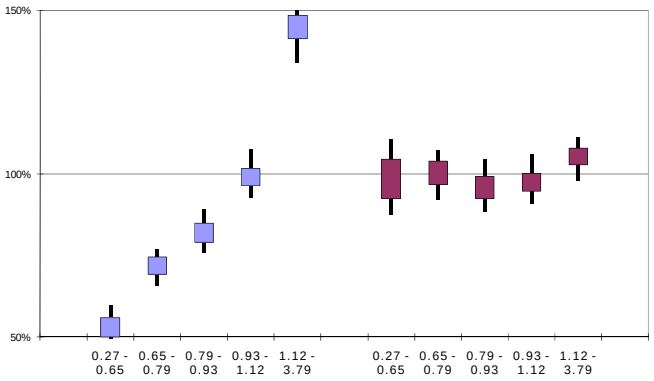
PY 2006 Risk Size 1000 to 10,000 Split Point 20000



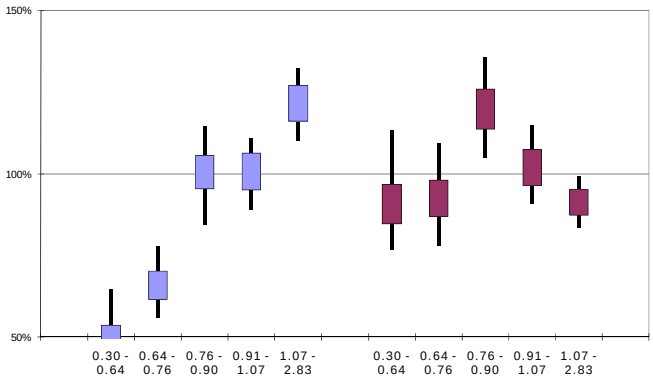
PY 2006 Risk Size 10,000 to 100,000 Split Point 20000



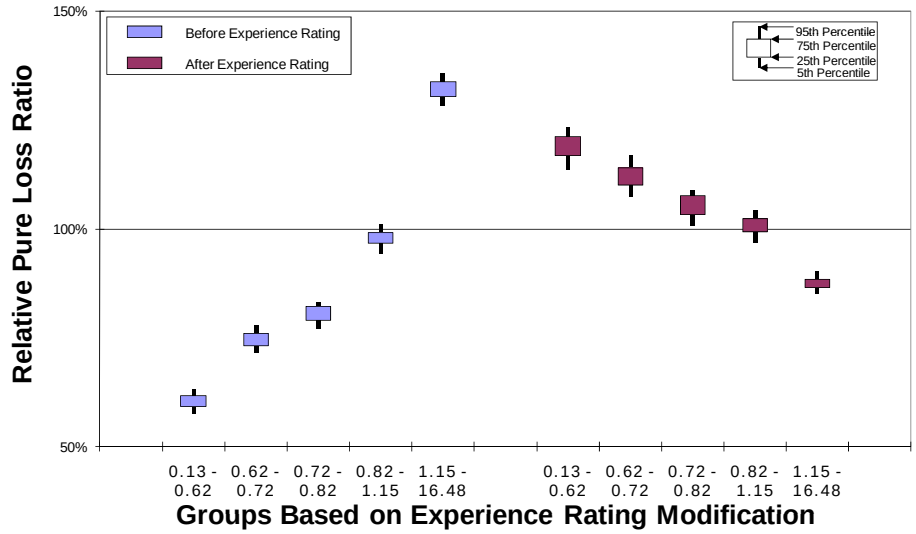
PY 2006 Risk Size 100,000 to 1M Split Point 20000



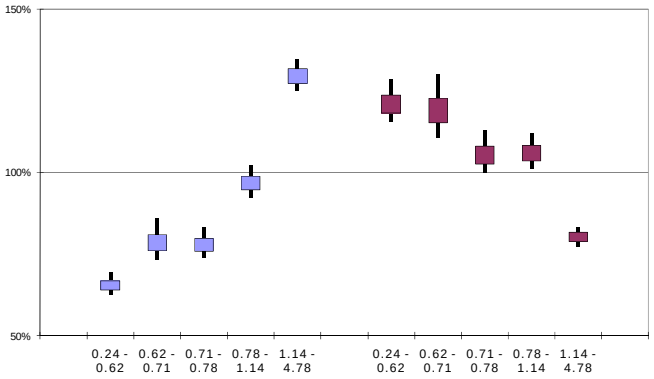
PY 2006 Risk Size 1M to 10M Split Point 20000



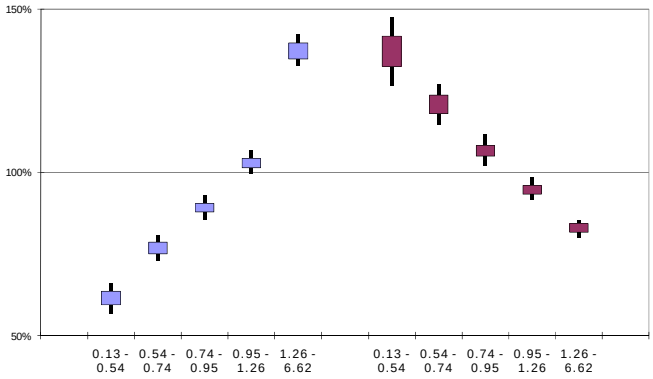
PY 2002 Countrywide Split Point 25000



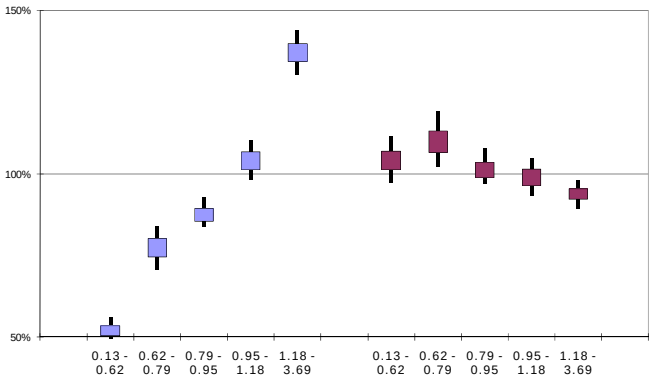
PY 2002 Risk Size 1000 to 10,000 Split Point 25000



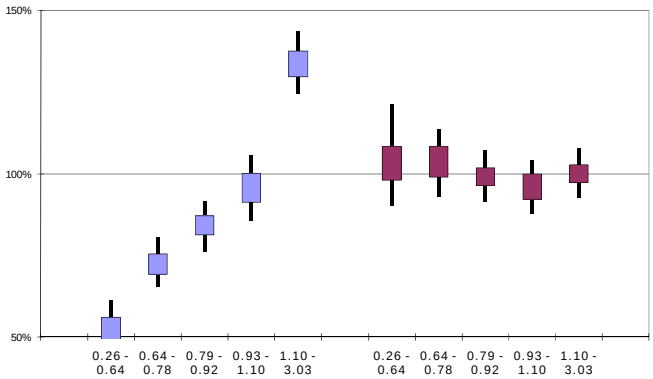
PY 2002 Risk Size 10,000 to 100,000 Split Point 25000



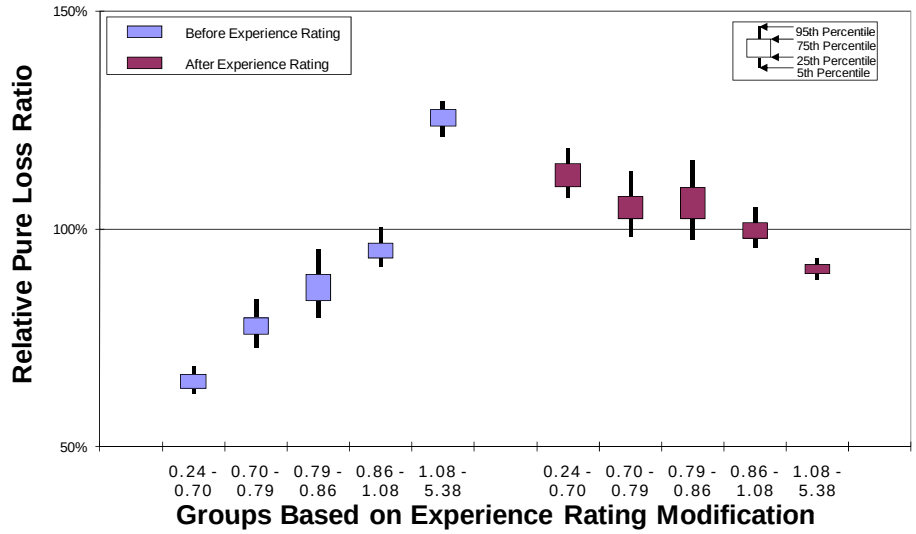
PY 2002 Risk Size 100,000 to 1M Split Point 25000



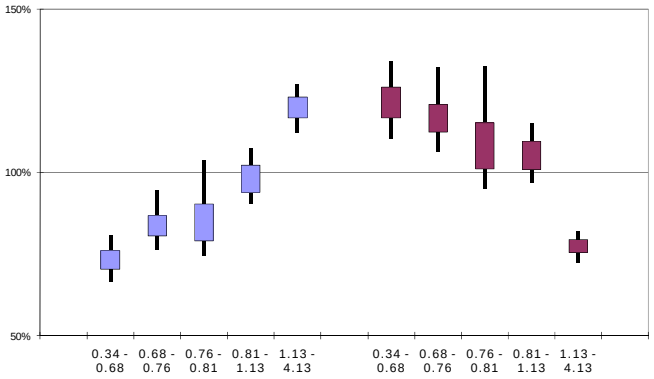
PY 2002 Risk Size 1M to 10M Split Point 25000



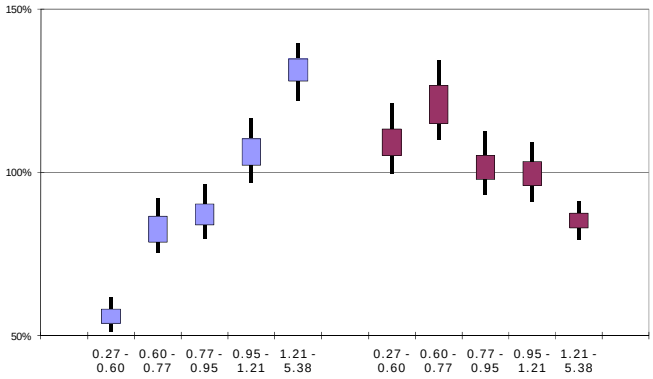
PY 2006 Countrywide Split Point 25000



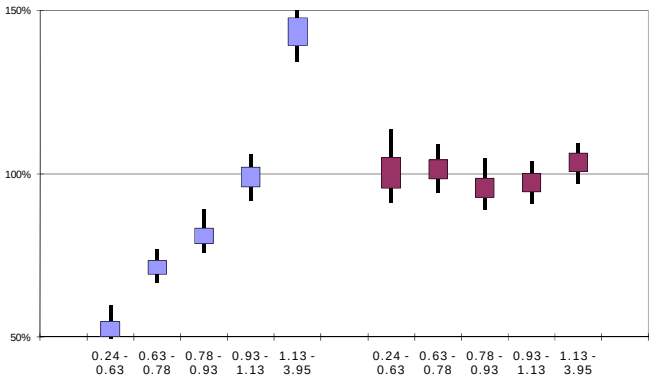
PY 2006 Risk Size 1000 to 10,000 Split Point 25000



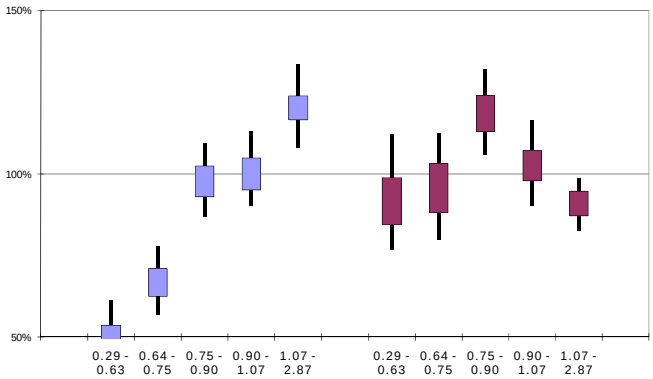
PY 2006 Risk Size 10,000 to 100,000 Split Point 25000



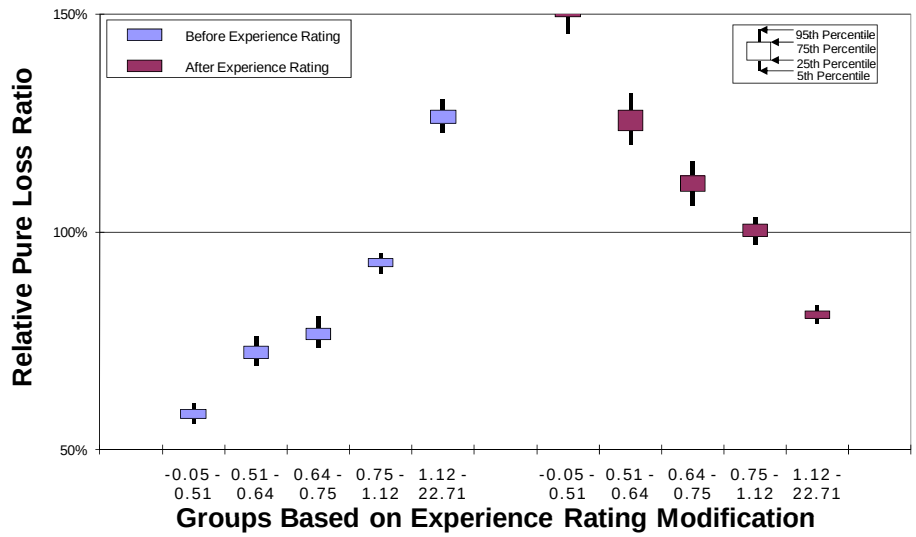
PY 2006 Risk Size 100,000 to 1M Split Point 25000



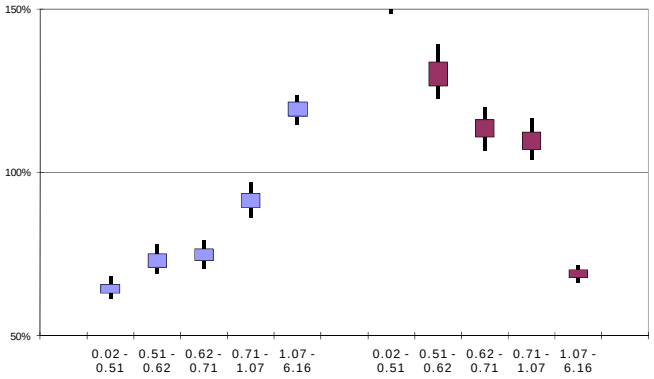
PY 2006 Risk Size 1M to 10M Split Point 25000



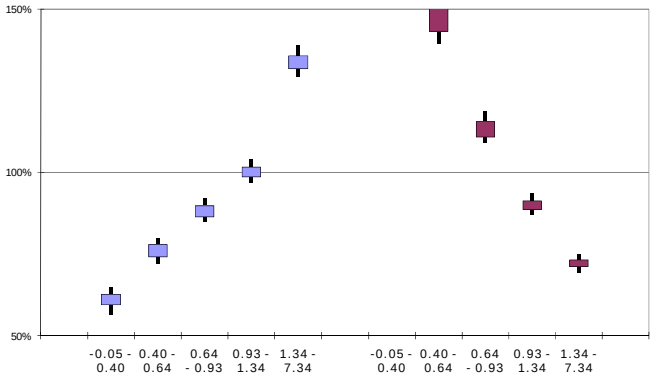
PY 2002 Countrywide Split Point 50000



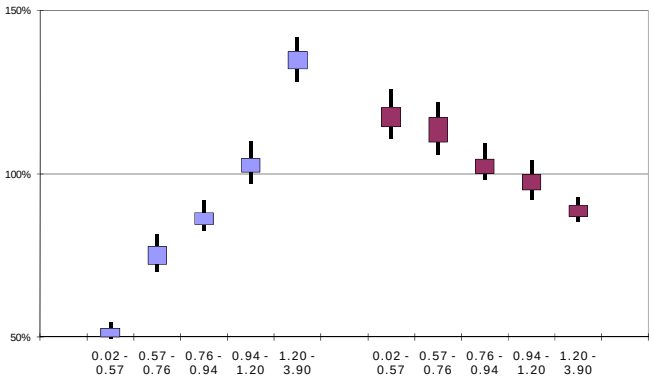
PY 2002 Risk Size 1000 to 10,000 Split Point 50000



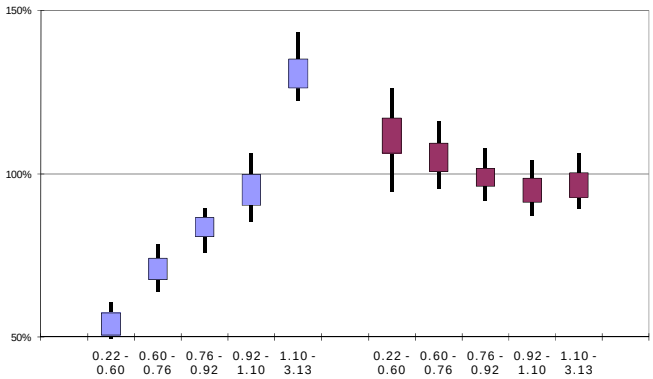
PY 2002 Risk Size 10,000 to 100,000 Split Point 50000



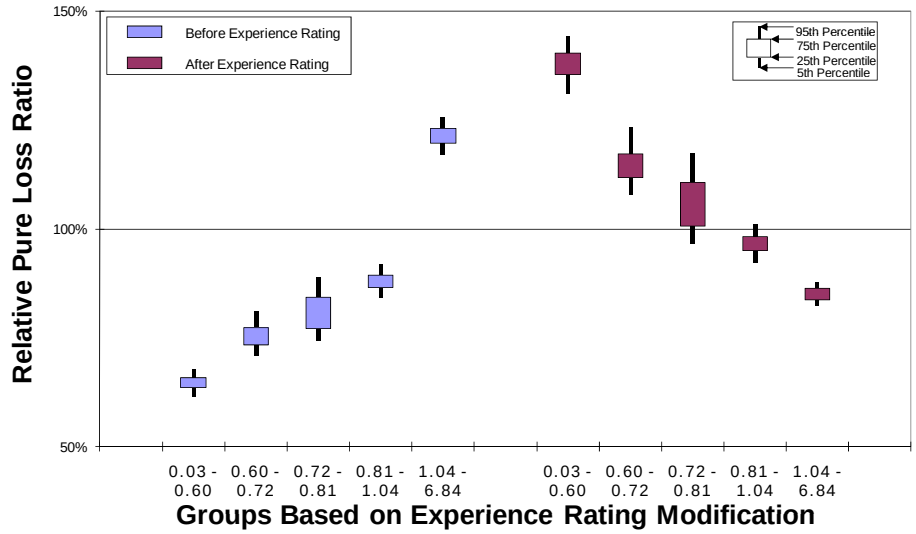
PY 2002 Risk Size 100,000 to 1M Split Point 50000



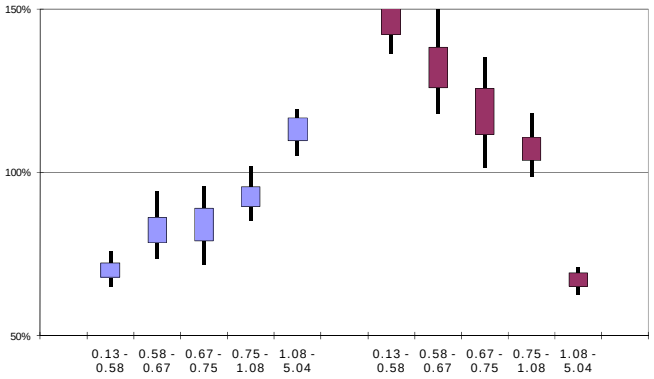
PY 2002 Risk Size 1M to 10M Split Point 50000



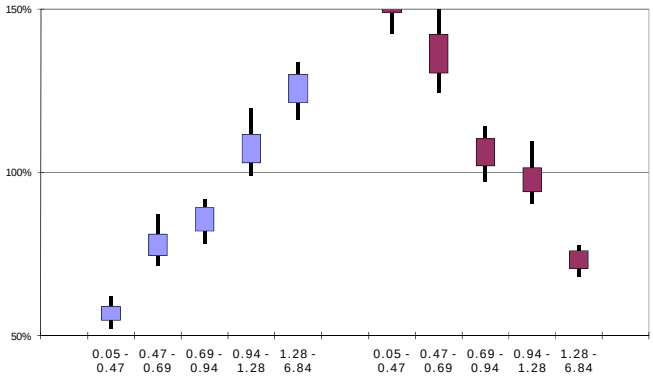
PY 2006 Countrywide Split Point 50000



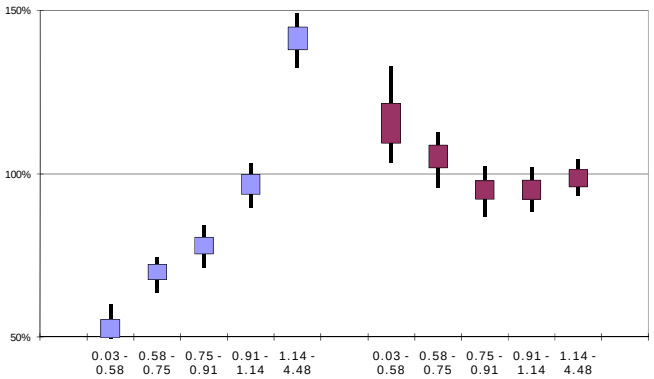
PY 2006 Risk Size 1000 to 10,000 Split Point 50000



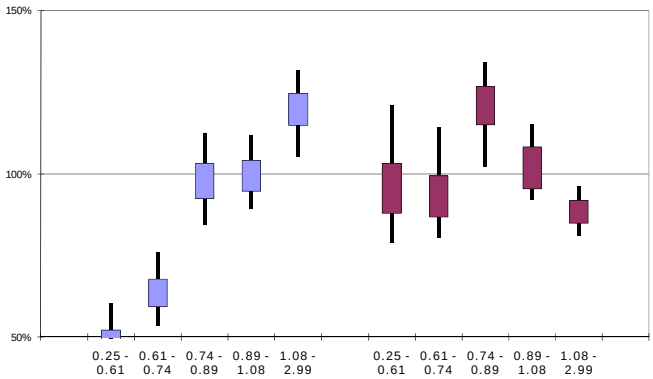
PY 2006 Risk Size 10,000 to 100,000 Split Point 50000



PY 2006 Risk Size 100,000 to 1M Split Point 50000



PY 2006 Risk Size 1M to 10M Split Point 50000



Old Quintile Test Static

A* = variance of un-modified loss ratios without bootstrapping
B* = variance of modified loss ratios without bootstrapping

C* = B* / A*

PY 2002

		Risk Size			
Split Point	Countrywide	1000-10,000	10,000-100,000	100,000-1M	1M-10M
2500	0.064	0.258	0.097	0.057	0.034
3750	0.037	0.163	0.071	0.054	0.026
5000	0.021	0.107	0.032	0.043	0.015
7500	0.007	0.034	0.006	0.032	0.019
10000	0.007	0.027	0.011	0.021	0.013
15000	0.043	0.109	0.095	0.020	0.009
20000	0.093	0.218	0.271	0.022	0.014
25000	0.191	0.415	0.524	0.035	0.015
50000	1.027	2.211	3.614	0.137	0.066

PY 2006

		Risk Size			
Split Point	Countrywide	1000-10,000	10,000-100,000	100,000-1M	1M-10M
2500	0.167	0.296	0.134	0.080	0.231
3750	0.098	0.211	0.105	0.078	0.224
5000	0.081	0.109	0.071	0.064	0.205
7500	0.082	0.235	0.027	0.048	0.176
10000	0.026	0.236	0.014	0.037	0.179
15000	0.023	0.352	0.075	0.020	0.179
20000	0.060	0.628	0.149	0.013	0.176
25000	0.120	0.885	0.229	0.008	0.150
50000	0.870	3.649	1.527	0.068	0.180

New Quintile Test Statistic

A = variance of un-modified loss ratios with bootstrapping
B = variance of modified loss ratios with bootstrapping

$C = \text{sign}(A-B)*|A - B|^{0.5}$

PY 2002

		Risk Size			
Split Point	Countrywide	1000-10,000	10,000-100,000	100,000-1M	1M-10M
2500	0.218	0.239	0.241	0.275	0.273
3750	0.225	0.246	0.252	0.281	0.271
5000	0.234	0.252	0.255	0.279	0.264
7500	0.241	0.253	0.260	0.279	0.271
10000	0.247	0.241	0.263	0.282	0.272
15000	0.240	0.228	0.249	0.282	0.269
20000	0.235	0.205	0.223	0.282	0.264
25000	0.221	0.166	0.173	0.278	0.266
50000	-0.052	-0.212	-0.395	0.259	0.252

PY 2006

		Risk Size			
Split Point	Countrywide	1000-10,000	10,000-100,000	100,000-1M	1M-10M
2500	0.181	0.157	0.231	0.299	0.225
3750	0.187	0.170	0.237	0.304	0.229
5000	0.192	0.177	0.238	0.307	0.231
7500	0.197	0.167	0.248	0.306	0.230
10000	0.206	0.159	0.251	0.308	0.226
15000	0.203	0.126	0.253	0.308	0.230
20000	0.198	0.078	0.235	0.309	0.227
25000	0.190	-0.034	0.218	0.306	0.224
50000	0.063	-0.239	-0.173	0.290	0.227

Observations

- For all risks sizes combined, considering both the old and new quintile tests, the indicated optimal split point is around 7,500 to 10,000 for effective year 2002 and around 10,000 to 15,000 for effective year 2006.
- This is consistent with the current indication of the severity index for a split point around 10,500
- The individual risk size category indications point in this direction, although results vary between the two test statistics and effective years, and there are some outliers.

Editorial note:
10,500 is the 2006 value ...
trending to 2013 yields 15,000

Discussion

National Council on Compensation Insurance, Inc.

Combined Impact Analysis Of Changes In The Experience Rating Plan

Ampegama Perera

Individual Risk Rating Working Group
February 2, 2011

Introduction

This presentation covers some combined impact analyses for a simultaneous increase in the split point, to either 10k or 15k, and a change in the mod cap formula to:

$$1.10 + 0.0004\left(\frac{E}{G}\right) = 1.10 + 0.4\left(\frac{E}{SACC}\right)$$

De-trend Adjustments

To account for increases in severity from historical experience to an anticipated filing effective year of 2013, the following de-trend adjustments have been applied to the split point:

PY 2006	-33%
PY 2008	-25%
PY 2009	-20%

For example, a split point of 10,000 would be reduced to 7,500 when applied to experience from PY 2008.

Outline Of Exhibits

Impact On Individual Mod Values (PY 2008 & PY 2009)

- Average Intrastate new mod values by old mod values
- Distribution of differences between old and new mod values
- Change in cap formula
- Impact of mod cap changes by size of risk

Impact On Performance Testing

- PY 2006 Quintile test by size of risk

Average Intrastate
New Mod Values By Old Mod Values

Countrywide Impact on Experience Mods, Alternative Split Points, Ratings in 2009

Impact of Alternative Splits Points and Mod Cap on Intrastate Mods Effective in 2009*; Split Points detrended with 20% reduction

	Percentage of			Average Mod				
				Current Cap	Proposed Cap			
Original Mod	Risks	Payroll	Expected Losses	$5,000	$5,000	$10,000	$15,000	$20,000
Mod < 0.75	0.2%	2.0%	2.4%	0.69	0.69	0.64	0.60	0.56
0.75 <= Mod < 0.80	0.6%	2.8%	3.5%	0.77	0.77	0.72	0.68	0.64
0.80 <= Mod < 0.85	3.1%	7.9%	9.1%	0.82	0.82	0.77	0.72	0.69
0.85 <= Mod < 0.90	10.3%	14.3%	16.1%	0.87	0.87	0.83	0.79	0.76
0.90 <= Mod < 0.95	28.0%	21.0%	20.1%	0.92	0.92	0.89	0.86	0.84
0.95 <= Mod < 0.98	26.5%	12.8%	11.0%	0.96	0.96	0.94	0.93	0.91
0.98 <= Mod <= 1.02	9.4%	9.5%	9.4%	1.00	1.00	1.00	0.99	0.99
1.02 < Mod <= 1.05	2.9%	4.3%	4.4%	1.04	1.04	1.05	1.06	1.07
1.05 < Mod <= 1.10	4.3%	6.1%	6.0%	1.08	1.08	1.10	1.13	1.14
1.10 < Mod <= 1.15	3.8%	4.8%	4.6%	1.13	1.13	1.17	1.20	1.23
1.15 < Mod <= 1.20	3.2%	3.9%	3.6%	1.18	1.18	1.23	1.28	1.32
1.20 < Mod <= 1.25	2.3%	2.8%	2.6%	1.23	1.23	1.30	1.35	1.40
1.25 < Mod	5.5%	7.8%	7.2%	1.42	1.42	1.53	1.61	1.68
Overall				0.98	0.98	0.97	0.97	0.96

Note: (*) Does not include South Carolina and large deductible policies.

Average Intrastate
New Mod Values By Old Mod Values

Countrywide Impact on Experience Mods, Alternative Split Points, Ratings in 2008

Impact of Alternative Splits Points and Mod Cap on Intrastate Mods Effective in 2008*; Split Points detrended with 25% reduction

	Percentage of			Average Mod				
				Current Cap	Proposed Cap			
Original Mod	Risks	Payroll	Expected Losses	$5,000	$5,000	$10,000	$15,000	$20,000
Mod < 0.75	0.1%	2.0%	2.3%	0.68	0.68	0.64	0.60	0.57
0.75 <= Mod < 0.80	0.6%	2.9%	3.6%	0.77	0.77	0.72	0.68	0.64
0.80 <= Mod < 0.85	3.0%	7.7%	8.9%	0.82	0.82	0.77	0.73	0.69
0.85 <= Mod < 0.90	10.6%	14.9%	16.6%	0.87	0.87	0.83	0.79	0.76
0.90 <= Mod < 0.95	28.2%	21.3%	20.5%	0.92	0.92	0.89	0.87	0.84
0.95 <= Mod < 0.98	26.4%	12.8%	11.2%	0.96	0.96	0.94	0.93	0.91
0.98 <= Mod <= 1.02	9.2%	9.6%	9.5%	1.00	1.00	1.00	0.99	0.99
1.02 < Mod <= 1.05	3.0%	4.3%	4.4%	1.04	1.04	1.05	1.06	1.07
1.05 < Mod <= 1.10	4.5%	6.1%	6.1%	1.08	1.08	1.10	1.13	1.14
1.10 < Mod <= 1.15	3.9%	4.9%	4.6%	1.13	1.13	1.17	1.20	1.23
1.15 < Mod <= 1.20	3.1%	3.5%	3.3%	1.18	1.18	1.23	1.28	1.32
1.20 < Mod <= 1.25	2.2%	2.7%	2.5%	1.23	1.23	1.30	1.35	1.39
1.25 < Mod	5.3%	7.3%	6.5%	1.41	1.42	1.52	1.61	1.68
Overall				0.98	0.98	0.97	0.96	0.95

Note: (*) Does not include large deductible policies.

Distribution of Differences Between Old and New Mod Values

Countrywide Impact on Experience Mods, 10k Split Point, Ratings in 2009

Impact of Changing the Split Point to $10,000 And Implementing New Cap Formula for Intrastate Mods Effective in 2009*; Split Points detrended with 20% reduction

Change in Mod	Percentage of			Average Mod	
	Risks	Payroll	Expected Losses	Current	Proposal
Change < -0.25	0.0%	0.0%	0.0%	---	---
-0.25 <= Change < -0.20	0.0%	0.0%	0.0%	---	---
-0.20 <= Change < -0.15	0.0%	0.0%	0.0%	---	---
-0.15 <= Change < -0.10	0.0%	0.0%	0.0%	1.31	1.19
-0.10 <= Change < -0.05	8.1%	12.5%	13.8%	0.83	0.77
-0.05 <= Change < -0.02	38.3%	31.9%	33.0%	0.89	0.85
-0.02 <= Change <= 0.02	35.8%	33.6%	33.5%	0.99	0.98
0.02 < Change <= 0.05	4.3%	8.4%	8.0%	1.14	1.18
0.05 < Change <= 0.10	6.5%	7.4%	6.8%	1.21	1.29
0.10 < Change <= 0.15	4.5%	3.6%	2.9%	1.30	1.42
0.15 < Change <= 0.20	1.6%	1.4%	1.1%	1.40	1.58
0.20 < Change <= 0.25	0.5%	0.6%	0.5%	1.50	1.73
0.25 < Change	0.4%	0.5%	0.4%	1.69	2.01
Overall				0.98	0.97

Note: (*) Does not include South Carolina and large deductible policies.

Distribution of Differences Between Old and New Mod Values

Countrywide Impact on Experience Mods, 10k Split Point, Ratings in 2008

Impact of Changing the Split Point to $10,000 And Implementing New Cap Formula for Intrastate Mods Effective in 2008*; Split Points detrended with 25% reduction

Change in Mod	Percentage of			Average Mod	
	Risks	Payroll	Expected Losses	Current	Proposal
Change < -0.25	0.0%	0.0%	0.0%	---	---
-0.25 <= Change < -0.20	0.0%	0.0%	0.0%	---	---
-0.20 <= Change < -0.15	0.0%	0.0%	0.0%	---	---
-0.15 <= Change < -0.10	0.0%	0.0%	0.0%	1.63	1.50
-0.10 <= Change < -0.05	7.4%	11.5%	12.5%	0.83	0.77
-0.05 <= Change < -0.02	39.5%	33.4%	34.5%	0.89	0.85
-0.02 <= Change <= 0.02	35.3%	33.9%	34.1%	0.99	0.98
0.02 < Change <= 0.05	4.5%	8.3%	7.9%	1.13	1.17
0.05 < Change <= 0.10	6.6%	7.2%	6.5%	1.20	1.28
0.10 < Change <= 0.15	4.3%	3.4%	2.7%	1.29	1.42
0.15 < Change <= 0.20	1.6%	1.4%	1.0%	1.40	1.58
0.20 < Change <= 0.25	0.5%	0.6%	0.4%	1.49	1.72
0.25 < Change	0.3%	0.4%	0.3%	1.69	2.01
Overall				0.98	0.97

Note: (*) Does not include large deductible policies.

Distribution of Differences Between Old and New Mod Values

Countrywide Impact on Experience Mods, 15k Split Point, Ratings in 2009

Impact of Changing the Split Point to $15,000 And Implementing New Cap Formula for Intrastate Mods Effective in 2009*; Split Points detrended with 20% reduction

Change in Mod	Percentage of			Average Mod	
	Risks	Payroll	Expected Losses	Current	Proposal
Change < -0.25	0.0%	0.0%	0.0%	---	---
-0.25 <= Change < -0.20	0.0%	0.0%	0.0%	---	---
-0.20 <= Change < -0.15	0.3%	0.4%	0.6%	0.78	0.62
-0.15 <= Change < -0.10	6.2%	10.1%	11.2%	0.83	0.71
-0.10 <= Change < -0.05	29.3%	27.5%	28.9%	0.89	0.81
-0.05 <= Change < -0.02	36.6%	21.5%	20.0%	0.93	0.89
-0.02 <= Change <= 0.02	8.9%	14.8%	15.5%	1.01	1.01
0.02 < Change <= 0.05	2.6%	5.9%	5.9%	1.09	1.13
0.05 < Change <= 0.10	4.2%	7.0%	6.7%	1.15	1.23
0.10 < Change <= 0.15	3.9%	4.6%	4.3%	1.21	1.33
0.15 < Change <= 0.20	3.1%	3.0%	2.7%	1.25	1.42
0.20 < Change <= 0.25	2.2%	2.1%	1.7%	1.29	1.52
0.25 < Change	2.6%	3.1%	2.4%	1.44	1.80
Overall				0.98	0.97

Note: (*) Does not include South Carolina and large deductible policies.

Distribution of Differences Between Old and New Mod Values

Countrywide Impact on Experience Mods, 15k Split Point, Ratings in 2008

Impact of Changing the Split Point to $15,000 And Implementing New Cap Formula for Intrastate Mods Effective in 2008*; Split Points detrended with 25% reduction

Change in Mod	Percentage of			Average Mod	
	Risks	Payroll	Expected Losses	Current	Proposal
Change < -0.25	0.0%	0.0%	0.0%	---	---
-0.25 <= Change < -0.20	0.0%	0.0%	0.0%	---	---
-0.20 <= Change < -0.15	0.2%	0.3%	0.3%	0.78	0.62
-0.15 <= Change < -0.10	5.5%	9.0%	9.9%	0.83	0.71
-0.10 <= Change < -0.05	29.9%	28.6%	30.2%	0.88	0.81
-0.05 <= Change < -0.02	36.8%	21.6%	20.1%	0.93	0.89
-0.02 <= Change <= 0.02	8.9%	15.7%	16.7%	1.00	1.00
0.02 < Change <= 0.05	2.6%	5.8%	5.8%	1.09	1.13
0.05 < Change <= 0.10	4.2%	6.9%	6.5%	1.14	1.22
0.10 < Change <= 0.15	4.1%	4.5%	4.1%	1.20	1.33
0.15 < Change <= 0.20	3.3%	3.0%	2.6%	1.24	1.42
0.20 < Change <= 0.25	2.2%	1.9%	1.6%	1.29	1.51
0.25 < Change	2.5%	2.8%	2.2%	1.44	1.79
Overall				0.98	0.96

Note: (*) Does not include large deductible policies.

Change in cap formula

ER Mod Caps - Current and Proposed

Current Formula: 1 + 0.00005(E+2E/G)

Proposed Formula: 1.1 + 0.0004(E/G)

Expected Losses (E)	G (SACC) = 5		G (SACC) = 7		G (SACC) = 10	
	Current	Proposed	Current	Proposed	Current	Proposed
500	1.04	1.14	1.03	1.13	1.03	1.12
1,000	1.07	1.18	1.06	1.16	1.06	1.14
2,500	1.18	1.30	1.16	1.24	1.15	1.20
5,000	1.35	1.50	1.32	1.39	1.30	1.30
6,667	1.47	1.63	1.43	1.48	1.40	1.37
7,500	1.53	1.70	1.48	1.53	1.45	1.40
10,000	1.70	1.90	1.64	1.67	1.60	1.50
15,000	2.05	2.30	1.96	1.96	1.90	1.70
20,000	2.40	2.70	2.29	2.24	2.20	1.90
25,000	2.75	3.10	2.61	2.53	2.50	2.10
30,000	3.10	3.50	2.93	2.81	2.80	2.30
40,000	3.80	4.30	3.57	3.39	3.40	2.70
50,000	4.50	5.10	4.21	3.96	4.00	3.10
75,000	6.25	7.10	5.82	5.39	5.50	4.10
100,000	8.00	9.10	7.43	6.81	7.00	5.10

G-Values

The G-value is the State Average Claim Cost (SACC) in units of 1,000. Here are 2009 G-values by state:

State Code	G (SACC)	State Code	G (SACC)	State Code	G (SACC)
AL	6.3	LA	11.25	OK	9.9
AR	5.1	ME	5.25	OR	5.65
CO	6.15	MD	7.8	SC	11.25
CT	8.05	MN	6.85	SD	5.65
DC	10.6	MS	7.65	TN	7.5
FL	7.2	MO	8.65	TX	4.3
GA	8.15	MT	7.7	UT	4.1
ID	5.3	NE	6.95	VT	7.2
IL	12.7	NV	5.7	VA	6.85
IN	4.7	NH	6.4	WV	7
IA	7.15	NM	7.2	WI	5.6
KS	6.5	NY	14	HI	7.2
KY	6	NC	9.05	AK	10.55

Impact of Mod Cap Changes by Size of Risk

Impact Analysis

(Rating year 2009*; includes new mod cap formula; current 5k split point)

Expected Loss (E)		Total Intrastate Risks	Number of Risks Where Current Cap is Lower than the Proposed Cap	Number of Risks Reaching Mod Cap Current	Number of Risks Reaching Mod Cap Proposal	Current Mod Cap Range		Alternative Mod Cap Range		Current Uncapped Mod Range	
1	1,000	187	187	10	2	1.00	1.07	1.10	1.20	0.97	1.51
1,000	5,000	128,904	127,118	8,283	5,039	1.06	1.38	1.14	1.61	0.88	3.82
5,000	10,000	166,352	131,887	4,088	2,977	1.29	1.76	1.26	2.13	0.82	5.48
10,000	20,000	120,013	49,985	448	462	1.58	2.51	1.42	3.15	0.75	3.40
20,000	50,000	85,418	24,962	16	28	2.16	4.78	1.73	6.23	0.69	3.92
50,000	100,000	30,323	7,664	0	0	3.89	8.56	2.68	11.35	0.66	2.96
100,000	200,000	13,815	2,988	0	0	6.79	16.11	4.25	21.59	0.61	2.83
200,000	500,000	5,950	1,254	0	0	12.58	38.32	7.40	51.70	0.52	2.55
Over	500,000	1,284	257	0	0	29.96	872.18	16.86	655.51	0.30	2.22
Total		**552,246**	**346,302**	**12,845**	**8,508**						
Percentage		**100.0%**	**62.7%**	**2.3%**	**1.5%**						

Note: (*) Does not include South Carolina and large deductible policies.

Impact of Mod Cap Changes by Size of Risk

Impact Analysis

(Rating year 2008*; includes new mod cap formula; current 5k split point)

Expected Loss (E)		Total Intrastate Risks	Number of Risks Where Current Cap is Lower than the Proposed Cap	Number of Risks Reaching Mod Cap Current	Number of Risks Reaching Mod Cap Proposal	Current Mod Cap Range		Alternative Mod Cap Range		Current Uncapped Mod Range	
1	1,000	172	172	9	2	1.00	1.08	1.10	1.21	0.97	1.49
1,000	5,000	123,534	122,626	8,084	4,791	1.06	1.39	1.14	1.64	0.87	3.73
5,000	10,000	168,747	135,122	4,039	2,804	1.29	1.77	1.27	2.18	0.81	3.75
10,000	20,000	125,650	52,303	485	455	1.59	2.54	1.44	3.26	0.73	4.74
20,000	50,000	89,564	26,453	15	26	2.17	4.85	1.78	6.50	0.69	5.18
50,000	100,000	31,685	7,857	0	0	3.93	8.69	2.80	11.89	0.65	3.03
100,000	200,000	14,375	3,544	0	0	6.85	16.14	4.51	22.35	0.59	2.19
200,000	500,000	6,189	1,512	0	0	12.70	36.34	7.91	49.46	0.56	1.97
Over	500,000	1,311	320	0	0	30.32	1,965.20	18.16	1,690.73	0.29	2.45
Total		**561,227**	**349,909**	**12,632**	**8,078**						
Percentage		**100.0%**	**62.3%**	**2.3%**	**1.4%**						

Note: (*) Does not include large deductible policies.

Impact of Mod Cap Changes by Size of Risk

Impact Analysis

(Rating year 2009*; with split points detrended with 20% reduction; proposal includes new mod cap formula and split point 10k)

Expected Loss (E)		Total Intrastate Risks	Number of Risks Where Current Cap is Lower than the Proposed Cap	Number of Risks Reaching Mod Cap Current	Number of Risks Reaching Mod Cap Proposal	Current Mod Cap Range		Alternative Mod Cap Range		Current Uncapped Mod Range		Proposal Uncapped Mod Range	
1	1,000	187	187	10	2	1.00	1.07	1.10	1.20	0.97	1.46	0.96	1.67
1,000	5,000	128,904	127,118	6,788	8,646	1.06	1.38	1.14	1.61	0.89	3.72	0.85	4.12
5,000	10,000	166,352	131,887	3,154	5,316	1.29	1.76	1.26	2.13	0.84	4.89	0.77	7.06
10,000	20,000	120,013	49,985	312	1,048	1.58	2.51	1.42	3.15	0.77	3.14	0.69	3.99
20,000	50,000	85,418	24,962	8	64	2.16	4.78	1.73	6.23	0.72	3.72	0.61	4.67
50,000	100,000	30,323	7,664	0	1	3.89	8.56	2.68	11.35	0.69	2.83	0.59	3.27
100,000	200,000	13,815	2,988	0	0	6.79	16.11	4.25	21.59	0.64	2.70	0.54	3.19
200,000	500,000	5,950	1,254	0	0	12.58	38.32	7.40	51.70	0.54	2.49	0.47	2.68
Over	500,000	1,284	257	0	0	29.96	872.18	16.86	655.51	0.31	2.20	0.27	2.32
Total		**552,246**	**346,302**	**10,272**	**15,077**								
Percentage		**100.0%**	**62.7%**	**1.9%**	**2.7%**								

Note: (*) Does not include South Carolina and large deductible policies.

Impact of Mod Cap Changes by size of risk

Impact Analysis

(Rating year 2008*; with split points detrended with 25% reduction; proposal includes new mod cap formula and split point 10k)

Expected Loss (E)		Total Intrastate Risks	Number of Risks Where Current Cap is Lower than the Proposed Cap	Number of Risks Reaching Mod Cap Current	Number of Risks Reaching Mod Cap Proposal	Current Mod Cap Range		Alternative Mod Cap Range		Current Uncapped Mod Range		Proposal Uncapped Mod Range	
1	1,000	172	172	9	2	1.00	1.08	1.10	1.21	0.97	1.42	0.96	1.62
1,000	5,000	123,534	122,626	6,220	7,782	1.06	1.39	1.14	1.64	0.88	3.40	0.83	4.40
5,000	10,000	168,747	135,122	2,877	4,713	1.29	1.77	1.27	2.18	0.83	3.38	0.76	4.47
10,000	20,000	125,650	52,303	298	938	1.59	2.54	1.44	3.26	0.77	4.19	0.68	5.63
20,000	50,000	89,564	26,453	9	49	2.17	4.85	1.78	6.50	0.73	4.89	0.62	5.54
50,000	100,000	31,685	7,857	0	0	3.93	8.69	2.80	11.89	0.68	2.75	0.59	3.53
100,000	200,000	14,375	3,544	0	0	6.85	16.14	4.51	22.35	0.62	2.09	0.54	2.37
200,000	500,000	6,189	1,512	0	0	12.70	36.34	7.91	49.46	0.58	1.92	0.52	2.14
Over	500,000	1,311	320	0	0	30.32	1,965.20	18.16	1,690.73	0.31	2.38	0.27	2.57
Total		**561,227**	**349,909**	**9,413**	**13,484**								
Percentage		**100.0%**	**62.3%**	**1.7%**	**2.4%**								

Note: (*) Does not include large deductible policies.

Impact of Mod Cap Changes by Size of Risk

Impact Analysis

(Rating year 2009*; with split points detrended with 20% reduction; proposal includes new mod cap formula and split point 15k)

Expected Loss (E)		Total Intrastate Risks	Number of Risks Where Current Cap is Lower than the Proposed Cap	Number of Risks Reaching Mod Cap Current	Number of Risks Reaching Mod Cap Proposal	Current Mod Cap Range		Alternative Mod Cap Range		Current Uncapped Mod Range		Proposal Uncapped Mod Range	
1	1,000	187	187	10	2	1.00	1.07	1.10	1.20	0.97	1.46	0.95	1.87
1,000	5,000	128,904	127,118	6,788	10,316	1.06	1.38	1.14	1.61	0.89	3.72	0.81	4.96
5,000	10,000	166,352	131,887	3,154	9,693	1.29	1.76	1.26	2.13	0.84	4.89	0.72	8.84
10,000	20,000	120,013	49,985	312	2,206	1.58	2.51	1.42	3.15	0.77	3.14	0.62	4.65
20,000	50,000	85,418	24,962	8	180	2.16	4.78	1.73	6.23	0.72	3.72	0.53	5.48
50,000	100,000	30,323	7,664	0	1	3.89	8.56	2.68	11.35	0.69	2.83	0.51	3.67
100,000	200,000	13,815	2,988	0	0	6.79	16.11	4.25	21.59	0.64	2.70	0.46	3.65
200,000	500,000	5,950	1,254	0	0	12.58	38.32	7.40	51.70	0.54	2.49	0.41	2.83
Over	500,000	1,284	257	0	0	29.96	872.18	16.86	655.51	0.31	2.20	0.24	2.45
Total		**552,246**	**346,302**	**10,272**	**22,398**								
Percentage		**100.0%**	**62.7%**	**1.9%**	**4.1%**								

Note: (*) Does not include large deductible policies.

Impact of Mod Cap Changes by Size of Risk

Impact Analysis

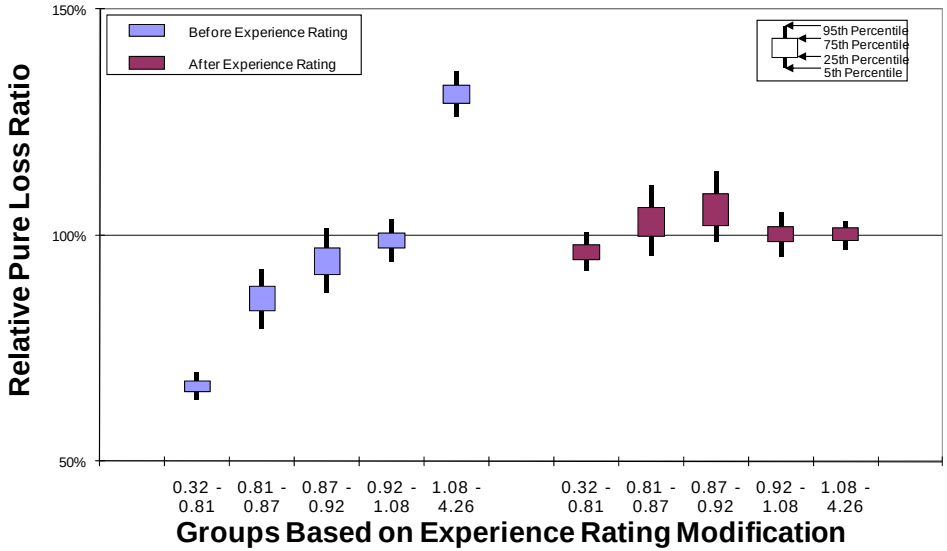
(Rating year 2008*; with split points detrended with 25% reduction; proposal includes new mod cap formula and split point 15k)

Expected Loss (E)		Total Intrastate Risks	Number of Risks Where Current Cap is Lower than the Proposed Cap	Number of Risks Reaching Mod Cap Current	Number of Risks Reaching Mod Cap Proposal	Current Mod Cap Range		Alternative Mod Cap Range		Current Uncapped Mod Range		Proposal Uncapped Mod Range	
1	1,000	172	172	9	2	1.00	1.08	1.10	1.21	0.97	1.42	0.95	1.82
1,000	5,000	123,534	122,626	6,220	9,912	1.06	1.39	1.14	1.64	0.88	3.40	0.80	5.41
5,000	10,000	168,747	135,122	2,877	8,648	1.29	1.77	1.27	2.18	0.83	3.38	0.71	5.48
10,000	20,000	125,650	52,303	298	1,914	1.59	2.54	1.44	3.26	0.77	4.19	0.62	6.46
20,000	50,000	89,564	26,453	9	127	2.17	4.85	1.78	6.50	0.73	4.89	0.55	5.90
50,000	100,000	31,685	7,857	0	0	3.93	8.69	2.80	11.89	0.68	2.75	0.51	4.20
100,000	200,000	14,375	3,544	0	0	6.85	16.14	4.51	22.35	0.62	2.09	0.48	2.63
200,000	500,000	6,189	1,512	0	0	12.70	36.34	7.91	49.46	0.58	1.92	0.47	2.37
Over	500,000	1,311	320	0	0	30.32	1,965.20	18.16	1,690.73	0.31	2.38	0.24	2.75
Total		**561,227**	**349,909**	**9,413**	**20,603**								
Percentage		**100.0%**	**62.3%**	**1.7%**	**3.7%**								

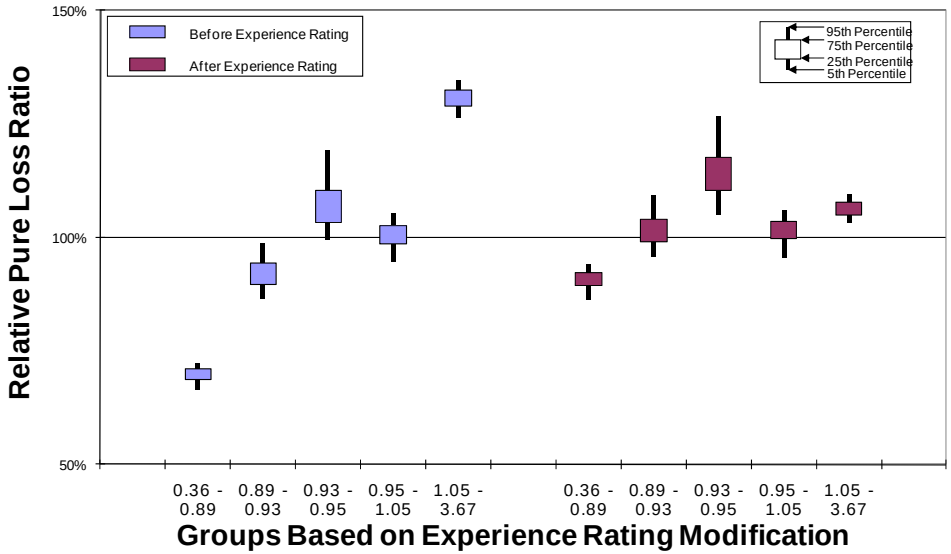
Note: (*) Does not include large deductible policies.

PY 2006 Quintile Tests By Size Of Risk

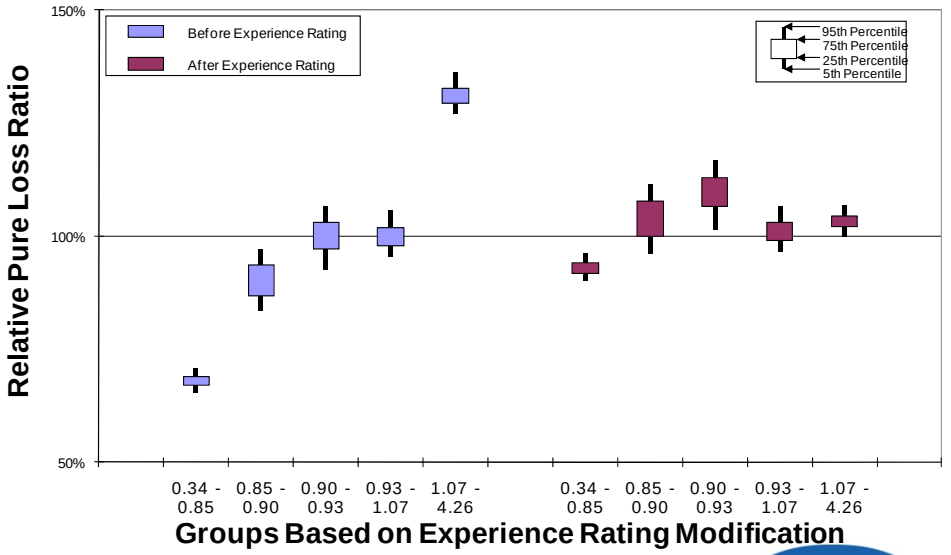
PY 2006 Countrywide Split Point 15,000
(33% detrend reduction)



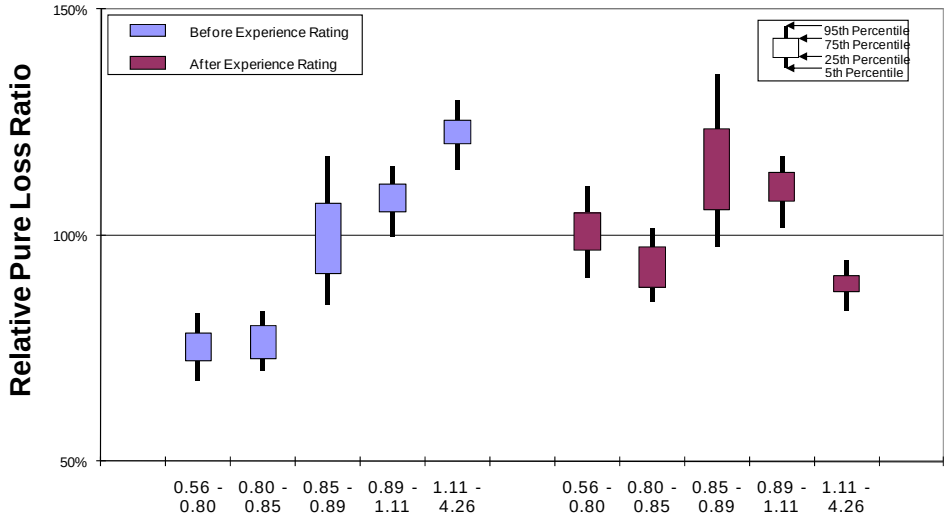
PY 2006 Countrywide Split Point 5,000
(33% detrend reduction)



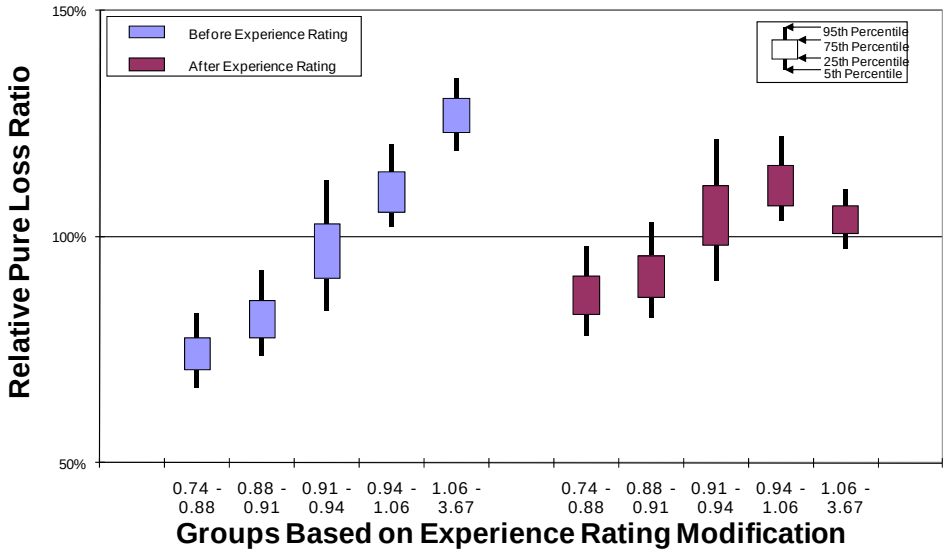
PY 2006 Countrywide Split Point 10,000
(33% detrend reduction)



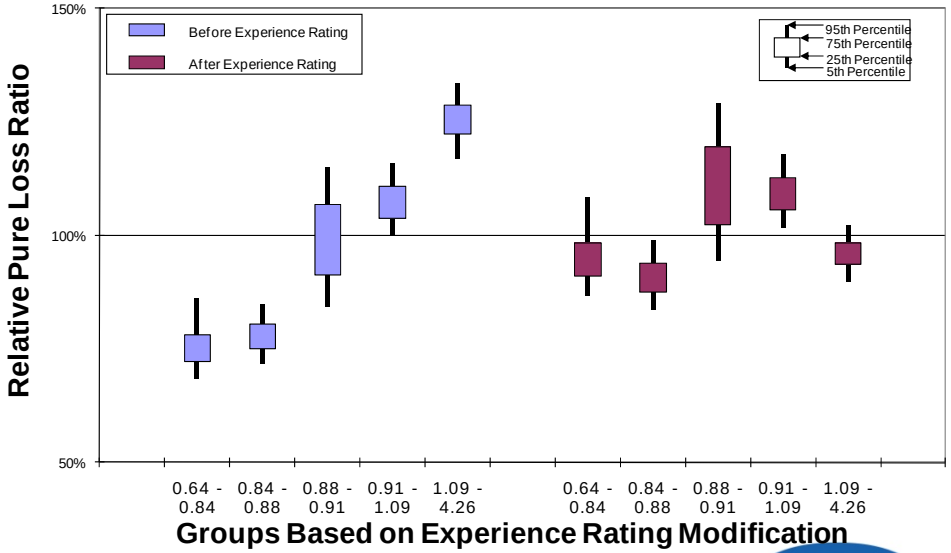
PY 2006 Risk Size (E/G) 1000 to 10,000 Split Point 15,000
(33% detrend reduction)



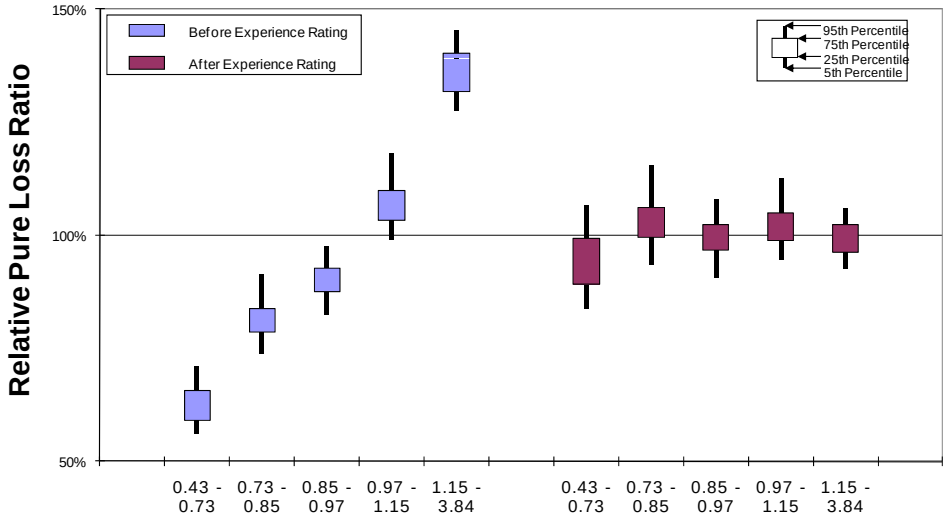
PY 2006 Risk Size (E/G) 1000 to 10,000 Split Point 5,000
(33% detrend reduction)



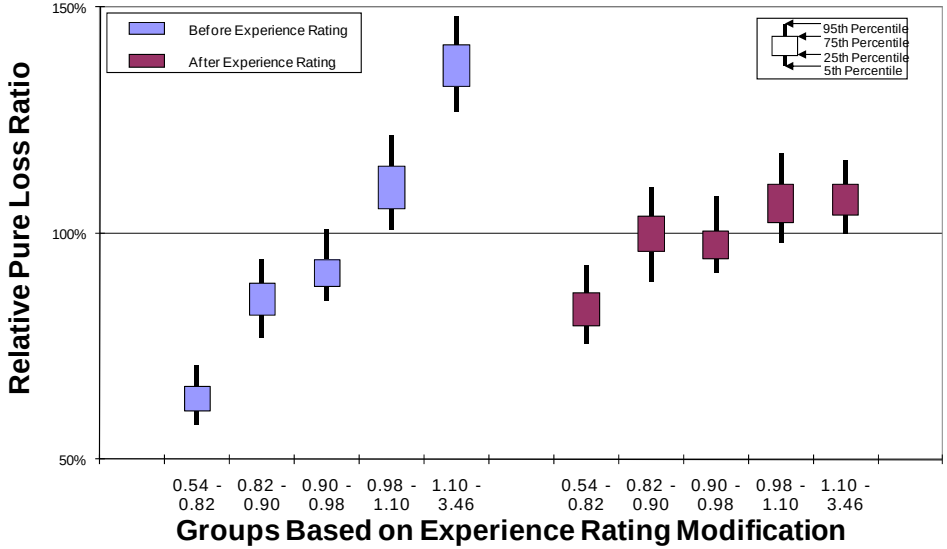
PY 2006 Risk Size (E/G) 1000 to 10,000 Split Point 10,000
(33% detrend reduction)



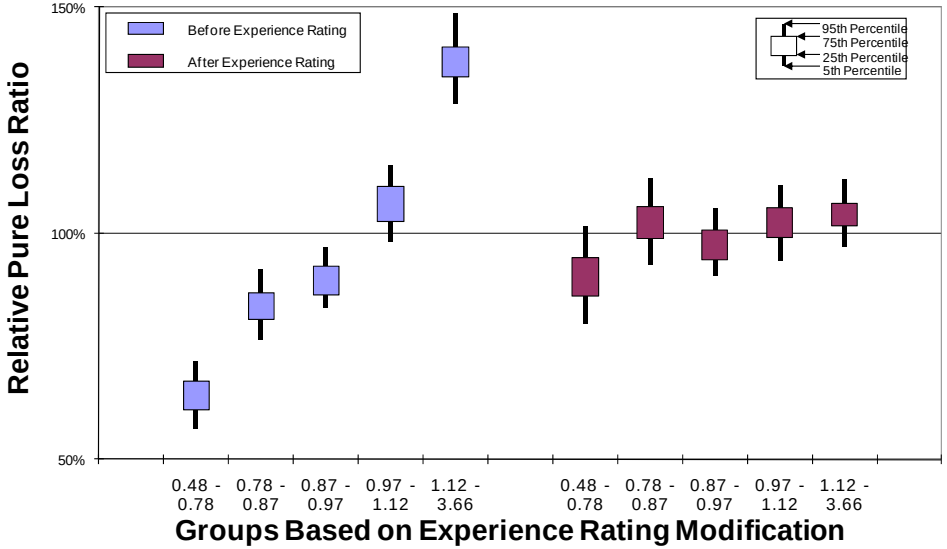
PY 2006 Risk Size (E/G) 10,000 to 100,000 Split Point 15,000
(33% detrend reduction)



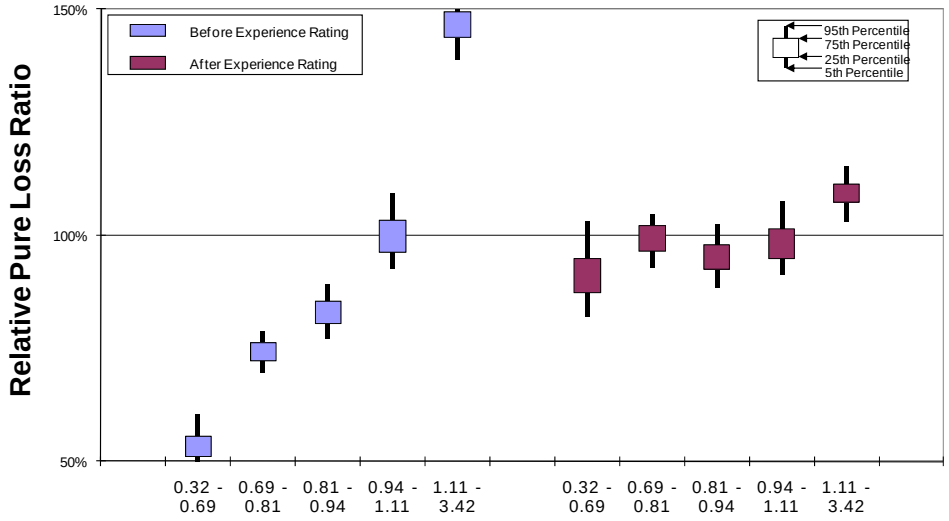
PY 2006 Risk Size (E/G) 10,000 to 100,000 Split Point 5,000
(33% detrend reduction)



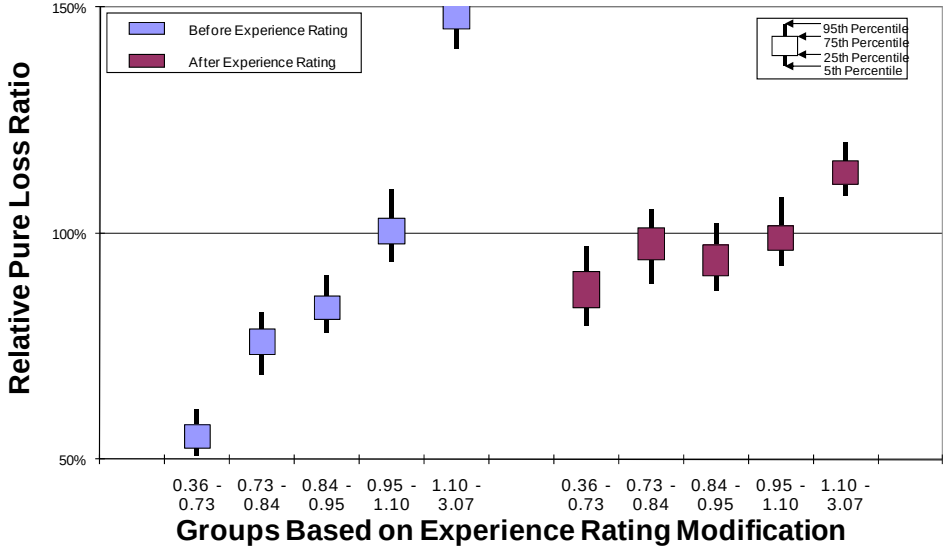
PY 2006 Risk Size (E/G) 10,000 to 100,000 Split Point 10,000
(33% detrend reduction)



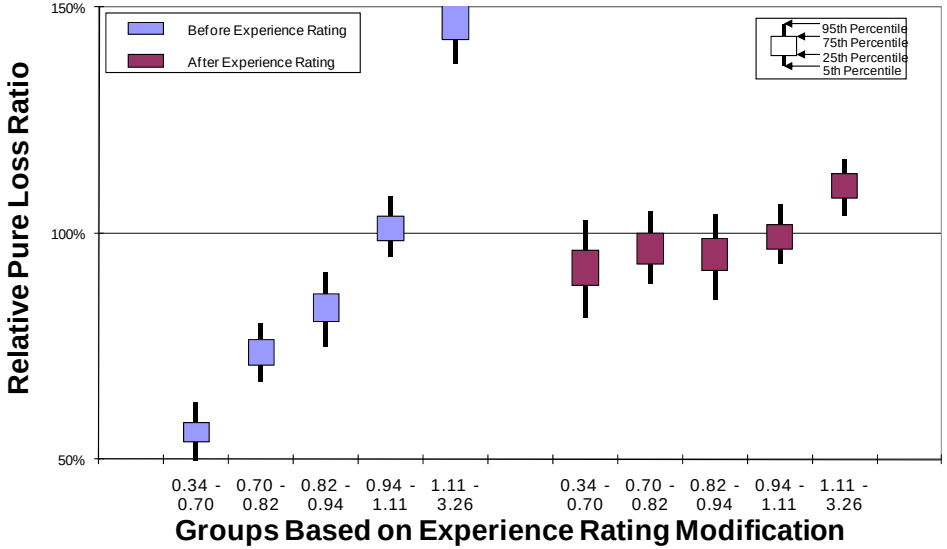
PY 2006 Risk Size (E/G) 100,000 to 1M Split Point 15,000
(33% detrend reduction)



PY 2006 Risk Size (E/G) 100,000 to 1M Split Point 5,000
(33% detrend reduction)



PY 2006 Risk Size (E/G) 100,000 to 1M Split Point 10,000
(33% detrend reduction)



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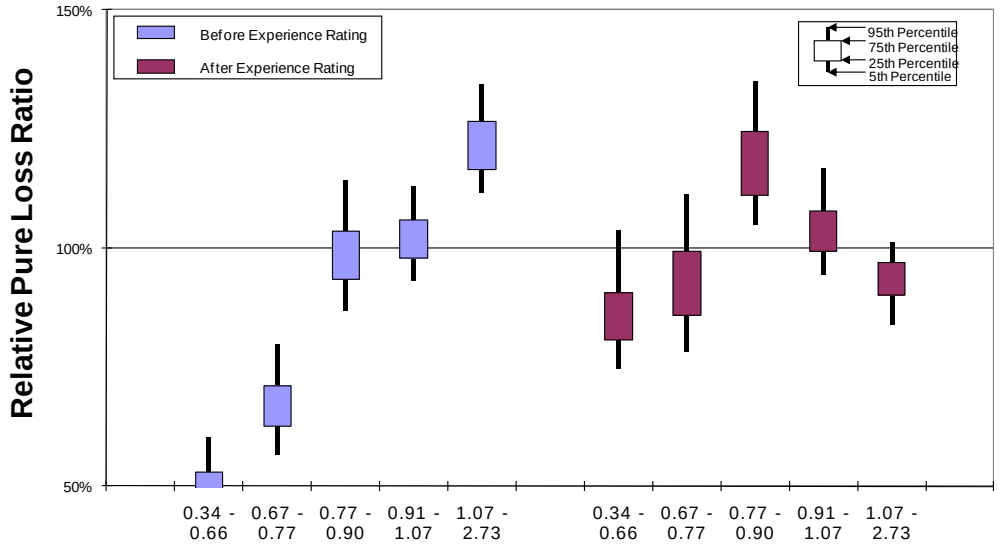
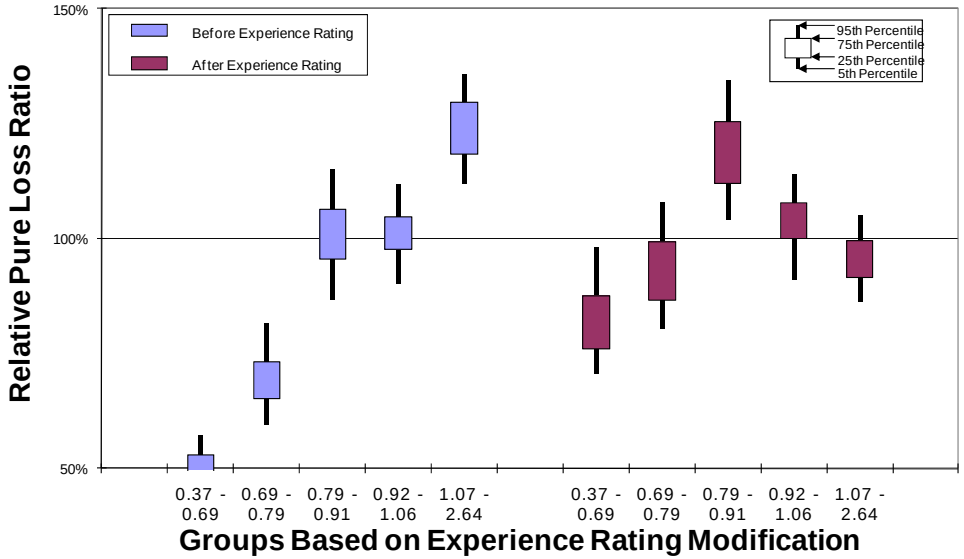
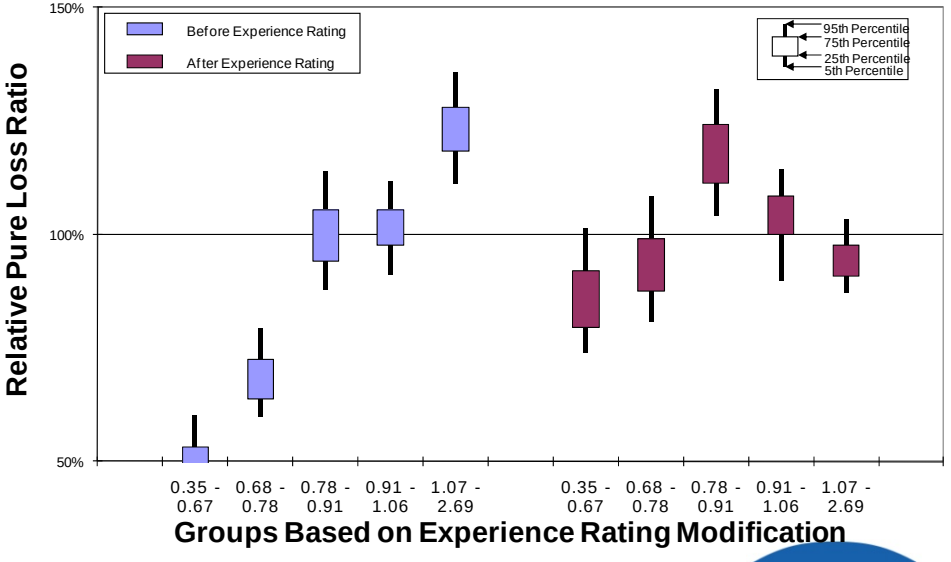


PY 2006 Risk Size (E/G) 1M to 10M Split Point 5,000 (33% detrend reduction)



PY 2006 Risk Size (E/G) 1M to 10M Split Point 10,000 (33% detrend reduction)



Summary

- Increasing the split point will generally result in larger debits for debit mod risks and larger credits for credit mod risks.
- The mod cap change will have a much smaller impact.
- Performance overall will be enhanced.

Discussion

National Council on Compensation Insurance, Inc.

The Maximum Debit Modification Factor

Ampegama Perera

Individual Risk Rating Working Group
November 3, 2010

Overview

- Background
- The Current Mod Cap Formula
- An Alternative Mod Cap Formula
- Comparison
- Some Empirical Impact Analysis
- Summary
- Discussion

Background

- Why is there an overall mod cap ?
  - In some unusual situations the uncapped mod can be quite large despite loss limits and split credibility. For example, a small risk might have many claims
- Prior analyses suggest the mod cap is too low for small risks because prior experience is predictive for small risks
- The current mod cap formula is a function of E and G. It would also be more consistent with experience period expected claim counts to have a cap formula that is a function of only E/G

The Current Mod Cap Formula

- Experience rating mod factors are subject to a cap if a debit mod exceeds a specific amount

- Maximum debit mod $= 1 + [0.00005(E + 2\frac{E}{G})]$

$$= 1 + 0.00005(G + 2)\left(\frac{E}{G}\right)$$

E = Expected Loss

G = SRP/250,000 rounded to the nearest 0.05

SRP = State Reference Point

SRP = 250 x SACC

SACC = State Average Cost per Case

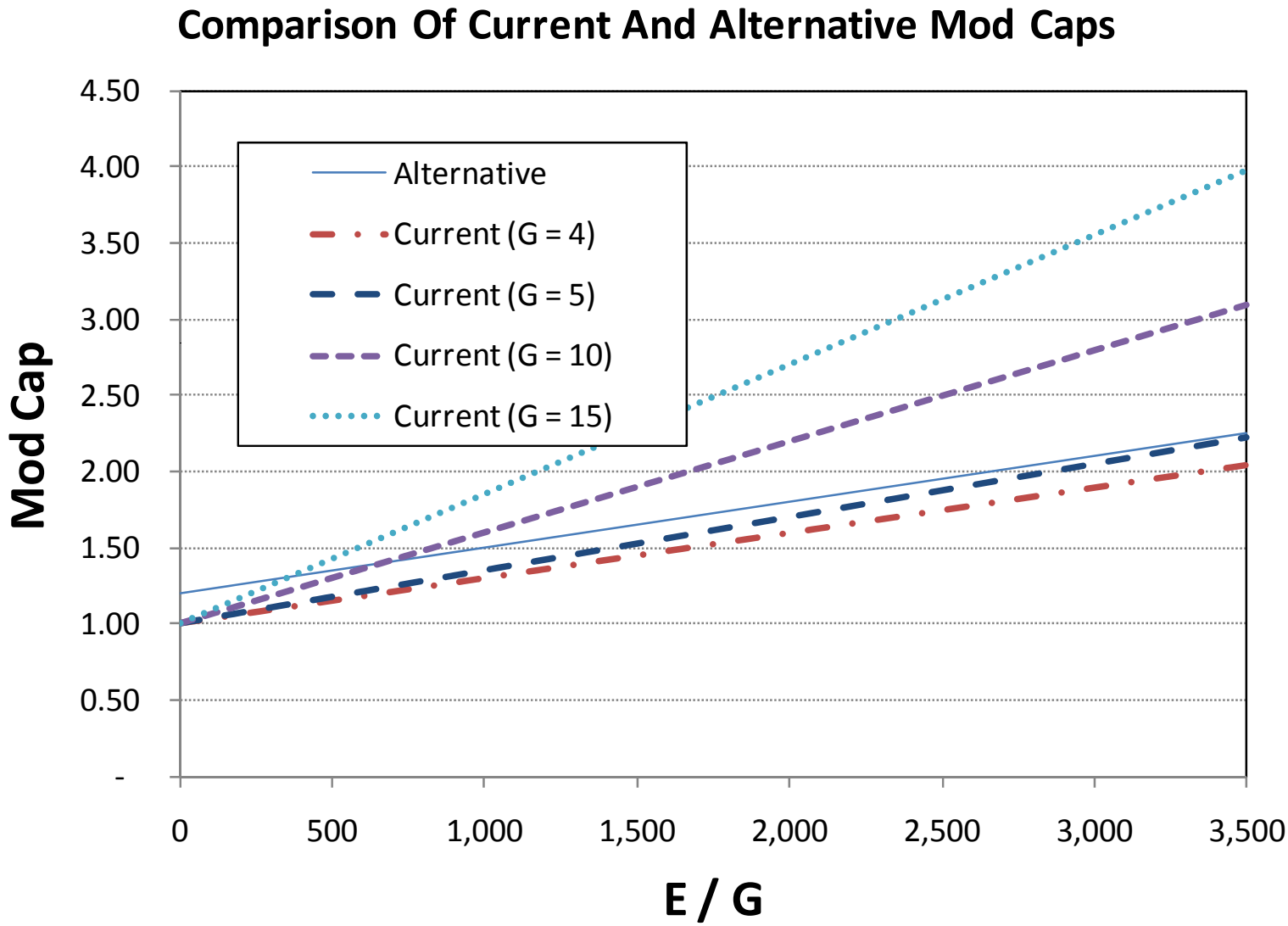
Note: G ≈ SACC / 1,000

Alternative Mod Cap Formula

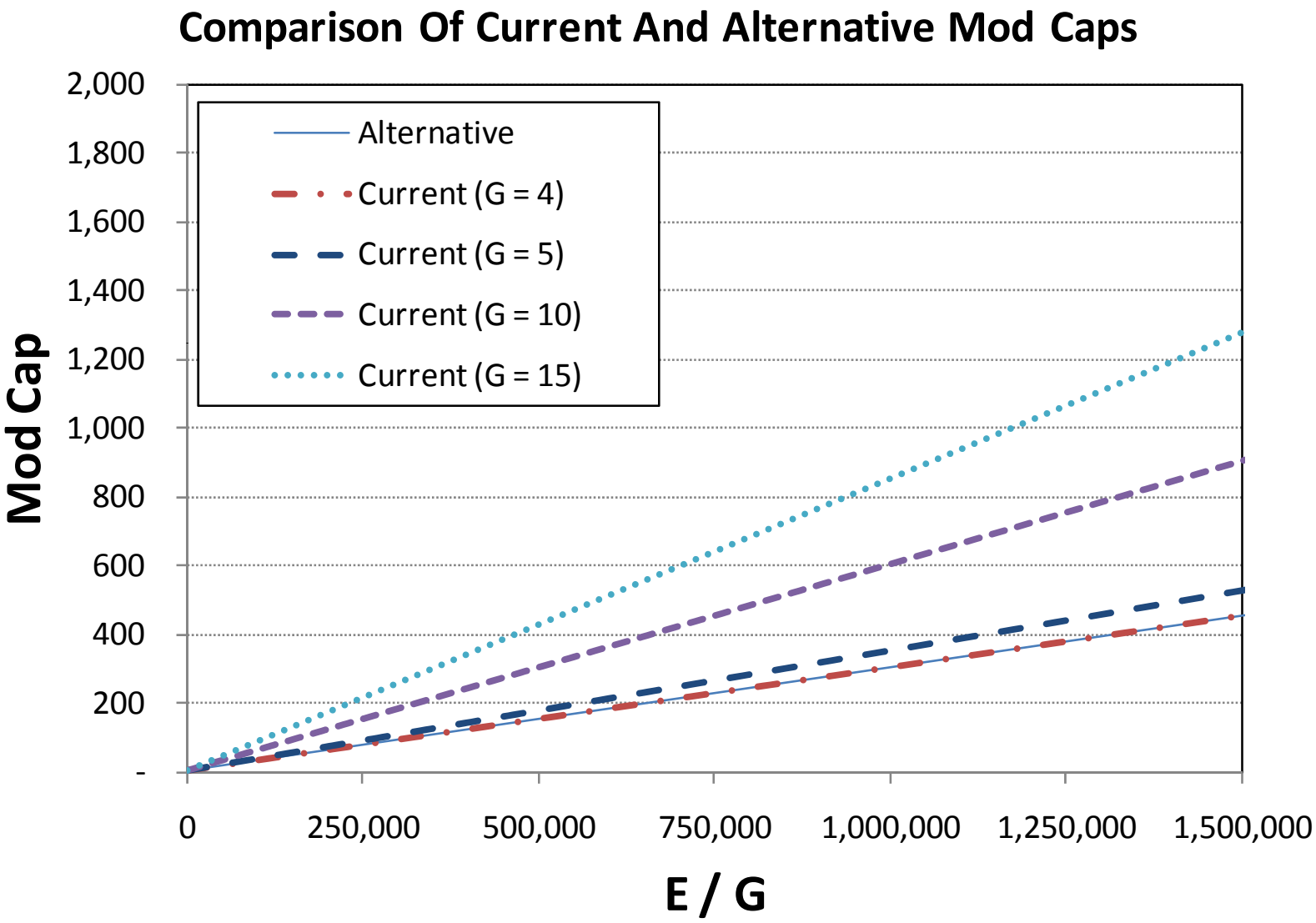
$$1.20 + 0.0003\left(\frac{E}{G}\right)$$

- Why choose a formula that is strictly a function of (E/G)?
  - 0.001 (E/G) is roughly equivalent to expected claim counts in the experience period
- Why raise the cap to always be at least 1.20?
  - The mod is predictive even for smaller risks (i.e., small risks with lost time claims have about 50% higher subsequent losses, etc.) and the current formula is very low for small risks allowing almost no room for a debit mod

Comparison



Comparison



Comparison

Alternative Mod Cap minus Current Mod Cap

$$= \left(1.20 + 0.0003\frac{E}{G}\right) - \left(1 + 0.00005(G+2)\frac{E}{G}\right)$$

$$= 0.20 + 0.00005E\left(\frac{4}{G} - 1\right)$$

- For G = 4 the difference between this alternative mod cap and the current mod cap is exactly 0.20 for all E
- G= 4 is around the lower end of State G-values

Comparison

- The intersection point of the current mod cap and the alternative mod cap is given by:

$$E = 4000\left(\frac{G}{G-4}\right)$$

- For G <= 4 there is no intersection (since E is finite and positive); the alternative cap is always higher than current cap
- For G > 4 the alternative cap is higher than the current cap below the intersection point and lower than the current cap above the intersection point
- Note For G = 5 the intersection is at E = 20,000. As G gets very large the intersection drops down to a lower bound of E = 4,000

Comparison

	G--->							
	4		5		10		15	
Expected Loses (E)	Current	Alternative	Current	Alternative	Current	Alternative	Current	Alternative
500	1.04	1.24	1.04	1.23	1.03	1.22	1.03	1.21
1,000	1.08	1.28	1.07	1.26	1.06	1.23	1.06	1.22
2,500	1.19	1.39	1.18	1.35	1.15	1.28	1.14	1.25
5,000	1.38	1.58	1.35	1.50	1.30	1.35	1.28	1.30
6,667	1.50	1.70	1.47	1.60	1.40	1.40	1.38	1.33
7,500	1.56	1.76	1.53	1.65	1.45	1.43	1.43	1.35
10,000	1.75	1.95	1.70	1.80	1.60	1.50	1.57	1.40
15,000	2.13	2.33	2.05	2.10	1.90	1.65	1.85	1.50
20,000	2.50	2.70	2.40	2.40	2.20	1.80	2.13	1.60
25,000	2.88	3.08	2.75	2.70	2.50	1.95	2.42	1.70
30,000	3.25	3.45	3.10	3.00	2.80	2.10	2.70	1.80
35,000	3.63	3.83	3.45	3.30	3.10	2.25	2.98	1.90
40,000	4.00	4.20	3.80	3.60	3.40	2.40	3.27	2.00
45,000	4.38	4.58	4.15	3.90	3.70	2.55	3.55	2.10
50,000	4.75	4.95	4.50	4.20	4.00	2.70	3.83	2.20
55,000	5.13	5.33	4.85	4.50	4.30	2.85	4.12	2.30
60,000	5.50	5.70	5.20	4.80	4.60	3.00	4.40	2.40
65,000	5.88	6.08	5.55	5.10	4.90	3.15	4.68	2.50
70,000	6.25	6.45	5.90	5.40	5.20	3.30	4.97	2.60
75,000	6.63	6.83	6.25	5.70	5.50	3.45	5.25	2.70
80,000	7.00	7.20	6.60	6.00	5.80	3.60	5.53	2.80
85,000	7.38	7.58	6.95	6.30	6.10	3.75	5.82	2.90
90,000	7.75	7.95	7.30	6.60	6.40	3.90	6.10	3.00
95,000	8.13	8.33	7.65	6.90	6.70	4.05	6.38	3.10
100,000	8.50	8.70	8.00	7.20	7.00	4.20	6.67	3.20
Intersection Point	**Undefined**		**20,000**		**6,667**		**5,455**	

Empirical Impact Analysis
(Rating Year: 2009)

Expected Loses (E)		Total Intrastate Risks	Number of Risks Where Current Cap is Lower than the Alternative Cap	Number of Risks Reaching Current Mod Cap	Number of Risks Reaching Alternative Mod Cap	Current Mod Cap Range		Alternative Mod Cap Range		Mod Range (uncapped)	
1	1,000	57	57	4	2	1.00	1.07	1.20	1.27	0.97	1.51
1,000	5,000	133,075	133,075	8,805	4,241	1.06	1.37	1.23	1.57	0.88	4.67
5,000	10,000	182,199	140,239	4,646	3,356	1.29	1.74	1.32	1.93	0.82	20.57
10,000	20,000	133,339	26,953	533	745	1.58	2.49	1.44	2.66	0.75	10.49
20,000	50,000	96,599	9,835	22	67	2.16	4.72	1.67	4.86	0.69	3.92
50,000	100,000	35,014	1,136	0	1	3.89	8.43	2.38	8.51	0.66	2.97
100,000	200,000	16,091	133	0	0	6.79	15.86	3.56	15.82	0.60	2.99
200,000	500,000	7,264	0	0	0	12.58	37.70	5.92	37.30	0.46	4.40
over	500,000	1,973	0	0	0	29.96	1144.16	13.02	849.24	0.06	4.77
Total		**605,611**	**311,428**	**14,010**	**8,412**						
Percentage		**100.0%**	**51.4%**	**2.3%**	**1.4%**						

Empirical Impact Analysis
(Rating Year: 2008)

Expected Loses (E)		Total Intrastate Risks	Number of Risks Where Current Cap is Lower than the Alternative Cap	Number of Risks Reaching Current Mod Cap	Number of Risks Reaching Alternative Mod Cap	Current Mod Cap Range		Alternative Mod Cap Range		Mod Range (uncapped)	
1	1,000	69	57	7	4	1.00	1.08	1.20	1.28	0.97	2.00
1,000	5,000	132,429	126,352	9,079	4,337	1.06	1.38	1.23	1.58	0.87	6.47
5,000	10,000	185,926	145,651	4,776	3,305	1.29	1.76	1.33	1.97	0.81	5.18
10,000	20,000	140,254	33,284	596	780	1.59	2.51	1.46	2.74	0.73	5.42
20,000	50,000	101,829	11,086	26	59	2.17	4.78	1.71	5.04	0.69	4.17
50,000	100,000	36,779	672	0	0	3.93	8.55	2.48	8.88	0.65	3.03
100,000	200,000	17,036	0	0	0	6.85	15.86	3.75	16.32	0.59	3.07
200,000	500,000	7,704	0	0	0	12.70	37.51	6.31	35.97	0.45	3.29
over	500,000	2,050	0	0	0	30.32	6,384.87	13.99	4,119.83	0.05	3.75
Total		**624,076**	**317,102**	**14,484**	**8,485**						
Percentage		**100.0%**	**50.8%**	**2.3%**	**1.4%**						

Summary

- The current mod cap is very low for small risks and is a function of E and G
- Under the current formula about 2.3% of intrastate risks hit the cap
- An alternative, but very similar, formula would be strictly a function of E/G and raise the cap to a minimum of 1.20
- This alternative mod cap formula would be equal to the current mod cap formula +0.20 for G = 4
- Under this alternative formula only about 1.4% of intrastate risks would hit the cap

Discussion

National Council on Compensation Insurance, Inc.

Split Point Trend

Chris Poteet

Individual Risk Rating Working Group
June 23, 2010

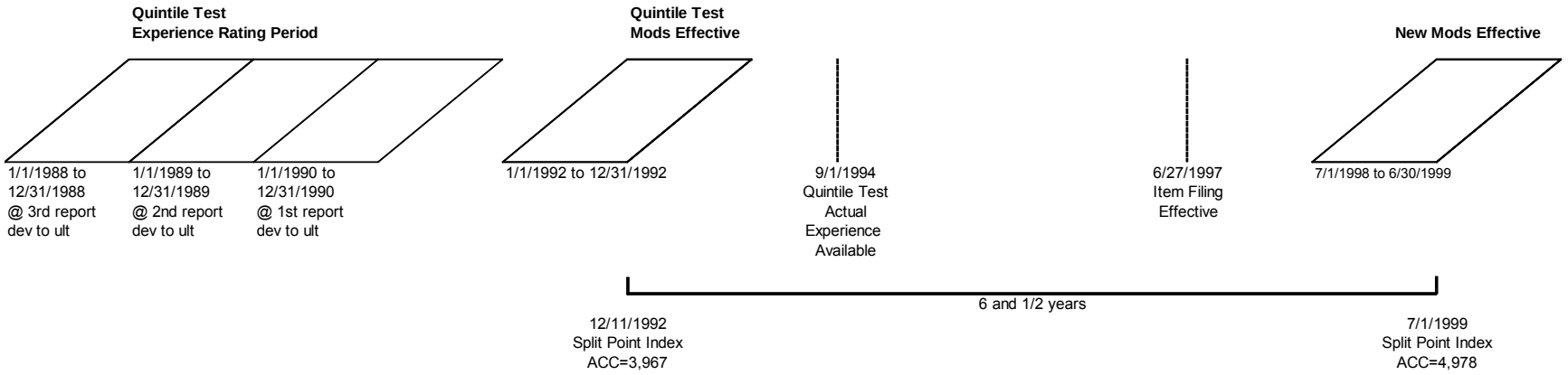
Overview

- Background
- Timeline of ERA Item E-1339
- Time Series for the Split Point Index
- Expected Loss Group (ELG) Trend
- Split Point Trend
- Discussion

Background

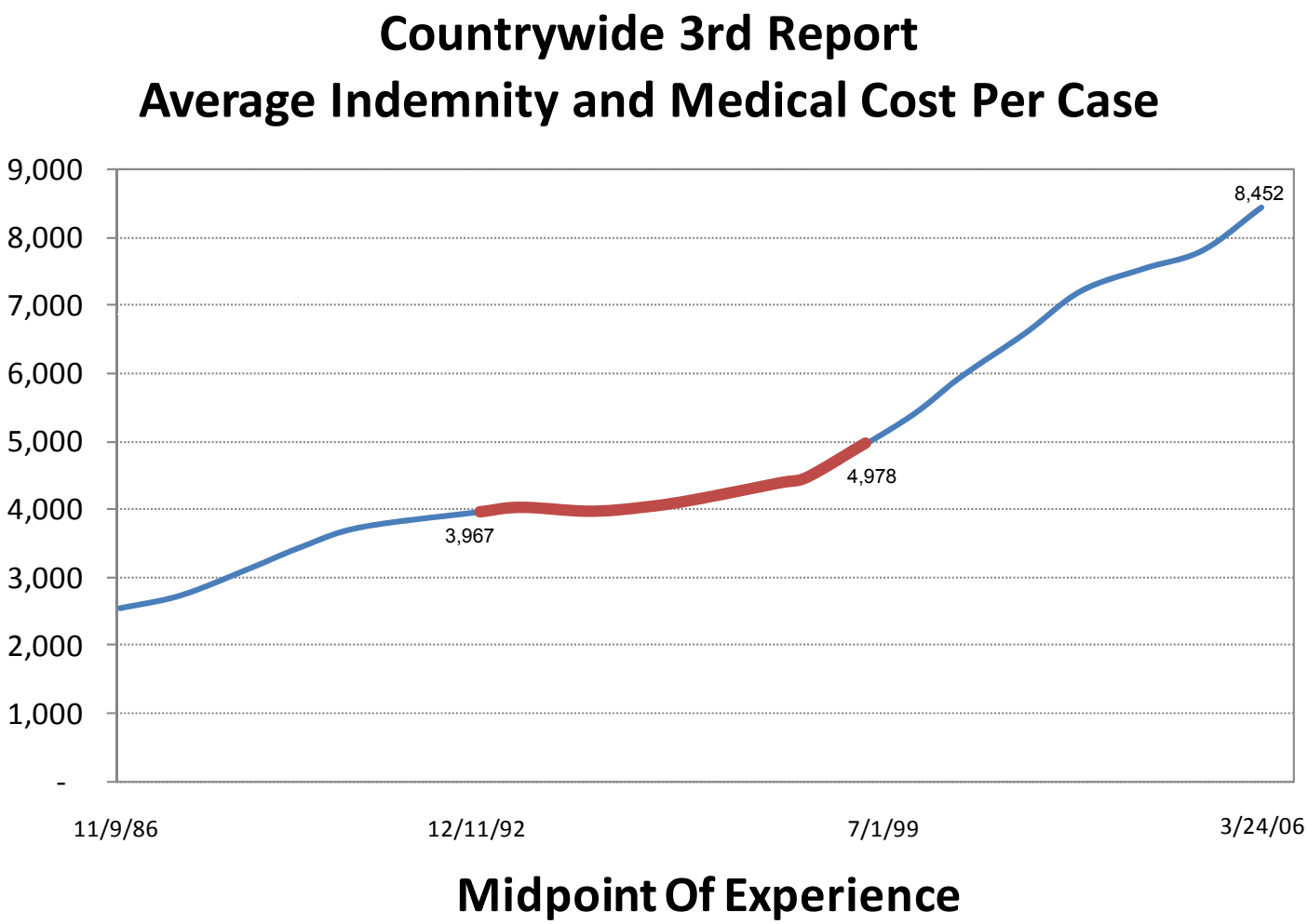
- The Experience Rating Adjustment (ERA), filed as Item E-1339 first effective in 1998, allowed for indexation of the split point.
- Using 1992 as the indexing year, the split point of 5,000 was proportional to the 1992 Countrywide Average Cost per case (ACC) of 3,967. Preliminary analysis of 1993 continued to indicate no change in the split point. It was assumed that ACC would remain flat through the effective period of the new mods.
- While ACC remained flat in the early 1990s it did move up to 4,978 by 1998-1999 when the new mods were effective.

Timeline of ERA Item E-1339



- Quintile test on ratings effective 1992 used split point indexed to 1992 (timing shown above)
- Quintile test on ratings effective 1991 (not shown) also used split point indexed to 1992

Split Point Index



Split Point Index

- Recent average claims costs indicate that the split point should be raised to approximately 10,500 ≈ 5,000 x (8,452 / 3,967) if we do not include trend from the latest index point to the effective period of mods.
- The ACC time series referenced for indexing of the split point in the item filing is the same ACC time series as is used for trending the ELG ranges.
- ELG trend could be used to trend the split point from the midpoint of the latest index experience to the midpoint of the effective period of mods.

ELG Trend

Third Report Losses

Midpoint of Experience	Average Cost Per Case (ACC) *	Change	Annualized Change	LINEAR			EXPONENTIAL		
				8 Pts.	6 Pts.	4 Pts.	8 Pts.	6 Pts.	4 Pts.
08/23/93	$4,034								
10/28/94	$3,976	-1.4%	-1.2%						
10/10/95	$4,040	1.6%	1.7%						
08/05/96	$4,147	2.7%	3.2%						
01/21/98	$4,396	6.0%	4.1%						
06/30/98	$4,471	1.7%	4.0%	$4,569			$4,695		
03/06/00	$5,322	19.0%	10.9%	$5,431			$5,380		
02/15/01	$5,957	11.9%	12.6%	$5,916	$6,077		$5,807	$6,113	
03/21/02	$6,601	10.8%	9.8%	$6,475	$6,583		$6,344	$6,561	
02/28/03	$7,219	9.4%	10.0%	$6,956	$7,017	$7,158	$6,844	$6,973	$7,172
03/26/04	$7,553	4.6%	4.3%	$7,506	$7,514	$7,575	$7,465	$7,475	$7,566
03/24/05	$7,818	3.5%	3.5%	$8,014	$7,973	$7,960	$8,088	$7,970	$7,949
03/24/06	**$8,452**	8.1%	8.1%	$8,525	$8,435	$8,348	$8,768	$8,502	$8,353
Annual Inflation				7.7%	6.4%	5.0%	8.4%	6.7%	5.1%
R Squared				98.8%	97.9%	95.7%	96.8%	96.9%	96.5%

Notes

* The ACC's at 03/24/05 and 03/24/06 are 2nd and 1st report developed to 3rd respectively.

ELG Trend

First Report Losses Developed to Ultimate

Midpoint of Experience	Average Cost Per Case (ACC)	Change	Annualized Change	LINEAR			EXPONENTIAL		
				8 Pts.	6 Pts.	4 Pts.	8 Pts.	6 Pts.	4 Pts.
12/10/92	$4,866								
11/28/94	$4,947	1.7%	0.8%						
08/30/95	$5,103	3.2%	4.2%						
10/27/96	$5,225	2.4%	2.1%						
10/15/97	$5,222	0.0%	-0.1%						
08/07/98	$5,567	6.6%	8.2%	$5,522			$5,730		
01/15/00	$6,433	15.5%	10.5%	$6,629			$6,567		
06/22/00	$6,771	5.3%	12.5%	$6,964	$7,055		$6,843	$7,114	
03/05/02	$8,318	22.8%	12.8%	$8,272	$8,327		$8,037	$8,217	
02/15/03	$9,314	12.0%	12.7%	$9,001	$9,036	$9,472	$8,792	$8,904	$9,475
03/25/04	$10,291	10.5%	9.4%	$9,853	$9,864	$10,043	$9,764	$9,780	$10,024
03/02/05	$10,519	2.2%	2.4%	$10,572	$10,562	$10,524	$10,666	$10,585	$10,512
03/24/06	$10,985	4.4%	4.2%	$11,387	$11,355	$11,070	$11,791	$11,579	$11,094
Annual Inflation				9.0%	8.0%	5.0%	9.9%	8.8%	5.2%
R Squared				98.2%	96.2%	93.7%	97.0%	94.0%	92.6%

ELG Trend

First Report Losses

Midpoint of Experience	Average Cost Per Case (ACC)	Change	Annualized Change	LINEAR			EXPONENTIAL		
				8 Pts.	6 Pts.	4 Pts.	8 Pts.	6 Pts.	4 Pts.
12/11/92	$3,418								
11/28/94	$3,409	-0.3%	-0.1%						
08/29/95	$3,432	0.7%	0.9%						
10/28/96	$3,571	4.0%	3.5%						
10/15/97	$3,693	3.4%	3.6%						
08/08/98	$3,850	4.2%	5.2%	$3,832			$3,927		
01/14/00	$4,306	11.8%	8.1%	$4,416			$4,391		
06/22/00	$4,508	4.7%	11.0%	$4,594	$4,651		$4,543	$4,682	
03/05/02	$5,349	18.7%	10.6%	$5,286	$5,320		$5,185	$5,275	
02/15/03	$5,861	9.6%	10.1%	$5,672	$5,694	$5,881	$5,582	$5,638	$5,888
03/26/04	$6,267	6.9%	6.2%	$6,124	$6,130	$6,205	$6,084	$6,093	$6,197
03/02/05	$6,419	2.4%	2.6%	$6,504	$6,497	$6,477	$6,543	$6,505	$6,470
03/24/06	$6,803	6.0%	5.6%	$6,935	$6,914	$6,787	$7,105	$7,007	$6,795
Annual Inflation				7.5%	6.7%	4.6%	8.1%	7.3%	4.7%
R Squared				98.7%	97.5%	98.2%	97.6%	95.5%	98.1%

ELG Trend

- Expected Loss Group Ranges are used to determine which column to use in Table M.
- Each column in table M corresponds to a range of expected number of claims per risk.
- ELGs are trended because the expected loss range corresponding to a given number of claims increases over time.
- Annual trend of 6.7% selected
- Trend from 3/24/06 to 1/1/2011 (trend factor 1.360)

Split Point Trend

- Annual trend of 6.7% selected (same as ELG selected trend)
- Trend split point from 3/24/06 to 1/1/2011 (trend factor 1.360)
- 5000 x (8,452 x 1.360 / 3,967) = 14,488

Split Points for Various Annual Trends and Effective Dates

Annual Trend	Effective Midpoint 1/1/2011	Effective Midpoint 1/1/2012	Effective Midpoint 1/1/2013
0.0%	10,500	10,500	10,500
5.0%	13,500	14,000	15,000
6.7%	14,500	15,500	16,500
8.0%	15,500	16,500	18,000

Arguments For Using ELG Trend For Split Point Indexation

- The impact of the change in the mix in claim size is minor.
- Recent quintile tests produced good results for effective year 2006, 14 years after the 1992 test year, when the split point was adjusted by approximately the value indicated by indexation.
  - Many changes to the mix of claims occurred during this period.

Comments

- The severity index referenced in filing E-1339, in connection with the split point, is still produced by NCCI. It is very similar to G-value/SAL/SACC index used to index the W and B values, loss limit, and mod cap.
- Split Point trended to 1/1/2011 would be ≈ 14,500.
- Next Step: Investigation of impact of different split points on individual risk mods.

Discussion

National Council on Compensation Insurance, Inc.

Impact of Alternative Split Points on Experience Mods

Thomas Sheppard and Ampegama Perera

Individual Risk Rating Working Group
August 17, 2010

Overview

- Background
- Method
- Countrywide results in total
- Countrywide results by size of risk
- Summary and Discussion
- Appendix: Results by state

Background

- Because the split point is fixed, inflation moves an increasing share of total losses from primary to excess.
- This makes the rating formula less responsive to actual experience.
- We have investigated the impact on experience mods of moving the current $5,000 split point to,
  - $10,000
  - $15,000
  - $20,000

Method

- We used intrastate data from the experience rating production system for mods effective in 2008 and 2009.
- We applied an alternative split point to break actual losses into primary and excess.
- We applied the alternative split point to expected losses by adjusting the class level D-Ratios by state and hazard group actual primary losses.
- We calculated mods using both split points and targeted the same off-balance.

D-Ratio Components

- A class code's D-Ratio is a weighted average of the D-Ratio Factors.
- The weights are the class partial pure premiums.
- We revised class ratemaking methodology in 2009.
- Prior to 2009 we used statewide D-Ratio Factors for serious, non-serious, and medical.
- In 2009 we switched to D-Ratio Factors by Hazard Group for indemnity and medical.

D-Ratio Adjustment

- The D-Ratio is the ratio of expected primary to expected total losses by class.
- We adjust the class D-Ratio to a new split point by applying the ratio of actual primary at the new split point to actual primary at the $5,000 split point.
- We make the adjustment at a state, hazard group level.

$$D_{c,n} = D_{c,5000} \times (P_{sh,n} / P_{sh,5000})$$

$D_{c,n}$ is the D-Ratio for Class c and split point n

$P_{sh,n}$ is the actual primary loss for state s, hazard group h at split point n

Off-Balance Adjustment

- Mods calculated with an alternative split point typically result in a different average mod.
- Ratemaking targets the average intrastate mod so a revised split point will not move the average mod by state.
- Because of this, we adjust mods to the same average mod by state and mod effective year.

Countrywide Test Results

- "Countrywide" refers to states for which NCCI calculates intrastate mods.*
- Interstate risks are not included in this review.
- Formula used to determine impact on mod is:

  Mod at Alternative Split Point – Current Mod
- State level results are included in the appendix.

* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

Testing Results - Countrywide Impact on Experience Mods Alternative Split Points, Ratings in 2008

Impact of Alternative Splits Points on Intrastate Mods Effective in 2008

Original Mod	Percentage of			Average Mod			
	Risks	Payroll	Expected Losses	$5,000	$10,000	$15,000	$20,000
Mod < 0.75	0.004	0.031	0.036	0.69	0.64	0.60	0.56
0.75 <= Mod < 0.80	0.015	0.048	0.057	0.78	0.72	0.68	0.64
0.80 <= Mod < 0.85	0.056	0.103	0.118	0.83	0.78	0.73	0.70
0.85 <= Mod < 0.90	0.140	0.156	0.166	0.88	0.84	0.81	0.78
0.90 <= Mod < 0.95	0.324	0.204	0.188	0.92	0.90	0.89	0.87
0.95 <= Mod < 0.98	0.185	0.090	0.081	0.96	0.96	0.95	0.95
0.98 <= Mod <= 1.02	0.055	0.074	0.073	1.00	1.01	1.01	1.02
1.02 < Mod <= 1.05	0.024	0.038	0.039	1.04	1.06	1.07	1.09
1.05 < Mod <= 1.10	0.036	0.055	0.057	1.08	1.11	1.14	1.17
1.10 < Mod <= 1.15	0.033	0.045	0.043	1.12	1.18	1.23	1.27
1.15 < Mod <= 1.20	0.033	0.038	0.036	1.17	1.25	1.31	1.36
1.20 < Mod <= 1.25	0.027	0.029	0.027	1.22	1.31	1.38	1.44
1.25 < Mod	0.068	0.088	0.078	1.42	1.56	1.67	1.76
Overall				0.97	0.97	0.97	0.97

* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

Testing Results - Countrywide Impact on Experience Mods Alternative Split Points, Ratings in 2009

Impact of Alternative Splits Points on Intrastate Mods Effective in 2009

Original Mod	Percentage of			Average Mod			
	Risks	Payroll	Expected Losses	$5,000	$10,000	$15,000	$20,000
Mod < 0.75	0.003	0.028	0.033	0.69	0.64	0.59	0.56
0.75 <= Mod < 0.80	0.013	0.044	0.052	0.78	0.72	0.68	0.64
0.80 <= Mod < 0.85	0.051	0.098	0.115	0.83	0.78	0.73	0.70
0.85 <= Mod < 0.90	0.132	0.151	0.163	0.88	0.84	0.81	0.78
0.90 <= Mod < 0.95	0.317	0.205	0.188	0.92	0.90	0.89	0.87
0.95 <= Mod < 0.98	0.205	0.100	0.087	0.96	0.96	0.95	0.94
0.98 <= Mod <= 1.02	0.058	0.073	0.073	1.00	1.01	1.01	1.01
1.02 < Mod <= 1.05	0.025	0.039	0.041	1.04	1.06	1.07	1.09
1.05 < Mod <= 1.10	0.036	0.056	0.056	1.07	1.11	1.14	1.17
1.10 < Mod <= 1.15	0.034	0.046	0.045	1.12	1.18	1.22	1.26
1.15 < Mod <= 1.20	0.033	0.040	0.037	1.17	1.25	1.30	1.35
1.20 < Mod <= 1.25	0.027	0.031	0.028	1.22	1.31	1.38	1.44
1.25 < Mod	0.067	0.090	0.083	1.42	1.55	1.66	1.75
Overall				0.98	0.98	0.98	0.98

* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

Testing Results - Countrywide Impact on Experience Mods Split Point of $10,000, Ratings Effective in 2008

Impact of Changing the Split Point to $10,000 for Intrastate Mods Effective in 2008*

Change in Mod	Percentage of			Average Mod	
	Risks	Payroll	Expected Losses	Before	After
Change < -0.25	0.000	0.000	0.000	---	---
-0.25 <= Change < -0.20	0.000	0.000	0.000	---	---
-0.20 <= Change < -0.15	0.000	0.000	0.000	---	---
-0.15 <= Change < -0.10	0.001	0.001	0.001	0.73	0.63
-0.10 <= Change < -0.05	0.117	0.170	0.187	0.83	0.76
-0.05 <= Change < -0.02	0.352	0.282	0.287	0.88	0.85
-0.02 <= Change <= 0.02	0.352	0.274	0.270	0.97	0.97
0.02 < Change <= 0.05	0.040	0.091	0.092	1.09	1.12
0.05 < Change <= 0.10	0.051	0.087	0.082	1.17	1.24
0.10 < Change <= 0.15	0.044	0.047	0.043	1.25	1.38
0.15 < Change <= 0.20	0.027	0.025	0.021	1.33	1.50
0.20 < Change <= 0.25	0.009	0.011	0.009	1.43	1.66
0.25 < Change	0.008	0.011	0.009	1.62	1.94
Overall				0.97	0.97

* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

Testing Results - Countrywide Impact on Experience Mods Split Point of $15,000, Ratings Effective in 2008

Impact of Changing the Split Point to $15,000 for Intrastate Mods Effective in 2008*

Change in Mod	Percentage of			Average Mod	
	Risks	Payroll	Expected Losses	Before	After
Change < -0.25	0.000	0.000	0.000	---	---
-0.25 <= Change < -0.20	0.000	0.000	0.000	0.65	0.45
-0.20 <= Change < -0.15	0.006	0.011	0.012	0.77	0.61
-0.15 <= Change < -0.10	0.073	0.117	0.131	0.82	0.70
-0.10 <= Change < -0.05	0.258	0.241	0.254	0.87	0.80
-0.05 <= Change < -0.02	0.284	0.176	0.164	0.92	0.88
-0.02 <= Change <= 0.02	0.176	0.139	0.138	0.97	0.97
0.02 < Change <= 0.05	0.043	0.076	0.074	1.05	1.08
0.05 < Change <= 0.10	0.034	0.073	0.074	1.10	1.18
0.10 < Change <= 0.15	0.028	0.051	0.048	1.16	1.29
0.15 < Change <= 0.20	0.026	0.036	0.034	1.21	1.39
0.20 < Change <= 0.25	0.023	0.026	0.023	1.25	1.48
0.25 < Change	0.049	0.056	0.047	1.39	1.76
Overall				0.97	0.97

* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

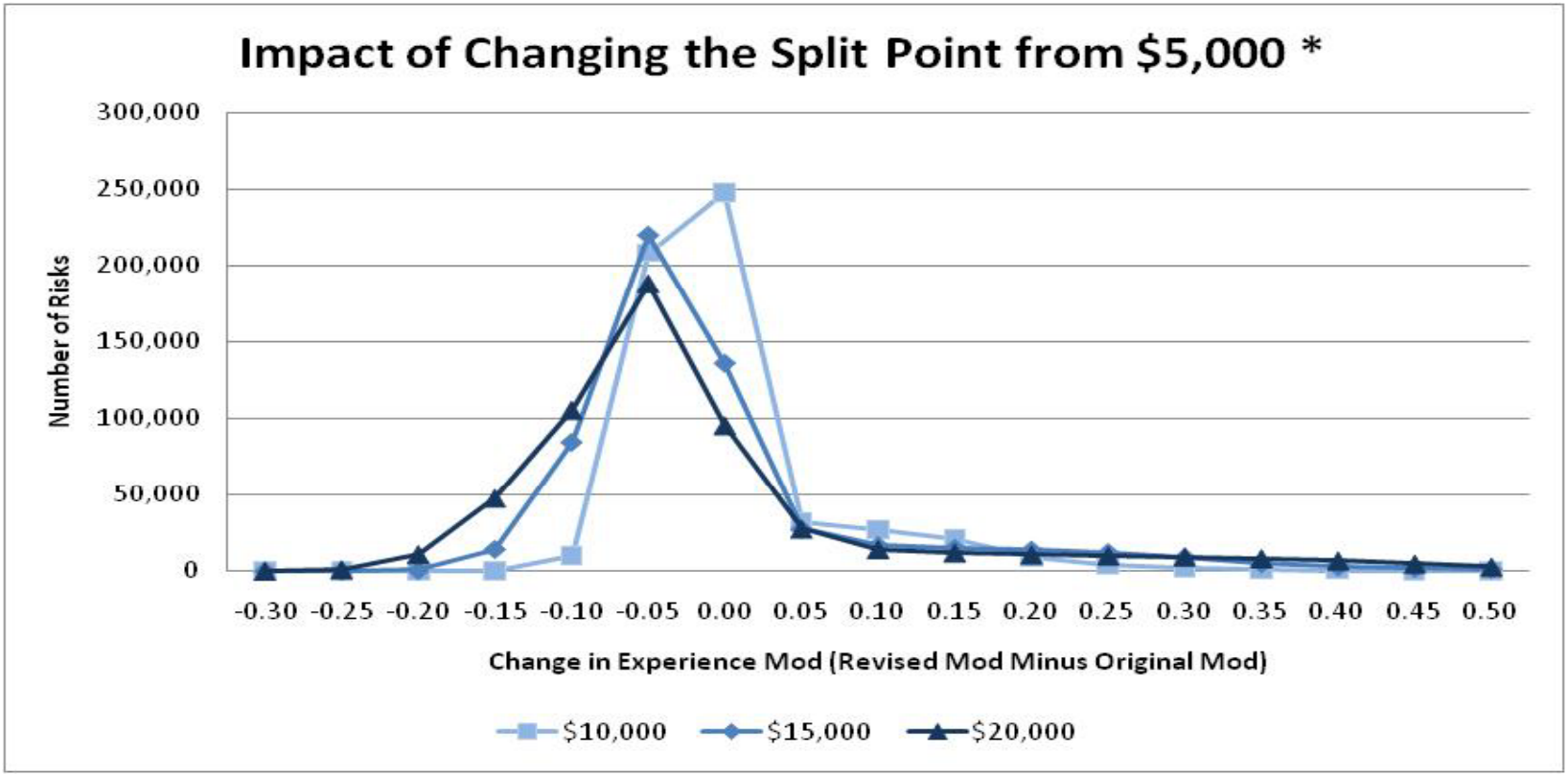
Testing Results - Countrywide Impact on Experience Mods Split Point of $20,000, Ratings Effective in 2008

Impact of Changing the Split Point to $20,000 for Intrastate Mods Effective in 2008*

Change in Mod	Percentage of			Average Mod	
	Risks	Payroll	Expected Losses	Before	After
Change < -0.25	0.000	0.000	0.000	0.72	0.47
-0.25 <= Change < -0.20	0.006	0.012	0.014	0.78	0.56
-0.20 <= Change < -0.15	0.047	0.079	0.093	0.82	0.65
-0.15 <= Change < -0.10	0.127	0.154	0.168	0.86	0.73
-0.10 <= Change < -0.05	0.265	0.200	0.199	0.89	0.82
-0.05 <= Change < -0.02	0.222	0.127	0.113	0.93	0.90
-0.02 <= Change <= 0.02	0.128	0.098	0.097	0.96	0.96
0.02 < Change <= 0.05	0.034	0.062	0.062	1.03	1.06
0.05 < Change <= 0.10	0.033	0.063	0.063	1.08	1.16
0.10 < Change <= 0.15	0.023	0.046	0.046	1.13	1.25
0.15 < Change <= 0.20	0.020	0.037	0.035	1.17	1.34
0.20 < Change <= 0.25	0.018	0.028	0.026	1.20	1.42
0.25 < Change	0.077	0.093	0.083	1.33	1.74
Overall				0.97	0.97

* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

Testing Results - Countrywide Impact on Experience Mods for Ratings Effective in 2008



* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

Testing Results - Countrywide Impact on Experience Mods Split Point of $10,000, Ratings Effective in 2009

Impact of Changing the Split Point to $10,000 for Intrastate Mods Effective in 2009*

Change in Mod	Percentage of			Average Mod	
	Risks	Payroll	Expected Losses	Before	After
Change < -0.25	0.000	0.000	0.000	---	---
-0.25 <= Change < -0.20	0.000	0.000	0.000	---	---
-0.20 <= Change < -0.15	0.000	0.000	0.000	---	---
-0.15 <= Change < -0.10	0.000	0.001	0.001	0.73	0.63
-0.10 <= Change < -0.05	0.111	0.167	0.184	0.83	0.76
-0.05 <= Change < -0.02	0.353	0.282	0.291	0.89	0.86
-0.02 <= Change <= 0.02	0.358	0.276	0.267	0.97	0.97
0.02 < Change <= 0.05	0.041	0.091	0.091	1.09	1.13
0.05 < Change <= 0.10	0.052	0.089	0.085	1.18	1.25
0.10 < Change <= 0.15	0.043	0.047	0.043	1.26	1.39
0.15 < Change <= 0.20	0.026	0.025	0.021	1.34	1.51
0.20 < Change <= 0.25	0.009	0.010	0.009	1.44	1.66
0.25 < Change	0.008	0.011	0.009	1.64	1.96
Overall				0.98	0.98

* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

Testing Results - Countrywide Impact on Experience Mods Split Point of $15,000, Ratings Effective in 2009

Impact of Changing the Split Point to $15,000 for Intrastate Mods Effective in 2009*

Change in Mod	Percentage of			Average Mod	
	Risks	Payroll	Expected Losses	Before	After
Change < -0.25	0.000	0.000	0.000	---	---
-0.25 <= Change < -0.20	0.000	0.000	0.000	0.72	0.52
-0.20 <= Change < -0.15	0.005	0.009	0.012	0.77	0.61
-0.15 <= Change < -0.10	0.070	0.116	0.130	0.82	0.70
-0.10 <= Change < -0.05	0.250	0.239	0.255	0.88	0.80
-0.05 <= Change < -0.02	0.295	0.180	0.168	0.92	0.89
-0.02 <= Change <= 0.02	0.178	0.140	0.137	0.97	0.97
0.02 < Change <= 0.05	0.042	0.071	0.070	1.06	1.09
0.05 < Change <= 0.10	0.034	0.075	0.075	1.11	1.19
0.10 < Change <= 0.15	0.029	0.052	0.050	1.17	1.30
0.15 < Change <= 0.20	0.026	0.037	0.034	1.22	1.39
0.20 < Change <= 0.25	0.023	0.026	0.024	1.26	1.49
0.25 < Change	0.047	0.055	0.046	1.40	1.77
Overall				0.98	0.98

* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

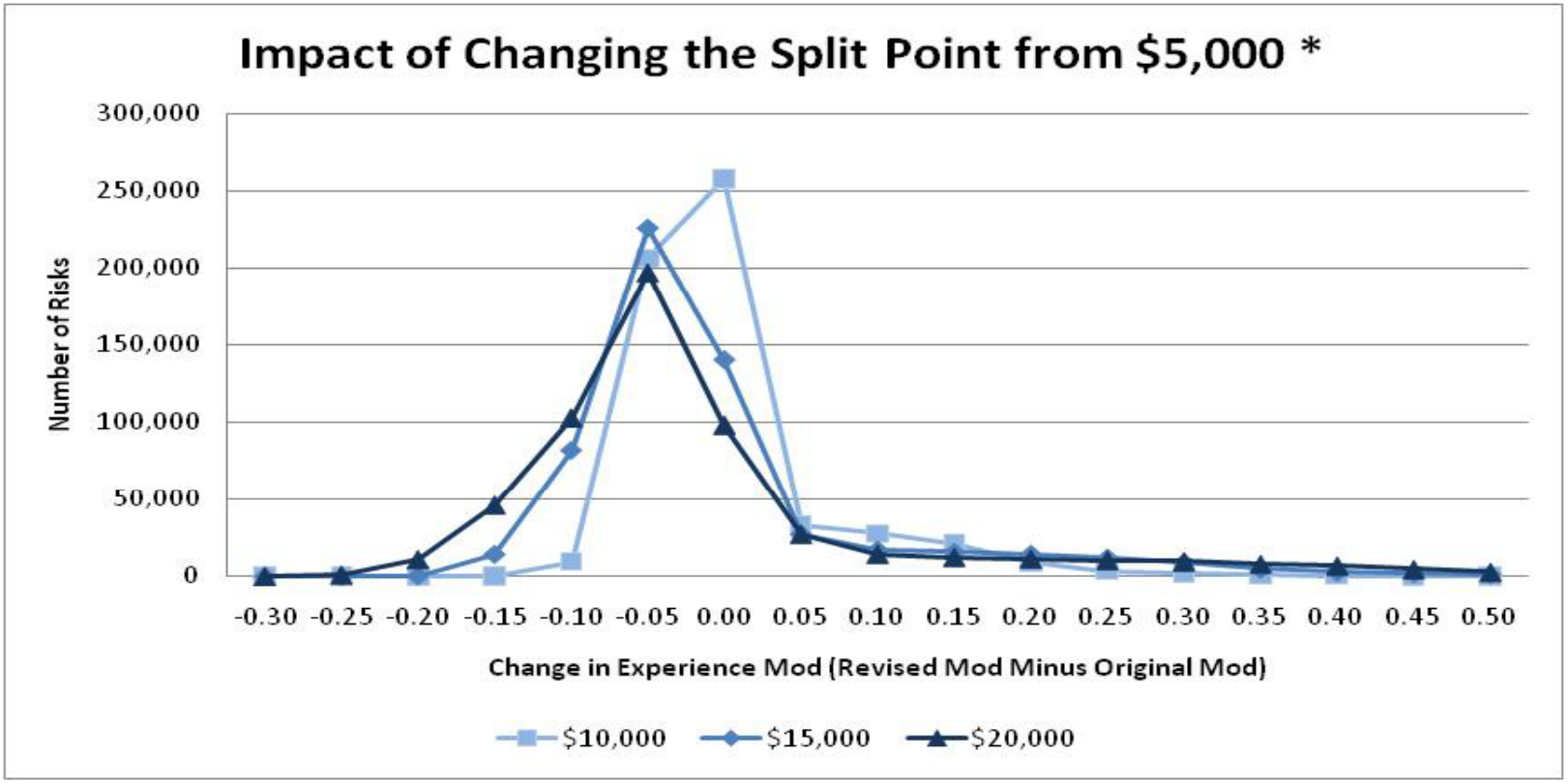
Testing Results - Countrywide Impact on Experience Mods Split Point of $20,000, Ratings Effective in 2009

Impact of Changing the Split Point to $20,000 for Intrastate Mods Effective in 2009*

Change in Mod	Percentage of			Average Mod	
	Risks	Payroll	Expected Losses	Before	After
Change < -0.25	0.000	0.000	0.000	0.73	0.47
-0.25 <= Change < -0.20	0.006	0.011	0.015	0.77	0.56
-0.20 <= Change < -0.15	0.046	0.081	0.093	0.82	0.65
-0.15 <= Change < -0.10	0.122	0.150	0.165	0.86	0.74
-0.10 <= Change < -0.05	0.262	0.200	0.200	0.90	0.82
-0.05 <= Change < -0.02	0.232	0.131	0.117	0.94	0.90
-0.02 <= Change <= 0.02	0.129	0.100	0.097	0.97	0.97
0.02 < Change <= 0.05	0.034	0.057	0.056	1.04	1.07
0.05 < Change <= 0.10	0.033	0.064	0.064	1.09	1.16
0.10 < Change <= 0.15	0.023	0.048	0.047	1.14	1.26
0.15 < Change <= 0.20	0.021	0.037	0.036	1.18	1.35
0.20 < Change <= 0.25	0.019	0.029	0.027	1.21	1.43
0.25 < Change	0.074	0.093	0.082	1.33	1.75
Overall				0.98	0.98

* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

Testing Results - Countrywide Impact on Experience Mods for Ratings Effective in 2009



* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

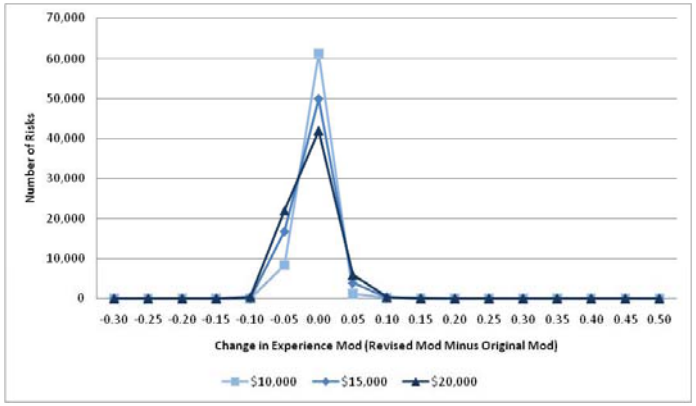
Observations on Countrywide Results

- No significant difference between 2008 and 2009.
- A greater split point increases the spread in mod changes.
- Risks with debit mods get larger debits. Risks with credit mods get larger credits.
- Increasing the split point functions as an increase in credibility for actual experience.

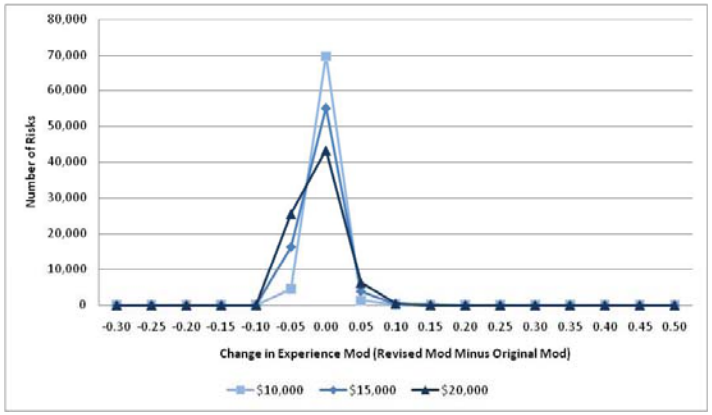
Testing Results - Change in Mods by Size of Risk

Intrastate Rated Risks With Expected Losses Between $2,000 and $4,000

Ratings Effective in 2008

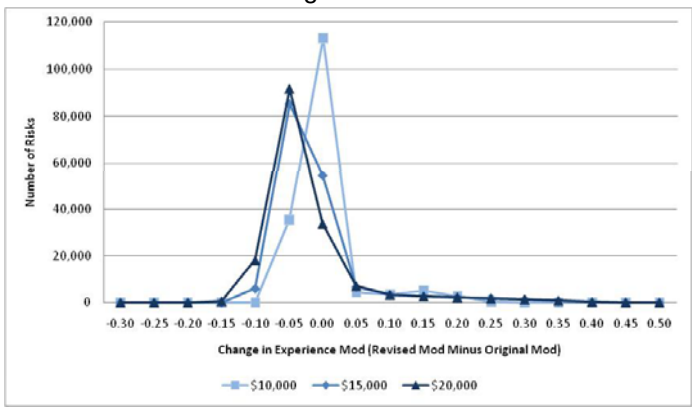


Rating Effective in 2009

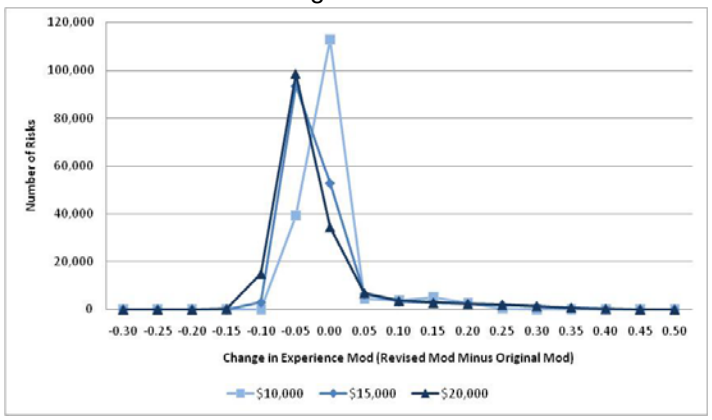


Intrastate Rated Risks With Expected Losses Between $4,000 and $8,000

Ratings Effective in 2008



Rating Effective in 2009

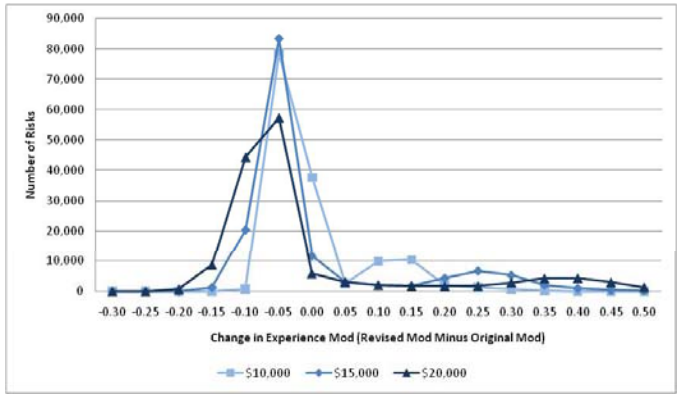


* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

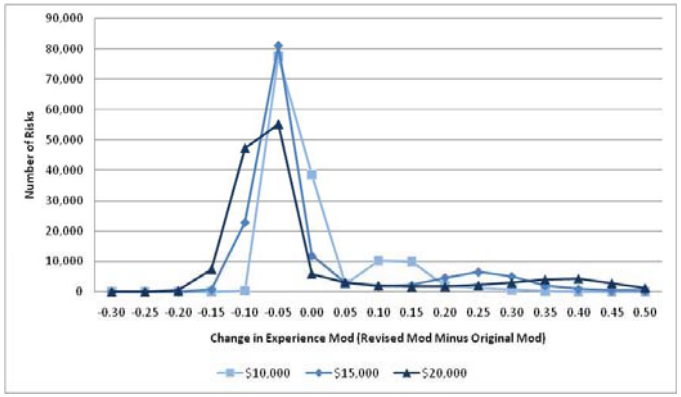
Testing Results - Change in Mods by Size of Risk

Intrastate Rated Risks With Expected Losses Between $8,000 and $16,000

Ratings Effective in 2008

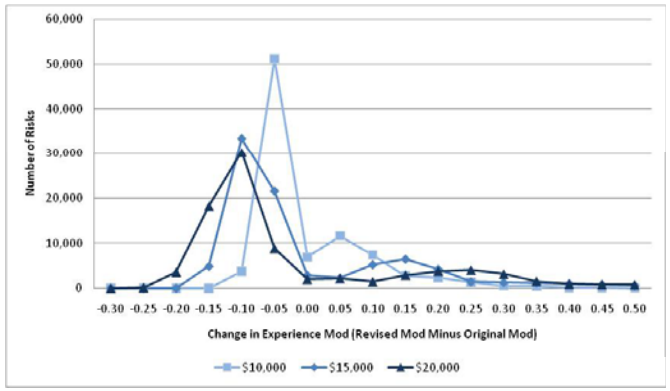


Rating Effective in 2009

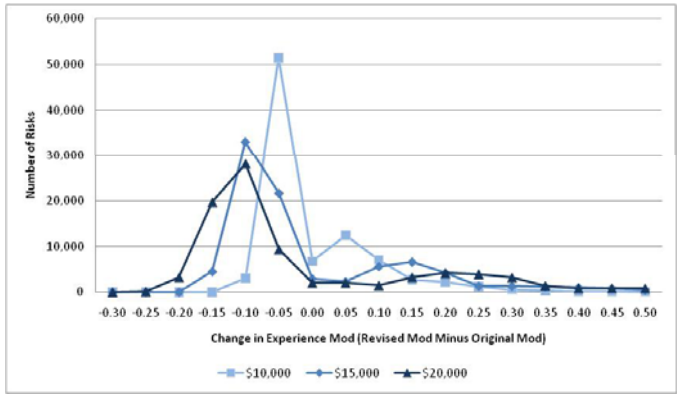


Intrastate Rated Risks With Expected Losses Between $16,000 and $32,000

Ratings Effective in 2008



Rating Effective in 2009

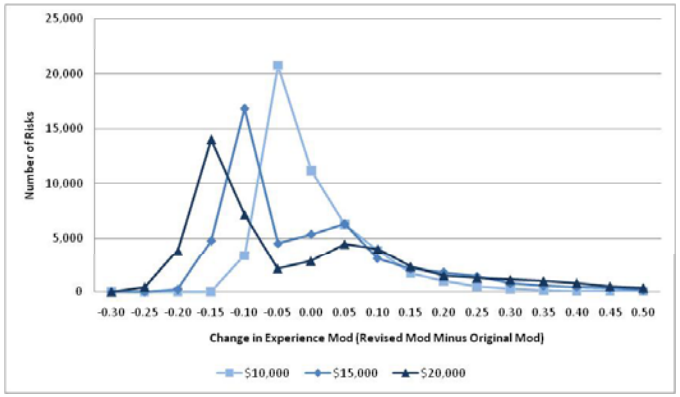


* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

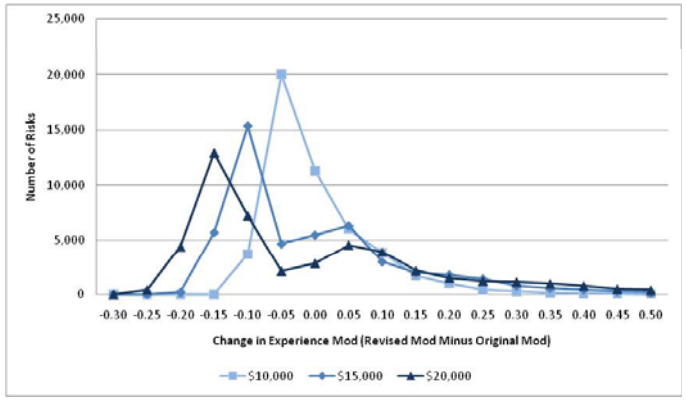
Testing Results - Change in Mods by Size of Risk

Intrastate Rated Risks With Expected Losses Between $32,000 and $64,000

Ratings Effective in 2008

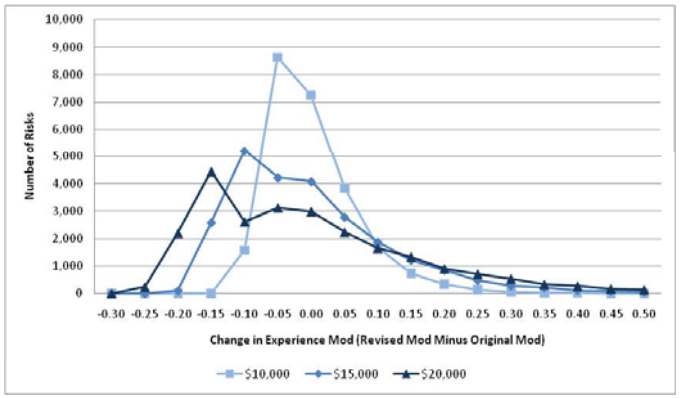


Rating Effective in 2009

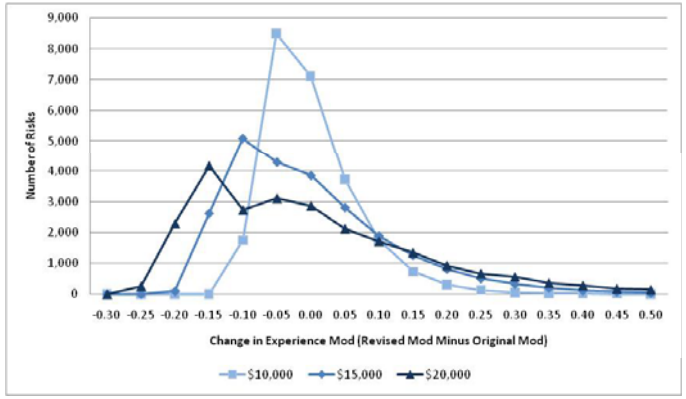


Intrastate Rated Risks With Expected Losses Between $64,000 and $128,000

Ratings Effective in 2008



Rating Effective in 2009

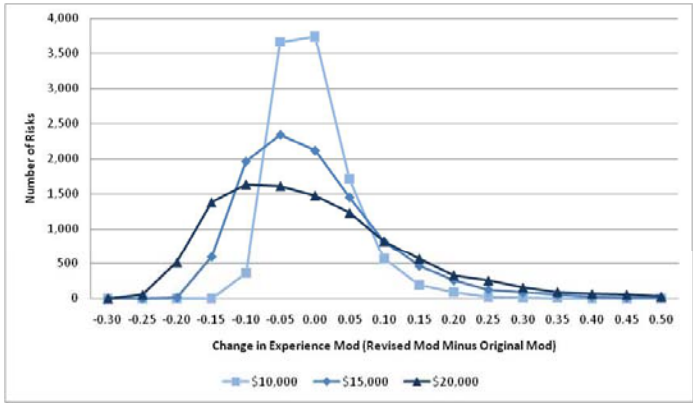


* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

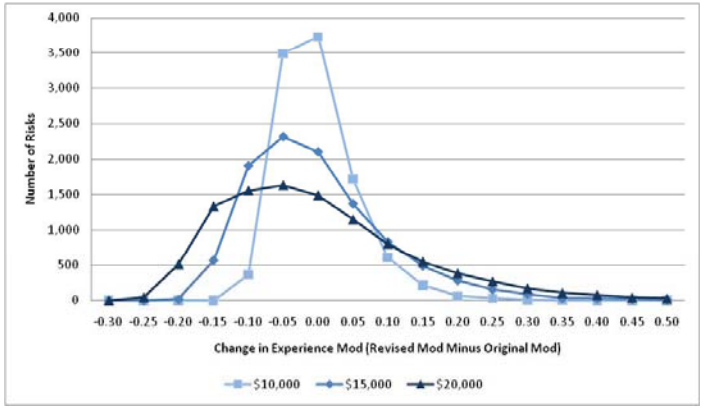
Testing Results - Change in Mods by Size of Risk

Intrastate Rated Risks With Expected Losses Between $128,000 and $256,000

Ratings Effective in 2008

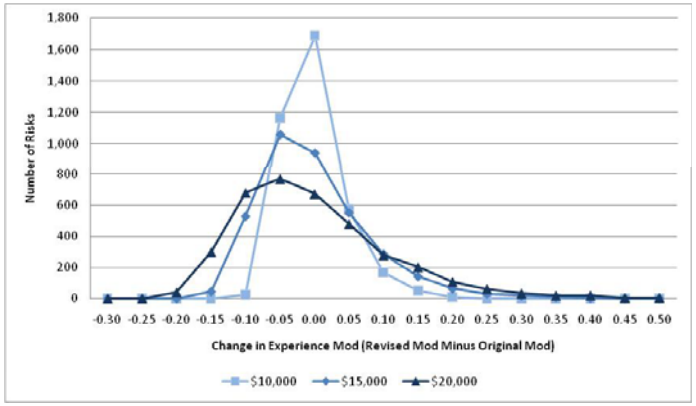


Rating Effective in 2009

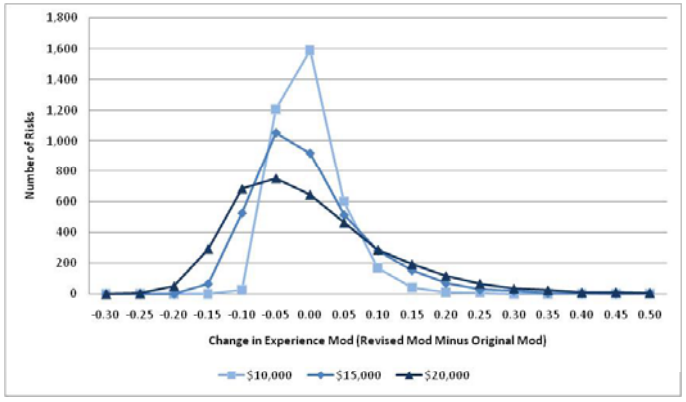


Intrastate Rated Risks With Expected Losses Between $256,000 and $512,000

Ratings Effective in 2008



Rating Effective in 2009

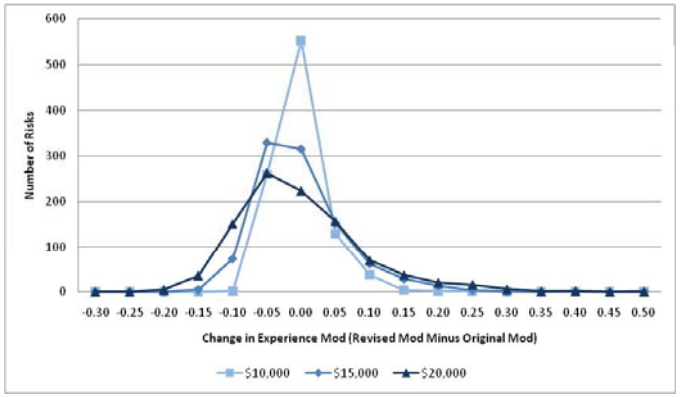


* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

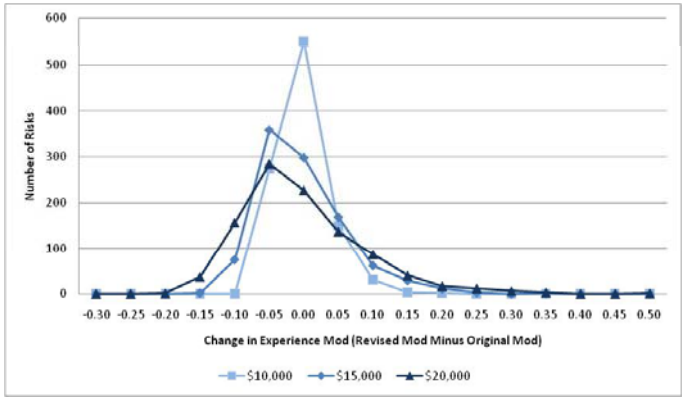
Testing Results - Change in Mods by Size of Risk

Intrastate Rated Risks With Expected Losses Between $512,000 and $1,024,000

Ratings Effective in 2008

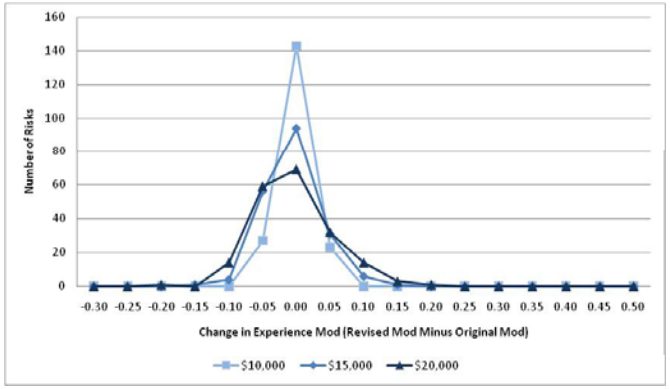


Rating Effective in 2009

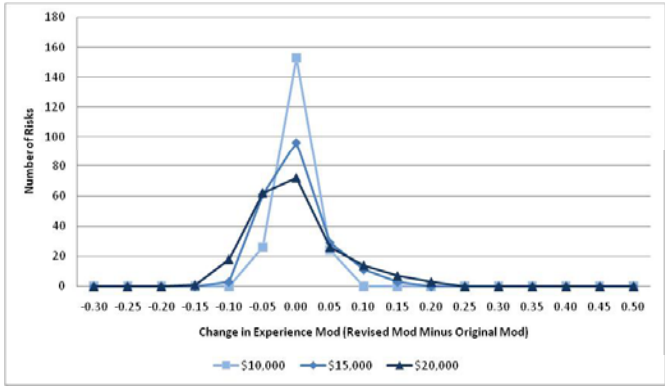


Intrastate Rated Risks With Expected Losses Between $1,024,000 and $2,048,000

Ratings Effective in 2008



Rating Effective in 2009



* Includes AL, AK, AZ, AR, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MS, MO, MT, NE, NV, NH, NM, OK, OR, RI, SC, SD, TN, UT, VT, and VA.

Observations on Results by Size of Risk

- Results by size look generally like the overall results.
- Larger risks have a greater impact.

Summary Results

Percentage of Intrastate Rated Risks

Mod Effective Year	Alternative Split Point	A Mod Decrease of More Than 0.10	A Mod Change of Less Than 0.10	A Mod Increase of More Than 0.10
2008	$10,000	0.1%	91.2%	8.8%
	$15,000	7.9%	79.5%	12.6%
	$20,000	18.0%	68.2%	13.8%
2009	$10,000	0.0%	91.5%	8.6%
	$15,000	7.5%	79.9%	12.5%
	$20,000	17.4%	69.0%	13.7%

Percentage of Intrastate Rated Payroll

Mod Effective Year	Alternative Split Point	A Mod Decrease of More Than 0.10	A Mod Change of Less Than 0.10	A Mod Increase of More Than 0.10
2008	$10,000	0.1%	90.4%	9.4%
	$15,000	12.8%	70.5%	16.9%
	$20,000	24.5%	55.0%	20.4%
2009	$10,000	0.1%	90.5%	9.3%
	$15,000	12.5%	70.5%	17.0%
	$20,000	24.2%	55.2%	20.7%

Discussion

- Results are as expected
  - A larger split point increases credibility for actual losses.
  - Larger risks have a greater impact.
- More than two thirds of all risks will see their mod change by less than 0.10 for any of alternative split points reviewed.

National Council on Compensation Insurance, Inc.

Split Point Indexing and D-Ratios

Chris Poteet

Individual Risk Rating Working Group
November 3, 2010

Overview

- Background
- Split Point Indexing
- D-ratio
- Example Increase and Indexation of Split Point
- Discussion

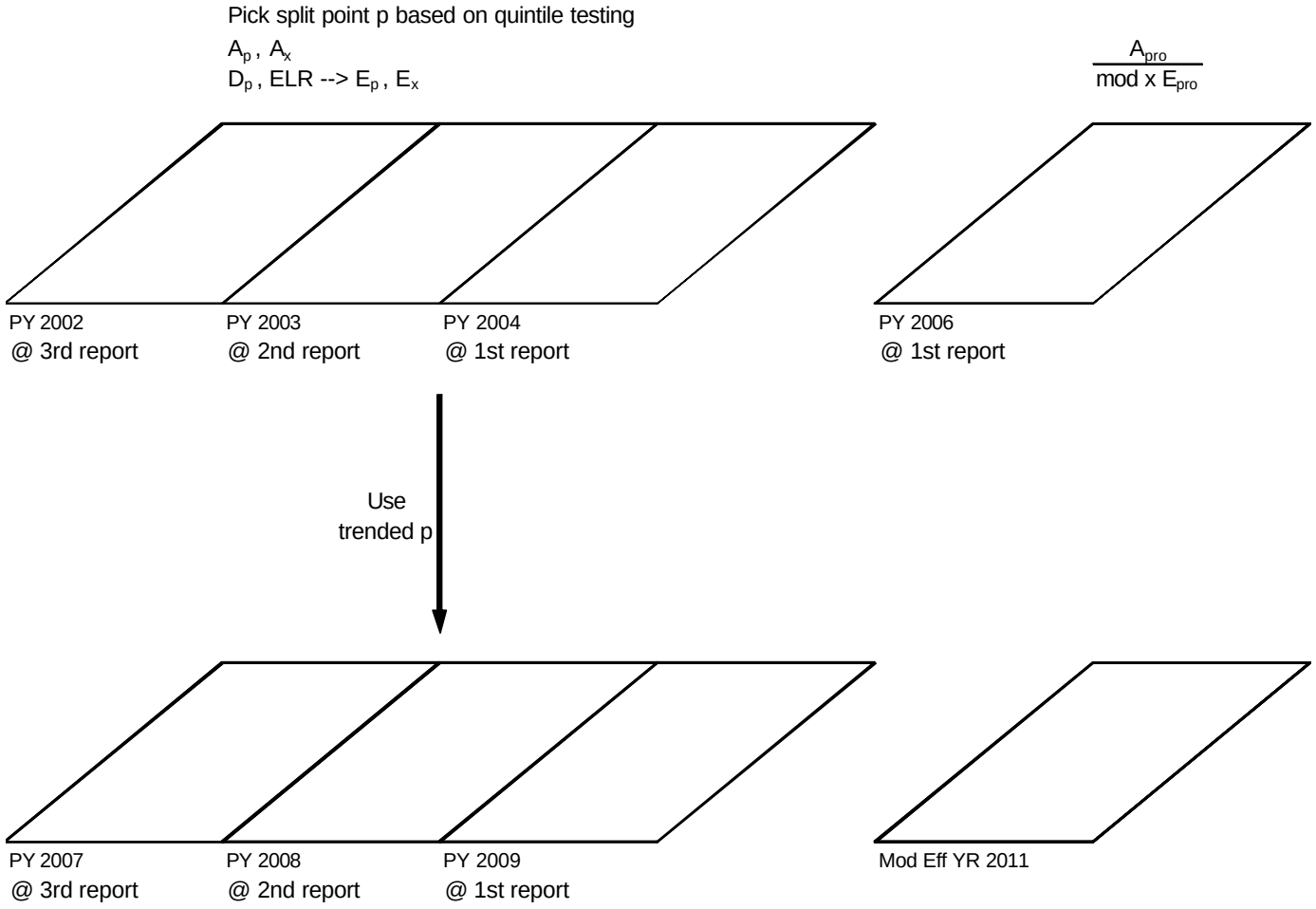
Background

- As the split point has stayed at 5000, D-ratios have decreased over time, understating the credibility of experience.
- Increasing the split point will have an initial effect of increasing D-ratios.
- In the future, if split points are updated regularly for trend, D-ratios should not change much over time.

Split Point Indexing

- Quintile testing was performed on mods effective in 2006. These mods are based on experience from policy years 2002 to 2004 (midpoint 1/1/2004). This resulted in a range of split point indications which produced an equitable plan.
- Mods effective in 2011 are based on experience from policy years 2007 to 2009 (midpoint 1/1/2009).
- The split point that works well for quintile testing should be trended from 1/1/2004 to 1/1/2009 to get a split point that is appropriate for the experience period used to determine a mod effective in 2011.

Split Point Indexing



Split Point Indexing

- The indicated split point could be updated annually (or as needed) based on changes in the countrywide average cost per case at the same time that the ELG trend is selected.
- Throughout the year, NCCI calculates D-ratios (for a predetermined split point) concurrent with ELRs and loss costs.
- The split point used for each state should be consistent with the D-ratio used.

Split Point Indexing

- If there is not an annual loss cost filing in a state then D-ratios may be based on an older split point.
- Independent bureau states may not determine D-ratios based on a revised split point at the same time as NCCI.
- At any point in time all states might not have the same split point because filing effective dates are not all the same.

Old Quintile Test Statistic =B*/ A*

A* = variance of un-modified loss ratios without bootstrapping
B* = variance of modified loss ratios without bootstrapping

PY 2002

		Risk Size			
Split Point	Countrywide	1000-10,000	10,000-100,000	100,000-1M	1M-10M
2500	0.064	0.258	0.097	0.057	0.034
3750	0.037	0.163	0.071	0.054	0.026
5000	0.021	0.107	0.032	0.043	0.015
7500	0.007	0.034	0.006	0.032	0.019
10000	0.007	0.027	0.011	0.021	0.013
15000	0.043	0.109	0.095	0.020	0.009
20000	0.093	0.218	0.271	0.022	0.014
25000	0.191	0.415	0.524	0.035	0.015
50000	1.027	2.211	3.614	0.137	0.066

PY 2006

		Risk Size			
Split Point	Countrywide	1000-10,000	10,000-100,000	100,000-1M	1M-10M
2500	0.167	0.296	0.134	0.080	0.231
3750	0.098	0.211	0.105	0.078	0.224
5000	0.081	0.109	0.071	0.064	0.205
7500	0.082	0.235	0.027	0.048	0.176
10000	0.026	0.236	0.014	0.037	0.179
15000	0.023	0.352	0.075	0.020	0.179
20000	0.060	0.628	0.149	0.013	0.176
25000	0.120	0.885	0.229	0.008	0.150
50000	0.870	3.649	1.527	0.068	0.180

New Quintile Test Statistic = $\text{sign}(A-B)*|A - B|^{0.5}$

A = variance of un-modified loss ratios with bootstrapping
B = variance of modified loss ratios with bootstrapping

PY 2002

		Risk Size			
Split Point	Countrywide	1000-10,000	10,000-100,000	100,000-1M	1M-10M
2500	0.218	0.239	0.241	0.275	0.273
3750	0.225	0.246	0.252	0.281	0.271
5000	0.234	0.252	0.255	0.279	0.264
7500	0.241	0.253	0.260	0.279	0.271
10000	0.247	0.241	0.263	0.282	0.272
15000	0.240	0.228	0.249	0.282	0.269
20000	0.235	0.205	0.223	0.282	0.264
25000	0.221	0.166	0.173	0.278	0.266
50000	-0.052	-0.212	-0.395	0.259	0.252

PY 2006

		Risk Size			
Split Point	Countrywide	1000-10,000	10,000-100,000	100,000-1M	1M-10M
2500	0.181	0.157	0.231	0.299	0.225
3750	0.187	0.170	0.237	0.304	0.229
5000	0.192	0.177	0.238	0.307	0.231
7500	0.197	0.167	0.248	0.306	0.230
10000	0.206	0.159	0.251	0.308	0.226
15000	0.203	0.126	0.253	0.308	0.230
20000	0.198	0.078	0.235	0.309	0.227
25000	0.190	-0.034	0.218	0.306	0.224
50000	0.063	-0.239	-0.173	0.290	0.227

Example Increase and Indexation of Split Point

- Eff Yr 2006 test indicates split point = 12,500
- 3/26/04 countrywide average cost per case = 7,553
- 3/24/06 countrywide average cost per case = 8,452
- Trend split point from 3/24/06 to 1/1/2009 using selected ELG annual trend 6.7% (trend factor 1.20)
- Initial trended indication
  - 12,500 x (8,452 / 7,553) x 1.20 = 16,785

Example Increase and Indexation of Split Point

	Base Tested Year		
Eff Yr	**1992**	**2002**	**2006**
1992	5,000		
2002	7,684	9,000	
2006	10,905	12,773	12,500
2011	14,644	17,152	16,785

Example Increase and Indexation of Split Point

Eff yr	Indicated	Tempered1	Tempered2
2011	16,785	5,000	5,000
2012	17,910	5,000	5,000
2013	19,110	10,000	15,000
2014	20,390	13,000	17,000
2015	21,756	16,000	19,000
2016	23,214	19,000	21,000
2017	24,769	22,000	23,000
2018	26,428	25,000	25,000
2019	28,199	28,000	27,000
2020	30,089	30,089	29,000
Indication assumes continued annual trend of 6.7%			
Tempered1 increases 3,000 a year after 2013			
Tempered2 increases 2,000 a year after 2013			

Example Increase and Indexation of Split Point

- Following year's trended indication
  - 12,500 x (3/24/07 average cost per case / 7,553) x selected ELG trend from 3/24/07 to 1/1/2010
- Tempered annual steps
  - Increase each year until caught up
- Indication should be stable

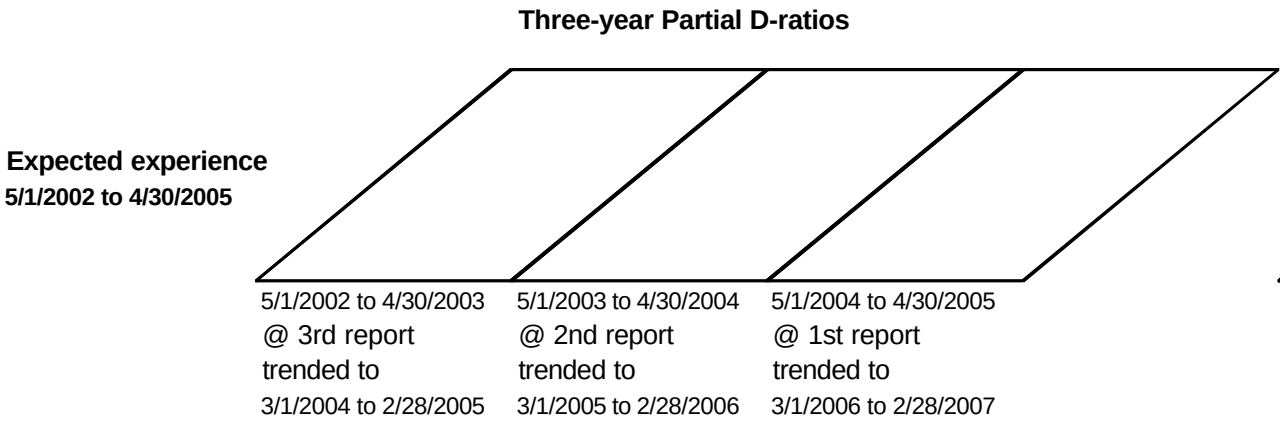
Discussion

Appendix

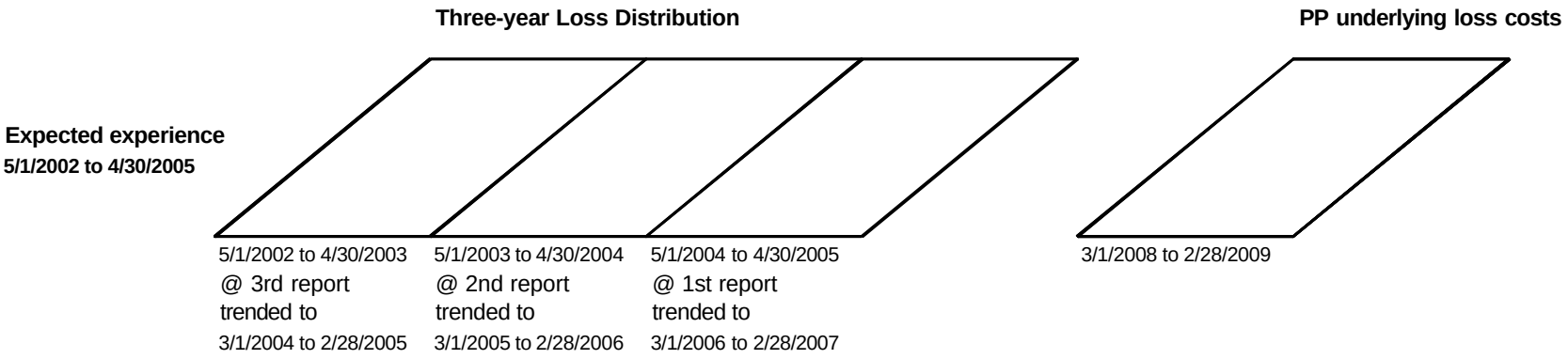
D-ratio

- The losses for the latest three years of WCSP data are trended to the experience rating period and then limited to the state per-claim accident limit. These losses will be used to determine indemnity and medical D-ratios by hazard group called "Three-year Partial D-ratios" under new class ratemaking procedures.
- Under previous class ratemaking procedures, partial D-ratios were calculated by serious, non-serious and medical; and did not vary by hazard group.

D-ratio



D-ratio



D-ratio

Class D-ratio =

Hazard Group Three-year Partial D-ratios

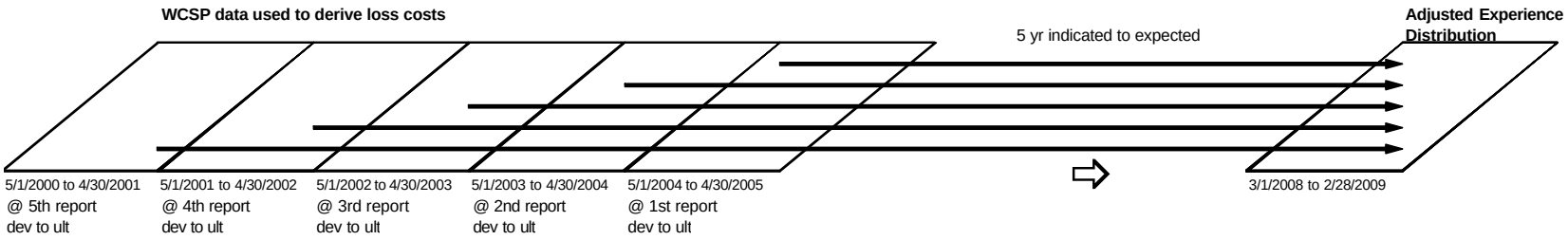
X Class Indemnity, Medical pure premium weights

X Three-year Loss Distribution /
Adjusted Experience Distribution

D-ratio

- Three-year losses will also be used to determine a loss distribution by hazard group called “Three-year Loss Distribution”.
- Losses for all five years of WCSP data are brought to the level of the pure premiums underlying the proposed loss costs. These losses will be used to determine a loss distribution by hazard group called “Adjusted Experience Distribution”.

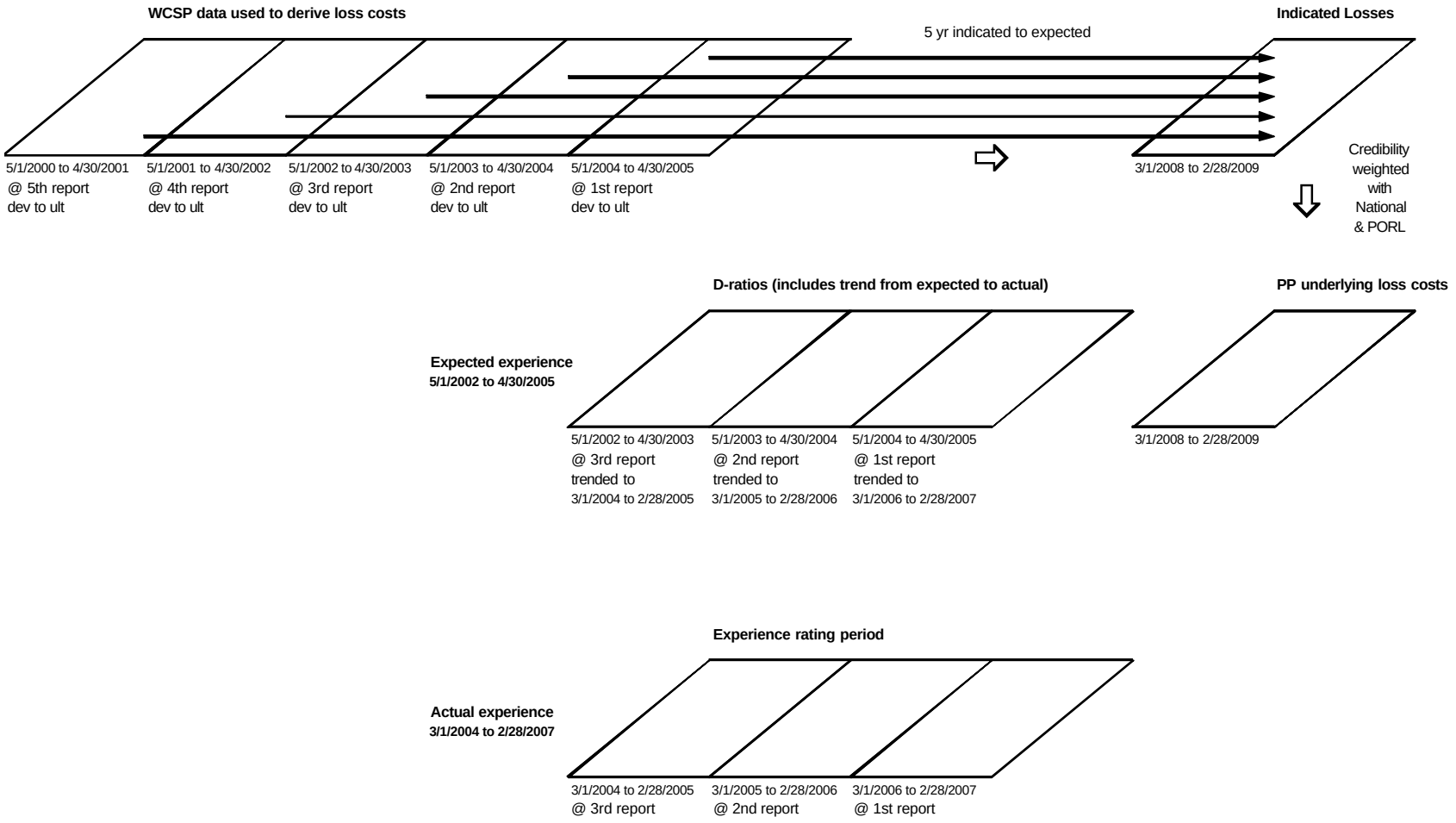
D-ratio



D-ratio

- D-ratio Factors = Three-year Partial D-ratios X Three-year Loss Distribution / Adjusted Experience Distribution
- A Class D-ratio is calculated by weighting the hazard group D-ratio Factors using the pure premiums underlying the proposed loss costs as weights.

D-ratio



Reference

- The example used in this presentation is from the same filing (Alabama 3/1/2008) as referenced in the "Review of ELR and D-ratio Calculation Methodology and Details" in the previous Individual Risk Rating Working Group Agenda April 10, 2008. The reader can find additional detail there.
- The corresponding timeline of the Loss Cost and Mod calculations can be found in the "Rate Level and the Mod calculation" in the previous Individual Risk Rating Working Group Agenda August 13, 2008.

National Council on Compensation Insurance, Inc.

Experience Rating Plan Review Preliminary Summary and Recommendations

Jon Evans

Individual Risk Rating Working Group
November 3, 2010

Overview

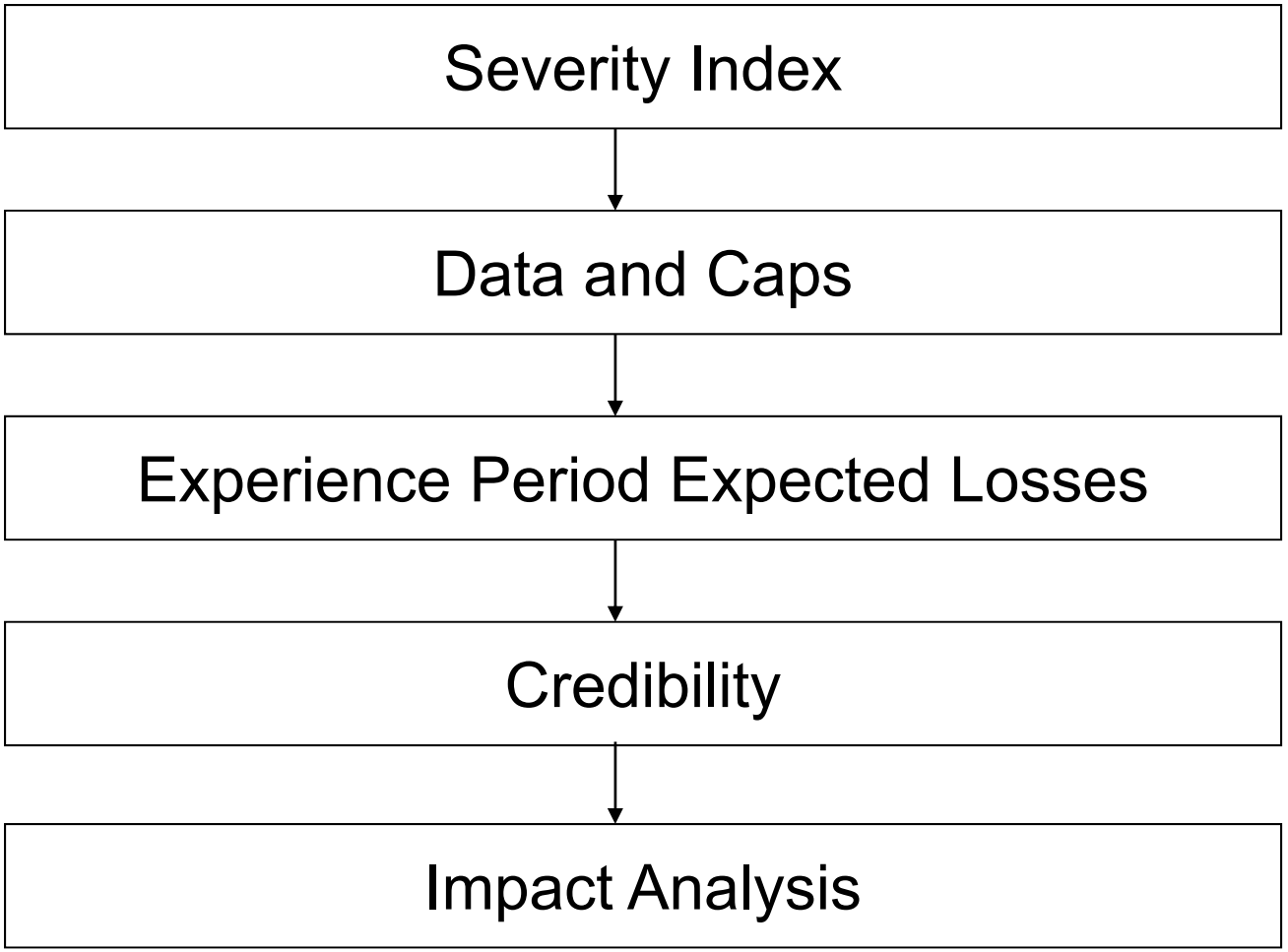
- Introduction
- Tier Structure And Scope Of Review
- Meetings And Presentations
- Changes Made To Support New Class Ratemaking Procedures
- Key Observations And Results
- Recommended Action Items
- Impact Analysis For Action Items
- Implementation Issues
- Discussion

Background

NCCI is at the end of an extensive review of the Experience Rating Plan.

The presentation covers key observations and NCCI Staff's recommended action items for the Experience Rating Plan coming out of the review.

Tier Structure Of Review



Tier Structure Of Review

Tier #	Category	Components
1	Severity Index	G value/SAL/SRP/SACC
2	Data and Caps	per claim limit, multiple claim limit, mod cap, medical only exclusion, experience period, eligibility threshold, etc.
3	Expected Loss	ELR (and ELAF), D-ratio
4	Credibility	W, B, split point
5	Impact Testing	mod values, quintile tests

Changes Made To Support New Class Ratemaking Procedures

Simultaneous with the review of the Experience Rating Plan, NCCI implemented new procedures for class ratemaking. Two aspects of the new procedures required adjustments to the Experience Rating Plan:

1. Partial pure premiums for non-serious and serious indemnity were consolidated into a single indemnity partial pure premium.

2. Limits on individual losses for class ratemaking were set to 500k for all states, with 500k limited loss development factors. An ELF based excess loss provision by Hazard Group replaced the previous actual excess provisions by Industry Group.

Changes Made To Support New Class Ratemaking Procedures

NCCI developed modifications to the D-ratio and ELAF calculations to maintain consistency with class ratemaking

ELAF

- The switch from unlimited to 500k limited loss development factors in class ratemaking left an excess layer above 500k where the ELAF, based on undeveloped losses, would no longer be appropriate.
- ELAF excess ratio curves were refit with more recent data.

Changes Made To Support New Class Ratemaking Procedures

ELAF (continued)

- An algorithm was developed for the ELR calculation to sequentially:
  1. Remove the class ratemaking expected loss provision excess of 500k.
  2. Undevelop losses on a 500k limited basis.
  3. Remove the undeveloped layer between the loss limit and 500k using the updated ELAF curves.

Changes Made To Support New Class Ratemaking Procedures

D-ratio

- The consolidation of serious and non-serious indemnity partial pure premium components necessitated the consolidation of the corresponding partial D-ratios.
- This consolidation also reduced responsiveness of the D-ratio to variations in claim sizes by class codes.
- To compensate partial D-ratios were varied by Hazard Group.
- A smoothing and monotonicity adjustment for the raw data indicated partial D-ratios was developed to ensure a reasonable pattern of D-ratios across HGs.

Key Observations And Results

Severity Index

- The severity index is used to update W and B values, the individual loss limit, and the mod cap.
- The current index is based on an undeveloped average of all claims, including medical only claims.
- Several alternatives were explored. While Staff is not currently recommending a change to an index based on Lost Time average severity, it may be worth further exploration in the future.

Severity Index

- Performance testing across Hazard Groups indicated credibility in general should be increased but that an index differential by HG was unnecessary.
- The severity index appears in several different forms:
  - State Average Claim Cost (SACC)
  - State Accident Limit (SAL)
  - State Reference Point (SRP)
  - G-value
- These different values are all proportional (aside from rounding).
- It is recommended that the nomenclature for these values be consolidated to only refer to the SACC.

Loss Limits

- The loss limit is currently set at 25 times the SACC.
- No credibility is given to actual losses above the loss limit.
- Impact analysis was performed for the possibility of raising the loss limit to 500k.
- The increase is not recommended as it would increase the impact of large claims for small risks without materially improving overall performance.

Mod Cap

- The mod cap provides a buffer against unusual situations that are not moderated by the loss limit or split point, such as many claims for a small risk.
- Quintile testing and lost time claim experience testing indicated that:
  - Loss experience is predictive for small risks.
  - The mod cap for small risks was too low to capture this useful information.
- The current mod cap formula is not entirely a function of experience period expected claim counts.
- An alternative mod cap formula is recommended.

State Exceptions

- Various state exceptions for Experience Rating were reviewed.
- It is actuarially warranted to adjust ELRs and D-ratios to account for loss reporting net of deductibles.
- NCCI has previously filed such an adjustment (DERF), and the filing was not approved in all the net reporting states.
- The review of state exceptions resulted in NCCI Staff recommending no experience rating changes.

Class Exceptions

Various state exceptions for Class Rating that affect the Experience Rating Plan were reviewed.

- Maritime/FELA classes were addressed in an August 2010 presentation to Actuarial Committee.

- Foundry codes have been pended for future review.

ELR, ELAF, and D-Ratio Calculations

- Calculations for ELRs, ELAFs and D-ratios were extensively outlined and reviewed.
- Aside from changes necessitated by recent changes in class ratemaking no recommendations from NCCI Staff for changes in the calculations resulted from the review.

Weights and Ballasts

- Weight and Ballast values determine the primary and excess credibility, and their performance is essentially synonymous with performance testing of the Experience Rating Plan.
- Extensive quintile testing was performed on various categories of rated risks, such as risk size ranges, Hazard Groups, etc.
- A bootstrap version of the quintile test was developed to visually illustrate the credibility of the test itself; particularly important when categories of risks containing lower volumes of data were tested.

Weights and Ballasts

- Quintile tests were generally very good and showed that the mod greatly improved ratemaking equity for virtually all categories tested.
- Quintile tests in recent years did show a slight, but growing over time, positive slope.
- Positive slope is an indication that credibility should be increased.
- NCCI Staff explored alternative statistical models for fitting and testing W and B values for individual size ranges of risks.

Weights and Ballasts

- It became apparent that statistical models to replace the current parameterization underlying W and B values and the quintile test based fitting/testing would tend to be very complicated, yield unstable credibility indications, involve tremendous amounts of analytical work, and ultimately be unlikely to lead to a meaningful improvement.
- Simultaneously, it became apparent that effective credibility in the plan had decreased over time since the split point had remained fixed during a long period of large increases in severity.
- An additional consideration was that the impact of recent changes in class ratemaking would not be present in data used to fit W and B values for several years. It was not clear that even a complicated adjustment to currently available data could account for this impact.

Weights and Ballasts

- Testing of higher split points with the current W and B values removed the positive slope.
- The review did not result in a recommendation from NCCI Staff to change the underlying parameterization of the current W and B values.
- NCCI Staff recommended that the split point be significantly increased.
- For simplicity and better consistency with the expected claim count basis of the underlying parameterization, state level W and B values should be replaced with their corresponding countrywide Zp and Zx tables.

Split Point

- In principle the split point should be adjusted for severity changes over time, just as the loss limit and W and B values are.
- The split point has remained fixed for many years at 5000.
- It became apparent that keeping the split point constant during an extended period, when average severities more than doubled, was the source of the positive slopes appearing in recent quintile tests.
- Testing of alternative split points adjusted for changes in the severity index removed the slope.

Eligibility Thresholds

- The eligibility thresholds were set in the 1980s to a level approximately equivalent to 10 employees.
- Very small risks are overwhelmingly claim free most of the time.
- A simplified lost time claim count based experience rating formula for small risks was tested. However, NCCI Staff did not recommend this due to concerns that the NCCI Experience Rating Plan was not appropriate for the very low claim frequency of very small risks.

Eligibility Thresholds

- NCCI has evaluated several possibilities for an increase in the threshold based on expected claim counts.
  - For example, one possibility uses the State Average Claim Cost (SACC) as the amount for the minimum annual subject premium. This would imply 1.0 expected claim counts in the experience period and approximately double the current thresholds.
- Consideration is also being given to subsequent indexation of the eligibility.
- NCCI will make a final decision on the eligibility threshold in early 2011.

NCCI Staff's Recommended Action Items

- Increase the split point with subsequent routine indexation.
- Increase the eligibility threshold, possibly with subsequent routine indexation.
- Change the mod cap formula.
- Replace state specific W and B tables with corresponding countrywide Zp and Zx tables.
- Consolidate severity index nomenclature into reference to the state average claim cost (SACC).

Split Point Action Item

- The split point should be increased to approximately 15k.
- Subsequent to reaching the 15k level the split point should be increased based on indications from the 3rd report countrywide average claim cost index.
- The 15k level may not be reached all at once.
  - For example, for the first filing effective year the split point may be raised to 10k and then allowed to subsequently increase in increments of 3k.

Eligibility Threshold Action Item

- The eligibility thresholds should be increased based on an expected claim count standard.
  - In the 1st Quarter of 2011 NCCI will decide on the specific standard.
- Consideration should be given to automatically adjusting the eligibility thresholds based on a severity index, subsequent to the initial increase.

Mod Cap Action Item

The current mod cap formula should be replaced with a similar alternative formula:

$$\text{Current Mod Cap} = 1 + 0.00005(G + 2)\left(\frac{E}{G}\right)$$

This alternative was later superseded by the filed formula

$$\text{Alternative Mod Cap} = 1.20 + 0.0003\left(\frac{E}{G}\right)$$

E = Experience Period Expected Loss

G ≈ SACC / 1,000

Countrywide Zp and Zx Action Item

- Statewide W and B tables by experience period expected loss (E) should be replaced with countrywide Zp and Zx tables in terms of E / SACC.
- Zp and Zx values for interstate risks should be referenced based on the overall sum of the ratios E / SACC across states.
- In the instances where Zp and Zx tables differ between states, such as Texas and states that have not approved ERA, Zp and Zx should be calculated for each of the corresponding tables and weighted together based on proportions of E corresponding to the respective tables.

Severity Index Consolidation Action Item

The nomenclature for the severity index (SACC, SRP, SAL, and G-value) should all be consolidated to refer only to the State Average Claim Cost (SACC).

Impact Analysis For Action Items

For the recommended action items the general impacts will be:

- Split Point – Mods will be more sensitive to experience, and modified pure loss ratios will equalize between high and low mod risks. In most instances high mods will be higher than for the current split point and the very lowest mods will be lower. (see IRRWG-10-ER-02 “Some Impact Analysis of Higher Split Points” in August 17, 2010 IRRWG Agenda)
- Eligibility Threshold – Approximately 30% of intrastate risks currently rated (or 26% of all currently rated risks) will no longer be eligible for experience rating.

Impact Analysis For Action Items

- Mod Cap – The total number of risks hitting the mod cap will decrease from over 2% to about 1.5%, under the current split point and eligibility threshold. The recommended mod cap will have a minimum of 1.20 and rarely be below 1.30 before the eligibility is raised, and rarely below 1.50 after the eligibility is raised, for small risks. However, for medium and large risks the cap will be lower than the current formula.
- Countrywide Zp and Zx – Mods will rarely change beyond rounding.
- Consolidation of Severity Index – Mods will rarely change beyond rounding.

Implementation Issues

Action items will require that NCCI:

- Change to production computer systems that apply the methodology.
- Change to computer databases that store and manage the information.
- File with state regulators.
- Change to filed manuals.
- Communicate to system stakeholders.

Discussion

National Council on Compensation Insurance, Inc.

Roy Wood
State Relations Executive
Regulatory Service Division

January 26, 2012

John M. Huff, Director
Missouri DIFP
P.O. Box 690
Jefferson City, MO 65102-0690

Attn: Gail Flannery
Consulting Actuary
AMI Risk Consultants, Inc.

RE: Item E-1402—Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification Formula
SERFF Tracking Number: NCCI-127336056

Dear Ms. Flannery:

We are in receipt of your additional questions (numbers 11 through 21) regarding the above noted filing, and offer the following responses.

Question 11:
Why are large deductible policies excluded from exhibits such as Informational Exhibits 5 & 6?

Response 11:
They were excluded for several reasons, including the following:

- Large deductible policies are excluded from financial call data and from the determination of the overall aggregate filing indication.
- The final charged premium on large deductible policies is significantly different than the manual premium charge (perhaps only 20% of the manual charge) and the impact that the experience rating mod has on the final charged premium may be different than it is for other (non-deductible) policies.
- There are very few intrastate policies written on a large deductible policy.
- Their treatment in the ER Plan varies across states.

Question 12:
According to Response #10 there are 23,043 Missouri risks that are intrastate experience rated among mods effective 6/1/11 to 5/31/12. How many Missouri risks are:

- Interstate experience rated?
- Not subject to experience rating?

Can you also provide the total payroll for each of the three groups?

11430 Gravois Road • Suite 310 • St. Louis, Missouri 63126
Telephone: 314-843-4001 • Fax: 314-842-3188 • E-mail: Roy_Wood@NCCI.com

Response 12:
The following estimates are based on data excluding large deductibles. Expected losses are provided as an indication of the volume of business rather than payroll as that is not readily available.

- The 23K intrastate risks represent approximately 48% of expected loss volume.
- There are approximately 16K interstate risks representing approximately 42% of expected loss volume.
- There are approximately 40K non-rated risks representing approximately 10% of expected loss volume.

Question 13:
Could the "Exhibit for Response 9" previously provided, please be sent in Excel? How were the 50 sample risks selected? Could we have the complete list instead of just a sample?

Response 13:
The Exhibit for Response 9 is being provided in Excel. The 50 sample risks were randomly chosen, they happened to be the first 50 risks in the spreadsheet.

Question 14:
What does bootstrap sampling mean? Can you please describe the sampling process that was used?

Response 14:
The entire set of observations (465,639) was sampled **with replacement**. The size of the sample was set equal to the size of the entire population. Thus, each sample contained 465,639 observations.

Because the sampling was done with replacement, some observations within each individual sample would be repeated while other observations (from the entire population) would not be present. Repeating this over 100 samples and comparing the results (from the different samples) provides a sense of variability in the data (e.g. are a few super-large outliers driving the results?).

Question 15:
If each marker on Informational Exhibits 2 and 3 is the result of 100 samples of several hundred thousand risks, could you please provide the total resulting sample size for each range of mods depicted as well as the total population size for that range?

Response 15:
The total population size and the total sample size (all ranges combined) for **each** of the 100 samples is 465,639. Each range of mods, referred to as a quintile, contains 20% of the observations. So for each sample, each quintile contains 20% of 465,639 (=93,128).

Over all 100 samples, the total observations would be 465,639 x 100 = 46,563,900 and each quintile would represent 20% of 46,563,900 (=9,312,800).

Question 16:
As a follow-up to your response to question #1 from our December 12th email: Are you using some variance statistic, mean squared error or other measurement to quantify the improvement in the plan performance using the $15,000 split point? If so, could we please have those values for $5,000, $10,000, $15,000, $18,000 (or whatever split points were tested for the 2002 and 2006 policy years) in order to demonstrate optimality of the $15,000 selection and also to quantify the improvement in the plan performance over the current $5,000 split point ?

Response 16:
Please see pages 33-35 of the April 14, 2010 presentation entitled **Analysis Of Alternative Split Points** as well as pages 8-11 of the November 3, 2010 presentation entitled **Split Point Indexing and D-Ratios** that were both previously provided.

Note that lower values indicate better performance under the old test statistic while higher values indicate better performance under the new test statistic. Also, note that the split point values being tested do NOT reflect any de-trending. Thus, these split point values would need to be trended to 1/1/13.

Question 17:
What are the 5% , 50% and 95% percentile relative loss ratios for each of the experience mod groups (both before and after experience rating) shown on Informational Exhibits 2 and 3?

Response 17:
The relative loss ratios for each group (quintile) are shown below:

Informational Exhibit 2: 5,000 split point, indexed for severity inflation

	Before experience rating					After experience rating				
50th percentile	0.70	0.92	1.07	1.01	1.31	0.91	1.02	1.14	1.02	1.06
95th percentile	0.72	0.99	1.19	1.05	1.35	0.94	1.09	1.27	1.06	1.09
5th percentile	0.66	0.86	0.99	0.95	1.26	0.86	0.96	1.05	0.96	1.03

Informational Exhibit 3: 15,000 split point, indexed for severity inflation

	Before experience rating					After experience rating				
50th percentile	0.67	0.86	0.94	0.99	1.31	0.96	1.03	1.05	1.00	1.00
95th percentile	0.70	0.93	1.02	1.04	1.36	1.01	1.11	1.14	1.05	1.03
5th percentile	0.64	0.79	0.87	0.94	1.26	0.92	0.95	0.98	0.95	0.97

Question 18:
As a follow-up to Question #2, what did Policy Year 2002 look like under the $5,000 split point?

Response 18:
Please see page 15 of the previously provided April 14, 2010 presentation entitled **Analysis Of Alternative Split Points**. The split points underlying these results have NOT been de-trended. A split point of $2500 in 2002 is equivalent to a $5000 split point in 2013.

Question 19:
On what basis were 2002 and 2006 selected as the test years for the experience rating studies?

Response 19:
During the time period of our analysis, PY 2002 represented the most recent data available at a 5th report and PY 2006 represented the most recent data available at a 1st report. While PY 2002 was older than 2006, it was also more mature (developed). Thus, there was value in reviewing both of these policy years.

Question 20:
How were the parameters for the proposed mod cap formula selected?

Response 20:
From a purely actuarial standpoint, there is little support for the general concept of capping. Because of this, a less restrictive minimum cap (10%) is being proposed. 10% was judgmentally selected as being

less than or equal to a typical credit or debit in workers compensation and in other lines of insurance. The 0.0004 factor was selected to minimize the change versus the current mod cap on small insureds.

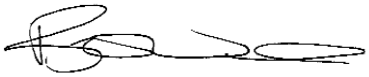
The other primary reason for the change in the formula was to fully account for differences across states in claim severities. Two identical employers operating in two different states should ideally be subject to the same cap. The proposed formula achieves this by dividing the employer's expected losses (E) by the state's average claim cost (G). This normalizes severities across states. The current formula falls short in this respect because it includes an expected loss term (E) that is not divided by G.

Question 21:
Could a column please be inserted on each page of "Exhibit for Response 10" to show the number of risks that would reach the current mod cap under the $10k and $15k split points?

Response 21:
Please see the attached exhibits. Due to updates in the underlying data, the total number of risks shown is slightly different than on previously submitted exhibits.

Thank you for consideration of this item.

Respectfully submitted,



Roy Wood
State Relations Executive

Missouri ER Mod Cap Impact Analysis

Impact of Mod Caps on MO Intrastate Mods Effective Between 6/1/2011-5/31/2012

Expected Losses [E]		Total Intrastate Risks	Number of Risks Reaching Current Mod Cap @ 5K Split Point	Number of Risks Reaching Current Mod Cap @ 10K Split Point
1	1,000	-	-	-
1,000	5,000	3,900	146	335
5,000	10,000	8,148	90	288
10,000	20,000	5,795	10	44
20,000	50,000	3,723	1	3
50,000	100,000	1,192	-	-
100,000	200,000	462	-	-
200,000	500,000	185	-	-
over	500,000	39	-	-
Total		**23,444**	**247**	**670**
Percentage		**100.0%**	**1.1%**	**2.9%**

Note: excludes large deductible policies.

Missouri ER Mod Cap Impact Analysis

Impact of Mod Caps on MO Intrastate Mods Effective Between 6/1/2011-5/31/2012

Expected Losses [E]		Total Intrastate Risks	Number of Risks Reaching Current Mod Cap @ 5K Split Point	Number of Risks Reaching Current Mod Cap @ 15K+index Split Point
1	1,000	-	-	-
1,000	5,000	3,900	146	335
5,000	10,000	8,148	90	568
10,000	20,000	5,795	10	119
20,000	50,000	3,723	1	6
50,000	100,000	1,192	-	-
100,000	200,000	462	-	-
200,000	500,000	185	-	-
over	500,000	39	-	-
Total		**23,444**	**247**	**1,028**
Percentage		**100.0%**	**1.1%**	**4.4%**

Note: excludes large deductible policies.

National Council on Compensation Insurance, Inc.

Roy O. Wood
State Relations Executive
Regulatory Service Division

June 12, 2012

Ms. Joan Dutill, Manager
Property and Casualty Section
Missouri Department of Insurance
301 W High Street
Jefferson City, MO 65101

Re: **Item E-1402—Revisions to the Experience Rating Plan Primary/Excess Split-Point Value and Maximum Debit Modification**

Dear Ms. Dutill:

Per our discussion on Friday June 8, and your subsequent email, NCCI is amending the split point filing, Item E-1402, for the state of Missouri, as follows:

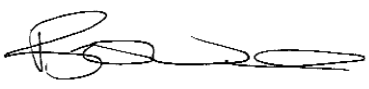
Increase the primary/excess split point to an inflation adjusted amount over a **four-year** transition period and continue to increase the amount thereafter on an annual basis using a countrywide inflation index.

- In year one, the primary/excess split point is $7,500 to become effective January 1, 2013
- In year two, increase the primary/excess split point to $10,000 effective January 1, 2014
- In year three, increase the primary/excess split point to $13,500 effective January 1, 2015
- In year four, and annually thereafter, increase the primary/excess split point to the actual indexed value using the countrywide inflation index

Additionally, future Filing Memorandum with each annual filing will include a section specifically discussing any changes to the primary/excess split point.

I trust these changes will allow your office to approve Item E-1402 as amended. Please contact me if there are any questions or if additional information is needed.

Sincerely,



Roy O. Wood
State Relations Executive

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