



Notes

Get ready for the Actuarial Opinion Summary (AOS). We will be providing our clients with a one-page AOS this year. The AOS will compare your carried reserves to our advised reserves and comment when the one-year reserve development exceeds 5% of surplus in at least three of last five years. You can view a sample of the AOS under the Publications page on our website www.streffinsurance.com.

We are pleased to add three clients. Security Mutual specializes in property insurance in upstate New York. Missouri Physicians Mutual is Missouri's leading medical malpractice insurer. North Star Mutual, an "A" rated regional company based in Cottonwood, MN signed up with us last summer.

Remember to change our address to Suite 450. We have settled in nicely to our new office and hope you can visit us this year.



Al Hapke Joins Streff Insurance Services

We are pleased to announce that Alan J. Hapke, FCAS, MAAA, has joined Jim and Steve Streff at Streff Insurance Services. Al brings years of consulting and corporate actuarial experience, with an emphasis on commercial lines.

Al worked most recently for Meadowbrook Insurance Group as Vice President – Actuarial, where he held responsibility for reserving and pricing several large business segments as well as communication with branch management teams. Al also provided Meadowbrook with fee income from his consulting practice.

Al has strong technical knowledge covering an array of actuarial issues from traditional disciplines such as personal lines reserving to the emerging field of information management. More importantly, he has the ability to see a project's purpose in the context of the client's broader needs. Strong communication skills and attention to detail and quality will make him a natural fit with our clients. Companies that write workers' compensation, professional

liability and other long-tailed lines will especially benefit from his expertise.

From 1996 through 2002 he managed Aspect, Inc., an actuarial consulting firm. He maintained a core of these clients during his tenure at Meadowbrook and they will be joining the client base of Streff Insurance Services.

Al worked extensively with Jim and Steve Streff before 1996. Jim hired and worked with Al at Sentry Insurance, in Stevens Point, Wisconsin. After stints in financial reserving and corporate planning departments, he became Actuary for Commercial Lines Pricing and National Accounts. In 1991, Al again teamed up with Jim and later Steve at Streff & Herder before moving to Kansas City for personal reasons in 1995.

Please join us in welcoming Al to our firm.

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Prediction Markets and Insurance Strategy

Great emphasis is placed these days on the value of experts. We seek direction from political pundits, investment gurus and futurists. The result is a small class of experts advising the masses.

Perhaps we are on the wrong track. Evidence suggests that the best decisions are made by the masses, not the experts. By combining the collective wisdom of independent

predictions, a result more accurate than the experts is achieved.

Consider two examples. Gambling on sporting events is a huge industry, both legally and illegally. To even out the two sides of a contest, a "line" is created that predicts the game's winner and the final point spread. A winning bet on the favored team must



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Prediction Markets and Insurance Strategy - Continued

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also have that team prevailing by at least the final point spread. The line is adjusted during the week preceding the game so that there are an equal number of bettors on each side.

The Iowa Electronic Market (IEM) is best known for allowing investors to predict the outcome of elections by purchasing a share in the candidate they expect to win. Shares range in value from \$1 to \$100. The “stock” of a candidate that is expected to win will sell for, say, \$70 right before the election. If that candidate wins, the shareholders would get paid \$100. If that candidate loses, the investor receives no money. It is an all or nothing investment.

In both examples, the wisdom of the markets is superior to that of the experts. On average, the final line of athletic contests has a better record of predicting the game’s outcome than any ESPN pre-game prognosticator. Likewise, the IEM has outperformed major polling organizations that call voters and make guesses about who is home, who doesn’t like to answer pollsters and who is likely to actually vote.

The value of prediction markets, like those described here, is beginning to be appreciated. Prediction markets depend on a high number of independent and diverse self-interested people. It is one thing to tell a pollster you’re going to vote a certain way; it is entirely different to invest money in your candidate. It is the element of a monetary incentive that breathes life into prediction markets.

The 2004 business best-seller “The Wisdom of Crowds” by James Surowiecki details how prediction markets are being employed internally by companies to forecast the success of products. A pharmaceutical company lets its employees bet with real money which drugs will sell the best. That company’s prediction market did a better job of forecasting sales than senior management. Employees that bet accurately were financially rewarded for their insight.

How can prediction markets be used inside insurance companies? Imagine a contest with bonus money at stake where every employee of the company predicts the loss ratio for the current accident year. The loss ratio is perhaps the simplest expression of a year’s success, and can be used to set the IBNR reserves when related to earned premium.

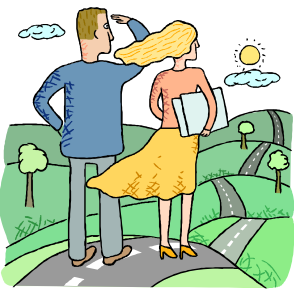
Prediction markets work best when people with a wide range of skills and knowledge participate. The wider and more diverse the group is, the better the consensus result will be. This runs counter to the traditional wisdom of reserve committees or finance departments handling the reserve duties. While Bob from Human Resources can’t project reserves using development factors or the Bornhuetter-Ferguson method, he probably knows if business is moving in the right direction. He reasons that the recent influx of new job applicants reflects growing profit margins. This information leads him to select a low loss ratio.

It will take several years for the real loss ratio to firm up and the winner of the contest may not be known for a while. However, since prediction markets are based on the *consensus* number, management simply takes the average of all entries and books reserves to that loss ratio. The contest with bonus money is a cover-up for getting an answer that is probably more accurate than (gulp) your actuary’s.

Insight from prediction markets can also tell us something about pricing and the current semi-soft market. The American insurance industry is mature and sophisticated with many competitors, flexible sources of fresh capital and quick dissemination of pricing information. Prediction markets, along with basic supply and demand principles, teach us that the market is to be trusted (in general). There will always be stretches when prices become too soft or destructively hard, but the market is usually in balance as it is now. Prediction markets tell us that instead of bucking the overall market, it is better to trust the market and adjust your plans around the market. Traditional rate filings involve the opposite and often ignore the underlying wisdom of prediction markets.



“Prediction markets work best when people with a wide range of skills and knowledge participate.”



Inside the BCAR - A Closer Look at Adjusted Surplus

Best's Capital Adequacy Ratios, as computed by AM Best, have taken on increasing importance in recent years. Companies are becoming more aware of their role in the rating process and are actively seeking ways to improve their BCAR.

We examined the denominator of the BCAR in our fall 2005 newsletter by analyzing net required capital. This article discusses the numerator – Adjusted Surplus.

$$\text{BCAR} = \text{Adjusted Surplus} / \text{Net Required Capital}$$

The adjusted surplus step begins with the reported surplus and adjusts it for factors that, in theory, should eventually make their way into the reported surplus.

$$\text{Adjusted Surplus} = \text{Reported Surplus} \pm \text{Adjustments}$$

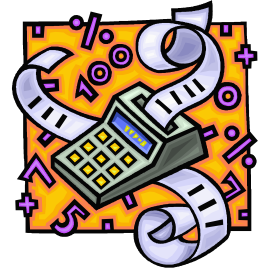
Heading up the list of adjustments is a one for catastrophes. Companies with limited geographic diversity or a concentrated exposure to property losses get hit hard here. One-state companies should avoid over-concentration in urban areas. It is probably worth the investment to model your exposures for catastrophes every several years. That

information could be used to help lower this subjective adjustment.

Surplus notes are also subtracted from the reported surplus. The BCAR treats these as it would a loan. We wonder if a company has ever been forced to disperse surplus notes to its policyholders instead of returning the funds to the issuer. Let's hope state regulators would step in long before that. In any case, pulling out surplus notes is a prudent move.

The remaining adjustments are more likely to add than subtract to the reported surplus. They relate to the built-in equity of the unearned premium, loss reserves and fixed income. The adjusted surplus is then divided by the net required capital to arrive at the BCAR.

The BCAR is a relatively straightforward calculation. It does not yet directly translate into a letter rating, as intangibles still play a role. However, a solid understanding of the key BCAR components can help improve your ratio and lead to a stronger financial position. Companies should be aware that the BCAR has subjective inputs and the better each is understood, the more likely a favorable BCAR will be earned.



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Shifting Payment Patterns and IBNR Reserves - Continued

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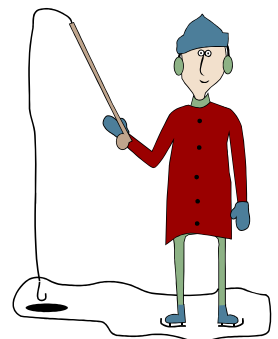
An increase in partial payments on open claims can also create the impression of higher costs. However, case reserves usually decrease as partial payments increase, hitting the company with the double-whammy of weaker case reserves at a time when it appears that claim costs are rising. Table B shows that partial payments have increased significantly in 2005.

Measured at:	Reserves and Payments			
	Case Reserves	Paid on Open Claims	Total Value	Percent Already Paid
2004 Q1	\$ 25,112	\$ 7,831	\$ 32,943	23.8%
2004 Q2	24,987	8,123	33,110	24.5%
2004 Q3	26,336	8,247	34,583	23.8%
2004 Q4	28,712	8,974	37,686	23.8%
2005 Q1	27,550	9,257	36,807	25.2%
2005 Q2	27,442	10,984	38,426	28.6%
2005 Q3	27,121	11,325	38,446	29.5%
2005 Q4	27,745	11,576	39,321	29.4%

Table B

This would explain the higher payments and lower case reserves.

This complicated scenario can certainly not be appreciated with Schedule P information alone. Usually, an analyst would need to rely on anecdotal evidence from management to learn about this trend. On the other hand, granular files could decipher the situation in minutes.



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Streff Insurance Services provides a wide range of actuarial consulting support to property and casualty insurance companies, self-insurance funds and state insurance departments. We trace our roots back to 1983 and have been located in picturesque Red Wing, MN since 1995. Since then our client base has steadily grown and our relationships with our other insurance vendors have strengthened.

We are known for our concise and informative reports, independent views and practical advice. Open communication and a sharp focus on the end product are the keys to meeting project deadlines and keeping clients satisfied. Our areas of specialty include loss reserves, pricing, reinsurance analysis, start-up feasibility studies, strategic management and industry research.

Shifting Payment Patterns and IBNR Reserves

Loss payments patterns play an important role in projecting loss reserves. A shift in patterns can give “false readings” and cause the IBNR reserve projections to be inaccurate.

It is common to accelerate the claim settlement rate when premium growth turns flat. In such years that is a wise use of adjustors’ time and energy. However, this faster closure rate will create the impression that claims are becoming more expensive and will likely overstate the payment projection method. The paid development factors will start to rise. Lower rather than higher projection factors need to be selected.

On the other hand, if the settlement rate is slowing, as can happen when claim departments are stretched, the paid loss patterns will look optimistic. In this instance, the analyst needs to compensate by raising the paid projection factors even though the evidence suggests otherwise.

Schedule P of the Annual Statement does not separate loss payments into payments on open claims versus payments on closed claims. Claim counts, while included in

Schedule P, are not subject to the same scrutiny as the financial amounts. We see many Schedule P’s with inaccurate reported and open claim counts. For that reason, they are often used cautiously by actuaries.

Management can do simple things to help clarify payment patterns. Table A shows that claims have been closing about 25% faster over the past year. This justifies a downward adjustment to the paid development factors.

Information like this can easily be gleaned from granular claim file extracts. Granular files in Excel or Access are becoming standard in the insurance world, as analysts are beginning to realize that Schedule P, in its annual format, masks important trends. Pivot tables have the ability to quickly summarize a dizzying number of records. Such approaches have especially helped us study trends in times of change.

Average Days to Close Claims		
Closure Month	Number of Claims Closed	Average Days to Close
Jan	111	61
Feb	120	65
Mar	115	54
Apr	132	60
May	104	55
Jun	97	53
Jul	102	51
Aug	114	48
Sep	109	42
Oct	127	45
Nov	140	48
Dec	139	44

Table A

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