Excess Workers' Compensation: A Tale of Three Tails

Gary Blumsohn



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Three Tails



Incurred loss development



Paid loss development



Severity distribution

Incurred tail







Source: RAA data, my analysis

Comparison of % Reported From RAA Loss Development Studies: 2001, 2003, 2005



RAA data isn't stable

Age-to-ultimate (10-year weighted averages)

| | 4-ult | 15-ult |
|------|-------|--------|
| 2001 | 2.7 | 1.7 |
| 2003 | 3.0 | 1.5 |
| 2005 | 3.4 | 1.4 |

Paid tail

RAA 2005 (with my analysis):

- Median payment date: 25 years
- □ 90% paid: 44 years
- □ PV factor @ 5% interest: 39%

Paid tail varies by layer

Venter:

\$100,000 retention in 1965 (\$1.2 million now?):

□ Median payment date: 39 years

□ 90% paid: 60 years

□ PV factor @ 5% interest: 25%

□ Sources:

- Gary G. Venter, "Workers Compensation Excess Reinsurance The Longest Tail," NCCI Issues Report, 1995
- Gary G. Venter, "An Excessive Claim Tail," *Best's Review*, November 1992

Severity tail

Typical large WC claim: 25 year old permanent total \$20,000 annual indemnity \$40,000 annual medical (2007 dollars)

Claim size by age at death



Key driver of losses in excess layers is medical inflation...

... over the next several decades

50 Year History of US Medical Inflation



Raw data from Bureau of Labor Statistics: www.bls.gov

The medical inflation dilemma

You can't predict it

but

for pricing or reserving, you need to take a view.

And if you don't take an explicit view, you're implicitly taking one anyway.

Implicit medical inflation



What's the implicit medical inflation rate in the RAA factors?



In bureau excess factors?

One final tail problem

Everyone's retired before you find out if you got it right.