


**Premium Deficiency Reserves:
How Much and Why?**

Ken Quintilian, FCAS, MAAA

Presented to: CLRS
September 21, 2010

Disney's Contemporary Resort
Lake Buena Vista, FL



1

Ken's Disclaimer

Note that the opinions expressed in this presentation are my own personal professional opinion, and not necessarily those of my employer, of the CAS, or of any committees of the various actuarial organizations. PDR is an emergent area of compliance, and this presentation presents, not reliable, definitive guidance, but one reasonable approach to analyzing and monitoring this reserve in the industry.

2

Quick Tour of My Segment


- o Current climate – actuaries bypassed on PDR
- o Consequences – state of the accounting science for this reserve
- o Proposal - institute PDR opinions
- o Potential analytical problems (and solutions)
- o Professional objections (and answers)
- o What's the problem? We do this already!

3

Current Landscape

- o PDR is outside the scope of reserve opinions
- o No uniform regulatory or professional requirement for actuarial review of PDR
- o Few practitioners have given much thought to how PDR should be estimated
- o Someone simply has to check the box that says it was considered


4



So Who Reviews It These Days?


One Guess...


5



The Accountants


6






PDR – As It Was Meant to Be


- Provides for earlier recognition of reserve shortfall when rates significantly inadequate (short-duration)
- Improves consistency between reserves for unearned premium and incurred loss
- A side benefit: can alert principals to inadequate rates
- Useful metric even if not material


7 



PDR – How it Turned Out

- Actuarial involvement estimated at 10% of companies
- Accountants tend to focus on the immateriality of the reserve to the overall finances of the company
- Analysis is often superficial, involving underwriting input and target loss ratios
- Coarse level of review (e.g. "all commercial" / "all personal") results in tacit offset of profits and losses between lines
- As a result, few companies carry any PDR, even in the soft market


8 



Consequences of the Accounting PDR Hegemony

- Many approaches used to set this reserve seem rules-based:
 - Disconnected from the logic of PDR
 - Rules of thumb instead of common sense
- "Immateriality" becomes self-fulfilling (if you think the answer is zero, how close will you look?)
- A bias toward a smaller or zero reserve commonplace
 - Even fairly clear guidance dismissed in favor of simplified "rules" that reduce the reserve
 - Convoluted procedures arise, that strain the concept of PDR, but serve to reduce the estimates.
- Actuaries could bring much science to the process but are rarely brought in at all


9



How to Fix It

- The PDR would benefit from an opinion requirement
 - Separate opinion, or separate line from loss reserves
 - Opinion required on reasonableness of both zero and non-zero PDRs
 - Signed by an actuary appointed for PDR
- Actuaries are the experts on the elements of PDR
 - Ratemaking at its core
 - Requires selection of trend rates, interest rates, other actuarial parameters
- Actuaries approach such analysis from a principles-based perspective
 - Illogical approaches would be reduced
 - PDR would become more common and be more useful

10




Varying Approaches – Which is Right?

A difficulty going in, is the wide variety of accepted analytical approaches:

- Should the profit from the earned portion of in-force exposure be included in the calculation?
- Should the investment income from the earned portion be included?
- Should we use the accrued investment income or discounting approach?
- Should we include investment income at all?


11



Go Back to First Principles

- (Short-duration) PDR is based on an estimate of unearned premium (that is, rate) inadequacy
- As such, investment income should be considered
- Except for prepaid expenses, each quantum of time should generate its own constant quantum of PDR with little offset between periods


12



First Principles Applied to PDR

- Seek a bright line between earned/past (loss reserves) and unearned/future (unearned premium reserves)
- Do not commingle past with future
- Use discounting approach, to better match corresponding future losses and premiums
- Process becomes simpler and more intuitive by following this approach


13



Lines-of-Business Quandary

- Current guidance requires detailed breakdown of PDR by line
- Negative (profitable) PDR lines may not offset positive lines
- Guidance is not specific on by-line breakdown
 - Stat: "how policies are marketed, serviced, and measured"
 - GAAP: "grouped consistent with...manner of acquiring, servicing, and measuring the profitability"
- Strong financial incentive to rationalize using as few subdivisions as possible
- Current "rule-of-thumb" practice often goes beyond reasonable interpretation

14



Principles-Based (Actuarial) Methods Show the Way


- Clearly companies track their business at least at annual statement LOB level of detail. This should be the minimum
- Additional levels are possible, the actuary judges the reasonable level of detail
- Like with loss reserves, all business is included in the analysis somewhere, if there is any unearned premium (no size threshold)
- Since companies already monitor their results at this level of detail, a PDR by line is not a big step
- Some extra regulatory guidance would help clarify this issue further

15

Is This About More Accurate Financial Reporting?

- Partly. This proposal will improve the reserving of companies in this area, with larger and more frequent PDRs
- Also important: PDR sheds light on actuarial rate adequacy
- This might almost be a sort of "rate level opinion" to benchmark company performance and the market (even if the reserve is small in most cases)

16



The Details Need Not be Onerous


- Let the pricing actuary sign the PDR opinion (and write the report)
- Take it out of the time frame of the year-end crunch
- Provide more regulatory guidance on lines of business
- Give some regulatory insight on desired method


17

Common Objections

- "Actuaries don't routinely do these types of analyses so experience and established practice are limited"
- "There is little existing regulatory guidance -- we need to be told how to make this estimate"
- "We need accountants' help in areas like investment income and underwriting expenses"
- "The effort involved is disproportionate to the benefit since PDRs are infrequent and small"
- "If companies are carrying zero PDR, why do an expensive analysis to prove what we already know?"

18







Translation: “We Don’t Wanna”

- o Actuaries are the experts at rates. We have the expertise to select the best method. We can and should do this analysis
- o We don’t have to pass the buck to the accountants. We can sign the opinion, and just get their help when needed
- o If the analysis is completed correctly, there will be larger reserves and a lot fewer “zeros”
- o Even when the reserve is immaterial it could provide insight into rate adequacy
- o The actuarial report will provide detail for drilling down line by line
- o We can pursue regulatory guidance to clarify gray areas

19







What Are Companies Afraid Of?

- o If companies are monitoring profitability, why would a PDR be difficult to calculate?
- o If the reserve is based on adequacy of rate levels, actuaries should already be involved
- o If the PDR requirement exists, and they are complying already, why not get an actuary to sign off on it?
- o Aren’t the stakeholders entitled to full disclosure?

20






Precedent – Reserve Opinions

- o There was a similar controversy in the early 90’s
- o Many actuaries objected to this obligation
- o Accountants waiting in the wings, happy to take it
- o The industry is much better off now with the heightened, more robust oversight
- o So is the profession – greater demand, greater use of actuaries
- o When extended to monoline insurance (title; mortgage guaranty; etc.), met with identical reaction: resistance, then acceptance; broader use of actuaries resulting in better reserving


21



A Little Bit of Pontificating

- o CAS members want to do ERM
- o PDR (underwriting risk) falls within our core skills AND is ERM
- o You can't measure risk without taking a risk; incurring costs; and sometimes giving companies bad news
- o If we say "not my job, man" to this bread-and-butter actuarial risk, then we are not serious about being go-to risk analysts!

22



Questions?

Discussion?

23

Thank You!

24



**Premium Deficiency Reserves:
How Much and Why?**

Ken Quintilian, FCAS, MAAA

Presented to: CLRS
September 21, 2010

Disney's Contemporary Resort
Lake Buena Vista, FL

25

