

Actuarial Guideline 38 & Shadow Accounts

(Both Sides of the Issue)

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Agenda

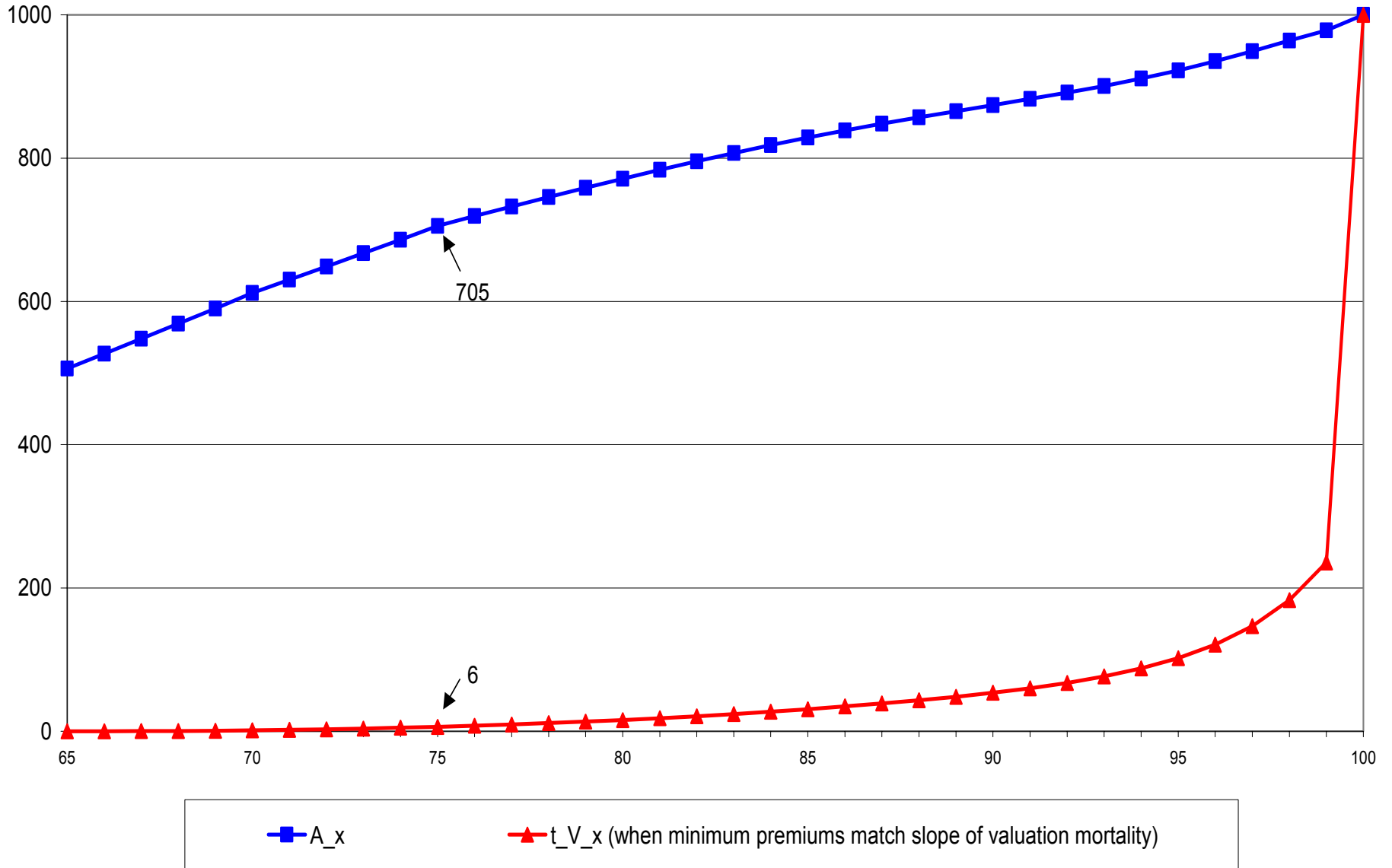
- AG38: Technical Details
- DIY: Creative shadow accounts
- Arguments for fixing the guideline
- Arguments for moving to modeling based reserves
- Rebuttal

AG38: Technical Details

AG38: Technical Details

- “r” = ratio to indicate pre-funding level
- AG38 Reserve = $r * A_x + (1-r) * {}_t V_x$
- After some algebra = $A_x - (1-r) * \ddot{a}_x$
- All creativity centers around “r”

Reserve Boundaries



Calculation of “r”

- Numerator = excess payments (amount in shadow account)
- Denominator = assuming you've paid the minimum needed so far, the single premium needed to fully pay up the shadow account for life (referred to as single premium to pay up)

DIY: Creative Shadow Accounts



Vanilla Shadow Account



- Consider a shadow account with only 2 components
 - COIs = 27% of 80 CSO
 - Interest = 4.5%



Vanilla Shadow Account



- Male, 65, NonTobacco
 - Single pay premium = \$312
 - At duration 10, shadow account value = \$446
 - single premium to pay up = \$446
 - “r” = 100%
 - ${}_tV_x = 6$; $A_x = 705$
 - AG38 = \$705



Creative Shadow Account



- New Provision: if your shadow account value ever = 0, then the parameters of the shadow account change
 - COIs = 100% 80 CSO
- Why?
 - Because assuming you've paid the minimum needed so far (shad acct = 0 at end of each year), the single premium needed to pay up = \$718



Creative Reserves



- At duration 10, shadow account value = \$446
- single premium to pay up = \$718
- “r” = 62%
- ${}_tV_x = 6$; $A_x = 705$
- AG38 = \$440
- 39% reduction!
- This is only one fairly tame example.

Arguments for Fixing the Formula

$$E=mc^2$$



I Want to Fix the Formula

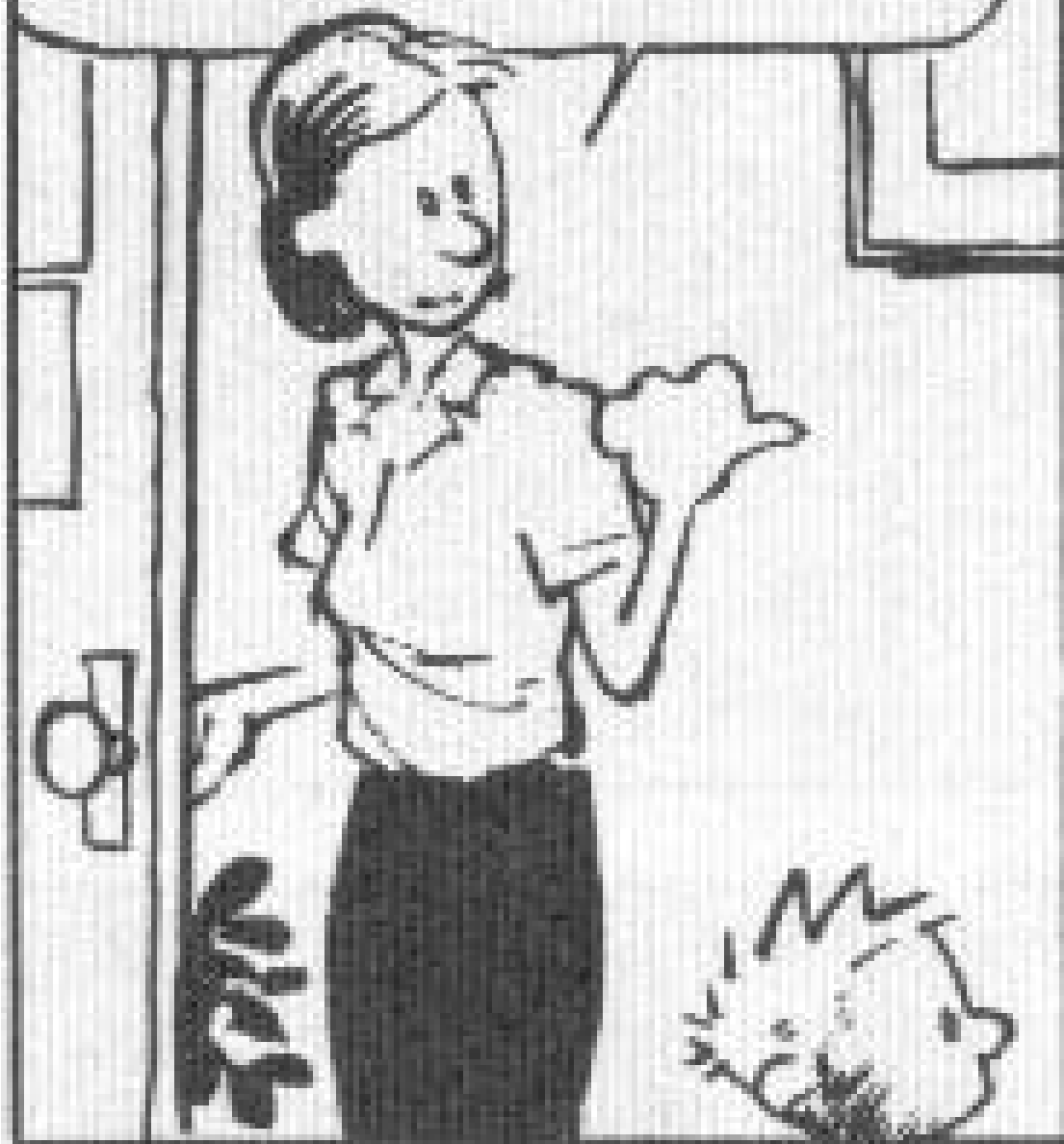
- New proposal merely clarifies the guideline's original intent



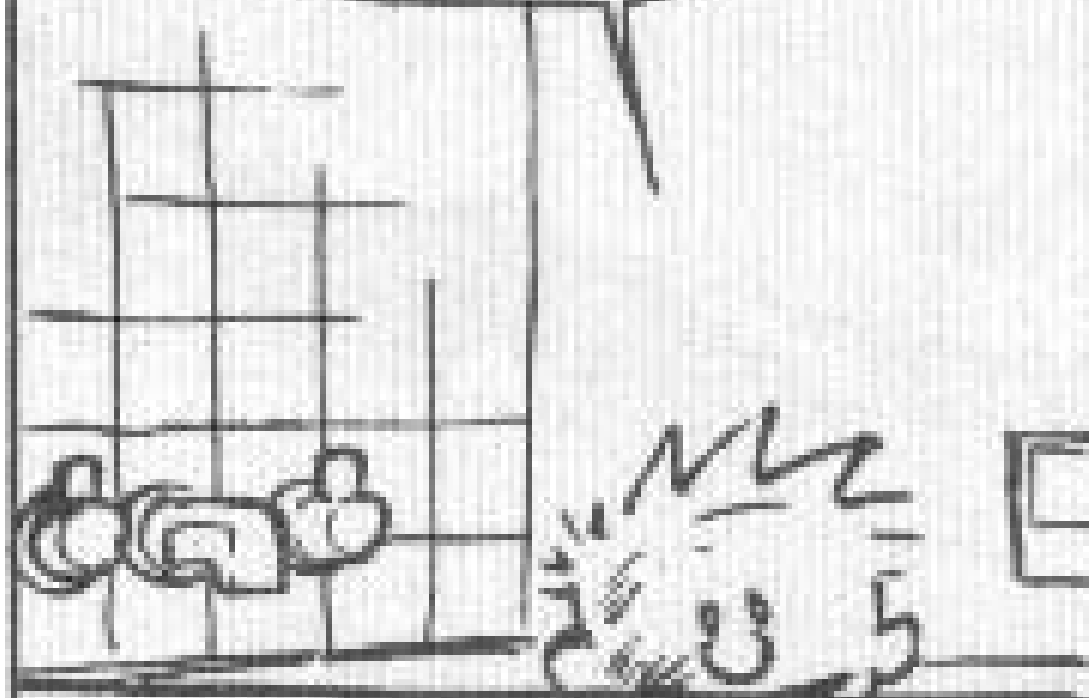
I Want to Fix the Formula

“Obviously, new policy designs will emerge subsequent to the development of this document. No statute, regulation, or guideline can anticipate every future product design, and common sense and professional responsibility are needed to assure compliance with both the letter and the spirit of the law. While the Model is a complex regulation, its intent is clear: reserves need to be established for the guarantees provided by a policy. Policy designs which are created to simply disguise those guarantees or exploit a perceived loophole must be reserved in a manner similar to more typical designs with similar guarantees.”

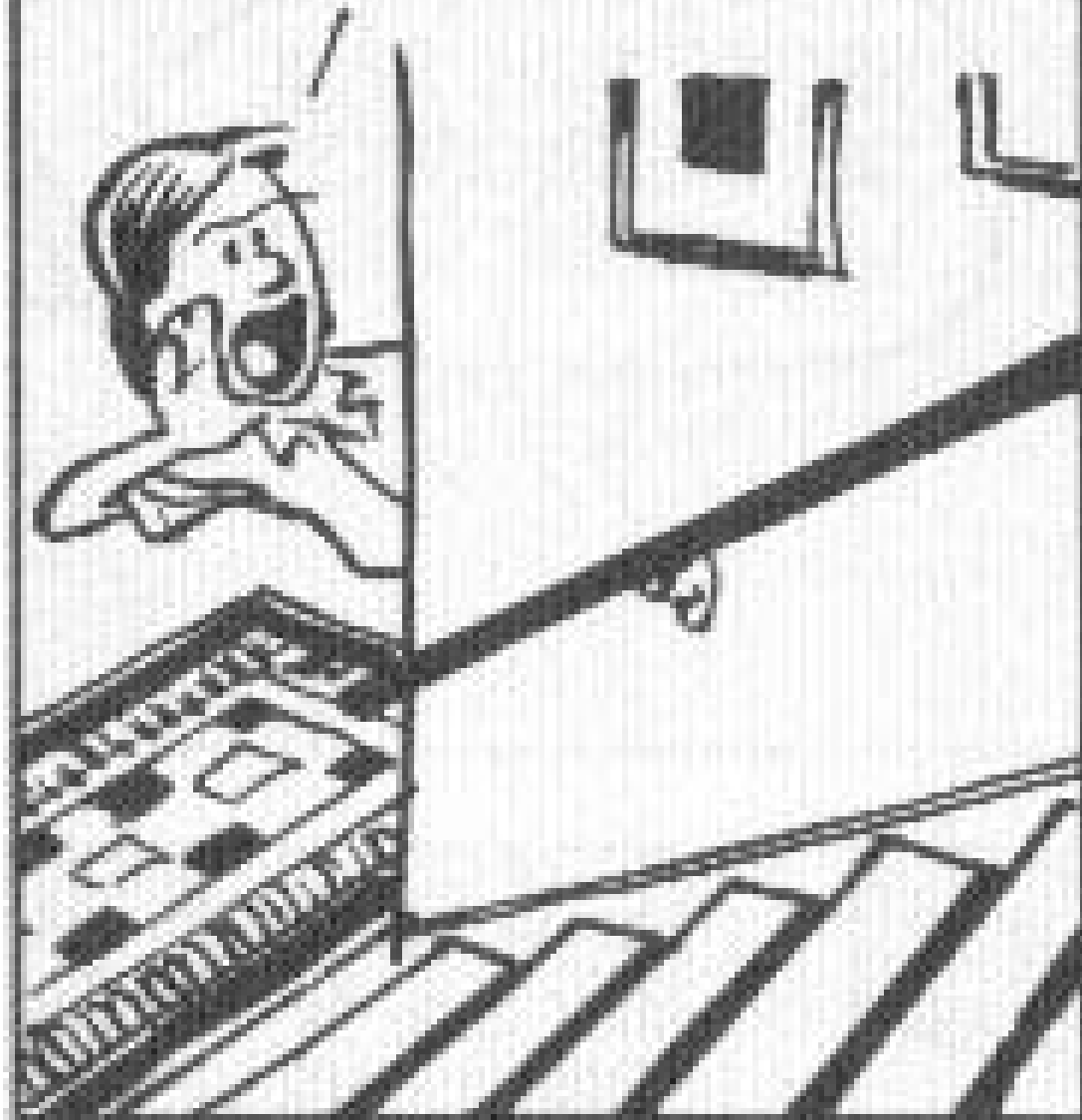
GOODNESS, YOU'RE FILTHY.
INTO THE TUB WITH YOU.



I OBEY THE LETTER OF
THE LAW, IF NOT THE
SPIRIT.



LET'S HEAR SOME
WATER RUNNING!



NUTS.



WILSON

$$E=mc^2$$



I Want to Fix the Formula

- New proposal merely clarifies the guidelines original intent
- The “fix” creates a level playing field
- Feel bound by the “spirit” language

$$E=mc^2$$



I Want to Fix the Formula

- It doesn't mean you are opposed to modeling based reserves
- Short term fix; Long term solution (maybe very long)
- Disputes over reserve levels may get worse, not better

Arguments for Modeling Based Reserves



Modeling Based Reserves

- Problem vs. Symptom of a problem
 - Problem = redundant reserves
 - Symptom = creative shadow accounts, financial reinsurance and LOC, securitization, etc



Modeling Based Reserves

- What was the intent?
- Similar guarantees? There are none.
- I'm following the law
- Retroactivity is unfair



Modeling Based Reserves

- My reserves are adequate
- Let's consider the consumer
- Formula driven reserves are a waste of time

Rebuttal



Rebuttals - Formula Driven

- Problem vs. Symptom of a problem
 - This is an argument for changing the law, not circumventing it
- Retroactivity is unfair?
 - Retroactivity is the only thing that is fair

$$E=mc^2$$



Rebuttals - Formula Driven

- My reserves are adequate
 - Statutory law is to create a conservative standard

Three Positions

- Vote for me!
- No, vote for ME!
- I don't care. Just tell me what to do.

Further Reading

www.towersperrin.com/tillinghast/publications/publications/till_update_us/Universal_Life/Universal_Life.pdf

www.veconsulting.com/resources/shadowaccounts.pdf



Currently Exposed AG38

- Changes denominator of “r”
 - “r” = the minimum possible value of a paid up shadow account