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October 27-30
Toronto, Canada

Session 103: How Equitable is Your Actuarial Equivalence?

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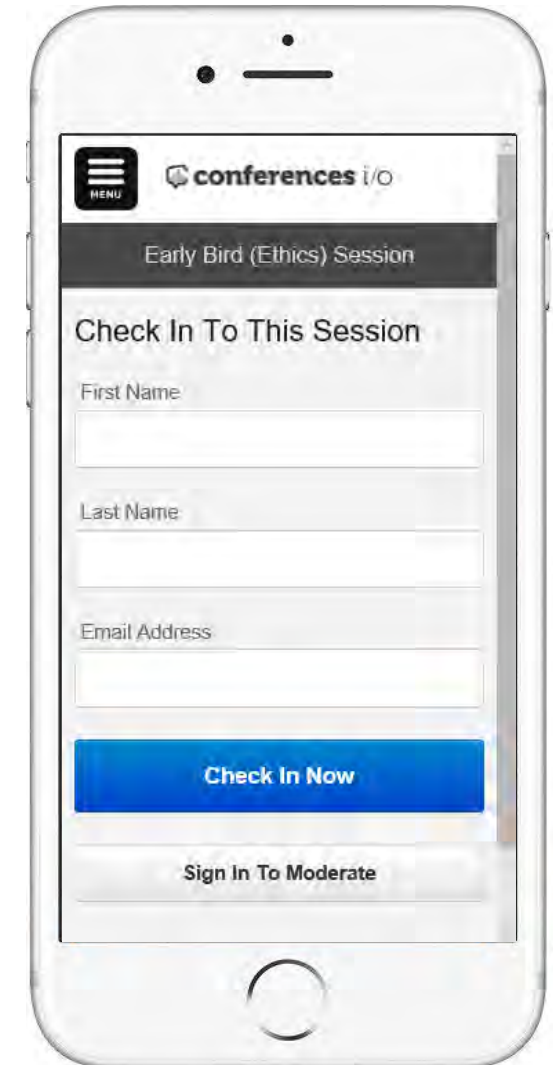
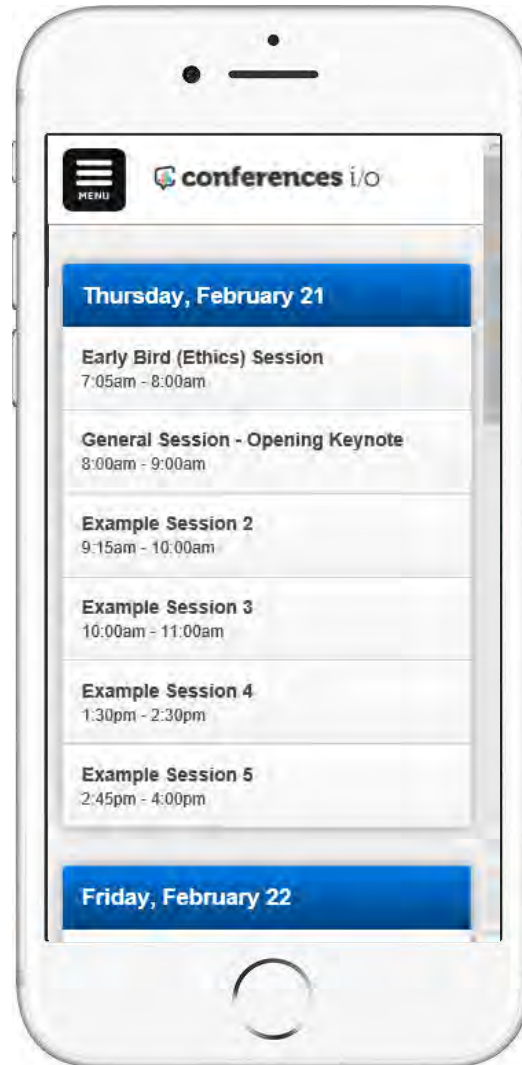
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Session 103: How Equitable is Your Actuarial Equivalence?

SPEAKERS

MITCHELL SEROTA, FSA, EA, MAAA

ROBERT IZARD

MODERATOR

LISA SCHILLING, FSA, EA, FCA, MAAA

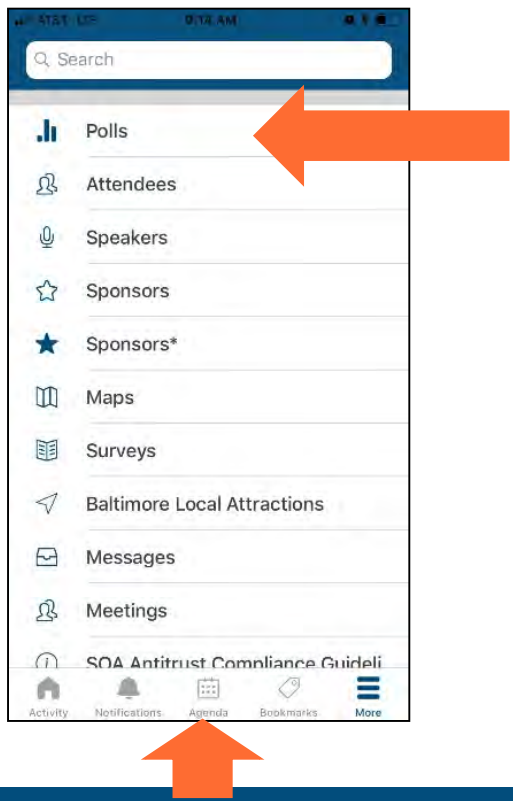
Tues., October 29, 2019



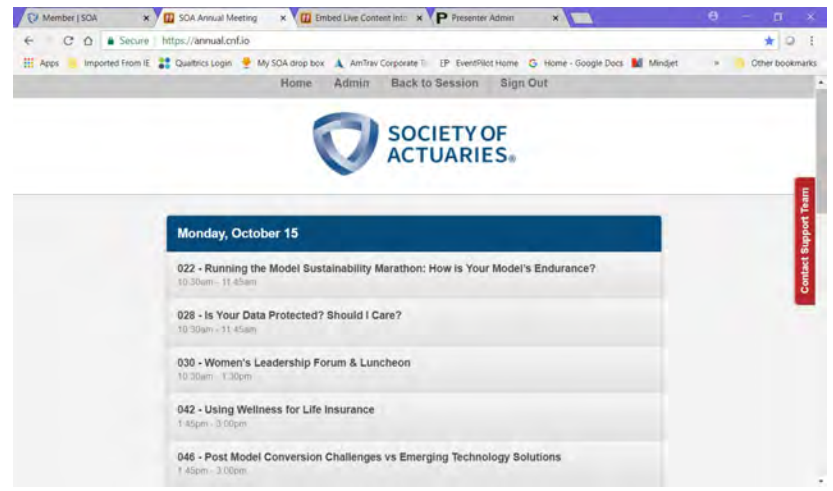
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Poll: Does it still make sense to use a mortality table that's older than Mitch to perform ANY actuarial calculation for a group of generic 65-year olds?

Actuarial Perspectives

Mitchell Serota, FSA, EA, MAAA



TOPICS TO DISCUSS

Actuarial Foundation
of Equivalence

The Issues at Hand

Class Action Law
Suits

How to Resolve the
Issues at Hand

What is an Actuarial Equivalent?

- The liability of a monthly benefit, payable in an optional form allowed by the Plan, should be equal to the liability of the monthly benefit payable in the Normal Form (presumably Single Life Annuity)

$$\begin{aligned} & \textit{Benefit}_{\textit{Optional}} \times \textit{AnnuityValue}_{\textit{Optional}} \\ & = \textit{Benefit}_{\textit{Normal}} \times \textit{AnnuityValue}_{\textit{Normal}} \end{aligned}$$

- Mortality and discount rate defined in Plan Document (See EA-1-24-91 for directions)

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Poll: How close to "equal" should an actuarial equivalent be for a calculation performed for benefits commencing in 2019?

When do we use actuarial equivalents?

Convert Normal Retirement to:

- Early retirement
- Late retirement

Convert Normal Form (SLA) to:

- Joint and survivor annuity
- Term certain and life
- Lump sums
- Level Income Options
- Two separate payment streams for QDROs

What are the issues?

- Most significant issue is improvement in mortality since ERISA became law
 - Common tables built into earliest ERISA Plan Documents
 - 1951 GAM
 - 1971 GAM
 - 1971 IAM
 - UP-1984
 - Current Table (used per ASC 715-30 or 960)
 - RP-2014 with MP-2018 scale projected to 2018 or 2019

What are the issues?

- Important issue is discount rate
 - Common discount rates fluctuated over 40+ years
 - Bottom of the range in Plan Documents, 3.5%
 - Top of the range in Plan Documents, 9.0%
 - Currently in the 5% to 8% range
 - Discount rates in current usage (for different purposes)
 - FTSE Pension Discount Curve
 - (formerly Citi Pension Discount Curve)
 - Segment rates
 - Minimum ERISA
 - Maximum ERISA
 - PBGC
 - Yield Curve

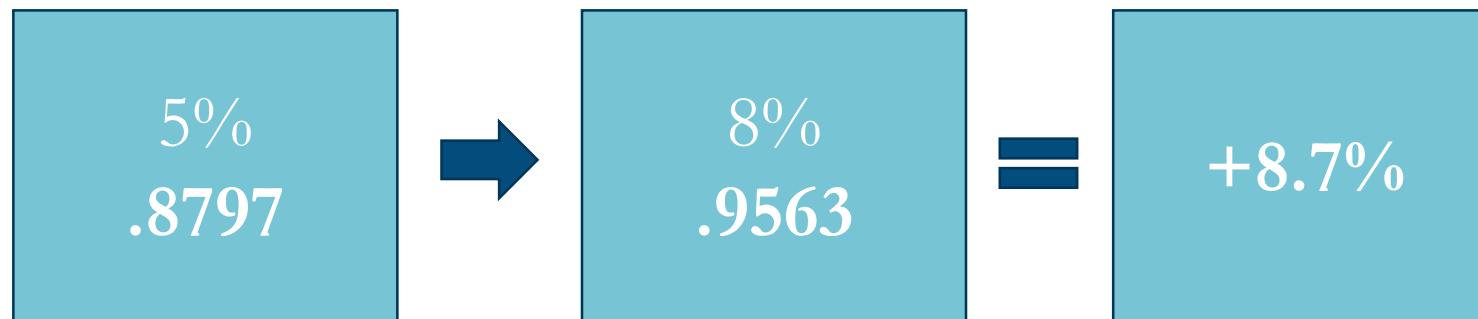
Effect of changing mortality tables

- Consider the impact of changing from 1983 GAM to RP-2000 projected to 2015
- Annuitant and spouse both 63
- Discount rate 5%
- Joint and 50% survivor
- Conversion Factors (CF):



Effect of changing discount rates

- Consider the impact of changing from 5% to 8%
- Annuitant and spouse both 63
- 1983 GAM
- Joint and 50% survivor
- CF:



WAIT A SECOND.

WHAT???

Effect of changing both q_x and i

Joint & Survivor Options

- Modern mortality table will increase the CF
 - J&S benefits are reduced to pay for the “insurance” of a survivor benefit later
 - The principal is expected to live longer relative to the beneficiary and the joint life
- Increasing the discount rate will increase the CF
 - The value of the later benefits are discounted more

Old mortality
with higher
interest rate



Modern mortality
with lower interest
rate

Effect of changing both q_x and i

Term Certain & Life Options

- Lower mortality rates (more modern table) presume that the certain period is not terribly important, so the CF is higher
- Decreasing the interest rate lowers the CF, but the effect is small



Effect of changing both q_x and i

Early Retirement

- The participant is reducing future benefits for now
- Lower mortality rates (more modern table) presume that the participant will live longer and will have more years of future payments to pay for earlier payments
- Decreasing the interest rate raises the CF by increasing the value of future payments



Effect of changing both q_x and i

Late Retirement

- The participant is increasing future benefits by foregoing benefits now
- Lower mortality rates (more modern table) presume that the participant will live longer and need not be rewarded for “beating” the mortality table between NRD and LRD
- Decreasing the interest rate lowers the CF because the value of deferred payments declines



Legal Perspectives

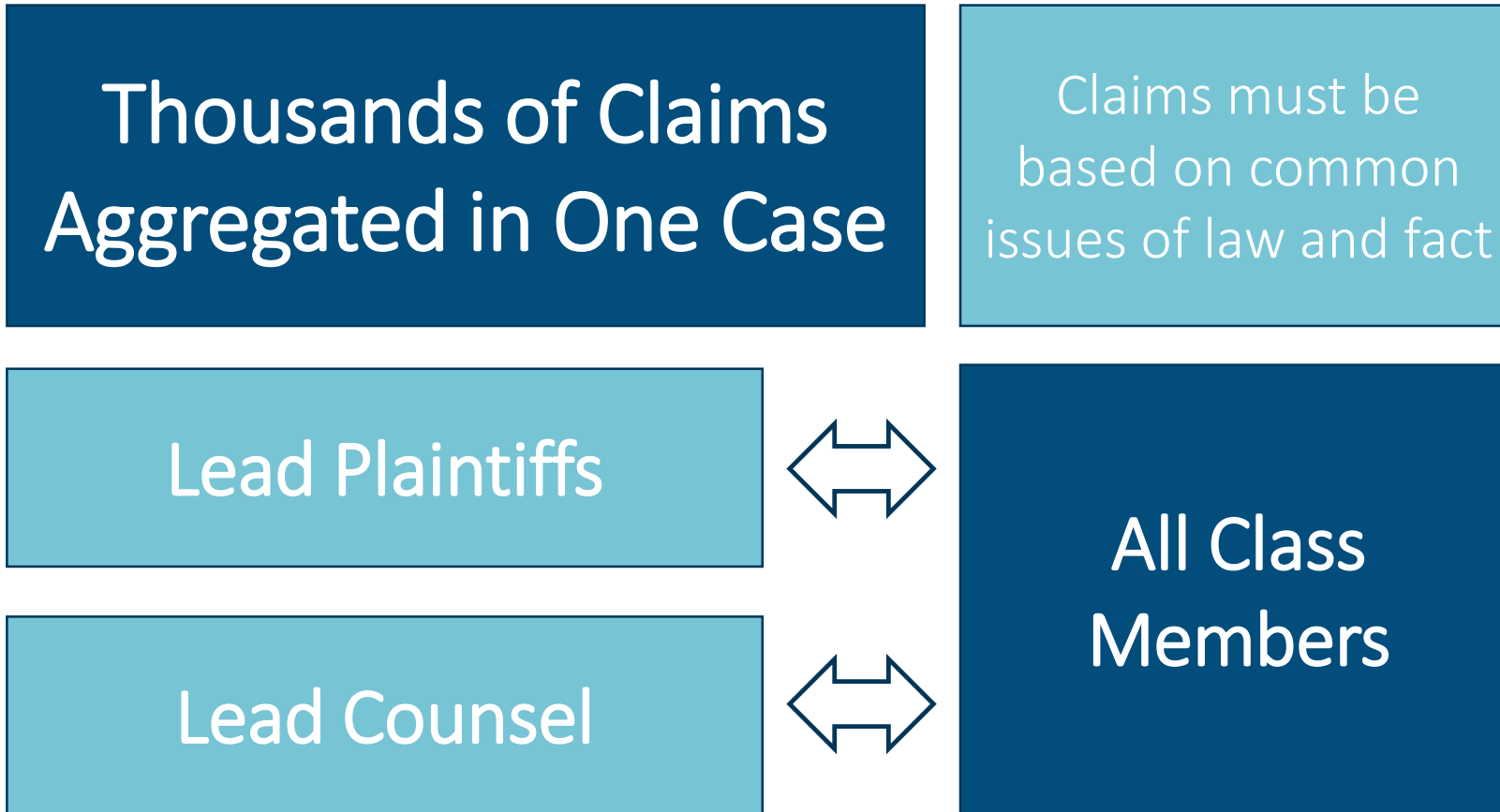
Robert Izard



What Happens in a Law Suit

- File Complaint
- Motion to Dismiss
- Discovery – Documents, Depositions and Experts
- Motion for Class Certification
- Motion for Summary Judgment
- Trial
- Mediation

What is a Class Action



Why Have A Class Action

Efficient for
courts and
parties

Cost-
effective
resolution

Avoid
inconsistent
results

Actuarial Equivalence Claims

Plans Mandating Outdated Mortality Assumptions For Calculating PV of Alternative Benefits Violate ERISA

Under ERISA, “present value” is “the value adjusted to reflect anticipated events.”
—29 U.S.C. § 1002(27)

Neither the plan nor the participants should be better or worse off if the participant selects a JSA instead of an SLA.
—*Bird*

Not events from the long ago

Actuarial Equivalence Claims

Two modes of payment are actuarially equivalent *when their present values are equal* under a given set of assumptions.” —*Stephens*

The term actuarially equivalent means equal in value to the present value of normal retirement benefits, *determined on the basis of actuarial assumptions with respect to mortality and interest which are reasonable in the aggregate.* —*Dooley*

Actuarial Equivalence Claims

Under ERISA, “present value” “shall conform to such regulations as the Secretary of the Treasury may prescribe.”

“Equivalence may be determined, on the basis of consistently applied *reasonable actuarial factors*”
26 C.F.R. § 1.401(a)-11(b)(2)

A plan must determine optional benefits using “a single set of *interest and mortality assumptions that are reasonable . . .*” 26 C.F.R. § 1.417(a)(3)-1(c)(2)(iv)

Plans “cannot contract around the statute” —*Edsen*

Who Are The Defendants

- Sponsors
- Fiduciaries
- Not Actuaries
 - Actuaries retained to apply plan terms as written
 - Not to opine on whether plan terms represent “best estimate” of “the value adjusted to reflect anticipated events.” 29 U.S.C. § 1002(27)

What Cases Seek to Recover

Difference in amount of benefits using conversion factor based on plan terms and conversion factor using reasonable mortality and interest rate assumptions.

Recalculate alternative benefits

Recover shortfall on prior payments

Increase future payments

Real money

- “5 figure” PV shortfall
- Typically at least 5% shortfall

What Are Reasonable Assumptions

- Under GAAP, Defendant's estimate of PV of benefit obligation "should represent the 'best estimate' for that assumption as of the current measurement date."
 - Calculation of PV of sponsor payment obligations is inverse of PV of retiree benefits
 - Same benefits for same lives for same time period
 - "mutuality of obligation" between payor and payee
- 10-K discount rate "sworn" to be true

Resolving the issues

Change mortality
table

Change discount
rate

Prospective only?

Prospective and
retrospective?

Which mortality table?

- Accounting standards vs. ERISA
- Accounting standards mandate modern table
 - But they also use separate tables for males and females
- ERISA is playing catch-up
 - Does a generational table make sense?
 - Does Applicable Mortality Table make sense?
 - Must be unisex

Which mortality table?

- Can a very large plan use its own table based on experience study?
- Must be unisex version of the table

Which discount rate?

- FTSE Pension Discount Curve
- Segment rates
 - Minimum ERISA
 - Maximum ERISA
 - PBGC
- Yield curve

What time period?

- Constraints on plan administrator to perform expeditious calculations
- Amend the plan now?
- Wait for IRS to propose Regulations?
- Prospective calculations only?
- Prospective and retrospective?
- Policy for incorporating future changes in mortality or discount rates

What makes sense?

What do YOU think?

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Poll: What is an appropriate mortality table to use when calculating an actuarial equivalent?

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Poll: What is an appropriate discount rate to use when calculating an actuarial equivalent?

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**Poll: How often should a plan sponsor
review actuarial equivalence
assumptions?**



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