



SOCIETY OF ACTUARIES

**SOA 09 Annual Meeting & Exhibit
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**Session 61 PD, If We Build It, Will They Come (a
Retirement 20/20 Update)?**

Moderator:

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If we build it, will they come?

A Retirement 20/20 Update

SOA⁰⁹ Annual Meeting
Cindy Levering & Emily Kessler



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Overview

- About Retirement 20/20
- 2008 Conference
- Lessons learned to date
 - Insurance vs. Investment
 - Choice vs. Default
 - Measurement Framework: (initial) lessons learned
- Call for Models Contest



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About Retirement 20/20

- Systematically explore new retirement systems (tier II) that go beyond DB/DC
- Initial focus: stakeholder needs, risks and roles
 - Society, Individuals, Employers & Markets
- Work to date
 - Conferences: 2006, 2007, 2008
 - Measurement Frameworks
 - Capstone Paper (2009)
 - Call for Models (2009-2010)



2008 Conference

- Focus:
 - Changing signals,
 - Default distribution options,
 - Self-adjusting mechanisms,
 - Market hedging opportunities.
 - Also, lessons from behavioral economics
- Conference featured paper/presentations prepared directly for conference
 - New ideas, new systems from various cultures



2008 Conference

- Held while financial crisis was unfolding
- In this environment, questions became
 - How do we use these features to help individuals deal with retirement risk?
 - How do we design systems to handle individuals' uncertainty?
 - How well do these features handle extreme market events?



Signals, default distributions

- Structured choices create better outcomes
- Participants look to signals (e.g. retirement age)
 - Reversal from prior conferences: remove certain signals to change terminology
- Well-framed default distributions (e.g., annuities) can minimize risk, send signals in face of uncertainty



Signals & defaults: Challenges & opportunities

- Adjust retirement age with life expectancy?
- Cultural expectations: workforce productivity vs. retirement leisure
- Lessons from behavioral economics
 - “Decision paralysis”
 - Financial (il)literacy & emotional decisions
 - Power of inertia



Signals ... a real-life example

“The example of the SSA is telling ... their institutional desire to be the friend of older workers and popular, led them to ... find the first baby boomer who was retiring January 1 and get that person to sign up for benefits ... if the very agency charged with retirement in America does that, we have a lot of work to do.”

- Conference Participant



Unintended signals

- What has the focus on accumulation accounts signaled about retirement?
 - Signal sent: maximizing wealth, not income
 - ◆ Doesn't meet hierarchy of needs
- Do we need to shift focus away from accumulation toward income?



Self-adjusting mechanisms

- Design features to share risk - one party doesn't bear all
- Based on pre-determined rules with long-term focus
- Challenges
 - Lack of design clarity increases participant uncertainty
 - Good governance and strong communication needed for success
 - Cannot guarantee financial sustainability
 - ◆ Monte Carlo simulations & fat tail problem



Self-adjusting mechanisms ... a real-life example

"One thing we learned loud and clear was that the risk tolerance of virtually everybody was very different when the idea of a negative balance was an idea [versus] the point when it actually got negative and then nobody could sleep at night."

- Conference Participant



Use of markets

- Informational asymmetry: individuals are uncertain about risks they face & unable to measure those risks effectively
 - Result: individuals may never make good choices
 - Solution: create institutional demand
- Creating better hedges
 - Capital markets need institutional demand to create instruments for hedging



Use of markets ... a real-life solution

"Where the markets work, hallelujah, but we also need to think about the impact of where markets don't work very well and whether we need to respond to that ... [Where the market] doesn't work in some demonstrable way, that is a legitimate situation for a public choice option ... We need to think about what kind of public choice interventions we need to deal with the informational asymmetry." - Conference Participant



Lessons learned to date

- 2009 "Capstone Paper" - an opportunity to encapsulate everything from 2006 – 2008 conferences, measurement framework
- Retirement system as a choice between
 - Insurance vs. Investment
 - Choice vs. Default
 - Incorporating "best practices"



Current environment



- Balance has tipped toward choice & investment
 - Based primarily on employer risks & preferences
- Does this produce the optimal outcome for all stakeholders?



Insurance vs. Investment

- Society prefers a degree of insurance
- Individuals do better with insurance
 - Need wealth cushion (health & long-term care)
- Employers should be indifferent
 - Today, prefer DC (investment) model because it seems to pose less risk to employer



Insurance vs. investment

- Markets are indifferent
 - Unresolved debate: Investment of retirement assets in risk-free or risky assets
- If we move away from the employer as insurance guarantor, will we need new market hedging instruments?



Choice vs. default

- Caveats:
 - Any choice system needs strong defaults to succeed
 - Role of signaling
 - Cost of choice
 - ◆ Insurance: anti-selection
 - ◆ Investment: poor choices



Choice vs. default

- Society likes defaults (offer protection)
 - Cost to society of choice
- Individuals want choice but often make poor choices (behavioral economics)
 - Role of signals & defaults



Choice vs. default

- Employers are indifferent to (individual) choice
 - But want more employer choice (models)
- For markets, choice provides opportunity for innovation
 - But, for individuals, defaults (standardized products) increase comparability, decrease costs



Measurement Framework

- Tool to assess how well particular designs meet stakeholders needs and risks
 - Role alignment for Society, Individuals, Employers, Market
 - In-depth evaluation for each stakeholder with composite ratings
- Objectively measure plan designs in a “perfect world”



Measurement Framework

- Also consider effects of “moral hazard”
 - When agents take actions that don’t align with interests of stakeholders, particularly individuals or shareholders/owners.
 - When stakeholders (particularly individuals) can be led to not act in their own best interest
- Not considering voluntary nature of system – increases risk due to unpredictability



Society's Needs & Risks (Composite rating ■)				
Plan being evaluated: Traditional Final Pay DB				
US/Canadian, corporate sponsor, single employer. Assumes plan is properly funded and administered.				
Criteria	Description	Rating	Evaluation	Moral hazard (& adjusted rating)
Adequate	Protects vulnerable citizens.	Yellow-Green	Protects those who are able to hold down employment for long periods of time; less protection for workers who change jobs frequently.	Adequacy depends on employer paternalism including the willingness to maintain benefit levels. Would employers provide benefits to all low-paid employees without statutes requiring such coverage? ■
Affordable	Does not take resources from other social needs. Ensures risk pooling done efficiently.	Yellow-Green	Private employer sponsorship does not put cost burden on state; however costs are generally tax deductible and tax sheltered pre-retirement. May not pool risks efficiently in markets	Managers may not use market hedging, preferring to gamble on market returns. ■
Sustainable	Sustainable across and within generations. Equitable across and within generations.	Green	Can be funded to directly allocate costs back to the current generation of owners/shareholders.	Can be tempting to push costs to future generations of owners/shareholders. ■



Measurement Framework

The average rating of yellow-green is a composite of the nine society subcategories.

The ratings for the nine-subcategories are shown in the color line. They are color grouped so you can see how many of each rating were received.

Ratings for each subcategory were adjusted for the effects of moral hazard. This shows the new color line after moral hazard is considered as well as a new composite rating.

Society (composite rating)	Meets society's needs and risks.	Yellow-Green	Individual criteria ratings: Plans protect long-service workers well (less so short-service workers) avoiding the need for more government sponsored benefits.	Adjusted composite rating: ■ Ratings after moral hazard: System depends on employer paternalism, and employer moral hazards require government regulation, which destabilizes system.
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Traditional Final Pay DB Plan
US/Canadian, corporate sponsor, single employer. Assumes plan is properly funded and administered.

Criteria	Description	Rating	Evaluation	Effect of moral hazard
Self-adjusting	Automatically adjusts to changing demographic and economic conditions.	Red		
Aligns roles with skills	Aligns stakeholders' roles well with skills.	Yellow		
New norms for work and retirement	Could support flexible work arrangements, e.g. phased retirement, return to work, etc.	Red-Yellow		
Alignment with markets	Could use market mechanisms effectively to hedge risks.	Yellow-Green		Rating after moral hazard: ■
Society (composite rating)	Meets society's needs and risks.	Yellow-Green	Individual criteria ratings: ■■■■■■	Ratings after moral hazard: ■■■■■■ Adjusted composite rating: ■
Individuals (composite rating)	Meets individuals' needs and risks.	Yellow-Green	Individual criteria ratings: ■■■■■■	Ratings after moral hazard: ■■■■■■ Adjusted composite rating: ■
Employers (composite rating)	Meets employers' needs and risks.	Red-Yellow	Individual criteria ratings: ■■■■■■	Ratings after moral hazard: ■■■■■■ Adjusted composite rating: ■
Markets (composite rating)	Meets markets' needs and risks.	Yellow	Individual criteria ratings: ■■■■■■	Ratings after moral hazard: ■■■■■■ Adjusted composite rating: ■



Measurement Framework

- To date reviewed DB, DC, Ontario Teachers Pension Plan, Dutch industry wide schemes, United Methodist Church Plan
- More to evaluate
- **Initial** lessons learned



Measurement Framework: Initial lessons learned

- Strong governance
- Aligning roles with skills
- Self-adjusting mechanisms
- Member solidarity
- Independence from employer
- Use of groups
- Default free discount rates



Strong Governance

- Independent boards: pension/investment experts
- Board members do not advocate for employers or employees
- Plans have pre-set rules: changes in contributions and/or benefits
- For union plans, benefits/contribution levels set by board (not subject to negotiation)



Aligning roles with skills

- Use professional investment advisors to make investment decisions
- Independent from employer of participants
 - Professionals acting on behalf of plan
- Offer limited choices to participants
 - No lump sums



Self-adjusting mechanisms: concerns

- Market shocks
 - May believe a system designed on ALM models is more resilient than it is.
- Industry decline
 - Will the plan know/be able to hedge on the way down?
- Breakdown of solidarity on market decline
 - Everyone is willing to share the gain, but will they be willing to share the pain?



Self-adjusting mechanisms: concerns

- Hedging vs. sharing risks
 - Economic theory: more efficient to hedge risks than share them
 - Lifecycle theory: if human capital is higher (younger), can take more market risks
- Assuming same risk preferences for retirees & actives
 - Retirees have low human capital; must be hedged



Member solidarity

- Organized around a particular profession
- Create member accountability to plan
 - Require significant employee contributions
 - Adjust employee contributions/benefits based on fund performance
- Concerns
 - Demographic strains (aging membership)
 - Solidarity: created or found?



Based on what we know about choice vs. default, insurance vs. investment, and the roles of choice, signals, default, governance, self-adjusting mechanisms, preferences of stakeholders ...

*What would **you** design?*



Call for models

- Opened a call for models contest in July 2009
 - What is your new (tier II) retirement system that best meets principals of Retirement 20/20?
- Accepted about 20 statements of intent
- Final submissions due December 18
 - Judged by panel
 - Monetary prizes for top 3 – 5 submissions
 - Winners chosen & featured spring 2010 seminar



Questions?



Conclusions

- Retirement systems need a degree of insurance
 - Protect society, individuals
- Consider (carefully) role of choice
 - Choice brings cost
 - At a minimum, provide strong defaults
- Rethink role of employers
 - Should tier II be reliant on employer sponsorship?
- Market evolution
 - Products, investments/hedging mechanisms



Conclusions

- Measurement framework
 - Strong governance
 - Possible new design features that could be borrowed
- 800 lb gorilla: Health (& long-term) care
 - Will we able to do the right thing for retirement without fixing health (& long-term care)



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Thank you!

