Variable Annuity Pension Plan—Choose Your Own Adventure

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Plan Design Considerations

- Plan type (DB or DC)
- Funding cost
- Administrative difficulty
- Investment strategy
- Investment/benefit risk
- Employee demographics
- Cost control
- Communication/education

Plan Type

- Traditional Defined Benefit—DB
  - Participant receives life annuity, can't outlive benefit
  - All investment risk with employer **(or is it?)**
- Defined Contribution—DC
  - 401(k), 403(b)
  - Participant saves up nest egg and tries to figure out how to live on it for the rest of their life
  - All investment risk with participant

Plan Type

- New Defined Benefit plans have been developed
  - Cash balance
  - Variable accrual
  - **Variable benefit**
- We are going to focus on the last type

Plan Type

- Variable benefit
  - Benefit is based on number of shares like a mutual fund
  - Each year value of shares increase or decrease based on investment performance
  - Entire accrued benefit fluctuates each year

Design Considerations

- Variable benefit options
  - Grandfathering benefits
  - Hurdle rate
  - Fix benefit for retirees when they retire
  - Limit benefit adjustments for retirees
  - Stabilization reserve
  - Funding target
  - Caps/floors
  - Minimum benefit

Design Considerations

- Variable benefit options
  - Investment return—Market or actuarial
  - Investment allocation
  - Investment lag periods
  - Benefit adjustment timing

Variable Benefit—Options

- Hurdle rate
  - Low provides a lower initial benefit and larger future expected increases
  - Favors younger workers
  - High provides a higher initial benefit and lower future expected increases
  - Favors older workers
  - Typical range 4–5.50%

Variable Benefit—Options
Question 1

- Select hurdle rate:
  (Note a rate lower than 5% requires 3-year vesting rather than 5-year vesting)

  A. 3%

  B. 4%

  C. 5%

  D. 6%

Variable Benefit—Options
Question 2

- Benefits at retirement:
  Should retirees get unadjusted lifetime income?
  A. Yes
  B. No

Variable Benefit—Options
Question 3

- Benefits at retirement:
  Should retirees' benefits be subject to same volatility as actives?
  A. Yes
  B. No

Variable Benefit—Options
Question 4

- Benefits at retirement:
  Should retirees be protected from benefit decreases?
  A. Yes
  B. No

Variable Benefit—Options
Question 5

- Benefit at retirements:
  If question 4 was yes, what funding target should plan be at to protect retirees?
  (Sometimes referred to as a stabilization reserve)
  A. Always protect, no matter the cost
  B. 100%
  C. 105%
  D. 110%
  E. 115%
  F. 120%

Variable Benefit—Options

- Funding Target
  - Should contributions exceed normal cost and admin expenses
  - 100% means any bad experience causes unfunded liability in the plan which must be recovered
  - 140% means a lot of the contribution is going towards building up surplus rather than going towards benefits
  - Typical target 110–120%

Variable Benefit—Options
Question 6

- Select funding target:
  A. 100%
  B. 105%
  C. 110%
  D. 115%
  E. 120%

Variable Benefit—Options

- Cap on annual share value increase
  - Cap annual increase in benefit (full or partial)
  - Allow good years to help build surplus
  - How long to build surplus?
- Alternative method for building a surplus
  - Extra contributions above operating costs
  - Initial cash contribution to seed the plan

Variable Benefit—Options
Question 7

- Should we cap annual increase?
  A. No cap
  B. Hurdle rate + 1.0%
  C. Hurdle rate + 2.0%
  D. Hurdle rate + 3.0%
  E. Hurdle rate + 4.0%
  F. Double the hurdle rate

Variable Benefit—Options
Question 8

- Minimum Benefit:
  Do you want to provide a minimum benefit?
  A. No
  B. Yes, 40% of basic benefit
  C. Yes, 60% of basic benefit
  D. Yes, 80% of basic benefit
  E. Yes, 100% of basic benefit

Variable Benefit—Options

- Investment Returns
  - In some cases, actual investment returns can be delayed
    - Real Estate investments may not have full audits available to determine current market value
    - Private Equity may have delays in determining market value
  - Benefits adjusted based on investment performance compared to hurdle rate

Variable Benefit—Options

- Investment returns
  - How can we address these problems?
  - Only used daily valued investments
  - Use preliminary financial statements
  - Have a lag in the adjustment calculation
    - Benefit adjustment effective 1/1/2024 would be based on investment returns for 2023 or 2022
    - Creates a lag so the plan has time to get actual market returns
  - Lag periods may lead to funding issues in the plan

Variable Benefit—Options

- Investment Lag Period (assume 5% hurdle rate)

With no lag, 2023 benefit will decrease about 20% [(.85/1.05) -1]

With 1 yr. lag, 2023 benefit will increase about 14.3% [(1.20/1.05) -1]

Variable Benefit—Options
Question 9

- Investment returns:
  A. No lag
  B. 1 year lag

Variable Benefit—Options
Question 10

- Return target:
  A. Target return to hurdle rate
  B. Hurdle rate + 0.5%
  C. Hurdle rate + 1.0%
  D. Hurdle rate + 1.5%
  E. Hurdle rate + 2.0%

Variable Benefit—Options

- Investment return for benefit adjustments
  - Market return
    - Provides greater transparency
    - Liabilities track better with market value of assets
  - Actuarial return (smoothed return)
    - Reduces benefit volatility
    - Higher chance of unfunded liability

Variable Benefit—Options
Question 11

- Investment return for benefit adjustments:
  A. Market return
  B. Actuarial return

Variable Benefit—Considerations

- Plan may not always be fully funded
  - Impact of lag
  - Other assumptions will lead to changes in funded status (mortality, retirement, etc.)

Variable Benefit—Considerations

- Communication
  - Must be able to communicate the plan design to participants
  - Multiple layers of communication can be helpful
  - Detailed benefit statements
  - Member meetings

Key Takeaways

- Many design decisions are inter-related with tradeoffs
- Design features are available to reduce benefit volatility
- Variable plans are complex and challenging to administer
- Communication and education are critical
- Variable designs can mitigate underfunding and be attractive to existing and new employers

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