Derisking Your Defined Benefit Pension Plan

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Discussion Points

- General Risks
- Defined Benefit Plan Background
- Regulatory Environment
- Spectrum of Pension Risk Management Options
- Points of View
- Risk Transfer Strategies by Population Segments
- Terminated Vested Lump Sums
- Annuity Purchase
- Asset Strategies
- Plan Termination
- Final Considerations for Controlling Cost/Liability Management
- Next Steps
General Risks

What do we generally mean by risk in a Pension Plan?

• Investment Risk
• Interest Rate Risk
• Regulatory Risk
• Longevity Risk
Since the Turn of the Century Alone:

- **Perfect Storm (2000 – 2003)**
  - Interest rates declined
  - Equity markets declined
  - Funded percentages declined

- **Credit Crisis (2007 – 2008)**
  - Markets severely declined

- **“Recovery” (2010 – current)**
  - Low interest rates
  - New mortality tables
  - Increased PBGC premiums
Regulatory Environment—Incentive to Derisk?

**ERISA**
- Long term horizon

**PPA (MAP-21, HATFA, BBA)**
- Shorter term horizon
- Cash outlays

**FAS 87/ FAS 132/ FAS 158/ ASC 715**
- Balance sheet impact
- Settlement charges

**PBGC Premiums**
- Significant increases in both flat-rate and variable-rate premiums
- Incentive to reduce participant counts
Spectrum of Pension Risk Management Options

- Traditional Ongoing Plans
- Account Based Plans
- Close Plan to New Entrants
- Prospective Lump Sum Option
- Freeze Benefit Accruals
- Increased Funding
- Liability-Driven Asset Strategies
- Bulk Lump Sum (Retirees)*
- Bulk Lump Sum (Former Employees)
- Annuity Purchases
- Plan Termination
- Settlement
- Benefit

* As of July 9, 2015, IRS Notice 2015-49 prohibits sponsors from adopting lump sum windows for participants who currently receive annuity payments.
Consulting Point of View

• It is our consulting viewpoint that a defined benefit plan should be managed like a separate line of business: it should have budgets, forecasts and a strategic plan.

• The magnitude of the issue and its prominence on the balance sheet require this approach, as the defined benefit plan is a use of cash, creates volatile liability and expense, and causes negative consequences often at the worst time in business cycles.
Plan Sponsor Point of View

A plan sponsor’s point of view involves a variety of areas regarding cost, risk management, cash flow, competitiveness, and labor management:

**Step One: Status-quo**
- Understand all-in costs of DB plans and the basis to evaluate (accounting vs. funding) approaches; See “dashboard report”
- Does this plan provide you with competitive advantages for human capital?
- Are there opportunities within the current operating structure of the Plan to improve efficiencies?

**Step Two: Establish Objectives**
- If the goal is to contain/reduce costs, know and understand that fact
- If the goal is to contain balance sheet volatility, evaluate target “spread” and create action plan; understand all impacts on other aspects of accounting (e.g. settlement costs)
- If the goal is to exit the Plan, set strategic plan to achieve this goal within an acceptable time horizon in orderly fashion, given other financial constraints
Plan Sponsor Point of View (continued)

**Step Three:**
- Model impacts and refine as needed.

**Step Four:**
- Implement strategy with communications plans and periodic updates of progress.
# Sample Dashboard Report

<table>
<thead>
<tr>
<th>Item</th>
<th>Accounting (based on June 30, 2015 ASC 715 report)</th>
<th>Funding (based on July 1, 2015 valuation report)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Cost (cost of benefits earned)</td>
<td>N/A – plan frozen</td>
<td>N/A – plan frozen</td>
</tr>
<tr>
<td>Expense/Minimum Required Contribution</td>
<td>$63,881</td>
<td>$0</td>
</tr>
<tr>
<td>Projected Benefit Obligation (PBO)</td>
<td>$15,498,295</td>
<td>$11,876,057</td>
</tr>
<tr>
<td>Accumulated Benefit Obligation (ABO)/Funding Target</td>
<td>$15,498,295</td>
<td>$12,025,120 (AVIA)</td>
</tr>
<tr>
<td>Assets</td>
<td>$11,888,246</td>
<td>N/A</td>
</tr>
<tr>
<td>Balance Sheet Liability</td>
<td>$3,630,049</td>
<td>N/A</td>
</tr>
<tr>
<td>AOCI Balance (offset to retained earnings; represents items not yet reflected in P&amp;L; mainly net losses; amortized over future periods; key items for settlement charges and/or curtailment)</td>
<td>$7,690,218</td>
<td>N/A</td>
</tr>
<tr>
<td>Cash into Plan</td>
<td>$548,000 (cash basis)</td>
<td>$321,000 (accrual basis)</td>
</tr>
<tr>
<td>Cash out of Plan</td>
<td>$628,690–$99,236 (expenses)</td>
<td>$628,690+$99,236 (expenses)</td>
</tr>
<tr>
<td>Liability by Group:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actives</td>
<td>$4,326,586</td>
<td>$3,046,932</td>
</tr>
<tr>
<td>Retired</td>
<td>6,791,034</td>
<td>5,791,017</td>
</tr>
<tr>
<td>Terminated Vested</td>
<td>4,380,075</td>
<td>3,035,118</td>
</tr>
<tr>
<td>Total</td>
<td>$15,498,295</td>
<td>$11,876,057</td>
</tr>
<tr>
<td>PBGC Premiums</td>
<td>$95,928</td>
<td>$95,928</td>
</tr>
<tr>
<td>Demographics:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actives</td>
<td>152</td>
<td>152</td>
</tr>
<tr>
<td>Retired</td>
<td>168</td>
<td>168</td>
</tr>
<tr>
<td>Terminated Vested</td>
<td>152</td>
<td>152</td>
</tr>
<tr>
<td>Total</td>
<td>472</td>
<td>472</td>
</tr>
<tr>
<td>Discount Rate/Effective Rate</td>
<td>4.30% (BOY)/4.25% (EOY)</td>
<td>6.28%</td>
</tr>
</tbody>
</table>
Plan Sponsor Interest in Lump Sum Settlements Remains Strong

Why consider a Lump Sum Offering?

• Reduces overall plan liabilities incrementally
  – Lowers volatility on balance sheet and risk exposure
• Reduces PBGC premiums (especially if close to or at VRP cap)
• Reduces ongoing administrative costs and plan administration
• New mortality tables likely to be mandated in 2017

Annuity Purchase Activity has Lagged Lump Sum Activity
Plan Sponsor Point of View (continued)

Development of Financial/Funding Policies:

• Tighter annual funding rules already caused changes as, in simple terms, requiring to fund 100% of benefits earned, plus/minus seven year amortization of other gains/losses. Pension relief has clouded the goal.

• Consider ROI in making additional contributions

• Does borrowing to fund the plan (or terminate the plan) have value?

• Mitigate PBGC premiums, especially if near the variable-rate cap

• Required future mortality assumption changes

Evaluation of Investment Strategies:

• Alter longer-term desire to out-perform obligation growth: focus more on reducing risk than seeking higher returns

• Changes in investment portfolio will require changes in assumed long-term rate of return on plan assets resulting in modest increases to expense

Continue to Run a Frozen Plan Permanently?
## Risk Transfer (Settlement) Strategies by Population Segments

<table>
<thead>
<tr>
<th>Population Segment</th>
<th>Settlement Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td><strong>Lump Sums</strong></td>
</tr>
<tr>
<td></td>
<td>Only with full plan termination (see right column) or via spinoff/termination if full plan termination is not feasible/desirable</td>
</tr>
<tr>
<td></td>
<td><strong>Annuities</strong></td>
</tr>
<tr>
<td></td>
<td>No participant election needed, but expensive and almost exclusively used with full plan termination</td>
</tr>
<tr>
<td></td>
<td><strong>Plan Terminations</strong></td>
</tr>
<tr>
<td></td>
<td>Start with lump sums (less expensive option but requires participant election). Purchase annuities for participants who do not take a lump sum (expensive but no participant election required)</td>
</tr>
<tr>
<td>Terminated Vested</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Least expensive opportunity; needs participant election</td>
</tr>
<tr>
<td>Retiree</td>
<td></td>
</tr>
<tr>
<td></td>
<td>May be possible only on plan termination</td>
</tr>
<tr>
<td></td>
<td>Good solution to settle large amount; no participant election needed</td>
</tr>
<tr>
<td></td>
<td><strong>Annuities</strong></td>
</tr>
</tbody>
</table>
Terminated Vested Lump Sums

Offer Lump Sums in Lieu of Future Monthly Benefits for the Terminated Vested Participants

Surveys Show:

- Average acceptance rates run from 50% - 70%
- Ideal election period is from 45 to 60 days
- More participants than not rollover their funds
- Communications process is critical
Plan Sponsors Have Many Factors to Consider When Implementing a Lump Sum Program

• Plan funded status
• Pension expense
• Settlement accounting
• Administration
• Communication challenges
• Participant reaction
• Paternalism
• Mortality tables (known through 2016)
• PBGC premium increases
Terminated Vested Lump Sums

(continued)

Coordination is a Must Between the Following Parties:

- Actuary
- Plan Administrator
- Investment Advisor
- Trustee
- Legal Counsel
- Communicators

- Data management is very important
  - Are all accrued benefits calculated?

- Communications plan
  - Pre-election announcement
  - Election packages
  - Reminders
  - Face to face/group meetings
Annuity Purchase

Many Organizations Have Taken Successful Action to Reduce the Barriers and Perceptions of Derisking

PBGC Premium increases are really what causes Plan Sponsors to act

New Mortality Tables have/will increase accounting liabilities for Retirees by 6% - 8%; Insurer Pricing already includes the new Mortality Tables, so the Annuity Buyout might only be 3% +/- of the accounting liabilities

Market Capacity is still high

What is the effect on funding and accounting (settlement?)
Immediate Retirees have a Predictable Cash Flow with Shorter Duration Liabilities

Look at Annuitizing a Smaller Portion of the Retiree Population (perhaps those with less than $100/ month or $250/ month), especially if at or near the VRP cap

Deferred Participants’ Cash Flows are Less Predictable

- Unknown commencement date
- Unknown form of payment
- Longer duration
- Purchase premium is higher than for lump sums
DOL Interpretive Bulletin 95-1

- Plan fiduciaries must select the “safest available annuity” provider
  - May not just rely on ratings provided by insurance rating services, but must consider:
    - Quality and diversification of the annuity provider’s investment portfolio,
    - Size of the insurer relative to the proposed contract,
    - Level of the insurer’s capital and surplus,
    - Lines of business of the annuity provider and other indications of an insurer’s exposure to liability,
    - Structure of annuity contract and guarantees supporting the annuities,
    - Availability of additional protection through state guaranty associations and the extent of those guarantees.

State Guarantee Associations Provide Various Levels of Protection

PBGC Protections End Upon Annuity Purchase
Reduce Potential Funded Status Volatility by Looking at Plan Assets

- Financial Solutions
- Investment Solutions
Asset Strategies (continued)

Financial Solutions (reduce the shortfall in plan assets)

• Contributions in excess of the required minimum, with a time horizon in mind
  – Keep in mind possible future mortality assumption changes
• Contributions to meet retiree payroll/obligation
• Contributions of employer securities (limited use)
• Debt financing
Asset Strategies (continued)

Investment Solutions (reduce the volatility of the shortfall in plan assets)

• Full Immunization
  – Match interest rate sensitivity of assets to the liability for entire group
  – Way of insuring against a drop in funded status
  – Likely increase in contributions and expense

• Partial Immunization
  – Liability Driven Investing (LDI)
  – Many plans have gone to a larger fixed-income allocation

• Portfolio Diversification
Liability Driven Investing (LDI)

• Most common approach to immunizing pension risk
• Used in conjunction with a “Glide Path” approach
• As the funded ratio of a plan increases, a larger fixed income portfolio is used as a hedge
  – Match bonds with the duration of the liabilities
• Selecting an appropriate glide path includes many considerations:
  – Plan demographics
  – Current Funded Status
  – Overall Funded Status Objective (i.e. 105% of accounting liability?)
  – Effect on Financial Statement
  – End game for the Plan
Final Key Points

• It is never too late to begin a Glide Path program
• Successfully predicting interest rate movements has proven to be difficult
• Seek outside professional investment assistance
Plan Termination

LIABILITY SEGMENT STRATEGY
Based on the status and duration of three participant groups

Non-Retirees
Lump Sum
Assume 80% take rate and annuities for the remaining participants
Lump sum payment is 100% of GAAP

Retirees
Buy-out
Purchase Buy-out

100% 110%
105.0% of GAAP to full exit

1 Estimated cost to exit based on hypothetical plan of 50% retirees and 50% non-retirees
Plan Termination

Plan Termination Strategy when Appropriate

• Select a Plan Termination Date
  – This date starts the timeline of activities required

• Only begin the process when you know all data is clean

• Various Notices must be filed with plan participants
  – Notice of Intent to Terminate
  – Notice of Plan Benefits
  – Notice of Annuity

• Government Filings
  – PBGC filing – no later than 180 days after termination date
  – IRS filing done concurrently

• Distribute plan assets after the later of:
  – 60 day PBGC review period
  – Receipt of IRS determination letter

• Entire process can take between 9 and 18 months to complete, or even longer
# Final Considerations for Controlling Cost/Liability Management

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Impact on liability and cost</th>
</tr>
</thead>
</table>
| Close Plan to New Entrants                   | **Liability:** long-term gradual slow-down in liability growth related to reduction in benefit earned  
  **Cost:** depends on amount and type of new hires and replacement plan  |
| Freeze Benefit Accruals for Current Actives   | **Liability:** immediate impact to stop growth of service cost; longer term exposure to volatility remains  
  **Cost:** understand replacement plan and immediate potential for settlement charges and/or curtailment charges as well as trailing DB costs  |
| Lump-sum for Former Employees                | **Liability:** favorable (as is current situation) if lump-sum obligation is less than current obligation; understand potential ramifications for current or delayed accounting impacts and funding impacts; will assist in volatility issues in the future  
  **Cost:** reduces interest exposure; PBGC premiums; potential for settlement charges; AFTAP strain  |
| Lump-sum for Current Retirees                 | As of July 9, 2015, IRS Notice 2015-49 prohibits sponsors from adopting lump-sum windows for participants who currently receive annuity payments.                                 |
| Periodic/Selected Purchases of Non-participating Annuity Contracts for Former Employees | **Liability:** favorable if annuity purchase obligation is less than current obligation; understand potential ramifications for current or delayed accounting impacts and funding impacts; will assist in volatility issues in the future  
  **Cost:** reduces interest exposure; PBGC premiums; potential for settlement charges, AFTAP strain  |
| Periodic/Selected Purchases of Non-participating Annuity Contracts for Current Retirees | **Liability:** favorable if annuity purchase obligation is less than current obligation; understand potential ramifications for current or delayed accounting impacts and funding impacts; will assist in volatility issues in the future  
  **Cost:** reduces interest exposure; PBGC premiums; potential for settlement charges, AFTAP strain  |
| Plan Termination                              | **Liability:** Immediate elimination  
  **Cost:** elimination of PBGC premiums; understand settlement costs or curtailment costs; evaluate cost of replacement plan and the cost to fully fund the current DB Plan  |
Next Steps

• Evaluate where your organization is on the Pension Risk Management Spectrum
• Compare and contrast your options/opportunities, given the wide range of alternatives available
• Determine your final objectives and overall timeframe
• Begin or Continue to Derisk your plan
Questions ???

Thank you!