REMEMBER THE OIL CRISIS OF 1973?
THANK YOU POLICY FORUM DEVELOPMENT TASK FORCE!

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On the week of June 29th, EBRI will offer its traditional spring Policy Forum in a nontraditional format — via a series of webinars. While we would love to see you in person — and hope we will see you in healthier times in December — EBRI wants to deliver timely, valuable content in a manner that is safe for our community. We plan to offer compelling speakers addressing policy implications in a post-pandemic world. We’ll be discussing retirement, health, and financial wellness issues within the prism of the times.

Register now!

Full Agenda

Presentations

- **June 29**: CARES Act: Implications for Retirement Security of American Workers
- **June 30**: The New Landscape: COVID-19’s Impact on Defined Benefit Plans
- **July 1**: Coming out the Other Side of COVID-19: the Future of the Economy and Employment
Click this button to raise your hand.

We will contact you through this chat window so that you can communicate your question(s) to us. Please note that you will be muted throughout the meeting.
Christopher Bone, former Director of the Policy, Research and Analysis Department (PRAD), Pension Benefit Guaranty Corporation

Bruce Cadenhead, Partner, Global Chief Actuary, Mercer

Jason Russell, Senior Vice President and Actuary, Segal Consulting

Moderated by: Jack VanDerhei, Research Director, EBRI

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TODAY’S AGENDA

• How market volatility and changes in the benchmark corporate bond interest rates have affected deficits across the U.S. pension system.

• Actuaries’ points-of-view on implications of the deficit changes on the defined benefit plan system.
The New Landscape:
COVID-19’s Impact on Defined Benefit Pension Plans

June 30, 2020
Defined Benefit Pensions for Employees and Beneficiaries

• Private Sector
  – Multiemployer
  – Single-Employer

• State and Local

• Federal
  – Military
  – Civilian

Source Data: Federal System Actuarial Reports, Publicplansdata.org, EBSA Private Pension Plan Bulletin
COVID-19 Plan Impacts

• Investments
• Liability Measures
  – Interest Rates
  – Mortality
  – Contributions (Sponsors)
The State of Defined Benefit Plans

Private Plan Systems
Aggregate Funding Levels - Estimated Market Value Basis

Source Data: PBGC 2017 Data Tables S-44 & M-9
The State of Defined Benefit Plans

State & Local Systems
Aggregate Weighted Funding Levels - Actuarial Basis

Source Data: Publicplansdata.org Quick facts as of June 2020 based on Public Plans Database and PENDAT
Underfunding in Single-Employer Plans with Weak Sponsors

($billions)

The State of Defined Benefit Plans

Multiemployer Plan Risk Status

% of Ongoing Plans

Source Data: PBGC 2017 Data Tables M-18 2009-2015; Form 5500 Abstracts 2016-2018
Multiemployer Plans

Overview
Current Solvency Crisis
Impact of COVID
Possible Legislation
Multiemployer Plans: Overview

- Plans cover workers in the same industry
- Plans may be local, regional, or national
- Plans are governed by a joint board of trustees
  - Equal representation by labor and management
- Contributions are collectively bargained
  - Contributions usually tied to work levels (i.e., not discretionary)
  - Pension is part of overall wage package
- Vast majority of plans provide future benefit accruals (i.e., not “frozen”)
Multiemployer Universe

Source: Segal analysis of Form 5500 data for plan years ending in 2018
Size of each plan “bubble” is based on the number of covered participants
Differences by Industry

**Plans**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total Plans</th>
<th>Green Zone</th>
<th>Endangered</th>
<th>Critical</th>
<th>Declining</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Industries</td>
<td>1,222 Plans</td>
<td>63%</td>
<td>12%</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>Construction</td>
<td>744 Plans</td>
<td>67%</td>
<td>16%</td>
<td>13%</td>
<td>4%</td>
</tr>
<tr>
<td>Service</td>
<td>93 Plans</td>
<td>70%</td>
<td>6%</td>
<td>18%</td>
<td>5%</td>
</tr>
<tr>
<td>Retail/Food</td>
<td>63 Plans</td>
<td>43%</td>
<td>10%</td>
<td>35%</td>
<td>13%</td>
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<tr>
<td>Transportation</td>
<td>174 Plans</td>
<td>53%</td>
<td>8%</td>
<td>18%</td>
<td>21%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>102 Plans</td>
<td>42%</td>
<td>5%</td>
<td>19%</td>
<td>34%</td>
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<tr>
<td>Entertainment</td>
<td>46 Plans</td>
<td>80%</td>
<td>9%</td>
<td>2%</td>
<td>9%</td>
</tr>
</tbody>
</table>

**Participants**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total Participants</th>
<th>Green Zone</th>
<th>Endangered</th>
<th>Critical</th>
<th>Declining</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Industries</td>
<td>11.0 Million</td>
<td>55%</td>
<td>11%</td>
<td>22%</td>
<td>12%</td>
</tr>
<tr>
<td>Construction</td>
<td>4.2 Million</td>
<td>65%</td>
<td>24%</td>
<td>10%</td>
<td>1%</td>
</tr>
<tr>
<td>Service</td>
<td>1.9 Million</td>
<td>57%</td>
<td>1%</td>
<td>39%</td>
<td>3%</td>
</tr>
<tr>
<td>Retail/Food</td>
<td>1.8 Million</td>
<td>47%</td>
<td>2%</td>
<td>42%</td>
<td>9%</td>
</tr>
<tr>
<td>Transportation</td>
<td>1.7 Million</td>
<td>54%</td>
<td>6%</td>
<td>7%</td>
<td>33%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1.0 Million</td>
<td>11%</td>
<td>2%</td>
<td>36%</td>
<td>51%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>0.4 Million</td>
<td>86%</td>
<td>1%</td>
<td>0%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: Segal analysis of Form 5500 data for plan years ending in 2018. Percentages may not add, due to rounding.
Solvency Crisis (Pre-COVID)

- About 130 plans in “critical and declining” status
  - Covering about 1.4 million participants and beneficiaries
  - Critical and declining = projected insolvency within 20 years

- PBGC multiemployer program projected to be insolvent in 2025

- “MPRA” tools for plans in critical and declining status
  - MPRA = Multiemployer Pension Reform Act of 2014
  - Includes suspension of benefits, PBGC partition, PBGC facilitated merger
  - Must enable the plan to remain solvent
  - Must be approved by Treasury and/or PBGC
  - So far, fewer than 30 plans have applied for relief under MPRA
PBGC Multiemployer Program

Source: PBGC FY 2018 Projections Report
Data as of June 26, 2020 compiled from www.treasury.gov/mpra
Counts include 3 applications for a suspension plus PBGC partition
Counts do not include 1 recently-approved PBGC facilitated merger
## How We Got Here (Pre-COVID)

### Median Results for Multiemployer Pension Plans

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All Plans</td>
<td>1,222</td>
<td>88%</td>
<td>84%</td>
<td>1.1</td>
<td>1.6</td>
<td>x 1.8</td>
</tr>
<tr>
<td>Green Zone</td>
<td>766</td>
<td>92%</td>
<td>92%</td>
<td>1.0</td>
<td>1.4</td>
<td>x 1.7</td>
</tr>
<tr>
<td>Endangered</td>
<td>152</td>
<td>78%</td>
<td>72%</td>
<td>1.2</td>
<td>1.6</td>
<td>x 2.1</td>
</tr>
<tr>
<td>Critical</td>
<td>186</td>
<td>86%</td>
<td>67%</td>
<td>1.4</td>
<td>2.3</td>
<td>x 2.1</td>
</tr>
<tr>
<td>Declining</td>
<td>118</td>
<td>83%</td>
<td>45%</td>
<td>2.6</td>
<td>7.3</td>
<td>x 1.9</td>
</tr>
</tbody>
</table>

Source: Segal analysis of Form 5500 data for plan years ending in 2018
Zone status does not take into account changes after January 1, 2019
Funded percentages and maturity ratios are as of the end of the plan year
Impact of COVID

Will the economic impact of COVID expand the current solvency crisis?

Will healthy plans be able to recover?

Plan Risk Factors: General Considerations

Investment Returns
- Market volatility so far in 2020
- Investment gains in 2019
- Continued low interest rates

Contributions
- Declines in covered employment
  - Temporary vs. long term?
  - Variations by industry, geography
- Employer bankruptcies
- Affordability for remaining employers

Demographics
- Mortality rates
- Retirement rates
Multiemployer Pension Legislation?

Relief for troubled plans?
- Expanded PBGC partition program?
- Eligibility and preconditions?

Increased PBGC guarantees?

Increased PBGC revenue?
- PBGC premium increases?
- Federal funding?
- Other sources?

Ongoing funding rules?
- Minimum funding requirements?
- Zone status rules?
- Role of MPRA?
- Withdrawal liability rules?

Temporary COVID relief?

Composite plans?
The New Landscape: COVID-19’s Impact on Defined Benefit Plans

Single-Employer Plans

June 30, 2020

Bruce Cadenhead
New York

welcome to brighter
Overview

• Types of effects
  – Actuarial
    - Mortality
    - Retirement / turnover / disability
    - Data update
  – Economic
• Heightened uncertainty
• Trends and legislative outlook for funding relief
Mortality / Longevity

• The indelicate question – “Will COVID-19 make my pension costs go down?”
  – Probably not significantly – economic effects are likely to outweigh the effect on participant longevity

• Near-term effect
  – Normal data updates will capture the immediate effect on the plan population
    - Will capture any “excess” mortality
  – Generally no need to build what’s happening now into assumptions for the future
  – Overall effect likely to be relatively small for most populations

• Longer-term – more speculative
  – Some concern about ongoing health effects for survivors
  – Other factors may improve longevity
How might assumptions be affected?

1. Is this a one-off?
2. Will survivors be “fittest”? Or impaired?
3. What are the long term impacts?

Deaths

COVID-19

2020

Time
What might be the impacts of COVID-19?

**Shorter term**
- Improved hygiene / reduced infectious disease deaths
- Immunity of survivors
- Second / multiple waves
- Impaired health of survivors
- New virus strain
- Weaker economy
- Delayed treatments

**Longer term**
- Changes to social care system
- Reduced air pollution
- Long term financial impact
- Shorter lives
- Longer lives

Weaker economy
Deaths to date – will this be a significant event?
Many states are experiencing the worst year on record

**Illinois**: 116% of 5-year average

**California**: 106% of 5-year average

Source: Club Vita analysis of data up to 23 May 2020, from the National Center for Health Statistics at the Center for Disease Control and Prevention (downloaded 22 June 2020)
Deaths to date – will this be a significant event?

Some areas have been very badly affected

New York City cumulative weekly deaths compared to average over 2015-2019

NYC full-year trend likely to be closer to 150% of a normal year

New York City: 209% of 5-year average

Source: Club Vita analysis of data up to 23 May 2020, from the National Center for Health Statistics at the Center for Disease Control and Prevention (downloaded 22 June 2020)
Deaths to date – will this be a significant event?

Some states still within boundaries of previous years

Ohio: 101% of 5-year average

Source: Club Vita analysis of data up to 23 May 2020, from the National Center for Health Statistics at the Center for Disease Control and Prevention (downloaded 22 June 2020)
Riskiness of different jobs

Health care workers are at the greatest risk — they can encounter diseases and infections daily and typically work in close proximity to one another and their patients. Many are already under quarantine because of exposure to the virus.

Overall effect?

- Depends on variety of factors
  - Level of exposure
  - Case fatality rate
    - Varies substantially based on age and other demographic/socio-economic factors
  - Related excess mortality (e.g., deferral of necessary care, economy-related)

- US Population Stats
  - Total population 329M in 2019 (from Census.gov)
  - Estimated annual deaths based on projected 2020 Death Rates from SSA: 2.9M (about 0.9% of population)
  - 2020 deaths attributed to COVID-19 year-to-date: 122,000 (CDC as of June 25) = 0.04% of population
    - Likely significantly more COVID-related deaths attributed to other causes
    - Highest projections absent effective interventions were in the 2M range (< 1% of population); current projections are variable, but much lower
Effect on individual plans?

- Few (if any) plans are likely to see a doubling of normal annual mortality

**Rough estimate of effect of doubling of one year’s typical mortality**

<table>
<thead>
<tr>
<th>Age</th>
<th>Approximate % Change in Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>-0.1%</td>
</tr>
<tr>
<td>60</td>
<td>-0.8%</td>
</tr>
<tr>
<td>80</td>
<td>-4%</td>
</tr>
<tr>
<td>Overall for “typical” demographics</td>
<td>&lt;-1%</td>
</tr>
</tbody>
</table>

- Non-mortality effects have potential to be far more significant
  - 8-10 basis point change in discount rates ≈ 1% change in liability
  - Daily change in S&P 500 has been > 1% 65 times already this year (compared to 37 times in 2019)
Beyond Longevity – Other Demographic Assumptions

• Retirement / turnover
  – Very employer-specific
  – Expect lower voluntary turnover / retirement as there is greater economic need / appreciation for current employment and fewer alternatives
    - Employees dependent on DC accounts may need to work a lot longer to feel financially secure
    - Increased concern about securing healthcare prior to Medicare eligibility
    - Those with significant DB benefits are likely to feel most secure in going ahead with retirement
    - Potentially higher involuntary turnover / retirement
    - Temporary reductions (e.g., furloughs) may reduce associated benefits costs as well

• Many may wind up settling for lower than anticipated standard-of-living in retirement, rather than trying to get back into the labor market

• Disability claims tend to rise in challenging economic conditions
Employer-initiated Changes

• Early retirement windows
  – Viable even with otherwise frozen DB plans
  – Defers cash costs relative to other options

• In-service distributions from DB plans for those age 59 ½ or higher
  – May represent a significant transfer of risk from employer to employee if taken as a lump sum

• Plan design
  – Temporary reduction in DC contributions / DB accruals
  – Further movement away from DB, or toward lower-risk designs, such as cash balance

• Phased retirement programs
  - Allows for knowledge transfer during transition to retirement
  - Many programs provide for defined end-date which facilitate workforce planning
  - Increase opportunities for promotion for remaining employees
MARKET THEMES

- RECENT MARKET VOLATILITY RELATED TO CORONAVIRUS
- SIGNIFICANT RECOVERY IN EQUITY MARKETS DURING Q2 FOLLOWING SIGNIFICANT DROPS
- DISCOUNT RATES DOWN ~45 BPS YTD DUE TO NARROWING SPREADS OVER APRIL AND MAY
- OVER 6% YTD DECREASE IN FUNDED STATUS PRIMARILY DUE TO HEAVY EQUITY LOSSES

LIABILITY THEMES

- UPTICK IN RISK TRANSFER AND PLAN TERMINATION ACTIVITY
- UNDERFUNDING PBGC "TAX" OF 4.5% PER YEAR (TOTAL PREMIUMS UP TO $644 / PERSON)
- RELEASE OF NEW PRIVATE-SECTOR MORTALITY TABLE EXPECTED TO HAVE MINIMAL IMPACT ON LONGEVITY COSTS FOR MOST PLANS

INTEREST RATES & MARKET VolATILITY

Source: Bloomberg, Mercer.

Equity levels reflect the S&P 1500 total returns net of dividends and are indexed to 12/31/2012. Yield levels reflect the Barclays Long AA Corporate Yield to Worst.

S&P 1500 funded status estimates are from Mercer’s proprietary database.
Summary of current trends

• Greater uncertainty in general will affect planning
  – Asset allocation
  – Derisking – likely to remain popular
    - Market remains very competitive
  – Greater appreciation for uncertainty in demographic factors (turnover/retirement/mortality) than in the past
    - Changing retirement patterns could result in substantial change in costs for plans with early retirement subsidies or for plans that do not provide actuarial increase for those working past 65
    - Gathering more granular data on participant mortality may help with optimizing risk transfer options
  – Many employers looking for opportunities to reduce benefit costs – at least temporarily
Accounting trends

• Declining interest rates and weak asset returns have substantially increased deficits

• Year-end measurements
  – Accelerated data gathering may be required for plans with significant demographic changes (more likely to be driven by turnover or pay changes than by mortality)

• Remeasurements due to significant events
  – Settlements or curtailments due to RIFs or voluntary programs
Funding trends

• Phase-out of 25-year average interest rate corridor scheduled to begin in 2021
  – Required contributions are projected to increase substantially for plans that have been paying close to the minimum required amount

• HEROES Act would provide significant additional time to meet these obligations
  – Retain (and strengthen) 25-year average corridor and delay phase-out until 2026
  – Increase amortization period for unfunded liabilities from 7 years to 15 years
  – Unlikely to be adopted in its current form due to strong opposition in the Senate
  – Recent discussions suggest strong possibility of a compromise
  – But outcome likely tied to multiemployer reform negotiations
welcome to brighter
EBRI SUMMER POLICY FORUM WEBINAR
JULY 1, 2020
1-2 PM

Coming out the Other Side of COVID-19: the Future of the Employer Based Health Care System

Featuring:

Paul Fronstin, Director, Health Research and Education Program, EBRI
Kurt Giesa, Partner, Oliver Wyman
Jon Kessler, President and CEO, HealthEquity
UPCOMING EBRI PROGRAMS

Members-Only Research Round-Up Webinar – July 15

Savings and Caregiving in the Age of COVID 19, American Savings Education Council Meeting – July 22


COBRA, Chronic Conditions and Spending Webinar – August 4

Winter Policy Forum – December 10

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