

Butch Lewis Act

**Landmark Legislation
To rescue union pensions**



Ryan ALM, Inc.
The Solutions Company
1- 561-656-2014
www.RyanALM.com

Multiemployer Pensions

Pension deficit = \$600 billion

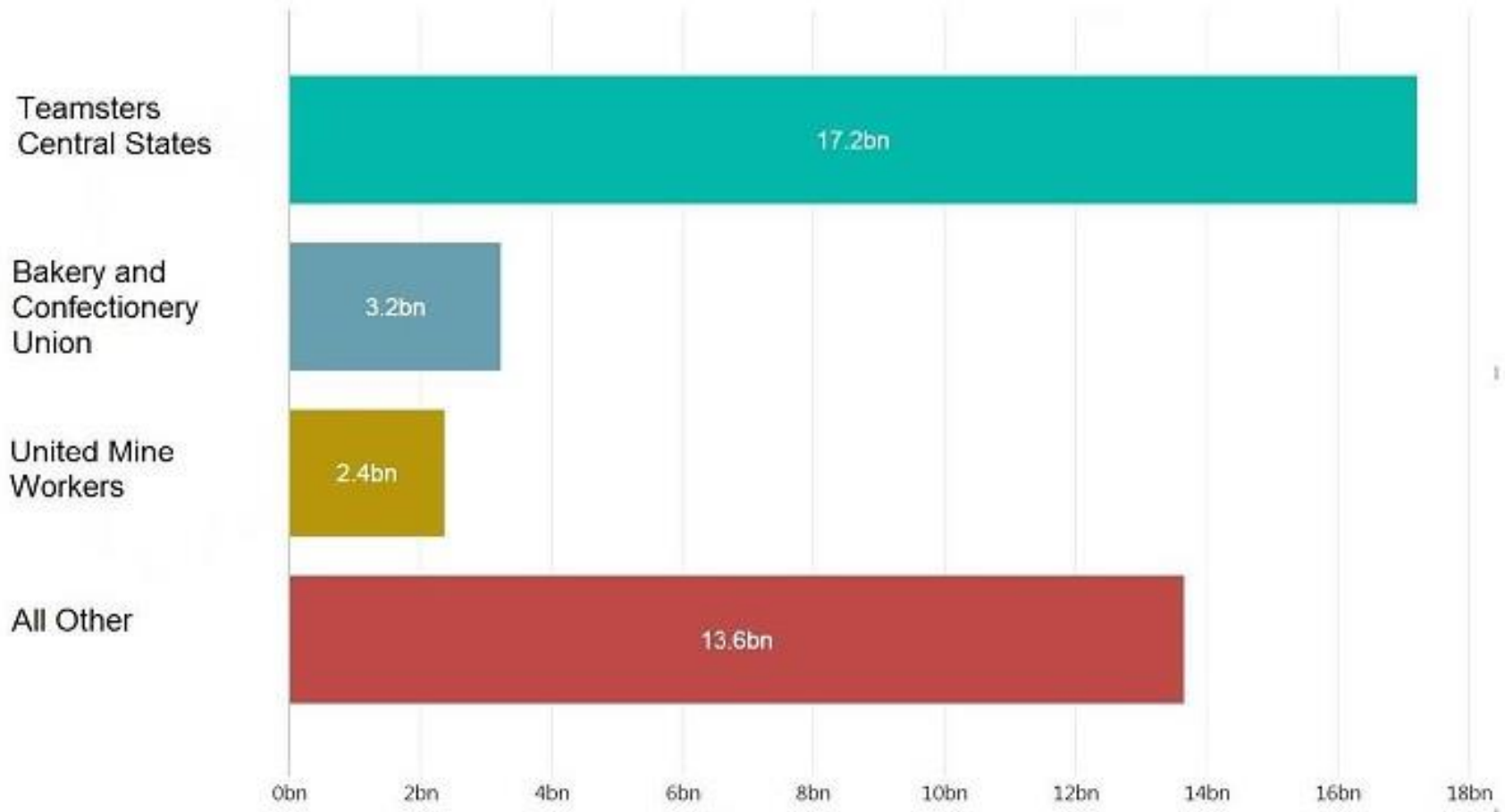
3.2 million workers in insolvent plans

**1.3 million in Critical & Declining status
(funded status below 65%)**

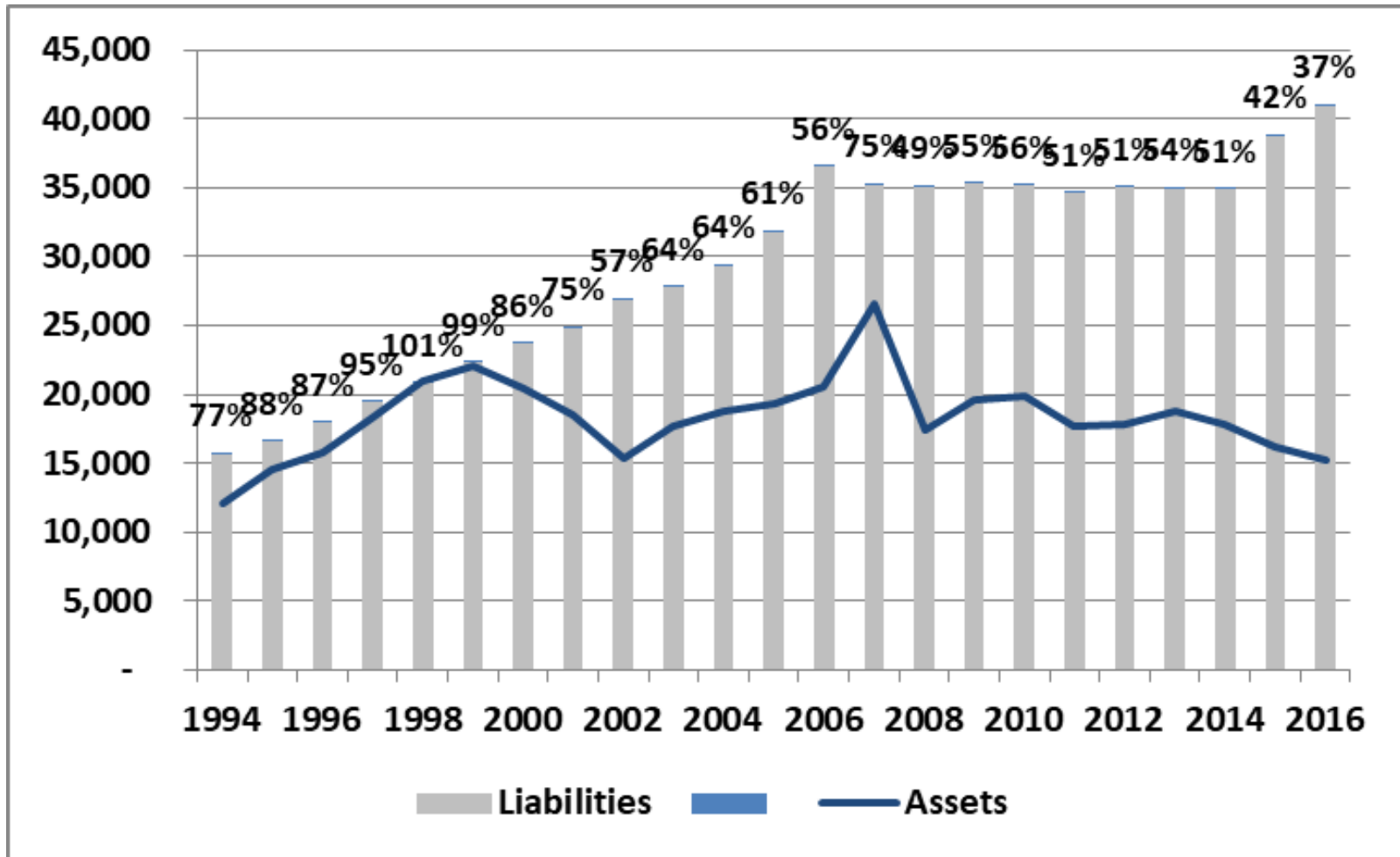


Concentration of the Problem

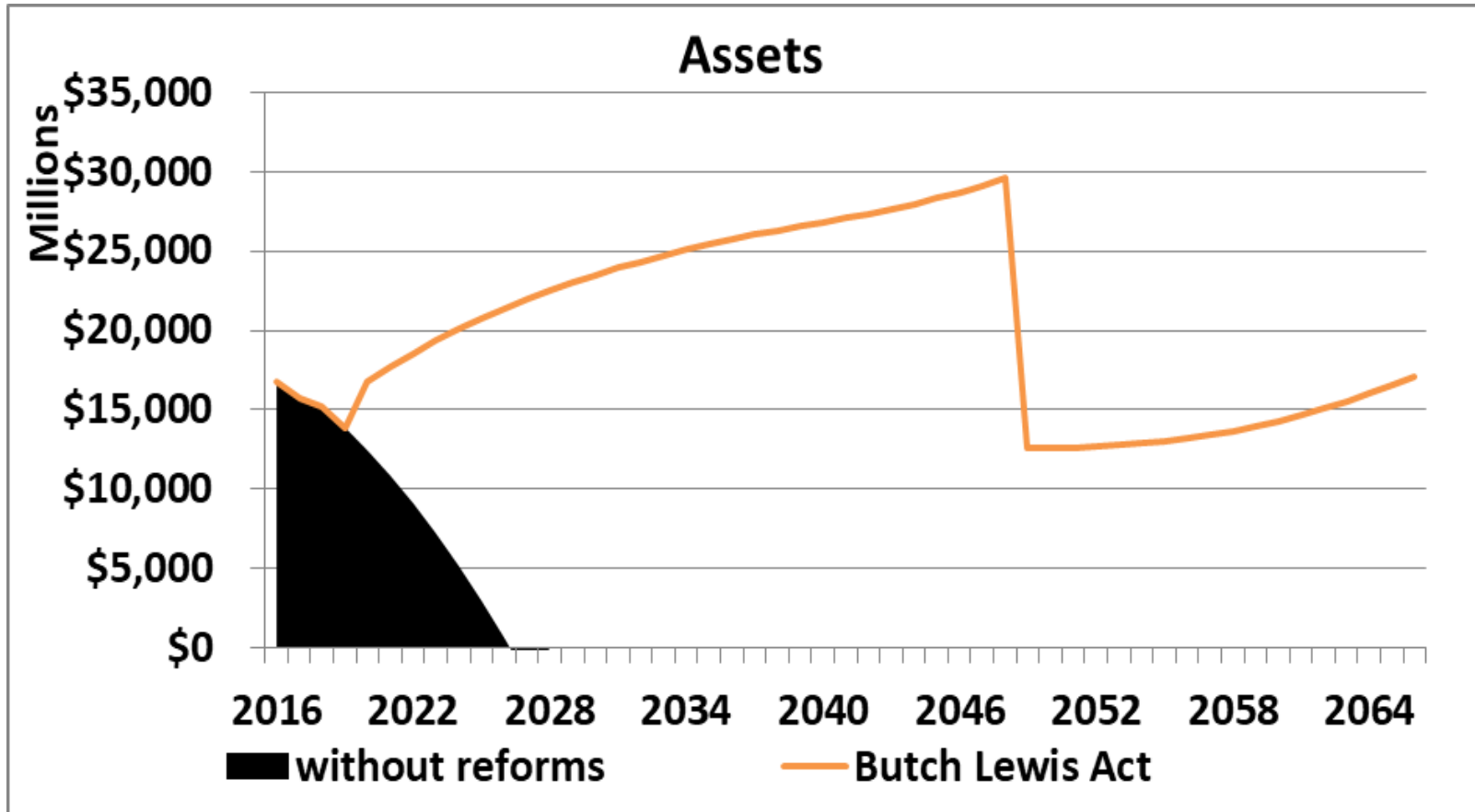
Three multiemployer pension plans account for most of the unfunded liability of all failing plans



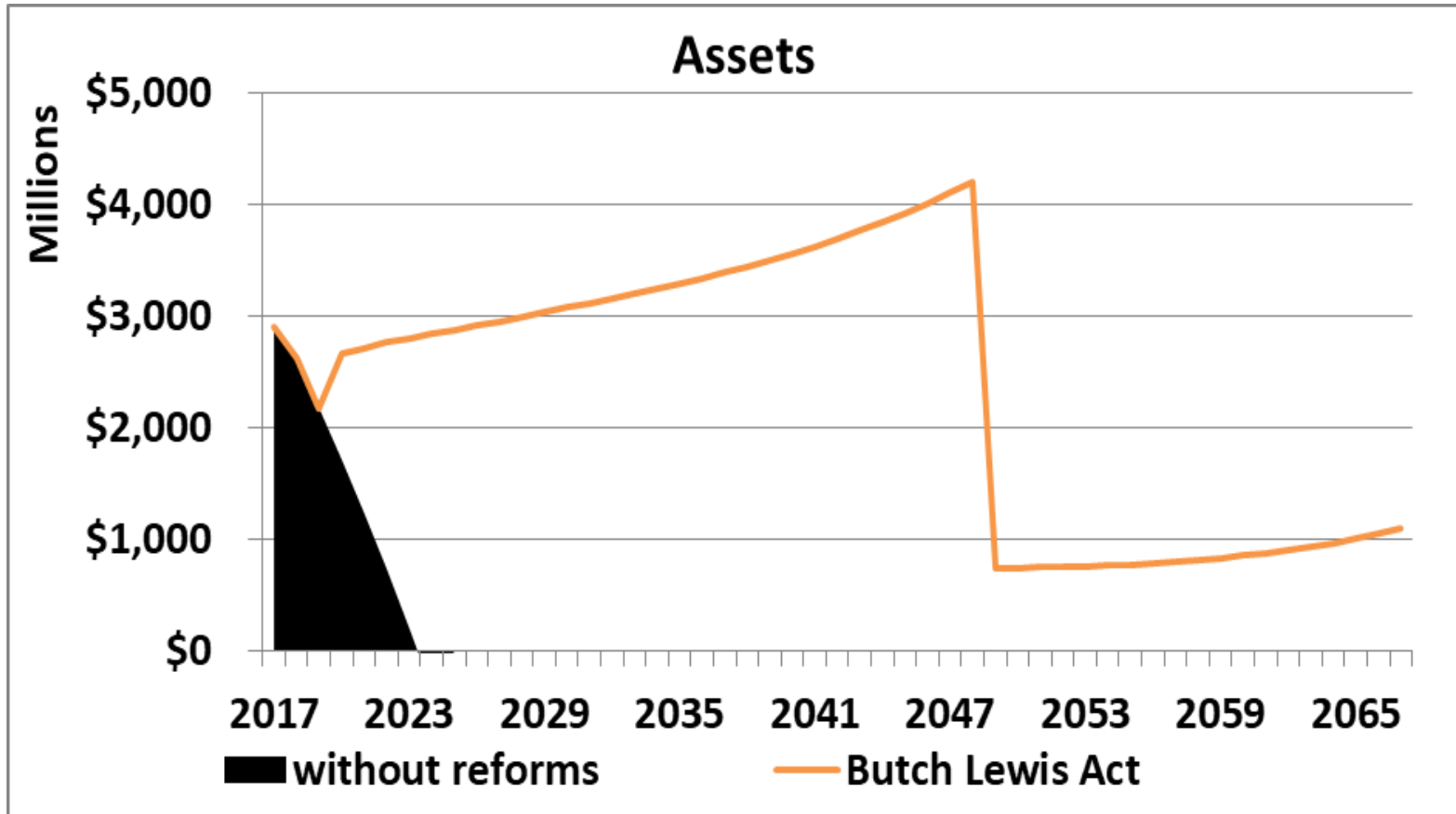
Central States Funded Ratio



Central States

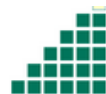
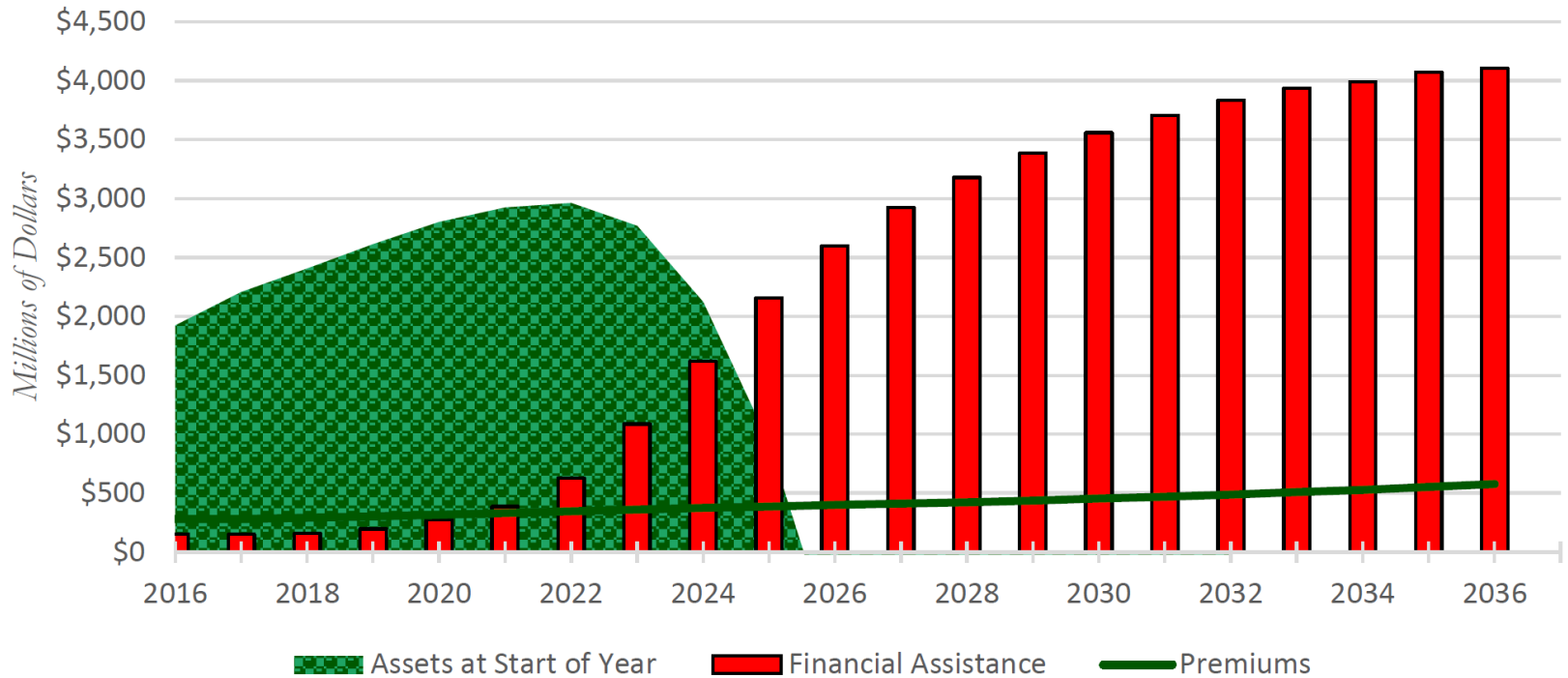


United Mine Workers



PBGC 2016 Projections Report

PBGC Assets, Average Assistance Payments and Premiums by Fiscal Year
No Future MPRA Suspensions / Partitions
 (Projected in Nominal \$ Amounts)



How Did We get Here?

- Focused on Assets ROA instead of Liabilities
- Two Stock Market Crashes between 2001-2009
- Federal Laws and Regulations
- Industry De-Regulation
- Shifting Demographics
- Growing Investment Risk



Possible Options to Solve the Crises

- Superior Investment Returns
 - *Funds like Central States would have to earn 20%+ each and every year*
- MRPA Benefit Suspensions
 - *Maximum benefit cuts for most of the plans in critical and declining status are not enough to maintain solvency*
- Increased Employer Contributions
 - *Central State Employers already contribute \$18,000 annually per active worker*
- PBGC Premium Increases



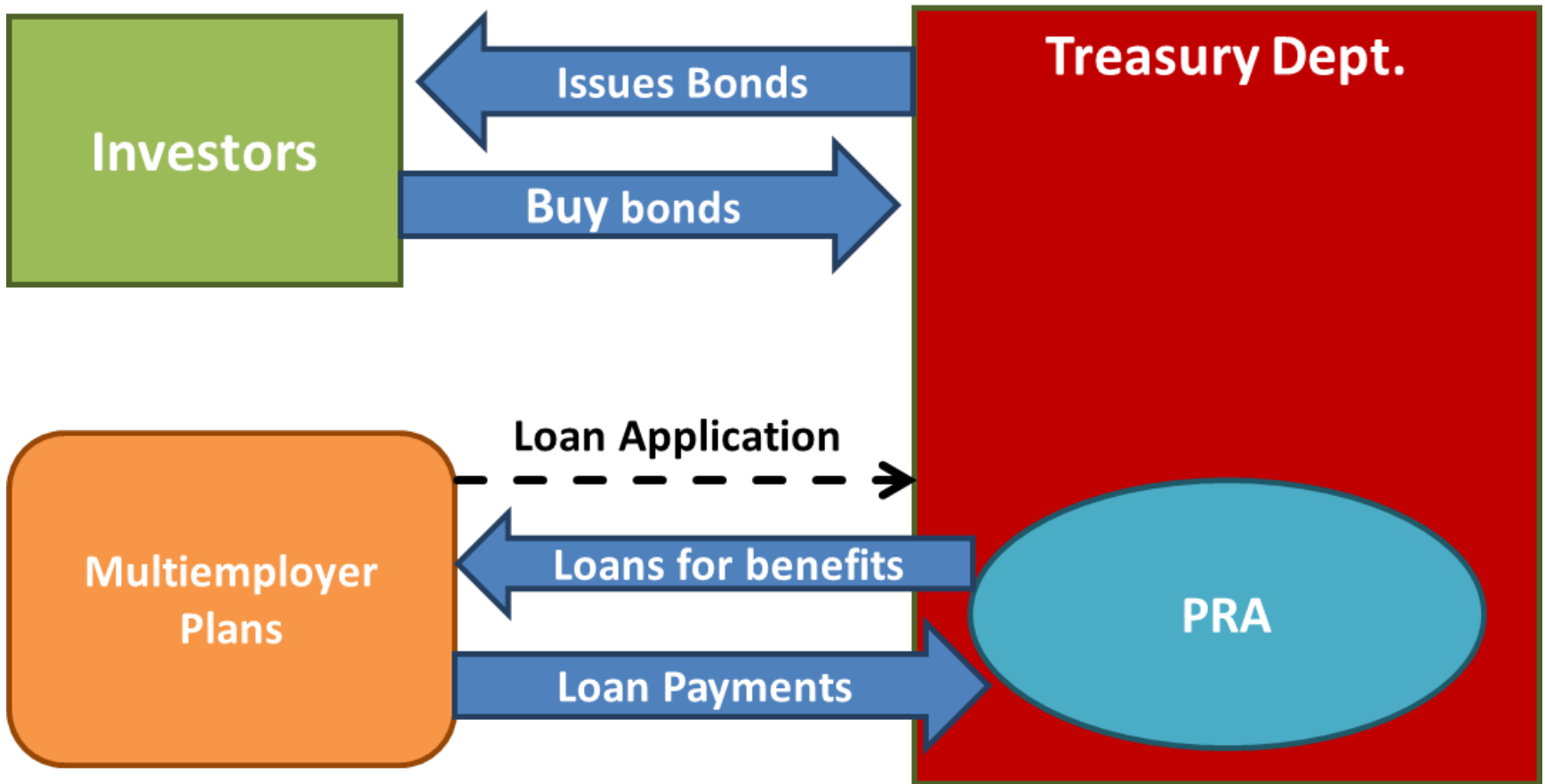
PRA

Pension Rehabilitation Administration (PRA) and PRA Trust Fund

Structure	Agency in the Dept. of the U.S. Treasury
Mission	Provide 30-year loans to multiemployer defined benefit plans in “critical and declining” funding status (funded ratio < 65%, probable insolvency in 20 years) so as to avoid insolvency for at least 30 years
Trust Fund	Mandates loan proceeds used to <i>defease</i> Retired Lives benefit payments through either: Insurance Annuities Duration Matching Cash Flow Matching



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PRA Loan

**30-year loan to qualified pensions at U.S. Treasury like rate
Calculated as amount needed to defease Retired Lives thru:**

- 1. Cost of a Insurance Annuity**
- or**
- 2. Cost of U. S. Treasury STRIPS (zero-coupon bonds)**

Example: Retired Lives benefit payments
\$1 billion (future value)
\$750 million (present value)

PRA Loan = \$750 million



Defeasance

A method that sets aside funds dedicated to funding a certain debt or obligation with some certainty.

Bonds and annuities are chosen as the funding choice since they have a known cash flow or future value.

**Examples: State Lotteries
Pension benefits
Municipal bond debt service**



Insurance Annuities

**Transfer of Retired Lives liabilities to insurance company.
Removes potential Retired Lives liability from PBGC
Guarantees timely payment of benefits**

Problems:

Credit worthiness of one insurance company

Could be quite costly:

**Price Retired Lives at U.S. Treasury STRIPS discount rates
(Some use U.S. Treasury STRIPS – 20 basis points)**

Fee = @ 4% above present value of liabilities using STRIPS



Duration-Matching Liabilities

Hedging strategy

Well diversified in credit worthiness

Popular de-risking strategy for pensions

Attempts to match *average duration* of liabilities

Attempts to match *present value growth rate* of liabilities

Problems:

Present value focus

Duration is a measurement of price returns *not* total returns

Duration peaks out @15 years...requires Treasury STRIPS

Duration-Matching does not match liability future values

Duration-Matching does not fund liabilities

May not be cost effective



Cash Flow Matching

Cost Optimization Model

Searches universe of investment grade bonds

Model runs several iterations to fund each benefit payment at low cost

**Reduces Funding Costs: @ 16% vs. STRIPS (Amount of PRA loan)
@ 20% vs. Annuities**

Reduces ROA needed to fund Active Lives + PRA loan (18% est.)

Problems:

Tedious to implement

Requires sophisticated cash flow modeling



Asset Exhaustion Test

**Calculates *economic* Return On Assets (ROA) needed
to fully fund Active Lives + PRA Loan
(does not replace actuarial ROA)**

**Goal is to reduce asset hurdle rate (ROA)
from existing actuarial ROA to economic calculated ROA**

Reduced economic ROA = enhances long term solvency



Sample Pension

Retired Lives (Benefit Payments thru 2067)	\$4,947,304,615
1. <i>Cost to Defeas</i> (U.S. Treasury STRIPS) Calculated amount of PRA loan	\$3,584,240,817
2. <i>Cash Flow Matching</i> (Cost to Defeas) Cost Savings to fund Retired Lives	\$3,249,613,911 \$ 334,640,156 9.336%
3. <i>Asset Exhaustion Test</i>	
ROA used by Actuary	8.50%
ROA needed to fully fund Active Lives + PRA loan	6.15%

Note: cost savings added to current assets



Bailouts

	Spent	Profit
TARP	\$411.0b	\$15.6b
FNMA/FHLMC	\$187.5b	\$37.9b
Fed Investing		\$294.0b
AIG		\$22.7b
BAC/Citigroup	\$250.5b	\$22.3b

