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# Pension Protection Act of 2006: DB Killer or Just Misunderstood?

*Two Years Later*

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# What I Concluded Two Years Ago

- The Perfect Storm is over
- Temporary fixes have been replaced with permanent ones
- The legality has been clarified for hybrid plans
- Volatility can be managed
- The funding rules are not that bad

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# Focus of this Presentation

## *2009 Minimum Required Contribution*

- Shortfall Amortization
- Credit Balances
- Asset Averaging/Smoothing
- Quarterly Contributions

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# Focus of this Presentation

## *Minimum Required Contribution*

- Single employer plan
- Calendar Year Plan Year
- Valuation Date 1/1
- No funding waivers
- No special provisions with PBGC
- No collectively bargained employees

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# PPA change to minimum funding rules

- Yield curve/modified yield curve for determining plan liabilities
  - A single funding method for all plans
  - Prescribed mortality assumption
  - Limited asset smoothing
  - Modified use of credit balances
  - Seven-year amortization of unfunded liabilities
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2008 results looked good for 1/1 plans

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Then came the stock market crash

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Looking ahead to 2009

# New PPA Terminology

## Out with the old

- Actuarial Assets
- Current Liability
- CL Normal Cost
- Unfunded CL
- Funded Current Liability Percentage
- Credit Balance

## And in with the new

- Plan Assets
- Funding Target (FT)
- Target Normal Cost
- Funding Shortfall
- Funding Target Attainment Percentage (FTAP)
- Carryover (COB) and Prefunding (PFB) Balances

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# New PPA Terminology

## The New Minimum Required Contribution

- MRC
- Beginning of the plan year
- MRC, contributions and COB, PFB are all determined at Plan Year Beginning (PYB)

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# New PPA Terminology

## The New Minimum Required Contribution

- Sum of
- Normal Cost (including expenses) and
- Amortization of Shortfall Liability

# Many Interest Rates

- Interest rates for MRC (EIR), changes each year
- Contributions made on any date after the first day of PYB get discounted back to PYB with applicable EIR
- COB and PFB are adjusted for amount waived and brought forward by actual ROR for the plan year
- ROR assumed to include receivables

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# Changes beginning 2008

Calculating funding shortfall

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# Definition of Funding Shortfall

- Shortfall = Funding Target - Plan Assets - Carryover Balance - Prefunding Balance
- Result less than zero? - all bases are wiped out
- New base equals Funding Shortfall less sum of outstanding bases

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# Calculating Funding Shortfall

*Recall before WRERA*

- Transition Relief:

No shortfall amortization charge if the funded percentage is

- 92% in 2008 and
- 94% in 2009 and
- 96 % in 2010 and 100% thereafter.

# Calculating Funding Shortfall

*After WERA:*

- If not subject to Deficit Reduction Contribution in 2007: Shortfall amortization charge is
  - 92% Funding Target in 2008
  - 94% Funding Target in 2009
  - 96% Funding Target in 2010 and 100% thereafter.

# Calculating Funding Shortfall -Example

*Now Under WREERA:*

*2008 Valuation: Plan not subject to DRC in 2007*

*Funding Target           \$876,000*

*Plan Assets       \$773,000*

*COB               \$0*

*Amort. Factor 5.98503*

*Prior rule for shortfall amortization*

*$(876,000 - 773,000) / 5.98503 = 17,210$*

*Current rule for shortfall amortization*

*$(.92 \times 876,000 - 773,000) / 5.98503 = 5,500$*

# 2009 - Calculating Outstanding Funding Shortfall from Prior Year

- Amortization amount same as calculated last year
- Outstanding balance is based on this years interest rates

# Calculating Outstanding Funding Shortfall

*7-Year Amortization based on the interest rate used for the valuation*

## *2009 Valuation Example*

*Interest Rates: January segment rates without transition  
5.32%, 6.45%, 6.69%*

<i>Year</i>	<i>1-5</i>	<i>6-7</i>
<i>Interest Rate</i>	<i>5.32%</i>	<i>6.45%</i>

*6-Year factor 5.25135*

*7-Year factor 5.93861*

*Subject to DRC in 2007*

# Calculating Outstanding Funding Shortfall

*Shortfall amortization base from last year's valuation:*  
\$300,585

*Funding Target for 2009:* \$9,009,716

*Plan Assets:* \$6,240,471

*Carryover balance :* \$0

*PV of Remaining Prior Shortfall Amortization:* \$1,578,477  
 $\$300,585 \times 5.25135$

*This year's Shortfall Amortization:* \$200,513

$(\$9,009,716 - 6,240,471 - 1,578,477) / 5.93861$

*Total Shortfall Amortization* \$501,098

$(\$300,585 + 200,513)$

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# Credit Balances – PPA Overview

- **Carryover Balance (COB):**
  - Remaining credit balance from pre-PPA rules
  - Adjusted only by interest after PPA effective date
- **Prefunding Balance (PFB):**
  - New credit balance *available* for excess contributions
  - Set equal to \$0 as of first day of first plan year in which Section 430 applies (e.g., 1/1/2008 for calendar year plans)
- COB must be used before PFB

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# COB/PFB Growth

- Grows (or shrinks) with ROR
  - ROR must be adjusted for amount and timing of “contributions, distributions, and other plan payments made during that period”
  - IRS has not yet provided exactly how ROR is calculated

# Development of COB from Year to Year

- COB at year-end =  $(A - B - C) \times (1 + \text{ROR})$ , where:
  - A = COB at beginning of plan year
  - B = Amount burned in a 430(f) election
  - C = Amount used to offset MRC
  - ROR = Actual rate of return on market value of assets

# Development of PFB from Year to Year

- $\text{PFB at year-end} = (A - B - C) \times (1 + \text{ROR}) + D \times (1 + \text{EIR})$ :
  - A = PFB at beginning of plan year
  - B = Amount burned in a 430(f) election (after COB is gone)
  - C = Amount used to offset MRC (no COB left)
  - ROR = Actual rate of return on market value of assets
  - D = Excess contributions that sponsor has elected to voluntarily add to the PFB (discounted with EIR back to the valuation date first)
  - EIR = Effective interest rate for the valuation year

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# COB/PFB and MRC

- MRC determined without regard to COB/PFB
- Available to use for MRC if funding percentage at least 80% for the prior plan year
- Decision to use COB/PFB to satisfy all or part of the minimum is a voluntary election by the sponsor (if both exist, COB must be used first)

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# COB/PFB Subtraction from Assets

- Subtracted for many purposes, and under many different circumstances ...

# Subtraction from Assets

- When/where COB & PFB are subtracted:

Purpose	Subtract COB?	Subtract PFB?
Funding shortfall	Yes*	Yes
Shortfall amortization base establishment exemption	No	Yes, to the extent PFB will be used to offset minimum contribution
At-risk determination	Yes	Yes
FTAP	Yes	Yes
AFTAP	Yes, if $AVA / FT < 100\%^*$	Yes, if $AVA / FT < 100\%^*$

\* 100% threshold phased in: 92% in 2008, 94% in 2009, and 96% in 2010, so long as plan is at that threshold every year (different than funding).

# Subtraction from Assets

- When/where COB & PFB are subtracted (cont'd):

<b>Purpose</b>	<b>Subtract COB?</b>	<b>Subtract PFB?</b>
Test to be able to use COB & PFB to offset minimum	No	Yes
Quarterly contribution requirement	Yes	Yes
ERISA 4010 filing – 80% test	Yes	Yes
ERISA 4010 filing – \$15MM underfunded test	No	No
PBGC variable rate premium	No	No

- COB receives slightly better treatment than PFB (see bolded items)

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# Using COB/PFB

- Written elections required when using COB/PFB to satisfy quarterly contribution requirements
- *And watch out:* Make sure it really exists and can't disappear due to a “deemed waiver”

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# Creating PFB

- Not automatically created/increased when more than MRC is contributed
- Plan sponsor must make a written election to add to the PFB

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# Creating PFB

- Amount by which the sponsor's contributions exceed the MRC
- MRC determined without respect to any reduction in the minimum resulting from using the COB or PFB
- Cannot add any Section 436 earmarked contributions (to avoid benefit or plan amendment restrictions) to PFB

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# Creating PFB

- Contributions are discounted back from actual deposit date to the valuation date at the plan's EIR for that plan year
- Excess amount is determined at 1/1
- Amount added to next year's PFB = Excess amount at 1/1 of prior year, increased with interest at prior year's EIR

# Creating PFB

*Example:*

- MRC at 1/1/2008 = \$4,000
- Contribution at 9/15/2009 = \$5,000
- 2008 plan year EIR = 6.25%
- Contribution discount back to 1/1/2008 = \$4,509
  - $\$5,000 / 1.0625^{(624/366)}$
- Excess contribution = \$509
  - $\$4,509 - \$4,000$
- Amount potentially added to PFB at 1/1/2009 = \$541
  - $\$509 \times 1.0625$

# Creating PFB

*Does the answer change if COB had been used to offset part of the contribution?*

- MRC at 1/1/2008 = \$4,000
- COB at 1/1/2008 = \$2,000 – *elected to use all of this*
- Contribution at 9/15/2009 = \$3,000
- 2008 plan year EIR = 6.25%
- Contribution discount back to 1/1/2008 = \$2,705
  - $\$3,000 / 1.0625^{(624/366)}$
- **Excess contribution = \$0**
  - $\$2,705 - \$4,000 < \$0$

Must contribute more than the minimum before use of  
COB/PFB, before we can add to the PFB

# COB/PFB *Voluntary* Waivers

- Unique feature of COB/PFB: Ability to voluntarily reduce the balances
  - Requires written election under Section 430(f) by plan sponsor, provided to enrolled actuary and plan administrator
  - Must elect specific amounts
    - For example, can't just say "I wish to forfeit the amount of COB necessary to avoid at-risk status..."
    - This is based on Proposed Regulations – subject to change
  - Election must be irrevocable and unconditional
  - Regardless of actual election date, election is effective as of the beginning of the plan year to which it applies

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# COB/PFB *Mandatory* Waivers

- Another unique feature of COB/PFB: Balances may be automatically forfeited
  - Known as a “**deemed waiver**” – Section 436(a)(5)
  - Occurs if Section 436 restrictions can be avoided by waiving some/all of COB/PFB
    - Applies for 60% or 80% thresholds (accelerated distributions)
  
- Does not apply if the benefit restriction does not apply to the plan

# COB/PFB Waivers

- However, if waiving all of COB & PFB would not avoid the restriction, then none of the COB & PFB is waived
  - Exception: For amendment, waiver may equal the cost of the amendment
- Can lead to the counter-intuitive situation where a plan can owe more than if it were actually worse funded

# COB/PFB Mandatory Waiver Example

<u>As of 1/1/09</u>	<u>Scenario 1</u>	<u>Scenario 2</u>
FT	1,000	1,000
Target NC	100	100
Plan Assets	800	799
COB	150	150
Prior year AFTAP	85%	85%
AFTAP (no COB waived)	65%	64.9%
AFTAP (all COB waived)	80%	79.9%
COB waived	(150)	-
<u>MRC</u>		
Funding Shortfall	200	351
Shortfall Amortization	33	59
MRC	133	159
MRC offset by COB	133	9

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# COB/PFB Waivers

FYI

- General rules on deemed waivers can be found in 1.436-1(a)(5)
- Special rule for when AFTAP is not yet certified can be found in Section 436(g)(2)
- *These rules are very complicated*

# COB/PFB Elections

## *Timing*

- For voluntary waivers
  - must elect to reduce balances by end of the plan year to which the election relates
- Adding to balances
  - By due date of Form 5500
  
- For example: To forfeit COB to improve 1/1/2009 funded status in a calendar year plan, must elect to do so by 12/31/2009; to add to same plan's PFB, can elect to do so by 10/15/2010 (assuming 5558 extension filed)

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# Plan Assets

- Market Value
  - Averaged/smoothed: IRS Notice 2009-22
    - Automatic approval for change in asset valuation method in 2009
    - Uses expected earnings capped at 3<sup>rd</sup> segment rate
    - Expected to average about 98% of fair market value of assets over long term
    - Helps to decrease volatility of contributions
    - Limited to 90-110% of fair market value of assets
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# Plan Assets – Example

- Averaged/Smoothed Assets
  - 24 month average
  - Expected ROR: 6.09% for 2007, 6.43% for 2008
  - Market Value with discounted accrued contributions
    - \$3,316,236 as of 1/1/07
    - \$3,993,204 as of 1/1/08
    - \$2,609,703 as of 1/1/09
  - Actual earnings in 2008 were (1,546,515)
  - Actual earnings in 2007 were 185,274

# Plan Assets – Example - Calculation

	<u>1/1/08</u>	<u>1/1/07</u>
Fair/Expected MV at 1/1/08	3,993,204	4,024,640
Contributions w/disc. rec.	382,915	382,915
Benefit Payments	214,101	214,101
Administrative Expenses	5,800	5,800
Expected Earnings	<u>261,922</u>	<u>261,922</u>
	4,418,140	4,449,576
Fair/Expected MV at 1/1/07		3,316,236
Contributions w/disc. rec.		1,039,019
Benefit Payments		527,383
Administrative Expenses		19,942
Expected Earnings		<u>216,710</u>
		4,024,640

# Calculations

	<u>1/1/09</u>	<u>1/1/08</u>	<u>1/1/07</u>
Adjusted Value	2,609,703	4,418,140	4,449,576
Average Assets (AVA)	3,825,806		
Plan Assets*	2,870,673		
Check prior to corridor limit			
MVA G/(L)		(1,808,437)	(31,436)

$$\begin{aligned} \text{AVA} &= 1/1/09 \text{ Assets} - 2/3(2008 \text{ Asset G/(L)}) - 1/3 (2007 \text{ Asset G/(L)}) \\ &= 2,609,703 - 2/3 \times (-1,808,437) - 1/3 \times (-31,436) \\ &= 3,825,806 \end{aligned}$$

\*limited by 90-110% MVA

# Quarterly Required Contributions

- Changes from the old pre-PPA rules
  - Which plans are subject to quarterlies
  - Interest rates used on late quarterlies
  - No interest adjustment in computing the required annual payment
  - No interest adjustment on early contributions

# Quarterly Required Contributions

- Only if plan had a funding shortfall for the prior plan year
- Funding shortfall is the excess, if any, of
  - The FT for the plan year, over the
  - The value of plan assets reduced by the carryover and prefunding balances, but not below zero

# Quarterly Required Contributions

- 25% of the “required annual payment”
- The required annual payment is the lesser of:
  - 90% of the MRC for the plan year; or
  - 100% of the MRC for the prior plan year, determined without regard to any funding waiver for that year

# Quarterly Required Contributions

- The MRC for both years is determined as of the valuation date without any adjustment for interest
- The required annual payment is not reduced by any COB or PFB
- For the first effective plan year, the prior year minimum is determined as of the last day of the prior year (without regard to any funding waiver and not reduced by any credit balance)

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# Summary

- 2008 stock market collapse
- Some relief with *WRETA*
- Still outstanding guidance
- Lots of moving parts – consulting opportunities

# Options to Consider in 2009

- Change PPA plan sponsor elections for 2009 (and possibly 2008)
  - not officially committed to 2008 methods until 2008 Schedule SB filed
- Change in Asset Method
  - Switch to asset averaging/smoothing (immediate 10% improvement in asset value at January 1, 2009)
  - Need to be careful of implications on 2008 valuation!

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# Options to Consider in 2009

- Change interest rate election:
  - Switch from phase-in from Current Liability to no phase-in
  - Switch from 4 month lookback to 0-3 month lookback
  - Switch to full yield curve (October for 2009)
  - All of these should have positive implications for 2008 valuation

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# Outstanding Guidance

- Should the ROR for bringing COB & PFB forward, include discounted receivables?
- What expected ROR should be used for calculating asset gain/loss?
- What expenses should be added to the NC?
- How do you go about applying to change interest rate and asset method when not automatically approved?

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# QUESTIONS?