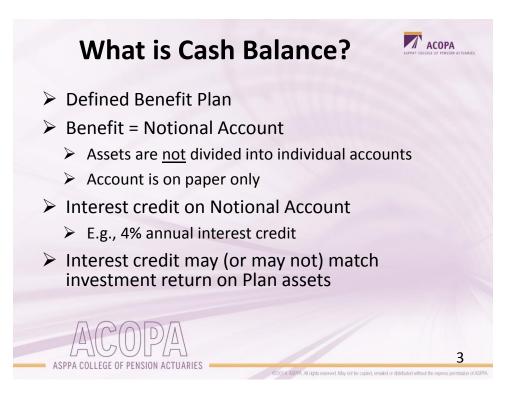


Today's Agenda

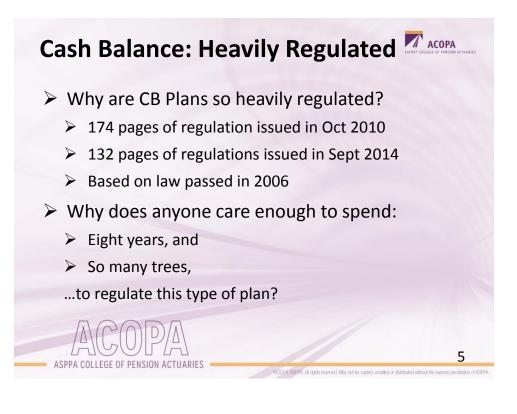


- 1. Background and History
- 2. Age Discrimination
- 3. Interest Crediting Rules
- 4. More on 2014 Regs, including Relief
- 5. 415 Limits & Miscellaneous Items
- 6. What's Missing from the Regs
- 7. Questions





Cash Balance Example	
> 1/1/2014 Account Balance:	\$100,000
Annual principal credit:	\$25,000
Annual interest credit:	
➢ 2014: \$100,000 * 4% =	<u>\$4,000</u>
> 12/31/2014 Account Balance:	\$129,000
ACOPA ASPPA COLLEGE OF PENSION ACTUARIES	4



Cash Balance: History



- 1990's: Defined benefit plans unpopular
 - High and volatile costs
 - Punitive financial accounting
 - Opaque and under-appreciated benefits
- Employers sought design alternatives
 - Many conversions to cash balance in 1990's
 - Other employers exited DB plans altogether

Cash Balance: History (cont')

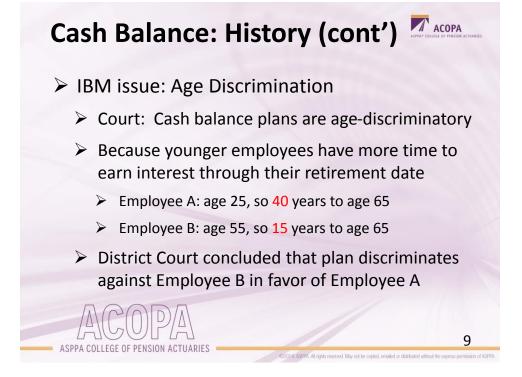
- Rising employee anger
 - Conversions usually reduced employer costs
 - After plan freezes, employees without a pension
- Court cases against cash balance plans
 - Attack on statutory & regulatory flaws in designs
 - Xerox case: lump sum not the account balance
 - IBM case: cash balance is age-discriminatory

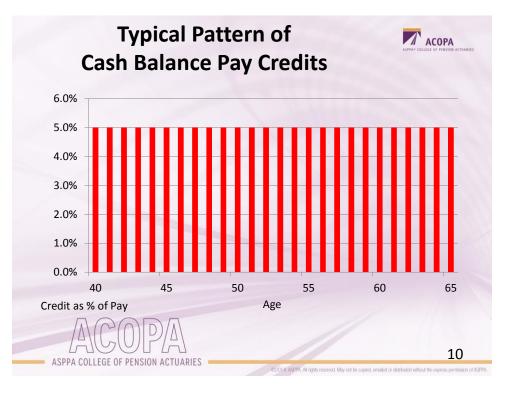
Cash Balance: History (cont')

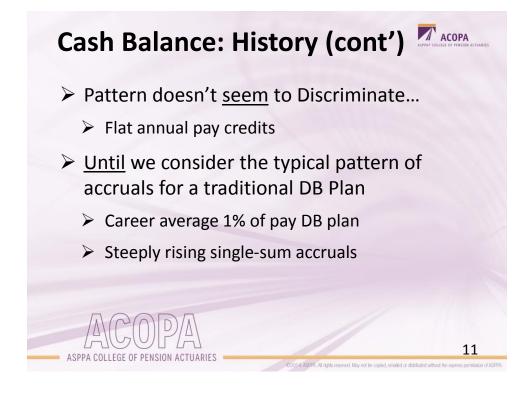
Xerox issue: lump sum calculation

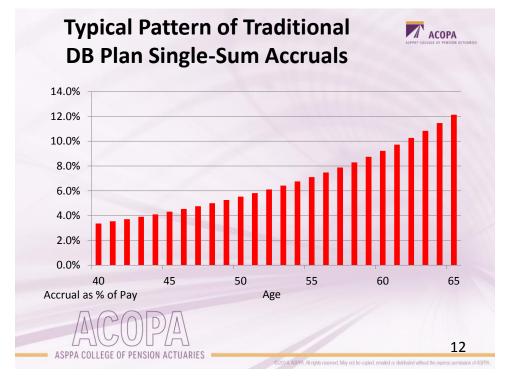
- Under some cash balance designs, plans had to pay benefits higher than the account balance
 - Called "whipsaw"
- Congress fixed in 2006 through PPA legislation
- No retroactivity to change

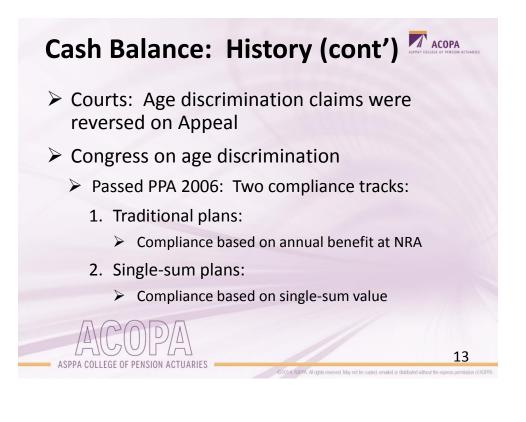














- PPA 2006: Two separate compliance regimes
 - How to tell the difference?
 - In other words, when is a plan "traditional", and when is it "single-sum based"?
- Congress: Two ways to draw the line:
 - 1. Form: how plan is described in document
 - 2. Substance: what benefits are delivered



<section-header><section-header><section-header><list-item><list-item><list-item><list-item><list-item><list-item><list-item>

Statutory Hybrid Plans

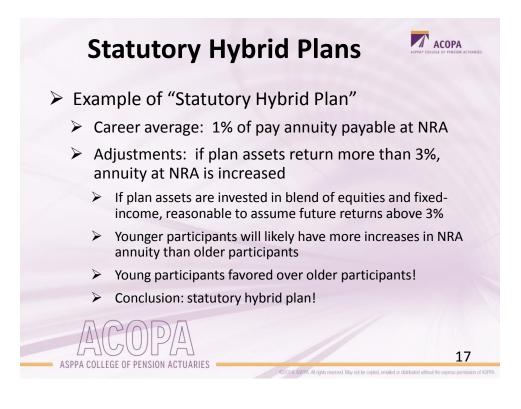


16

How to spot a "statutory hybrid plan"?

- Looks like a duck: If plan document states current benefit as either:
 - 1. Account balance, or
 - 2. Percent of final average compensation
 - > Example: 10% of average pay times service
- Acts like a duck:
 If adjustments to NRA annuity favor the young



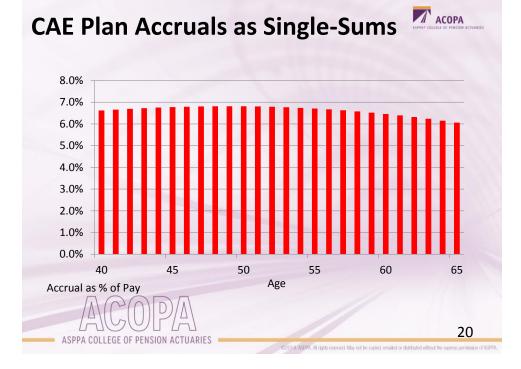


Statutory Hybrid Plans



- Form over Substance?
 - If a Plan looks like a duck, is it a duck?
 - Congress: YES!
 - If benefit stated in plan document as account balance (or current value is stated as percent of FAE), then Plan is a statutory hybrid plan
 - Even if Plan benefit value is identical to traditional plan
 - Consider IRC 401(a)(26) minimum in cash balance plan
 - 0.5% of pay as an NRA annuity benefit

<section-header><section-header><section-header><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item>



Statutory Hybrid Plans



- Form over Substance?
 - Do early retirement subsidies make a traditional Plan <u>act</u> like a statutory hybrid plan?
 - ➤ IRS: No!
 - Consider only annuity at NRA
 - If adjustments to NRA annuity likely higher for younger participants, then statutory hybrid plan
 - Early retirement subsidies that do not adjust the NRA benefit are ignored: NOT statutory hybrid!



Statutory Hybrid Plans



21

22

IRS Nomenclature

- 1. Statutory hybrid plans:
 - a. "Lump sum-based formula": defines benefit in plan document as account balance (or accumulated percent of FAE)
 - Even if no lump sum payment form is offered
 - b. Effect similar to lump sum-based formula: defined benefit in plan document traditionally, but NRA benefit adjustments favor the young
- 2. Traditional plans

Lump Sum-Based Formulas

- LS-Based Formulas subject to:
 - 1. Whipsaw: lump sum = account balance
 - Deemed to satisfy IRC 417(e) (minimum present value)
 - Effective for 2016+ plan years:
 - If lump sum made available, lump sum must equal account balance (or accumulated percent of FAE)
 - Exception: if lump sum of top-heavy minimum benefit, or other preserved benefit, is higher



Lump Sum-Based Formulas



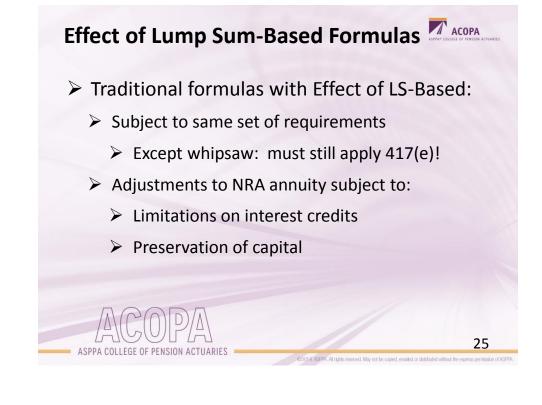
23

24

ACOPA

- LS-Based Formulas subject to:
 - 2. Three-year cliff vesting
 - 3. Prohibition on wear-away plan amendments
 - When converting to LS-based formula, must add current and future accruals to frozen accrued benefit
 - Cannot simply take greater of frozen and new benefits
 - 4. Market-based limits on interest credits
 - 5. Preservation of capital







- Age Discrimination Compliance: Two methods:
 - 1. General rule:
 - Benefit accruals generally cannot slow down due to age
 - Based on annuity benefit at NRA (or current age if later)
 - 2. Safe Harbor:
 - "Accumulated benefit" not less than "similarly situated" younger individual who is or could be a participant
 - Accumulated benefit = annuity at NRA, account balance, or accumulated percent of FAE





28

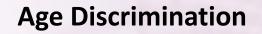
Safe Harbor:

- Older participants must have as large a benefit value as similarly-situated younger participants
 - Includes all theoretically possible younger participants
- Benefit value determined based on how benefit is stated in plan document:
 - 1. Annuity at NRA ("traditional")
 - 2. Cash balance account
 - 3. Accumulated percent of FAE



- Cash Balance Example:
 - 3% of pay to 10 years of service
 - 4% of pay for service between 10 and 20 years
 - 5% of pay for service over 20 years
- Pass on age discrimination
 - Fails general rule: front-loaded due to interest
 - What about safe harbor?

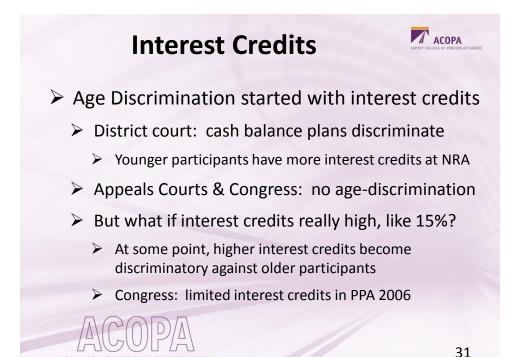
SPPA COLLEGE OF PENSION ACTUARIES





29

- Cash Balance Example (cont'):
 - "Similarly situated" participants have same characteristics, except age
 - Service is a named factor in regs
 - When comparing accumulated benefits between younger and older participants, keep service constant
 - In example, comparisons on age are always between participants within same service band (3%, 4%, or 5%)
 - PASS the safe harbor!



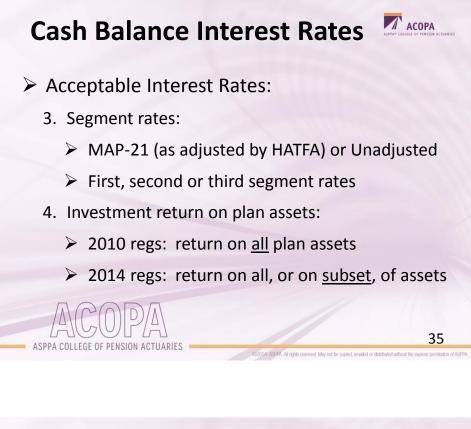
SPPA COLLEGE OF PENSION ACTUARIES







- Acceptable Interest Rates:
 - 1. Fixed: up to 6.0%
 - > 2010 regs: up to 5.0%
 - > 2014 regs increase the acceptable upper limit
 - 2. Treasury yields:
 - Yields + fixed basis points
 - E.g., 5-year Treasury yield + 25 basis points
 - Similar to IRS Notice 96-8



ACOPA

36

Acceptable Interest Rates:

- 5. Investment return on a mutual fund:
 - Must be broad-based
 - Not significantly more volatile than US markets
 - E.g., no industry sector
- 6. Annuity contract rates:
 - Helpful if contract written for specific plan

Acceptable Minimum Interest Rates:

- a. Treasury yields: up to 5.0% annually
 - E.g., Max of 30-year Treasury and 5.0%
 - Minimum applies on <u>annual</u> basis
- b. Corporate bond yields: up to 4.0% annually
 - E.g., Max of MAP-21 1st segment rate & 4.0%
 - Minimum applies on <u>annual</u> basis

Cash Balance Interest Rates



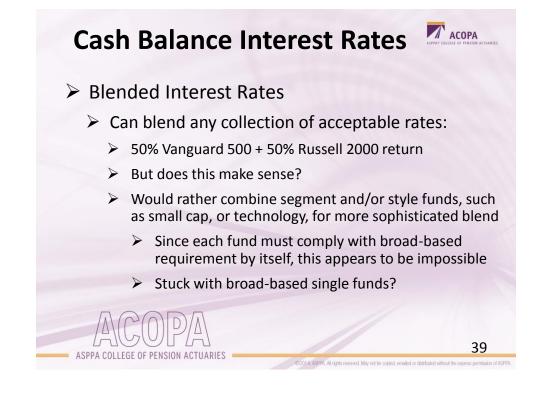
38

37

ACOPA

Acceptable Minimum Interest Rates:

- c. Return on Plan Assets: up to 3.0% cumulatively
 - E.g., Return on plan assets, not less than 3.0%
 - Does NOT apply annually
 - Applies on cumulative basis
 - Applies at distribution only
- d. Return on mutual funds:
 - Same as for Return on Plan Assets

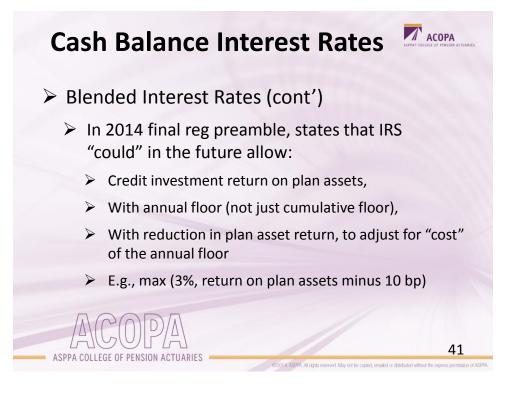


Blended Interest Rates (cont')

- Alternative solution:
 - Set blended rate as desired:
 - E.g., 50% Vanguard 500 + 50% QQQ
 - Cap blended rate by a compliant interest rate

АСОРА

- E.g., limit to 6.0%
- Or limit by MAP-21 3rd segment rate



ASPPA+ COLLEGE OF PENSION ACT

42

➤ Things we <u>cannot</u> do:

- 1. Credit the greater of two compliant rates:
 - E.g., can't credit max (return on plan assets, 5%)
 - Can credit the lesser of two compliant rates
- 2. Credit outside the IRS's exclusive list
 - E.g., can't credit based on LIBOR (without a cap)
- 3. Credit a multi-year average of returns
 - Must use return over one year or less

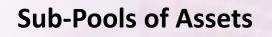
Investment Direction?

- > Can Investment Direction be provided?
 - Suggested by IRS in 2010 regulations
- > 2014 regulations:

"It is possible that the Treasury Department and the IRS will conclude that such plan designs are not permitted."

This follows 4 pages of criticism of investment direction. We take this as "No." But we could be wrong...







43

44

- New option in 2014 regs:
 - Credit investment return on sub-pool of plan assets
 - Allows plan sponsor to segment liabilities and invest to match those liability characteristics
 - Plan can maintain LDI (liability-driven investing) for portion of liability (e.g., retirees)
 - Participants with cash balance accounts (actives & DVTs) credited with return of remaining sub-pool

Sub-Pools of Assets



- IRS Examples in Regs:
 - 1. Sub-pool option intended to accommodate cash balance conversions:
 - Sub-pool 1: traditional defined benefit
 - Sub-pool 2: new cash balance benefit
 - 2. Or matching of assets with liabilities:
 - Sub-pool 1: active participants
 - Sub-pool 2: retirees with annuities

Sub-Pools of Assets



45

46

Requirements for Sub-Pools:

PENSION ACTUARIES

- 1. Sub-pool must be diversified:
 - ERISA standard applies
- 2. 10% limit in sub-pool on qualified employer securities
- 3. Market value of assets in sub-pool must approximate the liabilities for benefits to which the sub-pool relates
 - Restrictions on funding of the sub-pool



Sub-Pools of Assets



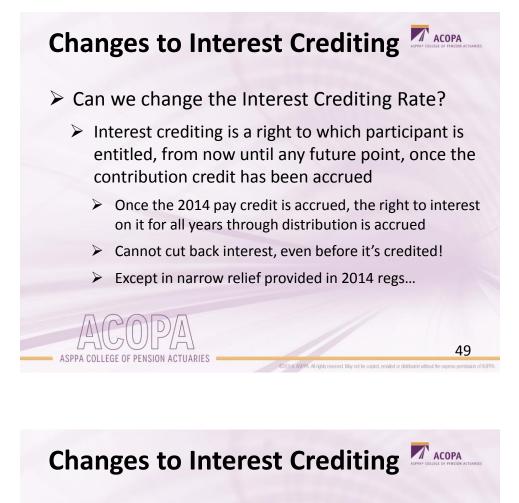
47

Asset Sub-Pools: Other Applications

- 1. Asset allocation sub-pools:
 - Each sub-pool is a separate investment policy
 - Participants assigned to a particular sub-pool
 - Assignment is one-time at design inception
 - Does this heighten the 401(a)(26) risk?
 - With sub-pools assigned by investment policy, does the Plan and its likely cost allocation act like "separate arrangements," which would disqualify?



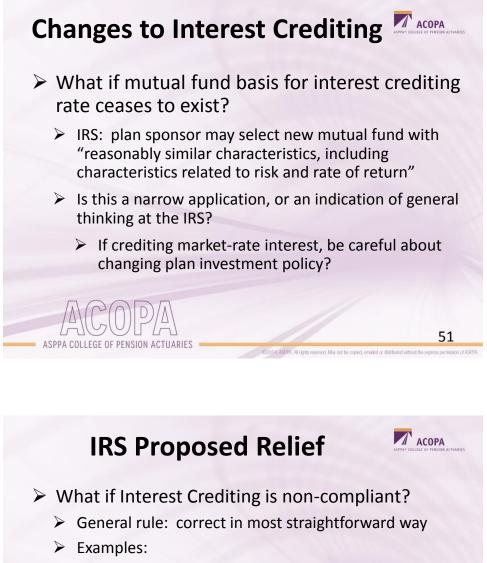
<section-header><section-header><image><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item>



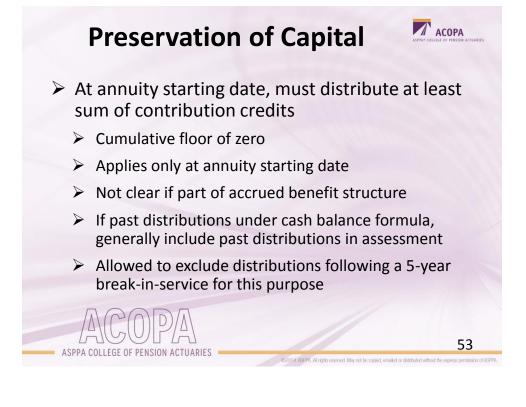
2014 Relief for Interest Crediting changes

- Can change look-back and/or stability periods for:
 - Treasury yield rates (+ margins, if applicable)
 - Segment rates
- Rules similar to 417(e) changes:
 - Must credit higher of old and new interest crediting rate from one-year period beginning on later of amendment's adoption and effective dates





- 1. Credits 7%: cut back to 6%
- 2. Credits S&P 500: credit Vanguard 500 return
- 3. Credits 30-year Treasury yield, with floor of 6%: reduce floor to 5%
- Special rules apply for more complicated situations
- Effective January 1, 2016

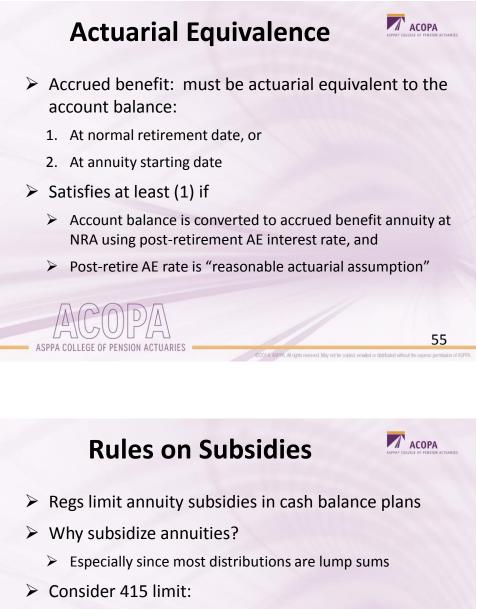


Actuarial Equivalence



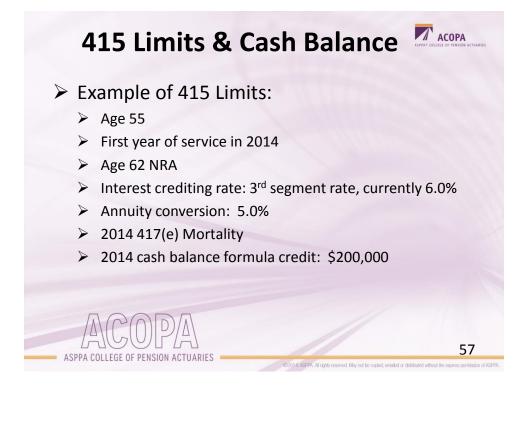
- Actuarial Equivalent Issues
 - 1. Account balance requirements
 - 2. Rules on subsidies
 - 3. Post-NRA actuarial increases





- Reduction in 415 limit pre-age-62 is based on plan's pre-age-62 annuity values, not lump sum
- Higher pre-age-62 limit with a subsidized annuity?





415 Limits & Cash Balance

> Example:

- 1. Limit Accrued Benefit as annuity: \$21,000
 - Convert \$21,000 annuity to current account balance

ACOPA

58

- > \$21,000 * a₆₂ / 1.06⁽⁶²⁻⁵⁵⁾ = \$181,933
- Must the formula credit of \$200,000 be reduced?
- EA Gray Book 2014-29:

"Section 415 requires the plan to limit the accrued benefit and optional forms of benefit, not the hypothetical account balance."

ACOPA

59

60

ACOPA

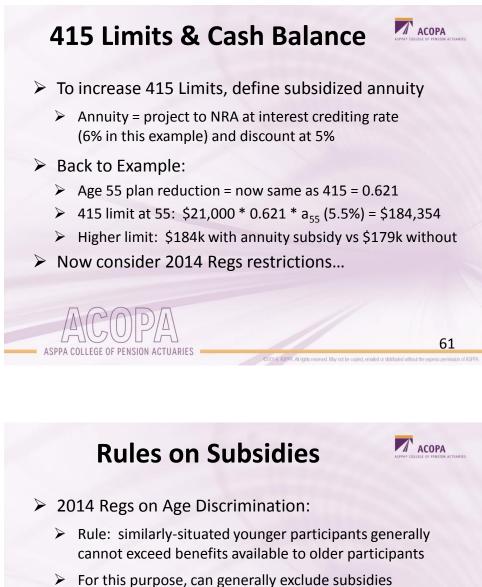
415 Limits & Cash Balance

- Example: (continued)
 - 2. Limit benefit at annuity starting date
 - \$21,000, reduced by lesser of 415 and Plan factors
 - > 415 factors: $(a_{62} / 1.05^{(62-55)} / a_{55}) = 0.621$
 - > Use Plan factors without subsidy: Plan factors: $(a_{62} / 1.06^{(62-55)} / a_{55}) = 0.581$
 - Plan assumptions apply (because of 6.0%)
 - Annuity limit = \$21,000 * 0.581 = \$12,201

415 Limits & Cash Balance

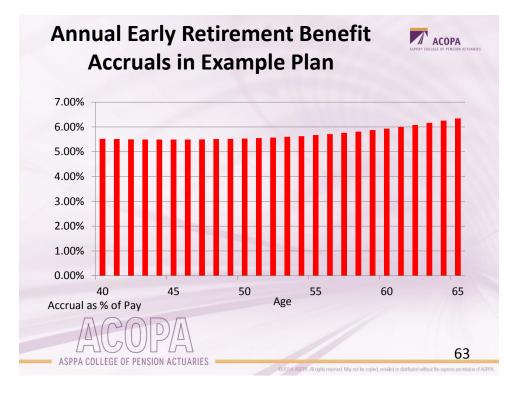
Example: (continued)

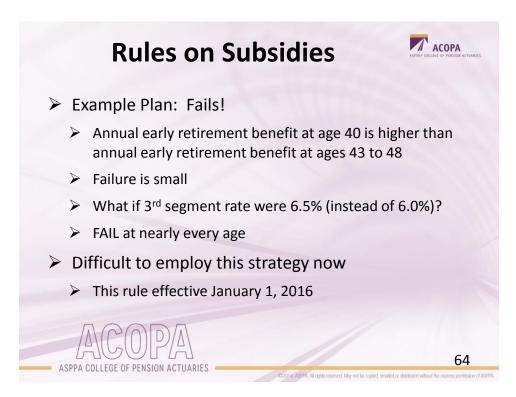
- 2. Limit benefit at annuity starting date (continued)
 - Convert immediate annuity limit to account value using 415 lump sum assumptions
 - Either small employer, or 417(e) rates are too low to apply, so use 5.5%
 - \$12,201 * a₅₅ (5.5%) = \$172,479
 - Current distribution cannot exceed \$172,479
 - Current formula balance is still \$200,000



- But only if the subsidies do not result in the annual early
- retirement benefit exceeding the annual early retirement for a similarly-situated older participant
- Consider immediately-commencing annuity benefits created in cash balance example...







65

66

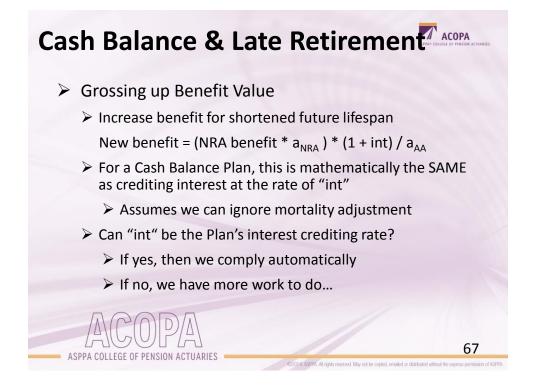
Cash Balance & Late Retirement Concerned about preservation of benefit value after Normal Retirement Age ("NRA") If not in pay status by NRA, continued deferral causes loss of value (because of shorter expected lifespan) Example: \$100 per month payable at age 65 (the NRA) Participant defers payment to age 67 Two fewer years of payment of that \$100 per month In the DOL's eyes, that's a loss of benefits



Cash Balance & Late Retirement

Four solutions:

- 1. Notify participants of loss of value
 - Distribute "suspension notice" upon attainment of NRA
- 2. Gross up the benefit
 - Increase the \$100 at age 65 to, say, \$114 at age 67
- 3. Offset gross-up by continued accruals
 - If \$100 at age 65 becomes \$125 at age 67 due to ongoing accruals, then no loss of value
- 4. Force distributions to start at NRA



Cash Balance & Late Retirement

2014 Final Regulations Preamble:

"A [cash balance] plan that does not suspend benefits ... will have to provide adjustments in excess of the benefits determined ... <u>if the interest crediting rate is insufficient to</u> <u>provide the required actuarial increases</u>." (emphasis added)

In other words, at least some interest crediting rates are not sufficient for post-NRA actuarial increases



69

70

Cash Balance & Late Retirement ACOPA

- Post-NRA Actuarial Increase
 - Standard for actuarial increase: reasonableness
- Are these reasonable:
 - a. 30-year Treasury rate
 - b. 5-year Treasury rate (current rate: 1.8%)
 - c. 1-year Treasury rate (current rate: 0.1%)
 - d. Actual return on assets (could be negative)



Consider DOL "suspension" notice

- a. If CB Plan document already provides for suspension of benefits notice, but these notices have not been distributed in the past, can start distributing the notices
 - Distributing notice now covers only future increases
 - What about past increases?
- b. If no CB Plan document language on suspensions:
 - Use wear-away to extend notice coverage to existing account balance and still preserve accrued benefit

<section-header><section-header><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item>

Accrual Rules



72

Accrual Rules:

- Ensure Plan provides sufficient accruals at ages prior to NRA
- Cash balance accruals = pay credit + future interest credits
 - Example: 2014 accrual = 2014 pay credit + interest on 2014 pay credit for all years until participant attains NRA
- With interest compounding over all years to NRA, cash balance plans are <u>usually</u> front-loaded and pass easily
 - If pay credits escalate with age, may not pass
 - What if interest credits are negative?

Accrual Rules

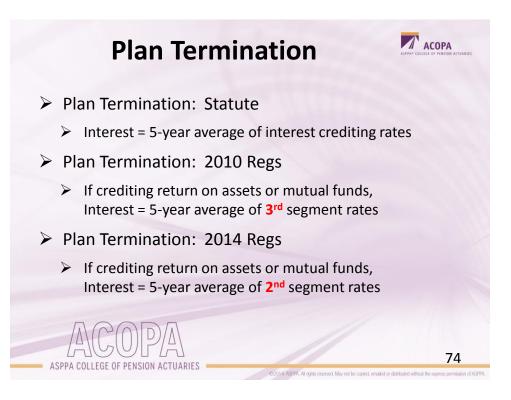


73

➢ 2014 Regs

- Same as 2010 regulations on accrual rules:
 - In assessing 133-1/3% accrual rule, may assume that current and future interest credits are not less than zero
 - No relief for fractional rule or 3% method
- Provided that pay credits do not increase more than 33-1/3% over years to NRA, cash balance plan Passes!
- Disconnect between accrued benefit for accrual rules, and accrued benefit for all other purposes





ACOPA

75

Plan Termination

- In determining 5-year average:
 - Determination of whether any rate used in average is a market rate is based on time rate applied and not year of termination
 - Minimums, maximums, etc. recognized
 - But not cumulative minimums
 - Per PBGC guidance, if final year is a short year, ignore final year rate in average
 - Still use final year rate for crediting to termination date





<section-header><section-header><section-header><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item>

What's Missing from Regs



- How to Project the Interest Credit
 - Accrued benefit: interest projected to NRA
 - Accrued benefit is the basis for compliance:
 - Non-discrimination testing
 - IRS benefit limits ("415" limits)
 - Accrual rules
 - Most significant compliance item is still unknown!



What's Missing from Regs



- Projection of Interest Credit
 - IRS (verbal) position:
 - Project interest at current rate
 - Does it make sense to project an equity portfolio's returns for all future years at current rate of return?
 - 2013 S&P 500 return: 30%
 - Project for all years after 2013 at 30%?
 - Note: the IRS rejects this position in the preamble to these regulations, stating that a 5-year average of returns is not indicative of future returns on equity portfolios



