## Cash Balance Plans <br> Ten Years after PPA 2006



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## Agenda

- Introduction
- PPA and Cash Balance Plans/ADEA
- Interest Credits
- Late Retirement
- Plan Terminations/Conversions
- Pre-approved Cash Balance Plans
- Miscellaneous Topics
- Funding/Restrictions/Deductions


## Introduction

- A defined contribution plan is a plan that provides for an individual account for each participant and for benefits based solely on the amount contributed to such account, and any income, expenses, gains, and losses, and any forfeitures allocated to such account
- IRC 414(i)
- A defined benefit plan is a plan that is not a defined contribution plan
- IRC 414(j)


## Introduction

- What is a cash balance plan?
- Benefit is defined as theoretical account balance (TAB)
- As opposed to periodic benefit payment
- TAB paper account only; assets not divided into individual accounts
- TAB credited with
- Pay credits (aka contribution credits, compensation credits, etc.)
- Interest credits at rate defined in plan document
- DB plan as benefit not based on actual earnings
- At least not totally; will discuss interest credit $=$ ROR


## Introduction

- Example
- Plan effective 1/1/14
- Single participant
- 2014 Compensation \$200,000
- 2015 Compensation \$250,000
- Contribution credit 50\% of compensation
- \$100,000 for 2014; \$125,000 for 2015
- Interest crediting rate 5\%


## Introduction

- Example (continued)
- TAB Balance 1/1/14
- 2014 contribution credit
- Balance 12/31/14 (1/1/15)
- 2015 interest credit (5\% of \$100K)
\$ -
100,000
100,000
5,000
- 2015 contribution credit
- TAB Balance 12/31/15
- Actual plan assets may or may not $=\sum$ TABs
- Employee statement would look something like this - very similar to a statement in their DC plan


## Introduction

- Why use a cash balance plan (versus traditional DB)?
- Provides more "meaningful" (understandable) benefit to employee verses traditional DB plan
- Recall previous slide - statement looks like PSP statement
- Compare to statement from traditional DB plan where statement tells participant of monthly benefit payable sometime in future
- In professional groups more able to equalize benefits
- Or identify how much of plan belongs to each
- Avoid lump sum swings due to interest rate shifts


## Introduction

- Why use a cash balance plan (versus traditional DB)?
- Divides costs and benefits easily amongst multiple principals
- Principal's benefit = account balance
- Principal's cost = funding of account balance
- Staff costs easily assignable by employee
- Not true with traditional DB plan as varying ages will generate different lump sums


## Introduction

- Avoids interest rate volatility inherent in traditional DBPs
- Compare above cash balance versus monthly accrued benefit of $\$ 1,206.27$ in traditional DBP (ignore 2015 accruals)
- Lump sum in cash balance at 12/31/15
- $\$ 100,000 * 1.05=\$ 105,000$ (this is a known)
- Traditional DB plan, assume at 12/31/14 all segment rates are $5 \%$, same table as above, lump sum therefore \$100,000
- Assume all segment rates go to $4 \%$ at 12/31/15
- LS now = \$1,206.27 * $172.117^{*}(1.04$ ^ -12$)=\$ 129,678$


## Introduction

- Cash balance plan still must provide annuity benefit
- To determine 415 benefit limit
- Also for discrimination testing
$-\mathrm{AB}=$ account balance * $(1+\mathrm{int})^{\wedge}(\mathrm{nra}-\mathrm{aa}) / \mathrm{apr}(\mathrm{NRA})$
- Increase = pay credit * $(1+\mathrm{int})^{\wedge}(\mathrm{nra}-\mathrm{aa}) / \mathrm{apr}(\mathrm{NRA})$
- Where int = interest crediting rate
- Much more on this


## Introduction

- Returning to previous example assume
- Interest crediting rate of 5\%
- Actuarial equivalence factors for converting TAB to SLA
- Interest 5\% / 2014 applicable mortality table
- Participant date of birth 12/31/1965
- Normal retirement age (NRA) 62
- Normal retirement date (NRD) 12/31/2027


## Introduction

- 12/31/14
- TAB \$100,000; Age 49; 13 years to NRA
- TAB projected to NRA
- \$100,000 * (1.05 ^ 13) = \$188,565
- Annuity factor 156.321
- Monthly annuity ("accrued benefit")
- \$188,565 / 156.321 = \$1,206.27
- As percentage of compensation
$-\$ 1,206.27 / 200,000 * 12=7.24 \%$


## Introduction

- 12/31/15
- TAB \$230,000; Age 50; 12 years to NRA
- TAB projected to NRA
- \$230,000 * (1.05 ^ 12) = \$413,047
- Annuity factor 156.321; monthly annuity
- \$413,047 / 156.321 = \$2,642.30
- Increase
- \$2,642.30-\$1,206.27 = \$1,436.03
$-\$ 1,436.03 / 250,000 * 12=6.89 \%$ of compensation
- Note reduction in 'rate of accrual' - more to come


## PPA and Cash Balance Plans

- Must provide for full vesting after three years
- Interest credit rate may not exceed "market rate"
- Otherwise plan violates $411(\mathrm{~b})(1)(\mathrm{H})$ prohibition on shrinking accruals - i.e., plan not qualified
- An applicable defined benefit plan shall be treated as failing to meet the requirements of paragraph (1)(H) unless the terms of the plan provide that any interest credit ... is not greater than a market rate of return...
- IRC §411(b)(5)(B)(i)(I)
- Special rules for terminations/conversions


## PPA and Cash Balance Plans

- Upon distribution, amount payable not less than cumulative pay credits
- Preservation of Capital Rule
- Lump sum may = account balance without consideration of 417(e)
- l.e., no more whipsaw
- Similarly situated rule allows age discrimination to be measured based on theoretical account balance instead of life annuity


## PPA and Cash Balance Plans

- More on whipsaw
- Pre-PPA most cash balance plans (at least the ones in my office) used the 30-year Treasury rate for interest credits
- Why?
- To avoid whipsaw
- Generally, pre-PPA law required projecting account to Normal Retirement Age at interest credit rate and discounting back at 30-year Treasury rate to determine lump sum amount


## PPA and Cash Balance Plans

- Assume 30-year rate was $4 \%$ and interest crediting rate was 6\%
- Current age 30; NRA 65; account = \$10,000
- \$10,000 * $\left(1.06^{\wedge} 35\right)=\$ 76,861$ (benefit at NRA)
- $\$ 76,861 /(1.04 \wedge 35)=\$ 19,478$ (current value)
- Lump sum amount almost double account balance!
- This was called whipsaw
- Using 30-year rate for interest crediting rate meant projection and discount rates same
- So lump sum = account balance


## Age Discrimination and Interest Credits

- Age discrimination started with interest credits
- IBM District court: cash balance plans discriminate
- Younger participants have more interest credits at NRA
- Recall decrease in accrual rate from example
- Appeals Courts and Congress: no age discrimination
- Accrual rate can be based on pay credit rate
- But what if interest credits are really high, like 15\%?
- At some point, higher interest credits become discriminatory against older participants
- Congress: limited interest credits in PPA 2006



## Age Discrimination and Interest Credits

|  | 27-Year Old | 55-Year Old |
| :--- | ---: | ---: |
| Compensation | $\$ 50,000$ | $\$ 50,000$ |
| Interest Crediting Rate | $5 \%$ | $5 \%$ |
| Pay Credit | $\$ 600$ | $\$ 600$ |
| Value of Pay Credit at <br> Age 62 (5\% Growth) | $\$ 3,309.61$ | $\$ 844.26$ |
| Annuity Conversion at <br> Age 62 (annual APR) | $\$ 13$ | $\$ 13$ |
| Annuity at Age 62 | $\$ 254.59$ | $\$ 64.94$ |
| Annuity as \% of <br> Compensation | $(3,309.61 / 13)$ | $(844.26 / 13)$ |

Congress is OK with this.

## Age Discrimination and Interest Credits

|  | 27-Year Old | 55-Year Old |
| :--- | ---: | ---: |
| Compensation | $\$ 50,000$ | $\$ 50,000$ |
| Interest Crediting Rate | $15 \%$ | $15 \%$ |
| Pay Credit | $\$ 25$ | $\$ 25$ |
| Value of Pay Credit at <br> Age 62 (15\% Growth) | $\$ 3,329.39$ | $\$ 66.50$ |
| Annuity Conversion at <br> Age 62 (annual APR) | $\$ 13$ | $\$ 13$ |
| Annuity at Age 62 | $\$ 256.11$ | $\$ 5.12$ |
| Annuity as \% of <br> Compensation | $(3,329.39 / 13)$ | $(66.50 / 13)$ |

Congress is not OK with this. Result: Congress limited interest credits with PPA 2006

## PPA and Interest Credits

- Statutory limit on interest credits:
- Cannot exceed "market rate of return"
- Interest rates outside IRS list cannot be used
- 2014 regulations: IRS delegated the ability to issue future guidance to expand list of acceptable interest rates
- IRS left open expansion of possibilities


## Interest Credits

- Interest credits must be applied no less often than annually
- Document must specify
- Annual certainly the norm, at least in small plan market
- Also must specify how interest applied (if at all) to distributions within period
- Regulations specify that no interest need be credited between crediting dates, even if annual
- And must specify factors for converting to annuity to determine accrued benefit
- I.e., mortality table and interest rate for conversion



## Interest Credits

- What is an interest credit?
- "An interest credit for purposes of this paragraph ... means the ... adjustments to a participant's accumulated benefit under a statutory hybrid benefit formula, to the extent not conditioned on current service ..."
- Reg. §1.411(b)(5)-1(d)(1)(ii)


## Interest Credits

- What is an interest credit?
- Some plans have an "interest credit rate" that is greater for active employees
- E.g., the rate is $6 \%$ while employed but 4\% after separation from service
- Under regulations piece dependent on service (i.e., the extra 2\%) not an interest credit
- And is therefore a pay credit and treated as such


## Interest Credits

- Acceptable interest rates:

1. Fixed: up to $6.0 \%$

- 2010 regulations: up to 5.0\%
- 2014 regulations: 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


## Interest Credits

- Acceptable interest rates:

3. Segment rates:

- First, second, or third segment rates 430 or 417(e)
- Look-back and stability rules of 417(e) apply
- MAP-21 (including HATFA) or Unadjusted (404 rates)
- Update from Notice 2012-61, which left open possibility MAP 21 rates may be in excess of market


## Interest Credits

- Acceptable interest rates:

4. Investment return on plan assets:

- 2010 regulations: return on all plan assets
- 2014 regulations: return on all, or on subset, of assets
- Assets must be "diversified so as to minimize the volatility of returns" - refer to ERISA 404(a)(1)(C):
- "By diversifying the investments of the plan so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so."


## Interest Credits

- Acceptable interest rates:

4A. Investment return on "subset" of plan assets:

- Subset diversified to minimize volatility of returns
- $10 \%$ limit in subset on employer securities/R.E.
- Assets in subset must approximate liabilities for benefits to which subset relates


## Interest Credits

- Acceptable interest rates:

5. Investment return on a mutual fund:

- Must be broad-based
- Not significantly more volatile than US markets, so no:
- Industry sector
- No single country other than U.S.
- No leverage or derivatives to enhance return
- Okay for fund to track broad indices such as S\&P 500 or Russell 2000
- BUT, cannot credit index - must be index fund



## Interest Credits

- Acceptable minimum interest rates:
a) $96-8$ rates: up to $5 \%$ annually
- E.g., greater of 30-year Treasury and 5\%
- Minimum may be applied on an annual basis
b) Segment rates: up to $4 \%$ annually
- E.g., greater of unadjusted first segment rate and 4\%
- Minimum may be applied on an annual basis


## Interest Credits

- Acceptable minimum interest rates:
c. Return on plan assets: up to 3\% cumulatively
- E.g., return on plan assets, not less than 3\%
- May NOT apply annually
- Applies on cumulative basis, at distribution only
d) Return on mutual funds:
- Same as for return on plan assets


## Interest Credits

- Note however any rate can be used if capped by market rate, e.g.:
- Highly leveraged mutual fund capped at HATFA third segment
- 30-year Treasury rate plus 200 basis points capped at HATFA third segment
- Rate of return on aggressively invested plan assets capped at HATFA third Segment
- Etc.
- REALITY - most new plans using fixed rate or some rate tied to ROR on assets


## Interest Credits

- Can investment direction be provided?
- Suggested by IRS in 2010 regulations
- Preamble to 2014 regulations:
- "It is possible that the Treasury Department and the IRS will conclude that such plan designs are not permitted."
- This follows four pages of criticism of investment direction
- I take this as "No." But could be wrong ...


## Change to Interest Credit Rate

- Can interest crediting rate be changed?
- Why would you want to?
- May be having testing issues with current (otherwise compliant) rate
- Current rate non-compliant


## Changing Interest Rate - Compliant

- Relief for interest crediting changes
- Interest crediting is a right to which participant is entitled once the pay credit has accrued
- I.e., once the pay credit for a year has been earned, the right to interest on it for all years through distribution is accrued
- Cannot cut future interest credits, even before they're credited
- Except in narrow relief provided in 2014 regulations


## Changing Interest Rate - Compliant

- Changing from one compliant rate to another
- Wear-away approach on old balance
- I.e., payout greater of
- Balance at date of change, plus interest at old rate, or
- Such balance, plus pay credits, plus interest at new rate
- But not for those not active (or otherwise no longer benefiting) at amendment date
- Otherwise would be receiving greater of two rates
- Such folks must continue at old rate


## Changing Interest Rate - Compliant

- Consider plan using 30-year Treasury rate
- Recall IRS requires .5\% accrual to be receiving meaningful benefit for IRC 401(a)(26)
- 30-year rate for December 2014 is 2.83\%
- Consider employee age 37, NRA 62
- Compensation = \$50,000; pay credit \$1,000
- APR 2015 applicable table $=156.595$ (13.05 annual)


## Changing Interest Rate - Compliant

- Pay credit $=\$ 50,000$ * . $02=\$ 1,000$
- To NRA = \$1,000 * (1.0283 ^ 25) = \$2,009.07
- Benefit $=\$ 2,009.07 / 13.05 / 50,000=.31 \%$
- Not meaningful
- What if changed to $5 \%$ fixed?
- To NRA = \$1,000 * (1.05 ^ 25) = \$3,386.36
- Benefit $=\$ 3,386.36 / 13.05 / 50,000=.51 \%$
- Meaningful


## Changing Interest Rate - Compliant

- Regarding change from 30-year rate to fixed rate
- Would need to keep track of pre-amendment balance and continue to credit at 30-year rate
- At distribution such balance would be compared to actual balance at such date
- Of course if 30-year rates stay where they are will be nonissue
- Or could keep 30-year rate with 5\% minimum
- Though this may backfire if rates skyrocket!


## Change to Interest Credit Rate

- What if interest crediting is non-compliant?
- General rule: correct in most straightforward way
- Examples:
- Fixed at 7\%: reduce to 6\%
- S\&P 500 index: credit return of specific S\&P 500 fund
- 30-year Treasury with floor of 6\%: reduce floor to 5\%
- Special rules apply for more complicated situations


## Crediting ROR or RIC

- Why?
- Goal is to invest assets to mirror crediting rate
- Investment risk shifted to employees
- Losses do not create a funding shortfall
- Goal to simply deposit pay credits
- Ala a money purchase plan!


## Crediting ROR or RIC

- Issues?
- Potentially lower 415 limits
- Potentially harder to pass 401(a)(4)
- Potentially harder to pass 401(a)(26)
- Timing of contributions
- Interim interest credits
- Potential 411(a)(9) issue


## Crediting ROR or RIC

- Recall that in determining accrued benefit pay credit/account balance project to NRA using interest credit
- Where interest credit variable "The IRS has taken the position that the hypothetical account balance must be projected to normal retirement date using the interest crediting rate in effect on the date the projection is made."
- IRS hybrid training manual
- Consistent with recent cash balance LRMs
- And §1.401(a)(4)-3(d)(5)(iii)(H) of old 1991 regulations
- 2014 regulations allow 0\% assumption if loss



## Crediting ROR or RIC - 415 Issue

- DB plan's early retirement reduction factor:
- Benefit at aa $=a_{\text {NRA }} /(1+i n t) \wedge\left(\right.$ NRA - aa) $/ a_{\text {aa }}$ (where int = current interest crediting rate)
- Let's look at a case where ROR is being used and most recent ROR is $15 \%$
- Partner in law firm


## Crediting ROR or RIC - 415 Issue

- Partner is age 59
- Two years in plan (2014 and 2015)
- NRA 62
- Annuity conversion based on 5\% / 2015 applicable table
- Pay credit \$200,000
- Look at interest credits of 5\% and 15\%
- Note if lower than $5 \%$ would base on $5 \%$


## Crediting ROR or RIC - 415 Issue

- Account balance at 5\% and 15\%
- TAB Balance 1/1/14
- 2014 contribution credit
- Balance 12/31/14 (1/1/15)
- 2015 interest credit
- 2015 contribution credit
- TAB Balance 12/31/15


## Crediting ROR or RIC - 415 Issue

- What is 415 limit?
- If interest credit rate 5\%
- \$210,000 / 12 * $156.5947 / 170.0164 /\left(1.05^{\wedge} 3\right)=$ \$14,193.02
- Two years of part = \$14,193.02 / 10 * $2=\$ 2,838.60$
- Max LS $=\$ 2,838.60$ * $158.7841=\$ 450,725$
- Compare to account balance $=\$ 410,000$
- No problem!


## Crediting ROR or RIC - 415 Issue

- What is 415 limit?
- If interest credit rate $=$ ROR $=15 \%$
$-\$ 210,000 / 12$ * $156.5947 / 170.0164 /(1.15 \wedge 3)=$ \$10,803.12
- Two years of part = \$ 10,803.12 / 10 * 2 = \$2,160.62
- Max LS $=\$ 2,160.62$ * $158.7841=\$ 343,073$
- Compare to account balance $=\$ 430,000$
- Problem!


## Crediting ROR or RIC - 401(a)(4)

- Potentially harder to pass 401(a)(4) testing
- Combo plans often have:
- HCEs: mostly in CB Plan
- NHCEs: mostly in PS Plan
- Testing depends on leverage, e.g.:
- HCEs: 5\% projection in CB Plan
- NHCEs: 8.5\% projection in PS Plan


## Crediting ROR or RIC - 401(a)(4)

- Normal accrual rate generally = included in $\mathrm{AB} /$ compensation
- Look at example where ROR = 15\%
- Annuity conversion based on 5\% / 2015 applicable table
- Pay credit \$100K; Compensation \$250K
- Attained Age 55; NRA 62
- NAR = normal accrual rate
- At 5\% NAR = \$100K * 1.05 ^ $7 / 13.05 / 250 \mathrm{~K}=4.31 \%$
- At 15\% NAR = \$100K * 1.15 ^ $7 / 13.05 / 250 \mathrm{~K}=8.15 \%$
- Leverage obtained by testing PS at $8.5 \%$ lost!


## Crediting ROR or RIC - 401(a)(26)

- Recall need $40 \% / 50$ participants with "meaningful" benefit ( $0.5 \%$ AB increase at NRA)
- Low or negative returns can create problems
- Assume compensation \$45K at age 35, pay credit 2\% (\$900), NRA 62, 2015 applicable table 5\%
- At 5\% projection rate $=\$ 900$ * 1.05 ^ $27 / 13.05=257.48$ $>257.48 / \$ 45,000=.57 \%$ (meaningful)
- At $2 \%$ projection rate $=\$ 900 * 1.02^{\wedge} 27 / 13.05=117.72$ $>117.72 / \$ 45,000=.26 \%$ (not meaningful)
- Pass where interest credit = 5\% / fail at $2 \%$
- Would need to double pay credit to pass!


## Crediting ROR or RIC - Timing

- Timing of contributions
- Where contributions not made on last day of year, crediting ROR may cause interest credits higher than actual amounts earned
- E.g., assets earn $33.33 \%$ first half year and lose $10 \%$ for last half - result is $20 \%$ return for the year

$$
\text { - l.e., P * } 1.3333^{*} .9=1.2 \text { P }
$$

- Prior year contribution made end of first half
- Deposit that lost $10 \%$ needs to credit 20\%??
- How is ROR on plan assets defined?


## ROR - Interim Interest Credits

- Interim interest credits
- 2015 Grey Book Q28
- Under the final hybrid regulations, a plan is not required to provide interest credits to participants whose benefits commence during an interest crediting period before the interest crediting date, but may provide such interest credits. Can a cash balance plan provide an interest credit for the current partial year based on a different acceptable interest credit basis than is used for the full period?
- (Continued on next slide)


## ROR - Interim Interest Credits

- 2015 Grey Book Q28 (continued)
- RESPONSE
- No. Regulation §1.411(b)(5)-1(d)(1)(iv)(D) provides that "... a plan is not treated as failing to meet the requirements of this paragraph (d) merely because the plan calculates increases or decreases to the participant's accumulated benefit by applying a rate of interest or rate of return (including a rate of increase or decrease under an index) to the participant's adjusted accumulated benefit (or portion thereof) for the period." The reference under this regulation to "a rate of interest or rate of return" means the plan's rate of interest or rate of return.
- When crediting annual ROR will want to NOT credit interim interest and get folks paid ASAP


## ROR - 411(a)(9)

- And my favorite, IRC §411(a)(9)
- IRC §411(a)(9) and Regulation §1.411(a)-7(c) provide that "periodic benefit" (i.e., annuity) payable at any point cannot be less than any previously available amount
- Most cash balance plans provide for immediately payable lump sums upon termination of employment
- Regulation 1.401(a)-20 Q\&A 17 provides that if a non deminimis (over $\$ 5 \mathrm{~K}$ ) lump sum is available at any point (referred to as "earliest retirement age" in the regulation) then qualified annuity forms must be available at same time


## ROR - 411(a)(9)

- And my favorite, IRC §411(a)(9)
- Assume account balance \$1.5 million at age 64
- Due to large asset returns
- Age 64 417(e) 2015 mortality table 5\% APR = 149.47
- Life annuity = \$10,035
- Loss results in age 65 balance of $\$ 1$ million
- Even after preservation of capital rule, as there were substantial previous gains
- Age 65 417(e) 2015 mortality table 5\% APR = 145.819
- Life annuity = \$6,858
- At 65 participant has right to $\mathbf{\$ 1 0 , 0 3 5}$ annuity ... Cost!?


## ROR - Sub-pools of Assets

- New option in 2014 regulations:
- Credit return on sub-pool of plan assets
- Sub-pool option intended to accommodate cash balance conversions:
- Pool 1: assets invested to pay traditional DB benefits
- Pool 2: assets invested to pay ICR = ROR on CB accounts


## ROR - Sub-pools of Assets

- Preamble to regulations also states:
- "... a plan sponsor may wish to credit interest based on a rate of return that differs for different groups of participants (such as using a more conservative, or less volatile, subset of plan assets for long service employees)"


## ROR - Sub-pools of Assets

- Lead to lifestyle/target date CB plans?
- Each sub-pool is a separate investment policy
- Participants assigned to a particular sub-pool
- Assignment is one-time at design inception
- Segment participants by age?
- Age discrimination a risk?
- See inter-sector notes on following slide


## ROR - Sub-pools of Assets

- October 15, 2014 inter-sector notes:
- "The IRS/Treasury representatives explained that any sort of age-based criteria would take you out of the age discrimination safe harbor for lump sum-based plan formulas, which means that the plan would have to satisfy the general age discrimination requirements of IRC section 411(b)(1)(H)(i). They commented that they were careful that the example they provided in the preamble depended on service, not age."


## ROR - Sub-pools of Assets

- The IRS has indicated that a subset is NOT a separate benefit right or feature that must be tested separately
- Instead it is part of the accrued benefit such that it is taken into account in testing the amount of the benefit under Section 401(a)(4)
- 2015 Grey Book Q 27 next slides


## ROR - Sub-pools of Assets

- 2015 Grey Book Q 27
- "The final hybrid regulations permit an interest crediting rate based on a subset of plan assets provided the assets are diversified to minimize volatility, qualifying employer securities held in the subset do not exceed $10 \%$ of the fair market value (FMV) of the subset, and the FMV of the subset of assets approximates the liabilities of benefits that are adjusted by reference to the rate of return on the subset. The preamble makes it clear that if all other rules are satisfied, there can be different subsets of assets for different participants.
- (Continued next slide)



## ROR - Sub-pools of Assets

- 2015 Grey Book Q 27 (continued)
- If a cash balance plan has more than one subset of assets, and each subset is used to determine the interest crediting rate for a different set of participants, is assignment to a particular subset considered a BRF that must be tested under the nondiscrimination rules?
- RESPONSE
- The interest crediting rate is part of the accrued benefit, and will be tested as such rather than as a benefit, right, or feature. The differences in rates of return on the subsets of assets will affect §401(a)(4) amounts testing."



## ROR - Sub-pools of Assets

- Consider Regulation 1.401(a)(26)-2(d)(1)(iii)
- "A defined benefit plan is treated as comprising separate plans if ... there is an arrangement (either under or outside the plan) that has the effect of providing any employee with a greater interest in a portion of the assets of a plan in a way that has the effect of creating separate accounts. Separate plans are not created, however, merely because a partnership agreement provides for allocation among partners, in proportion to their partnership interests, of either the cost of funding the plan or surplus assets upon plan termination."


## ROR - Sub-pools of Assets

- Regulation 1.401(a)(26)-2(d)(1)(iii) - EXAMPLE 1
- "Employer A maintains a defined benefit plan under which each highly compensated employee can direct the investment of the portion of the plan's assets that represents the accumulated contributions with respect to that employee's plan benefits. In addition, by agreement outside the plan, if the product of the employee's investment direction exceeds the value needed to fund that employee's benefits, Employer A agrees to make a special payment to the participant. In this case, each separate portion of the pool of assets over which an employee has investment authority is a separate plan for the employee."


## ROR - Sub-pools of Assets

- Do sub-pools result in each separate pool being tested under 401(a)(26)?
- No guidance, but l'd hope not!


## ROR - Sub-pools of Assets

- Does the ability to use sub-pools equate to individual direction as some have implied?
- In the words of the great philosopher Eric Theodore Cartman
- "Uh, no"


## Late Retirement

- With respect to a participant with an annuity starting date after NRA, a DB plan must either:
- Provide an actuarial increase after NRA, or
- Satisfy the requirements for suspension of benefits under §411(a)(3)(B)
- Accordingly, a cash balance plan that does not properly suspend benefits violates the requirements of §411(a) if the balance of the theoretical account is not "increased sufficiently" for post-NRA distributions


## Late Retirement

- Consider a plan crediting interest based on the ROR of plan assets
- Absent a minimum rate such a plan could violate the rules for post-NRA increases in years with low or negative returns
- But a minimum rate would violate the market rate requirement (absent relief)
- Recall ROR can only have cumulative minimum


## Late Retirement

- 2014 regulations provide relief:
- "A statutory hybrid plan is not treated as providing an effective interest crediting rate that is in excess of a market rate ... merely because the plan provides that the participant's benefit, as of each annuity starting date after normal retirement age, is equal to the greater of:
- (i) The benefit based on the accumulated benefit determined using an interest crediting rate ... not in excess of a market rate ...; and
- (ii) The benefit that satisfies the requirements of section 411(a)(2)."


## Late Retirement

- Not an issue if significant pay credits are still being received
- I.e., post-retirement actuarial increase is only required if adjusted NRA accrual would result in a benefit greater than that received under the terms of the plan including continued accruals
- So what is reasonable?
- Certainly not a negative rate based on ROR or RIC
- 30-year Treasury? Currently ~ 3\%
- Three-year Treasury + 50 bps? Currently ~ 1.5\%
- Again, zero guidance


## Plan Termination

- Plan termination: statute
- Interest = five-year average of interest crediting rates
- Plan termination: 2010 Regulations
- If crediting return on assets or mutual funds, Interest = five-year average of third segment rates
- Plan termination: 2014 Regulations
- If crediting return on assets or mutual funds, Interest = five-year average of second segment rates (without regard to limitations of MAP/HATFA)


## Plan Termination

- In determining five-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


## Plan Termination

- Example: plan used lesser of 30-year rate for preceding October or 4\% for interest crediting
- October 2013 3.68\%
- October 2012 2.90\%
- October 2011 3.13\%
- October 2010 3.87\%
- October 2009 4.00\% (actual 4.19\%)
- October 2008 4.00\% (actual 4.17\%)



## Plan Termination

- Plan terminates April 1, 2014
- Interest used post-termination would be $3.58 \%$ (average 2.90, 3.13, 3.87, 4.00, 4.00)
- October 2013 rate ignored in average, since 2014 is not a full plan year (but used in interest crediting up to termination date)
- Originally in PBGC regulations
- Confirmed by IRS in 2015 Grey book Q30



## Plan Conversions

- Cash balance conversions
- Statute requires A plus B approach on conversion
- $A=$ benefit accrued as of "conversion date" under terms of plan in effect before conversion amendment
- $B$ = benefit accrued for years of service after conversion date under terms of plan in effect after conversion amendment
- Objective to assure no wear-away with respect to accrued benefit or subsidized early retirement benefit based on pre-conversion service


## Plan Conversions

- 2010 final regulations provided for 'set and check' alternative
- Effectively allows ' $A$ ' piece to be replaced by opening balance that must be "checked" at ASD
- 2010 proposed regulations a narrow slice of relief:
- 'Set and forget'
- If certain requirements met convert at 417(e) and no check
- 2014 Regulations retract - transition rules if used
- Only two options:
- Set and check: check opening balance against 417(e)
$-A+B$ : traditional acc benefit + hypo account balance



## Cash Balance Plans -Pre-approved Documents

- In Announcement 2014-4 IRS extended submission deadline for PPA restatement of pre-approved DBPs to February 2, 2015
- IRS intent was to expand pre-approved program to plans with "certain cash balance features."
- Announcement 2014-41 further extended submission deadline to June 30, 2015
- Rev proc 2015-36 further extended to 10/30/15


## Cash Balance Plans -Pre-approved Documents

- Announcement 2014-4 provided that current sponsors of cash balance plans could complete Form 8905 (Certification of Intent to Adopt a Pre-approved Plan) before end of applicable individually designed on-cycle deadline (1/31/16 for Cycle E) negating need to restate until deadline for pre-approved documents


## Cash Balance Plans -Pre-approved Documents

- Again, IRS intent was to expand pre-approved program to plans with "certain cash balance features."
- Begs question as to what will/won't be allowed in preapproved plans
- And what happens if 8905 signed but upon restatement plan does not meet specifications required for pre-approval and therefore adopts an IDP?


## Cash Balance Plans -Pre-approved Documents

- Rev Proc 2007-44
- 19.03 Temporary Eligibility for Six-Year Cycle
- An employer who adopts an individually designed plan ... is entitled to remain in the six-year remedial amendment cycle only for the current remedial amendment cycle. This temporary eligibility for the six-year cycle applies if:
- (1) The employer is an intended adopter ... and after timely executing the Form 8905, the employer decides to adopt an individually designed plan whose underlying plan document is not based on a pre-approved plan


## Cash Balance Plans -Pre-approved Documents

- 17.04 an employer is an intended adopter if:
- (1) The employer currently maintains a qualified individually designed plan; and
- (2) Such employer and a sponsor or practitioner who maintains an existing pre-approved plan ... execute Form 8905 ... before the end of the employer's five-year remedial amendment cycle ...


## Cash Balance Plans -Pre-approved Documents

- Confirmed in IRS Employee Plan News Issue 2014-4 March 19, 2014
- http://www.irs.gov/Retirement-Plans/FAQs-on-Withdrawing-Cycle-C-Applications
- Question 1 confirms above conclusion


## Cash Balance Plans -Pre-approved Documents

1. May a plan sponsor who signs a Form 8905 under Announcement 2014-4 intending to adopt a pre-approved cash balance plan subsequently adopt an individually designed plan without losing reliance?

## Cash Balance Plans -Pre-approved Documents

- Yes, a plan sponsor who originally intended to adopt a preapproved cash balance plan may later adopt an individually designed cash balance plan as long as the plan sponsor adopts the individually designed plan within the two-year window for pre-approved defined benefit plans, which will be announced in future guidance (see Revenue Procedure 2007-44, Section 19.03(1)).


## Cash Balance Plans -Pre-approved Documents

- Rev Proc 2015-36 provides which features will not be allowed in pre-approved cash balance plans
- Section references below to sections in RP 2015-36 (two references in each slide refer to M\&P and VS sections of RP)


## Cash Balance Plans -Pre-approved Documents

- 5.16(1) / 14.08(1)
- A cash balance plan that was the subject of a conversion amendment must comply with the provisions of § 411(b)(5)(B)(iii) and must comply with §1.411(b)(5)-1(c)
- l.e., pure " $\mathrm{A}+\mathrm{B}$ " approach must be used
- So opinion or advisory letters won't be issued for plans using opening account balance as described in §1.411(b)(5)-1(c)(3).
- I.e., no set and check approach allowed


## Cash Balance Plans -Pre-approved Documents

- 5.16(2) / 14.08(2)
- Plans that contain structure of pay credits that increase with age, service, or otherwise must be:
- Definitely determinable
- Operationally nondiscriminatory; and
- At all times in compliance with the "133 1/3 percent rule" of §411(b)(1)(B)


## Cash Balance Plans -Pre-approved Documents

- 6.03(7) / 14.08(2)
- Letters not issued for:
- Plans with non-cash balance formulas
- E.g., PEP plans
- Plans with interest credits based on participant choice
- Plans with interest credits based on return on plan assets or return on mutual funds


## Cash Balance Plans -Pre-approved Documents

- 6.03(7) / 14.08(2) (continued)
- Letters not issued for:
- Conversions other than pure $A+B$
- Plans not using 133 1/3 method to pass §411(b)
- Plans funded with insurance under §412(e)(3)
- Certain floor offset arrangements



## Sample (Rounded) Pay Credit Limits

- Age 30
- Age 35
- Age 40
- Age 45
- Age 50
- Age 55
- Age 60

$\$ 50,000$ 65,000 85,000<br>110,000<br>140,000<br>180,000<br>235,000

## Sample (Rounded) Pay Credit Limits

- What happens if account balance greater than allowable currently payable lump sum
- For example a 40-year-old's maximum lump sum is about $\$ 255,000$ if three years in plan
- Suppose pay credits designed to get there but plan uses ROR to credit interest such that account balance actually $\$ 275,000$
- Must account balance be limited to $\$ 255 \mathrm{~K}$ if not looking to take distribution


## Sample (Rounded) Pay Credit Limits

- 2014 Gray Book
- Question 29, Section 415: How to Apply §415 in a Cash Balance Plan
- Please explain the effect of $\S 415$ on the hypothetical account balance in a cash balance plan. Specifically:
- a) Must the hypothetical balance be limited to the maximum lump sum payable at all potential payment ages?


## Sample (Rounded) Pay Credit Limits

- RESPONSE
- a) Section 415 requires the plan to limit the accrued benefit and optional forms of benefit, not the hypothetical account balance. Limiting the hypothetical account balance to an amount that complies with the §415(b) limit would result in compliance with $\S 415$ but might result in limiting accruals or optional forms beyond what is required under $\S 415$. Limiting interest credits on prior pay credits over what is required by $\S 415$ would result in an impermissible forfeiture. Limiting pay credits does not create a forfeiture but may cause back-loading problems in the future if they pop back up.
- So it's okay to maintain balance in excess of amount that may currently be paid as long no more 415 limit is paid at ASD


## Cash Balance Plans - Insurance

- 2015 Grey Book Q19
- An employer maintains a cash balance plan and a profitsharing plan that are aggregated for purposes of nondiscrimination testing. The HCEs are primarily covered by the cash balance plan, and the NHCEs are primarily covered by the profit-sharing plan. In each plan, whole life insurance is purchased. Under the profit-sharing plan, the premium is limited to $40 \%$ of the profit-sharing contribution to a participant's account. Under the cash balance plan, the premium for a participant may not exceed $40 \%$ of the hypothetical pay credit (in addition to the overall requirement that total life insurance must be considered incidental). The same type of life insurance policy is purchased under each plan.
- (Continued next slide)


## Cash Balance Plans - Insurance

- 2015 Grey Book Q19 (continued)
- The expense associated with the purchase of life insurance is charged to participants' accounts in the profit-sharing plan. In the cash balance plan, this is treated as a plan expense that does not reduce any accrued benefits. (The cash balance plan's interest crediting rate, which is a permitted bond rate, is unaffected by expenses.)
- Does this situation give rise to a benefits, rights, and features (BRF) problem under §1.401(a)(4)-4 of the regulations?
- (Continued next slide)


## Cash Balance Plans - Insurance

- 2015 Grey Book Q19 (continued)
- RESPONSE
- The death benefit is an ancillary benefit that is not available on substantially the same terms for each plan (because the DC plan participants have to pay for the benefit and the DB plan participants do not). Therefore, the death benefit is a different BRF for DC plan participants than for DB plan participants. In addition, the fact that whole life insurance is used may cause differences in the amount of the ancillary benefit provided under each plan.


## Cash Balance Plans - Offsets

- 2015 Grey Book Q20
- A cash balance plan offsets the gross pay credit by a DC plan contribution. Pay credits in the cash balance plan are either $7 \%$ or $5 \%$ of compensation, depending on employment classification. The DC plan provides a uniform $5 \%$ of compensation for all participants. The employees who participate in the cash balance formula benefit under the DC plan on a uniform basis, and the offsetting DC plan contributions are not used to offset benefits under another plan.
- Does this arrangement meet the requirements of the special rule for concurrent benefit offset arrangements under §1.401(a)(26)-5(a)(2)(iii), so that the determination of who is benefiting under the cash balance plan is based on the gross pay credit rather than the pay credit net of the DC contribution offset?

(Continued next slide)


## Cash Balance Plans - Offsets

- 2015 Grey Book Q20 (continued)
- RESPONSE
- If the annual pay credits under the cash balance plan are offset by annual DC plan contributions, then only the net pay credit is considered when determining benefits accrued under the cash balance plan, including for purposes of §401(a)(26)
- The point is that floor offset plans determine the offset at annuity starting date not each year!


## Cash Balance Plans - Top-25 Rule

- Top-25 rule of 1.401(a)(4)-5(b)
- 110\% funded - per IRS can use HATFA funding target
- 2013 Gray Book Q\&A 8; 2015 Gray Book Q\&A 22
- Pre-fund to achieve?
- Escrow arrangement
- Defer receipt
- Or start installments (but not r/o eligible )


## Cash Balance Plans - Funding

- Per funding regulations (Reg. 1.430(d)-1(f)(5)(i)):
- "In the case of an applicable defined benefit plan ... the amount of ... distribution is determined by projecting the future interest credits ... under the plan's interest crediting rules using actuarial assumptions that satisfy the requirements of paragraph $(f)(3)$ of this section. Thus, if a plan provides for a single- sum distribution equal to the balance of a participant's hypothetical account under a cash balance plan, then the amount of that future distribution is equal to the projected account balance at the expected date of payment determined using actuarial assumptions that satisfy the requirements of paragraph (f)(3) of this section..."


## Cash Balance Plans - Funding

- Per the funding regulations (Reg. 1.430(d)-1(f)(3)):
- Other assumptions. In the case of actuarial assumptions other than those specified ... each of those actuarial assumptions must be reasonable (taking into account the experience of the plan and reasonable expectations). In addition, the ... assumptions ... must, in combination, offer the plan's enrolled actuary's best estimate of anticipated experience under the plan based on information determined as of the valuation date...
- "Other assumptions" include payment date and interest credits
- Note that there is no need to turn account balance or pay credit into accrued benefit to determine funding (presuming lump sum form of payment is assumed). Funding a matter of projecting interest credits to payment date and discounting projected amount back at segment


## Cash Balance Plans - Funding

- So ...
- First need to determine anticipated payment date (e.g., Normal Retirement Age)
- Then need assumption for future interest crediting rate
- Fixed rate $\rightarrow$ life is simple, use fixed rate for projection
- Variable rates $\rightarrow$ not so simple, again -
- "Actuary's best estimate of anticipated experience ... as of the valuation date ..."


## Cash Balance Plans - Funding

- TNC and FT determined by projecting forward to assumed separation (e.g., NRA) using interest crediting rate and discounting back using applicable segment rate
- August 2014 rates:
- MAP-21: S1: 4.99\%, S2: 6.32\%, S3: 6.99\%
- Use for minimum funding
- 430(h): S1: 1.15\%, S2: 4.06\%, S3: 5.14\%
- Use for maximum deduction


## Cash Balance Plans - Funding

- Example
- First year "principal credit" = \$90,000
- $A A=54 ; N R A=62$
- Assume lump sum payment at NRA
- 8 years from retirement - so use S2 for discounting
- $\mathrm{S} 2=6.32 \%$ for minimum funding; $4.06 \%$ for max deduction
- Interest crediting rate $=5 \%$
- Projected account at $5 \%=\$ 90,000 *(1.05)^{8}=\$ 132,971$
- Present value at $6.32 \%=\$ 132,971 /(1.0632)^{8}=\$ 81,440$ (Target Normal Cost for minimum funding)
- Present value at $6.15 \%=\$ 132,971 /(1.0615)^{8}=\$ 96,713$ (Target Normal Cost for maximum deduction)
- Range = \$81,440-\$96,713


## Cash Balance Plans - Funding

- Funding restrictions - Top 25/AFTAP Example:
- Account balances total $\$ 500,000$, assets same
- All participants 10 years from distribution except one with balance of $\$ 50,000$ (an HCE who wants money now)
- Assume interest credit fixed 4\%, S2 = 5\%
$-\mathrm{FT}=\$ 450,000$ * $(1.04)^{10} /(1.05)^{10}+\$ 50,000=\$ 458,934$
- AFTAP $=\$ 500,000 / \$ 458,934=108.95 \%$
- After distribution assets / FT = \$450,000 / \$408,934 = 110.04\% [ $>110 \%$ so distribution may be made]

Higher fixed rate would have prevented distribution

## Cash Balance Plans - Funding

- What if interest crediting rate is actual ROR?
- What is a reasonable projection of future interest credits? Remember the regulation -
- "... Actuary's best estimate of anticipated experience ..."
- Projection of variable rate subject to ACTUARY'S judgment affects FT \& TNC
- Impacts \%s and when people can get paid
- For years we used 30-year/other Treasury rates
- Common to assume current rate for projection
- Clearly not reasonable with volatile crediting rates like ROR, etc.



# Questions? 

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