

Cash Balance 201

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Curriculum: 4 Modules


Cash Balance Coach Certificate

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Notes

## Outline

## Drilling deeper:

5 key design and compliance issues


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Notes

## Example of a Challenge

| 2 Owners |  |  |
| :--- | ---: | :--- |
| Hardt | 45 | $\$ 270,000$ |
| Hardt | 45 | $\$ 183,000$ |
| Subtotals |  | $\$ \mathbf{4 5 3 , 0 0 0}$ |
|  |  |  |
| $\mathbf{5}$ Eligible Employees (>1 year) |  |  |
| Gren | 46 | $\$ 45,500$ |
| Strom | 56 | $\$ 31,605$ |
| Rivera | 39 | $\$ 15,914$ |
| Anderson | 46 | $\$ 12,000$ |
| Doll | 61 | $\$ 11,000$ |

5

## Better

| 2 Owners |  |  |
| :--- | ---: | :--- |
| Hardt | 45 | $\$ 270,000$ |
| Hardt | 45 | $\$ 183,000$ |
| Subtotals |  | $\$ 453,000$ |
|  |  |  |
| 5 Eligible Employees (>1 year) |  |  |
| Gren | 46 | $\$ 45,500$ |
| Strom | 56 | $\$ 31,605$ |
| Rivera | $\mathbf{3 0}$ | $\$ 15,914$ |
| Anderson | $\mathbf{3 2}$ | $\$ 12,000$ |
| Doll | $\mathbf{2 7}$ | $\$ 11,000$ |

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Notes

## Testing for non-discrimination

New Comparability

Dr. Thomas Age 50

Joyce Smith Age 25
Joyce
Smith

> Dr. Thomas $$
\text { Retirement Age }
$$

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$\qquad$

## Non-Discrimination Satisfied?

Non-discrimination is primarily satisfied with the profit sharing contribution.

| Name | Age | Annual Salary | 401(k) | Profit Sharing | $\begin{gathered} \text { Cash } \\ \text { Balance } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 Owners |  |  |  |  |  |  |
| James Marshall | 61 | \$ 270,000 | \$ 24,000 | \$ 36,000 | \$0 to | \$ 254,000 |
| Tammy Marshall | 56 | \$ 65,000 | \$24,000 | \$ 9,750 | \$0 to | \$ 57,000 |
| Subtotals |  | \$ 335,000 | \$ 48,000 | \$ 45,750 |  | \$ 311,000 |
| 4 Staff |  |  |  | 7.5\% of pas |  |  |
| Brandon Byrd | 41 | \$ 51,000 |  | \$ 3,825 |  | \$ 700 |
| Jessica Jensen | 34 | \$ 41,000 |  | \$ 3,075 |  | \$ 700 |
| Ryan Osler | 27 | \$ 34,000 |  | \$ 2,550 |  | \$ 700 |
| Jimmy Bond | 44 | \$ 21,000 |  | \$ 1,575 |  | \$ 700 |

Notes

## Profit Sharing Range?

5\%-7.5\% (Gateway contribution)

| Name | Age | Annual Salary | 401(k) | Profit Sharing |  | sh ance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 Owners |  |  |  |  |  |  |
| James Marshall | 61 | \$ 270,000 | \$ 24,000 | \$ 36,000 | \$0 to | \$ 254,000 |
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## Methods to Manage Staff Costs


$\checkmark$ Lower amounts to certain HCEs
$\checkmark$ Consider a higher amount for a certain job classification to avoid a higher amount for all NHCEs?
$\checkmark$ Consider a 410(b) minimum coverage carve-out design:

- Can consider only covering 70\% of the NHCEs
- Even less if exclude some of the HCEs
- Example: a separate plan for Associates at a law firm
$\checkmark$ Or consider the 401(a)(26) minimum participation carve-out to cover 40\%/50 of the eligible employees...

Notes


1 of 2 Choices
Coverage Requirement
the lesser of:

$40 \%$ of aliglbe oaticpants

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Notes

1 of 2 Choices

## Coverage Requirement OR



Example: 40\% Participating

| 40\%=2.4(3) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Age | Annual Salary | 401(k) | Profit <br> Sharing | Cash <br> Balance |
| 2 Owners |  |  |  |  |  |
| James Marshall | 61 | \$ 270,000 | \$ 24,000 | \$ 36,000 | \$0 to \$ 254,000 |
| Tammy Marshall | 56 | \$ 65,000 | \$ 24,000 | \$ 9,750 | \$0 to \$57,000 |
| Subtotals |  | \$ 335,000 | \$ 48,000 | \$ 45,750 | \$ 311,000 |
| 4 Staff |  |  |  | 7.5\% of pay | Meaningful Benefits |
| Brandon Byrd | 41 | \$ 51,000 |  | \$ 3,825 | \$ $\times 560$ |
| Jessica Jensen | 34 | \$ 41,000 |  | \$ 3,075 | \$ 9 |
| Ryan Osler | 27 | \$ 34,000 |  | \$ 2,550 | $\$ 62$ |
| Jimmy Bond | 44 | \$ 21,000 |  | \$ 1,575 | \$ 722 |
| Subtotals |  | \$ 147,000 |  | \$ 11,025 | \$ 3,897 |

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Notes

Case Study: 50+ Owners

| Compensation | 401(k) | Profit Sharing | Cash Balance | Total Contribution |
| :---: | :---: | :---: | :---: | :---: |
| 53 Shareholders |  |  | (average) |  |
| \$ 270,000 | \$ 24,000 | \$ 36,000 | \$ 55,000 | \$ 115,000 |
| 68 Shareholders |  |  |  |  |
| \$ 270,000 | \$ 24,000 | \$ 36,000 | \$ $0^{\circ}$ | \$ 60,000 |
| 6\% of pay |  |  |  |  |
| 240 Employees |  |  |  |  |
| varied |  | \$ 720,000 | \$ 0 | \$ 720,000 |

15

## Considered "Meaningful"?

$\checkmark$ To participate means to receive a "Meaningful benefit"
$\checkmark$ Meaningful benefit is defined as " $0.5 \%$ of pay, paid as a lifetime annuity, at retirement age"


## Example

| Name <br> 2 Owners | Age | Annual Salary | 401(k) | Profit Sharing | $\begin{gathered} \text { Cash } \\ \text { Balance } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| James Marshall | 61 | \$ 270,000 | \$ 24,000 | \$ 36,000 | \$0 to | \$ 254,000 |
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| 4 Staff |  |  |  | 7.5\% of pay | Meanin | Benefits |
| Brandon Byrd | 41 | \$ 51,000 |  | \$ 3,825 |  | \$ 1,560 |
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| Ryan Osler | 27 | \$ 34,000 |  | \$ 2,550 |  | \$ 624 |
| Jimmy Bond | 44 | \$ 21,000 |  | \$ 1,575 |  | \$ 722 |
| Subtotals |  | \$ 147,000 |  | \$ 11,025 |  | \$ 3,897 |

$\checkmark$ Each participant receives their meaningful benefit
$\checkmark$ Age and compensation drives cost
$\checkmark$ Can consider covering just minimum of $40 \%$
$\checkmark$ Consider buffer to avoid annual corrective amendments

## Options to Satisfy Participation



## What Option to Use?

$\checkmark$ Actual meaningful benefits?

- Pros: The actual meaningful benefit
- Cons: Gets more expensive the older the participant
$\checkmark$ Percent of pay?
- Pros: Gives everyone similar benefits based on pay like profit sharing contributions
- Cons: Can get expensive for a high paid group
$\checkmark$ Flat dollar amount?
- Pros: Manages overall costs
- Cons: Benefit as \% of pay varies


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19


Notes

## Covered by PBGC

Protecting America's Pensions

Annual Premiums:
$\checkmark$ 2017: \$69/participant
2018: \$74/participant
Variable Premium:
$\checkmark \quad$ 2017: $\$ 34$ per $\$ 1,000$ that liabilities exceed assets

- \$517 cap per participant
$\checkmark \quad$ 2018: \$38*per \$1,000 that liabilities exceed assets
- $\$ 517^{*}$ cap per participant
* Actual rates subject to indexing

Plans Exempt from PBGC:
$\checkmark \quad$ Owner-only plans
$\checkmark \quad$ Professional service firms with 25 or fewer active participants

## Larger Tax Deductions!



Protecting America's Pensions

PBGC Plans:
$\checkmark$ NO overall deduction limit for combined CB/DC plans
(Pre-PPA/"the old days" - limited to $25 \%$ of eligible pay)
$\checkmark$ Can deduct any underfunding plus 50\% Cushion Amount too!

Section 810(b) of PPA: "25\% DC/DB deduction limit disregarded for purposes of applying 404(a)(7) for PBGC-covered plans.


Notes

## Example of Cushion Amount

1. Funding Target $\$ 200,000$
2. $50 \%$ of Funding Target $+\$ 100,000$
3. Target Normal Cost $\quad+\$ 200,000$
4. Assets $-\$ 200,000$

Deduction Limit Total $=\$ 300,000$ (1+2+3-4)

Allows for increased deductions in a good year prefund next year!

## What About Those Pesky Exceptions?

## EXEMPTIONS

Professional service firms with 25 or fewer active participants
PROBLEM
May not be able to contribute the maximum to both plans
OPTIONS:

- Maximize CB but limit profit sharing to $6 \%$, or
- Limit the total of both plans to $31 \%$

| Age | Annual <br> Salary | $401(\mathrm{k})$ | Profit <br> Sharing | $\%$ of pay |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |$\quad$| Cash |
| :---: |
| Balance |

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Notes

## Who are "Professionals Service Employers"?



- Physicians

Dentists

- Chiropractors
- Osteopaths
- Optometrists
- Other licensed practitioners
of the healing arts
- Attorneys at law
- Public accountants
- Public engineers
- Architects and draftsmen
- Actuaries
- Psychologists
- Social or physical scientists
- Performing artists
(see CB Coach website)


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Notes

A Key Deadline


Benefits accrue
to participants
(1,000 hours/~June 15)

Amendments: reducing contribution amounts need $15-45$ day notice! Must know by May $\mathbf{1}^{\text {st! }}$

## What if?



Notes

## What if?



## Other Accrual Options

Accrue monthly (1/12), quarterly (1/4), semiannually (1/2)

Issues to Consider:
$\checkmark$ Company must fund benefits in side account and fund by due date of tax return, or
$\checkmark$ Make periodic deposits to trust account so money can be invested

## Notes

## Other Issues

$\checkmark \quad$ Options on how we allocate costs to partners?
$\checkmark \quad$ Options to handle potential
shortfalls or underfunding?


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## "Cash Balance 1.0"

Cash Balance ICR options-prior to 2010 IRS Regulations:
$\checkmark$ ICR cannot exceed "Market Rate of Return"
$\checkmark \quad$ IRS did not clearly define "Market Rate"
$\checkmark \quad$ Plan sponsors relied on safe harbor rates

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## "Cash Balance 1.0"

## Safe Harbor Rates

$\checkmark$ Yields on 3-month to 30-year Treasury bills/bonds
$\checkmark$ Rate on long-term investment grade corp. bonds
$\checkmark$ Latest Rates for September 2017:

- 3-month T-bills: 1.03\%
- 30-Year Treasuries: $2.87 \%$
- Composite Corporate Bonds: 3.78\% (Aug)


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## Cash Balance 2.0 - New ICR Options

2010 and 2014 IRS Regulations Changed the Game!
$\checkmark$ Actual Rate of Return
$\checkmark$ Fixed Rates
$\checkmark$ Equity Based Rates
$\checkmark$ Combined Rates

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35

## Option 1: Actual Rate of Return

## ICR = Actual rate of return on

 plan assetsRequirement: assets "diversified so as to minimize the volatility of returns."

Acceptable: mix of bonds and equities

Unacceptable: exclusively in a sector fund


Notes

## Option 1: Actual Rate of Return

## Advantage

Minimizes most of the underfunding and overfunding issues

## Disadvantages

Volatile returns will have significant impact

Preservation of Capital Rule


## Option 1: Actual Rate of Return

Preservation of Capital Rule
Participant payout can never be LESS than the sum of employer contributions


Notes

## Option 1: Actual Rate of Return

Preservation of Capital Example:
个 Employer contributes \$1,000 for three years
$\downarrow$ Negative return reduces participant account from \$3,000 to \$2,800

Participant receives the greater of:
(a) Account Balance or
(b) Sum of Employer Contributions


Payout to participant $=\$ 3,000$

39

## An Unexpected Surprise



Notes

## Actual Rate of Return With a Twist

Biggest change in the September 2014 Cash Balance Regulations:
IRS now allows for different investment strategies for various groups of participants within one Cash Balance plan.


## Actual Rate of Return With Investment Options



## Actual Rate of Return With Investment Options

Three Rules:

1. Diversification
2. Employer securities cannot be $>10 \%$
3. Employer choice, not participant choice

Note: participant direction and Target Date Funds in Cash Balance plans is still 'under review' by the IRS.

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## Case Study



Notes

## Option 2: Fixed Rates

## A stand-alone fixed rate of up to 6\% per annum

## 6\%

Many smaller plans (less than 50 active participants) using 4\% to keep contributions and benefits predictable and cost-effective

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## Other Options

Option 3 - Equity Based Rates
$\checkmark$ Acceptable: fund tracking the S\&P 500
$\checkmark$ Acceptable: fund tracking a broad-based "small cap" index

- Assets do not need to be invested in actual fund!


## Option 4 - Combined Rates

- Example: the greater of
(a) interest rate on long term investment grade corporate bonds or (b) 5\%

Notes
New Options Create New Issues

1. Compliance Testing
$\checkmark$ Meaningful Benefits Test
$\checkmark$ Non-Discrimination Test
2. Lump Sum Payments

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## Meaningful Benefits Test

$\checkmark$ At least $40 \%$ of eligible employees or 50 total employees
$\checkmark$ Meaningful Benefit is an annual benefit at retirement of at least $0.5 \%$ of pay

- Based on age \& pay
- ICR impacts the $0.5 \%$ of pay calculation


Notes

## Example: Meaningful Benefits Test

Example: 30 year old earning $\$ 40,000$ per year

| Interest Crediting Rate | Meaning Benefit |
| :---: | :---: |
| $9.5 \%$ | $\$ 71$ |
| $4.5 \%$ | $\$ 528$ |
| $1.5 \%$ | $\$ 1,951$ |
| $0.0 \%$ | $\$ 3,880$ |

Cost to provide "meaningful benefits" can increase significantly as the ICR decreases
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## Non-Discrimination Testing

Comparison: $4.5 \%$ vs. $10.0 \%$ ICR

| Name | Age | Comp | Cash <br> Balance | 4.5\% ICR <br> Profit Sharing | 10\% ICR <br> Profit <br> Sharing |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Owner 1 | 65 | $\$ 270,000$ | $\$ 200,000$ | $\$ 36,000$ | $\$ 36,000$ |
| Owner 2 | 45 | $\$ 270,000$ | $\$ 75,000$ | $\$ 36,000$ <br> $7.5 \%$ | $\$ 36,000$ <br> $11 \%$ of Pay Pay |
| Employee 1 | 50 | $\$ 85,000$ |  | 6,400 | 9,300 |
| Employee 2 | 40 | $\$ 60,000$ |  | 4,500 | 6,600 |
| Employee 3 | 30 | $\$ 50,000$ |  | 3,700 | 5,500 |
| Employee 4 | 25 | $\$ 40,000$ |  | 3,000 | 4,400 |
| Totals |  |  |  | $\$ 19,600$ | $\$ 27,800$ |

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## Compliance Testing

$\downarrow$ As the ICR decreases:
1 Meaningful Benefits costs increase
$\uparrow$ As the ICR increases:
1 Employer contributions needed to pass Non Discrimination Testing increase

## Volatility Impacts Testing



Caution: Volatility will have a significant impact on your
Compliance Testing!

Notes

## Impact on Lump Sum Payments

IRS limit on lump sum payouts:
$\checkmark$ Greater of ICR or $5.5 \%$ interest
$\checkmark$ Prior to new regulations: $5.5 \%$
$\checkmark$ New Regulations could result in ICR >5.5\%
As ICR increases, maximum lump sum payouts decrease:
$\checkmark$ Ultimate lump-sum can be less than what is in the account
Caution: not paying entire account balance as a lump sum is a major problem !

## Example: Lump Sum Payments

## Example: 50 year old participant

$\checkmark$ 5.5\% ICR

- Max lump sum is \$1.3M
- Account = \$1.3M - OK
$\checkmark$ 12.5\% ICR
- Max lump sum is $\$ 388 \mathrm{~K}$
- Account = \$1.3M - $\odot!!!$


Notes

## Possible Solutions

## Solutions:

1. Only pay out lump sums when ICR is low
2. Select the annuity payout option
3. Ceiling on the ICR


## Conclusions

## Advantages

$\checkmark$ Actual Rate of Return may eliminate most overfunding and underfunding issues
$\checkmark$ More ICR flexibility
$\checkmark$ IRS support


## Notes

## Conclusions

## Disadvantages

$\checkmark$ Testing Issues
$\checkmark \quad$ Lump Sum Payout Issues
$\checkmark \quad$ Benefit Restriction Issues


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## Helpful Guide: Understanding ICRs



## CASH BALANCE PLANS: Better than ever


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Selecting Your ICR


Notes

## Understanding New ICR Options



## Cash Balance 2017 Predictions

1. Continued strong CB growth driven by tax climate, economy and awareness

2. Actual Rate of Return continues to grow more popular for larger plans
3. More frequent valuations; e.g. semi-annual, quarterly or even daily!
4. Larger sponsors opt for 'investment choice' Cash Balance plans
5. CB continues to be a "must-have" for top medical/legal groups
6. CB assets grow past $\$ 1.2$ Trillion by 2020
7. More investment products and income options

## Review Existing Plans

$\checkmark$ Cash Balance Plans are maturing
$\checkmark$ Opportunities to win existing plans
$\checkmark$ Consider the following design and administration issues:

1. Are owners' benefits at the maximum?
2. Cost of staff increasing?
3. Are plan admin costs reasonable?
4. Converting from a traditional DB plan?
5. Using a different ICR, like Actual Rate of Return?
6. Is the client happy with quality and timeliness of actuarial services?
7. Annual cash flow/contributions smooth?
8. Satisfied with plan sponsor/participant websites?

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## Questions to Ask Your Actuary?



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Notes

## Contact Information

New Plan inquiries - by Time Zone/States


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Curriculum: 4 Modules


## CashBalanceDesign.com



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