Cash Balance Plans

Understanding the Market So You Can Take Advantage of It

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About IAI

Independent Actuaries, Inc. (IAI)

- IAI is the largest independently-owned actuarial consulting firm in the Pacific Northwest. We provide customized retirement plan design, valuation, administrative and consulting services to a wide array of clients, including small business owners, large corporations, and public sector employers.
- We have 13 professional credentialed consultants on staff, including 11 credentialed actuaries.
- We specialize in consulting and administrative services for defined benefit and defined contribution plans. The majority of our clients are small businesses.
- We also offer a variety of other actuarial services, such as retiree medical valuations and financial reporting under FASB and GASB.
- For additional information and resources, visit our website at:

www.independentactuaries.com

What We Will Cover

- General Overview of Cash Balance Plans
- Identifying good candidates
- Understanding the solutions a Cash Balance Plan brings to your clients (WIFMs)
- Why your client's company demographics are important
- Unique investment aspects of a Cash Balance Plan
- Interest crediting approaches in Cash Balance Plans
- Questions and answers about interest credits

Why a Little Cash Balance Plan Education is Worth Your Time

- **Growth rate of Cash Balance Plans significantly outpaces 401(k) plans**
  - In 2016, the number of 401(k) plans grew 2%, versus 19% for Cash Balance Plans
- **Small and mid-size businesses drive Cash Balance growth**
  - 91% of Cash Balance Plans are in place at firms with fewer than 100 employees
- **Cash Balance Plans represent a large portion of Defined Benefit Plans**
  - Cash Balance Plans make up over 29% of all defined benefit plans in 2016 compared to just 2.9% in 2001.

401(k)s vs. Defined Benefit Plans

Defined Contribution Plans

- **Advantages**
  - Appreciated by employees
  - Easy to understand
  - Extremely flexible
  - Relatively easy to administer
- **Disadvantages**
  - Contribution limits
  - Minimal benefit to owners/ executives
  - Low contributions make it difficult to build sufficient retirement plan assets
  - Economic downturns reduce available assets at retirement

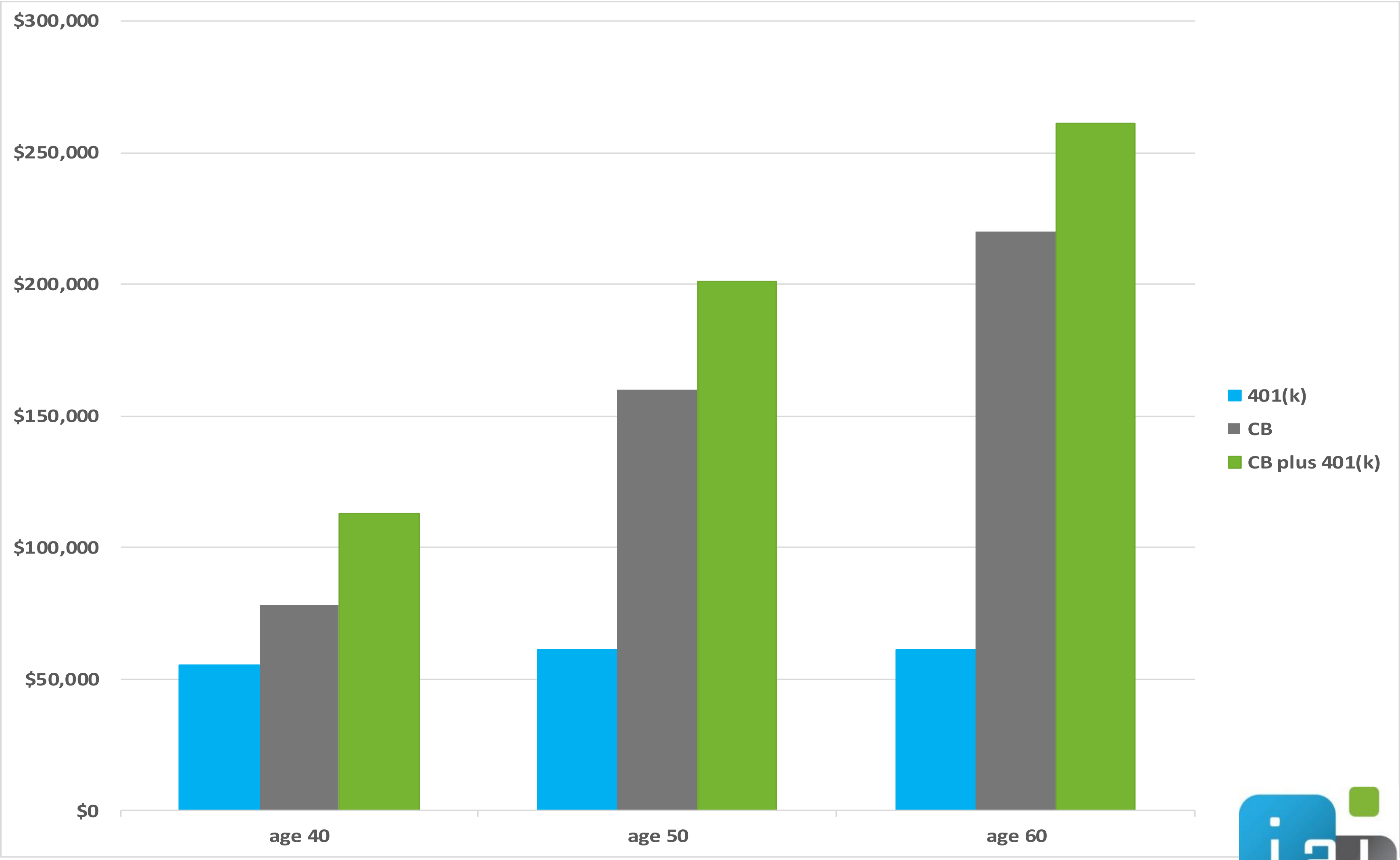
Defined Benefit Plans

- **Advantages**
  - Substantially higher contribution limits for owners/ executives
  - Likely reasonable cost for non-owners and rank and file
  - Greater assurance of achieving retirement goal
  - More efficient use of Retirement Plan funds
- **Disadvantages**
  - Minimum employer contributions required
  - More complex

What is a Cash Balance Plan?

- Defined Benefit Plan = Large Potential Tax Deductible Contribution
- "Hybrid" DB Plan = Look and Feel of a Defined Contribution Plan
- Works best side-by-side with a 401(k) Plan

Larger Contributions



Based on 2018 limits

The Look and Feel of a Defined Contribution Plan

- Hypothetical Account Balance
- Pay Credit every year
- Interest Credit every year
- When you leave you get the vested value of your account

But Still a Defined Benefit Plan

- Benefit is defined, not the contribution
- Subject to annuity benefit limit
  - The annuity limit is converted to a lump sum based on statutory factors and that limits the benefit paid from the Cash Balance Plan
- You need an actuary

Maximum Annual Pay Credits

Age	Maximum CB Plan Pay Credit
41	$87,000
42	$91,000
43	$96,000
44	$102,000
45	$107,000
46	$113,000
47	$119,000
48	$126,000
49	$133,000
50	$140,000

Age	Maximum CB Plan Pay Credit
51	$148,000
52	$156,000
53	$165,000
54	$174,000
55	$183,000
56	$193,000
57	$204,000
58	$215,000
59	$210,000
60	$206,000

Age	Maximum CB Plan Pay Credit
61	$201,000
62	$212,000
63	$222,000
64	$232,000
65	$244,000
66	$255,000
67	$267,000
68	$282,000
69	$295,000
70	$309,000

Normal Retirement Age is greater of 62 or 5 years of participation

Based on 2018 limits

Who are Good Candidates to Benefit From a Cash Balance Plan?

- Baby Boomer business owners who want to retire in the near future but have not accumulated enough retirement savings.
- Businesses with multiple owner/partners who have different retirement savings goals.
- Business owners who want to provide staff with the same ultimate benefit regardless of age.

A Cash Balance Plan May Not Work When…

- The business owner is generally younger than the workforce
- A contribution limit of $50,000 to $60,000 is acceptable to the owner
- The cost to cover employees outweighs other financial advantages
  - Must be prepared to contribute 6% to 10% of pay for employees

How a Cash Balance Plan Addresses Your Client's WIFMs*

- Accumulate a lot of retirement savings in a short period of time

  Sam has a very successful business and is ready to ramp up retirement savings. Facts about Sam:

  - Age 55
  - Compensation over the limit ($275,000)
  - 6% return in 401(k) Plan
  - Considering Cash Balance Plan with $175,000 pay credit and 5% interest credit

** What's in It For Me*

How a Cash Balance Plan Addresses Your Client's WIFMs*

- Accumulate a lot of retirement savings in a short period of time

	DC Plan Only		Cash Balance & DC Plan				
Age	DC Plan Contribution (including salary deferrals)	DC Plan End of Year Balance	CB Pay Credit	CB End of Year Account Balance	DC Plan Contribution (including salary deferrals)	DC Plan End of Year Balance	Total End of Year Balance
55	$61,000	$61,000	$175,000	$175,000	$41,000	$41,000	$216,000
56	$61,000	$125,660	$175,000	$358,750	$41,000	$84,460	$443,210
57	$61,000	$194,200	$175,000	$551,688	$41,000	$130,528	$682,215
58	$61,000	$266,852	$175,000	$754,272	$41,000	$179,359	$933,631
59	$61,000	$343,863	$175,000	$966,985	$41,000	$231,121	$1,198,106
60	$61,000	$425,494	$175,000	$1,190,335	$41,000	$285,988	$1,476,323
61	$61,000	$512,024	$175,000	$1,424,851	$41,000	$344,147	$1,768,999

** What's in It For Me*

How a Cash Balance Plan Addresses Your Client's WIFMs

- Allow Owner/Partners to customize their savings

  Create multiple (nondiscriminatory) contribution "tiers"

  The Cash Balance Plan document will specify which partner is in which tier and the contribution tier for staff

How a Cash Balance Plan Addresses Your Client's WIFMs

- Allow Owner/Partners to customize their savings

  Avery, Blake, Chris and Drew are partners with different retirement savings goals – Avery is age 60 and wants to save a lot fast, Blake is age 55 and wants to be prepared to retire but doesn't feel the need to save at the same level as Avery, Chris is also 50, has three kids in high school and is thinking about paying for college before saving for retirement and Drew is also age 50 but is ready to start saving for retirement

How a Cash Balance Plan Addresses Your Client's WIFMs

- <u>Allow Owner/Partners to customize their savings</u>

  Cash Balance Plan Pay Credits

  Avery - $200,000

  Blake - $100,000

  Chris - $0

  Drew - $100,000

Designing a Cash Balance Plan to Minimize Additional Staff Expense

- Pay credit tiers must be nondiscriminatory
- Employer non-matching contributions to the 401(k) plan count when testing for nondiscrimination
- A good Cash Balance Plan design will minimize contributions for staff in the Cash Balance Plan

Testing, Testing, Testing

- Pay credit tiers are nondiscriminatory if certain tests are passed
  - Gateway (allows CB Plan and DC Plan to be tested together)
  - Rate Group Test
  - Average Benefit Percentage Test
- Testing is done on a benefits (annuity) basis
  - Lump sum values are converted to annuity values at testing age and then converted to percent of compensation (accrual rate)

Let’s Talk About Accrual Rates

- Accrual rates are the building blocks of testing
- Accrual rate = [Contribution with interest to testing age divided by annuity factor] divided by compensation
- Interest for Cash Balance Plan accrual rate is interest credit
- Interest for 401(k) Plan accrual rate is testing interest rate between 7.50% and 8.50% per statute

Let's Talk About Accrual Rates

- Contributions in 401(k) Plan result in larger accrual rate than Cash Balance Plan pay credits
  - Cash Balance Plan with 5.00% interest credit, retirement age later of age 62 and 5 years of participation, annuity conversion factor at age 62 of 12.87
  - 401(k) Plan testing interest of 8.50% and annuity conversion factor at age 62 of 9.97
  - Employee age 25 earning $40,000
  - Accrual rate 1% CB pay credit:

    $(400 \times (1.05^{37}) \div 12.87) \div 40{,}000 = 0.473\%$
  - Accrual rate 1% contribution in DC Plan:

    $(400 \times (1.085^{37}) \div 9.97) \div 40{,}000 = 2.052\%$

Let's Talk About Accrual Rates

- Contributions to younger employees produce higher accrual rates
  - Same plan details as previous page
  - Employee age 25 earning $40,000
  - Accrual rate 1% contribution in 401(k) Plan:

    (400 x (1.085^37) ÷ 9.97) ÷ 40,000 = 2.052%
  - Employee age 45 earning $40,000
  - Accrual rate 1% contribution in 401(k) Plan:

    (400 x (1.085^17) ÷ 9.97) ÷ 40,000 = 0.401%

Designing a Cash Balance Plan to Minimize Additional Staff Expense

- 401(k) Plan features are important for minimizing staff expense
  - 3% safe harbor vs safe harbor match
    - Matching contributions can’t be used in the testing
  - Individual allocation groups
    - Provide flexibility in testing
- Demographics are very important
  - As noted before, Cash Balance Plan arrangements work best when staff is generally younger than the business owner(s)

Younger Employees = Less Staff Expense

- Avery, Blake, Chris and Drew have five staff members – one age 25, two age 30, one age 45 and one age 60
- They want to provide same benefit to all staff. To meet Gateway, staff Cash Balance Plan pay credit is 1.50% and 401(k) Plan contribution is 7.00% (including 3% safe harbor)
- Avery, Blake, Chris and Drew each receive a 401(k) Plan contribution of 5.75% in addition to the Cash Balance Plan credits on slide 19

Older Employees = Not a Good Fit

- Avery, Blake, Chris and Drew have five staff members – one age 45, two age 50, one age 55 and one age 60
- They want to provide same benefit to all staff. To pass nondiscrimination testing, staff Cash Balance Plan pay credit is 1.50% and 401(k) Plan contribution is 25.00% (including 3% safe harbor)
- Avery, Blake, Chris and Drew cannot receive a 401(k) Plan contribution in addition to the Cash Balance Plan credits on slide 19

Investing Cash Balance Plan Assets

- Fundamentally unlike 401(k) Plan investment strategies

  One investment pool

  Participants get the specified interest crediting rate regardless of the actual investment return earned on plan assets

  If goal is tax deductions, large investment return reduces future deductible contributions and can result in overfunding

Two Interest Crediting Approaches

- Fixed or Variable Interest
  E.g. - 4.0%, or 30-year Treasury Bill rate + 0.5%

- Market Rate
  E.g. - Return on the S&P 500, the return on a custom portfolio of equities or actual return on plan assets

Two Interest Crediting Approaches

- In general, employees tend to prefer the market rate approach
  - Upside potential
  - Cash Balance Plan regulations guarantee at least a 0% cumulative return (no loss of principle)

Two Interest Crediting Approaches

- In general plan sponsors prefer the fixed or variable interest approach
  - Employer is guaranteeing the return
  - Market rate approach likely to create undesirable contribution fluctuations
  - Market rate approach likely to make nondiscrimination testing unpredictable
    - Actual interest credit rate is used in testing

Two Interest Crediting Approaches

- In general (nearly universally based on our experience) advisors recommend the fixed or variable interest approach
  - For reasons of practicality and regulatory compliance, and
  - Because we believe it is in the best retirement savings interest of most plan participants

THE (Interest Crediting) Question

"Why should I invest something that only returns 4%? My brother-in-law can get me 10% every year from the stock market."

Answers to THE Interest Crediting Question

- It is not an either/or question
- Diversification is a fundamental principle of prudent investing
- A Cash Balance Plan should be considered one component of a diversified retirement savings portfolio
- Given the guaranteed nature of the interest credit in a Cash Balance Plan, make it the fixed income component and adjust the equity holdings in your 401(k) Plan and outside investments accordingly.
- Most advisors recommend gradually decreasing equity exposure as retirement nears

Helping Your Client Deal With the Other Interest Crediting Question

"I am uncomfortable with the firm guaranteeing a rate of return. We don't need that kind of liability."

Helping Your Client Deal With the Other Interest Crediting Question

- There are multiple ways to address the concern of the interest crediting guarantee
  - Develop an investment strategy that has a high (95%) confidence level of achieving a rate of return slightly higher than the guarantee
  - It is not necessary to "true up" the investment return every year. What is important is not to get too far afield from the guarantee.

Plan Implementation

- Identify a possible candidate
  - Define plan goals for partners and key people
  - Provide census data to Independent Actuaries, Inc. (IAI)
  - IAI will produce an initial plan design study for no charge
- Get the go-ahead from the client
  - Develop a plan document
  - Communicate the plan
  - Set up a trust fund
  - Fund the plan
  - Update plan annually

Contact Information

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