

Cash Balance 101

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101 Outline

1. What *exactly* is a Cash Balance Plan?
2. Four Case Studies.
3. Six basic features you need to know.

Qualified Plans Landscape

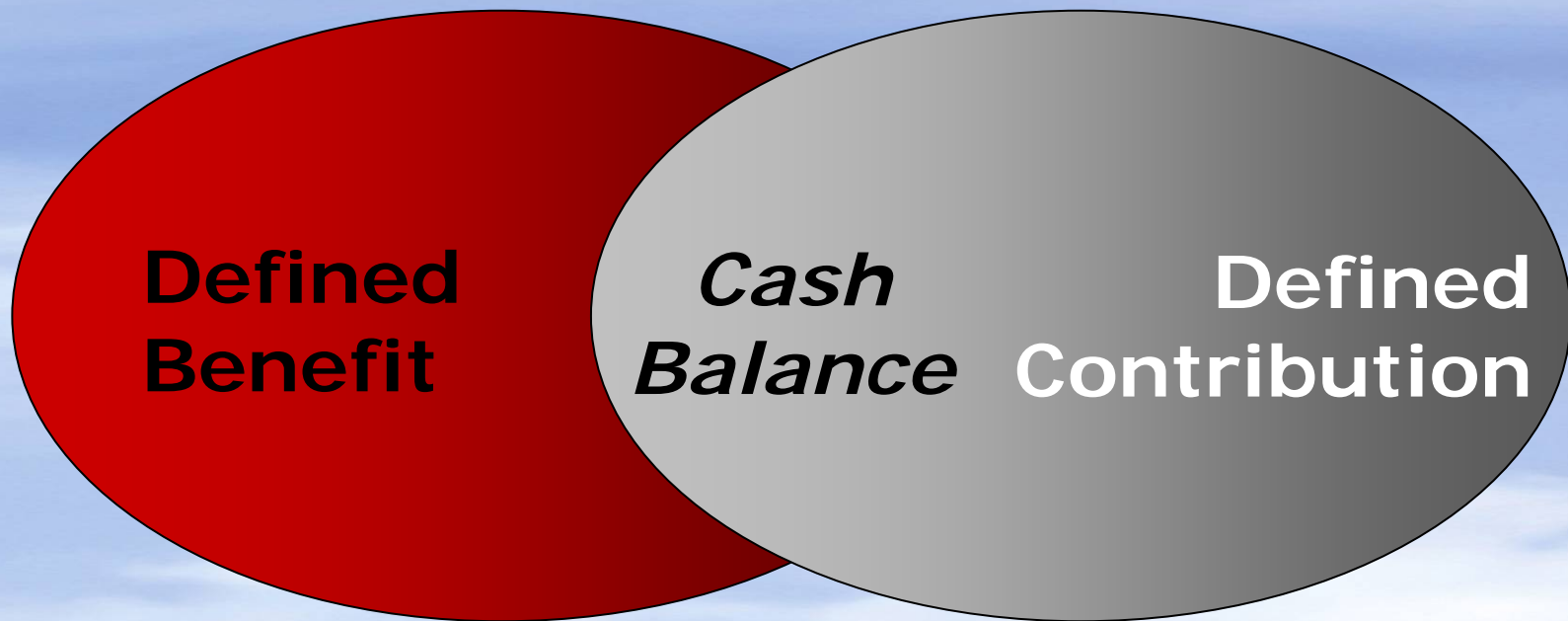
✓ **Defined Contribution Plans**

- 401(k) Plans
- Profit Sharing Plans

✓ **Defined Benefit Plans**

- Traditional Defined Benefit Plans
- Cash Balance Plans (“hybrid plans”)

The 21st Century *Hybrid*



**Defined
Benefit**

*Cash
Balance* **Defined
Contribution**

**Type of defined
benefit plan**

**Looks a lot like a 401(k)
Profit Sharing Plan**

Current Trend

Traditional defined benefit plans

- 1985: 112,208
- 2005: 29,000
- 2009: 12,000 (est)



Cash Balance Plans (% increase)

- 2000: 4%
- 2005: 10%
- 2009: 25% (est, ~5,000 plans total, nationally)



Source: Employee Benefit Research Institute, 2005

Why the trend?

Defined Benefit Plans

- Formula
- Difficult to understand
- Age-sensitive

Cash Balance Plans

- Account balance
\$100,000
- Looks like 401(k) Profit Sharing
- Age-neutral (relatively)
Pair well with (k) Plan

2009 Contribution Limits and Tax Savings

401(k) Profit Sharing & Cash Balance Plans

<u>Age</u>	<u>401(k) with Profit Sharing</u>	<u>Cash Balance</u>	<u>TOTAL</u>	<u>Tax savings*</u>
60 - 65	\$54,500	\$219,000	\$273,500	\$109,400
55 - 59	\$54,500	\$162,000	\$216,500	\$86,600
50 - 54	\$54,500	\$117,000	\$171,500	\$68,600
45 - 49	\$49,000	\$85,000	\$134,000	\$53,600
40 - 44	\$49,000	\$60,000	\$109,000	\$43,600
35 - 39	\$49,000	\$43,000	\$92,000	\$36,800
30 - 34	\$49,000	\$31,000	\$80,000	\$32,000

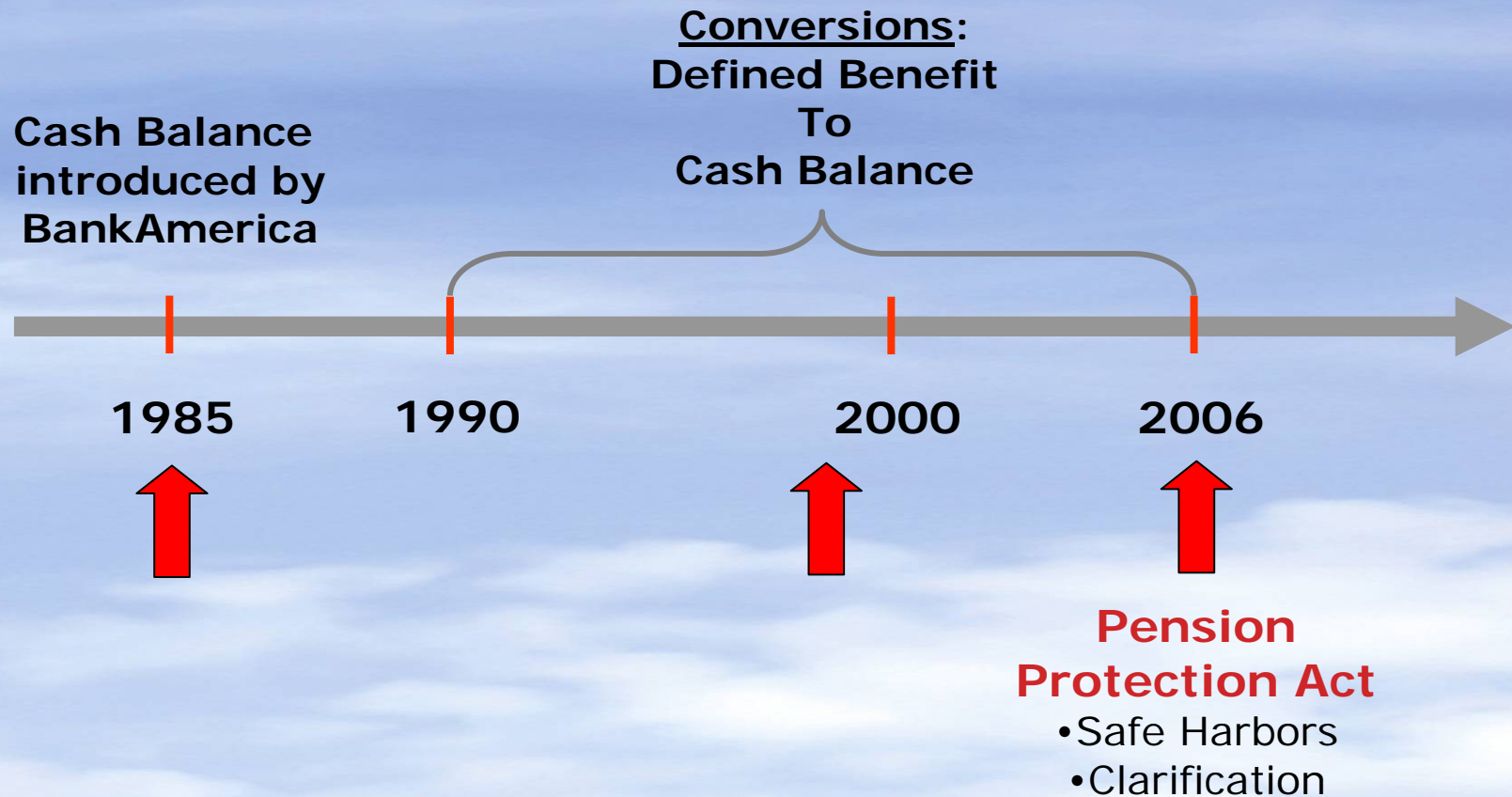
**Assuming 40% tax bracket, taxes are deferred*

Cash Balance

lifetime limit ~\$2,500,000



Important Background: Three Key Dates/Periods



How Do Cash Balance Plans Work?

401(k)

Contribution



Earnings





Cash Balance

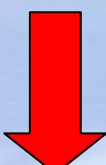

*Guaranteed
interest*

Contribution credit ($\approx 5\%$)



Plan Investments

Earnings  ...next year's contribution 

Earnings  ...next year's contribution 

7-year make-up

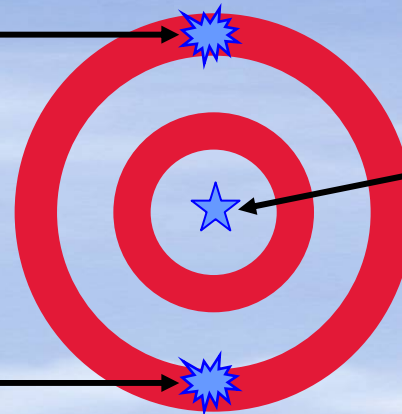
Investment Dynamics

1. Pooled accounts, no self-direction
2. Employer bears risk of investments
3. Guaranteed interest crediting rate ~4-5

Investment Dynamics

Too high:

- Lower contribution
- Smaller tax deduction
- Potential excise tax

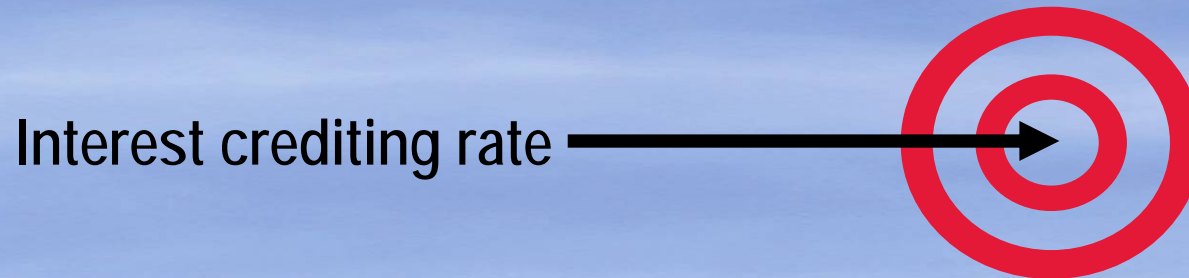


TARGET RETURN

Too low:

- Greater expense / larger contribution required
- Underfunding limitations

Interest Credit Flexibility



☐ Three Month Treasury Note: ~3.5%

☐ 30 Year Treasury Bond: ~4-5%

☐ Corporate Bond: ~6.4%

☐ Fixed rate: 5%

CASE STUDY:

Dentist

	Age	<u>Annual Salary</u>
Dentist		
Thomas	50	\$ 245,000
5 Staff		
Alfaro	33	63,789
Garibaldi	50	63,154
Sangha	33	52,822
Rivera	29	46,443
Stanton	24	22,347
Subtotals		<u>\$ 248,555</u>



Dr. Thomas

- Tax deduction AND save money
- But he has employees
- Plan cannot discriminate in Dr. Thomas' favor
- CORRECTION: There are limits to how much it can discriminate

CASE STUDY: Basic Plan

	<u>Annual Salary</u>	<u>401(k)</u>	<u>Profit Sharing</u>	<u>Total Contribution</u>
Dentist			<i>5% of pay</i>	
Thomas	\$ 245,000	\$ 22,000	\$ 12,250	\$ 34,250
5 Staff			<i>5% of pay</i>	
Alfaro	63,789		3,189	\$3,189
Garibaldi	63,154		3,158	\$3,158
Sangha	52,822		2,641	\$2,641
Rivera	46,443		2,322	\$2,322
Stanton	22,347		1,117	\$1,117
Subtotals	\$ 248,555		\$ 12,428	\$ 12,428
Grand Totals	\$ 478,555		\$ 24,678	\$ 46,678
Percent to Owner				73.4%



☐ Comparable benefits

☐ Can he do better?

CASE STUDY: New Comparability

	<u>Annual Salary</u>	<u>401(k)</u>	<u>Profit Sharing</u>	<u>Total Contribution</u>
Dentist			<i>13.3% of pay</i>	
Thomas	\$ 245,000	\$ 22,000	\$ 32,500	\$ 54,500
5 Staff			<i>5% of pay</i>	
Alfaro	63,789		3,189	\$3,189
Garibaldi	63,154		3,158	\$3,158
Sangha	52,822		2,641	\$2,641
Rivera	46,443		2,322	\$2,322
Stanton	22,347		1,117	\$1,117
Subtotals	\$ 248,555		\$ 12,428	\$ 12,428
Grand Totals	\$ 478,555		\$ 44,928	\$ 66,928
Percent to Owner				81.4%



If this is enough...

Cash Balance is not needed

CASE STUDY: Dentist Add Cash Balance

<u>Name</u>	<u>401(k)</u>	<u>Profit Sharing</u>	<u>Cash Balance</u>	<u>Total Contribution</u>
Dentist				
Thomas	\$ 22,000	\$ 10,000	\$ 115,000	\$ 147,000
5 Staff		<i>7.5% of pay</i>		
Alfaro		\$ 4,784	\$ 1,000	\$5,784
Garibaldi		4,737	1,000	5,737
Sangha		3,962	1,000	4,962
Rivera		3,483	1,000	4,483
Stanton		1,676	1,000	2,676
Subtotals	\$ 0	\$ 18,642	\$ 5,000	\$ 23,642
Grand Totals	\$ 22,000	\$ 28,642	\$ 120,000	\$ 170,642
<i>Percent to owner</i>				86%



Is this plan cost-effective and tax-efficient?

Basic Plan

Grand Totals	\$ 478,555	\$ 24,678	\$ 46,678
Percent to Owner			73.4%

New Comparability

Grand Totals	\$ 478,555	\$ 44,928	\$ 66,928
Percent to Owner			81.4%

Cash Balance Plan

Grand Totals	\$ 22,000	\$ 28,642	\$ 120,000	\$ 170,642
Percent to owner				86%



Hurdle rate?

Is the Cash Balance Plan cost-effective and tax-efficient?

No Plan

40% tax

60% to
Dr. Thomas

(\$102,385)

\$170,642

40%
tax bracket



Plan

14% to employees
versus *Uncle Sam*

86% to
Dr. Thomas

(\$146,752)
+\$44,367

CASE STUDY: Why the Dentist Would Add Cash Balance

<u>Name</u>	<u>401(k)</u>	<u>Profit Sharing</u>	<u>Cash Balance</u>	<u>Total Contribution</u>
Dentist				
Thomas	\$ 22,000	\$ 10,000	\$ 115,000	\$ 147,000
5 Staff		<i>7.5% of pay</i>		
Alfaro		\$ 4,784	\$ 1,000	\$5,784
Garibaldi		4,737	1,000	5,737
Sangha		3,962	1,000	4,962
Rivera		3,483	1,000	4,483
Stanton		1,676	1,000	2,676
Subtotals	\$ 0	\$ 18,642	\$ 5,000	\$ 23,642
Grand Totals	\$ 22,000	\$ 28,642	\$ 120,000	\$ 170,642
<i>Percent to owner</i>				86%



CASE STUDY: Family Business

	Age	Compensation
<i>Owners</i>		
Father	59	\$ 245,000
Mother	58	245,000
Son	36	135,000
Son	34	120,000
Daughter	28	80,000
<i>5 Salespeople</i>		>\$100,000
<i>25 Employees</i>		\$ 1,125,000



CASE STUDY: Family Business

	Age	401(k)	Profit Sharing	Cash Balance	TOTAL CONTRIBUTION
Owners					
Father	59	\$ 22,000	\$ 32,500	\$ 175,000	\$ 229,500
Mother	58	22,000	32,500	165,000	219,500
Son	36	16,500	10,000	0	26,500
Son	34	16,500	10,000	0	26,500
Daughter	28	0	0	0	0
<i>Subtotal</i>		\$ 77,000	\$ 85,000	\$ 340,000	\$ 502,000
5 Salespeople		Separate (k) plan	0	0	
			7.5% of pay	\$1,000 each	
25 Employees			\$ 84,375	\$ 25,000	\$ 109,375
Total					\$ 611,375
<i>Percent to owners</i>					82%



CASE STUDY: Family Business

Estate planning element:

Owners can exit: accelerated savings of **\$2,522,000**

2004

Succession: acquire stock or gifting

2009



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CASE STUDY: **Midsized Professional Firm**

Group I	Age	Compensation
Partner 1	52	\$ 245,000
Partner 2	49	245,000
Partner 3	48	245,000
Partner 4	42	245,000
Partner 5	40	245,000
Partner 6	39	245,000
Group II		
<i>Associate</i>		\$ 245,000
Group III		
<i>16 Employees</i>		\$ 750,000



CASE STUDY: **Midsized Professional Firm**

Group I	Age	401(k)	Profit Sharing	Cash Balance	TOTAL CONTRIBUTION
Partner 1	52	\$ 22,000	\$ 12,000	\$ 129,000	\$ 163,000
Partner 2	49	16,500	12,000	105,000	133,500
Partner 3	48	16,500	12,000	100,000	128,500
Partner 4	42	0	12,000	73,000	85,000
Partner 5	40	16,500	12,000	65,000	93,500
Partner 6	39	5,000	12,000	0	17,000
Group II					
<i>Associate Attorney</i>		excluded		excluded	
Group III					
			<i>7% of pay</i>	<i>\$1,000 each</i>	
<i>16 Employees</i>		?	\$ 52,500	\$ 16,000	\$ 68,500
Total					\$ 612,500
<i>Percent to Partners</i>					89%



CASE STUDY: Large Professional Firm

	Age	Compensation
<i>53 Shareholders</i>		\$ 245,000
<i>68 Shareholders</i>		\$ 245,000
<i>240 Employees</i>		varied



CASE STUDY: Large Professional Firm

Age	Compensation	401(k)	Profit Sharing	Cash Balance	TOTAL CONTRIBUTION
<i>53 Shareholders</i>	\$ 245,000	\$ 16,500	\$ 32,500	(average) \$ 55,000	\$ 104,000
<i>68 Shareholders</i>	\$ 245,000	\$ 16,500	\$ 32,500	\$ 0	\$ 49,000
<i>240 Employees</i>	varied		6% of pay \$ 720,000	\$ 0	\$ 720,000



Why do Clients Adopt Cash Balance Plans?

#1 Taxes



#2 Accelerate Savings

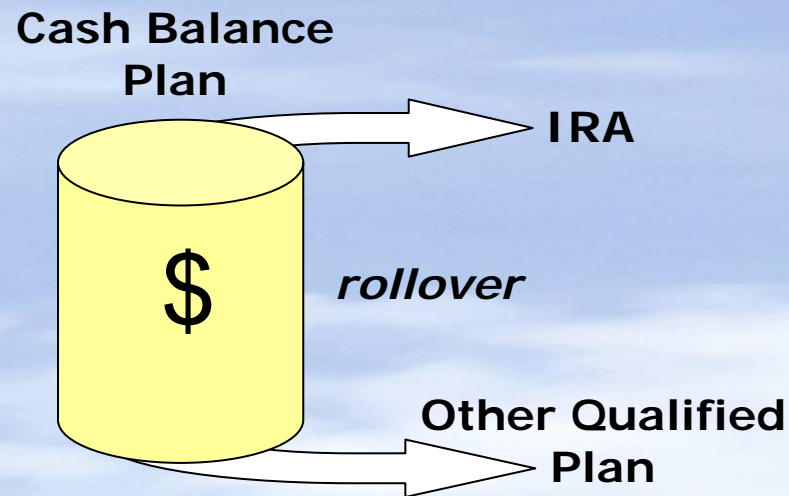


#3 Asset protection



Six Things You Need to Know

#1: Assets are portable



Contribution flexibility among partners

Owners/partners can have **different** amounts contributed for them

Cash Balance Contribution

Partner 1, age 50: \$100,000

Partner 2, age 50: \$0

Plan amendments are required to change contribution amounts.

What if cash flows/profits go down?

- Reduce 401(k) and/or Profit Sharing

	Age	401(k)	Profit Sharing	Cash Balance	TOTAL CONTRIBUTION
Owners					
Father	59	\$ 22,000	\$ 32,500	\$ 175,000	\$ 229,500
Mother	58	22,000	32,500	165,000	219,500

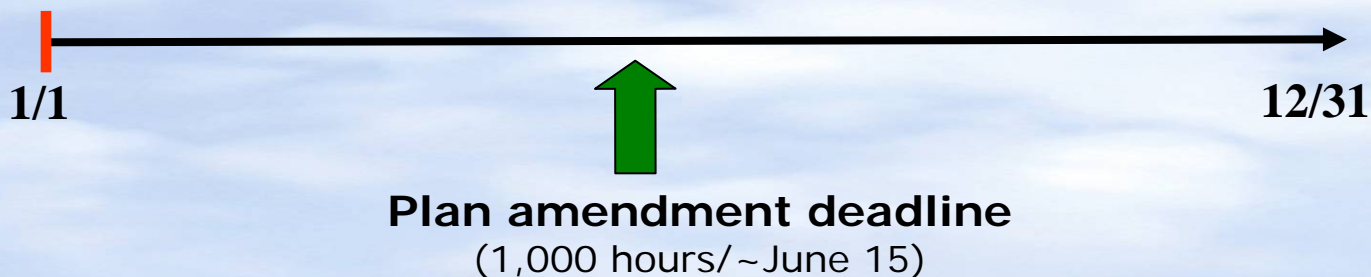
(k) and PS= \$54,500

\$229,500 to \$175,000

Plan amendments are required to change contribution amounts.

What if cash flows/profits go down?

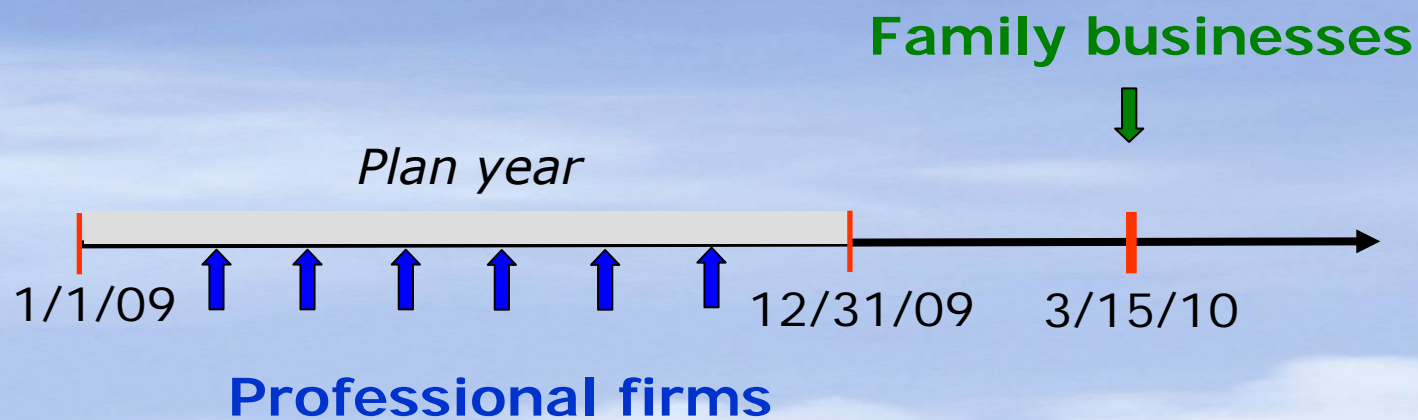
- ☐ Reduce 401(k) and/or Profit Sharing
- ☐ Amend plan, but not frequently (3 years)
- ☐ Freeze plan



Funding of the Plan



Funding Trends



Participation requirement

(how many people need to be in the CB Plan?)

- ☐ **40% of eligible participants**

- Example: $8/20 = 40\%$

OR

- ☐ **50 total**

Non-discrimination testing *primarily*
satisfied in the Profit Sharing Plan
 (gateway contributions 5%-7.5%)

<u>Name</u>	<u>401(k)</u>	<u>Profit Sharing</u>	<u>Cash Balance</u>
Dentist			
Thomas	\$ 22,000	\$ 10,000	\$0 to \$ 115,000
5 Staff		<i>7.5% of pay</i>	
Alfaro		\$ 4,784	\$ 1,000
Garibaldi		4,737	1,000
Sangha		3,962	1,000
Rivera		3,483	1,000
Stanton		1,676	1,000

How do I explore **feasibility** for my client?

Picture worth 1,000 words

	Age	401(k)	Profit Sharing	Cash Balance	TOTAL CONTRIBUTION	Tax Savings
Shareholder 1	60	\$ 22,000	\$ 32,500	\$0 to \$ 219,000	\$ 273,500	\$ 109,400
Shareholder 2	50	22,000	32,500	\$0 to 117,000	171,500	68,600
Shareholder 3	40	16,500	32,500	\$0 to 60,000	109,000	43,600
Shareholder 4	30	16,500	32,500	\$0 to 31,000	80,000	32,000
<hr/>						
<i>Employees</i>		?	5-7.5% of pay			
Percent to Shareholders					85%	

Information needed for **Illustration**

- Dates of birth
- Dates of hire
- Compensation
- ***In Excel***

Current plan features

Cash Balance 201



Outline

1. Drilling deeper: five key design and compliance issues
 - a. Satisfying non-discrimination
 - b. Meeting participation requirements
 - c. PBGC and contribution limits
 - d. Funding/allocation issues
 - e. Interest crediting rate options
2. Common Concerns and Objections
3. TPA Models

Key #1: New Comparability and Satisfying Non-Discrimination

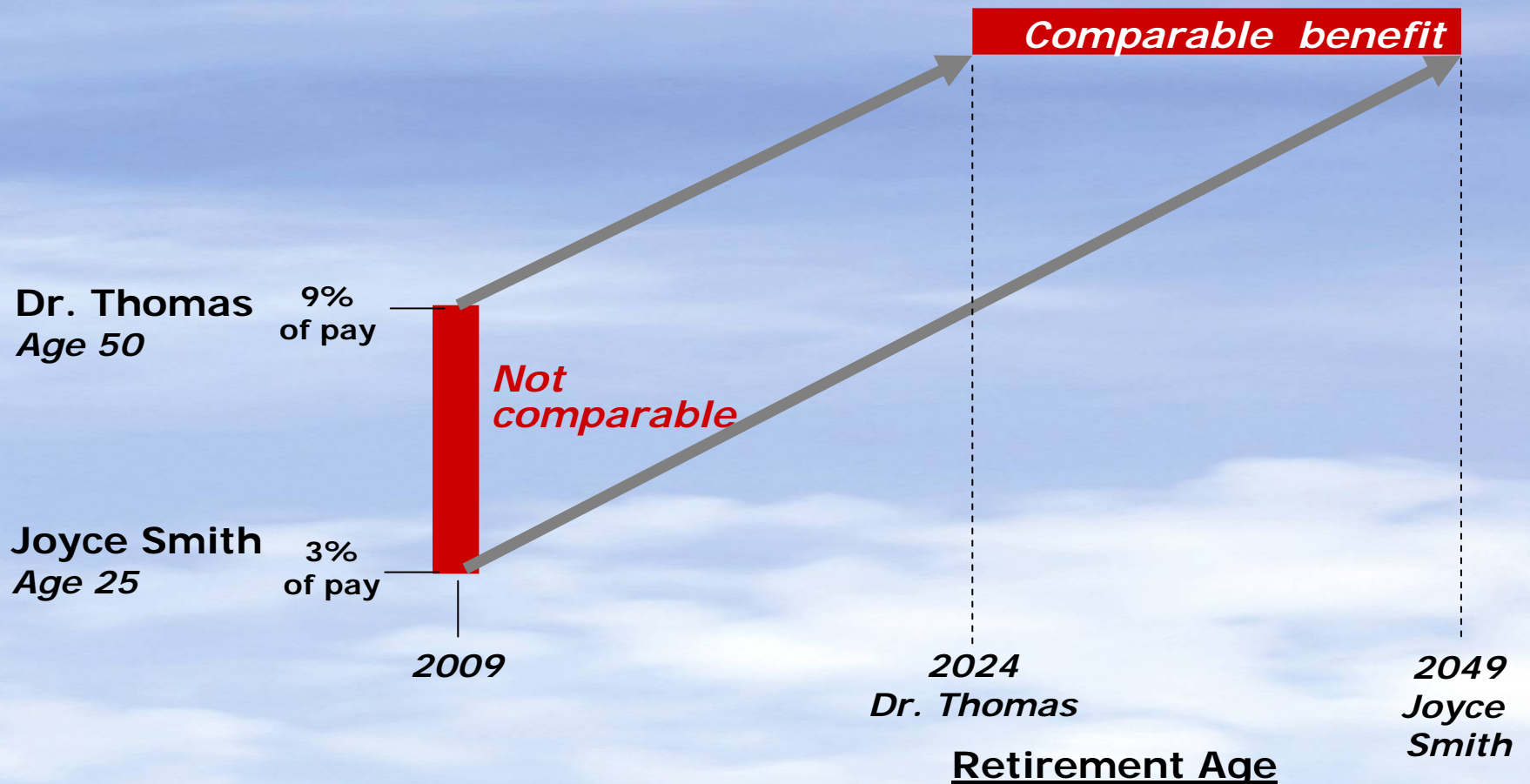
If New Comparability works...

Combination Cash Balance Plans will work

- Owner age 10 years+ > employees

401(a)(4) and 410(b)

New Comparability



New Comparability and Satisfying Non-Discrimination

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

<u>Name</u>	<u>401(k)</u>	<u>Profit Sharing</u>	<u>Cash Balance</u>
Dentist			
Thomas	\$ 22,000	\$ 10,000	\$0 to \$ 115,000
5 Staff		<i>7.5% of pay</i>	
Alfaro		\$ 4,784	\$ 1,000
Garibaldi		4,737	1,000
Sangha		3,962	1,000
Rivera		3,483	1,000
Stanton		1,676	1,000

Gateway contributions

5%-7.5%

<u>Name</u>	<u>401(k)</u>	<u>Profit Sharing</u>	<u>Cash Balance</u>
Dentist			
Thomas	\$ 22,000	\$ 10,000	\$0 to \$ 115,000
5 Staff		<i>7.5% of pay</i>	
Alfaro		\$ 4,784	\$ 1,000
Garibaldi		4,737	1,000
Sangha		3,962	1,000
Rivera		3,483	1,000
Stanton		1,676	1,000

#2: Meeting Participation Requirements (a)(26)

Does everyone need to be included in the Cash Balance Plan?

How Many Need to Receive a Meaningful Benefit?

40% of eligible participants
(unless 2 or fewer)

Example: $8/20 = 40\%$

OR

50 total

Meeting Participation Requirements (a)(26)

Who is considered a participant?

To participate means to receive a
“Meaningful benefit”
(.5% of pay, paid as a lifetime
annuity, at retirement age)

Example

Each participant receives their meaningful benefit.

Age and compensation

<u>Name</u>	<u>Age</u>	<u>Annual Salary</u>	<u>401(k)</u>	<u>Profit Sharing</u>	<u>Cash Balance</u>
2 Owners					
DDS	63	\$ 245,000	\$ 22,000	\$ 11,000	\$0 to \$ 195,000
Spouse	62	36,349	22,000	1,727	\$0 to 35,000
Subtotals		\$ 281,349	\$ 44,000	\$ 12,727	\$ 230,000
6 Staff					
				<i>7.5% of pay</i>	<i>Meaningful benefits</i>
House	31	37,139		\$ 2,785	613
Bailey	33	35,191		2,639	648
Mison	46	32,540		2,441	1,072
Week	26	31,635		2,373	426
Simon	60	27,297		2,047	1,652
Gill	49	25,249		1,894	932
Subtotals		\$ 189,050	\$ 0	\$ 14,179	\$ 5,344



Earlier Case Study: 50+

Compensation	401(k)	Profit Sharing	Cash Balance	TOTAL CONTRIBUTION
<i>53 Shareholders</i>			(average)	
\$ 245,000	\$ 16,500	\$ 32,500	\$ 55,000	\$ 104,000
<i>68 Shareholders</i>				
\$ 245,000	\$ 16,500	\$ 32,500	\$ 0	\$ 49,000
		<i>6% of pay</i>		
<i>240 Empl</i>	varied	\$ 720,000	\$ 0	\$ 720,000



Example: 40%

40% = 3.2

<u>Name</u>	<u>Age</u>	<u>Annual Salary</u>	<u>401(k)</u>	<u>Profit Sharing</u>	<u>Cash Balance</u>
2 Owners					
DDS	63	\$ 245,000	\$ 22,000	\$ 11,000	\$0 to \$ 195,000
Spouse	62	36,349	22,000	1,727	\$0 to 35,000
Subtotals		\$ 281,349	\$ 44,000	\$ 12,727	\$ 230,000
6 Staff					
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House	31	37,139		\$ 2,785	613
Bailey	33	35,191		2,639	648
Mison	46	32,540		2,441	1,072
Week	26	31,635		2,373	426
Simon	60	27,297		2,047	1,632
Gill	49	25,249		1,894	932
Subtotals		\$ 189,050	\$ 0	\$ 14,179	\$ 5,344

Techniques to Satisfy Participation Requirements

			% of pay		
Meaningful benefit					Flat dollar
2 Owners					
DDS	63	\$ 245,000	\$ 0 to		\$ 195,000
Spouse	62	36,349	\$ 0 to		35,000
Subtotals		\$ 281,349			\$ 230,000
6 Staff					
			<i>Meaningful benefit</i>	<i>2% of pay</i>	<i>Flat dollar</i>
House	31	37,139	\$ 613	\$ 743	\$ 700
Bailey	33	35,191	648	704	700
Mison	46	32,540	1,072	651	700
Week	26	31,635	426	633	700
Simon	60	27,297	1,652	546	700
Gill	49	25,249	932	505	700
Subtotals		\$ 189,050	\$ 5,344	\$ 3,781	\$ 4,200

Key #3

Pension Benefit Guarantee Corporation (PBGC) and tax deduction limits

Federal agency to protect pension plans

PBGC

DB plans are covered by the PBGC (ERISA)

- ☐ \$34/participant annual premium

EXCEPTIONS

- ☐ Owners only
- ☐ Professional service firms of 25 or fewer active participants

ERISA 4021 (PBGC coverage)

“Plans **not** covered: those established and maintained by a professional service employer which does not at any time after September 2, 1974, have more than 25 active participants in the plan.”

Good news: PBGC and PPA

Combination DC/DB Plans- No Deduction Limit

Example

	Age	401(k)	Profit Sharing	Cash Balance	TOTAL CONTRIBUTION
<i>Owners</i>					
Father	59	\$ 22,000	\$ 32,500	\$ 175,000	\$ 229,500
Mother	58	22,000	32,500	165,000	219,500

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

What about that pesky exceptions?

EXCEPTION

Professional service firms with 25 or fewer active participants

PROBLEM

May not be able to contribute the maximum to both plans

OPTIONS:

- Maximize DB but limit profit sharing to 6%
- Limit the total of both plans to 31%

<u>Name</u>	<u>Age</u>	<u>Annual Salary</u>	<u>401(k)</u>	<u>Profit Sharing</u>	<u>% of pay</u>	<u>Cash Balance</u>
Architect	63	\$ 245,000	\$ 22,000	\$ 14,700	6%	\$0 to \$ 195,000

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

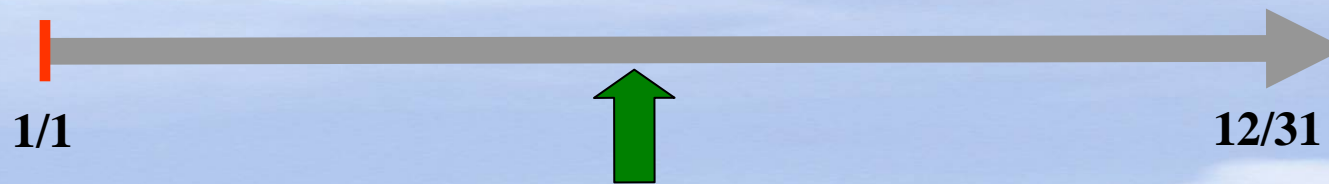
#4: Funding/Allocation Issues

When are monies allocated to partners?

When does the money actually get deposited?

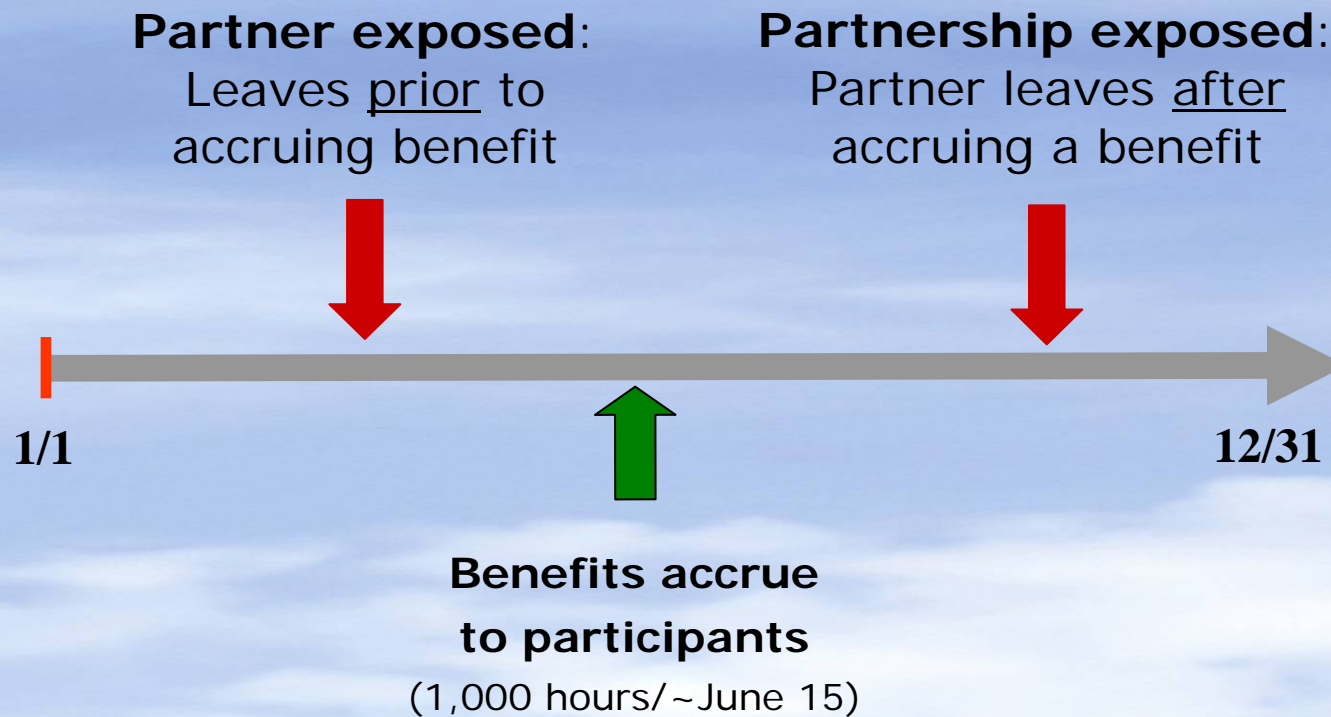
Allocation of Monies

When are monies allocated to partners?



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

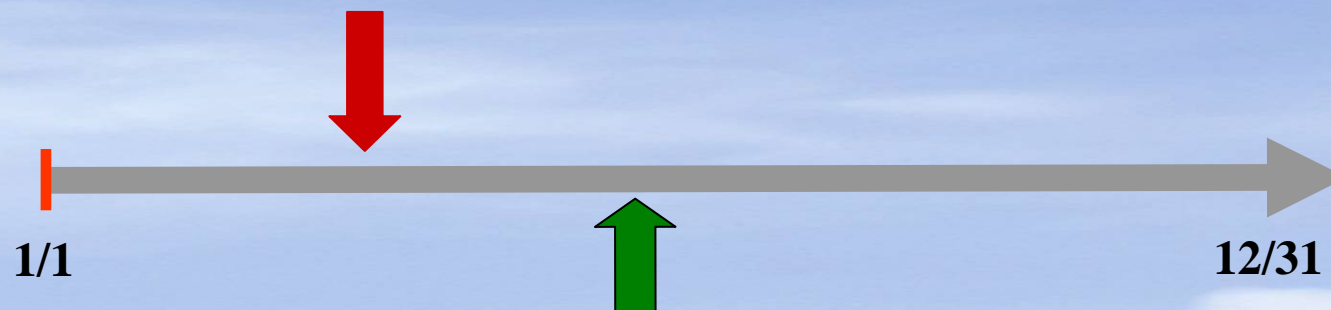
Potential Exposure with Timing of the Allocation



Solution for Partner

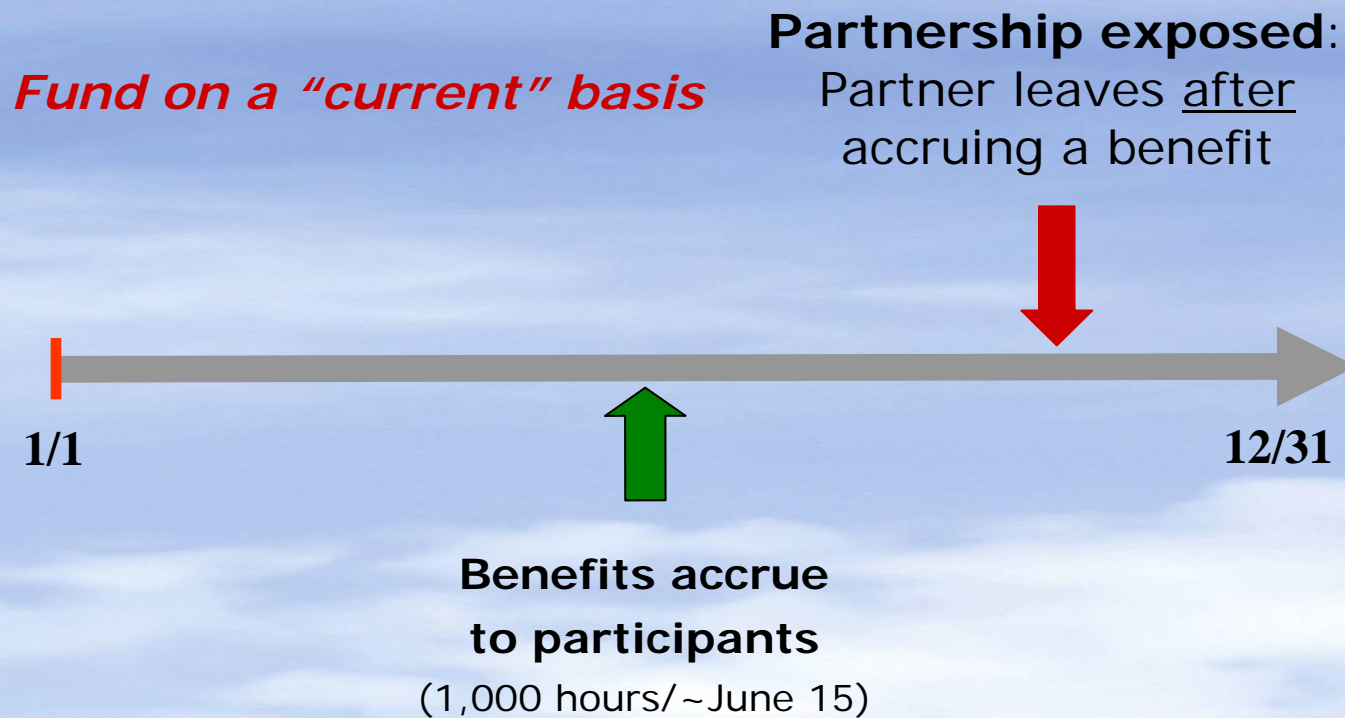
Partner exposed:
Leaves prior to accruing
benefit

*Make exiting partner
whole on the way out*



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

Solution for Partnership



Interest Crediting Rate Options

Interest crediting rate



Interest Crediting Rate Options

Interest crediting
rate



Three Month Treasury Note:	~3.5%
2008 30 Year Treasury Securities Interest Rate	4.53%
Corporate Bond:	~6.4%
Fixed rate:	5%

Common Concerns and Objections

1. CB is more of a commitment than 401(k)
 - What if economics change?
2. I'm not sure I have enough partners who want to participate in the program.
3. What about the added cost: employer contribution & actuarial?
4. Less investment flexibility and lower rate (pooled and only ~4-5%)

Common Concerns and Objections

5. Can we track partner contributions accurately? (contribution plus interest=distribution)
6. Can there be contribution differences among partners?
7. Can we minimize partnership liability?
 - The investment strategy

Why Not Just a DB Plan?

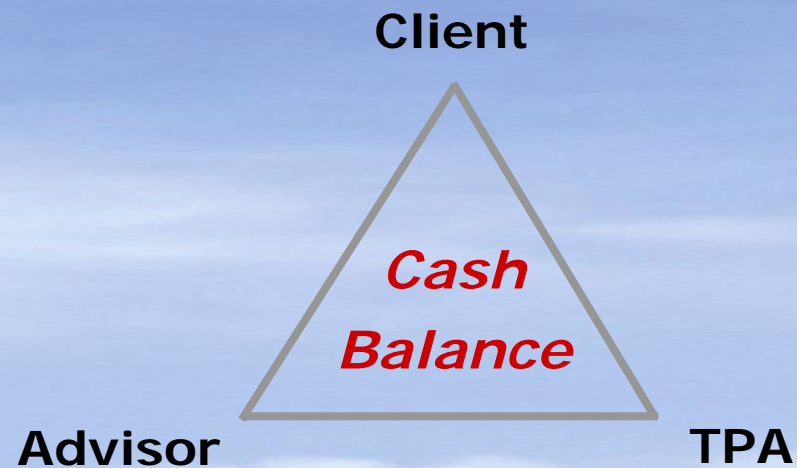
Defined Benefit Plans

- Complex formula
- Difficult to understand
- Age-sensitive
- Less expensive administration
- Greater interest risk

Cash Balance Plans

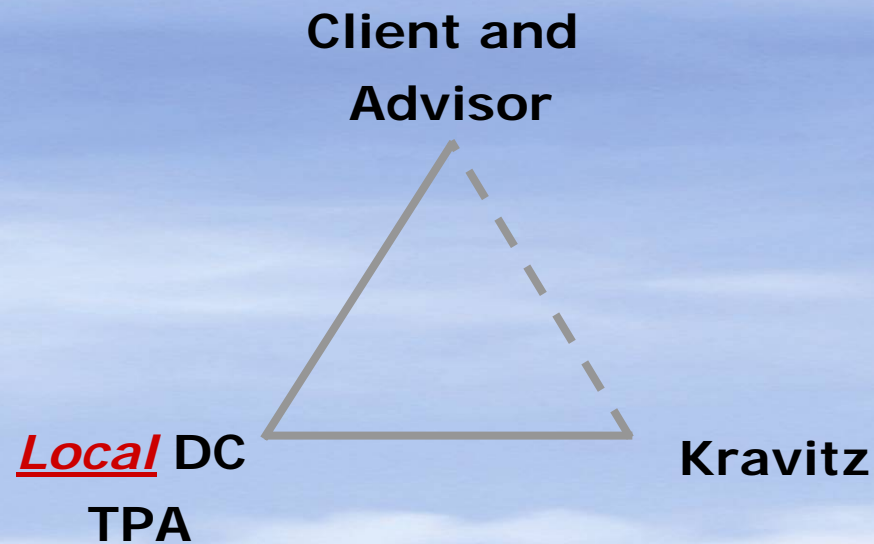
- Account balance, (\$100,000)
- “Looks” like the familiar: 401(k) Profit Sharing
- Age-neutral (relatively)
- Less expensive employee costs
- Less interest risk

Advisors and TPAs working together



...various models

Local DC TPA and Outside Actuarial TPA



What's in it for the DC TPA?

- Potential revenue sharing (Kravitz)
- Client retention

Local TPA and Actuarial TPA

Local TPA

Kravitz

DC Plan

- Plan Document (including amendments)
- Data Collection
- ADP/ACP Testing
- Form 5500
- Participant Statements (if necessary)
- Provide DC portion of the Top Heavy

Cash Balance Plan

- Plan Document (including amendments)
- Review Data
- Coverage (410(b)) Testing
- 415(b), 401(a)(4) and 401(a)(26) Tests
- Combined Top Heavy Calculation
- Actuarial Valuation
- Form 5500
- Participant Statements
- PBGC (if necessary)

Hybrid Partnership

Local DC TPA

Kravitz

DC Plan

- Plan Document (including amendments)
- Data Collection
- ADP/ACP Testing
- Form 5500
- Participant Statements (if necessary)
- Provide DC portion of the Top Heavy

Cash Balance Plan

- Trust Accounting
- Review Data
- Participant Statements
- Form 5500 Other than Schedule SB



Cash Balance Plan

- Plan Document (including amendments)
- Coverage (410(b)) Testing
- 415(b), 401(a)(4) and 401(a)(26) Tests
- Combined Top Heavy Calculation
- Actuarial Valuation
- Schedule SB and Attachments
- PBGC (if necessary)

Keys to successful Advisor and TPA partnerships

1. A “win” for everyone involved
 - Financial and business retention
2. Clear expectations: roles and responsibilities
 - Census
 - Advisor more involved w/ client than local TPA
3. Learning curve on working together

Disclosures

Kravitz is the marketing name for the businesses of Kravitz, Inc. and Kravitz Investment Services, Inc. Kravitz, Inc. provides actuarial and consulting advice on the design and administration of retirement plans. Kravitz Investment Services, Inc. is a registered investment advisory firm that provides investment advice and asset management.



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