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2018 National

CASH BALANCE RESEARCH REPORT

10TH ANNUAL EDITION

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New Cash Balance Retirement Plans Increase 15%, Plan Sponsor Contributions Up 30%

Cash Balance plans continue rising as the fastest growing sector of the retirement plan market despite uncertainty over tax rate changes

Every year since 2008, Kravitz has published an in-depth analysis of the latest IRS Form 5500 filings for Cash Balance retirement plans.* The annual growth in new plans, regional trends, plan asset growth and other statistics are provided as a reference for retirement plan professionals and others interested in learning more about Cash Balance plans.

Highlights:

- **The number of new Cash Balance plans increased 15%, compared with just 1% growth in new 401(k) plans:** Although growth was expected to be slower than usual due to election year uncertainty and possible changes to tax rates, the number of new plans increased 15% in 2016, the most recent year for which complete IRS Form 5500 filing data is available. Any uncertainty in 2016 did not ultimately impact the market. In fact, employer contributions to Cash Balance plans soared 30% to $38.2B up from $29.3 billion in 2015, for total plan assets of $1.03T.
- **Small businesses continue driving Cash Balance growth:** 92% of Cash Balance plans are in place at firms with fewer than 100 employees, and 57% have 10 or fewer employees. The needs of small business owners to catch up on delayed retirement savings and attract top talent are a key factor; see page 6 for details.
- **Companies with Cash Balance plans increase their contributions to employee retirement savings 50% or more:** the average employer contribution to staff retirement accounts is 6.9% of pay in companies with both Cash Balance and 401(k) plans, versus 4.7% of pay in firms with 401(k) alone.
- **California and New York have the most plans overall while the fastest growth has been in Georgia and Michigan:** California and New York account for 24% of all new Cash Balance plans followed closely by Texas, Ohio, and Florida. Georgia is a regional powerhouse with close to 29% year-over-year growth in new plans.
- **Increasing diversity of companies adopting Cash Balance plans:** while medical/dental groups and law firms still make up 48% of the market, Cash Balance plans are become more widely known and increasingly popular across the business world. Sectors such as technology, finance, and manufacturing and even retail have showed steady growth in new plans.
- **IRS regulations allowing broader Cash Balance investment options have accelerated plan growth:** the “Actual Rate of Return” option and other new investment choices approved in the 2010 and 2014 Cash Balance regulations made plans more flexible for employers and removed certain funding issues. The number of large plans using Actual Rate of Return is now 39%, up from just 10% five years ago.

**Source: Analysis performed by Kravitz, Inc., using data from IRS Form 5500 filings via the Judy Diamond Associates, Inc. database. The 2016 plan year data is the most current complete data set available. Additional data on defined contribution and defined benefit plans comes from Private Pension Plan Bulletin Abstracts by the U.S. Department of Labor Employee Benefits Security Administration (EBSA), and the Plan Sponsor Council of America (PSCA) 60h Annual Survey of Profit Sharing and 401(k) Plans.*

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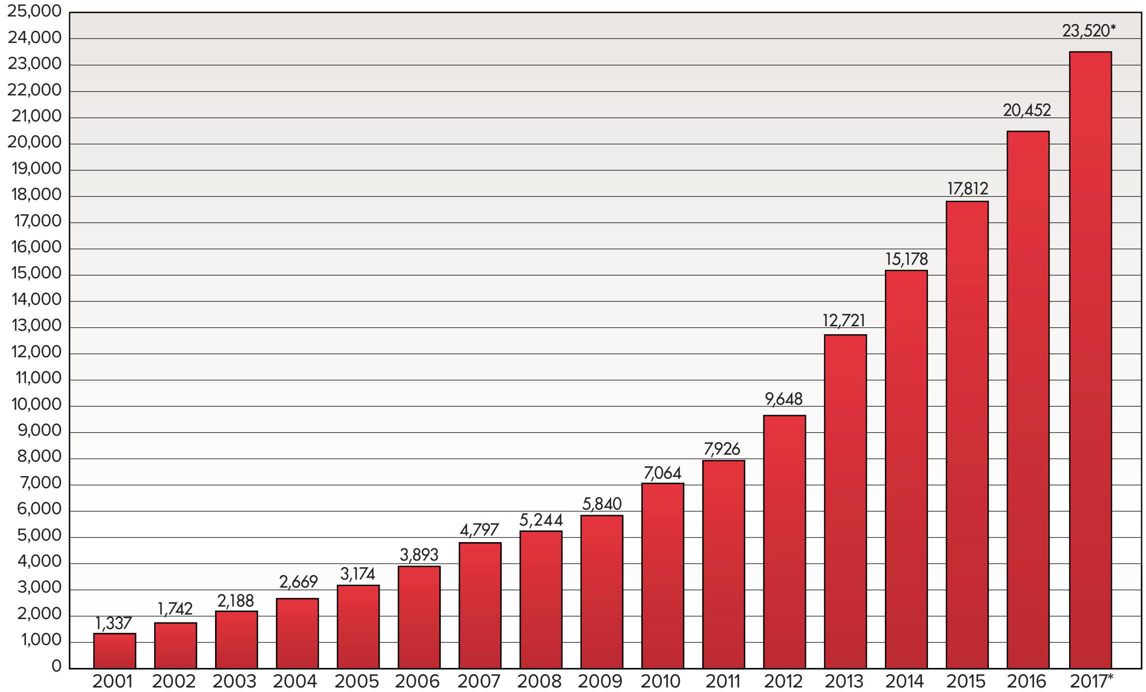
Cash Balance Plans: Growth 2001 to 2017



* Projection based on current growth rates and industry data.

The popularity of Cash Balance plans has soared since 2001, with double-digit annual growth almost every year, and a seventeen-fold increase over 16 years.

What's behind the remarkable growth in Cash Balance plans?

- **Rising taxes:** Rising federal, state and local tax rates have motivated many business owners to maximize tax-deferred retirement savings and take advantage of tax deductions for contributions to employee retirement accounts.
- **Hybrid appeal:** These "hybrid" plans combine the high contribution limits of a traditional defined benefit plan with the flexibility and portability of a 401(k) plan. They also avoid the common risk factors and runaway costs involved in traditional defined benefit plans.
- **Legislative changes and broader options for plan sponsors:** The 2006 Pension Protection Act affirmed the legality of Cash Balance plans and made the plans easier to administer. New IRS Cash Balance regulations in 2010 and 2014 expanded investment options, minimizing many funding issues.
- **Retirement savings crisis:** Frequent media coverage of the Boomer generation's lack of retirement preparedness has prompted older business owners to accelerate savings and maximize qualified plan contributions.

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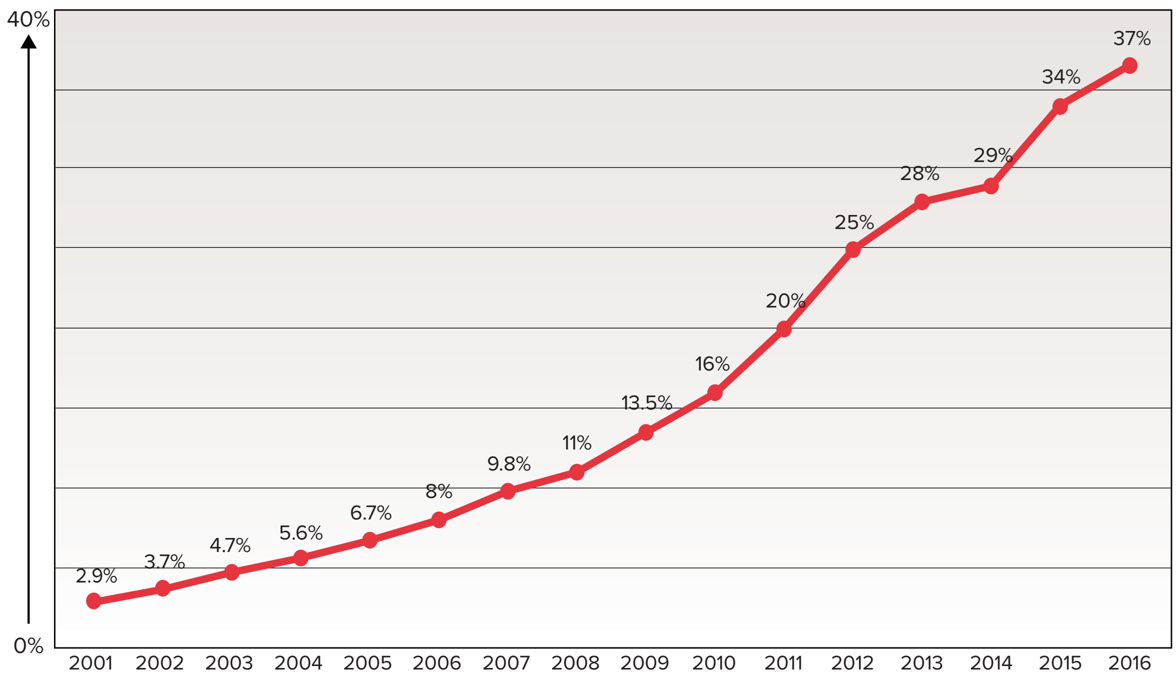
Cash Balance Plans
as a Percentage of All Defined Benefit Plans



In the past 15 years, Cash Balance plans have increased from less than 3% to 37% of all defined benefit plans. Traditional defined benefit plans have been steadily declining since the mid-1980s, due to a complex array of risk issues, runaway costs, and major changes in workforce demographics. Some larger corporations converted existing defined benefit plans to Cash Balance, while hybrid plans also became increasingly popular with small to mid-size businesses.

Why are Cash Balance plans rapidly replacing traditional defined benefit plans?

- **Lower risk:** Cash Balance plans remove the interest rate risk that led to constantly changing value of liabilities in traditional defined benefit plans.
- **Removing cost volatility:** The structure of a Cash Balance plan prevents runaway costs for employees nearing retirement age.
- **Easier for employees to understand and appreciate:** Cash Balance plans are similar to 401(k) plans in terms of showing individual account balances. Some plans even offer participant websites with daily updates.
- **Consistency and fairness:** These plans allow for more consistent contributions to employees, rather than uneven age-based contributions.
- **Full portability:** Account balances can be rolled over to an IRA, a necessary option for today's mobile workforce in which many employees change jobs every few years.

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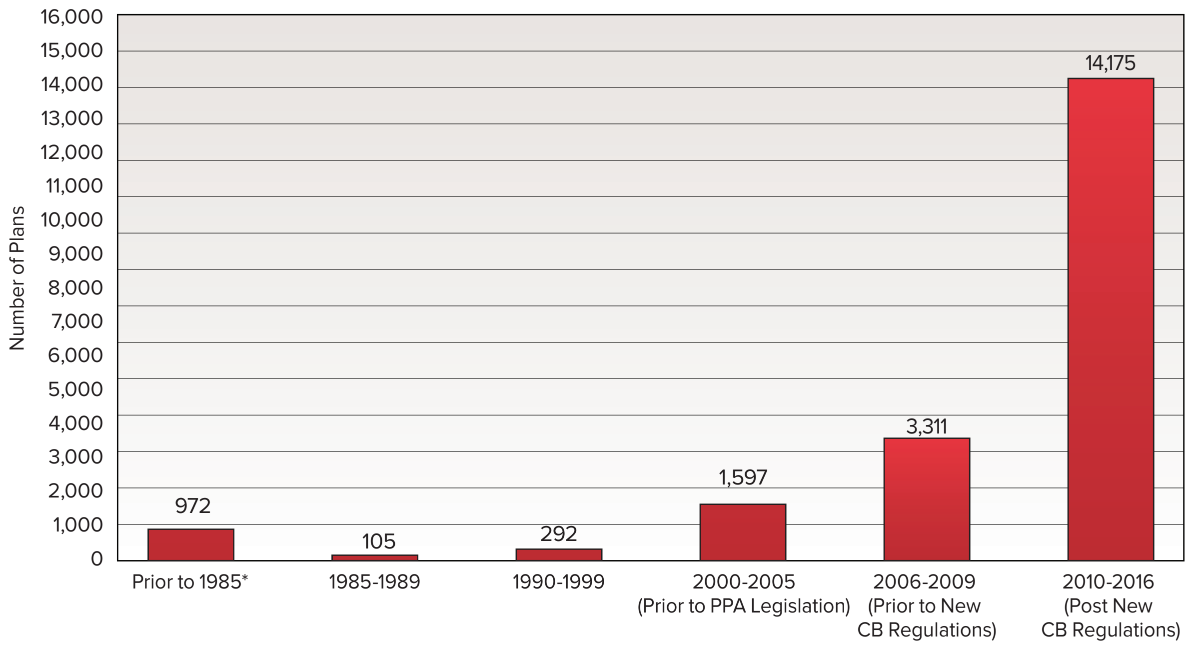
Cash Balance Plans by Year Established



* Plans with an effective date prior to 1985 are traditional defined benefit plans that were later converted to Cash Balance. The first IRS-approved Cash Balance plan was established in 1985 by Bank of America.

The number of Cash Balance plans nationwide has more than tripled since the Pension Protection Act (PPA) came into effect in 2006. The first Cash Balance plan was established by Bank of America in 1985, but the emerging hybrid segment of the retirement plan market remained relatively unknown for the next two decades.

How are legislative changes accelerating the growth of Cash Balance plans?

2006 Pension Protection Act: This law clarified IRS approval of the plans, removed any remaining uncertainty about their legal status, and introduced other changes that simplified implementation and administration. Thanks to this legislative shift, Cash Balance plans became a popular and viable choice for many small business owners.

2010 IRS Cash Balance regulations: New regulations published in 2010 provided greater clarity and expanded options for Interest Crediting Rates (ICR), making these plans even more appealing to employers. The new regulations also generated widespread media coverage and greater national awareness of the high contribution limits, tax advantages and recruitment/ retention power of adding a Cash Balance plan.

2014 Final IRS Cash Balance regulations: Final regulations issued in September 2014 gave plan sponsors a compliance roadmap and greater investment flexibility, including the option to use fixed rates up to 6% and to include multiple investment options within a single Cash Balance plan.

Cash Balance Plans by Size: Participants

Participants	Number of Plans	Percent of Nation's Total
Over 10,000	246	1.4%
1,000 to 10,000	570	3.3%
100 to 999	597	3.6%
25 to 99	1,997	10.7%
10 to 24	4,544	24.2%
1 to 9	12,498	56.7%
National Total	**20,452**	

Total participants in Cash Balance plans nationwide: 11.8 million

Small to mid-size businesses continue to drive the growth of Cash Balance plans and the highest growth over the past five years has been in companies with fewer than 25 employees. Today, 92% of plans are in place at firms with fewer than 100 employees. Firms with 1 to 9 employees now account for 57% of all Cash Balance plans.

The largest plans (those with 10,000 or more participants) typically represent older traditional defined benefit plans that were converted to Cash Balance. These conversions may increase in the next few years as an alternative to terminating financially troubled defined benefit plans.

What makes Cash Balance plans so attractive to small business owners?

- **Cost efficiency and tax efficiency:** After staff costs, taxes are usually the largest expenditure for small businesses. Cash Balance plans help owners with a significant tax deduction for employee contributions, plus generous tax-deferred retirement contributions for themselves.
- **Asset protection:** As with any IRS-qualified retirement plan, Cash Balance assets are protected in the event of a lawsuit or bankruptcy.
- **Catching up on delayed retirement savings:** Age-weighted contribution limits allow older owners to squeeze 20 years of savings into 10. Owners can typically double or triple the pre-tax deferrals they were able to make in a defined contribution plan.
- **Attracting and retaining talented employees in a tight labor market:** Defined benefit plans such as Cash Balance are more appealing to many employees than typical 401(k) plans alone, giving small business owners a competitive recruitment advantage.

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Cash Balance Plans:
Company Contributions to Employee Retirement Accounts

Plan Type	2009	2010	2011	2012	2013	2014	2015	2016
401(k) only*	2.2%	2.2%	2.4%	2.6%	2.8%	3.1%	3.7%	4.7%
401(k) combined with a Cash Balance plan**	5.8%	6%	6.2%	6.3%	6.3%	6.5%	6.6%	6.9%

Company contributions as a percentage of eligible participants' total annual payroll.

Companies typically increase contributions to employee retirement accounts 50% or more when adding a Cash Balance plan to an existing 401(k)

- **6.9% of pay** – average employer contribution to non-owner employees in companies with both Cash Balance and 401(k) plans.
- **4.7% of pay** – average employer contribution to non-owner employees in companies with 40(k) only.

Cash Balance plans require employers to contribute 5% to 8% of gross annual pay to non-highly compensated employees in order to pass IRS fairness testing, due to the larger amounts contributed for owners. The two plans are cross-tested and contributions to employees are usually made through the profit sharing plan. In many cases, employer contributions are 50% higher or even double the amount employees receive at firms with a 401(k) only.

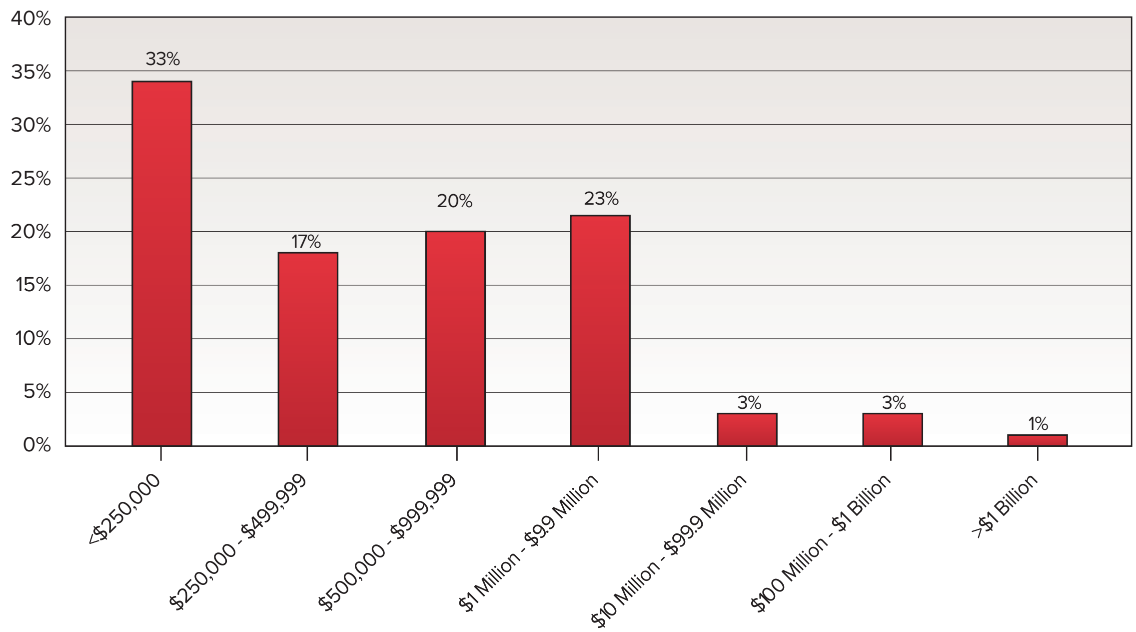
Cash Balance plans provide other advantages to employees:

- Employees do not have to reduce their take-home pay in order to receive an employer contribution, since Cash Balance contributions (sometimes also satisfied through a profit sharing plan) are not based on a "match."
- Employees do not have to choose their own investments or bear any investment risk.
- Plan assets are pooled and typically invested by the plan sponsor using a conservative benchmark, so retirement savings are protected from market volatility.
- Portability: When employees leave or retire, they have the choice of an annuity option or a lump sum that can be rolled over to an IRA.

*Source for data on employer contributions to 401(k) plans, 2009-2016: Plan Sponsor Council of America (PSCA), *60th Annual Survey of Profit Sharing and 401(k) Plans.*

** Source for combination plans: analysis of Kravitz clients' contributions to employee retirement accounts.

Cash Balance Plans by Asset Size



Total assets in all Cash Balance plans nationwide: $1.03T in 20,452 plans
Annual contributions for 2016: $38.2 Billion

As relatively new plans, many still have assets under $500,000. This asset profile will shift over the next decade, as many business owners seek to maximize tax-deferred savings for themselves and optimize tax-efficient contributions to employees.

For most firms, a Cash Balance plan is an "add-on" to an existing 401(k) profit sharing plan that already has significant assets. See page 14 for an overview of the most popular plan combinations.

Highlights: steady, stable growth

- The median asset size of a Cash Balance plan is $486,390; the average is $50.3 million.
- 30% of Cash Balance plans have assets over $1 million.
- Cash Balance accounts increase each year in two ways: through an employer contribution (a flat amount or a percentage of pay) and through an interest credit. Both are specified in the plan document. See page 10 for a discussion of Interest Crediting Rates.
- The high percentage of plans with assets under $250K reflects the large number of new start-up plans at small firms, typically with fewer than 10 participants.

Largest Cash Balance Plans by Asset Size

Top 10 Plans Overall	
1. IBM	$52.9B
2. AT&T	$51.2B
3. Boeing	$29.0B
4. FedEx	$26.5B
5. Bank Of America	$20.2B
6. Alcatel-Lucent	$17.9B
7. United Technologies	$17.3B
8. Honeywell International	$16.8B
9. Northrop Grumman	$16.0B
10. 3M	$15.6B

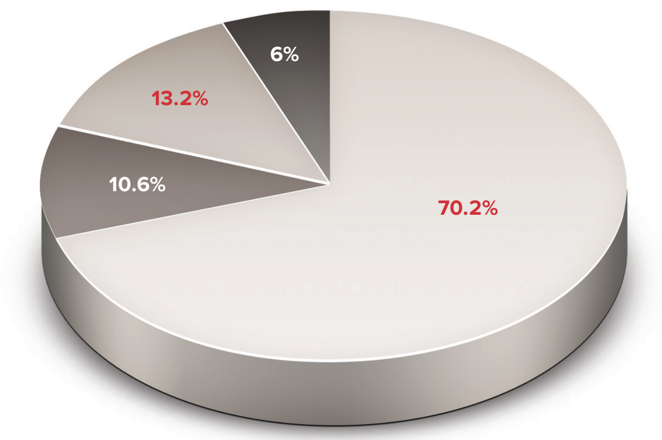
Top 10 Medical/Hospital Plans	
1. Sutter Health	$3.7B
2. Massachusetts General Hospital	$3.1B
3. Intermountain Healthcare	$2.9B
4. University Of Pittsburgh Medical Center	$2.0B
5. North Shore University Hospital	$1.5B
6. Brigham Health	$1.5B
7. Hartford Healthcare	$1.4B
8. The Cleveland Clinic Foundation	$1.2B
9. Board of Trustees for Hospital Employees	$1.1B
10. William Beaumont Hospital	$1.1B

Top 10 Law Firm Plans	
1. Sidley Austin	$863.4M
2. Morgan, Lewis & Bockius	$338.5M
3. Omelveny & Myers	$234.6M
4. Gibson, Dunn & Crutcher	$232.5M
5. Jones Day	$209.1M
6. Kirkland & Ellis	$208.9M
7. Akin, Gump, Strauss, Hauer & Feld	$197.2M
8. DLA Piper	$170.7M
9. Arnold & Porter	$152.8M
10. Reed Smith	$148.7M

Cash Balance plans play a strategic role in retirement and benefits planning for many large firms

While the dramatic growth in new Cash Balance plans has been driven mainly by small and mid-size businesses, these tax-efficient plans are also offered by many leading national law firms, hospitals, and medical groups. Select Fortune 100 companies maintain large Cash Balance plans, some of which were converted from older traditional defined benefit plans (see page 4 for more details). For many large firms, Cash Balance plans are a key tool for recruiting and retaining talented employees in a highly competitive labor market.

Interest Crediting Rates Chosen
by Cash Balance Plan Sponsors



Interest Crediting Rate	Percentage*
Fixed Rate of Return (ranging from 2% to 6%)	70.2%
30-year Treasury Rate	10.6%
30-year Treasury Rate with a floor (ranging from 3% to 5%)	13.2%
Actual Rate of Return*	6%

*80% of Actual Rate of Return (ARR) plans have a ceiling of 3%-6%

"Actual Rate of Return" and fixed rates rise in popularity

All Cash Balance plan participants receive an annual interest credit on their account balances, based on the specific **Interest Crediting Rate (ICR)** written into the plan document.

Before the IRS Cash Balance regulations were published in 2010, an estimated 95% of Cash Balance plans used the yield on the 30-year Treasury bond. This rate averaged 4 to 5% for most of the decade prior to the current low interest rate era, when the yield has often fallen below 3%. The 2010 regulations changed the game, allowing many more ICR options and greater flexibility for plan sponsor. Fixed rates have become the dominant choice, with 4% the most common, and Actual Rate of Return became a very popular option for larger plans. Page 11 of this report reviews large plan ICRs in more detail.

Actual Rate of Return: this option allows plan sponsors to set the ICR to equal what the plan investments actually earn in the market (the "Actual Rate of Return"), rather than trying to target a specific interest rate every year. The employer's investment risk is reduced considerably, and participants are protected by various investment rules.

Final IRS Cash Balance regulations released in September 2014 made Actual Rate of Return an even more compelling option, as discussed on page 11.

* Based on Interest Crediting Rate (ICR) selections by 876 Kravitz Cash Balance clients.

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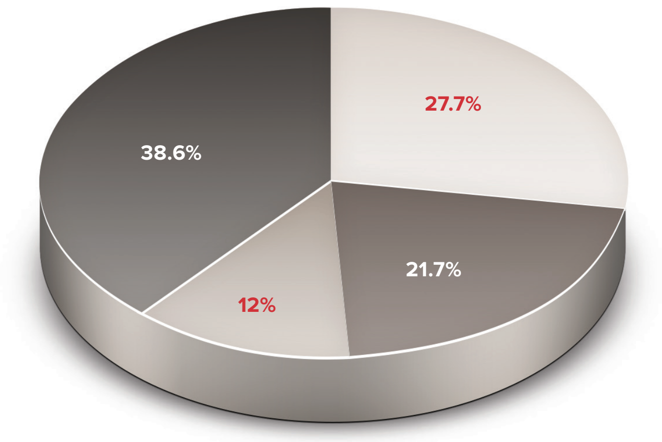
Interest Crediting Rates Chosen by Large Cash Balance Plan Sponsors



Interest Crediting Rate	Percentage*
Fixed Rate of Return (ranging from 3% to 5%)	27.7%
30-year Treasury Rate	21.7%
30-year Treasury Rate with a floor (ranging from 3% to 5%)	12%
Actual Rate of Return (ranging from 4% to 5.5%)	38.6%
*87% of large ARR plans have a ceiling of 4% to 5.5%.	

* Based on Interest Crediting Rate (ICR) selections by 83 Kravitz Cash Balance clients with plans with more than 100 participants.

Minimizing risks and maximizing investment options makes Actual Rate of Return appealing for larger plans

We have continued to see large plan sponsors moving away from the 30-year Treasury rate as an ICR and choosing either a fixed rate or Actual Rate of Return (ARR), usually with a ceiling between 4.5% and 6% to manage volatility. Only one in three large plans still uses the 30-year Treasury rate, down from 90% when the IRS regulations changed in 2010. Using ARR reduces the employer's investment risk considerably, and participants are protected by various investment rules, including preservation of capital.

The final IRS Cash Balance regulations released in September 2014 have made Actual Rate of Return even more compelling, since plan sponsors can now offer multiple investment options within a single plan, tailored to suit different retirement goals and needs.

Advantages of an Investment Choice Cash Balance plan:

- Meets diverse participant needs and goals
- Incorporates a range of investment strategies within a single plan
- Enhances flexibility for growing firms with many partners/shareholders
- Improves ability to attract and retain top talent

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Cash Balance Plans: Regional Concentration

Rank	State	Number of Plans	Percent of Nation's Total	Percent Annual Increase*
1.	CA	2,853	14%	20%
2.	NY	2,039	10%	14%
3.	TX	1,258	6%	14%
4.	OH	1,249	6%	11%
5.	FL	1,243	6%	17%
6.	IL	1,229	6%	8%
7.	NJ	1,079	5%	15%
8.	PA	788	4%	12%
9.	MI	763	4%	18%
10.	GA	507	2%	29%
National Total		**20,452**		

*Increase in total number of plans between 2015–2016, the most recent year for which complete IRS Form 5500 data is available.

California and New York have been leading the Cash Balance sector for the past 15 years in terms of the total number of plans, and continued to do so last year. Together they account for 4,892 plans, or 24% of the national total. Georgia did not even make the top 10 list last year, but now leads the way for fastest regional growth in new plans, with a remarkable 29% year-over-year increase. Atlanta's role as a regional medical hub is likely a factor, as Cash Balance plans are very popular with medical specialty groups.

Since new Cash Balance Plans are most frequently adopted by successful, profitable small to midsize businesses, their steady growth rates are a good indicator of the regional health of small business.

Other regional highlights:

- Cash Balance plans are active in all 50 states, and are now represented in Puerto Rico, Guam, and the US Virgin Islands.
- Texas is a powerhouse of regional growth, climbing to third on our chart from fifth last year.
- Illinois barely made the top 10 a few years ago and is now ranked sixth in the nation, likely driven by large numbers of medical and legal groups in the Chicago area along with many competing Cash Balance providers promoting awareness in the business community.

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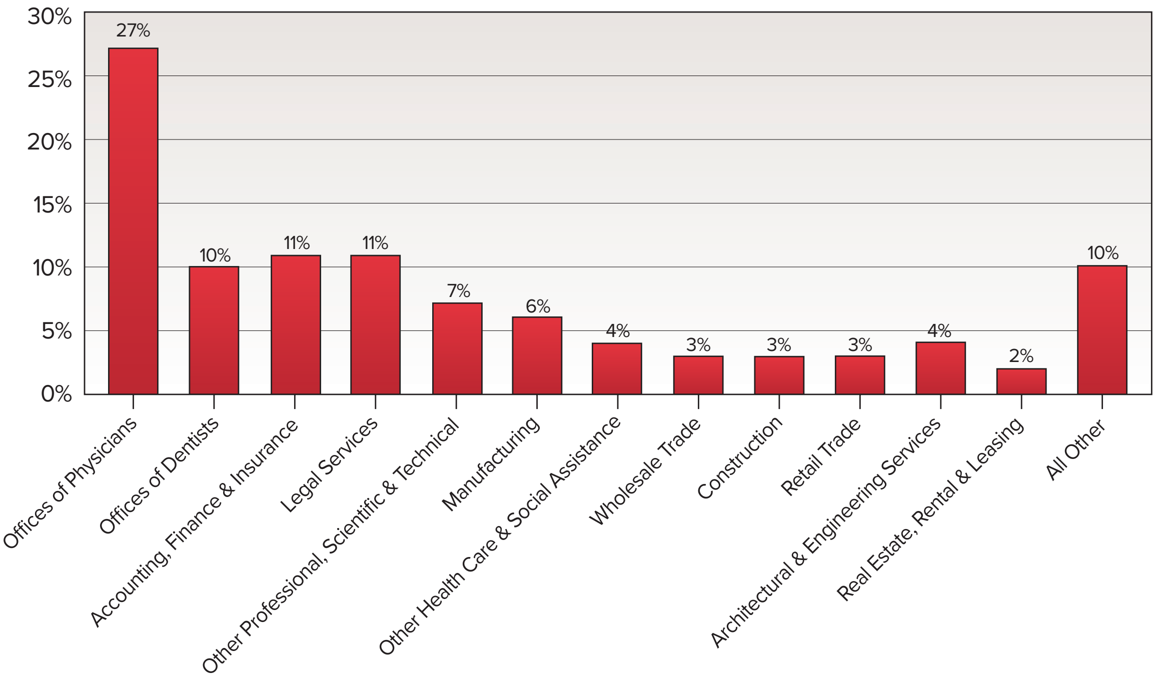
Cash Balance Plans by Business Type

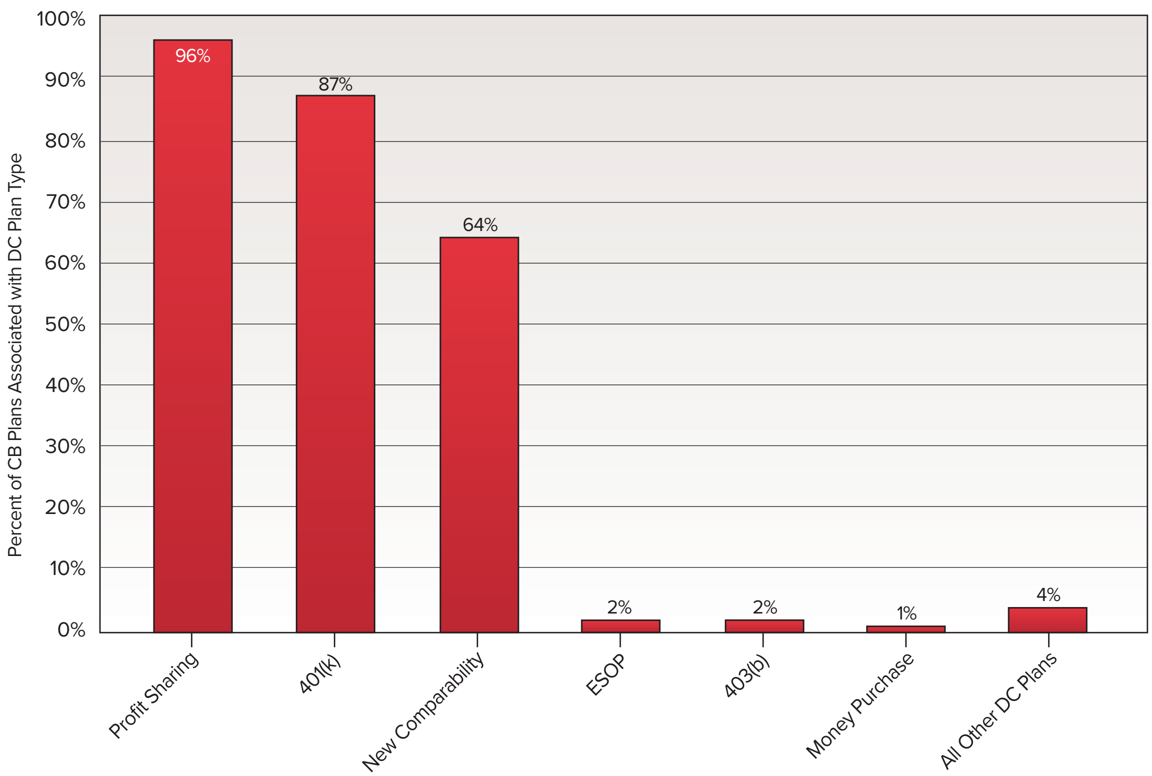


America's healthcare, technical, legal and financial sectors continue to lead the way in adopting Cash Balance plans. These plans are an excellent fit for the retirement needs of professional services firms, because of their flexibility for multi-partner firms and high age-weighted contribution limits which allow older owners to double or triple pre-tax retirement savings.

Increasing diversity of businesses adopting Cash Balance plans:

- Manufacturing firms now account for 6% of all Cash Balance plans, a promising sign for the economy since owners need fairly predictable profit levels to meet the plan's annual financial commitments.
- Medical and dental groups account for 37% of all Cash Balance plans nationally, and we expect to see continued growth in the healthcare sector effecting trends in the overall US economy.
- With many CPA and financial advisory organizations educating clients about Cash Balance plans, we expect even greater diversification of business types adding these plans.
- The "Other" category (10% of all Cash Balance plans) provides a compelling snapshot of the sheer diversity in types of businesses adopting Cash Balance plans. It includes everything from farms to funeral homes, from lobbyists to lighting technicians.

Defined Contribution Plans
Associated with Cash Balance Plans



Plan combinations allow business owners to optimize tax efficiency and maximize retirement savings

- Very few firms have a stand alone Cash Balance plan; today 96% offer Cash Balance plans in combination with one or more defined contribution plans. The most common combination is Cash Balance with a 401(k) and/or profit sharing plan, allowing business owners to maximize contribution levels, flexibility, and tax efficiency.
- When a firm offers a combination of retirement plans, the IRS requires "cross-testing" to ensure fairness to all employee groups across all compensation levels. It is important to have an experienced, technically skilled actuarial consultant design a Cash Balance retirement program that will achieve the plan sponsor's goals while passing all IRS tests every year.
- The average employer contribution to staff retirement accounts is 6.9% of pay in companies with both Cash Balance and 401(k) plans, compared with 4.7% of pay in firms with 401(k) alone (see page 7 for details).
- Thanks to steadily increasing demand for creative plan designs combining Cash Balance, 401(k) and Profit Sharing, top retirement plan consultants are finding new opportunities to develop a niche specialty with a competitive edge.

About Kravitz

Since 1977, Kravitz, an Ascensus company, has brought its clients the latest in design, administration, and management of corporate retirement plans. Kravitz designed its first Cash Balance plan in 1989 and has become nationally recognized as an innovator and a leader in all aspects of Cash Balance plans. Today the firm manages more than 1,400 retirement plans across the country, including more than 950 Cash Balance plans.

Headquartered in Los Angeles, Kravitz has offices in New York, Chicago, and Atlanta, along with satellite offices in 11 other states. The Kravitz team of 85 employees includes 11 actuaries and many other highly trained and credentialed retirement professionals. Kravitz founded the Cash Balance Coach® training program in 2009, the nation's first and only Cash Balance certification program. More than 1,800 financial advisors and retirement professionals have enrolled, earning certification as Cash Balance Consultants. Kravitz has also published a book, Beyond the 401(k), an industry bestseller on the topic of Cash Balance plans as a business growth strategy. Kravitz was acquired by Ascensus in 2017.

Learn more at CashBalanceDesign.com.

For more information regarding Cash Balance plans,
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