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Hybrid Retirement Plans:
Acceptable Compromises and Long-term Solutions

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Acceptable Compromises and Long-Term Solutions

In 1985, there were 114,000 defined benefit (DB) pension plans in the United States; in 2012, there were only 38,000—a decrease of 66%. Today only 15% of private sector employees are covered by a traditional DB plan.[1]

Americans are rapidly losing their pensions—replaced by *savings* plans disguised as retirement plans.

Many sponsors view defined contribution (DC) plans as the best option for retaining some of the features of a pension plan without bearing all of the costs and risks of DB. This paper explores how hybrid plans offer a more flexible approach to retirement plans by bringing together the best features of both DB and DC.

This paper explores how:

- Hybrid plans offer a flexible third option—taking advantage of the best features of DB and DC plans, including:
  - A shared-risk approach
  - Stable cost
  - Guaranteed lifetime benefits
  - Professional management
- Hybrid plans—and how they balance sponsor and beneficiary responsibilities—differ materially and hence provide flexibility.
- A hybrid plan can limit participant biases and may help increase contributions and reduce investment risk.
- Hybrid plans use professional management that can look beyond short-term volatility to focus on maximizing return potential (e.g., greater exposure to equities and higher yielding bonds).
- Hybrids pool individual participants' assets, helping counter longevity risk.

Learning from DB and DC

Traditional DB plans may present the best option for participants from a benefits perspective—providing guaranteed lifetime income and professional money management. However, increased longevity and low returns for U.S. Treasuries in recent years have raised costs for plan sponsors.

DC plans are attractive to plan sponsors because they offer a stable cost, but they require individuals to manage their own retirement savings; including contributions, investment selection and eventual distribution of funds.

DB plans ask too much of plan sponsors, while DC plans expect too much from plan participants. By combining the best elements from both DC and DB, hybrid plans seek to strike a balance between risk and benefits for both participants and plan sponsors—and create a much needed third option.

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[1] Department of Labor estimate

Exhibit 1: Cost and Benefit of Retirement Plans

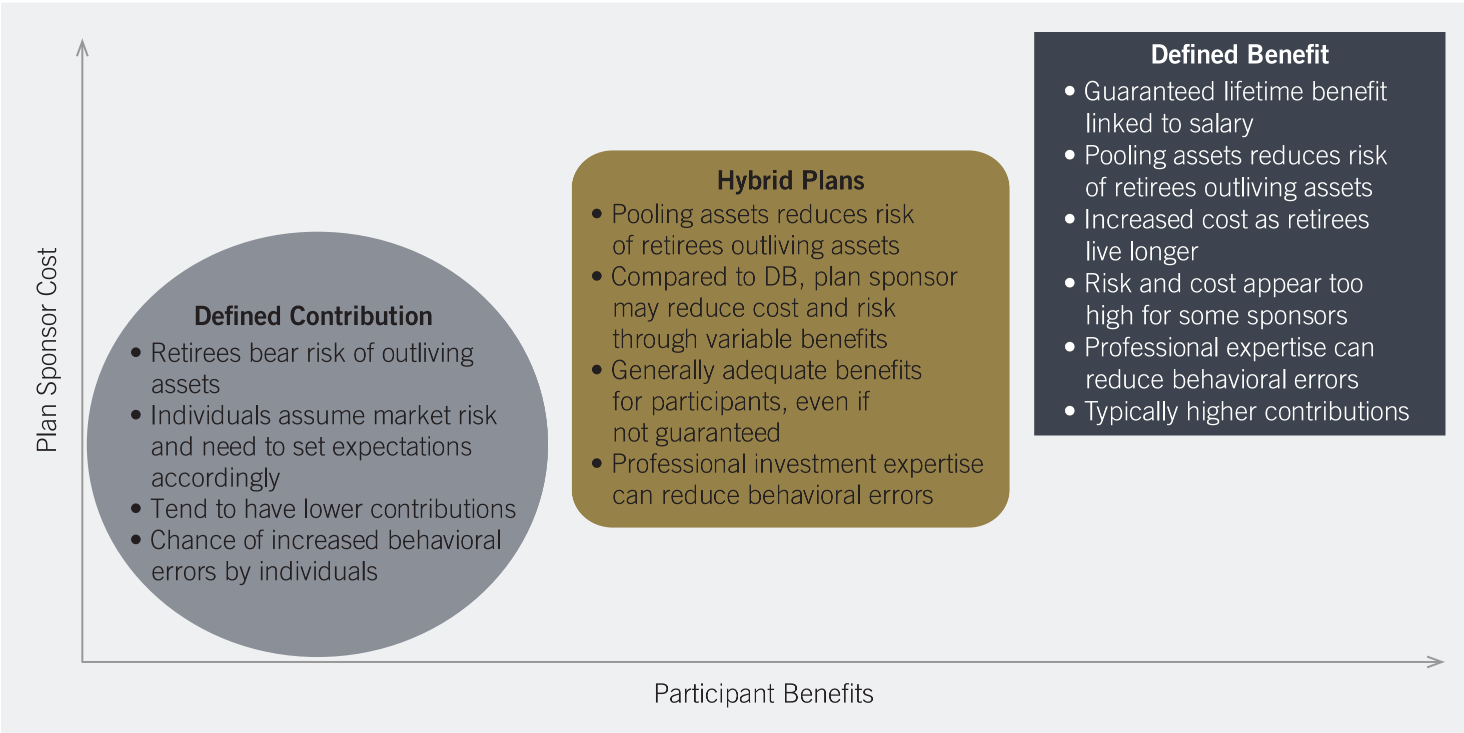


Exhibit 1 illustrates how cost and benefits are distributed for traditional DB, DC and hybrid plans.

Hybrids are not without drawbacks. Participants would have to relinquish some benefits; sponsors would have to retain greater liabilities. However, they offer a compromise that may provide appropriate retirement benefits at a manageable cost to sponsors—assuming contribution levels are sufficient and the asset allocation mix seeks to maximize returns.

A Variety of Hybrid Structures Provide Potential Solutions

The hybrid plan concept is not new. Bank of America set up the first IRS-approved cash balance (CB) hybrid plan in 1985. Categorized as a traditional DB plan, each participant of a CB plan has his/her own reported notional account balance, which reduces liabilities for sponsors. The switch from DB to CB reportedly saved Bank of America $75 million in the first year alone.[2]

Fear over potential litigation and an IRS moratorium stopped conversions during the 90s.[3] The IRS ban was lifted with the passing of the Pension Protection Act of 2006 and adoption of CB plans escalated sharply. In 2001, CB plans accounted for 2.9% of all DB plans—today they account for more than 20%.[4]

Between 2001 and 2011, the plan year for which most recent data is available, the number of CB plans in the United States climbed from 1,337 to 7,926.[5] While several large and well-known companies have converted from traditional DB to CB in recent years, including The Coca-Cola Company and Dow Chemical, the largest growth has been among small to medium-sized companies.[6] Eighty-six percent of current CB plans have 100 employees or fewer.[7]

Despite a surge in recent adoption of these hybrid plans, without longer-term results, it is difficult to measure CB plans' success against the more established DB and DC plans. Furthermore, cash balance plans are just one type of hybrid plan. The variety of hybrid plan structure continues to grow.

[2] According to Bank of America's senior vice president of compensation and benefit statement at a 1993 Conference Board meeting.
[3] Reich, Al. "Overview of Hybrid Plans (Cash Balance and Pension Equity Plans)" 2013. The IRS Service Director, Employee Plans, placed a moratorium on accepting conversions of existing DB plans to cash balance plans on September 15, 1999.
[4] Kravitz, The 2013 National Cash Balance Research Report
[5] Ibid
[6] Ibid. The Kravitz study claims, "These plans are an excellent fit for the retirement needs of professional services firms, because their flexibility for multi-partner firms and high age-weighted contribution limits which allow older owners to double or triple pre-tax retirement savings."
[7] Ibid

Below are just a few examples of hybrid plans in various stages of development:

1. **USA Retirement Fund**: Officially proposed by Sen. Tom Harkin in Jan. 2014, if realized, this plan will provide universal coverage through automatic payroll deduction. Administered at the federal level, it's designed to produce a predictable retirement income stream. Assets would be pooled, professionally managed and portable. Seeking to counter inertia, it automatically enrolls participants, targeting the 45% of U.S. households without access to *any* retirement plan, DB or DC or IRA.[8]
2. **Secure Choice**: Proposed by the National Conference on Public Employee Retirement Systems (NCPERS), it's designed and administered to be fully funded and subject to ERISA minimums; it can adjust to changing economic conditions and offers flexible benefit accrual. Similar to the USA Retirement Fund, beneficiaries would enjoy a guaranteed retirement income, but Secure Choice is designed to work at the state level—not federal.
3. **Adjustable Plans**: Benefits in these plans adjust based on investment performance, typically annually. They transfer some investment risk to participants, while retaining some traditional DB advantages (e.g., pooled longevity risk and professional investment management). While early adopters (e.g., *The New York Times*, Greater Boston Hospitality Employers 26) have emerged, the plans still need IRS approval or may revert to DC plans.
4. **Double DB Plans**: Based on existing DB structures, these plans divide assets into two separate accounts: base DB and double DB. The plan seeks to deliver a steady defined benefit from the base DB and a varying return from the double DB. The plan blends plan sponsors' desire for a fixed-cost plan (per traditional DC plans), while delivering a minimum defined benefit and potential for additional gains.

WHY PLAN SPONSORS SWITCH

In July of 2012 the Employees' Retirement System of Rhode Island (ERSRI) adopted a combined DB/DC retirement plan.[9] The new plan brings retirement age in line with Social Security and ties cost-of-living adjustments to funding levels and investment returns.

Prior to the switch, ERSRI had an estimated unfunded liability of $6.8 billion. The primary factors that created the deficit included:

- Failing to utilize or follow sound actuarial practices
- Approving benefit improvements without corresponding tax payer or employee contributions
- Plan design that allowed retirees to earn higher benefits in retirement than current employees doing the same job
- Retirees living longer
- Lower-than-assumed investment returns

ERSRI says the new plan will keep costs steady and predictable for decades to come, saving Rhode Islanders approximately $4 billion over the next two decades.

Source: Raimondo, Gina. "The Truth in Numbers: The Security and Sustainability of Rhode Island's Retirement System." May 2011.

Exhibit 2: Overview of Current and Proposed Retirement Plans

	DB	DC	Cash Balance	USA Retirement Fund	Secure Choice	Adjustable Plans	Double DB
Guaranteed Lifetime Benefit	Yes	No	Yes	No	Yes	Yes	Yes
Professional Management	Yes	No	Yes	Yes	Yes	Yes	Yes
Investment Risk	Sponsor	Participant	Shared	Participant	Shared	Shared	Shared
Portable	No	Yes	Yes	Yes	Yes	Limited	Limited
Additional Legislation Needed	No	No	No	ERISA and state-level	ERISA amendment	No	No
Estimated Current Assets*	$7 trillion	$5 trillion**	$900 billion	n/a	n/a	<$5 billion	n/a

Source: Longevity Financial Consulting
*As of 9/31/2013
**Does not include the estimated $6 trillion in IRA assets

[8]Rhee, Nari, Ph.D. "The Retirement Savings Crisis: Is It Worse Than We Think?" National Institute on Retirement Security white paper. June 2013.
[9]DC/DB combined plans include both a DB and DC component. Typically, plans offer a more modest pension plan with a mandatory DC component. These plans can be "stacked" or "parallel." Stacked plans feature a traditional pension on a base salary, with a DC plan for earnings beyond a cutoff. Parallel plans contribute to both plans equally.

Addressing Key Retirement Issues

Hybrid plans offer a flexible framework ideal for solving the underlying issues driving today's retirement gap, including:

- Increasing contribution rates
- Enhancing investment results
- Providing professional management
- Limiting longevity risk
- Focusing on long-term results

Higher Contributions Are Essential to Meet Retirement Income Goals

We believe current contribution levels (from employees *and* sponsors) are inadequate, especially when made on a voluntary basis.

In previous work we have suggested that retirement contributions should be about 15% of an individual's annual salary.[10] Aon Hewitt argues that workers need 11x their final salary at retirement.

Unfortunately, The National Institute on Retirement Security finds that four-out-of-five households have less than 1x their annual income saved. Only 8.3% of those 55–64 have 4x or greater, far below the most conservative estimates of what funding retirement will cost.[11]

Voluntary contributions to DC plans have been framed in an era when these plans were not the primary source of retirement benefits. We believe that average annual contributions of 4-6% are insufficient—we need to change investors' mindset and move towards 15-20%.[12]

The simplest solution to narrow this gap: increase contributions.

Yet, when left to themselves, many participants do not contribute enough (if at all)—even if the sponsoring company matches all or part of their contributions. A survey conducted in part by the American Benefits Institute finds that 34% of companies reported less than half their employees sought to take full advantage of the employer's matching amount.[13] In our view, this reflects short-termism: focusing on short-term needs at the expense of retirement planning. Investor education may encourage more savings, but more needs to be done.

Introducing mandatory contributions or opt-out strategies *instead* of traditional opt-in approaches may increase amounts saved. Facing many of the same problems as in the U.S. (i.e., low voluntary contributions), the United Kingdom initiated an *automatic opt-in* pension plan in 2012. Employees earning above a minimum level and without other pension coverage are enrolled with an opt-out provision; if they do leave, they're automatically re-enrolled after three years.

A survey by Aviva of 4,000 participants found that 37% *planned* to opt out: most said they would not be able to afford contributions.[14] Yet investors' behavior tells another story. The U.K. Department for Work & Pensions reported in November 2013 that only about 9% of workers had actually opted-out.[15]

AUSTRALIA: PUSHING CONTRIBUTIONS HIGHER

The Australian government and pension industry have had a successful campaign for higher contributions. In 1992, the Superannuation Guarantee (SG) was introduced, with a modest mandated minimum employer contribution of 3% of salary, for all employees. The contribution level was raised to 9% in 2009 and will reach 12% by 2019. Since introduced, pension assets have grown ten-fold, to around $1.4 trillion.[16]

The plan also includes a strong emphasis on the investment return element. Employer and participant contributions are generally directed into professionally managed funds, which compete on returns and expenses.

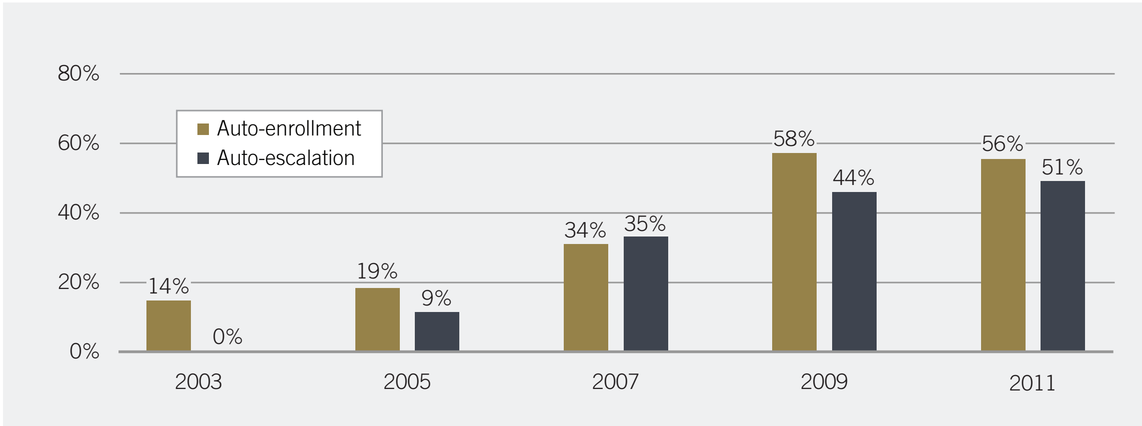
We note that while Australia is among the world leaders in the accumulation phase of retirement planning, less emphasis has been placed on managing withdrawals for lifetime income.

[10] Please see the Brandes Institute's "The Future of Retirement Plans" for a more details about retirement assumptions
[11] Nari Rhee. "The Retirement Savings Crisis: Is it Worse than we Think?" June 2013.
[12] Government estimates from the Social Security Bulletin (volume 71, no. 2, 2011) measured annual contributions by participants in DC in 2006 at around 5.5%.
[13] American Benefits Institute. "Trends in 401(k) Plans and Retirement" March 2013.
[14] Aviva. "Working Lives: A Research Report into Employer and Employee Attitudes to Workplace Pensions, Savings and Benefits" February 2013.
[15] United Kingdom Department for Work & Pensions, "Automatic Enrolment Evaluation Report 2013"November 2013.
[16] Dunn, James. "Super Perception Shifting from Accumulation to Pension Funding"Asia Asset Mangement. February 2013

Evidence suggests that behavior-based solutions, such as auto enrollment, may also be growing in the United States. Exhibit 3 shows the increase of auto-enroll and auto-escalate programs for U.S. employers who offer 401(k) plans.[17]

Exhibit 3: Automatic Enroll and Escalate 401(k) Plans in the United States

Percent of U.S. Employers who offer 401(k) that Automatically Enroll and Escalate Employee Savings Rate



Source: "Behavioral Economics and Retirement Savings Crisis" by Shlomo Benartzi & Richard H. Thaler

Tapping into investors' behavioral biases moves in the right direction. However, even if mandatory contributions and increases are adopted, many retirees—especially those approaching retirement—will probably not *save* their way to success; they must continue to invest after retirement.

CANADA: VARIABLE BENEFITS

Canadian variable benefits plans share the impact of underfunding between sponsor and participant, while preserving the longevity pooling, investment management and low-expense advantages of a DB plan.

Shared Risk Pension Plans use specific formulas to tie changes in contributions and benefits to levels of underfunding. The Ontario Teachers' Pension Plan, a leader in the shared-risk approach, adjusts benefits through deferred indexation, later retirement age, or increased contributions.

Plans are being considered in several Canadian provinces (pension plan supervision and regulation is handled at the provincial, not federal level). New Brunswick passed enabling legislation and is being considered in Saskatchewan, British Columbia and Quebec.

Looking Past Volatility and Increasing Exposure to Equities

Conventional retirement advice especially for DC plans tends to rely on "safe" investments, such as high quality bonds, including U.S. Treasuries, but they do not offer the potential for robust returns. Conservative investors run the risk of outliving their assets. To overcome the potential shortfall, retirement plans should focus on maximizing long-term returns.

Yet, even with today's low interest rates, loss-aversion is driving investors to bonds and cash. The focus on short-term volatility is blinding investors to the long-term potential of perceived higher-risk assets such as equities and corporate bonds.

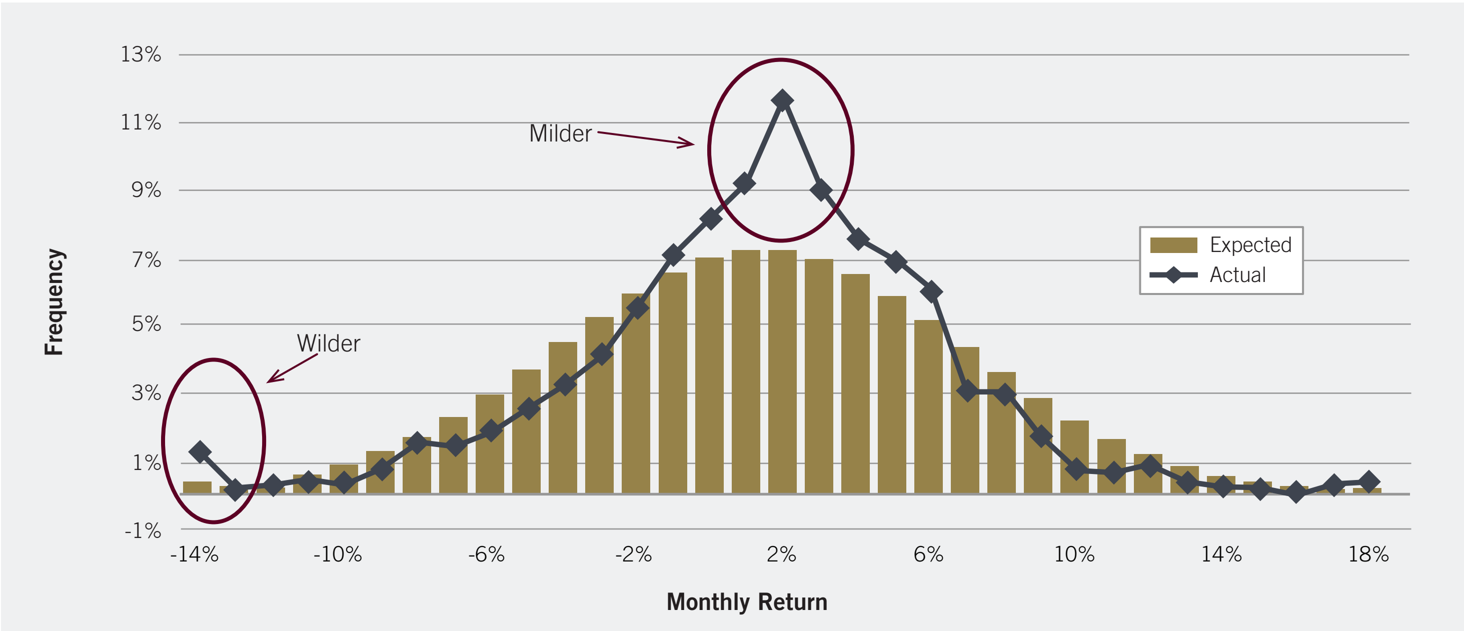
Over the short term, equities can be volatile; however, over a longer time horizon—one more representative of an average retirement investment cycle—returns have been more predictable.

Actual monthly equity returns have been different than expected by a traditional bell-shaped distribution.[18] As Exhibit 4 on the following page shows, the blue line showing actual returns has been *milder* and *wilder* than expectations. Note the narrow peak at the median and sharp, upward spike at the far left.

[17] Automatic escalate programs increase individuals savings rate over time and are often linked to pay increases. Pay increases continue until they reach a predetermined level or the employee opt-out. According to Benartzi & Thaler, "…employees who elected to join (and 78 percent of those offered the plan did) ended up almost quadrupling their savings rate from 3.5 percent to 13.6 percent in slightly less than four years."

[18] To learn more, please see "Back to the Future: Conventional Investing in a Complex World" by Robert Maynard.

Exhibit 4: Expected vs. Actual Frequency of Monthly Returns for U.S. Stocks (1926–2011)

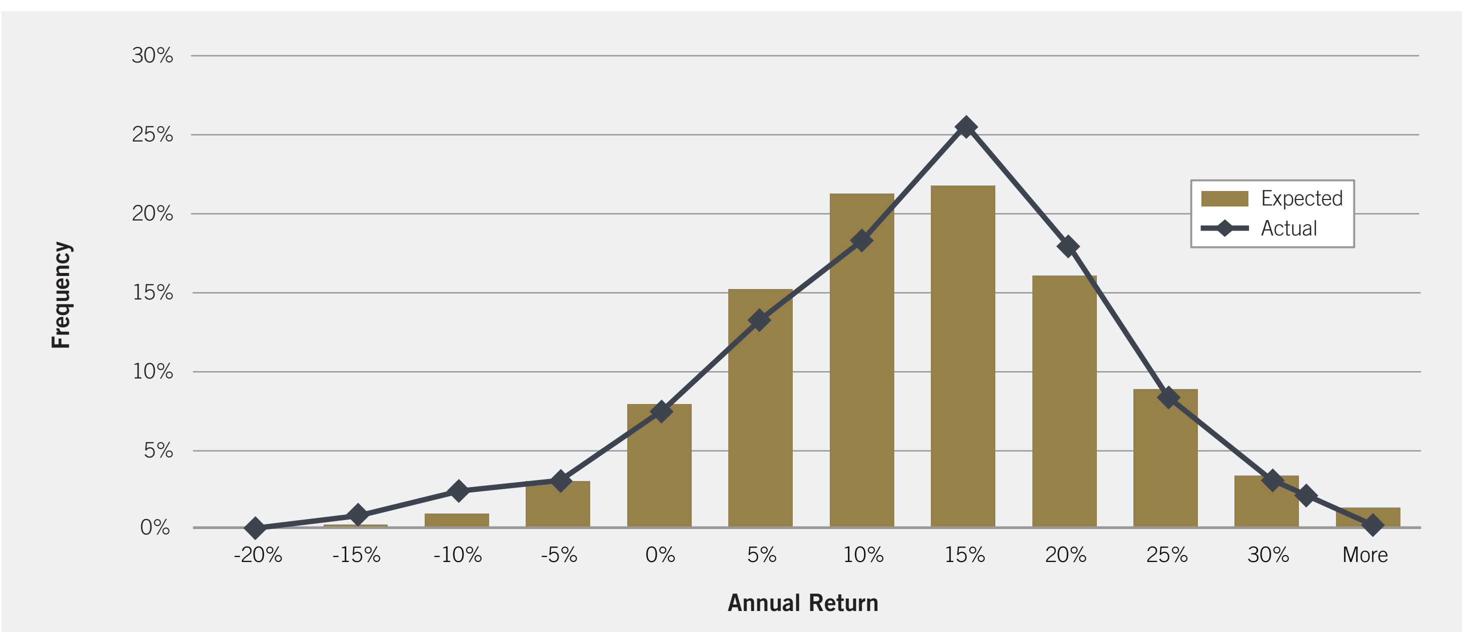


Source: Actual returns from Ibbotson's *Stocks, Bonds Bills and Inflation*, as of 12/31/2011. Expected returns were generated under the assumptions of a normal distribution using Ibbotson data. Past performance is not a guarantee of future results.

Actual returns tended to have a higher frequency of modest returns, creating a false sense of calm. While the outliers or fat tail events were far less common, they did great short-term damage—both financially and psychologically.

However, volatility fades over time. Exhibit 5 shows that annualized five-year rolling stock returns were more consistent with expected returns.

Exhibit 5: Expected vs. Actual Frequency of Annualized, Five-Year Rolling Returns (1926–2011)



Rolling periods represent a series of overlapping, smaller time periods within a single, longer-term time period. A hypothetical example is the 20-year time period from 12/31/1982 through 12/31/2002. This long-term period consists of 16 smaller five-year "rolling" segments. The first segment is the five-year period from 12/31/1982 to 12/31/1987. The next rolling segment is the five-year period from12/31/1983 to 12/31/1988, and so on.

Source: Actual returns from Ibbotson's *Stocks, Bonds Bills and Inflation*, as of 12/31/2011. Expected returns were generated under the assumptions of a normal distribution using Ibbotson data. Past performance is not a guarantee of future results.

For those who can see past short-term volatility, evidence indicates that equities, for example, can display return patterns in line with long-term expectations. The key to realizing these returns has been patience.

Strong performance for equities and higher interest rates pushed up funding levels for aggregate pension plans significantly in 2013, Towers Watson reports.[19] Exhibit 6 shows that aggregate pension plan funding is estimated to be the highest it has been since the financial crisis began in 2008.[20]

... the average mutual fund investor achieves results well below the overall market, largely because they are following the crowd—buying high and selling low.

Exhibit 6: Fortune 1000 Aggregate Pension Plan Funding Levels

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013*
Funding Level	89%	90%	91%	99%	106%	77%	81%	84%	78%	77%	93%

* estimated
Source: Towers Watson

The difficulty, especially for individuals managing their own retirement plans, is maintaining a disciplined long-term approach.

Disciplined Professional Management Can Make a Difference

Theoretically, DC plans can provide adequate income in retirement. DC success depends on individuals having the expertise and temperament to manage assets wisely; however, most do not.

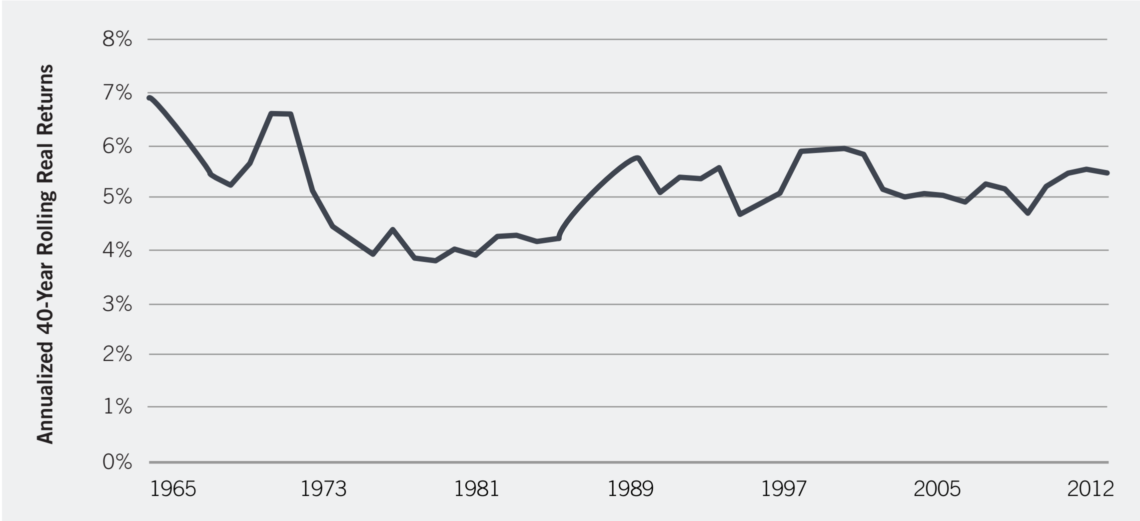
Annual studies by Dalbar show consistently that the average mutual fund investor achieves results well below the overall market, largely because they are following the crowd—buying high and selling low. For the 20 years through 2012, Dalbar reports an annual 5.9% shortfall.[21]

Professional management minimizes individuals' behavioral mistakes and helps retain focus on the long term.

Bob Maynard, CIO of the Idaho Public Employees Retirement System and Brandes Institute Advisory Board member, suggests that retirement plans should be built to survive short-term volatility in order to reach calmer and more predictable long-term returns. Instead of trying to squeeze out short-term gains, Maynard believes retirement plans need to focus on the long term. He suggests plans should aim to provide a return of 4.0% above inflation over the long term—an achievable goal when considering an investment horizon of several decades. Exhibit 7, on the following page, shows a simple 65/35 equity/bond portfolio from 1926 to 2012 averaged a 5.1% real return over rolling 40-year periods, dipping below 4% only four out of 48 rolling periods.

[19] Towers Watson, "Corporate Pension Plan Funding Levels Increased Sharply in 2013" January 2, 2014
[20] Ibid
[21] DALBAR, Inc., "Quantitative Analysis of Investor Behavior" 2013

Exhibit 7: 40-Year Real Returns for 65% Equity, 35% Bond Portfolio (1926-2012)



Source: U.S. stocks returns represented by data from Ibbotson Associates via Morningstar. Long-term U.S. Government bonds represented by data from Ibbotson Associates via FactSet through yearend 2005 and the Barclays U.S. Treasury 20+ Year Index from 2006 to yearend 2012. Performance is for the period January 1926 to December 2012. Past performance is not guarantee of future results. Once cannot invest directly in an index. Rolling periods represent a series of overlapping, smaller time periods within a single, longer-term time period. For example, over the illustrated 87-year period, there are 48 40-year rolling periods, with the first one running from 1926 through 1965, the next running from 1927 through 1966, and so on.

Even when planning responsibly, an individual without a lifetime benefit is forced to prepare for extremes to avoid running out of money in retirement.

Hybrids Can Counteract Financial Risks Created by Longer Lifespans

Increased life expectancy for participants can strain resources for plan sponsors and participants. For traditional DB plans, sponsors must assume additional costs to provide benefits for a generation of retirees who are living longer. On the other hand, DC participants run a real risk of outliving their assets. How should we respond?

Hybrid plans, like Secure Choice and USA Retirement Funds, minimize longevity risk for participants by pooling individual risk when providing lifetime income benefits. Even when planning responsibly, an individual without a lifetime benefit is forced to prepare for extremes to avoid running out of money in retirement.

A collective approach allows a plan to focus on maximizing returns over a very long term so it can retain more "risky assets," such as equities and high-yield corporate bonds.

Acceptable Compromises and Long-term Solutions

This paper does not seek to dismiss any particular retirement structure. Any strategy could succeed with sufficient contributions and investment earnings. Instead, we have presented how hybrid plans can address key gaps in our retirement system.

Approximately half of U.S. workers (about 78 million) still do not have *any* retirement plan.[22] So the first goal should be to provide greater inclusion. For new hybrid plans, including more participants should theoretically reduce fixed costs and create economies of scale; reducing the cost of benefits. More coverage would also reduce the percentage of retirees that will need additional support from social programs or family members in their advanced years.

As baby-boomers leave the workforce, the retirement gap will gain more attention, demanding action from private companies and legislators. This trend will highlight the importance of deferred compensation and could increase the value of retirement plans in attracting and keeping talented staff.

[22] Richard H. Thaler and Shlomo Benartzi "Behavioral Economics and Retirement Savings Crisis," March 2013

As hybrid plans grow, we do *not* foresee traditional DB and DC plans disappearing. Traditional DB plans, assuming they can maintain sustainable funding levels, will continue to provide excellent benefits. DC plans may revert more to their original purpose: tax-deferred savings that *supplement* retirement benefits. Combining a DC plan with a hybrid plan could create a tiered system that generates a minimum lifetime benefit with an additional savings option.

Finally, and fundamentally, any solution must aim for significantly higher long-term returns than today's government bond yields. Otherwise, DC retirees may need to cut spending materially as they age or may even exhaust their savings and DB plans may be forced to accept increasing funding deficits.

Failure to act may have negative consequences that spread significantly and place a financial burden on future taxpayers. The plan sponsor community is uniquely positioned to foster hybrid plan development as an alternative or complement to savings plans in order to balance cost and risk appropriately.

Barry M. Gillman, CFA, Research Director of the Brandes Institute Advisory Board, is a principal owner of Longevity Financial Consulting, a source of some research in this report.

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