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Glide Path

Ten Years Later: What have Target Date Funds Learned About Recessions and 401(k) Plans?

The global financial crisis is more than ten years in the rear-view mirror and equity markets have reached new highs. A spurt of volatility at the end of 2018 reminded us just how painful a 10% drawdown in one month can feel, especially to a participant who was set to retire on December 31. It leads us to ask the question: just how much equity risk is appropriate in the home stretch of retirement savings? And what can target date funds do to mitigate the effects of potential bear markets in those critical years?

In this paper we will:

1. Review the impact of 2008 on retirement plans and what asset managers have done to address the potential for prolonged bear markets to recur
2. Discuss demographic and behavioral shifts that have the potential to destabilize the target date fund landscape
3. Examine the glide path in relation to participant "ideals" for a confident retirement:
   - Highest potential portfolio value at retirement
   - Lower risk of sharp declines in any given year, especially right before retirement
   - Higher likelihood of achieving a sustainable retirement income
4. Consider what a glide path can and should offer participants in view of these ideals and in relation to the realities of today's workplace and economic environment.

From 8% to 65% and everything in between

Target date strategies form the backbone of many Americans' retirement plans. But just because two funds have the same target date doesn't mean their portfolios are alike. Asset managers take different approaches; particularly around the amount of equity that participants are exposed to at various points in their retirement savings life cycle:

- At age 25, equity exposure can range from 75 to 100%.
- At age 65, equity exposure can range from 8% to 65%.

The severity of the 2008–2009 bear market provided a wakeup call to the industry, so it is imperative that plan sponsors understand the three key differences among the target date fund options available.

1. **Glide path**
   The glide path—the asset allocation track through time—is the most important element as it indicates how the asset mix will change over time without any action from the participant.
2. **Asset mix**
   The combination of asset classes can have a big impact on the return—and volatility—as exposure to equities in bull markets can drive returns, but in bear markets can prove highly volatile. Diversification by geography, style, and factor mix can also be important in smoothing out returns across markets.
3. **Underlying funds**
   Variations include closed vs. open architecture, active vs. passive management (or sometimes both), value and growth investing biases, and market capitalization tilts.

> **"77% of investors surveyed want to protect their portfolios from significant losses, even if it means underperforming the market."[1]**

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The lost decade for plan participants

The bear market that resulted from the piercing of the technology bubble in 2000 was only a prelude to the stock market declines suffered during 2008. Together, they rendered the 2000s a "lost decade" for equity investors in general, and knocked the stuffing out of the retirement savings of many new and near retirees.

Hardest hit were those invested in 2010 target date funds which lost an average of 22.78% during that year.[2] (The highest one-year loss was 41%.) Those investors likely found themselves facing harsh choices, as assumptions built into their target date funds did not live up to expectations.

The short reason: target date funds of the day had no flexibility to retreat from impending losses. The ability to reduce equity risk beyond a tactical allowance (usually +/-5% or +/-10%) is set by the fund's prospectus—and regardless of whether they invested in active funds, passive funds, or a mix of both—those restrictions left them at the mercy of market forces.

The financial crisis also unearthed another risk: bonds weren't necessarily a safe place to hide, either. Where some target date funds held short-term bond funds, others held riskier high-yield bond funds, which can move in the same direction as equities and therefore can carry the same risks as equity.

What have asset managers done to address the risk of loss in the intervening ten years?

While there is no crystal ball that can predict the degree and longevity of drawdowns in equity markets around the world, we believe there are indicators—global economic slowdown, credit concerns, heightened political tensions and everything in between—that if quantitatively analyzed together relative to historical patterns, may be able to signal that rocky roads lay ahead.

For example, specific and measurable indicators for market volatility, macro-economic cycles, credit, and liquidity can potentially be quantitatively combined to capture the pulse of several asset classes, acting as a barometric signal.

One such quantitative model, developed by Franklin Systematic™, combines several significant economic and market event measures to identify a pattern of heightened market risk.

The model flags the pattern for target date managers, who can then examine the signals and determine whether they believe them to be "noise" or worth acting on. (Exhibit 1).

Predicting the potential for increased market risk is one thing; having the built-in flexibility to do something about it—beyond an allowable tactical range—is another. Plan sponsors should look for a prospectus that defines a "Plan B" in writing—the flexibility to switch to a more defensive glide path when the barometer indicates a potential storm in the offing.

Exhibit 1: Hypothetical Quantitative "Risk Signal Model"

Period	# of days	Notes on the global economic backdrop
May 2000–June 2000	43	Dot-com bubble bursts
December 2000–May 2001	109	Turkish economic crisis and IMF bailout in exchange for banking reforms
October 2001–February 2002	91	Post-9/11 terrorist attacks: oil prices fall; economy contracts
July 2002–November 2002	106	Stock market selloff and outbreak of accounting scandals
July 2007–May 2008	218	Bursting of the housing bubble, sharp spike in mortgage defaults
September 2008–April 2009	138	Bear Stearns and Lehman Bros bankruptcy
February 2016–April 2016	38	Global growth fears; Energy and material sector earnings recession

WHAT CAN ASSET MANAGERS DO?

No one can time the markets, but quantitative and computational finance has progressed to a high level of sophistication so that systematic models may indicate when conditions are aligning for a potential bear market or sustained market turbulence.

Upon reading such a model signal, portfolio managers have the opportunity to reduce equity exposure for the duration of the "risk off" signal—in effect creating a "defensive" glide path that can reduce downside risk and protect the assets of older participants when they need it most.

Conversely when those signals are no longer present, the model can flag for portfolio managers to return to the neutral glide path—business as usual.

Asset managers can build these tools into their glide path and make provisions in the target date fund's prospectus to respond when bear market signals are flashing.

There can be no assurance that the defensive glide path will accurately predict any economic regime change.

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Evolving behavior and expectations

In addition to having a defensive option for asset allocation, recent developments in participant behavior and expectations for retirement should also be applied to glide path development.

While it would be ideal to be able to address a participant's individual needs and career path, it is still helpful to recognize that participants enter distinct phases of their retirement savings life cycle in which they have shared demographic characteristics, goals, and risks. (Exhibit 2)

Accumulation Phase (Age 25–45)

Savings rate during the early working years is arguably the most important factor for long-term asset growth. The effect of compounding is significant, as is staying invested even during stressed markets since the runway to retirement has historically offered significant room for recovery of any losses.

At this stage, the risk of insufficient savings is not one that asset managers can control. Plan sponsors must do their part to encourage participants to contribute to the maximums allowed, offer matching contributions, and communicate the importance of staying invested despite short-term challenges.

Consolidation Phase (Age 45–55)

After the age of 45, participant goals begin to shift away from pure growth to a balance between growth and risk mitigation. As Exhibit 3 shows, after age 50, "financial capital" starts to outweigh "human capital", or in layman's terms, the runway to retirement begins to shorten (human capital) while financial resources begin to compound (financial capital). It's after this crossover point—between human and financial capital—that the impact of market correction is most acutely felt and the ability of asset managers to protect capital from loss is the most critical.[3]

Transition Phase (Age 55–70)

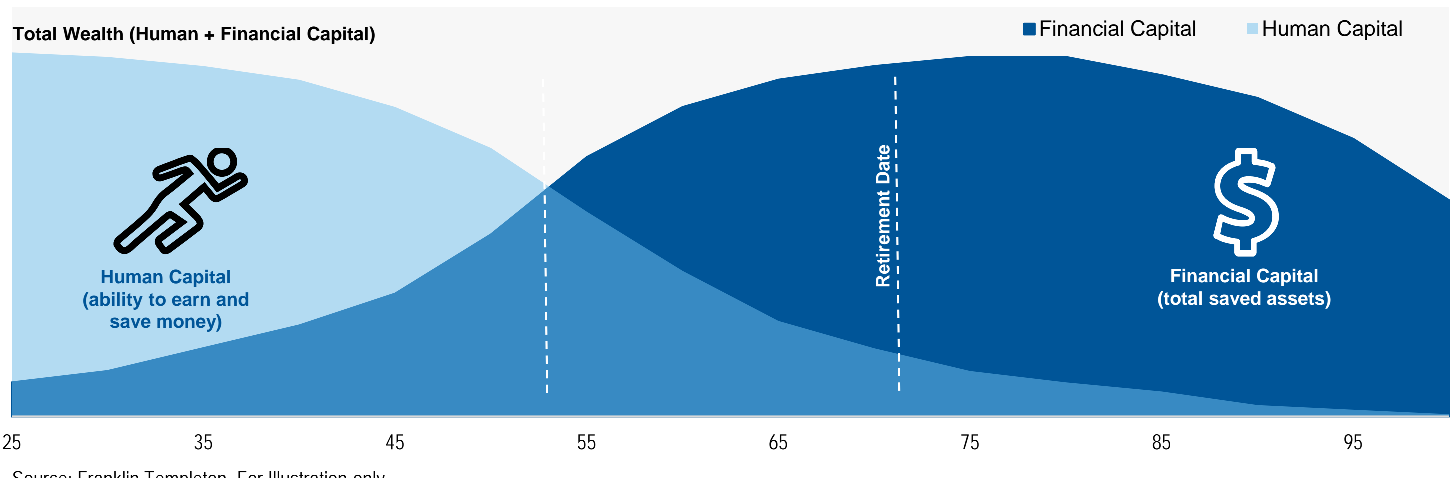
As human capital begins to diminish—the home stretch of retirement savings—the participant "utility function" becomes more asymmetric—meaning that the joy of a $1 gain is not enough to offset the pain of a $1 loss. This loss aversion bias is why allocation to risky assets decreases rapidly near retirement, even though markets may be heated and returns plentiful.

This is where having a defensive option, as described above, should be available to the target date fund manager. Any sharp drawdown at this point can be painful and have long-term effects on retirement confidence.

Exhibit 2: Phases of Retirement Savings Life Cycle

Life Stage	Participant Goals	Key Risks	
Accumulation **Ages 25–45**	• Maximize capital appreciation	• Insufficient savings	If key risks are left unaddressed, they magnify the risks in later life stages
Consolidation **Ages 45–55**	• Balance growth and risk	• Low returns	• Volatility
Transition **Ages 55–70**	• Reduce risk • Protect assets	• Inflation	• Significant market drawdowns
Income **Age 70+**	• Income strategy • Protect assets	• Inflation	• Unexpected costs • Outliving assets

Exhibit 3: Human Capital vs Financial Capital Framework



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Income Phase (Age 70+)

In the final stages of the retirement savings life cycle when financial capital is at its peak and human capital is waning, participants will begin retirement—whether partially, fully, or temporarily—and begin drawing an income from their retirement savings. Key financial risks during this phase include:

Inflation—with life expectancy increasing, a participant retiring at age 70 could potentially need a retirement income for 20+ years. Even at a modest rate of inflation at 2% over 20 years, financial capital will lose almost 50% of its purchasing power.

Unexpected costs—medical costs, elderly parents, memory care, boomerang kids, critical illness, mortgage debt, and even divorce can derail even the most sensible retirement plan.

Outliving one's assets—known in actuarial circles as "longevity risk", is a compound impact of the key risks throughout the retirement savings journey: insufficient savings in the accumulation stage, volatile markets during the consolidation and transition phases, inflation, unexpected costs, and increased life expectancy.

The changing face of retirement

Although "retirement at age 65" may still sound ideal, for most Americans the reality may be quite different. A Pew Charitable Trusts survey released in November 2018 showed that nearly two thirds of Americans over the age of 36 expect to be working beyond age 65.[4] In our view, the reasons for that diminishing ideal are a combination of behavioral and demographic trends that boil down to three basic reasons outlined in Exhibit 4.

"70 is the new 65"

It's not just younger generations that expect to work beyond age 65. It's a phenomenon that's already in full swing. The Bureau of Labor Statistics reports that in 2016, more than 30% of Americans age 65 to 69 were still in the labor force. That number is projected to increase to more than 35% in 2026.[5] (Exhibit 5)

While the majority (67%) of Americans over 55 may be planning to work for financial need, the wide variety of options available to older workers today—contract work, part time work, gig economy, self-employment—will keep many engaged quite simply because they want to or enjoy it (33%).[6]

"Retirement Confidence" is not common

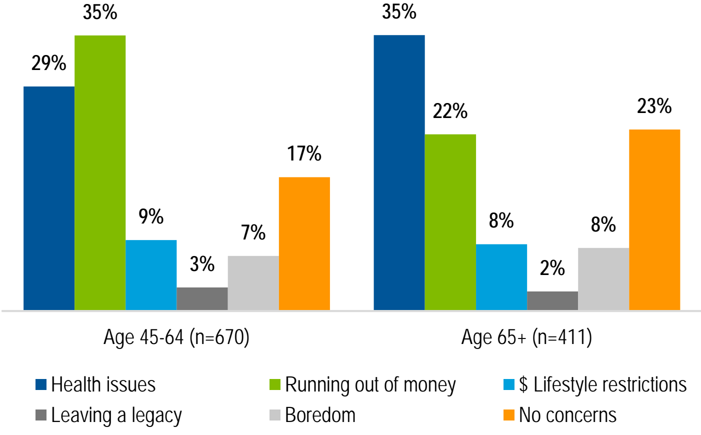
Still others may decide to delay retirement because of financial worry, topped by fears of running out of money, health issues, paying off debt.[6] (Exhibit 6)

Exhibit 5: Participation in the Workplace After Age 60 (American Population)

Age	1996	2016	2016	2026 (projected)
60 to 64	45.8%	52.5%	55.8%	59.6%
65 to 69	21.9%	32.2%	32.2%	36.6%
70 to 74	12.5%	17.0%	17.0%	22.7%
75+	4.7%	6.4%	6.4%	10.8%

Source: Bureau of Labor Statistics

Exhibit 6: Health and Financial Worries Top the List of Retirement Concerns



Source: Franklin Templeton Retirement Income Strategies and Expectations (RISE) Survey[6]

Exhibit 4: Behavior and Demographic Trends in Retirement

Insufficient Savings	• Under-contributing to 401(k) • Not taking advantage of employer matching • Withdrawing before retirement • Housing cost / debt payments	42% of Americans age 65+ have less than $100,000 of retirement savings[6]
Rising Age for Social Security Eligibility	• Those born after 1960 won't receive full benefits until age 67 • Further increases in eligibility age may be considered by Congress in the future	20% of Americans are counting on Social Security as their top source of retirement income[6]
Increasing Life Expectancy	• Retirement savings will likely need to last 25 years or more for most Americans reaching 65 today	Over 40% of today's 40-year-old women will live to age 90 or beyond (25% for men)[7]

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The Income Years

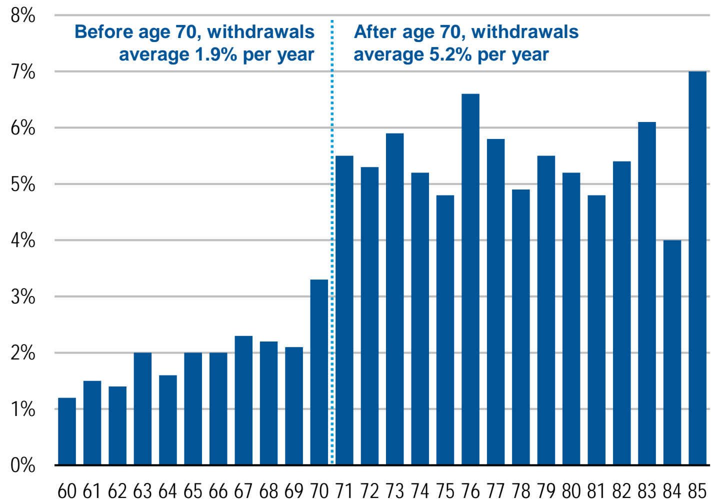
In the years leading up to retirement, participants are accustomed to a lifetime of saving for specific goals and having the opportunity to continue to replenish earnings after a period of market downturn. In the home stretch of retirement savings, facing uncertain life expectancy and healthcare costs, it's no surprise that Americans hold back on withdrawing retirement savings for as long as possible. In an exhaustive multi-year study sponsored by the US Social Security Administration and the National Bureau of Economic Research, researchers Poterba, Venti and Wise found that withdrawals from personal retirement accounts averaged 1.9% per year before age 70, but after age 70 jumped to average 5.2% per year, coinciding with the Required Minimum Distribution age. (Exhibit 7) This research, conducted before the increased age of eligibility for Social Security, should magnify the statistics in any follow-up study, in our view.

Americans Lack a Confident Strategy for Spending in Retirement

With the demographic and economic realities facing retirees today, we believe that concerns about healthcare, lifestyle and spending habits diminish an overall sense of retirement confidence.

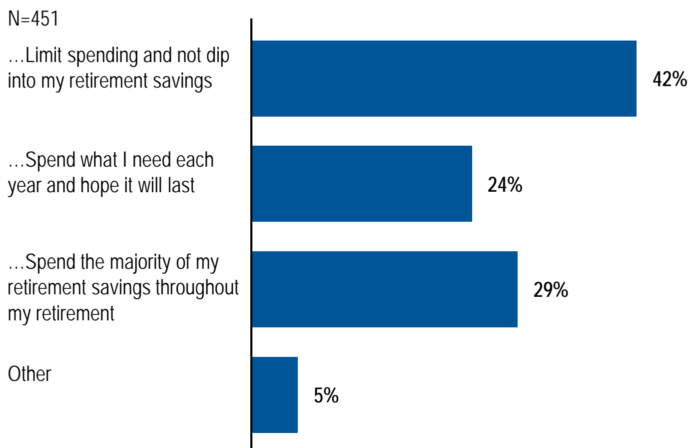
In a 2019 online study by Franklin Templeton, only 42% of retired respondents had a sustainable plan for spending in retirement. The balance of respondents "hope" that their savings will support their spending, or perhaps simply accept that their savings may be fully depleted in their lifetime. (Exhibit 8)

Exhibit 7: Americans Hold Back on Withdrawing Retirement Savings



Source: ©2011 by James M. Poterba, Steven F. Venti, and David A. Wise, National Bureau of Economic Research. Research was supported by the U.S. Social Security Administration and the National Bureau of Economic Research as part of the SSA Retirement Research Consortium.

Exhibit 8: Strategy for Retirement Savings Withdrawal



Source: Franklin Templeton Retirement Income Strategies and Expectations (RISE) survey 2019 was conducted online among a sample of 2,002 adults (1,000 men and 1,002 women) 18 years of age or older.

What Can a Glide Path Do?

We believe it's critical to understand participant needs to generate enough assets for retirement (reducing shortfall risk) and to deliver adequate income streams throughout retirement (addressing the longevity risk that a participant could outlive his or her assets). A target date philosophy can combine:

1. A research-based approach to glide path construction that balances participant goals and risks throughout their retirement savings life cycle. (Exhibit 9)
2. Asset allocation tailored to each distinct phase of the retirement journey with an emphasis on transition and income phases when investors become more vulnerable to significant market drawdowns as their runway to retirement shortens. We believe a glide path should also be informed by a quantitative model to signal potential bear markets, allowing managers to retreat to a defensive glide path to wait out the return to bull market conditions. (Exhibit 9)
3. A landing point at age 70 to capture the reality of retiree withdrawal and spending habits coinciding with the Requirement Minimum Distribution Age. (Exhibit 9)
4. The ability to convert retirement capital to an income stream by investing in income-generating assets and setting up a managed payout structure. (Exhibit 9)

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Need to Grow

In general, younger participants have the most potential to generate income and accumulate wealth and therefore have a higher risk tolerance. Return generation is key and a glide path can focus on higher equity allocations with diversification within various regions and sectors.

Need to Defend

As the glide path begins to steepen, managers shift from a capital markets theory-based approach to a focus on greater sub-asset allocation decisions to balance return potential while preserving wealth. Asset and sub-asset class allocation matters here, such as duration positioning for bonds or exposure to small-cap stocks, which tend to be more volatile but offer greater return potential. Capital Market Expectations have a strong influence at this point. Of course, the flexibility to tactically shift the strategic asset allocation (+/-%) is also critical to reflect short-term views.

In addition to the flexibility to reduce equity exposure in a meaningful way during turbulent and bear markets, asset allocation at this stage might typically shift toward:

- increased home country bias
- less volatile equities
- stocks with better downside capture
- shorter duration bonds given the potential for interest rate sensitivity to balance growth potential while managing the possibility of drawdowns.

Need to Reach

Given quantitative research showing the biggest jump in withdrawals from personal retirement accounts after age 70, we believe a target date glide path should continue with added equity exposure until at least age 70.5 when required minimum distributions begin . This allows the participant to reach for incremental growth before taking an income.

Need to Sustain

Once a participant crosses the threshold to retirement, a target date provider and plan sponsor can eliminate “transition and portability risk”, which occurs when participants are unsure how to use savings to create a income stream in retirement. At this point, the capital balance can be rolled into a payout fund and regular income checks begin to be distributed. This approach aims to balance growth with a steady and sustainable income stream. In this case, the manager can dynamically weight asset class exposures and using efficient note structures.

Exhibit 9: What Can a Glidepath Do?

There can be no assurance that the defensive glide path will accurately predict any economic regime change.

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Beyond the Glide Path

In addition to the glide path, a fund manager can add value by:

1. Seeking to maximize return potential during the earliest wealth accumulation years of a participant's life.
2. Selecting active funds when they believe the benefits relative to cost are clear, or passive investments when they believe they will be most efficient.
3. Focusing on the critical, most vulnerable mid- and late-life stages by combining an active approach to sub-asset class allocation with a quantitative risk indicator that can prompt a shift into a defensive glidepath if needed.
4. Applying strategic asset allocation views that are fundamentally supported by annual capital market expectations research as well as dynamic asset class tilts based on short-term risks and opportunities.

Key Takeaways

Asset managers often differ about whether to use a "to" versus "through" glide path approach and debate the merits of where the most effective landing point is for investors nearing retirement.

We believe the argument should be much more robust and that plan sponsors and participants are looking for value, not just low costs.

Given the current market environment, key lessons learned from the experience of target date funds in 2009, and changes in participant behavior and expectations, we believe:

- The accumulation phase is best addressed by exposure to as much equity as possible to fuel the engine for long-term growth.
- "70 is the new 65", a behavioral shift that has adjusted our expectation of when participants are most likely to begin drawing an income from their retirement savings.
- Flexibility to address and respond to bear markets in the home stretch of retirement is critical to protecting capital when it matters most.
- Plan sponsors and participants alike appreciate the smooth transition to a payout strategy in retirement—creating a withdrawal schedule in line with required minimums.

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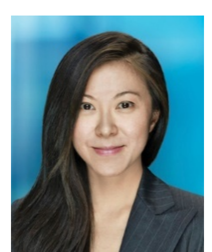

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RISE Survey methodology: The Franklin Templeton Retirement Income Strategies and Expectations (RISE) survey was conducted online among a sample of 2,002 adults comprising 1,000 men and 1,002 women 18 years of age or older. The survey was administered between January 17 and 28, 2019, by Engine's Online CARAVAN®, which is not affiliated with Franklin Templeton Investments. Data is weighted to gender, age, geographic region, education and race. The custom-designed weighting program assigns a weighting factor to the data based on current population statistics from the U.S. Census Bureau.

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