



CALLAN
ASSOCIATES

The Future of Target Date Funds

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What Type of DC Plan: Social Versus Market Norms

- **Social Norms**

- Having family over for Thanksgiving dinner.
- Moving a couch.
- Helping to change a flat tire.

- **Market Norms**

- Wages
- Prices
- Rents



Circle/Square Experiment



How many circles can be dragged over the squares in five minutes?

Source: Dan Ariely, Alfred P. Sloan Professor of Behavioral Economics at MIT



Outcomes

- **Group 1 → Paid \$5**
- **Group 2 → Paid 50 cents**
- **Group 3 → No money, favor**
- **Group 4 → Small Snickers bar**
- **Group 5 → Box of Godiva chocolates**

Source: Dan Ariely, Alfred P. Sloan Professor of Behavioral Economics at MIT



Outcomes

- **Group 1 → Paid \$5 → 159 circles**
- **Group 2 → Paid 50 cents → 101 circles**
- **Group 3 → No money, favor → 168 circles**
- **Group 4 → Small Snickers bar → 162 circles**
- **Group 5 → Box of Godiva chocolates → 169 circles**

Source: Dan Ariely, Alfred P. Sloan Professor of Behavioral Economics at MIT



Social Norms and Corporations

If corporations started thinking in terms of social norms, they would realize that these norms build loyalty—more important—make people want to extend themselves to the degree that corporations need today: to be flexible, concerned, and willing to pitch in.

Source: Dan Ariely, Alfred P. Sloan Professor of Behavioral Economics at MIT



What Type of DC Plan?

Market Norms:

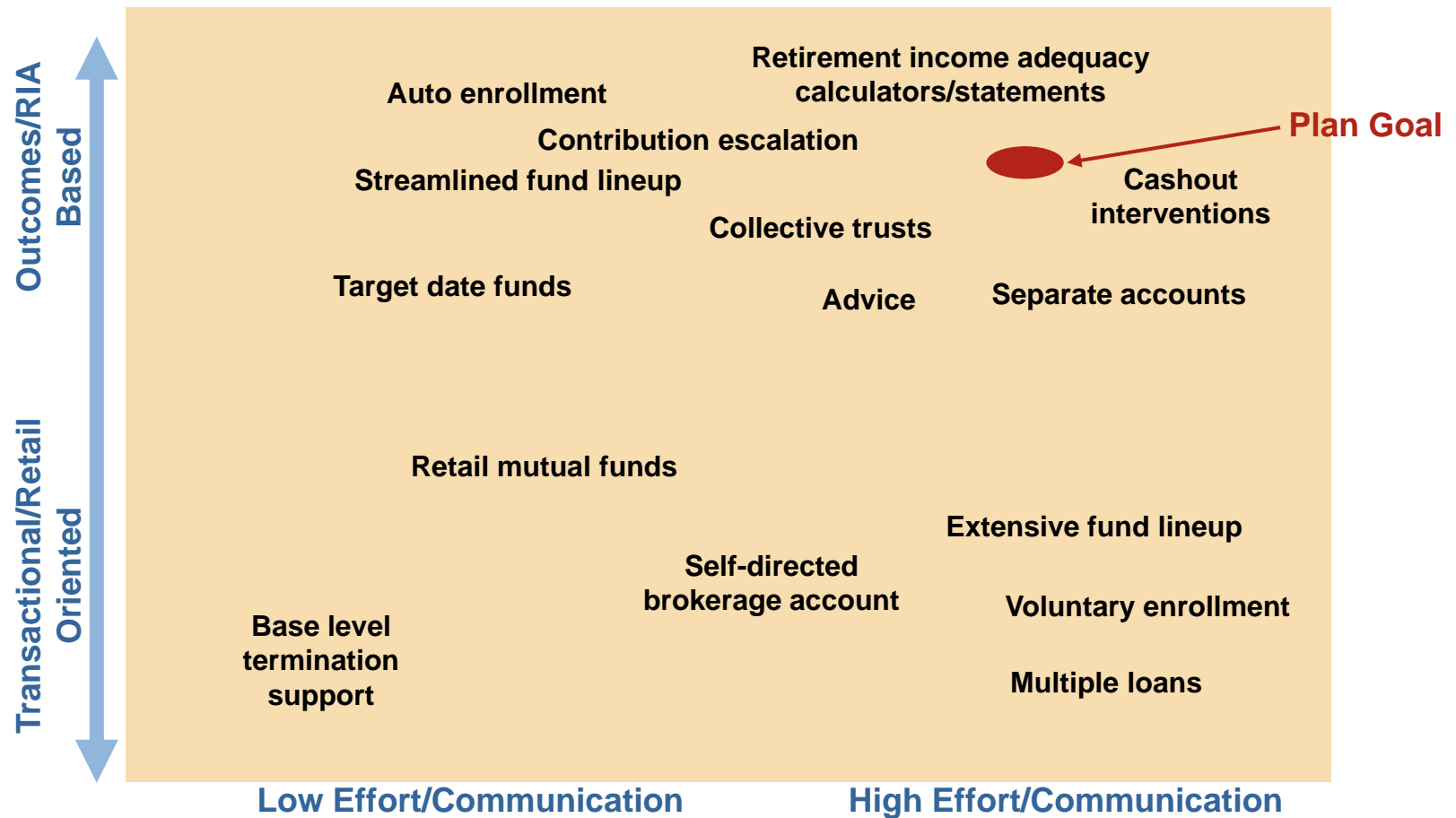
- **Transactional**
- **Attract and retain**
- **Promote match**
- **Focuses on accumulation**
- **Process is what matters**

Social Norms:

- **Relationship oriented**
- **Spans career**
- **Focused on retirement income adequacy**
- **Outcomes are what matters**



What Type of DC Plan?





Target Date Funds and the Outcomes-Based Approach

Traditional View

- Target date fund selection similar to selection of core funds.
- Often, target date fund of recordkeeper used—target date funds are a commodity.
- Little attention paid to glidepath.
- Keep QDIA a small target.

Alternative View

- Target date fund glidepaths vary widely, and are a key source of performance variation.
- Target date fund selection can drive retirement income adequacy—and will increasingly do so as a Qualified Default Investment Alternative.
- Retirement income adequacy analysis should be used in target date fund selection.



Outcomes Based Approach to TDFs

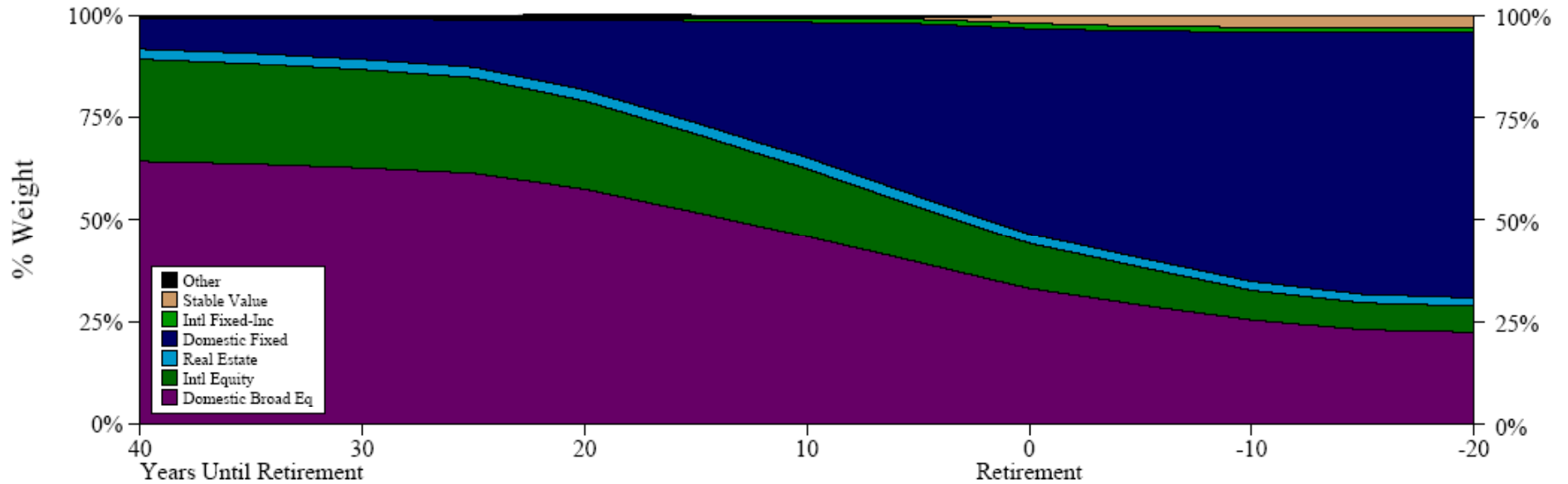
Outcomes-based approach asks three key questions about target date fund glidepaths:

- **What is the impact on retirement income replacement?**
- **What are the risk implications?**
- **How will participants fare during retirement?**



The Typical Target Date Fund Glidepath

Macro-Level Asset Allocation Glidepath - CAI Consensus Glidepath Idx





Forward-Looking Simulations

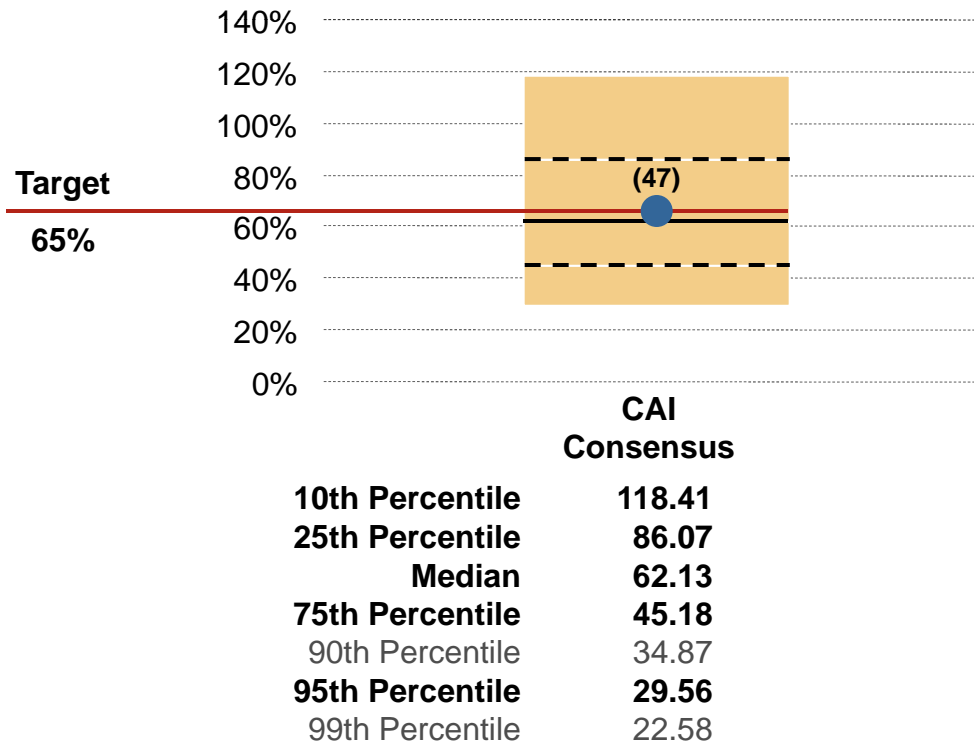
Assumptions

- **1,000 scenarios**
- **Starting salary of participant: \$25,000 at age 25**
- **Annual salary growth rate: 3.5%**
- **Aggregate annual contribution rate (plan sponsor and participant): 11%**
- **Life-only annuity: A static 5.5% interest rate and a 2.75% cost of living adjustment (COLA).**



Retirement Income Adequacy and the Average Glidepath

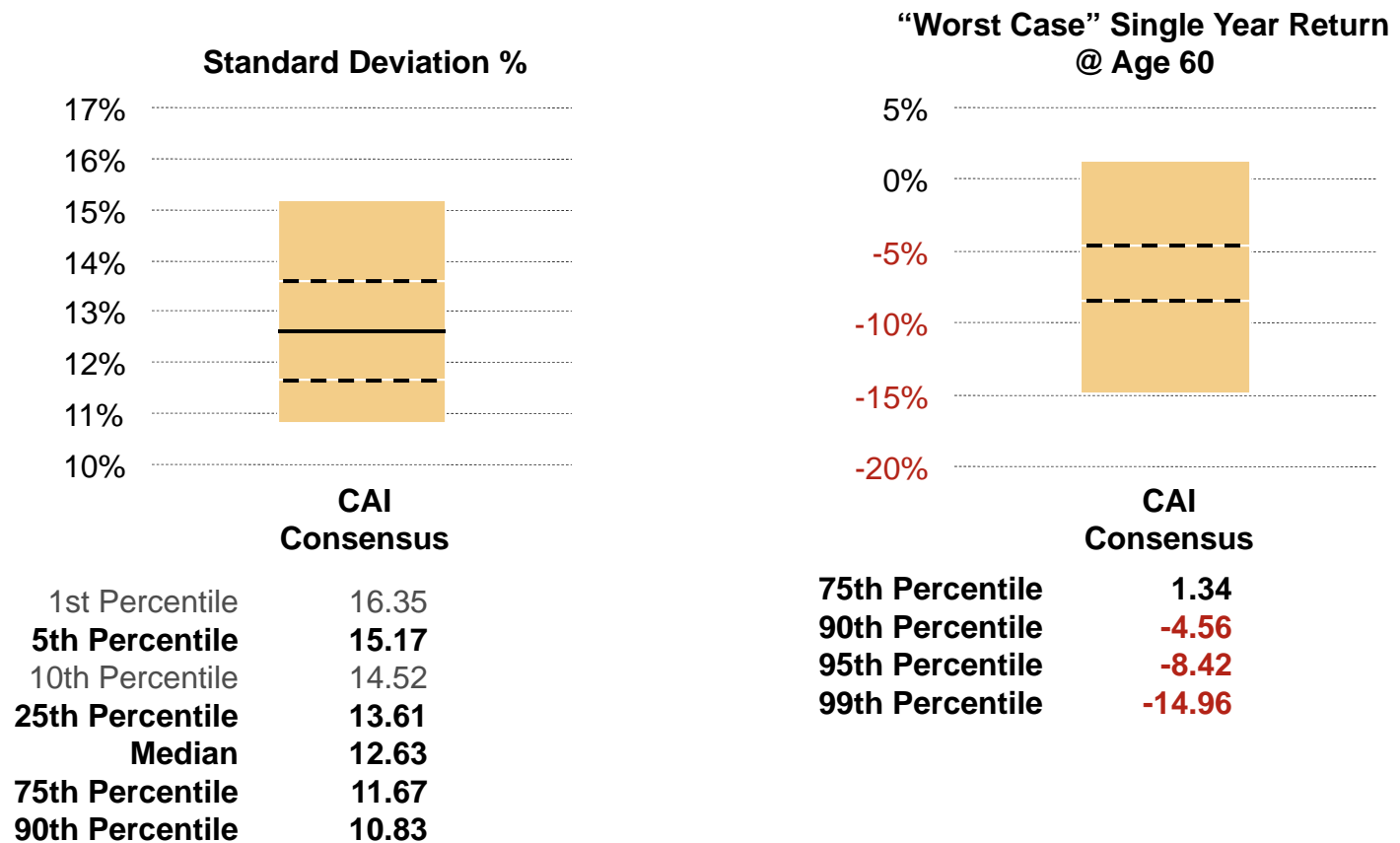
- The average glide path is expected to replace 62% of income at age 65 retirement.
- It has a 47% probability of replacing 65% of income.
- Worst case income replacement of 30%.





Risk and the Average Glidepath

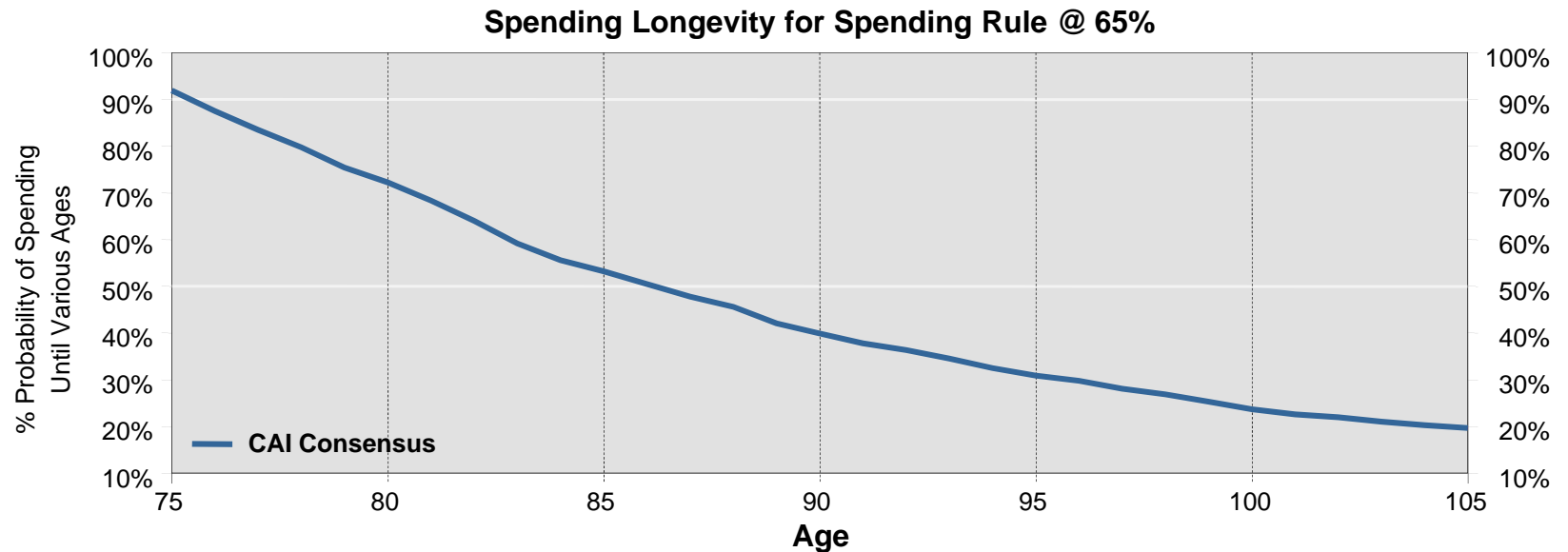
- The average glidepath has a median projected standard deviation of 12.63% and can be expected to lose nearly 15% in a worst case (99th percentile) scenario close to retirement.**





Longevity Risk and the Average Glidepath

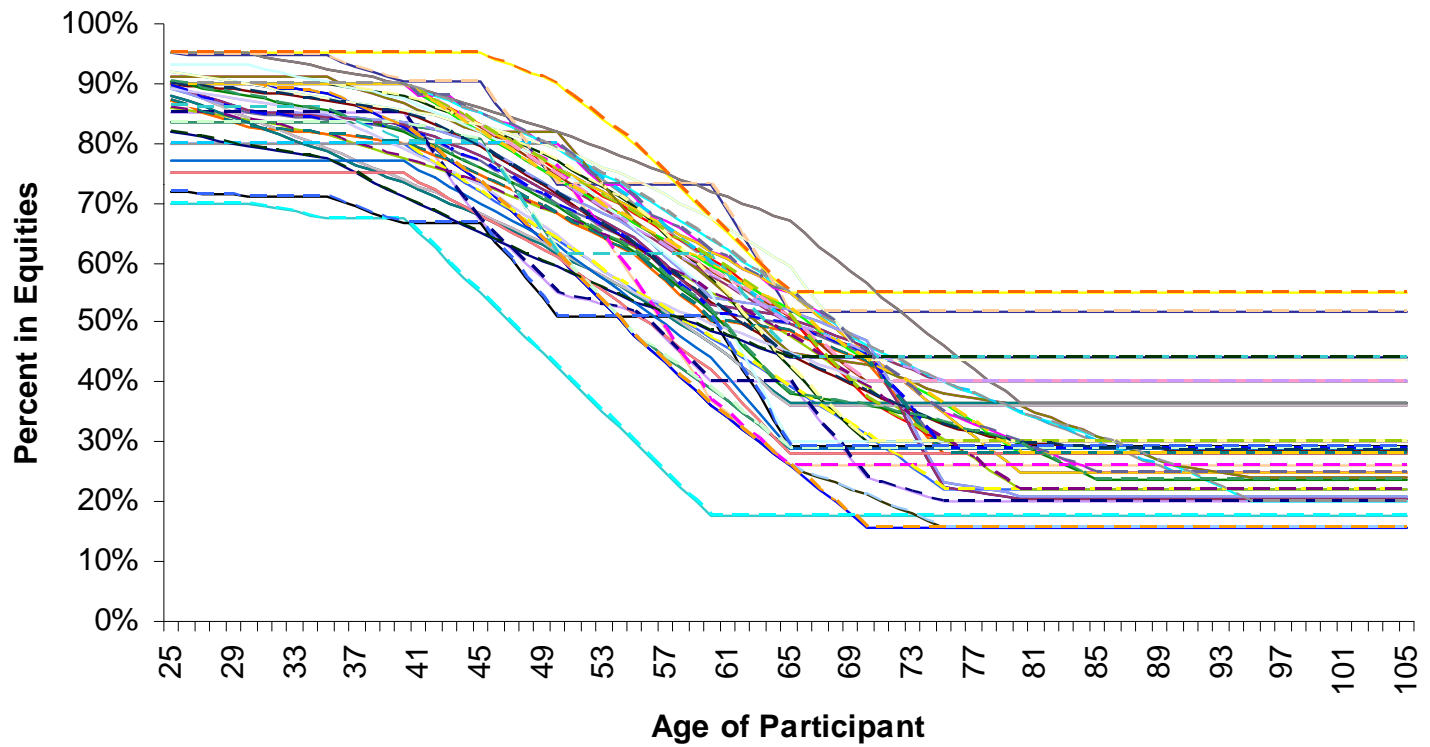
- **The average glidepath has a 54% chance of replacing 65% of pre-retirement income through age 85; a 33% of replacing 65% of pre-retirement income through age 95.**





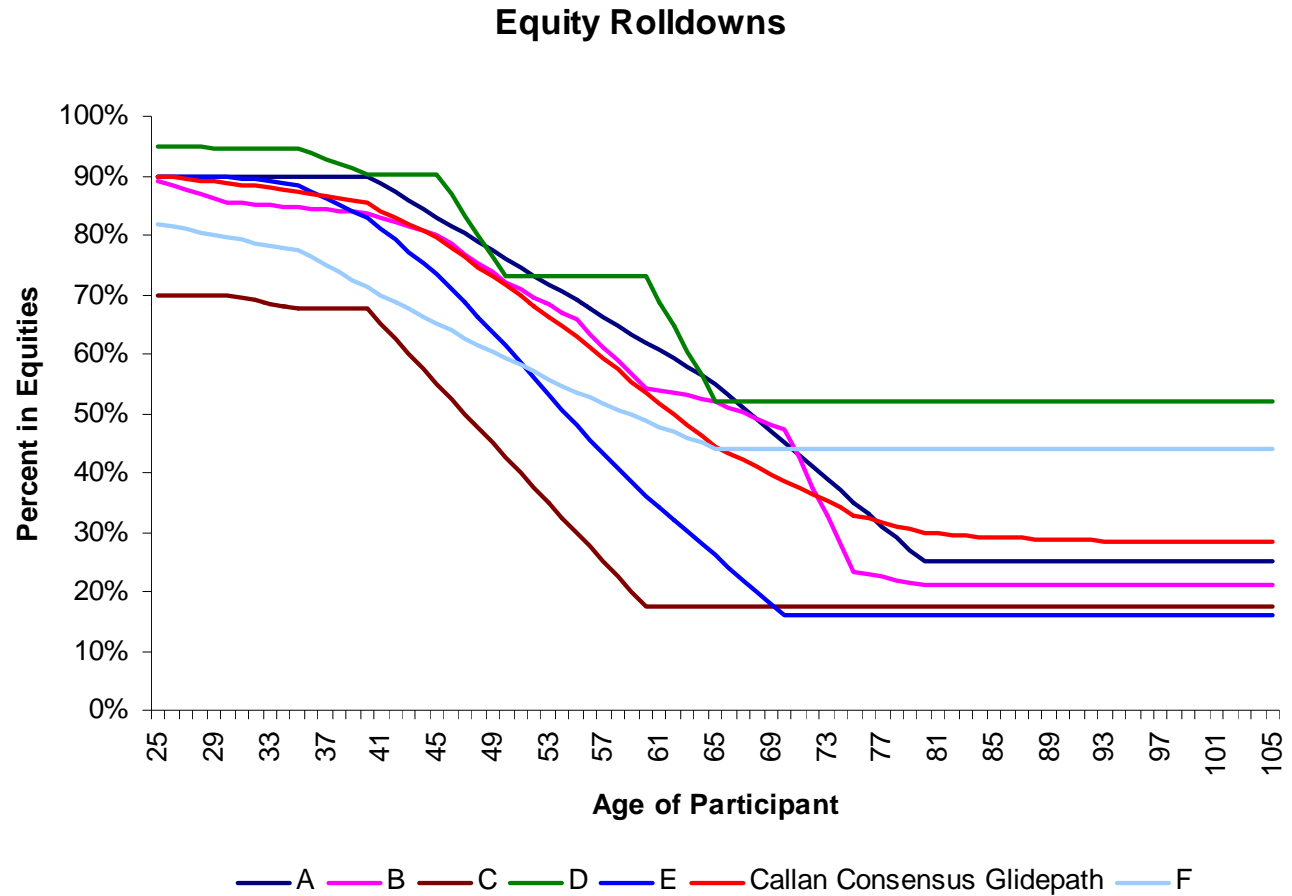
What if the Glidepath Isn't Average?

Equity Roll downs





What a Difference a Rolldown Makes

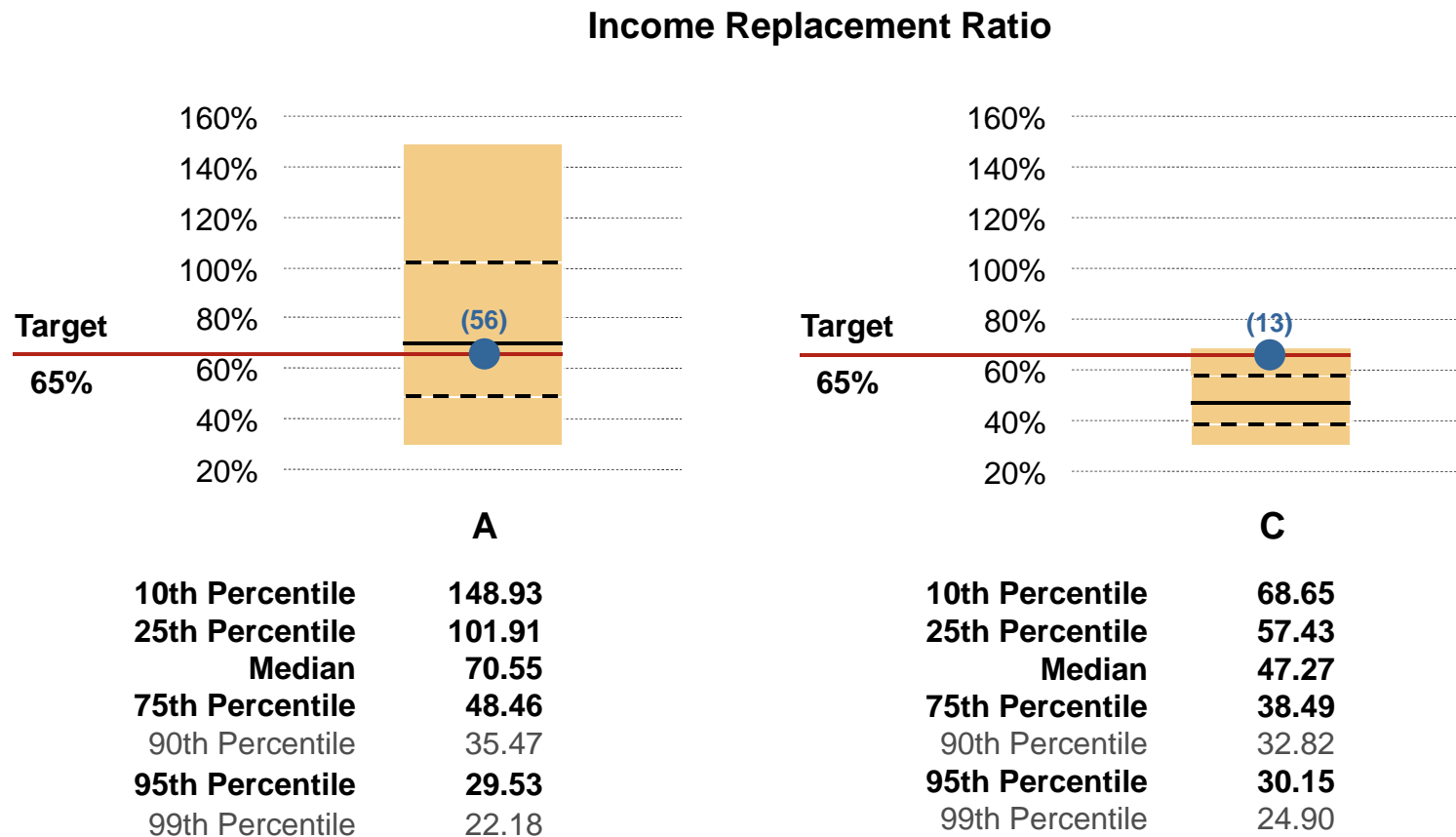


Average difference in equity allocation between A and C through age 65 is 29%.



Glide Path Differences Lead to Differences in Income Replacement Ratios

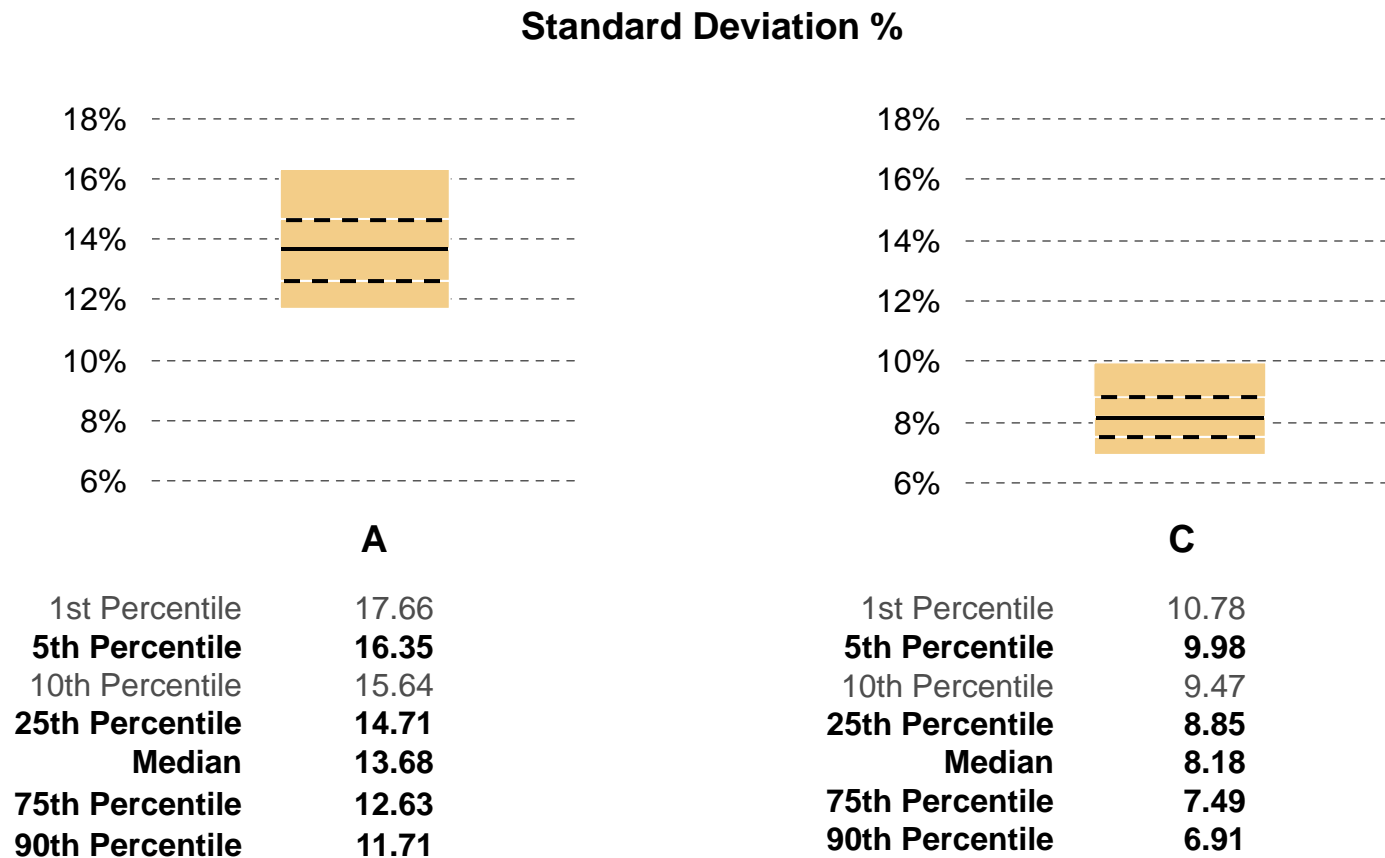
- Projected income replacement ratios can range from above 70% to as below 50% depending on the glidepath.





Glidepath Differences Lead to Differences in Risk

- The differences in income replacement projections are accompanied by differences in projected risk.

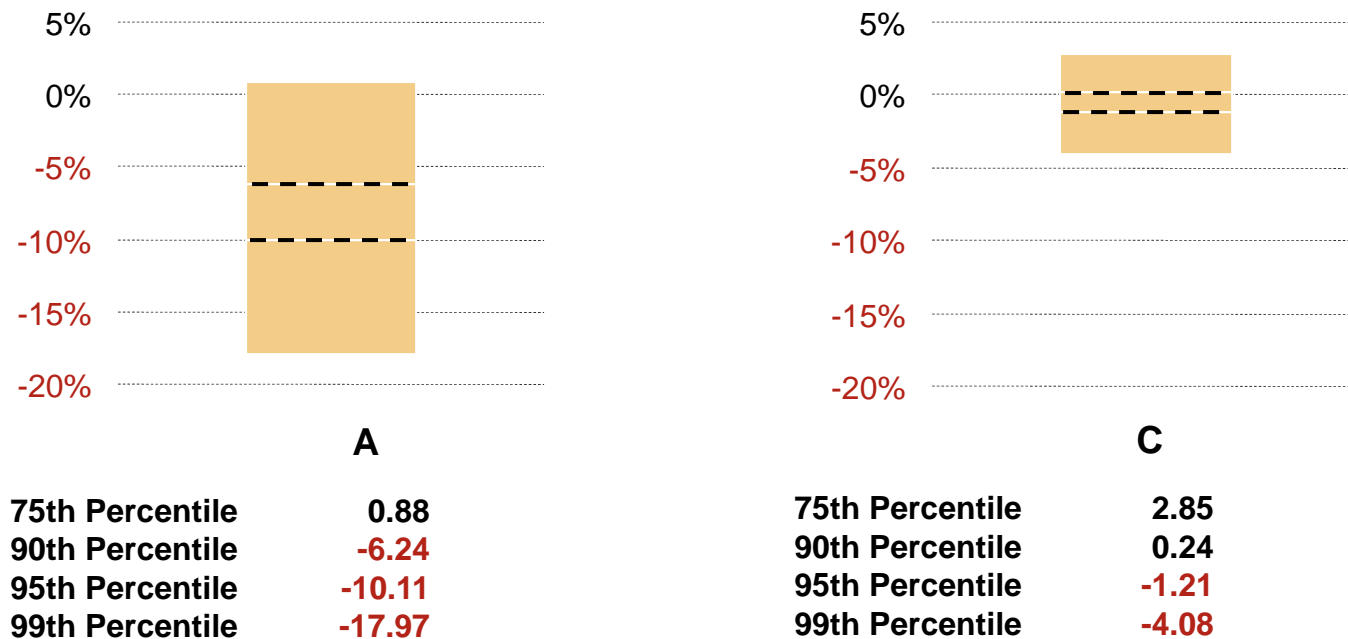




Glidepath Differences Lead to Differences in Risk

- The differences in income replacement projections are accompanied by differences in projected risk.

“Worst Case” Single Year Return @ Age 60





Implications

Implications of using the outcomes-based approach in target date fund selection:

- **Plan design**
 - Company contributions
- **Plan features**
 - Auto enrollment
 - Auto escalation
- **Communication**
 - To versus through
- **Decumulation support**
 - Managed accounts
 - Retirement income solutions



Implications for Future of Target Date Funds

Target date managers will need to understand the risks that are important to plan sponsors:

- **How do plan sponsors weigh these trade-offs?**
- **Are they willing to pursue high potential RIA at high levels of risk, or accept lower potential RIA at lower levels of risk?**
- **How important is longevity risk versus market risk in retirement?**
- **Are there ways to better offset certain tail risks without curtailing retirement income adequacy?**
- **Will plan sponsors accept insurance risk, liquidity risk, etc. to offset other risks?**
- **Do plan sponsors simply want to tailor the glidepath to their own particular risk profile?**