

WHAT DC PLAN MEMBERS REALLY WANT

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ABSTRACT: Target date or lifecycle funds are popular because they simplify decision making, but are blunt instruments in dealing with market risk and personal goals. We reengineer age based lifecycle funds making them more responsive to individual goals and to market conditions by structuring a dynamic risk based glide path that targets replacement income. We conclude that adjusting portfolio risk based upon progress towards a goal improves the likelihood of achieving a target income with lower expected risk than current lifecycle funds and other popular strategies.

TD3.0

Executive Summary

What defined contribution (DC) pension plan members really want is a defined benefit (DB) plan. Specifically, they want the reliable income in retirement that a DB plan provides and they want someone else to manage it for them. We establish target retirement capital sufficient to fund 70% of final year replacement income from age 65 to 85 using a 9% contribution rate. Rather than using a static equity glide path, the industry's standard, we incorporate two important changes:

1. we use risk rather than equity exposure for the glide path to recognize that risk is not static over time;
2. we make the glide path dynamic, modifying risk based upon progress towards the goal. When the actual portfolio falls behind the capital accumulation path in Figure 1 (A and C) we increase risk modestly and if it is ahead, we reduce risk modestly (B).

The frequency of achieving 70% replacement income based on historical testing is shown in Figure 2. The conventional fixed glide path target date fund* offers, effectively, a flip of the coin chance of success (52%). A 100% equity portfolio had better results than the fixed glide path portfolio (80%) but at the cost of higher risk (15.6% vs. 10.0%).

PUR's **Dynamic Glide Path Strategy** almost doubled (97%) the likelihood of the conventional approach and did so with less risk (5.5%) in the last five years before retirement than the all bond portfolio (6.6%).

Figure 1
Dynamic Glide Path Strategy

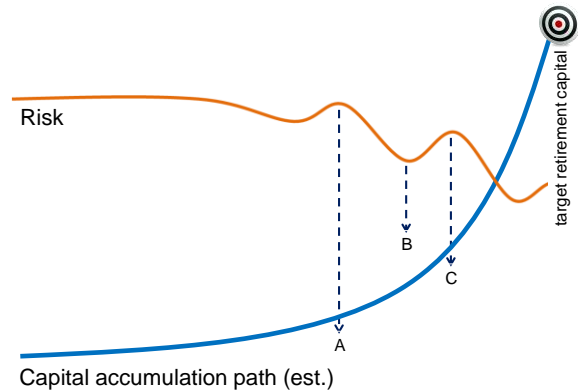
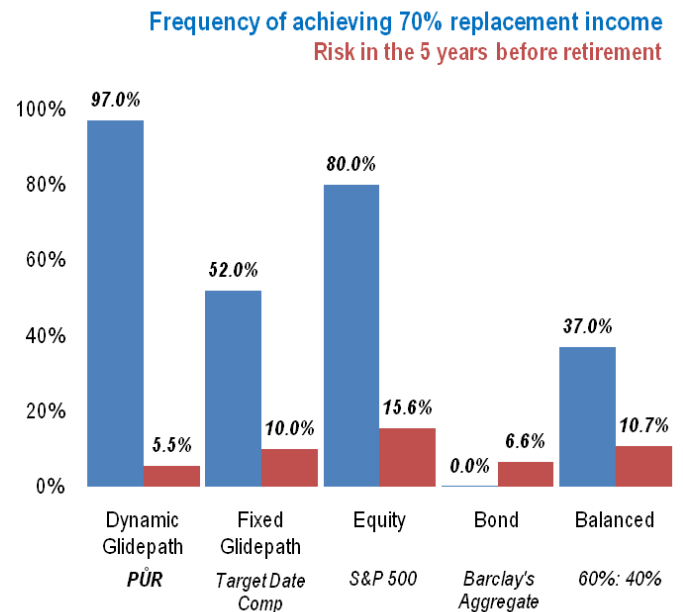


Figure 2
Achieving 70% Replacement Income



* Fixed glidepath: Fidelity, Vanguard and T. Rowe Price TDFs asset-weighted average. Equities: S&P 500. Bonds: Barclay's Aggregate and Shiller total return. Balanced: 60% equities, 40% bonds.

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Figure 3 summarizes the impact of the **Dynamic Glide Path Strategy**. Focusing on risk rather than equity exposure and making dynamic adjustments based upon progress towards the goal dramatically improves the frequency of achieving the target payout over a **Fixed Glide Path Strategy**.

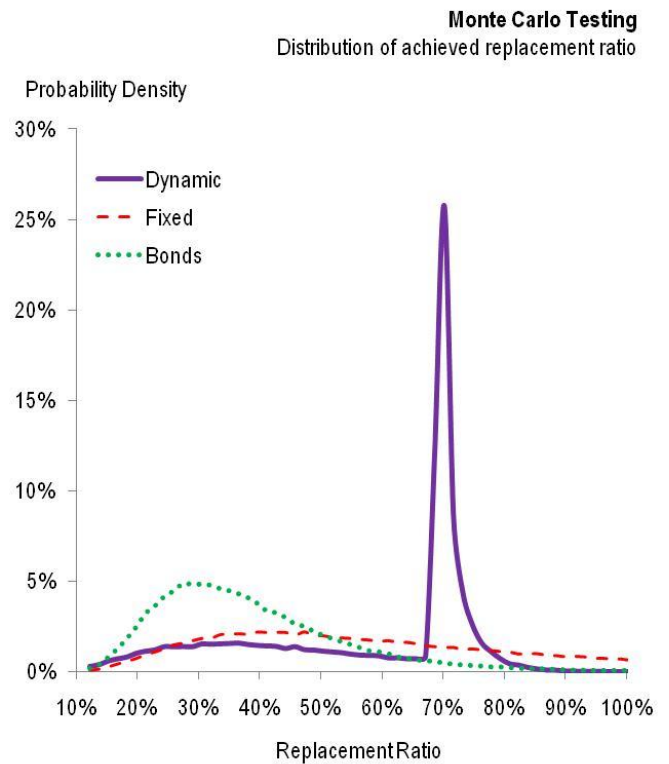
Conclusion

DC plan members want what a DB plan is designed to deliver, a reliable income in retirement that someone else manages. 15% of the improvement in the frequency of achieving target salary replacement, from 52% to 97%, can be attributed to the use of consistent risk in portfolio construction and 30% to the dynamic strategy adjustments based upon actual progress towards the goal.

Implementation

Improving the default option would satisfy a plan sponsor's objective to deliver better pension solutions to more employees since 80% of new plan members end up in the default. Since 80% of default options are target date funds, improving TDFs would be fundamental. If the plan sponsor's objective is to deliver a result that plan members really want, that is providing a default option that significantly improves the probability of achieving DB like replacement income, employees should be quite pleased. •

Figure 3
Distribution of Achieved Replacement Income



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