Scott Cameron, CFA

Scott is the Chief Investment Officer for the Multnomah Group and a Founding Principal of the firm. In that role, Scott leads Multnomah Group’s Investment Committee, is responsible for the development of the firm’s investment research methodology, and conducts investment manager due diligence. Scott also consults with plan sponsors on investment menu design, investment manager selection, fiduciary governance, and vendor fees/services.

Prior to founding the Multnomah Group, Scott was an investment consultant with a national retirement services firm.

Scott is a member of the CFA Institute, the CFA Society of Portland, the Investment Management Consultants Association, and the Portland Chapter of the Western Pension & Benefits Council. Scott holds a B.S in Management from Purdue University.
Agenda

• Overview of Qualified Default Investment
• Alternatives
• Survey of the Target Date Fund Universe
• Selection Methodology
• Ongoing Evaluation Methodology
• Questions
Qualified Default Investment Alternatives

- Originated with the Pension Protection Act (PPA) of 2006
- DOL’s objective was “…to ensure that an investment qualifying as a QDIA is appropriate as a single investment capable of meeting a worker’s long-term retirement savings needs.”
- Final regulation outlined four categories of products that qualify as QDIA
  - A product with a mix of investments that takes into account the individual’s age or retirement date
  - An investment service that allocates contributions among existing plan options to provide an asset mix that takes into account the individual’s age or retirement date
  - A product with a mix of investments that takes into account the characteristics of the group of employees as a whole, rather than each individual
  - A capital preservation product for only the first 120 days of participation
- QDIA regulations create safe harbor for plan sponsors meeting guidelines
- Safe harbor does not eliminate the requirement for plan sponsors to prudently select QDIA option

http://www.multnomahgroup.com/resources/white-papers/white-paper-qualified-default-investment

Target Date Fund Universe

- First product launched in 1994
- At the end of 2003 there were 16 target date fund series
- Now there are 70
  - 46 mutual fund series with $351 billion in assets as of 1/31/2011
  - 20 collective investment trust (CIT) series (estimated assets of $41 billion as of 9/30/2010)
  - 4 insurance company separate account series

<table>
<thead>
<tr>
<th>Target Date Series</th>
<th>Assets</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fidelity Freedom</td>
<td>$114,126,954,422</td>
<td>32.5%</td>
</tr>
<tr>
<td>Vanguard Target Retirement</td>
<td>$82,021,625,922</td>
<td>23.3%</td>
</tr>
<tr>
<td>T. Rowe Price Retirement</td>
<td>$57,640,732,683</td>
<td>16.4%</td>
</tr>
<tr>
<td>Principal LifeTime</td>
<td>$17,701,660,326</td>
<td>5.0%</td>
</tr>
<tr>
<td>Fidelity Advisor Freedom</td>
<td>$12,606,531,646</td>
<td>3.6%</td>
</tr>
<tr>
<td>Wells Fargo DJ Target</td>
<td>$9,403,695,198</td>
<td>2.7%</td>
</tr>
<tr>
<td>American Funds TD Retirement</td>
<td>$9,230,869,912</td>
<td>2.6%</td>
</tr>
<tr>
<td>TIAA-CREF Lifecycle</td>
<td>$6,385,558,839</td>
<td>1.8%</td>
</tr>
<tr>
<td>JHancock2 Lifecycle</td>
<td>$4,901,728,109</td>
<td>1.4%</td>
</tr>
<tr>
<td>Other</td>
<td>$37,520,464,618</td>
<td>10.7%</td>
</tr>
<tr>
<td>Total</td>
<td>$351,539,821,675</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Morningstar and Ibbotson Target Maturity Report Q4 2010
Selection Criteria

- Investment Management Firm Capabilities
- Equity Glide Path
- Asset Class Selection
- Portfolio Management
- Costs
Investment Manager Firm Capabilities

• Target date funds shift responsibilities to the fund manager from the participant
  • Asset allocation is the responsibility of the fund manager
  • Security selection is the responsibility of the fund manager

• Transitioning responsibility to the fund manager requires plan sponsor to gain deeper understanding of the investment management firm
  • Firm stability
  • Experience
  • Commitment
  • People
  • Process
  • Resources
Firm Evaluation Criteria

• How stable is the organization?
  • Target date funds are design to last a participant’s lifetime (40-70 years)
  • Funds need to grow and adapt during that time period
    • New asset classes
    • Changing market dynamics
    • New investment research
  • Plan sponsors desire lower turnover of target date fund products compared to core fund options

• What experience does the firm have in creating global asset allocation portfolios?
  • Most investment management firms are successful because of their single asset class funds
  • “Manager skill” is in selecting individual securities
  • Types of experience that is relevant
    • Outsourced pension investing
    • Investment consulting
    • Target risk investing
    • Target date investing
  • Is the asset allocation work done internally or outsourced to a third-party?
Firm Evaluation Criteria (cont.)

• **Commitment**
  
  • Does the firm have a dedicated staff for managing the target date funds?
  
  • Are the target date funds a core product for the fund manager?
  
  • Have the products shown sufficient traction in the market to ensure long-term viability?
  
  • Does the fund manager demonstrate thought leadership within the target date universe?

• **People**

  • What experience do the portfolio managers have with asset allocation funds?
  
  • How long have they been managing target date products?
  
  • Do they have any other responsibilities within the firm?

• **Process**

  • Do they have a process for evaluating changes to the target date funds?
  
  • Have they managed investment products before?
  
  • Do they have a defined process for managing cash flows?
  
  • How do they handle rebalancing?
Equity Glide Path
Selecting an Equity Glide Path

Plan Considerations

- Employee demographics
  - Average income levels
  - Future wage growth
  - Employee turnover
  - Existing asset allocation
  - Financial literacy
- Plan design
  - DB / DC
  - Auto-features
  - Employer contribution levels
  - Employer stock
- Fiduciary considerations
  - Knowledge level of the fiduciaries
  - Comfort level with risk

Fund Considerations

- Fund sponsor’s investment thesis (To vs. Through)
- Beginning equity levels (farthest from retirement)
- Transition period
- Slope of the glide path
- Terminal equity levels
- Terminal equity date
To Retirement

Investment Theses

• Human-capital thesis
  • Maintain static risk exposure regardless of time horizon
  • Future earning and Social Security are bond-like
  • As an investor ages the present value of their future earnings declines so their financial capital (retirement account) should be adjusted to increase their bond exposure

• Observed behavior thesis
  • Participants are not as rational as the forecast models imply
  • Analysis of actual 401(k) participant behavior indicates large withdrawals at or near retirement
  • Greater uncertainty at the end-point
  • Objective is to get participants to the end-point rather than all the way through retirement
To Retirement (cont.)

Glide Path Impacts

- Reaches its most conservative allocation at the retirement date
- Generally more conservative allocation across in the near retirement years
- Funds merge into static allocation product at expected retirement year
Through Retirement

Investment Theses

• Mean-reversion of assets
  • Time horizon is most important factor to analyze
  • Equity risk is minimized over longer time periods
  • Investors at retirement still have long time horizons

• Equities are necessary to counter longevity risk
  • Market risk (volatility) is weighed too heavy relative to longevity and inflation risk
  • Higher equity exposure is necessary to provide sufficient retirement
Through Retirement (cont.)

Glide Path Impacts

• Equity allocation continues to decline after the target retirement date until sometime post-retirement (5-20 years after retirement date)
• Equity allocations generally higher at retirement date compared against “to retirement” funds
• Participants maintain their age-specific fund past the retirement date
Target Date Stock Allocations

Widest variance in glide paths is near retirement

Source: Morningstar
Impact of Glide Path on Performance

The Aggressive Glide Path represents T. Rowe Price Retirement funds and the Conservative Glide Path represents Wells Fargo Dow Jones Target Retirement funds.
Asset Class Considerations

• Which asset classes are included in the target date funds?

• Do the funds provide sufficiently broad exposure to global capital markets?

• How did the fund manager determine which asset classes would be suitable for inclusion within the funds?
  • What modeling was done to determine the appropriate mix of asset classes?
  • Did the fund manager utilize capital market assumptions in their modeling?
    • Historical data?
    • Forecasted data?
  • What impact do the fund manager’s investment products play in determining asset classes?
    • Were asset classes excluded because the manager lacked a product?
    • Were asset classes included solely because a manager has a product in that class?

• How frequently does the fund manager review the asset class structure of the funds?
  • Have their been any recent changes in the asset classes utilized by the funds?
  • Are they evaluating any future changes to the asset class lineup?
Asset Class Components

Standard Asset Classes
- Cash
- Intermediate Bonds
- Large Cap U.S. Equities
- Small/Mid Cap U.S. Equities
- International Equities

Portfolio Diversifiers (Return Enhancement / Risk Reduction)
- Stable Value
- High Yield Bonds
- Global Bonds
- Preferred Stocks
- Small Cap International Stocks
- Emerging Market Stocks
- Volatility

Real Return Hedges
- TIPS
- Commodities
- Real Estate (REITs or Direct-Owned)
- Natural Resource Stocks
## Impact of Asset Classes on Performance

<table>
<thead>
<tr>
<th></th>
<th>2008 Return</th>
<th>2010 Fund A Portfolio Weight</th>
<th>2015 Fund B Portfolio Weight</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>2.06%</td>
<td>9.30%</td>
<td>0.00%</td>
<td>-9.30%</td>
</tr>
<tr>
<td>BC Credit Index</td>
<td>-3.08%</td>
<td>11.80%</td>
<td>4.01%</td>
<td>-7.79%</td>
</tr>
<tr>
<td>BC Government Index</td>
<td>12.39%</td>
<td>5.84%</td>
<td>22.35%</td>
<td>16.51%</td>
</tr>
<tr>
<td>BC Mortgage Backed Secs Index</td>
<td>8.34%</td>
<td>0.00%</td>
<td>8.13%</td>
<td>8.13%</td>
</tr>
<tr>
<td>BC High Yield Corporate Bond</td>
<td>-26.16%</td>
<td>15.79%</td>
<td>2.90%</td>
<td>12.89%</td>
</tr>
<tr>
<td>Russell 3000 Index</td>
<td>-37.31%</td>
<td>42.06%</td>
<td>49.87%</td>
<td>7.81%</td>
</tr>
<tr>
<td>DJ US Select REIT</td>
<td>-39.20%</td>
<td>1.98%</td>
<td>0.00%</td>
<td>-1.98%</td>
</tr>
<tr>
<td>MSCI EAFE</td>
<td>-43.38%</td>
<td>13.24%</td>
<td>12.84%</td>
<td>-0.40%</td>
</tr>
<tr>
<td><strong>Total Return</strong></td>
<td>N/A</td>
<td>-30.27%</td>
<td>-24.06%</td>
<td>-6.21%</td>
</tr>
</tbody>
</table>

*Portfolio weights are calculated using a returns-based style analysis method using returns for the 36 months ended 12/31/2010*
Active / Passive Investment Management

**Active Portfolio Management**
- Seeks to outperform a benchmark
- Value added through the manager’s skill in timing the market or selecting securities
- Higher costs create a hurdle for the manager to outperform on a net-of-fees basis

**Passive Portfolio Management**
- Seeks to provide market rates of return
- Portfolios try to track benchmark indices by replicating or sampling the index
- Lower cost for portfolio management

**Hybrid Portfolio Management**
- Utilizes a combination of active and indexed strategies
- May lower total cost of fund (not necessarily true)

Evaluating Target Date Funds
Active / Passive Management Considerations

Active Management

• Evaluate usual criteria for selecting active “core” managers
  • People
  • Process
  • Investment Philosophy
  • Costs
  • Capacity
• Active management adds a layer of risk to the target date series
• What is the process for selecting the active managers?
• How does the target date fund manager evaluate the managers?
• What happens if a manager underperforms?

Passive Management

• Evaluate the usual criteria for selecting index managers
  • Costs
  • Experience
  • Tracking error
• Does the target date fund provider have access to a broad enough set of index strategies to provide the asset class exposure that is desired?
Active Management of Target Date Funds

• Evaluated 32 active and hybrid target date funds series with at least 36 months of returns as of 12/31/2010

• For each fund we ran a returns-based style analysis model to calculate implied style exposures over the past 36 months

• Using the returns-based style analysis results we calculated a customized “style” benchmark for each target date fund in the series

• Calculated “alpha” relative to the target date fund series

• Results
  • 3 target date fund series (9.375%) had positive average alpha
  • Highest average alpha was 0.864% annualized
  • Lowest average alpha was -5.798% annualized
  • Average alpha was -1.271% annualized

Alpha (36 Months through 12/31/2010)
Proprietary vs Open Architecture

### Proprietary Investment Management
- All of the underlying portfolios are managed by the target date fund manager
- Most prevalent form of target date funds
- May create perceived conflicts between the target date fund investors and the fund manager
- May expose investors to highly correlated alphas

### Open-Architecture Investment Management
- Target date fund managers utilize outside portfolio managers to handle the security level portfolio management responsibilities
- Not very common
- Open-architecture funds are more commonly structured as collective investment trusts (CITs)
- Adds an additional level of fees to the funds
- Open-architecture is not a guarantee of higher performance

### Hybrid Strategies
- Sub-advised portfolios
- Fund manager utilizes sub-advisers for a portion of the portfolio
- Multi-boutique portfolios
- Target date fund sponsor has multiple independent investments teams
- Each team maintains its own independent investment research/strategy
Investment Costs

• Higher costs create a headwind for investors
• Higher fees have a significant cumulative affect on wealth accumulation
• There tends to be cost / benefit trade-offs in target date funds
  • Higher equities may lead to higher long-term return but will also increase fees
  • More esoteric asset classes may increase the expected return but may also increase product fees
  • Active management may generate higher returns but also creates an opportunity for underperformance on a net-of-fee basis

The hypothetical illustration compares the return of an average investor over their work life if they earned 7% or 8% annually. For illustration purposes we assumed an initial starting salary of $30,000, a 4% growth rate in the salary, and an average deferral percentage of 6% of pay.
Ongoing Monitoring Methodology

• Has anything in our initial analysis changed?
• Is the fund behaving consistent with expectations given the market environment?
• Are the portfolio managers adding value?
• How do these products compare to alternatives in the market?
Performance Attribution

Evaluating Target Date Funds
Peer Comparison

Evaluating Target Date Funds

Return % (Annualized) vs. Standard Deviation % (Annualized)

- ABC 2050
- ABC 2045
- ABC 2040
- ABC 2035
- ABC 2030
- ABC 2025
- ABC 2020
- ABC 2015
- 60%/40% Index
5 Things Every Plan Sponsor Should Know

- How capable is my target date fund management firm?
- Is the equity glide path consistent with our investment objectives and demographics?
- What asset classes are included in our target date funds?
- How is the portfolio management implemented?
- How much do our target date funds cost?
Disclosures

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