“To” Versus “Through”: Which Glidepath Is Right For You?

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Agenda

Snapshot Of The Target-Date Market

Differentiating “To” Versus “Through”

Case For A “Through” Glidepath Design

Case For A “To” Glidepath Design

Final Considerations
Snapshot Of The Target-Date Market
Demand Remains High For Target-Date Funds 

As of December 31, 2009

Provider Offerings Have Dropped Off Since 2008

As of December 31, 2009

Number of Fund Families Offering Target-Date Funds

Target-Date Fund Utilization Continues To Grow

31% - Percent of participants\(^2\) at year-end 2008 who were invested in target date funds, up from 25% at the end of 2007.\(^1\)

23% - Percent of participants\(^2\) in their 20s who were invested in target date funds at year-end 2008 compared to 19% at year-end 2007 and 16% at year-end 2006.\(^1\)

94% - Percent of consulting firms that “believe target date strategies will continue to be the most prevalent form of investment default in DC plans.”\(^3\)

75% - Predicted percentage of all 401(k) assets that will be held in target-date funds within five years.\(^4\)

\(^1\)Source: EBRI, Issue Brief No. 335, October 2009.
\(^2\)Represents participants recorded in the EBRI/ICI database.
Glidepaths Have A Wide Range Of Equity Allocations

Range of Equity Exposure in Target-Date Funds

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<tbody>
<tr>
<td>Industry Maximum</td>
<td>93</td>
<td>99</td>
<td>100</td>
<td>95</td>
<td>97</td>
<td>95</td>
<td>95</td>
<td>90</td>
<td>84</td>
<td>75</td>
<td>65</td>
<td>55</td>
<td>45</td>
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<tr>
<td>Industry Average</td>
<td>93</td>
<td>92</td>
<td>91</td>
<td>90</td>
<td>88</td>
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<td>78</td>
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<td>61</td>
<td>50</td>
<td>39</td>
<td>37</td>
<td>34</td>
</tr>
<tr>
<td>Industry Minimum</td>
<td>93</td>
<td>84</td>
<td>80</td>
<td>80</td>
<td>73</td>
<td>67</td>
<td>61</td>
<td>48</td>
<td>36</td>
<td>26</td>
<td>15</td>
<td>20</td>
<td>20</td>
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</tbody>
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Source: Morningstar, Inc.
Differentiating “To” Versus “Through”
“To” versus “Through”

What’s the difference and why does it matter?

• **“To” Funds**: The fund is designed for an investor who expects to spend all or most of his or her money in the fund at the target date.¹

• **“Through” Funds**: The fund is designed for an investor who plans to withdraw the value of the investor’s account in the fund gradually after retirement.¹

These two approaches focus on addressing two different retirement saving objectives.

¹Source: ICI Target-Date Funds Disclosure Working Group, *Principles to Enhance Understanding of Target-Date Funds*. June 18, 2009
What determines a riskier strategy?... It depends.

The Risks Facing Retirees

**Short-term Market Risk**
The risk that an investment will decline in value due to market movements

**Longevity Risk**
The risk that increasing life expectancies can result in an investor outliving their assets in retirement

**Implementation Risk**
The risk that a participant does not make an appropriate decision at and throughout retirement

**Inflation Risk**
The risk that the purchasing power of assets will be eroded over time due to rising inflation
What Goal Is Your Glidepath Trying To Achieve?

“To” Retirement

Minimize loss of principal in retirement

Market volatility

Primarily fixed income and cash instruments

“Through” Retirement

Maintain adequate income stream throughout retirement

Shortfall risk

Substantial equity allocation
Comparison Of Two Different Glidepath Structures

Equity Allocations for a Hypothetical “To” Glidepath and Hypothetical “Through” Glidepath

• The hypothetical “Through” glidepath maintains a higher equity allocation both at retirement and throughout retirement, focusing on maintaining an adequate income stream throughout retirement and reducing shortfall risk.

• The hypothetical “To” glidepath maintains a lower equity allocation prior to as well as throughout retirement, focusing on maintaining principal by reducing short-term market volatility.

1 Assumes a 90% equity allocation 40 years prior to retirement (which is assumed to begin at age 65). The equity allocation decreases by 1% each year for the 40-year period prior to retirement as well as an additional 30-year period after the target date.

2 Assumes a 90% equity allocation 40 years prior to retirement (which is assumed to begin at age 65). The equity allocation decreases by 1.75% each year for the 40-year period prior to retirement and then remains static at 20% for an additional 30-year period after the target date.
Case For A “Through” Glidepath Design
Case For A “Through” Glidepath

“To” Retirement

Minimize loss of principal in retirement

Market volatility

Primarily fixed income and cash instruments

Primary Goal

Risk Focus

Retirement Allocation

“Through” Retirement

Maintain adequate income stream throughout retirement

Shortfall risk

Substantial equity allocation
Participant behavior is typically to under-save and over-withdraw.

1 Source: Profit Sharing/401(k) Council of America 51st annual series (September 2008)
2 Non-highly compensated workers
3 401(k) plan only
4 T. Rowe Price plans (60-69 years old with installment distributions)
Retirees face an increasing risk of “living too long” rather than “dying too soon.”

Source: Society of Actuaries
The following slides (slides 18-21) show a series of historical analyses conducted by T. Rowe Price to illustrate the effect of two different hypothetical glidepath designs on long-term performance during the time periods shown. Each glidepath was constructed without regard to its historical performance. These charts are shown for illustrative purposes only and do not represent the performance of any specific security, asset allocation strategy, or T. Rowe Price fund. Past performance cannot guarantee future results.

Description of Hypothetical Glidepaths
The hypothetical “Through” glidepath assumes a 90% equity allocation 40 years prior to retirement (which is assumed to begin at age 65). The equity allocation decreases by 1% each year for the 40-year period prior to retirement as well as an additional 30-year period after the target date.

The hypothetical “To” glidepath assumes a 90% equity allocation 40 years prior to retirement (which is assumed to begin at age 65). The equity allocation decreases by 1.75% each year for the 40-year period prior to retirement and then remains static at 20% for an additional 30-year period after the target date.

Equities are represented by the S&P 500 Index and fixed income securities are represented by U.S. IT Gov’t Index from 1926 – 1972, Barclays Capital Gov’t/Corp Index from 1973 – 1975, and Barclays Capital U.S. Aggregate Index (formerly Lehman Brothers U.S. Aggregate Index) from 1976 – Present.

Time Periods
A 40-year accumulation period and a 30-year retirement are assumed. Data is based on rolling 30- or 40-year periods beginning December 31, 1925, the earliest available date for which performance data is available, through December 31, 2009.

For each chart shown, each data point represents an account balance (value in $) at the end of a quarterly rolling returns series over the specified time series (i.e., 30 or 40 years). Shaded charts represent the ending balances of the hypothetical “Through” glidepath minus the hypothetical “To” glidepath.

Withdrawals
The "inflation-adjusted withdrawals" assume withdrawals increase annually by the percentage change in the Consumer Price Index for All Urban Consumers (CPI-U), not seasonally adjusted (if great than 0%) or by 0% (if annual percentage change of CPI-U is negative).
**Ending Balances 30 Years After Retirement**

**Resulting Value of $1MM Investment at Retirement**

4% Initial Withdrawal, Inflation Adjusted Subsequent Withdrawals, Rolling 30-year Periods
Calculated Quarterly From December 31, 1925 to December 31, 2009.

A higher equity “through” strategy would have been more successful at providing a long-term income stream.

1 Positive balances reflect surplus assets at the end of a 30-year retirement horizon. Negative balances reflect the shortfall amount needed to fund the specified withdrawals.

See slide 17 for a description of the hypothetical glidepaths.

**Past performance cannot guarantee future results.**

Source of data: Ibbotson Associates; analysis by T. Rowe Price.
Difference In Ending Balances 30 Years After Retirement

**Difference in Resulting Value of $1MM Investment at Retirement**

4% Initial Withdrawal, Inflation Adjusted Subsequent Withdrawals, Rolling 30-year Periods
Calculated Quarterly From December 31, 1925 to December 31, 2009.

Average Difference of Ending Balances: $1,313,580

A higher equity allocation “through” strategy resulted in greater appreciation throughout retirement.

1Positive numbers reflect higher ending assets in “Through” glidepath. Negative numbers reflect higher ending assets in the hypothetical “To” glidepath.

See slide 17 for a description of the hypothetical glidepaths.

Past performance cannot guarantee future results.

Source of data: Ibbotson Associates; analysis by T. Rowe Price.
A higher equity “through” strategy tended to provide higher ending balances at retirement.

See slide 17 for a description of the hypothetical glidepaths.

Past performance cannot guarantee future results.

Source of data: Ibbotson Associates; analysis by T. Rowe Price.
Asset Allocation Can Have a Significant Impact Over an Investor’s Lifetime

Each point in time reflects the difference of the hypothetical “Through” glidepath balance minus the hypothetical “To” glidepath balance.

1 Positive balances reflect higher ending balances in the hypothetical “through” glidepath at the end of a 30-year retirement horizon.

2 Annual withdrawal amount of $54,752 represents a hard dollar figure withdrawn from both accounts annually, adjusted for inflation. The figure represents 4% of $1,368,810, the average ending balance for the “Through” glidepath at retirement after 40 years of accumulation (see Slide 20 for additional information).

See slide 17 for a description of the hypothetical glidepaths.

Past performance cannot guarantee future results.

Source of data: Ibbotson Associates; analysis by T. Rowe Price.
Case For A “To” Glidepath Design
Case For A “To” Glidepath

“To” Retirement
Minimize Loss of Principal at retirement
Market volatility
Primarily fixed income and cash instruments

Primary Goal
Risk Focus
Retirement Allocation

“Through” Retirement
Maintain adequate income stream throughout retirement
Shortfall risk
Substantial equity allocation
2008 Was Not The First Bear Market and It Won’t Be The Last

Highlighted bars represent calendar years in which the S&P 500 Index returned less than -10%.

Past performance cannot guarantee future results.

Source of data: Ibbotson Associates; analysis by T. Rowe Price.
Equities have historically had a higher percentage of short-term loss than fixed income securities due to market volatility.

Past performance cannot guarantee future results.

Source of data: Ibbotson Associates; analysis by T. Rowe Price.
The hypothetical “Through” strategy has had a higher percentage of short-term loss due to market volatility.

Past performance cannot guarantee future results.

Source of data: Ibbotson Associates; analysis by T. Rowe Price.
Example:
• An individual retires at the end of 2007, before the 2008 bear market, and needs all of their assets within the first two years after retirement.

Assumptions:
• $1,000,000 retirement savings balance on December 31, 2007.
• Individual intends to make three equal withdrawals of $333,333 over two years:

Results:

<table>
<thead>
<tr>
<th>Hypothetical Glidepath</th>
<th>Hypothetical “Through”</th>
<th>Hypothetical “To”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shortfall/Surplus of last withdrawal</td>
<td>-$80,029</td>
<td>$2,680</td>
</tr>
</tbody>
</table>

For an individual who needs all their assets at or near retirement going into the 2008 bear market, a “To” asset allocation strategy would have provided better capital preservation.

See slide 17 for a description of the hypothetical glidepaths.

Past performance cannot guarantee future results.
Final Considerations
Longer time periods can help lessen the impact of significant bear markets.

Significant bear markets have historically been followed by bull markets.

Past performance cannot guarantee future results.

Source of data: Ibbotson Associates; analysis by T. Rowe Price.
# The Reality Of Recent Market Volatility

<table>
<thead>
<tr>
<th>Equity Allocation at Retirement</th>
<th>2008</th>
<th>2009</th>
<th>1/1/08 through 12/31/09&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothetical &quot;Through&quot; Glidepath</td>
<td>50%</td>
<td>-15.9%</td>
<td>16.2%</td>
</tr>
<tr>
<td>Hypothetical &quot;To&quot; Glidepath</td>
<td>20%</td>
<td>-3.2</td>
<td>10.0</td>
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</tbody>
</table>

<sup>1</sup> Performance is annualized
See slide 17 for a description of the hypothetical glidepaths.
*Past performance cannot guarantee future results.*

Source of data: Ibbotson Associates; analysis by T. Rowe Price.
Example:

- An individual retires at the end of 2007, before the 2008 bear market, having accumulated assets over the prior 20 years and needs all of their assets within the first two years after retirement.

Assumptions:

**Balance at retirement**

<table>
<thead>
<tr>
<th>Hypothetical Through</th>
<th>Hypothetical To</th>
</tr>
</thead>
<tbody>
<tr>
<td>$624,373</td>
<td>$550,345</td>
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</table>

- Individual intends to make three equal withdrawals over two years:

<table>
<thead>
<tr>
<th>Actual Withdrawals</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total $ Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Through” Glidepath</td>
<td>$208,124</td>
<td>$208,124</td>
<td>$158,157</td>
<td>$574,405</td>
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<tr>
<td>“To” Glidepath</td>
<td>$183,448</td>
<td>$183,448</td>
<td>$184,923</td>
<td>$551,819</td>
</tr>
</tbody>
</table>

*Accounting for accumulation, a hypothetical "through" glidepath with a higher allocation to equities would have lessened the impact of short-term market volatility going into the 2008 bear market.*

See slide 17 for a description of the hypothetical glidepaths.

Past performance cannot guarantee future results.
What Are Some Additional Considerations?

- What else should be considered in choosing a target-date fund?
  - Is communication / disclosure sufficient?
  - What is the underlying sector representation and exposure?
  - What are the costs?

- What do participants do post-retirement?
  - Do they tend to stay in or opt out of the plan?
  - If opt out, do they annuitize?

- What does your retirement plan look like?
  - What is the participant’s saving and withdrawal behavior?
  - What are the post-retirement options?
  - Is there a Defined Benefit Plan available?
The principal value of the Retirement Funds is not guaranteed at any time, including at or after the target date, which is the approximate date when investors turn age 65. The funds invest in a broad range of underlying mutual funds that include stocks and, bonds, short-term investments and are subject to the risks of different areas of the market. The funds emphasize potential capital appreciation during the early phases of retirement asset accumulation, balance the need for appreciation with the need for income as retirement approaches, and focus more on income and principal stability during retirement. The funds maintain a substantial allocation to equities both prior to and after the target date, which can result in greater volatility.

Call 1-800-225-5132 to request a prospectus or summary prospectus; each includes investment objectives, risks, fees, expenses, and other information that you should read and consider carefully before investing.

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Questions?