

Benchmarking Target Date Funds

The S&P Target Date Index Series

Overview

- The strong growth seen in the target date fund market has been primarily due to the adoption of a “one-stop” shopping approach within defined contribution plans – an approach desired by plan participants.
- Significant differences in glide paths and asset class exposure across the target date fund universe can create difficulties in benchmarking and defining passive exposure to the available universe.
- S&P Indices’ target date benchmark series extends traditional representative indexing into the growing target date fund universe by establishing a new method for defining market consensus.
- Benchmark asset allocation is derived from a robust survey of target date fund peer groups with the allocations fully investable.

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Indexing the Target Date Fund Market

The strong growth seen in the target date fund market is primarily due to the adoption of a “one-stop” shopping approach within defined contribution plans – an approach desired by plan participants.

As of December 31, 2010, assets in this sector totaled US \$340 billion, up from US \$256 billion in 2009.¹ The positive growth comes as retirement plans shift from defined benefit platforms to defined contribution plans, and recent Department of Labor rulings provide the opportunity to establish target date funds as default investment options.

However, there are significant differences in glide paths and asset class exposure across the target date fund universe that create difficulties for benchmarking and defining passive exposure to the available fund universe. For the same target date, it is not unusual to see wide differences in asset class weights between two providers. While this is not a problem *per se*, since asset class weights are an active asset allocation decision, the absence of a benchmark to measure the impact of that active decision poses problems when analyzing performance.

Since 2009, S&P Indices has offered a target date index series that is representative of the target date universe in the traditional sense of indexing. To accomplish this, we avoid relying upon capital markets forecasting or proprietary risk modeling to select asset classes or derive their weightings. Instead, we utilize a robust survey of existing target date funds to capture market consensus of asset class exposure for a given target date. We believe that S&P Indices is the only index provider to extend traditional representative indexing to the growing target date fund universe by establishing a new method for defining the market consensus.

Philosophy

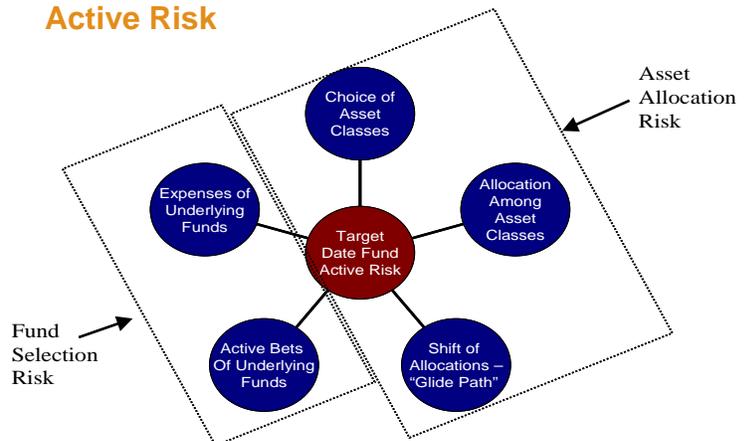
We view our survey of target date funds as a method of establishing a market consensus, thereby defining “market” exposure to various asset classes

within the target date fund universe. Although different in approach from the establishment of single-asset class benchmarks, such as the S&P 500, the goal of target date benchmarking is the same as in the single-asset class case – transparent market representation. The target date series extends traditional, representative, single-asset class benchmarking to the multi-asset class environment of target date funds.

Prior to the development of the S&P Target Date Index, significant differences in active risk among target date providers and the lack of standard benchmarking practices prevented the establishment of an independent, transparent, representative target date fund benchmark. Current benchmarking practices range from in-house custom benchmarks to third party model-driven indexes. S&P Indices approach creates a market consensus asset allocation, rendering new possibilities for both passive investment and benchmarking. For the first time, investors can track passive target date asset allocation exposure and can create new active/passive investment combinations by implementing the passive asset allocation with either active or passive funds. Also for the first time, passive target date asset allocation risk can be measured and tracked and the active target date asset allocation risk for individual managers can be objectively measured.

The decision set on the right side of Exhibit 1 encompasses asset allocation risk for a given target date fund, while the decision set on the left contains important aspects of fund selection risk. Taken together, and in particular because asset class exposure and expenses are two of the major drivers of long-term investment performance, these decision sets are highly significant and risky.

Exhibit 1 – Sources of Target Date Fund Active Risk



¹2011 Investment Company Fact Book”, 51st Edition, Investment Company Institute, 2011, WWW.ICIFACTBOOK.ORG.

As would be expected, each target date manager has its own unique approach to investment decision making. Table 1 shows how significant the asset allocation differences are between target date funds. The table contains comparative statistics for total

equity and fixed income exposure of funds in our survey. There are large ranges, particularly in close-dated target years. For example, investors in a 2015 fund could obtain as little as 26% or as much as 74% equities exposure, depending on the fund.

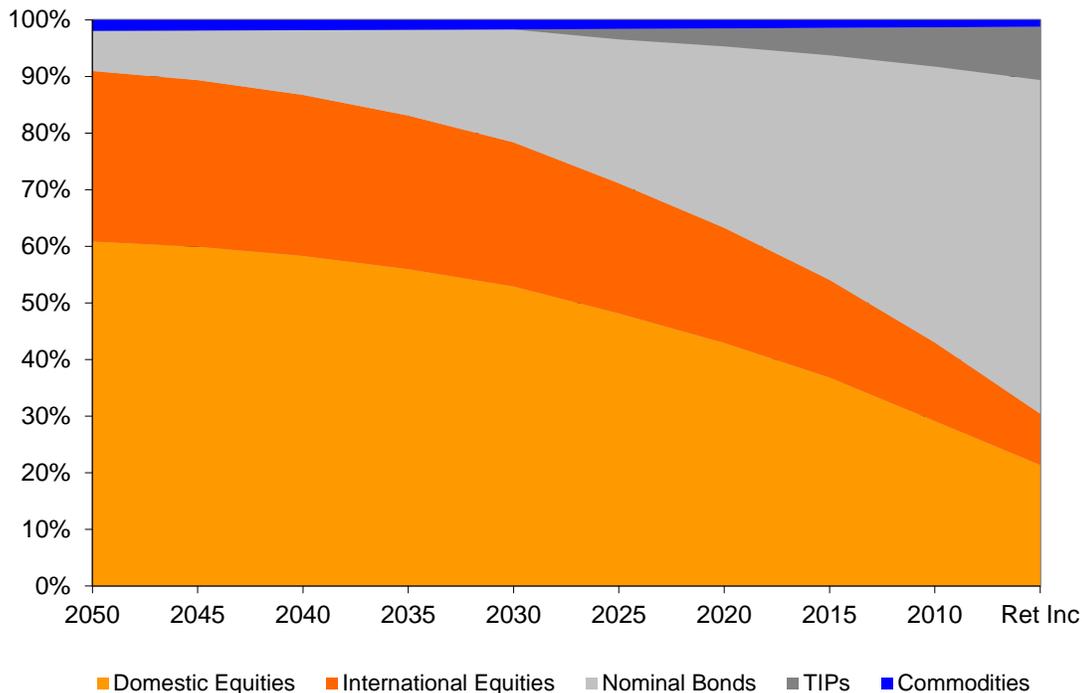
Target Date	Ret Inc	2010	2015	2020	2025	2030	2035	2040	2045	2050+	
Stocks	Min	15%	15%	26%	37%	50%	60%	72%	75%	78%	79%
	Max	69%	70%	74%	75%	84%	90%	94%	95%	97%	97%
	Range	54%	56%	48%	38%	34%	30%	22%	21%	19%	18%
	Median	32%	48%	58%	65%	74%	79%	85%	87%	90%	90%
Fixed Income	Min	31%	29%	23%	21%	16%	10%	6%	5%	3%	3%
	Max	85%	85%	72%	61%	48%	40%	28%	25%	19%	18%
	Range	54%	57%	49%	40%	32%	30%	22%	20%	16%	15%
	Median	68%	50%	41%	35%	26%	19%	13%	11%	9%	8%

Source: S&P Indices calculations using input from EDGAR and Bloomberg databases. Data as of 5/31/2011.

The glide path for a given fund sponsor can be thought of as a set of active risk exposures over time. The market consensus glide path, built bottom-up from the consensus at each target date, reflects the time dimension in benchmarking. We intentionally avoided relying on a model for our glide

path because it would introduce active risk instead of providing market representation. Exhibit 2 depicts what may generally be expected in terms of exposures as we approach target dates.

Exhibit 2 – Consensus Target Date Glide Path



Source: S&P Indices.

Benchmark Structure

To create its target date benchmark, S&P Indices conducts an annual survey of target date funds each year in April. Funds are required by the SEC to report their holdings quarterly. At the time of the annual index review, we use the most recent quarterly holdings data for each fund in our survey.

The overall process is as follows:

- Funds are identified as Target Date funds from the Morningstar or Lipper databases and sorted by asset size. Fund families not meeting the minimum asset threshold of US\$ 100 million are removed from consideration.
- Fund holdings are drawn from the latest period available using commercial databases and the SEC's Edgar web site.
- Asset class exposures for the funds are derived by mapping the fund holdings to their corresponding asset class category. In cases where surveyed funds hold balanced or other multi-asset class funds, we look through to the underlying asset allocation of these funds to determine their net effect on the asset allocation of the surveyed fund.

Weights for each target date index are derived by applying the following methods and rules to raw survey observations:

- Each constituent asset class in the index must be employed by at least 25% of target date fund sponsors in one or more of their respective funds. This serves as our asset class selection mechanism. As the market changes the asset classes it elects to include in target date funds, the new classes will be captured by our benchmark.
- For each target date peer group, asset class values either below the 10th percentile or above the 90th percentile of raw values are replaced with the value corresponding to the 10th percentile or the 90th percentile, respectively. This mitigates outlier effects without diminishing the number of survey data points.
- From the results of step 2, mean values of at least 1% are then proportionately adjusted to create preliminary weights that sum to 100% for each target date index.
- In order to establish a smooth consensus glide path from non-smooth holdings averages, a quadratic curve is fitted to the preliminary weight

values for each asset class across target dates. Weights must be 0% or greater than or equal to 1%, and they must sum to 100%. Allocations along the fitted curve for each asset class and target date are designated as final index weights.

Asset classes currently represented in the series are:

- Large-, mid-, and small-cap US equities
- Developed International Equities
- Emerging Market Equities
- US REITs
- Core Fixed Income
- Short-Term US Treasuries
- TIPS
- US High Yield
- Commodities

Each target date allocation is created and retired according to a pre-determined schedule related to the relevant target date. The series is currently comprised of the following ten indices:

- S&P Target Date Retirement Income Index
- S&P Target Date 2010 Index
- S&P Target Date 2015 Index
- S&P Target Date 2020 Index
- S&P Target Date 2025 Index
- S&P Target Date 2030 Index
- S&P Target Date 2035 Index
- S&P Target Date 2040 Index
- S&P Target Date 2045 Index
- S&P Target Date 2050+ Index

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