BrightScope Investment Menu Quality

Enabling the Effective Benchmarking of DC Plan Investment Menus

BrightScope Investment Menu Quality. *An investment menu scoring methodology developed by BrightScope to assist plan sponsors and advisors in benchmarking their investment menus to other plans.*

Overview

Over the last thirty years defined contribution (DC) plans have replaced defined benefit (DB) plans as the primary workplace retirement savings vehicle for America's workforce. The most fundamental impact of the decline of DB plans is a shift of decision making — and thus responsibility and risk — from plan sponsors to plan participants. In defined contribution plans, participants *choose* to participate, *choose* how much to defer, and *choose* how to invest within their plan.

One side effect of this shift in responsibility is a well-documented return gap between DB plans and DC plans. Researchers have estimated that DB plans outperform DC plans by between 100- 250 basis points a year.[1] While some of this return gap can be explained by participant level decision-making, much of the gap can be explained by critical plan sponsor decisions, including the responsibility to select and monitor the investments that comprise the investment menu.

Improving the quality of DC investment menus and closing the DB return gap is an important issue for policymakers, regulators, plan sponsors and participants. This paper will focus on the sponsors' investment selection and monitoring responsibilities, with particular emphasis on the role BrightScope's Investment Menu Quality algorithm plays in the investment selection and monitoring process.

The Importance of Investment Decision-Making

While an ERISA retirement plan may list multiple objectives in its plan document, the primary objective is to provide retirement income security to the plan's participants. To accomplish this objective, ERISA plans are generally invested in assets with risk and return characteristics that enable plan participants to achieve retirement income security with a high probability. Selecting these investments is an important part of operating a defined contribution plan. In a defined contribution plan with participant-direction, investment selection occurs on two levels:

1. ***Sponsors*** construct a menu of investment alternatives offered to participants in the plan;
2. ***Participants*** construct portfolios using the investment alternatives offered by the plan sponsor.

It is logical to view the first level as the dominant decision level, because the plan sponsor's choices define and limit the ability of plan participants to construct portfolios. The authors of ERISA acknowledge the ascendancy of the sponsors' investment decisions by offering a safe harbor to plan sponsors under section 404(c) for any losses "which result from" the participant's exercise of control. [2] Importantly, section 404(c) does not immunize fiduciaries from their own fiduciary misconduct, as evidenced through "imprudence in the selection or monitoring of investment options available under the plan." [3] Given the importance of investment selection and monitoring to participant outcomes and the fact that it is a fiduciary act for which ERISA provides no relief, sponsors must ensure their investment menu design decisions are prudent and result in portfolios that compare favorably to other portfolios.

Investment Selection and Monitoring as a Fiduciary Act

Selection and monitoring of plan investment alternatives is a fiduciary act. With all fiduciary responsibilities under ERISA, a fiduciary's action must be made in accordance with the following guidelines:

1. **Exclusive Purpose**: for the exclusive purpose of providing benefits to participants and their beneficiaries;
2. **Prudent Man Standard**: with the care, skill, prudence, and diligence *under the circumstances then prevailing* that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims;

> "In order to engage in a prudent process, fiduciaries must do more than analyze a particular service provider, or investment. Instead, they must also compare that information to comparable data about other similar plans, services or investments."
>
> - Fred Reish

3. **Diversification:** by diversifying the investments of the plans so as to minimize the risks of large losses;
4. **Plan Documents**: In accordance with the documents and instruments governing the plan.[4]

While all four fiduciary duties are critical, the "Prudent Man" or "Prudent Expert" Standard, serves as a useful guidepost for all fiduciary activities. This clause makes clear that ERISA's fiduciary standard is not an absolute standard, but rather one flexible enough to adapt to changing circumstances. ERISA's authors were careful to ensure that prudence could grow and change over time based on the current thinking of prudent experts. One researcher has called ERISA's version of prudence "a relative standard that is in part established by what other (s) . . . [are] doing." [5] In other words, prudence adapts to shifts in the investment and academic landscape, and one cannot be prudent without ensuring that one's actions are in line with the prevailing standards.

Demonstrating Prudence

Like all other fiduciary acts, a prudent fiduciary has an obligation to understand the prevailing standards for investment menu selection and monitoring. It is well accepted by practicing fiduciaries that engaging in a prudent process is an essential element of their ERISA responsibilities. Strategic Ethos, a leader in fiduciary education and decision-making, has developed a set of practices and performance standards for retirement plan fiduciaries. In the handbook designed for plan sponsor fiduciaries, the authors describe the importance of process, specifically as it relates to the prudent fiduciary's obligation to understand the prevailing standards for investment menu selection and monitoring:

> "Besides the legislative and regulatory requirements, it also has been demonstrated that superior investment returns are the result of developing a prudent process or strategy, and then adhering to it. As a practical matter, a comprehensive framework is needed to ensure that a 401k decision-maker's process is fully and effectively addressed on an ongoing basis. Only by following a structured process can a decision-maker be certain that all critical components of an investment strategy are being properly implemented."[6]

This emphasis on process is important because fiduciaries are only liable for losses that result from imprudence, not from the decline in a prudently selected investment. Assistant Secretary of Labor for the EBSA, Phyllis Borzi, describes it this way:

> "Under ERISA, plan fiduciaries are not liable for plan losses merely because an investment lost money but because they acted imprudently in selecting and monitoring the investment. Accordingly, when investigators review the selection of investments, they will generally focus on the procedures used by a plan fiduciary, rather than the ultimate performance of the asset." [7]

Investment fiduciaries are ultimately judged by a demonstration of prudence in the investment decision-making process rather than by actual investment performance. According to ERISA attorney Fred Reish, benchmarking is an essential part of demonstrating prudence:

> "In order to engage in a prudent process, fiduciaries must do more than analyze a particular service provider, or investment. Instead, they must also compare that information to comparable data about other similar plans, services or investments." [8]

Comparable data about other similar plans and investments is available, and can be used effectively for benchmarking a retirement plan as one part of a prudent investment process.

Retirement Plan Portfolio Benchmarking

To engage in benchmarking, a fiduciary must first define what must be benchmarked. The Department of Labor encourages sponsors to not only consider each investment individually, but also "consider the role of each investment in the plan's investment portfolio, taking into account such factors as diversification, liquidity, and risk/return characteristics." [9] The DOL makes it clear that each investment should not be analyzed in a vacuum, but should be analyzed in light of its impact on the overall portfolio. While most plan fiduciaries have a process for benchmarking individual funds on an investment menu, few fiduciaries have a defined process to benchmark the entire retirement plan portfolio.

Once a fiduciary has decided to engage in portfolio benchmarking they must develop financial metrics to compare the economic characteristics of their retirement plan portfolio to those of other retirement plans subject to ERISA. BrightScope's Investment Menu Quality Algorithm measures the degree to which a participant of any risk tolerance or time horizon can build a well-diversified portfolio that will meet their retirement goals. This metric is intended to be part of a prudent investment process, and to supplement the individual investment analysis prudent fiduciaries are already doing.

Literature Review

We start from the supposition that it is useful to investigate whether sponsors are offering participants appropriate investment alternatives, and that it is simultaneously prudent for a sponsor to evaluate the economic characteristics of their portfolio compared to those of other sponsors. There are two ways in which an investment menu may be sub-optimal: offering a menu with insufficient coverage of asset classes participants need to construct desirable portfolios, and offering investment options of any type which have inferior expected returns compared to other investments with similar levels of risk. Within the context of modern portfolio theory, both sub-optimalities result in a plan-level efficient frontier that is below the efficient frontier that is possible to an investor with more robust options.

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Existence of these sub-optimalities is well documented in the academic research. In particular there are three recent papers that provide analysis of plan-level investment menus. The first two highlight major deficiencies in investment menus while the third is more favorable:

> **Elton, Gruber, and Blake (2006)** studied 417 401(k) plans surveyed by Moody's Investor Service in 2001; they estimated that participants in those inadequate plans would have 53% less terminal wealth compared to a market portfolio, over a 20-year period.[10]
>
> **Angus, Brown, Smith, and Smith (2007)** studied a subset of TIAA-CREF funds offered by some college-based 403(b) plans; for that subset, they claimed that a participant in these plans might lose more than half of terminal wealth over a 40-year period, compared to an expanded menu.[11]
>
> **Tang and Mitchell (2008)** studied a subset of 1,530 401k plans for which the Vanguard Group acted as recordkeeper; for that subset, they arrived at the conclusion that most plans in the sample perform well in terms of mean-variance efficiency, diversification, and participant welfare, providing workers with the opportunity to invest optimally.[12]

The research reveals a dispersion of quality across plan portfolios and perhaps across service providers.[13]

Data

BrightScope's data is based on employee benefit plan documents filed by plan administrators with the Securities and Exchange Commission and the Department of Labor, and comprises over 15,000 plans. Of the over 15,000 plans with information available, roughly 1,200 plans are missing critical information required for analysis or have an investment menu consisting entirely of funds for which BrightScope has insufficient data. The resulting dataset of 13,832 plans analyzed in this study represents 26.88 million participants and over $1.6 trillion in defined contribution plan assets. There are three major differences between BrightScope's data and datasets used for previous research:

1. **Depth**: BrightScope's dataset at the time of writing contains investment menu data from13,832 defined contribution plans. These plans cover roughly 50% of 401k participants and roughly 55% of assets in defined contribution plans as of 12/31/2007.
2. **Breadth**: BrightScope's dataset includes plans from virtually every major service provider, and spans plans of all asset sizes and industries.
3. **Quality**: Due to the fact that BrightScope's data comes directly from each plan's audited regulatory filings, the data is free of any survey bias, including bias introduced through self-selection.

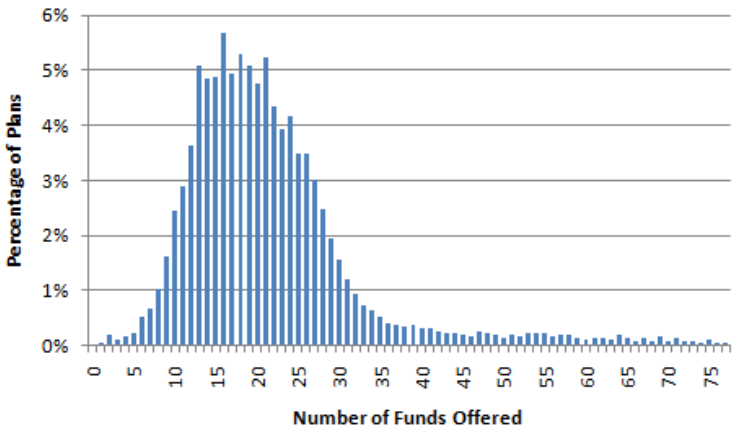
BrightScope partners with Xignite, Inc., a provider of financial data, to acquire mutual fund, equity, and benchmark index return histories, fee breakdowns, and associated information. Additionally, BrightScope works di-

We believe that BrightScope's dataset more accurately reflects the variation and scope of plans in the defined contribution marketplace because of the inclusion of plans across all providers, industries and sizes.

rectly with financial services firms that provide Collective Trust and Pooled Separate Account investments to acquire similar data from these providers.

Figure 1 shows the number of distinct investment choices offered by the 12,749 plans in the dataset:

Figure 1. Percentage of Plans by Number of Funds Offered



Source: BrightScope. Data from 15,200 plans as of 12/31/2007.

For these plans the average number of investment options measured is 22.5 and the median number is 20. This mean number is higher than the 18 found by the Profit Sharing Council of America,[14] the 14 found by Brown et. al. (using 2002 data; 2007), and the 13 found by Tang and Mitchell (2008).

We believe that our measure of investment options is substantially similar to the PSCA's findings and is higher than the other studies mentioned previously due to a higher proportion of small and mid-size plans in BrightScope's dataset, as smaller plans tend to have more investment options than larger plans. As a result, we believe that BrightScope's dataset more accurately reflects the variation and scope of plans in the defined contribution marketplace because of the inclusion of plans across all asset size and participant count ranges.

BrightScope's findings are in broad agreement with previous studies regarding both the quantity of investment offerings presented by these plans, as well as the observation that the average number of investment options offered by defined contribution plans has increased substantially in the last decade. Notably, within BrightScope's dataset of plans without brokerage windows, 5% of plans contain more than 47 investment options, 1% of plans have more than 76 investment options, 78 plans have more than 100 investment options, 8 plans offer more than 200 options, and 2 plans offer more than 300 options.

For the 1,083 plans that offer participant access to a brokerage window, the average number of investment options is 31. Among these plans there are a total of 20 plans offering 200 or more investment options and 4 plans that offer over 400 investment options.

Figure 2 (in the Appendix) shows the percentage of all plans that offer various types of investment options.

Figure 3 (In the Appendix) details BrightScope's summary findings regarding asset classes missing from investment menus, displayed in a tabular format. Several key findings include that many plans will offer at least one each of domestic large cap growth, value, and blend funds, but the same does not hold true for mid or small capitalization funds. Importantly, while the substantial majority of plans offer at least some mid or small cap exposure, it may be through only one type of fund. For example, one of a small cap blend, small cap growth, or small cap value fund, but rarely all three, or even two of the three.

Nearly all plans (99.75%) offer some form of domestic large capitalization fund; a full 95% offer a large cap blend fund; 94% offer a large cap growth fund; and nearly 87% offer a large capitalization value fund. Again, the story is highly dissimilar for mid cap and small cap offerings, where only 39% to 65% of plans offer any individual fund type.

Furthermore, a striking skewing effect toward growth funds is observed in the data across large, mid, and small cap equities. Across all plan sizes in BrightScope's comprehensive data set, plans appear to be more likely to offer a growth fund than a value fund, and for both the small and mid cap domestic equity asset classes, plans are substantially more likely to offer a growth fund than a blend fund in the same capitalization class.

Figure 4 (in the Appendix) details BrightScope's findings of missing asset classes by plan size. Several key findings include the overall tendency for larger plans to offer a more comprehensive investment option set over the complete set of asset classes, and that plans of all sizes are more likely to provide some form of large cap fund than either a mid cap or small cap fund. The former observation holds true except for a specific subset of asset classes - mid and small cap domestic equities - in the very largest plans. The latter observation holds true for plans of all sizes.

BrightScope believes that its data improves upon existing datasets and can serve to update and expand defined contribution plan investment menu research.

Investment Menu Quality Methodology

To evaluate and compare investment menus across plans we need a single measure of investment menu efficiency. The metric we use is based upon relative Sharpe ratio loss (RSRL) proposed by Calvet, Campbell, and Sodini (2006).[15] This metric measures each plan's mean-variance efficiency by comparing the Sharpe ratio[16] of a given portfolio with that of a benchmark portfolio. In this way we can shed light on plan-level economic opportunity loss under a mean-variance framework.

BrightScope measures each plan's mean-variance efficiency by comparing the Sharpe ratio of a given portfolio with that of a benchmark portfolio.

When discerning financial characteristics of plan investments, BrightScope analyzes funds and their associated benchmarks based on a 60-month return history. If a fund has an insufficiently long return history, its associated benchmark return history is used as a proxy or stand-in for calculations that require a return history. Additionally, funds without return history data are given the average alpha of funds in their asset class.

BrightScope uses data from Xignite, Inc. and direct data feeds from a variety of financial service providers to calculate alphas, betas, idiosyncratic variances (as measures of risk), and returns relative to benchmarks for each of the investment options offered by each plan. A list of the indices BrightScope uses for benchmarking can be found in the Appendix (Figure 5). In a break from existing research, BrightScope has included commodities and real estate benchmarks in the set of comparative asset classes, as these asset classes provide well-documented diversification benefit to participants. When analyzing the performance of a plan against its opportunity set, we evaluate which investments would be used for benchmarking defined benefit plans, foundations, and endowments, and found that real estate and commodities investment alternatives were commonly used diversifiers. Although less frequently found in participant-directed defined contribution plans, we felt that no analysis would be complete without considering the differences and resultant economic losses that exist between defined contribution plans and defined benefit plans.

At the core of BrightScope's comparison is a Sharpe ratio calculation that measures the excess reward per unit of risk that the plan's investment menu achieves, based on various weightings of the individual assets in the menu.

$$S = \frac{E[R] - R_f}{\sqrt{\mathrm{var}(R)}}$$

Sharpe Ratio Calculation

The Sharpe ratio calculation uses as its inputs:

The BrightScope Investment Menu Quality rating for a given plan is expressed as the percentage of the Sharpe ratio of the frictionless portfolio that the measured plan obtains using its own investments with their associated fees, alphas, betas, and variance measures.

E[R]: The weighted expected returns of the investments in a plan's investment menu, which are formulated by taking each investment's asset allocation among its benchmarks and combining the weighted expected returns of the benchmarks and adjusting these returns by the investment's unique (fund-specific) alpha and betas, and

R_f: The risk-free rate of return, and

var(R): The variance measures of the investments in a plan's investment menu, which are formulated by taking each investment's asset allocation among its benchmarks and combining the weighted variance-covariance of the benchmarks after controlling for the fund's unique betas idiosyncratic variance.

To compare one plan's investment menu to another, BrightScope performs a constrained linear optimization of the Sharpe ratio that may be obtained using every possible combination of investments within each plan's investment menu. Each linear optimization performed has a dimensionality equal to the number of funds in the measured plan's investment menu. The constrained linear optimization does not allow short sales, or any other scenario that results in negative weighting of an individual investment in the menu. The corollary to this is that no individual investment in the plan's menu may have a weighting above 100% in any step in the optimization.

The optimization technique begins with an equal weighting of all investment options in a given plan's investment menu, and calculates a baseline Sharpe ratio using estimates of expected returns for each fund along with covariance measures between the funds. As described above, the expected return calculations are based on the fund's benchmark allocations, as well as measures of its alpha and betas, which are computed using the fund's return history and its associated benchmark return histories. The variance measures for the investment options are calculated from the covariance of the return histories of the funds' benchmark return histories combined with the funds' unique betas and idiosyncratic variances.

BrightScope's linear optimization function then varies each of the investment option's weights, recalculating the Sharpe ratio using the same expected returns and covariance measures, comparing the Sharpe ratio obtained at each stage to the previous best Sharpe ratio. When a new optimal Sharpe ratio is found, it replaces the previous optimal Sharpe ratio and the algorithm continues until no further improvement can be made. The algorithm's result is considered the "optimal" or best possible Sharpe ratio obtainable using a given plan's investment menu.

BrightScope subsequently performs a calculation of the optimal Sharpe ratio that may be obtained with a "frictionless" portfolio of pure benchmarks, unaffected by fees and transaction costs. Then, the relative Sharpe ratio loss between the portfolio formed from the full set of pure benchmarks and the portfolio within the measured plan is calculated. The BrightScope Investment Menu Quality rating for a given plan is expressed as the percentage of the Sharpe ratio of the frictionless portfolio that the measured plan obtains using its own investments with their associated fees, alphas, betas, and variance measures.

Results

BrightScope's investment menu quality algorithm and Sharpe ratio loss results correlate strongly with the results published by Tang and Mitchell (2008). However, because BrightScope uses two index classes not used by Tang and Mitchell - commodities and real estate - and because BrightScope's data spans all providers, industries and plan sizes, our results show an additional risk diversification benefit that can be achieved by constructing a menu with more than 8-10 investment options. BrightScope believes that these additional indices, especially as investments that track them are being used by an increasing number of plans, are an important factor in measuring the true relative Sharpe ratio loss of plan investment menus versus the market as a whole.

As indicated by Tang and Mitchell, there is significant low-hanging fruit for plans with only a handful of investment menu options offered to participants. For plans that have a larger number of funds offered, a tremendous

benefit in risk diversification may still be had by reviewing the investment menu for low-performing and high cost funds, and for a lack of true de-correlative capacity. Despite having a relatively large number of funds (for example, dozens), many of the plans in BrightScope's dataset have few funds that come close to providing returns similar to their associated benchmark indices. While the mean Sharpe ratio loss tends to decrease as the number of investment menu options increases, there is considerable variance (as much as 75%) on a per-plan basis within the groups of plans offering the same number of investment options. This points to the criticality of measuring each plan on an individual basis, and the importance of performing an actual covariance and Sharpe ratio analysis, rather than simply a single "number of funds" analysis to discern the efficacy of a menu.

Overall, BrightScope has found that many 401k plans fail to capture more than 70 to 80% of the optimal Sharpe ratio obtainable using the frictionless portfolio. From a mean-variance standpoint, there is often significant correlation between the behavior of mid cap or small cap equity asset classes and their large cap counterparts. Nevertheless, the correlation is far from complete, and a significant proportion of plans - especially within the small and mid-size plan market - misses the diversification benefit offered by small and mid cap equities. This simultaneously leads to a loss of risk reduction and potential for returns, and limits the maximum Sharpe ratio obtainable for participants in plans without these asset classes. Additionally, BrightScope has found that participants in the smallest plan size ranges are even more likely to miss out on this diversification benefit than participants in larger plans, creating further divergence in the functional quality plans of varying sizes from a retirement income security perspective. The BrightScope Investment Menu Quality rating succinctly demonstrates this reduction in risk-diversification capacity, as the optimal Sharpe ratio obtainable for plans missing these asset classes will be lower than for otherwise-identical plans offering additional, performing investment options within the specific underperforming or missing asset classes.

The ideal menu from a relative Sharpe ratio loss standpoint is one that provides as much diversification opportunity as possible to the participant, while maintaining returns that are similar to those of benchmark indices. Frequently, this means a larger number of high-quality investment options. However, it is clear from the data that it is possible to at once provide a menu that offers a relatively small number of investment options and provides a high degree of risk diversification to the participant. Indeed, there are individual plans within BrightScope's data set with as few as 4-5 funds that capture nearly 80% of the maximal possible Sharpe ratio obtainable under a frictionless portfolio of pure benchmarks.

Conclusion

BrightScope's dataset demonstrates that 401k plans offer substantively variable opportunity for investment choice and risk diversification to their participants. Each of the scenarios discussed in the prior section demonstrates the further need for investment menu benchmarking across all plans to accurately discern which plans are offering their participants effective investment menus and which are not.

Due to their critical role in securing retirement income for plan participants, it is important for plan sponsors and policymakers to have metrics that they can use to evaluate the efficacy of plan menus. BrightScope's Investment Menu Quality rating provides additional insights to sponsors and policymakers about how their menus compare to menus of other plans and what, if anything, they can do to improve the menu for the benefit of participants.

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Future Research

BrightScope aims to ensure its Investment Menu Quality rating metric is the most accurate and useful measure of the efficiency of a 401k plan's investment menu and its ability to get participants to retirement. To that end, future research by BrightScope will focus on the following:

1. Evaluating plans according to the efficiency tests developed by DeRoon, Nijman and Werker (2001).
2. Comparing defined contribution plans with their defined benefit peers across both the Relative Sharpe Ratio Loss metric and the efficiency test metric above, to determine if a return gap exists and what may cause it.
3. Linking plan efficiency to providers to determine if menus from certain providers are more efficient.
4. Performing more detailed holdings-based analysis of investment menus to determine efficiency.
5. Analyzing participant-level data to determine the correlation between a well-designed menu and well-designed individual portfolios.
6. Evaluating the potential for a decline in plan performance due to "choice overload" due to too many funds being offered in the menu.

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Authors and Acknowledgements

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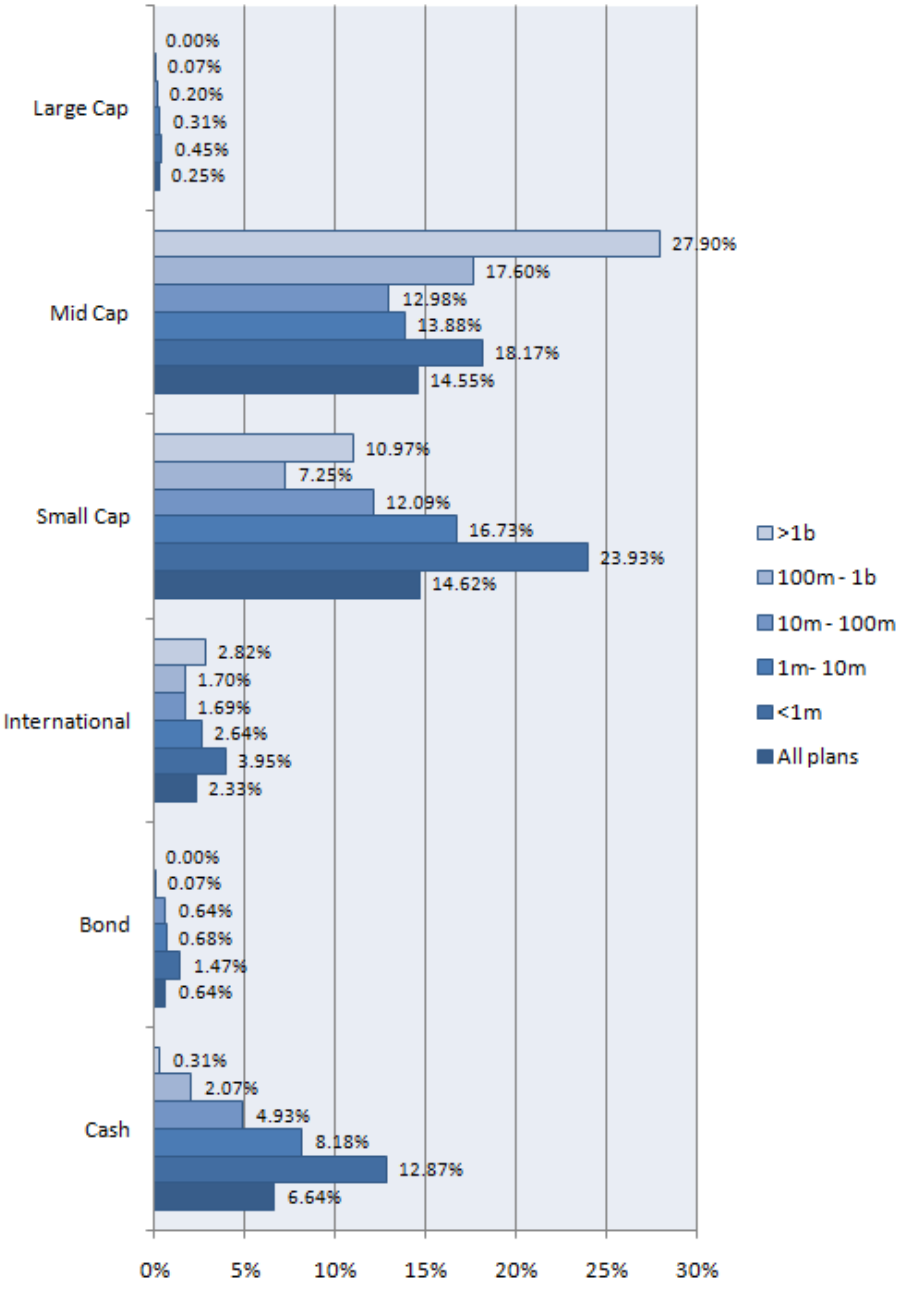
Appendix

Figure 2. *Percentage of All Plans Offering Investment Alternatives by Broad and Detailed Categories*

Broad Category	% of Plans Offering	Detailed Category	% of Plans Offering
Domestic Large Cap	99.7%	Domestic Large Cap Blend	95.0%
		Domestic Large Cap Value	86.9%
		Domestic Large Cap Growth	94.3%
Domestic Mid Cap	85.5%	Domestic Mid Cap Blend	52.6%
		Domestic Mid Cap Value	52.1%
		Domestic Mid Cap Growth	64.7%
Domestic Small Cap	85.4%	Domestic Small Cap Blend	55.8%
		Domestic Small Cap Value	39.2%
		Domestic Small Cap Growth	58.0%
Domestic Total Market	0.5%	Domestic Total Market	0.5%
International	97.7%	Europe, Australasia and Far East	90.9%
		EU	2.9%
		PA	3.0%
		Japan	1.6%
		EE	17.7%
		World Ex-US	43.2%
Fixed Income	99.4%	Total Bond Market	97.9%
		Corporate	3.3%
		Government	25.3%
		International	8.8%
		TIP	9.3%
		Mortgage	0.5%
Cash and Cash Equivalent	96.5%	Money Market	56.2%
		Stable Value/GIC	67.9%
Balanced Fund	90.7%	Balanced Fund	90.7%
Target Date	36.8%	2010	28.9%
		2015	19.8%
		2020	30.7%
		2025	20.1%
		2030	30.6%
		2035	20.0%
		2040	29.8%
		2045	13.0%
		2050	14.2%
Other	43.3%	Company Stock	6.80%
		Other Common Stock	10.81%
		Real Estate	28.42%
		Commodities	0.09%
		Brokerage/Mutual Fund Window	7.40%

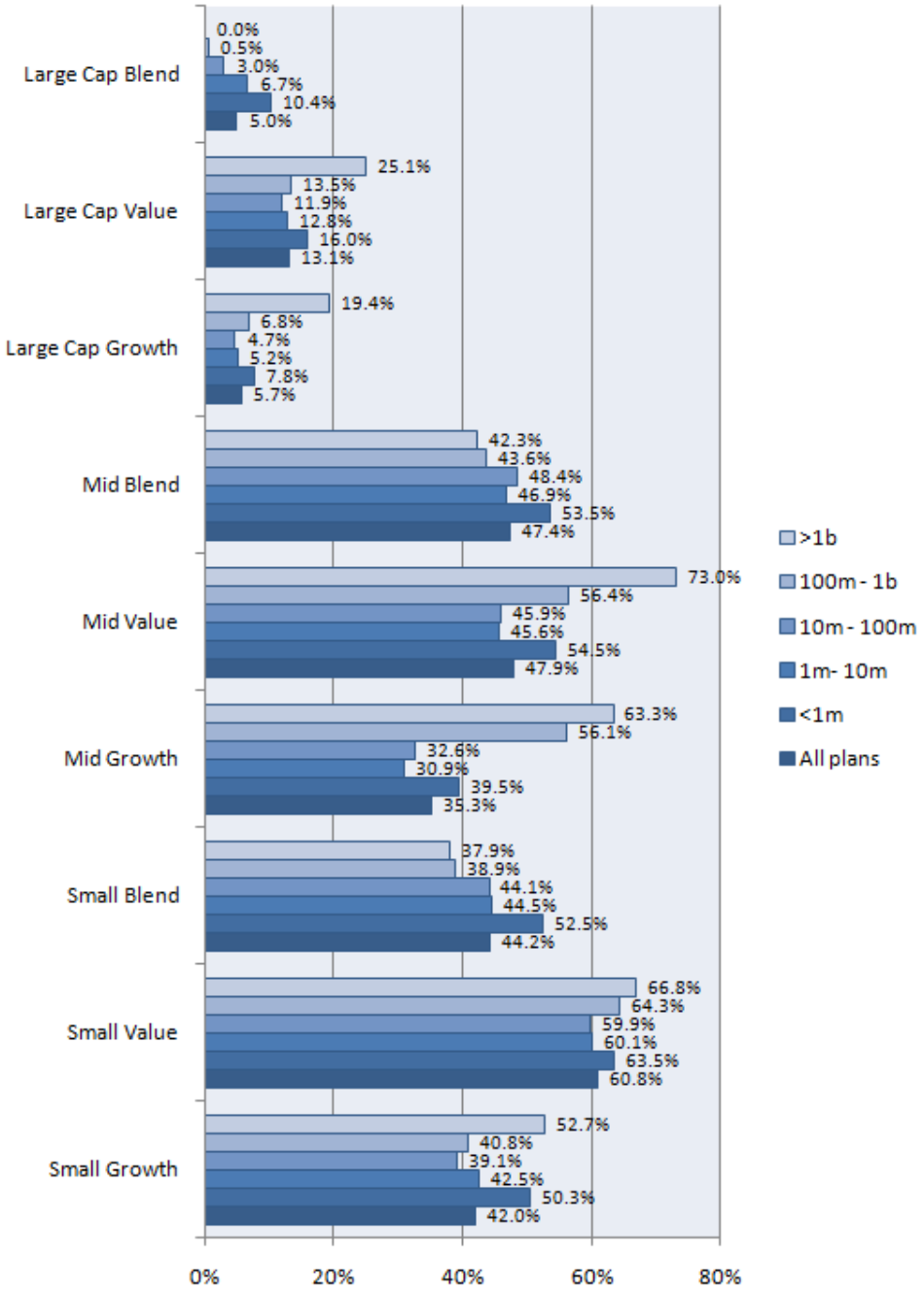
Appendix

Figure 3. *Percentage of Plans Missing Investment Alternatives by Major Asset Class*



Appendix

Figure 4. *Percentage of Plans Missing Investments in the Nine Major Domestic Stock categories by size of plan*



Appendix

Figure 5. *BrightScope Indices*

- Equities
    - Large Cap (Value and Growth)
        - Large Cap Blend (S&P 500)
        - Growth (S&P 500 Growth)
        - Value (S&P 500 Value)
    - Mid Cap (Value and Growth)
        - Mid Cap Blend (S&P 400)
        - Growth (S&P 400 Growth)
        - Value (S&P 400 Value)
    - Small Cap (Value and Growth)
        - Small Cap Blend (S&P 600)
        - Growth (S&P 600 Growth)
        - Value (S&P 600 Value)
    - International
        - EAFE (MSCI Barra EAFE Free USD)
        - Europe (MSCI Barra Europe Ex UK NR USD)
        - Pacific (MSCI Barra Pacific USD)
        - Japan (MSCI Barra Japan NR USD)
        - Emerging Markets (MSCI Barra Emerging Markets USD)
        - World Ex-US (MSCI Barra World Ex-US NR USD)
- Bonds
    - Total Bond Market (Barcap Aggregate Bond TR)
    - Corporate Bonds (Barcap US Corporate IG TR USD)
    - Long-Term Government Bonds (Barcap LT Governemnt)
    - Intermediate Government Bonds (Barcap Int Government)
    - International Bonds (Morningstar Glob Ex-US Gov Bond US)
    - TIPS (Morningstar TIPS TR)
    - Mortgage Backed (Barcap Mortgage-Backed)
- Real Estate and Commodities
    - FTSE NAREIT All REITs TR
    - Goldman Sachs Commodity
- Allocation/Balanced Funds
    - DJ Conservative Portfolio
    - DJ Moderate Portfolio
    - DJ Aggressive Portfolio
- Cash
    - Barcap 1-3yr Government