INNOVEST PORTFOLIO SOLUTIONS, LLC

A RETIREMENT PLAN WHITEPAPER

INVESTMENT MENU SIMPLIFICATION

Wendy Dominguez, MBA, Principal, President

With

Abigail Thomas, Associate Director of Operations

Cheryl Wilks, Lead Senior Analyst

4643 South Ulster Street | Suite 1040

Denver, CO 80237

303-694-1900

www.innovestinc.com

INTRODUCTION

Right-sizing retirement plan options for participant direction has been hotly contested in the retirement plan industry. Some argue that giving participants the choice to select investments from numerous different options leads to higher participation and better participant success. Others argue that simplifying investment menus and offering a thoughtful investment menu of 15 to 20 options offers better participant success. This paper offers guidance and best practices based on both academic and our experience over the past 20 plus years helping our clients build sound retirement plan programs for their employees.

ABOUT INNOVEST PORTFOLIO SOLUTIONS

Innovest is a leading provider of retirement plan consulting services to more than 100 retirement plans, including some of the largest in the Western United States. Our focus on improving retirement outcomes by coupling fiduciary best practices, innovative plan design and conflict-free investment solutions drives our clients' success.

A BALANCING ACT: HOW MUCH CHOICE SHOULD PARTICIPANTS HAVE?

Plan sponsors must walk a fine line between offering a well-diversified and broad-ranging investment menu and helping participants make a manageable number of decisions. ERISA dictates that sponsors "must (1) provide sufficiently varied investment alternatives to allow the participant an opportunity to materially affect the potential returns on assets and account risk; (2) allow the participant to choose from at least three alternative investments, each of which must be diversified and each with different risk/return characteristics (employer's securities may not be one of the three)," (ERISA, Section Number 2550.404c-10).

However, participants do not respond well to numerous options. Too much choice can lead to poor diversification, procrastination, or "paralysis from analysis" where they will make no choice at all. The phenomenon of choice overload decreases a person's motivation to choose an option, as well as the subsequent motivation to remain committed to a choice, especially when participants are asked to justify their decisions through discussions with family, advisors, or themselves. (Scheibehenne, Greifeneder, & Todd, 2009)

Social psychologists from Columbia University, Sheena Iyengar, Ph.D., Gur Huberman, professor of Behavior Finance, and Wei Jiang, Professor of Free and Competitive Enterprise, present a negative relationship between the number of funds offered in a 401(k) plan and average participation rates. They describe that offering an additional 10 funds corresponds to a 1.5 to 2.0 percentage point decline in the firm-level average participation rate (Pension Design and Structure, 83-96).

If a participant is presented with multiple decision points and investment options, it is easy to see how decisions could be put off for another day. But even when a participant has cleared the hurdle of participation, their asset allocation can be sub-optimally influenced by the number of investment options offered in a plan. Shlomo Bernatzi, professor and co-chair of the Behavioral Decision-Making Group at the UCLA Anderson School of Management, and Richard Thaler, professor of Behavioral Science and Economics at the University of Chicago Booth School of Business, suggest that unsophisticated investors may base their diversification strategy on the overall makeup of the investment menu. That is, if a plan sponsor offers 10 equity options and five non-equity options, participant accounts would be invested two-thirds in equities and the remainder elsewhere. They found a positive relationship between the proportion of equity funds in a menu and the amount of participant portfolios invested in equities (Benartzi & Thaler, 2001).

Additionally, Iynegar and Jiang found that a broader menu of investment options results in a lower allocation to equity in participant accounts (Iyengar & Jiang, 2003). One explanation is

that more choices make participants more susceptible to loss aversion. Loss aversion is a behavioral economics phenomenon that people have a tendency to avoid losses through multiple decision points, even at the cost of avoiding gains. This phenomenon would result in a higher allocation to less risky asset classes – bond and money market funds.

Researchers David Goldreich and Hanna Halaburda found that smaller menus often have better risk-return characteristics than larger menus, measuring the highest Sharpe ratio attainable using the funds offered in a menu. Often, adding the nth fund in a menu does nothing unique to contribute to a risk-return makeup. (Goldreich & Halaburda, 2011)

More than just participant confusion and inertia, an extensive core menu may give plan fiduciaries and participants a false sense of diversification as a result of redundancy in the investments' underlying funds. An efficient investment menu provides distinct and different investment options that offer true opportunities for diversification and can be easily explained to participants.

Case Study:

Figure 1 on the next page displays the top 25 holdings for a large municipality's two most utilized Large Cap Growth funds, the Fidelity Contrafund (FCNTX) and the Fidelity Magellan Fund (FMAGX). A participant could invest in both funds with the expectation of diversification within the large cap equity category; however, they would end up with two highly correlated funds that have a significant overlap in holdings.

Figure 1
Holdings as of 11/30/2018

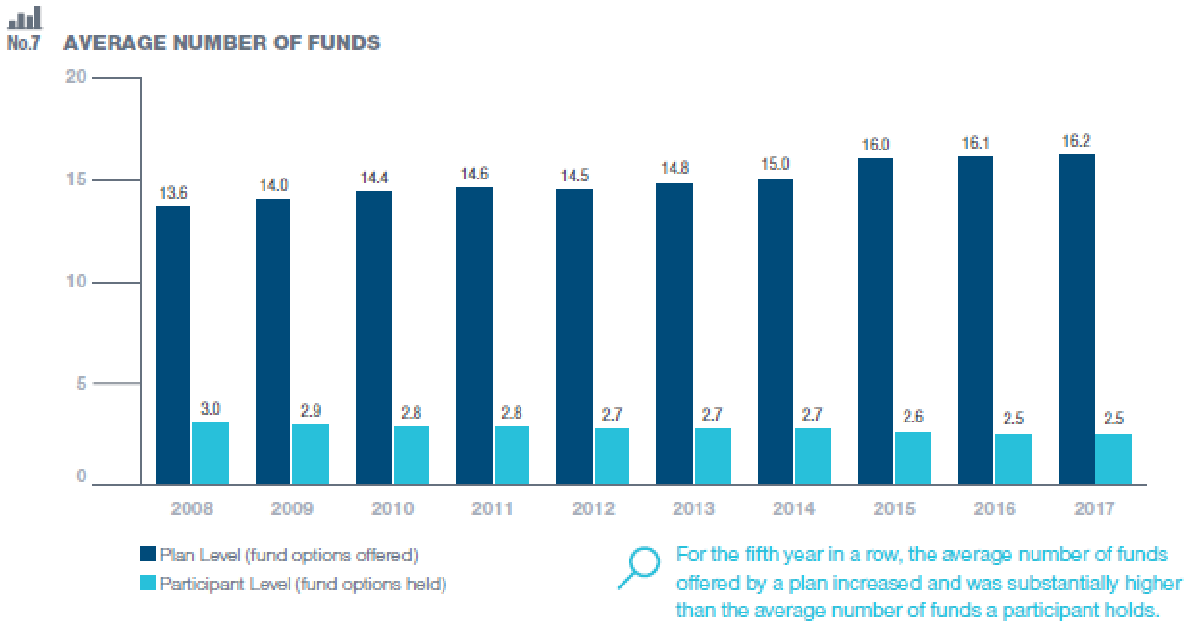
Fidelity Contrafund	%
Amazon.com Inc	6.86%
Berkshire Hathaway Inc A	5.58%
Facebook Inc	5.38%
Microsoft Corp	4.24%
UnitedHealth Group Inc	3.83%
Salesforce.com Inc	3.19%
Visa Inc	3.14%
Alphabet Inc	3.03%
Alphabet Inc C	2.71%
Adobe Inc	2.58%
Netflix Inc	2.22%
Apple Inc	2.22%
JPMorgan Chase & Co	1.99%
Mastercard Inc	1.92%
PayPal Holdings Inc	1.81%
Bank of America Corporation	1.80%
Citigroup Inc	1.73%
Amphenol Corp	1.66%
Activision Blizzard Inc	1.14%
Workday Inc	0.97%
The Estee Lauder Companies Inc	0.96%
Vertex Pharamceuticals Inc	0.93%
American Express Co	0.81%
McDonald's Corp	0.80%
Mettler-Toledo International Inc	0.73%
Top 25 Holdings	**62.23%**
13 Overlap Holdings	**44.16%**

Fidelity Magellan	%
Microsoft Corp	6.68%
Amazon.com Inc	4.04%
UnitedHealth Group Inc	2.92%
Apple Inc	2.79%
Berkshire Hathaway Inc B	2.52%
Alphabet Inc C	2.23%
Alphabet Inc	2.21%
JPMorgan Chase & Co	2.21%
The Home Depot Inc	1.84%
American Tower Corp	1.83%
McDonald's Corp	1.65%
Northrop Grumman Corp	1.64%
Facebook Inc	1.63%
Visa Inc	1.55%
United Technologies Corp	1.54%
Boston Scientific Corp	1.50%
Bank of America Corporation	1.44%
IHS Markit Ltd	1.43%
ConocoPhillips	1.43%
Wells Fargo & Co	1.43%
Intuit Inc	1.35%
EOG Resources Inc	1.27%
Humana Inc	1.23%
Amgen Inc	1.22%
Adobe Inc	1.21%
Top 25 Holdings	**50.79%**
13 Overlap Holdings	**33.08%**

Industry Snapshot

According to a custom defined contribution survey conducted by the Plan Sponsor Council of America, the average number of investment options in Profit Sharing and 401(k) plans in 2016 was 19, a number that has remained steady since 2011. T. Rowe Price surveyed their recordkeeping clients and reported that while investment options in plans have actually been increasing, participant usage has been declining. Please see the graphic below:

Figure 2



A 2018 Callan Institute survey of defined contribution plan trends reported that 58.2 percent of plan sponsors conducted an investment structure evaluation within the past year. Of those plan sponsors the most common reason for the evaluation was routine due diligence. Beyond that, 39.1 percent of those plan sponsors were using the evaluation to identify overlaps and gaps in the fund lineup and 27.3 percent completed the evaluation to streamline the fund lineup.

The Fiduciary Burden of Multiple Investment Options

Plan sponsors are faced with numerous and complex monitoring responsibilities as fiduciaries. How are the investments monitored for qualitative and quantitative criteria on an ongoing basis? How much time will it take to thoroughly vet the investment options and make decisions about replacement or removal?

Using multiple investments places an additional burden on plan fiduciaries that have an obligation to ensure the reasonableness of fees and act with prudence on behalf of plan participants. With numerous investment options, this obligation may be difficult to fulfill.

Recent retirement plan litigation brought against retirement plan sponsors has focused on retirement plan fees and plan sponsors not using their economies of scale to drive down costs for their participants. With the potential for participant investments spread over many investment options, the ability to drive down costs is more difficult. With a streamlined investment menu, the task of creating economies of scale becomes much easier.

Donald B. Keim and Olivia S. Mitchell, professors at the Wharton School at the University of Pennsylvania, studied a large, nonprofit organization who reduced the number of funds available to retirement plan participants. Participants who had previously held funds that were eliminated from the plan and mapped to alternatives ended up with a significantly lower exposure to non-market systematic risks after the menu change took place. In addition, these participants also experienced investment expenses after the changes that were significantly lower which, based on reasonable assumptions, could lead to potential accumulated savings. (Keim & Mitchell, 2016)

Another consideration for plan sponsors looking to drive down costs in a simplified menu is the use of Collective Investment Trusts (CITs). CITs are pooled institutional investment vehicles available only to plan sponsors and/or plan fiduciaries. Generally, CITs may not hold assets of 403(b) plans, individual retirement accounts (IRAs), or health savings accounts. CITs provide plan fiduciaries and participants the potential for considerable savings as they offer a more institutional approach to investment structure.

Typically, CITs have lower costs associated with compliance, administration, marketing distribution, and can engage in securities lending, another potential source of return. CITs do not have a ticker symbol or prospectus, thus limiting a participant's ability to conduct independent research and performance evaluation.

Examining ways to reduce plan expenses is a sound fiduciary practice and should be an ongoing exercise - The expectation for continued growth in the CIT space among retirement plans likely means that, although they may not be an appropriate choice for a plan today, they could be in the future.

The benefits of using a streamlined menu are significant in helping retirement plan fiduciaries mitigate common pitfalls, which leads to increased liability and potential litigation.

INVESTMENT MENU CONSTRUCTION

The findings of behavioral economics discussed above are part of the evolution of retirement plan investment menus since their inception almost 40 years ago.

How your investments behave is less important than how you behave.
Benjamin Graham

In 1981, the IRS issued rules that allowed employees to contribute to their 401(k) plans through salary deductions. This started the widespread implementation of 401(k) plans and by 1983, nearly half of all large firms offered or considered offering a 401(k) plan to their employees as a means of saving for retirement. Investment menus consisted of just three to five options: typically, company stock funds and stable value funds.

By 1990, 401(k) plans held more than $384 billion in assets, with 19 million active participants. This coincided with an increase in the popularity of mutual funds. Plan sponsors responded to pressure from their more active participants by adding more investment options to their menus. It was not unusual during the 1990s for retirement plan menus to consist of 30 or more retail mutual funds covering a broad range of asset classes.

Fast forward to 2002, when the number of employer-provided retirement plans soared from under 100,000 in 1990, to over 400,000. The number of investment options available in the average 401(k) plan matched that pace, increasing by 21%. However, the survey conducted by Iyengar and Jiang discussed earlier, showed that participation in 401(k) plans dropped to 68.2 percent of workers by the end of 2002, down from 71 percent a year earlier (Iyengar & Jiang, 2003).

Despite plan sponsor efforts to offer numerous investment options and provide their employees with education, defined contribution participation rates were declining. Retirement plan participants, faced with an overwhelming number of investment options, suffered from the aforementioned, "paralysis from analysis." The outcome caused participants to make decision shortcuts, either doing nothing, or investing their retirement savings equally into every option available in their plan or resorting to overly conservative investing.

Utilizing an understanding of participants behavior, plan sponsors should consider simplifying and design investment menus around key objectives and organizing fund options into "tiers."

Case Study:
A large school district had $41 million in assets, 1,800 participants and six different providers offering a total of 481 proprietary investment options. Participants would need to make about 521 possible decisions before they even put $1 in their voluntary/supplemental plan. Innovest led the school district through an RFP process and they selected a single provider that provided a non-proprietary investment menu. Participation in the plan increased 26 percent year-over-year.

Tier One - *Do It For Me*

TIER 1

Target Date Investments/Risk-Based Models
For investors who want a simple, yet diversified approach to investing

For the majority of participants, the thought of navigating even a simple core menu of funds can be daunting. For those participants that want someone to "do it for me," it is best to guide them through the process of making an investment election based on their age or their expected date of retirement and then selecting the appropriate target date fund. Another option is a risk-based model (i.e. conservative, moderate, aggressive). They are assured their account will be professionally managed going forward. The proliferation of target date fund usage over the past 10 years is a sign this tier is suitable for a large portion of the participant population.

TIER 2

Core Investments
For investors who want a more hands-on investing style

Tier Two – *Help Me Do It*

For the segment of the participant population that have the desire to spend time understanding and building their portfolio, it is a best practice to provide them with a simplified core menu of funds. The challenge to plan sponsors is to provide enough options to deliver diversification, but also keep the menu easy enough for the average investor to understand.

TIER 3

Self-Directed Brokerage Option
Choose from thousands of available options

Tier 3 – *Do It Myself*

For some plan sponsors with seemingly sophisticated investing participants, they may want to provide additional choice. While this isn't appealing to all plan sponsors, some find the ability to point participants to a brokerage window to purchase almost any investment option a benefit. We find that the amount of participants that actually invest in a brokerage window is about 2 percent.

Case Study:
A large university offered employees three defined contribution plans, collectively representing $3.2 billion in assets, serving over 20,000 participants with eight different providers offering 550 investments. Innovest suggested an open investment platform, applied a simplified three tier investment menu, lowering the average number of investment options in each plan to around 19 "best in class" choices.

Typical Investment Menu Construction

Equity Investment Options

The Equity Style Box provides a simple equity classification system. As seen in Figure 3, the grid incorporates simple organization to a universe of investment styles. For stock portfolios, it ranges from value to growth and from large companies to small. In general, a growth-oriented fund will hold stocks the portfolio manager believes will increase earnings faster than the rest of the market. A value-oriented fund will contain stocks the manager believes are undervalued in price. The core boxes will contain funds that will typically include a blend of growth stocks and value stocks.

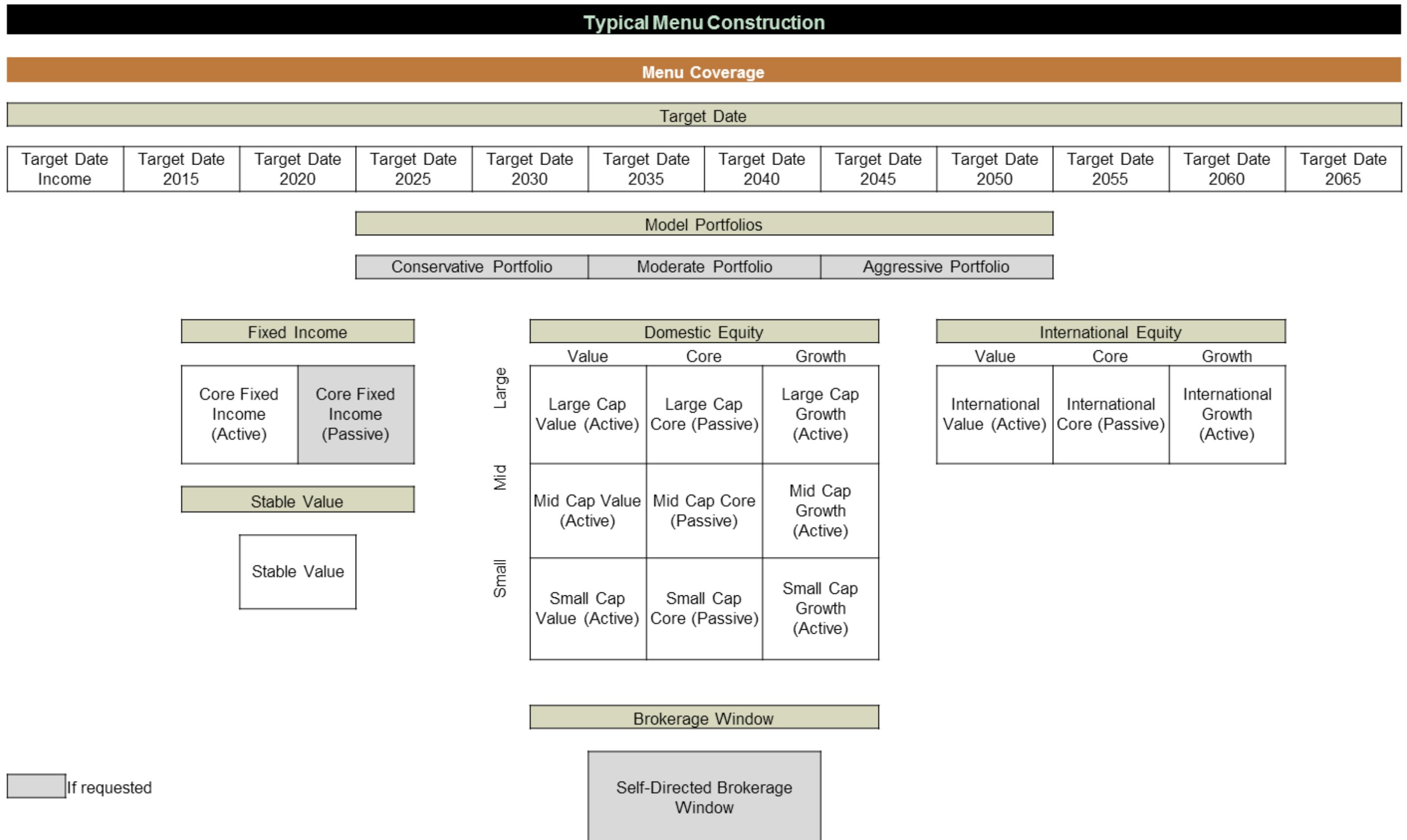
We have found that adopting this classification for investment menus in retirement plans is a good visualization tool for plan sponsors and allows for a thoughtful analysis and discussion about which equity funds to include in a Tier 2 core investment menu.

Fixed Income Investment Options

Fixed income investments in an investment menu should be diversified by duration. Most participants see fixed income as a way to dampen the overall risk of their investment portfolio, so as a result, long-duration bonds which can carry significant volatility should be avoided. Intermediate-term bond funds and short-term bond funds (or stable value options) are a solid example to include in a Tier 2 core investment menu.

Figure 3 below outlines a quality investment menu:

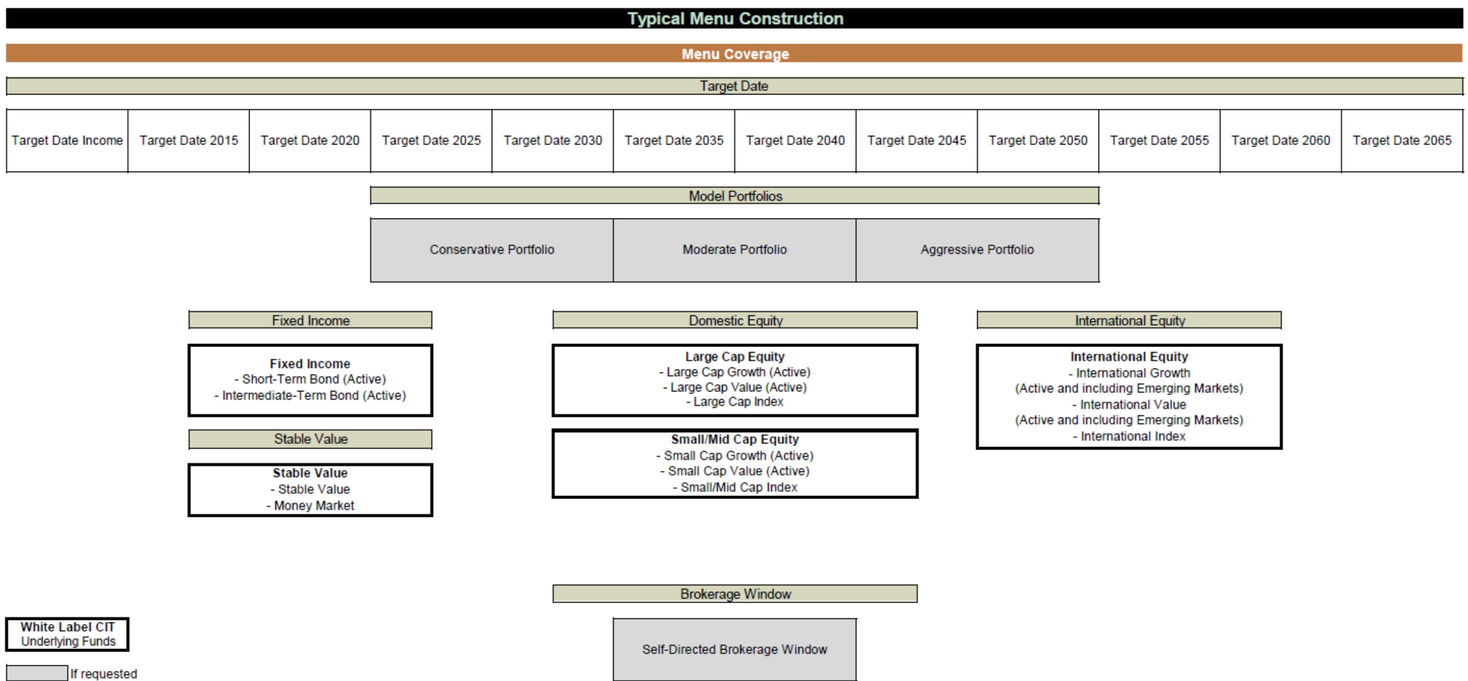
Figure 3



White Label Funds – Even Greater Simplification Opportunities

For some plan sponsors who want to further simplify their investment menu and possibly simplify the asset allocation process for their participants, creating White Label investment may be attractive. In the example below a traditional investment menu of 15 funds can be further reduced to just six diversified investment options.

Figure 4



Active vs. Passive Investment Strategies

Since markets have been steadily gaining from financial-crisis levels, passive strategies that track broad market indexes like the S&P 500 or Barclays Aggregate, have been gaining steam as they have been paid to ride the broad market up. Conversely, active strategies seek to offer better risk adjusted results.

We believe that investors, should seek to maintain exposure to both active and passive since they exhibit cyclical performance patterns as shown in Figure 4.

Passive strategies are typically the most inexpensive option for investors to access markets and thus, hold a great deal of appeal for expense-averse investors. Passive strategies own either all the securities in an index or a sampling of securities with the goal of replicating the characteristics and performance of the index before fees. While passive strategies may do well

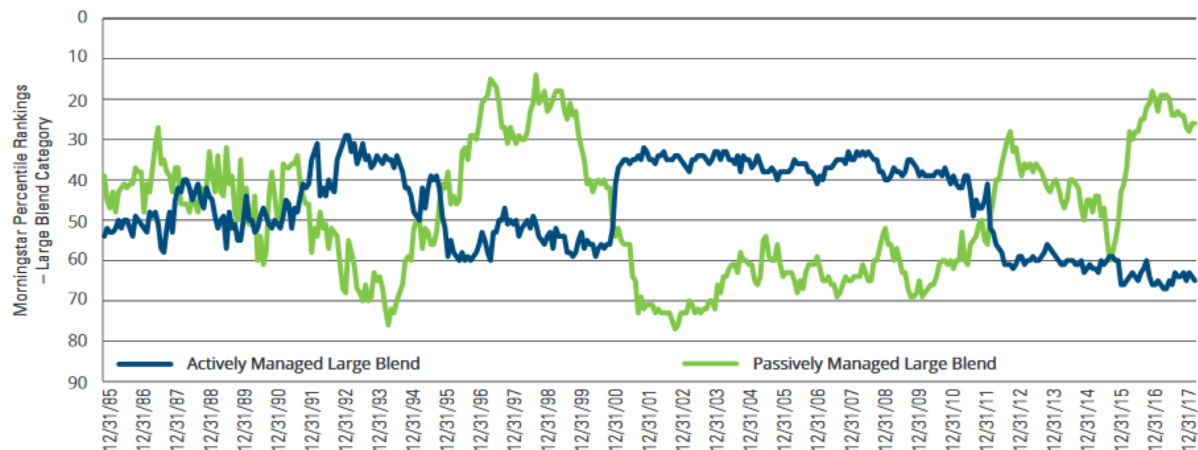
in periods of widespread positive market movement, they have limited, if any, potential to outperform the index due to their similarity to the index.

Active strategies expressly seek to differ from indexes by investing in a smaller subset of companies that an active manager deems favorable. Active management is the only source of potential outperformance for a portfolio since they differ from the benchmark. Active strategies allow investors the flexibility to vary their exposure to areas of the market that are either favorable or unfavorable. For example, minimizing exposure to sectors or specific companies with inflated valuations, or increasing exposure to sectors or companies that show positive indicators for future growth. However, increasing deviance from the benchmark inherently opens a strategy to divergence of any kind: positive *and* negative. Because active strategies require a high degree of due diligence and thought relative to passive strategies, they will have higher expenses, which can reduce returns relative to passive strategies. Historic data indicates that over time, a combination of passive and active management may be the best strategy to weather all market conditions.

Figure 5[1]

Active and Passive Outperformance Trends Are Cyclical

12/31/1985 to 12/31/2017 Rolling Monthly 3-Year Periods



Data Source: Morningstar, 12/31/17

It is difficult to know which style, active or passive, will outperform in any given period.

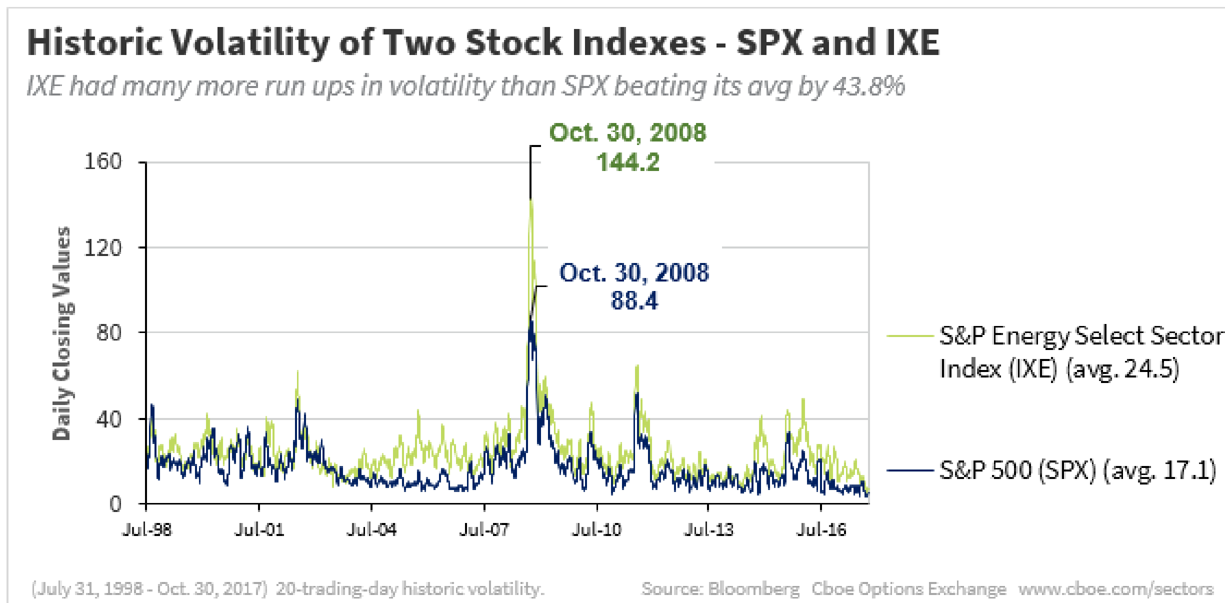
[1] Source: Morningstar, 12/31/2017. Performance for the Morningstar Large Blend Category is net of fees. "Active Large Blend" is made up of funds from the Morningstar Large Blend category that are not index or enhanced index funds. "Passive Large Blend" is represented by the Morningstar S&P 500 Tracking Category. Past performance is not indicative of future results. Indices are unmanaged and not available for direct investment.

According to a study by Callan, roughly 65 percent of defined contribution plans have a mix of active and passive investment funds. Plans that use purely passive lineups has increased from 5.8 percent in 2016 to 8 percent. Rather than considering these styles in opposition, we believe they should be thought of as complementary strategies over full market cycles each with a place in the retirement menu. Blending a mix of core passive options with active growth and value in the menu gives participants the flexibility to select low-cost market exposure, or options with the ability to outperform the market either in the growth or value segment.

The Appropriateness of Sector Funds or Specialty Asset Classes in Menu Construction

Sector funds are funds that invest in segments of the market (typically stocks in sectors such as real estate, commodities, technology, health care, etc.), with the belief that that sector will be able to outperform the broad market as a whole. While these sectors can in fact outperform other areas of the market at times, participants may miscalculate the risks associated with each individual fund. In addition, sector funds can be more adversely affected by outside market forces like legislation and tax code changes to name a few. For example, as shown in Figure 5, historically, the energy sector has been over 40 percent more volatile than the S&P 500 as a whole.

Figure 6



If the investment options offered in the menu already hold these sectors, it may not make sense to introduce a stand-alone sector fund. If a participant were to invest in and energy fund and an S&P 500 fund in their menu, they would double their exposure to the energy sector, perhaps unknowingly. It is the role of the investment menu to help participants invest appropriately

while avoiding unintended consequences where possible. Given that most sector funds carry significantly more risk than broadly diversified funds, and sectors are represented in the broad market indices, it should be strongly considered if they belong in a retirement plan investment menu.

PRODUCT SELECTION

Once the investment menu is created, selecting a best in class investment option is the next step. Selecting products should be more than just number crunching raw data. Innovest utilizes extensive qualitative and quantitative criteria to evaluate managers. This process identifies the risks managers are taking to generate returns and provides an excellent tool to identify and choose managers that will add future value. Innovest's manager evaluation process is proprietary and focuses on selecting managers to represent particular investment styles within the various asset classes. Managers must have characteristics that are in-line with the benchmark and processes that segment the investable universe appropriately relative to the benchmark in order to be selected. Selecting managers that approximate the style of the benchmark is crucial to ensuring the integrity of the plan construction. After defining the appropriate universes of style specific managers, we endeavor to select managers that can outperform the appropriate benchmark and peer group on a risk-adjusted basis over time.

CONCLUSION

Our experience has shown that a streamlined approach to investment menu construction benefits both participants and plan sponsors.

Participants can focus on how much to save, arguably the most important determination they will make in having a successful retirement, versus combing through dozens of investment options. Plan sponsors can also focus on monitoring the limited number of investment options and creating economies of scale to keep costs down. Together this will create participants that are retirement ready and reduce the fiduciary liability of plan sponsors.

SOURCES

Benartzi, Shlomo, and Richard H. Thaler. 2001. "Naive Diversification Strategies in Defined Contribution Saving Plans." American Economic Review, 91 (1): 79-98.

Goldreich, D., & Halaburda, H. (2011). When Smaller Menus are Better: Variability in Menu-Setting Ability. SSRN Electronic Journal.

Iyengar, S., & Jiang, W. (2003). HOW MORE CHOICES ARE DEMOTIVATING: IMPACT OF MORE OPTIONS ON 401(K) INVESTMENT (DRAFT OCTOBER 2003).

Keim, D., & Mitchell, O. (2016). Simplifying Choices in Defined Contribution Retirement Plan Design. National Bureau of Economic Research Working Paper.

Scheibehenne, B., Greifeneder, R., & Todd, P. M. (March 2009). What Moderates the Too-Much-Choice Effect? Psychology & Marketing, 26(3), 229-253.

Sethi-Iyengar, S., Huberman, G., & Jiang, W. (2004). How Much Choice is Too Much? Contributions to 401(k) Retirement Plans. Pension Design and Structure, 83-96.