Arnerich Massena
2045 NE Martin Luther King Jr. Blvd.
Portland, OR 97212
503.239.0475
www.arnerichmassena.com

Retirement Plan Best Practices
Investment Menu Construction

Third of five-part series

Arnerich Massena, Inc.

November 2017

Contributors:
Ryan Cunningham, CAIA; Jillian Perkins; Corrie Oliva, CFA;
Terri Schwartz; Chris Van Dyke, CFA, CAIA

This paper is the third in Arnerich Massena's five-part series on retirement plan best practices. The full series covers retirement plan best practices in the following areas:

- Plan Governance
- Plan Design
- Investment Menu Construction
- Plan Monitoring
- Participant Education

Table of Contents

Investment menu construction

The first two papers in this series covered plan governance and plan design, helping plan sponsors create a foundation for a successful retirement plan. With that foundation in place, now plan sponsors can build the main structure of the plan itself: the investment menu. The investment menu is ultimately what participants will use to grow their savings for retirement, so it would be difficult to overstate its importance. Selecting the investment menu requires consideration of several objectives:

- Providing adequate diversification opportunities for participants, as per ERISA
- Offering funds that will provide both growth and capital preservation
- Managing investment expenses
- Offering a line-up that is easy to use and navigate
- Providing options appropriate to participants at every stage of life and career

The move from defined benefit plans to defined contribution plans shifted the investment decision-making process to participants in a way they hadn't been confronted with in the defined benefit era. Over the past 20 years, defined contribution plan construction has evolved as the industry continues to learn more about participant decision making and how best to foster that process. As an industry, we are getting better at understanding how to really help participants invest successfully, much of which comes from our increased knowledge of the science of behavioral economics. Research into behavioral economics, a combination of economics and psychology, can be extremely useful in driving plan design and menu construction.

One of the greatest challenges in crafting an effective investment menu is the balance between providing enough options for diversification on one hand and on the other hand, keeping the menu simple enough for participants to use easily. Building a strong investment menu doesn't end with the menu construction either; how the investment options are presented and how participants are guided through their selection process also affects their ultimate outcomes and are an important area of focus.

We believe the study of behavioral economics can guide plan sponsors and their providers in constructing a menu that will best serve their participants and actually help cultivate behaviors that will assist them in reaching their goals. This paper outlines a method of menu construction based on a foundation of behavioral economics principles. The approach detailed here provides a strong balance between providing enough diversification while avoiding overwhelming participants with too much choice. We also help strategize around the presentation of the menu options, providing some guidance on how to facilitate participant decision-making.

Why behavioral economics?

Like most of us, participants are complex human beings who make decisions for a variety of reasons, many of them less than perfectly rational. Behavioral economics has helped us identify some of the common irrationalities we see in financial decision-making, making it possible to address or counter them. The findings of behavioral finance have served as a guide in designing retirement plan features like automatic enrollment and auto-deferral increases. But its usefulness doesn't end there; we can use the same field of study to help design an investment menu to optimize participant outcomes.

> "EVEN very well educated participants don't always exhibit the most rational behavior. Take the admission of Nobel laureate Harry Markowitz, who split his retirement account evenly between the two options available to him."
>
> ~ Benartzi, 2007

When saving for retirement, several behavioral obstacles face participants. We know that inertia impacts participants' saving behavior, as does hyperbolic discounting, in which people prefer an immediate payout to a future gain. This is why automatic features have been so successful and helpful. When it comes to making investment decisions in a retirement plan, behavioral finance has identified several key heuristics, or cognitive biases, that act as mental shortcuts to help people make choices, but that can stand in the way of optimal decision-making:

- Loss aversion or risk aversion: People feel the pain of loss more than the pleasure of a gain. Inexperienced investors tend to be highly risk-averse and are often driven by fear of loss. Younger investors who make risk-averse investment choices may invest too conservatively, missing out on long-term return potential.
- Endowment effect: People "endow" assets that they own with greater value simply by virtue of the fact that they own them. This results in risk aversion as well.

> "RESEARCHERS have now begun to quantify the effects of 'choice overload' as it relates to retirement plan participation, finding that for every 10 funds added to a plan the predicted participation rate drops by 2%... [Additionally], Academic researchers have shown that for every 10 funds added to a plan, there is a 5.4% increase in the allocation to money market and bond funds."
>
> ~ Benartzi, 2007

- Mental accounting: Money is technically fungible; one dollar is as good as the next. Behaviorally, though, all money is not equal. People think about money in categories and apply different rules to different categories. Participants may categorize retirement savings separately, either taking greater risks with it, as it's outside the budget, or refusing to take risks with it, as it's hard-won savings.
- Availability and anchoring: People will use the information they have at hand to make judgments and predictions, even if that information is irrelevant or inaccurate. For instance, when participants are offered a majority of bond funds, they will tend to select an asset allocation heavy in bonds, but if their options are mostly stock funds, they will invest mostly in stocks. (Shlomo, Thaler, 1999) Furthermore, studies have shown that more choices generally results in lower-risk investing.
- Overconfidence: People perceive their accuracy to be greater than it is, consistently rating it higher than reality demonsrates.

- Cognitive dissonance: This is the uncomfortable feeling one gets when faced with conflicting ideas. People will move to reduce this tension by adjusting or rationalizing their beliefs.
- Paralysis of choice: When faced with an abundance of options, people become overwhelmed and may become paralyzed with indecision. A large number of investment options has been correlated with a drop in participation rates.
- 1/n rule, also called naive diversification: When faced with "n" options, people will tend to simply divide their assets evenly across the options, particularly when there are fewer than ten options. This is rarely an optimal investment strategy.
- Excessive extrapolation: Participants have a tendency to chase hot performers, basing decisions on the most recent quarterly performance. Performance chasing often results in buying high and selling low, the reverse of a successful investment strategy.

We look to these studies and findings because we believe that a well-designed retirement plan investment menu should guide participants to making good choices. Thoughtful development and some simple strategies can elevate the menu into a tool for better outcomes.

The tiered approach

A tiered approach to menu construction optimizes participant choices, guiding the decision-making process to prevent paralysis of choice. In this construction, participants self-select themselves into the appropriate group, with each tier then designed to match their decision-making style. The initial decision of choosing a tier should be fairly easy and sets the stage for all subsequent decisions. We suggest three tiers:

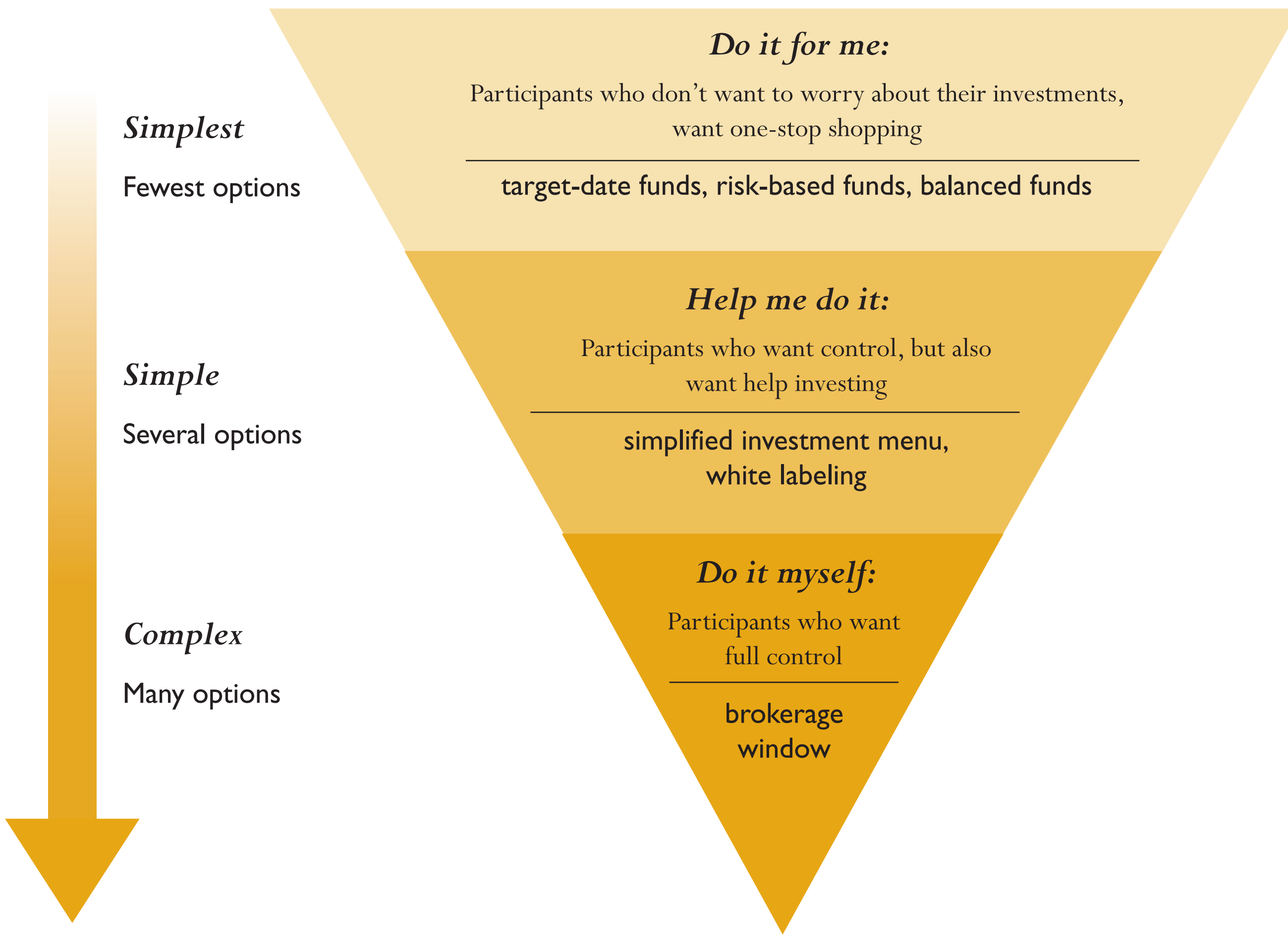
Do it for me

A large segment of most participant populations falls into this category. This is the cohort of participants who find investing and retirement planning onerous and confusing, and would prefer to make as few investment-related decisions as possible. Because this group is not interested in making complex investment decisions, they are presented with the simplest options: target-date funds. (Risk-based or balanced funds may also serve this purpose, although we would recommend target-date funds as the most comprehensive solution.) The "do it for me" group is guided through the process of making an investment election based on their age or expected date of retirement and then assured that their account will be professionally managed going forward. They can "set it and forget it" and be done with the process in minutes.

Help me do it

The next participant segment is, in our experience, often the largest group. "Help me do it" participants want to have some control over their account and participate in decision-making. This group identifies themselves as willing to put some time into understanding and building their investment portfolio. However, a traditional

THE TIERED APPROACH



investment menu of 15-20 options may still overwhelm them and cause a paralysis of choice or a 1/n decision (in which assets are evenly divided across the available options). To best support this group in building a thoughtful asset allocation, we suggest providing a simplified menu of options, which might look like the example on the following page, along with some basic investment information as we describe in the next section.

With a simplified menu, the sponsor can construct more sophisticated investment blends within each fund, while offering a menu that is easy for participants to understand and use. Within each option, for example, the plan sponsor may want to diversify across different styles, including both a growth and value option. Or they may want to include both a passive and an active approach to manage costs. This type of menu may also be "white labeled" with the company name on each custom blend. See page 5 for two sample simplified menus; one that outlines a relatively ideal lineup, in which all major asset classes are represented and each option

SAMPLE SIMPLIFIED MENU

Simplified menu option	*Underlying funds - ideal menu*	*Underlying funds - further simplified menu*
Stable Value Fund	Stable value fund Money market fund Ultra-short bond fund	Stable value fund Money market fund
Bond Fund	Short-term bond fund Intermediate-term bond fund High yield bond fund	Short-term bond fund Intermediate-term bond fund
Large Company Stock Fund	Active large cap growth fund Active large cap value fund Large cap index fund	Active large cap growth fund Active large cap value fund Large cap index fund
Small/mid Company Stock Fund	Active small cap growth fund Active small cap value fund Small/mid cap index fund	Active small cap growth fund Active small cap value fund Small/mid cap index fund
International Equity Fund	Active international growth fund Active international value fund International index fund Emerging markets fund	Active international growth fund (that includes emerging markets) Active international value fund (that includes emerging markets) International index fund

includes a full set of underlying diversified components, and a lineup that is further simplified, focused more on just the fundamentals. Sponsors should work with an investment advisor to select and monitor the underlying investment funds.

One question that comes up is whether to offer actively managed mutual funds or passively managed mutual funds in an investment menu. There are advantages to each, and reasons a plan sponsor might choose either one or both styles. With a thoughtful and diligent approach to manager selection and monitoring, active management can deliver long-term outperformance, particularly in less efficient asset classes such as small cap stocks and emerging markets. On the other hand, passive management generally offers lower costs for participants. With white labeled funds, you can select whether active or passive management will fit your menu best and in which asset classes, or combine them. Work with your advisor to evaluate the considerations and find the right balance of active and passive for your participants.

A simplified, white-labeled menu has several advantages:

Participants see only four to eight options, rather than being faced with a full list of individual funds.

Asset class fund names are easier to understand than individual fund names.

The professional construction of each option can add an additional layer of diversification to participant portfolios.

Core menu options can be automatically rebalanced, providing participants with another layer of risk management.

Education for the "help me do it" group is critical, especially as they are still susceptible to cognitive biases like representativeness, availability, and overconfidence. Participants need access to instructions on how to construct an appropriate asset allocation. The best guidance offers methods for making asset allocation decisions that are based on objective criteria rather than subjective judgment. For instance, a risk tolerance/time horizon quiz that points people toward model portfolio constructions based on their answers offers concrete guidance but still leaves the ultimate decisions to the participant.

Do it myself

"Do it myselfers" are typically the smallest cohort in any participant group; often, this group is comprised of just a handful of people. Though small proportionately, they can be a very vocal minority, with a strong desire for a wide range of choices. For plan sponsors who have a significant "do it myself" group, a self-directed brokerage option can provide the flexibility and choice this group is after.

Of course, with this option, participants are highly susceptible to using shortcuts in decision-making, and it is worthwhile to provide this group with background and information specifically about behavioral economics and the most common cognitive biases likely to affect financial decision-making. Fortunately, this group is also likely to be more interested in diving into detailed and in-depth investment education.

Presenting the menu

Presentation of this tiered menu is the key to success. Step into your participants' shoes to view the world from their perspective as you design your menu presentation. Plan sponsors and providers are prone to the "curse of knowledge;" behavioral economists tell us that when people have direct knowledge or expertise on a particular topic, it can be very difficult to understand what it's like for people who don't have that specific knowledge. This is why experts will use specialized jargon even among laypeople who are unlikely to be familiar with their lingo. Similarly, for plan sponsors, investment committees, and retirement plan providers, it can be very difficult to imagine the world from a participant's point of view, understanding just how complex and intimidating investment choices can be.

The goal is to direct participants to the process that will best suit them, and to minimize any extraneous choices. For this reason, the first decision point should be presented on its own. Participants can be asked which category they fit into: do it for me, help me do it, or do it myself. Brief descriptions of what each category means for them are helpful. Sponsors may want to present the options as "paths" or "directions."

Once that decision has been made, participants can then be presented with their next decision point, which will of course differ depending on their initial selection (do it for me, help me do it, do it myself). The more that each decision point can be isolated, the simpler each decision will be for participants. Work with your recordkeeper to ensure the enrollment and investment selection process is streamlined and designed to guide participants where possible.

Conclusion

Over the last decade, defined contribution plans have become vastly more complex, with many different types of investment options, and participants are often faced with an overwhelming amount of information and advice. In the early years, it was not uncommon for a plan to have a small handful of investment options, but now, 85 percent of plans offer more than 11 investment options, and almost 20 percent of plans offer 26 or more investment options. (PSCA, 2016) Over this same time period, we have seen a growing "paternalization" of defined contributions plans, whereby plan sponsors and providers take more of a role in guiding participant decision making.

Making investment decisions is both an opportunity and a burden for participants. Our job in the industry is to maximize the opportunity while minimizing the burden. Better understanding the decision making process and behavioral hurdles can help sponsors to design a menu that will best serve plan participants and guide them toward successful outcomes. If you are concerned that your investment menu may not be constructed optimally, it is important to begin the conversation with your investment consultant today to begin the rebuilding process and ensure that your participants have the best chance for an optimal outcome..

Plan Investment Options
(from PSCA 59th Annual Survey Reflecting 2015 Plan Experience)

Number of investment funds available in the plan	Percent of plans
One	2.4%
Two to nine	8.2%
Ten	4.3%
Eleven to fifteen	23.8%
Sixteen to twenty	27.3%
Twenty-one to twenty-five	15.6%
Twenty-six or more	18.4%

Endnotes

"Heuristics and Biases in Retirement Savings Behavior" by Shlomo Benartzi and Richard Thaler; *Journal of Economic Perspectives,* Vol. 21, No. 3; 2007

"Implications of Participant Behavior for Plan Design" by Shlomo Benartzi, *Research Insights*; Alliance Bernstein, 2007

"Naive Diversification Strategies in Defined Contribution Savings Plans" by Shlomo Benartzi and Richard H. Thaler; TIAA-CREF, Department of Labor, Center for International Business and Economic Research at UCLA; January 1999

"The Behavioral Economics of Retirement Savings Behavior" by Richard H. Thaler, University of Chicago, and Shlomo Benartzi, The Anderson School at UCLA; AARP Public Policy Institute; January 2007

"The 59th Annual Survey, Reflecting 2015 Plan Experience," Profit Sharing/401(k) Council of America; 2016

© 2017 Arnerich Massena, Inc. All rights reserved.

This material is provided for informational purposes only to clients and prospective clients of Arnerich Massena, Inc. It is drawn from third-party sources believed reliable but not independently verified or guaranteed by Arnerich Massena. We do not represent that it is accurate or complete, and it should not be relied on as such. It does not constitute investment advice, which would need to take into account a client's particular investment objectives, financial situation, and needs. Opinions expressed are our current opinions as of the date appearing on this material. Past performance does not guarantee future results. Investments and strategies discussed herein may not be suitable for all readers, and you should consult with a legal, tax, or accounting professional before acting upon any information or analysis contained herein. The information, ideas, and context expressed herein are confidential, proprietary, expressly copyrighted and may not be sold, reproduced, republished, or distributed in any way without Arnerich Massena's prior written consent.