

Developing an Implementation Matrix: Lessons to Be Learned from Defined Contribution Plans

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When working with defined contribution plans such as 401(k)s, financial advisors face the responsibility of adhering to strict fiduciary requirements. But they also owe it to their clients to provide an appropriate, comprehensive selection of investment options. In this article, the authors present a process for developing a matrix of investment options for defined contribution plans, including a series of what they have determined are questions and decisions critical to the process.

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Mutual funds are the implementation vehicle of choice for most financial planners. Funds are to planners what nails and screws are to carpenters. Likewise, mutual funds are the most widely used investment options for defined contribution plans (DC plans), particularly 401(k) plans. It's only natural, then, that planners are becoming increasingly involved in providing DC plans with implementation guidance or assistance in providing participant education.

There is a difference, however, between working with retail clients and retirement plans. In the case of DC plans, there are well-defined fiduciary standards of care that must be met. One of the most critical requirements is for the investment committee (with the assistance of the planner) to demonstrate that a rigorous due diligence process was developed, implemented and monitored for selected investment options. As an example, a significant class-action suit was recently filed against First Union for failing to prudently select and monitor the investment options for its own retirement plan.

Though this journal does not ordinarily cover the pension industry, the lessons planners can learn from working with DC plans, or any type of fiduciary account, can have a positive impact on the industry's investment practices. In developing this topic, the authors have relied as much on professional judgment and experience as quantitative research. There is an intuitive touch to the process of building a matrix, and the hope is that this article will spark spirited debate.¹

The Critical Questions

How many investment options should the typical 401(k) plan offer? Which asset classes should be represented by those options? What is the due diligence that a fiduciary² must demonstrate in the selection of those investment options?

Tough questions, and to our knowledge the subject of developing an implementation matrix for defined contribution plans has never been tackled before. For that matter, fiduciaries or advisors for any type of retirement plan, foundation, endowment or even private trust should be asking the same relevant questions: "How many?" "What kind?" and "How to select?"

There is a hierarchy to these questions, and fiduciaries are responsible for developing a process for the

management of these critical decisions. These are the questions, in order of importance: How many investment options should be offered?

1. Which asset class should be represented by each option?
2. Which asset class should be represented by each option?
3. How should the investment options be structured or managed?
4. What type of due diligence should be followed in selecting the money manager or fund for each option?

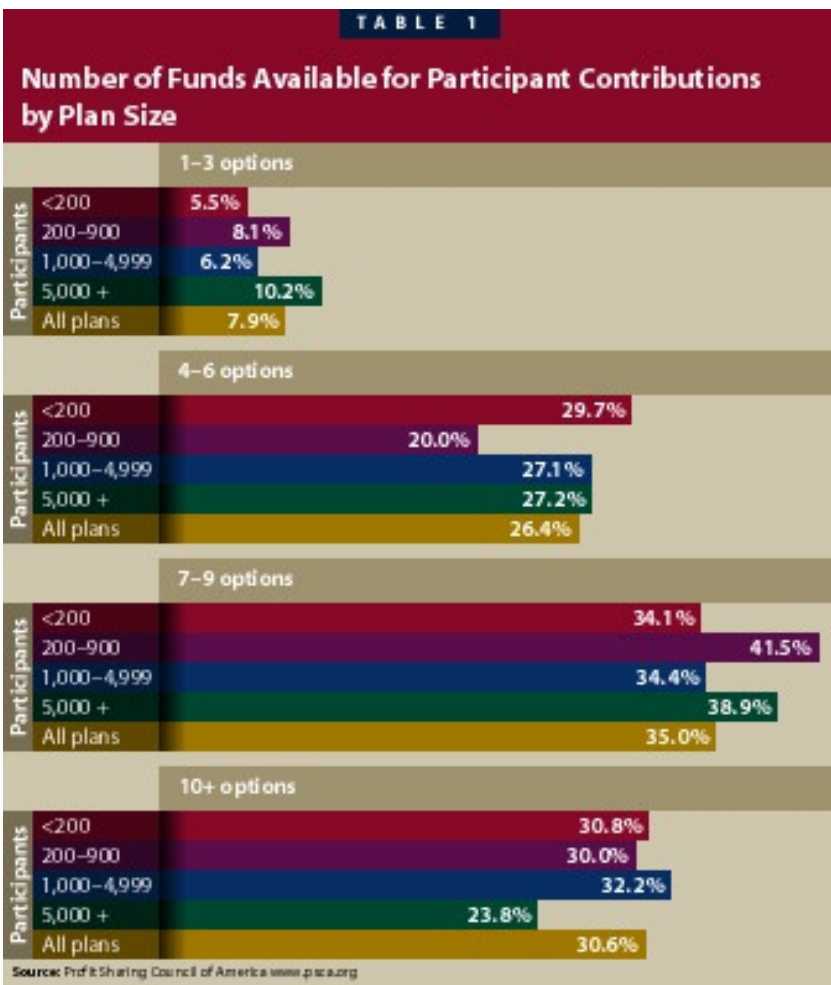
Unfortunately, too many fiduciaries lack such procedural prudence and end up reversing this hierarchy of decisions. The latest hot money manager is added as an option with no regard given to the asset class represented by the manager. Like a fishing tackle box, the portfolio ends up with a mismatched assortment of once brightly colored spinners and lures that serve no current purpose.

First Decision: How Many Investment Options?

There is no formula that a fiduciary can follow to determine the "best" number of investment options—the "appropriate" number is determined by facts and circumstances. As a starting point, participant-directed DC plans that have elected to formally, or informally, adopt 404(c) (the Department of Labor's interpretive ruling on the "safe harbor rules" for participant-directed plans) must offer participants at least three investment options. Most plans have moved well beyond three choices, adding new investment options each year.³ Why? Three possible explanations:

1. Service vendors have broadened their menu of investment options, and fiduciaries have taken advantage by adding new asset classes.
2. Fiduciaries have felt the pressure to add options in response to participant demand for "hot" new funds.
3. Fiduciaries have been reluctant to perform their duty to "fire" funds that have not performed, and have added options in lieu of getting rid of the deadwood.

Of these explanations, we hope the reason for the increase is the first response (adding new asset classes) as opposed to the last two (adding "hot" funds and the reluctance to "fire"). Unfortunately, our personal observations support the notion it's the latter two. Nevertheless, the starting point for this discussion will be to examine what plans of similar participant size are doing (although a weak starting point, for it presupposes that the industry is somehow converging on the right solution). The Profit Sharing Council of America (PSCA) has compiled the data shown in Table 1, current through 1997.⁵



Most commonly, plans offer between seven and nine options. As a follow-on, the fiduciary may wish to adjust from industry averages by considering the questions outlined below. In any case, fiduciaries should first determine whether a fund/option should be eliminated before a new one is added, and should have a prudent reason or purpose for adding the new option.

Table 2 outlines the number of investment options available depending on various factors.

TABLE 2

Factors Determining Investment Options

	Fewer options	More options
Investment expertise of fiduciary	Little experience	Very experienced
Investment expertise of participants	Little experience	Very experienced
Available staff to assist fiduciary	Part-time	Full-time
Concern for fiduciary liability	Concerned	Less concerned
Sensitivity to plan experience	Concerned	Less concerned

Source: Profit-Sharing Council of America www.pscia.org

What is the investment expertise of the fiduciary? If the fiduciary is "inexperienced," fewer options may be warranted. The fiduciary should become knowledgeable and comfortable with existing choices before expanding the number of options. If the fiduciary is "experienced," more investment options than the "average" could be considered.

What is the investment expertise of the participants? A corollary to the previous question, with similar responses: Participants should be knowledgeable and comfortable with existing choices before more options are offered. On the other hand, if plan participants are, in turn, knowledgeable investors, the fiduciary can afford to offer more choices.

Does the fiduciary have the time or the staff to adequately manage the investment program? If the management of investment decisions is just one of many corporate functions for which the fiduciary is responsible, consideration should be given to fewer options.

If, on the other hand, the fiduciary is fortunate to have the time or an experienced investment staff, consideration can be given to more options.

Is the fiduciary concerned about liability—being sued by participants? If the answer is yes, the fiduciary should consider fewer options (but still sufficient to offer appropriate diversification) so that more stringent due diligence and monitoring can be applied to the existing options. If the answer is no, the fiduciary may wish to consider more options.

How sensitive is the fiduciary to controlling expenses associated with the plan? Every fiduciary must control and account for all investment-related expenses, but the fiduciary who is particularly cost sensitive should consider fewer options. More options will have a direct impact on record keeping, administrative, custodial and participant education expenses. Indirect costs include the fiduciary's time for oversight and monitoring of the investment program.

Second Decision: Which Asset Classes?

Once the fiduciary has decided on the number of investment options, the next question is: "Which asset class should be represented by each investment option?"⁶ Each of the models in Table 3 builds upon a previous model—and each new asset class that is introduced is in italics. In adding an asset class, the objective is to suggest the asset class that offers the greatest, most relevant benefits to diversification. These models should not be viewed as the only possible solution, but rather as the most "appropriate," in the opinion of the authors.

Third Decision: How Should the Investment Options Be Structured or Managed?

The models outlined in Table 3 represent the "core" strategies. Each of these strategies can be expanded upon, or multiplied, by the way each investment option is structured. The two most important structural questions are (1) whether active or passive (indexed) strategies are going to be employed and (2) whether the options will be implemented through mutual funds (commingled accounts) or separately managed accounts.

TABLE 3

Model	Explanation	Asset Class (<i>additions in italics</i>)
Three-Option Model	If three investment options are going to be offered, the most appropriate asset classes would ordinarily be...	1. Short bond — money market, — stable value, — GIC 2. Multi-sector bond 3. Large-cap equity (<i>blend</i>)
Four-Option Model	Building upon the three-option model, the addition of a fourth asset class would be international equities. This would provide participants the opportunity for global exposure plus additional equity diversification.	4. <i>International (blend)</i>
Five-Option Model	Adding small-cap equity provides participants good diversification to both large cap blend and international.	5. <i>Small-cap equity (blend)</i>
Six-Option Model	When moving to six options, it is appropriate to consider adding an additional fixed-income option—in this case, intermediate bond.	6. <i>Intermediate bond</i>
Seven-Option Model	The addition of mid-cap (blend) provides participants coverage across all equity cap sizes.	7. <i>Mid-cap equity (blend)</i>
Eight-Option Model	The same as the seven-option model except that Large Cap Blend is diversified between large-cap value and growth. From a modeling standpoint, the combination of the two (value and growth) has the same long-term risk/return profile as the large-cap blend. However, participants may be able to benefit from transitory short-to-intermediate-term performance variations exhibited by value and growth allocations.	8. <i>Large-cap value, large-cap growth</i>
Nine-Option Model	At this point, it would be appropriate to consider adding emerging markets to the matrix. Since numerous studies support the theory that a large percentage of participants evenly divide their portfolio across all investment options, adding emerging markets before this point may not be prudent. For example, if emerging markets was introduced at the six-option point, it is conceivable that the typical participant would allocate 17 percent (1/6) to that asset class—a rather aggressive allocation for the average participant.	9. <i>Emerging markets</i>
Ten-Option Model	Real estate is added at this point, but it is important to understand the significant differences between the typical real estate investment trust (REIT) fund, versus the risk/return characteristics of owning a diversified portfolio of real estate. Most REITs invest in equity instruments. "They have cash flow characteristics of commercial real estate, but in the short term may exhibit share price volatility similar to that of small cap stocks."	10. <i>Real estate</i>
Eleven-Option Model	The next logical addition to a matrix is high-yield bond. By adding high yield, the broad range of fixed-income strategies is covered (with the exception of long-term bonds, which are seldom implemented with retirement portfolios).	11. <i>High-yield bond</i>
Twelve-Option Model	The core model is built by adding global bond. At present it is difficult to find a true international fixed-income fund because most funds have a sizable allocation to the U.S. market.	12. <i>Global bond</i>

Source: Profit-Sharing Council of America www.psc-a.org

Active Versus Passive

Either an active fund/manager or an index fund, or both, could implement each of the aforementioned options. For example, the fiduciary that wanted to offer 18 options could take the 12-option model and offer both active and passive funds for each of the equity options.

There are several advantages to selecting index funds over actively managed accounts. First, the index should more accurately reflect the modeled risk/return characteristics of the intended asset class of the investment option. Second, investment expenses are generally lower. Third, the index will stay fully invested (obviously not a

positive attribute during a market meltdown). And fourth, there is generally less fiduciary liability associated with the selection of index funds because there is no "manager selection risk"—selecting a top performing manager only to discover ex-post that the manager’s performance was a matter of luck, not brains.

Separate Accounts Versus Mutual Funds

Another important structural question is whether the investment option is going to be implemented through a mutual fund or a separately managed account—an appropriate question even for defined contribution plans. Again, the fiduciary has a responsibility to control and account for all investment-related expenses, particularly those expenses borne by the participants. Larger plans (assets in excess of \$200 million) should compare the costs of a separately managed account (the custodian would need to be able to unitize the various separate accounts for daily record-keeping purposes), versus the expense ratios of available mutual funds. Or the plan should at least give priority to seeking institutional versus retail-level mutual funds.

There are additional structural issues worth considering. One is to further diversify the mid- and small-cap equity options along the lines of large-cap—making an allocation between value and growth styles, recreating Morningstar’s familiar nine-cell matrix, as shown in Table 4.

TABLE 4

Matrix: Diversification of Mid- and Small-cap Equity Options

Large Value	Large Blend	Large Growth
Mid Value	Mid Blend	Mid Growth
Small Value	Small Blend	Small Growth

Source: Morningstar

The fiduciary also may want to consider offering socially responsible investment (SRI) funds as an added alternative to an existing option. To meet Department of Labor guidelines, the fiduciary can offer a socially responsible fund only if the participant has access to a traditional fund within the same asset class/option. For example, if the fiduciary wanted to offer the Domini Social Equity Index Fund (large-cap blend socially responsible index fund), another traditional large-cap blend fund would also have to be offered.

Global Diversification

Finally, the fiduciary may further diversify "international" by (1) cap size, (2) region, (3) industrialization (emerging versus developed countries) and (4) style (value versus growth).

Fourth Decision: What Type of Due Diligence Should Be Followed in Selecting the Money Manager or Fund for Each Option?

Fiduciaries have a responsibility to establish a due diligence process for selecting money managers and funds, and to monitor the activities and performance of the selected managers. The criteria to select and monitor obviously should be similar in scope and content.

The most important and appropriate document to record the criteria and aforementioned decisions regarding the portfolio's investment options is the investment policy statement (IPS). The IPS should include, at a minimum, (1) a discussion of the number of investment options to be offered, (2) the asset classes that will be represented, (3) the process that will be followed for selecting managers and funds, and (4) the performance criteria against which the managers and funds will be compared.

The due diligence process should incorporate, at a minimum, the following analysis and standards:

1. Regulatory oversight. Each investment manager should be subject to regulatory oversight by either a bank, an insurance company, a mutual fund organization or a registered investment adviser.
2. Correlation to style or peer group. The product should be highly correlated to the asset class of the investment option (peer group). This is one of the most critical parts of the analysis since most of the remaining due diligence involves comparisons of the manager with the appropriate peer group.
3. Performance relative to a peer group. The product's performance should be above median for the peer group for annual and cumulative periods (1-, 3-, and 5-year returns).
- 4.
5. Performance relative to assumed risk. The product should have above-median risk-adjusted performance measured against the manager's peer group—considering the fund's alpha, Sharpe, or Morningstar risk-adjusted measures.
6. Minimum track record. The product's inception date should be greater than three years and the same portfolio management team should have been in place for at least two years.
7. Assets under management. The manager should have at least \$75 million under management within the screened product.
8. Holdings consistent with style. The screened product should have no more than 20 percent of the portfolio invested in securities "unrelated" to the asset class. For example, a domestic growth fund should not hold more than 20 percent in cash, fixed income or international securities.
9. Expense ratios/fees: The screened product should not be in the top quartile (most expensive) of their peer group.
10. Stability of the organization: There should be no perceived organizational problems—personnel turnover, regulatory issues, assets coming in faster than the manager can handle, or an inability to demonstrate "best price and execution" in trading.

In summary, fiduciaries have a legal and moral responsibility to serve their constituency by providing an appropriate matrix of investment options. A rigorous and disciplined process must be developed and applied in the construction of that matrix. Deviations from the process to chase the latest Wall Street fad, or the failure to properly monitor and supervise an investment program, should be avoided so that participants have the opportunity of achieving long-term investment success.

Endnotes

1. J.P. Morgan/American Century Retirement Plan Services originated the concept of developing a "solutions" matrix for their 401(k) clients and commissioned the Investment Management Council (Trone) to do the research. The results of that research comprise the main body of this text, and American Century Investments has graciously permitted its usage. Particular recognition is given to Tom Kmak, John Lopez, Zung Nguyen, Kristina Kalebich and Greg Johnsen.
2. A fiduciary is defined as either (1) a person who holds assets for the benefit of another person (trustees of an investment committee), (2) a person who has discretionary control over assets (money managers), and/or (3) a professional held in capacity of trust and renders investment advice.
3. PSCA's Annual Survey of profit sharing and 401(k) plans. For further information, contact PSCA at Profit Sharing/401(k) Council of America, 10 South Riverside Plaza, Suite 1610, Chicago, IL 60606; (312) 441-8550; or www.pasca.org.
4. Editorial review by Robert DiMeo on number of investment options per DC plan, DiMeo Schneider &

Associates, Chicago, (312) 853-1000.

5. Ibid. PSCA's 41st Annual Survey, Table 19, p. 16.
6. We have used common industry terms to describe the various asset classes/ styles. We have assumed that each of the asset classes has retained its historical long-term risk/return characteristics and that the correlation coefficients between the various asset classes have not significantly changed. For ease, we have chosen to keep each option a single asset class. However, most vendors can offer their clients balanced, life cycle or funds of funds that are single options diversified across multiple asset classes. The fiduciary standards of care associated with the handling of multi-asset class investment options warrant a separate article.
7. Editorial review by Samuel R. Karetsky on REIT investing, European Investors Incorporated, New York, NY, (212) 644-0794.