Diversification

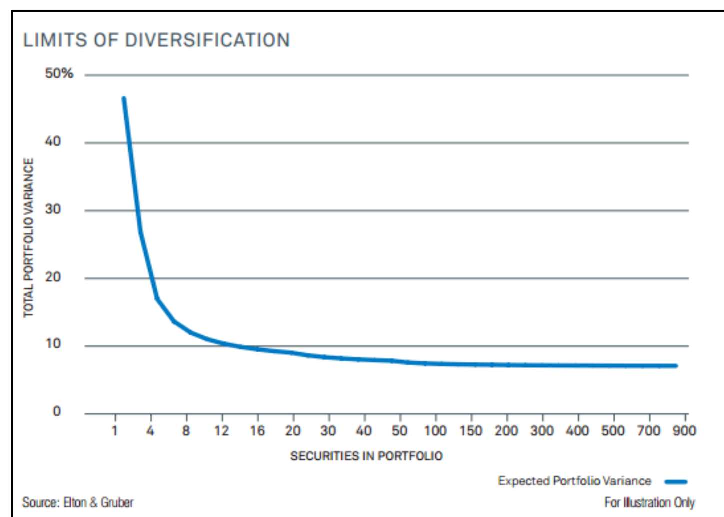
Plan sponsors are obligated to offer a range of fund alternatives with various risk/reward characteristics to allow participants to diversify their retirement portfolios in order to reduce risk and volatility. While investors cannot diversify away systematic, or market risk, diversification can significantly decrease investors' exposure to unsystematic risk, the risk associated with a single industry or asset class. Investors can diversify through number of funds, asset classes, and portfolio allocations. As a result, participants can diversify to reduce their portfolio risk and increase the probability of reaching their retirement savings goals.

Number of Funds

The number of funds offered to participants by 401(k) providers has increased over time from 3 to 10 to 20 to 40 to 200, driven by participant demands. As the number of funds offered has risen, participants have been faced with more difficult choices of investment alternatives for their 401(k) plans. However, providers have found that while too few funds does not allow for proper diversification, too many fund choices overwhelms the participants.

The '1-over-n problem' is where participants have *n* number of choices, so they often allocate 1 over *n* dollar amounts in each one. Paul Zemsky of ING Investment Management explains, "If you give people too many choices they feel they don't have enough information and are afraid to pick any one particular choice. So they spread the money over every one of the choices."[1] The resulting portfolio has a subsequent undesired risk balance. For example, if a participant equally weights the equities across small, mid, and large-cap holdings, 2/3 of the equity exposure would be in more volatile equities. Consequently, the participant may have an allocation of funds that does not match up with their risk tolerance.

Exhibit 1



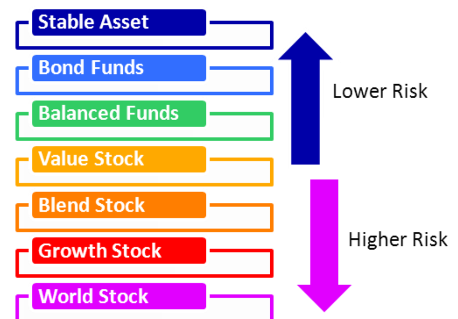
Further research has shown that too many funds don't contribute to the diversification of the portfolio. BlackRock writes, "The improvement provided by increasing diversification tends to diminish at a certain point. A carefully constructed asset allocation takes into account the complexity, expense, and impact on performance that each new fund brings."[2] Exhibit 1 illustrates the results of the study. The research shows that 15-20 funds is an adequate number in order to obtain a well-diversified portfolio, because after that point, adding additional funds does not significantly reduce the total portfolio variance.

[1] "When Diversifying, It's Asset Class that Matters," U.S. News & World Report, 2013
[2] "Asset Allocation Drives Your Target Date Fund," BlackRock, 2013

Founder of Vanguard, John Bogle states, "While diversification is generally 'a winning strategy,' if you diversify by using a large number of funds, which in turn hold a large number of stocks, the problem is less over-diversification [than that] you're paying too much for it. You might be paying 1 or 2 percent—3 percent even if you're paying sales loads. That's a killer."[3] Therefore, an appropriate number of funds to properly diversify while avoiding extra expense is 15-20.

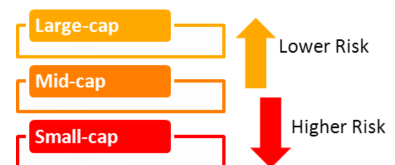
Asset Classes

More important than the number of funds is how diversified the portfolio is among asset classes. If all the 15-20 funds were growth funds, an investor would not be diversified. Thus, a portfolio must be diversified among asset classes to actually reduce risk Zemsky explains, "You get 90 percent of the diversification [benefit] with the first seven or ten asset classes, and after that it's diminishing returns."[4] While there are three major asset classes (stocks, bonds, and cash equivalents), equities can be further categorized by style, creating seven major asset categories: stable assets, bond funds, balanced funds, value stocks, blend stocks, growth stocks, and world stocks. Each asset category serves a purpose in diversifying the portfolio.



First, the stable assets help provide protection of principal and income. Second, bond funds provide investors with fixed income, or quarterly, semiannually, or annual coupon payments. Third, balanced funds combine stocks and bonds in a single portfolio, merging safety and income with capital appreciation. Generally, balanced funds would be used as the alternative to constructing an individual's portfolio and most likely would include a target date series. Fourth, value stocks add conservative equities to the portfolio. Fifth, blend stocks include a mix of growth and value, which together are moderately aggressive funds. Sixth, growth stocks add a proportion of aggressive stocks. Lastly, world stocks provide international exposure. World stocks are often considered most volatile due to currency and political risk.

Alternative investments include specialty investments (metals, energy, healthcare, natural resources, and utilities) and real estate. While specialty investments are typically too concentrated for 401(k) plans, real estate investments have long been considered a good diversification tool for retirement plans. Real estate returns are less correlated with those of stocks and bonds, improving diversification. In addition, property values and rental income have the propensity of changing more slowly than stocks or bond prices, reducing portfolio volatility.[5]



In addition to categorizing by style, U.S. equities can also be classified by size. In round numbers, large-cap equities are companies with market capitalizations of $12 billion or more. Traditionally, large-cap stocks are well-established companies with a strong market presence and generally have less risk as a result. Mid-cap equities have capitalizations of $2 billion to $12 billion and generally assume relatively more risk than large companies, but less risk than small companies. Lastly, small-cap equities have

[3] "When Diversifying, It's Asset Class that Matters," U.S. News & World Report, 2013
[4] "When Diversifying, It's Asset Class that Matters," U.S. News & World Report, 2013
[5] "Asset Classes," TIAA CREF, 2013

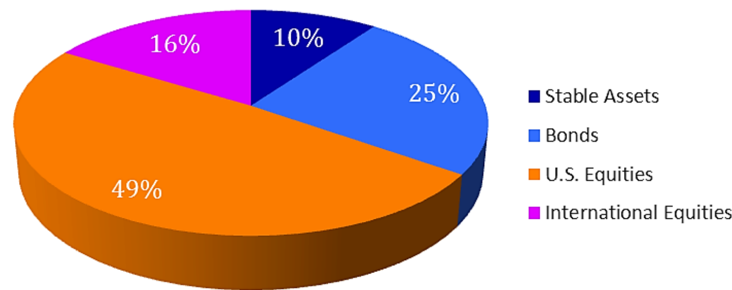
capitalizations of less than $2 billion. Because they operate with smaller revenue and client bases, small-cap equities have the highest risk.

Portfolio Allocation

The proportion of equities to bonds determines the broad risk level of the portfolio. A normal balanced portfolio is typically composed of 65% equities and 35% bond funds. Mixing equities and bonds helps bridge performance gaps between stocks and bonds, contributes downside risk protection, reduces volatility, and allows for more stable and potentially better long-term results. Furthermore, bonds can be broken down into stable assets and bond funds, with the ratio normally in favor of bonds between 2 or 3 to 1. Equities can be divided into U.S. and non-U.S. stocks, usually with a ratio of 3 to 1. Exhibit 2 illustrates a normal balanced portfolio allocation among equities (U.S. equities and international) and bonds (stable assets and bonds). The equity allocations are further divided by style and size.

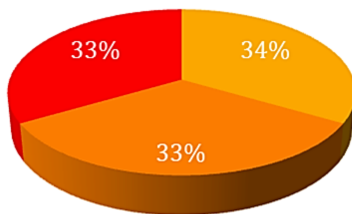
Exhibit 2

Normal Balanced Portfolio Allocation



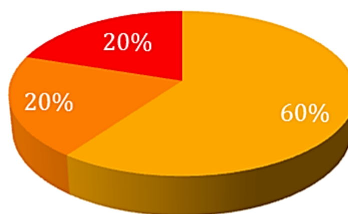
U.S. Equities by Style

Value Blend Growth



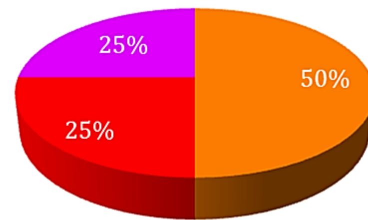
U.S. Equities by Size

Large-cap Mid-cap Small-cap



International Equities

Large Mid Emerging Markets



Self-Directed Brokerage Accounts

Self-directed brokerage accounts allow participants to invest their defined contribution plan money on their own through hundreds or even thousands of options available in the brokerage company. Thus, investors choose their own stocks, bonds, and mutual funds. For the participants, the major advantage of directing their own brokerage account is the open architecture investment platform that allows investors to choose the most suitable funds among thousands.[6]

The disadvantages, however, are significant. First, the individual investor most likely cannot properly diversify on their own, especially given too many choices. Furthermore, participants may take unnecessary investing risks because too many options are available. Second, investing through a brokerage window can be more costly because the brokerage windows typically do not offer group pricing, which has lower fees. Additionally, plans generally charge an extra administrative fee to use the brokerage window. Finally, placing trades in order to reallocate or rebalance accounts often will involve extra fees.[7] As a result, plan sponsors should be discouraged from engaging in self-directed brokerage accounts, as they do not assist participants in properly diversifying their retirement savings.

Conclusion

Fiduciaries have the responsibility to provide participants with an adequate fund line-up in order to allow participants to diversify their retirement savings. BlackRock states, "Effective asset allocation requires a robust process that identifies the right building blocks to drive performance over a long time horizon and produce consistent results. You also need to understand how all the parts of the asset allocation engine work together."[8] Because of the law of diminishing returns, 15-20 funds are adequate for proper diversification. Additionally, 7 asset classes may allow for the best diversification opportunity along with a real estate investment component. Furthermore, the number, style, and size of funds should be organized so that investors would still be diversified if they evenly divide their capital. Ultimately, designing an effective fund line-up structure can not only help participants diversify, but also assist the American worker in understanding the components of the 'asset allocation engine'.

[6] "Self-directed Brokerage Accounts in Defined Contribution Plans," J.P. Morgan, 2013
[7] "Using Brokerage Windows to Expand Your 401(k) Options," U.S. News & World Report, 2013
[8] "Asset Allocation Drives Your Target Date Fund," BlackRock, 2013