

# FAMILY FOUNDATION *Advisor*

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## Risk Management for Foundations

# The Role of Diversification in Family Foundation Investing

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### Introduction

Family foundation activity is far from trivial, with nearly 20,000 foundations contributing over \$7 billion in 1998 ("Family Foundations: A Profile of Funders and Trends," Foundation Center and National Center for Family Philanthropy, 2000). Investing money properly is a challenge at any time but perhaps more so than ever today. As this article goes to print, the U.S. Congress is debating new legislation that would affect private foundations at the same time that state watchdogs are evaluating tighter corporate governance rules. In addition, anemic market conditions in recent months have encouraged foundations to make up for lost income by investing in higher-risk securities. This may or may not be a bad thing, depending on the investment objective and related diversification benefits of adding higher-risk securities to the portfolio.

To ensure that adequate funds are available to support philanthropic objectives, however, family foundation trustees and their advisors must be aware of the way their portfolio changes with the addition of every new investment. Beyond that, a periodic review is required since risk measures can and do change over time.

### The Motivation to Diversify

Diversification is a concern for several reasons, including:

- Regulatory compliance
- Funding versus investing mismatch
- Changing market conditions

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- Correlation often used to construct financial hedges
- Foundation constraints regarding permitted investments

Since the promulgation of the Uniform Prudent Investor Act (UPIA) in 1994, fiduciaries are permitted to make investment decisions on the basis of the risk-return characteristic of a portfolio, something quite different than an analysis that looks only at individual securities. Nearly all states have adopted the UPIA, reinforcing its importance with respect to financial management of a private foundation. (For a list of these states, see [http://www.nccusl.org/nccusl/uniformact\\_factsheets/uniformacts-fs-upria.asp](http://www.nccusl.org/nccusl/uniformact_factsheets/uniformacts-fs-upria.asp).) The fact that the UPIA allows the delegation of investment activities outside the foundation puts new pressure on fiduciaries. They must know enough to make strategic investment decisions and then hire the right managers.

On the economic front, family foundations face a somewhat unique situation. Their investment decisions are often based on a stated goal that makes diversification difficult. For example, a family foundation may limit or outright ban any investment in a compa-

ny not deemed "socially responsible." This winnows down the list of eligible investments, requiring a more judicious analysis of what constitutes an appropriately well-diversified portfolio.

Moreover, family foundations could well be exposed to a mismatch in the way they fund versus what they fund. To illustrate, consider a family foundation that seeks to provide affordable housing to people who live in a fast-growing part of the U.S. by buying stock of multinational companies. During a down market, lower global revenues can depress stock values (and dividends). At the same time, grantseekers may ask for additional funds to support an increasing need for cost-effective homes. Assuming that diversification is an important goal, family foundation trustees can ill-afford to ignore either the regulatory or economic imperatives.

### Quantifying Diversification Benefits

Okay, diversification makes sense. But what is it worth? How can one measure the actual value to the foundation's portfolio of a diversification strategy? One popular tool for

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**Table 1: Interpreting Correlation Coefficient**

Range	Sign	Magnitude
Less Than Zero	A negative correlation coefficient suggests that returns for two particular securities will move in the opposite direction as market conditions change.	A number closer to -1.00 indicates more negative correlation and, by extension, greater diversification benefits.
Equal to Zero	Assuming that returns for two securities are proportional to each other (i.e. linearly related), a correlation coefficient of zero suggests independence.	Not Applicable
Greater Than Zero	A positive correlation coefficient suggests that returns for two particular securities will move in the same direction as market conditions change.	A number closer to +1.00 indicates more positive correlation and, by extension, fewer diversification benefits.

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measuring the diversification benefits associated with adding a new security to a portfolio is the correlation coefficient. It is a pair-wise measure that captures the way returns for two securities are expected to move ("co-vary") in response to a change in the economy. Mathematically, it takes a value between -1.00 and +1.00. As shown in Table 1, both the sign and magnitude inform the user about the potential diversification benefits.

An often-cited benefit of hedge funds is the low correlation between hedge funds as an asset class. One recent paper shows that the correlation coefficient between hedge fund returns and the S&P 500 Index is either low positive or low negative, depending on the type of hedge fund (Schneeweis, Thomas & Georgi Georgiev, "The Benefits of Hedge Funds," University of Massachusetts working paper, June 19, 2002, Exhibit 3, page 4). Note: Hedge fund performance varies by strategy. A correlation analysis of hedge funds vis-à-vis other investments reflects their varied use of leverage, asset allocation mix, and investment style.

**Are You Looking at the Right Data?**

Like any metric, an estimated correlation coefficient output is only as good as the inputs. Time has a material impact on correlation analysis in several ways. Since historical data is frequently used to compute correlation (versus projected returns), the exact calendar time period considered is crucial to the result. Consider the case of international securities, which were long deemed beneficial because foreign equity and fixed income markets were seldom affected by happenings in the U.S. With the advent of better and faster technology, information flows more quickly and the once negative correlations between the U.S. and overseas markets are typically now positive. Result: Those who invest in international securities for diversification purposes will have a rude awakening unless they frequently revise their numbers.

Frequency of data collection is another factor. Daily returns tend to reflect the higher variability associated with a short time period. Many family foundations emphasize a long-term approach. This renders correlations based on short-term data less meaning-

ful. Complicating things, the use of an external money manager means that trustees must be adept at asking tough questions about the extent to which their portfolio is diversified and what could cause the diversification benefits to disappear. A best practice approach is to put checks and balances into place that would force a portfolio rebalancing when correlations change by a pre-specified amount. Add to the mix the array of complex securities with embedded options (such as convertible bonds and mortgage-backed securities) and assessing correlation becomes even more of a challenge.

**Conclusion**

Being a fiduciary is tough going. Regulatory pressures to promote better corporate governance continue, with no end in sight. Security markets are seldom stable, directly impacting portfolio performance. Investment alternatives are often complex and require a lot of thought, especially for people with expertise in areas other than finance. That said, diversification is a cornerstone of prudent investing and cannot be ignored. ■