## YASUYUKI FUCHITA ROBERT E. LITAN

# Introduction

# *Mutual Funds: Looking Back and Ahead*

**O**<sup>NE</sup> OF THE cardinal rules of investing is not to put all of one's investment "eggs" in one basket. Investors can lower the risk that they run to achieve a given rate of return—or achieve higher returns for a given level of risk—by diversifying across and within broad categories, most commonly equities and bonds.

The mutual fund industry, dating from the formation of investment trusts more than two centuries ago, owes its origin to this simple insight: by pooling funds from a large number of investors and placing the funds into portfolios of financial instruments, mutual funds provide a more efficient means of diversification than individuals can achieve by investing on their own in specific stocks and bonds.

Mutual funds are of two basic types, closed- and open-end funds. Closed-end funds hold a fixed number of securities, with a fixed number of outstanding shares, which are traded in the open market as individual equities. The price of the shares thus is set in the market and often falls short of the fund's liquidation value per share. Open-end funds, in contrast, are continuously accepting (and in some cases redeeming) shares and investing the proceeds in a changing portfolio of securities. The shares are bought and sold at the fund's "net asset value," or the per share market value of all of the securities held by the fund, typically calculated from prices on the preceding trading day. Open-end funds have proven to be far more popular than closed-end funds, and unless otherwise noted, the discussion of mutual funds or the mutual fund industry in this book refers specifically to open-end funds.

The mutual fund industry has enjoyed especially rapid growth since the end of World War II, a product of growth in income and wealth in developed economies (which fueled rising fund inflows) and the rise in stock prices (which increased the value of the monies invested). In the United States, for example, mutual funds held roughly \$10 trillion in assets at year-end 2006, up from just \$50 billion in the late 1960s. Worldwide, mutual fund assets exceeded \$21 trillion at year-end 2006, a total that also had multiplied many times over the same period.

Mutual funds have grown not only in asset size but also in number. Currently more than 8,000 individual mutual funds are offered in the United States by roughly 500 mutual fund sponsors. Many more thousands of funds or their equivalents are in operation elsewhere throughout the world.

The large number of funds reflects the presence of many different types of funds, some that invest in both stocks and bonds of various types and many others that specialize in certain types of securities: large- and small-cap stocks, funds for virtually every industry sector, funds that mimic certain well-known stock indexes (the S&P 500 and the Dow-Jones averages or broader indexes, such as the Russell 3000), country funds, funds for different regions of the world, and funds that invest in various types of bonds of varying maturities.

Yet even as mutual fund assets have grown and choices among them have multiplied, it is not clear-as it once may have been-where this particular asset vehicle and the industry that has generated it are headed. New methods and options for efficient diversification have arisen-exchange-traded funds, or ETFs (instruments that trade like stocks and whose value is tied to some index); separately managed accounts offered by brokerage competitors; and limited partnerships in hedge funds and private equity funds (for wealthy investors)-and they are rapidly gaining ground on mutual funds. Meanwhile, the regulation of mutual funds themselves has been in flux, at least in some quarters. The scandals earlier in this decade in the United States over the "late trading" of fund shares by certain clients, coupled with criticism of fund fees, have sparked interest in strengthening oversight of funds. Meanwhile, the growing use of the Internet by investors to access information and to buy and sell individual securities as well as mutual funds and competing diversification vehicles is likely to lead eventually to major changes in the way that funds are required to disclose their investment objectives and performance and in the way that shareholders vote their shares.

Given the importance of mutual funds and the policy issues related to them, the Brookings Institution and the Tokyo Club convened their fourth annual joint conference on financial markets on October 18, 2007, at the Brookings Institution to examine the future of mutual funds as investment instruments and the future of the industry itself. This book presents the papers written for the conference and formal comments on the papers. We summarize here some of the key arguments and conclusions found in the presentations.

#### Mutual Funds in the United States

Because the fund industry and investor base are most developed in the United States, it is appropriate to begin with an analysis of the U.S. market. Paula Tkac of the Federal Reserve Bank of Atlanta takes up the challenge in chapter 1, first by describing the developments that have been most pronounced in the industry in the recent past and then by projecting the key trends that she expects to dominate fund activity in the foreseeable future.

Looking back, Tkac identifies the proliferation of different types of funds and the recent emergence of the funds' main competitor, the ETF, as among the more important developments in the fund industry. She adds to that list the provision by fund sponsors of other services apart from the funds themselves: information, investment advice, planning, recordkeeping, and access to and trading of other investment products. Indeed, she notes that in 2005 more of the people working in the fund industry serviced investors' accounts than managed fund portfolios.

The structure of the fund industry as well as the way that funds are distributed have changed in significant respects. Thirty years ago, funds generally were sold through brokers, who were paid out of a front-end load, or sales charge. With the adoption of rule 12b-1 in 1980 by the Securities and Exchange Commission, mutual funds were allowed to spread their marketing and distribution charges out over time and to take the costs out of fund assets. Tkac notes that many fund companies implemented the rule by introducing new share classes within the same fund, with each share class having its own fee structure. That, in turn, enabled fund advisers to distribute shares in various ways: through captive brokers, wholesalers, and financial advisers; through institutional pension or 401(k) programs; and to investors directly.

Perhaps the most important change in fund distribution in the past fifteen years in particular was the development of "open architecture" or "open platform" methods of distribution. Under this approach, fund sponsors give investors access to a range of funds, including those offered and managed by other advisers. Much of industry thus has moved away from a specialist, proprietary structure and toward "financial supermarkets" that offer investors a broad choice of funds as well as a range of investment-related services. Looking ahead, Tkac predicts that the most important factor affecting fund investment activity and patterns will be the retirement of the baby boom generation. Up to this point, of course, baby boomers have fueled the increase in assets invested in funds, encouraged by the shift among employers from defined benefit to defined contribution retirement plans, in which most of the funds are invested in mutual funds. Now that the baby boomers are beginning to retire, they will withdraw from rather than add to their fund accounts. In such an environment, a key challenge for fund companies will be to offset as best they can those withdrawals with new deposits from younger investors. At the same time, fund companies should find new service opportunities in advising retirees on how to draw down ("decumulate") their fund balances, as some companies already are doing through the "retirement calculators" featured on their websites.

In her chapter, Tkac surveys various theories about how retirees can best make the difficult decisions involved in "asset decumulation." Key factors in the decision include their tolerance for risk—specifically, the risk that they might outlive their assets—and the extent to which they want to leave bequests to their heirs. One obvious way for individuals to reduce or even eliminate longevity risk is by purchasing annuities. While the current annuity market is small, Tkac suggests that insurers that offer annuities will become more innovative in their attempts to spur demand for this particular investment product in the future.

Tkac expects fund sponsors to build on their past record of innovation in their efforts to attract investments from younger workers. In particular, Tkac predicts that mutual fund companies will broaden the range of their offerings of other financial services and increase their use of Internet technologies to refine and individualize the investment products and services that they offer to investors.

#### The Mutual Fund Industry in Japan

In the United States, mutual funds are organized legally as "investment companies," which technically are corporations, whose shares represent the prorated market value of the assets held by the funds. Mutual fund owners thus are "shareholders," who elect the members of the fund's board of directors, which oversees the operation of the funds. The investment strategy of the funds, however, is set by an investment adviser, who typically has organized and marketed the funds.

In Japan, as in some other countries, the more popular mutual funds are those that have been organized instead as investment trusts, which are administered by a fund trustee without a board of directors overseeing the fund. Investors in investment funds have a contractual rather than a shareholder relationship with their funds. In chapter 2, Koichi Iwai of the Nomura Institute of Capital Markets Research examines the growth of investment trusts in Japan and offers his views about the future. Japanese investors have been slower to embrace their equivalent of mutual funds than investors in the United States, although that has been changing. Inflows into investment trusts were substantial in the late 1980s, just before Japan's stock market "bubble" burst, and in the past few years they again have become significant. During the 1990s—Japan's "lost decade"—Japanese investors pulled their money out of investment trusts.

Given the popularity of foreign currency–denominated mutual funds, Iwai postulates that inflows into Japanese trusts should react positively to yen weakening (which makes Japanese securities more attractive). In addition, fund inflows should increase as equity returns widen relative to interest rates on savings deposits. Iwai presents a statistical study that confirms both hypotheses. Of particular interest, he reports that exchange rate movements have had a greater impact on net fund inflows since 2003 than beforehand.

Iwai points to two regulatory changes affecting the distribution of investment trusts in Japan that he believes also have stimulated inflows into the trusts. One change allowed banks (in 1998) and later the post office (in 2005) to sell shares in investment trusts. The second change, adopted in 2001, introduced defined contribution pension plans. Five years later, in 2006, investment trusts accounted for nearly 40 percent of the assets in those plans.

Product innovation also has led to growing interest in investment trusts among Japanese investors. Iwai notes that interest in investment trusts rises with age and that Japanese investors tend to be risk averse and more interested in obtaining regular income than capital gains from their trusts. Hence, trust investors have been most interested in balanced funds (which pay dividends), funds of funds, and foreign currency-denominated funds.

Iwai advances a short-run projection for the growth of investment trust assets in Japan. Using existing trust investment tendencies by age cohort and taking account of the positive relationship between investor age and the amount of funds invested in trusts, Iwai projects that because of the continued aging of the Japanese population, total investment trust assets should be 45 percent higher in 2010 than in 2000.

Looking out over a longer time horizon, Iwai identifies a number of factors that, unless they change, should limit the growth of the investment trust industry. One such factor relates to the "default choice" for individuals enrolled in contribution plans. For most workers, the current default is a savings account. Unless that changes, the opportunities for further growth in pension monies allocated to investment trusts will be capped. A second factor limiting the growth of assets is the greater concentration—and thus less intense competition—that exists in the Japanese fund industry than in the U.S. industry. A third limiting factor is that Japanese financial organizations tend to favor trusts advised by their own asset managers, a tendency confirmed by Iwai's empirical analysis. That tendency, which effectively limits customer choice and thus possibly interest in trust investments generally, contrasts with the movement toward the open architecture distribution model for mutual funds in the United States.

Finally, the growth of the investment trust industry is limited by the current preference of Japanese investors for income-oriented investment vehicles. Investor education about the benefits of investing in growth-oriented vehicles would expand the horizons of Japanese investors and thus widen opportunities for the growth of investment trusts in the future.

#### Mutual Funds in Europe and Elsewhere

As suggested by the total amount of assets noted previously, the mutual fund industry has become a global phenomenon. As of year-end 2006, assets held in mutual funds outside the United States exceeded the assets of U.S. funds. What lies ahead for mutual funds around the world? Ajay Khorana of the Georgia Institute of Technology and Henri Servaes of the London Business School address a number of aspects of this question in chapter 3.

Khorana and Servaes begin with a brief survey of the fund industry around the world. Notably, although fund assets are largest in the United States, relative to national output (GDP), the ratio of fund assets to GDP is next highest in Luxembourg, followed closely by Ireland. Both countries have become hubs for fund sales throughout Europe.

Looking ahead, the authors suggest that an important precondition for rapid growth in fund assets in a country is that fund assets relative to GDP be relatively low, so that ample room exists for future growth. Once that condition is met, growth should depend heavily on the quality of a country's legal system. For that reason, although the ratio of fund assets to GDP is small in countries such as China, India, Russia, and Turkey, fund growth in those countries is likely to be limited unless the quality of their legal systems improves significantly. Other factors that also should influence the rate of growth of fund assets are the ease and cost of forming new funds and the prevalence of defined contribution plans, which are major sources of fund asset growth.

Mutual funds are sold through three channels: directly by fund management companies, through financial advisers, and by commercial banks. Khorana and Servaes expect no major changes in current distribution patterns. However, they do report evidence indicating that financial advisers do not benefit investors but instead tend to raise fees and reduce risk-adjusted returns.

Not all countries have a "free market" in the sale of mutual funds—that is, they do not permit funds established in foreign countries to be sold in the domestic market. That is the case in Australia, Canada, Japan, and the United States, but there are significant cross-border mutual fund sales in Europe. The authors do not expect major changes in existing patterns, although they do anticipate some decline in European sales from Luxembourg and Ireland as European governments make it more difficult to hide ownership and income from funds in the two countries. Further, with the expiration of the tax advantages that helped spur the growth of the fund industry in Ireland, the authors expect Luxembourg to widen its lead over Ireland in future growth of fund assets on the Continent.

Khorana and Servaes also address certain of the controversial issues related to mutual fund fees, which are of two broad types: fees assessed when investors buy or sell fund shares and fees assessed annually (for portfolio management and, in some places, to pay for fund distribution and marketing). Fees vary significantly across and within countries, even when adjusted for size of funds, but as a percentage of assets, they typically go down as funds get larger and are able to realize economies of scale. By the authors' calculations, fund fees are lowest in Australia and highest in Canada. Fees in the United States are relatively modest compared with those in other countries. Fee-related lawsuits filed in the United States against fund companies so far have not succeeded, although the authors suggest that there may be downward pressure on fees if plaintiffs begin to prevail in such suits.

The authors note that one type of fee—the "performance-based" fee—is much more common in Europe than in the United States. Such fees are imposed if and when performance exceeds some benchmark. Performance fees are not common in the United States, because by law any such fees must be symmetric—if they rise for good performance, they must fall for poor performance. In Europe, however, fund managers can charge performance fees that are asymmetric—fees can go up if funds outpace the benchmark but do not have to go down if they fall below it. The authors note that performance fees are charged by 12 percent of European equity funds and suggest that use of such fees in Europe (but not the United States) will be more frequent in the future.

As we noted at the outset, the diversity of mutual funds has been growing over time. Khorana and Servaes single out several fund categories that have become increasingly popular in recent years and that they expect to become even more so in the future: index funds; guaranteed funds (funds established for a fixed period that increase in value if a specific index rises and guarantee the return of principal should the index not increase in value over that period); funds that specialize in certain industry sectors; and hedged mutual funds (funds that follow investment strategies similar to those of hedge funds). The authors are more cautious about the future of "funds of funds"—mutual funds that invest in other mutual funds—because of the multiple layers of fees embedded in such funds.

Khorana and Servaes also present an extensive discussion of the behavior of mutual fund investors. Specifically, they ask whether investors tend to act rationally, seeking to maximize the risk-adjusted, after-tax returns of their funds, net of fees. The authors identify several patterns of investor behavior suggesting that the answer to that question is no.

One such pattern shows that fund investors tend to chase fund "winners" funds that have performed the best over some recent time period or those that have been rated the best by independent rating services such as Morningstar. The best study of this "hot hand" phenomenon, however, suggests that investors' faith in recent winners is misplaced: past returns are not a statistically valid predictor of future returns, except in the case of poorly performing funds, which consistently tend to perform poorly. The exception for poor performers highlights a second oddity: that despite the funds' persistent poor performance, investors in such funds do not consistently withdraw their money beyond the first "bad year."

A third pattern inconsistent with the rational actor model is the persistence of large differences in fees among funds of the same type, such as index funds. In a rational world, such differences would not persist—investors would flock to the fund or funds with the lowest expense ratios—but Khorana and Servaes indicate that so far, they have not. Further, although all fees come out of investors' pockets and ideally should affect fund flows in the same fashion, in fact investors tend to pay more attention to fees that are more transparent, such as front-end load or sales charges, than to annual expenses.

The authors suggest that fund sponsors can take advantage of these oddities in investor behavior by promoting their best-performing funds (if the sponsors offer a "family" of fund choices), by increasing their fees across the board (as long as the fees remain below average and thus do not tend to stick out in any fee comparison chart), and by offering and promoting guaranteed funds (which are relatively inexpensive to manage because they tend to be linked to indexes).

Khorana and Servaes also highlight recent academic research exploring the characteristics that seem to be associated with successful fund management (management that results in risk-adjusted returns that are better than relevant benchmarks). Two manager-specific characteristics stand out: average SAT score at the college that the managers attended and the amount of personal wealth invested by the managers in the funds that they manage, both of which seem to be positively related to fund performance. The authors cite one study suggesting that fund returns tend to fall with fund size but rise as the size of a fund's family (the other funds offered by the same sponsor) increases. They note another line of research indicating that fund performance goes up with portfolio concentration, indicating that a few big bets may pay off better than many smaller ones.

The authors conclude by observing that there are large numbers of fund sponsors, around the world and within individual countries. Nonetheless, in the United States and elsewhere, the collective market share of the largest fund companies has been relatively stable. That pattern suggests the presence of economies of scale, which, in the authors' view, should lead to some consolidation among fund sponsors in the years ahead. The authors project that this trend will enhance the profitability of the surviving fund sponsors rather than result in savings to investors.

#### Commenters' Views

This book closes with four comments relating to the future of mutual funds: one comment by Brian Reid of the Investment Company Institute (ICI) on the contrasts in the conclusions and arguments of the chapter by Tkac and the chapter by Khorana and Servaes and three comments on the future of mutual fund regulation.

In Tkac's view, demographic characteristics—especially age of the investor—are the driving force behind fund investment and the force to which profit-maximizing fund sponsors respond. Khorana and Servaes agree that profit-maximization guides the behavior of fund sponsors, but they are skeptical that fund investors act in a rational fashion

Reid rejects the view that investors are not rational, while agreeing that demographic trends should have an important effect on the fund industry in the future. He points to evidence from the ICI showing much greater relative inflows into low-fee funds than those charging higher fees. Reid argues that that evidence, coupled with investors' stated desire for financial services that offer more than just the option of buying and selling mutual funds, suggests that funds charging higher fees are meeting investor demand for other services. Reid notes that nevertheless, on balance and for stock funds in particular, the ratio of fees to assets invested has declined by a little more than half since 1980, a decline that in his view is consistent with investors' paying attention to fees. Looking ahead, Reid expects fund companies to continue to innovate and specifically to address demand for a broader range of financial services as many investors retire. He singles out the new "target date" funds, which are meeting investor demand for a convenient investment vehicle that is well suited to retirement needs, and suggests that such funds should play an important role in the future growth of the fund industry, at least in the United States. In addition, like Tkac, Reid expects continued innovation by fund companies to respond to the decumulation of fund assets as baby boomers retire. He also forecasts the squeezing of fund companies' margins, which in turn should lead to further consolidation.

In the United States, mutual funds are regulated by the Securities and Exchange Commission, under provisions of the Investment Company Act of 1940 and subsequent amendments. The 1940 act requires fund sponsors to make various kinds of disclosures and vests responsibility for oversight in boards of directors to prevent fund managers from exploiting conflicts of interest. The other discussants—Peter Wallison of the American Enterprise Institute, Allan Mostoff of the Mutual Fund Directors Forum, and Harold Bradley of the Kauffman Foundation—comment on how the regulatory environment may change in the future.

Wallison contends that the structure of the mutual fund industry, the result of federal regulations that promote boards of directors and a corporate structure, is inhibiting competition. Citing evidence that compares fee dispersion in the United States and the United Kingdom, Wallison attributes the much wider fee distribution in the United States to disincentives for boards of directors to reduce fees. To increase industry competition in the future, he advocates moving away from structuring mutual funds as corporations. Instead, the law should permit funds to be organized (on an optional basis) as they are in many European countries—and somewhat as they are in Japan—as trusts whose portfolios are managed by a trustee (or an equivalent) without a board of directors.

Mostoff, in contrast, argues that boards of directors are a crucial and beneficial component of the mutual fund industry. In his view, boards help maintain and enhance investors' trust in funds, which is indispensable for their future growth. Mostoff acknowledges that boards have not always been perfect but argues that they offer the most cost-effective means of oversight.

Bradley, who has spent numerous decades working in the mutual fund industry, approaches regulatory issues from the perspective of an insider. He notes that although fee structures may be problematic, mutual funds still offer the lowestcost method for the average investor to achieve diversification and benefit from portfolio management and advice. Fees, however, are still being set by a few industry players, and in his view they are less than transparent. A key object of regulation in the years ahead, therefore, should be to enhance transparency.

### Conclusion

The mutual fund industry has enjoyed spectacular growth in the United States and elsewhere since the end of World War II. Funds have offered a cost-effective way for investors to diversity their assets. As investors age, earn more, and grow wealthier, they have put more of their assets into funds or equivalent vehicles.

The fund industry will be challenged in the years ahead by the retirement of the post–World War II generation of workers, especially in developed countries. If the past is any guide to the future, however, fund companies will continue to innovate to meet new needs. And debate will continue over how mutual funds are best governed. The chapters in this book shed light on each of these important issues.