AHEAD OF PRINT

Financial Analysts Journal
Volume 67 • Number 6
©2011 CFA Institute
FAJ

PERSPECTIVES

Most Likely to Succeed: Leadership in the Fund Industry

Robert Pozen and Theresa Hamacher, CFA

What is the critical factor for success in the U.S. mutual fund industry? Is it top-ranked investment performance, innovative products, or pervasive distribution? In our view, it is none of these factors, despite their obvious importance. Instead, the best predictors of success in the U.S. fund business are the focus and organization of the fund sponsor. We believe that the most successful managers over the next decade will be organizations with two characteristics: dedication primarily to asset management and control by investment professionals. Our view is based on research for the book *The Fund Industry: How Your Money Is Managed* (Pozen and Hamacher 2011).

Dedicated asset managers—firms deriving a majority of their revenues from investment management—dominate the industry, as shown in **Table 1**. The table ranks U.S. fund families by assets under management in 1990, 2000, and 2010 and shows dedicated asset managers in boldface. At the end of 2010, 8 of the top 10 firms were dedicated to investment management, as were 14 of the top 25 firms. Dedicated firms have held this dominant position for the past 20 years; in 1990, 13 of the top 25 firms were dedicated to asset management, only 1 fewer than in 2010.

Moreover, the market share of the dedicated managers in the top ranks has climbed over the last two decades. In 1990, the dedicated firms in the top 10 had a combined market share of 32.4 percent; by the end of 2010, that number had grown to 47.5 percent. Similarly, the market share of the dedicated firms in the top 25 rose from 39.8 percent in 1990 to 55.3 percent in 2010—even as the portion of industry assets held by the top 25 firms in aggregate fell from 76.2 percent to 73.6 percent.

Robert Pozen is senior lecturer at Harvard Business School, Cambridge, Massachusetts, and senior research fellow at the Brookings Institution, Washington, DC. Theresa Hamacher, CFA, is president of NICSA, Boston.

Authors' Note: This article is based on research for *The Fund Industry: How Your Money Is Managed* (John Wiley & Sons, 2011).

Firms dedicated to asset management gained market share at the expense of diversified financial firms. We define a diversified financial firm as a large entity that controls one or more fund sponsors but that receives more than half its revenue from sources outside asset management—usually brokerage, retail banking, investment banking, insurance, and annuities. These diversified financial firms lost share over the past 20 years despite their attempts, principally through the acquisition of existing fund sponsors, to expand into the fund business.

The Rise and Fall of the Diversified Firm

Many firms—both dedicated asset managers and diversified financial firms—have engaged in mergers and acquisitions (M&A) in order to move up quickly in the mutual fund ranks. Not surprisingly, M&A activity for fund complexes over the last 20 years roughly followed the rise and fall of the U.S. stock market with a modest time lag, as **Table 2** illustrates. After 1992, M&A activity in the fund industry falls into three distinct periods: 1993–2001, when banks and insurers were major acquirers; 2002–2006, when diversified firms began selling their fund families to dedicated asset managers; and 2007–2010, when the credit crisis forced the divestiture of fund management subsidiaries by diversified firms.[1]

Diversified Firms as Buyers. From 1993 to 2001, M&A activity in the fund industry was robust as diversified financial firms rushed into the business. Banks and insurers, hoping to boost profit margins and diversify their income streams, were major buyers of fund complexes. Mellon Bank (now BNY Mellon) broke the ice in 1993 by buying Dreyfus, a move soon copied by other major financial firms. European banks and insurers were particularly acquisitive, accounting for more than one-quarter of total deal volume in this period. One of the largest such acquisitions during this time was

Table 1. Largest U.S. Mutual Fund Complexes by Assets under Management

1990			2000			2010		
Rank	Fund Complex	Market Share	Rank	Fund Complex	Market Share	Rank	Fund Complex	Market Share
1	**Fidelity**	**10.2%**	1	**Fidelity**	**11.8%**	1	**Vanguard**	**12.1%**
2	Merrill Lynch	8.5	2	**Vanguard**	**8.1**	2	**Fidelity**	**11.3**
3	IDS/Shearson	7.0	3	**American Funds (Capital Group)**	**5.2**	3	**American Funds (Capital Group)**	**9.4**
4	**Dreyfus**	**5.4**	4	Putnam Funds/Marsh McLennan	3.8	4	**PIMCO**[a]	**3.7**
5	**Vanguard**	**5.3**	5	Morgan Stanley (includes Dean Witter and American Capital)	3.3	5	JPMorgan Chase	3.5
6	**Franklin**	**4.2**	6	**Janus**	**3.0**	6	**Franklin Templeton**	**3.2**
7	**Federated**	**4.1**	7	**Invesco (includes AIM Group)**	**3.0**	7	**BlackRock (includes Merrill Lynch)**	**3.0**
8	Dean Witter	3.8	8	Merrill Lynch	2.7	8	**Federated**	**2.4**
9	Kemper	3.5	9	**Franklin Templeton**	**2.5**	9	**T. Rowe Price**	**2.4**
10	**American Funds (Capital Group)**	**3.2**	10	Smith Barney/Citigroup	2.4	10	BNY Mellon (includes Dreyfus)	2.3
Subtotal		55.1%	Subtotal		45.6%	Subtotal		53.3%
11	Prudential	3.1%	11	**TIAA-CREF**	**2.4%**	11	**TIAA-CREF**	**1.9%**
12	Putnam Funds/ Marsh McLennan	2.5	12	**Federated**	**2.3**	12	Wells Fargo (includes Keystone)	1.9
13	PaineWebber	1.7	13	Schwab Funds	2.0	13	RiverSource/Ameriprise (formerly American Express; includes Columbia Management)[b]	1.8
14	MFS/Sun Life	1.6	14	**Dreyfus**	**1.9**	14	Goldman Sachs	1.7
15	**T. Rowe Price**	**1.6**	15	OppenheimerFunds/Mass Mutual	1.8	15	OppenheimerFunds/Mass Mutual	1.6
16	OppenheimerFunds/Mass Mutual	1.4	16	MFS/Sun Life	1.7	16	Schwab Funds	1.6
17	**Scudder**	**1.3**	17	American Express Funds (now Ameriprise, includes IDS)	1.6	17	**Invesco (includes Morgan Stanley)**[c]	**1.5**
18	**AIM Group**	**1.2**	18	Zurich Scudder (includes Kemper)	1.6	18	**Legg Mason (includes Smith Barney)**	**1.3**
19	Goldman Sachs	1.2	19	Columbia Management/Bank of America	1.6	19	**Dimensional Fund Advisors**	**1.1**
20	Alliance Capital Management/ Equitable Life	1.2	20	**T. Rowe Price**	**1.6**	20	John Hancock/Manulife Financial	1.1
21	SEI Investments	1.1	21	AllianceBernstein (formerly Alliance Capital)	1.6	21	Prudential	1.1
22	**American Capital**	**1.1**	22	**American Century**	**1.4**	22	**Dodge & Cox**	**1.1**
23	**Templeton**	**0.8**	23	Prudential	1.4	23	**Janus**	**0.9**

(continued)

©2011 CFA Institute

Table 1. Largest U.S. Mutual Fund Complexes by Assets under Management (continued)

1990			2000			2010		
Rank	Fund Complex	Market Share	Rank	Fund Complex	Market Share	Rank	Fund Complex	Market Share
24	**American Century (formerly Twentieth Century)**	**0.7**	24	JPMorgan Chase	1.3	24	MFS/Sun Life	0.9
25	**Keystone Group**	**0.7**	25	SEI Investments	1.2	25	DWS Investments/Deutsche Bank (includes Zurich Scudder)[d]	0.9
Total		76.2%	Total		71.0%	Total		73.6%

Notes: Firms dedicated to investment management are in bold. Percentages may not sum because of rounding. Parent company names are included in the table.

[a]By our definition, PIMCO is a diversified firm because it is owned by German insurer Allianz. We have included it among the dedicated asset managers, however, because PIMCO operates almost autonomously in the United States. It has its own brand and distribution system and is not integrated into the insurance and other U.S. operations of Allianz.

[b]Ameriprise Financial became an independent firm in 2005 when it was spun off from American Express. Its fund family was renamed RiverSource at that time. RiverSource acquired Columbia Management from Bank of America in 2010.

[c]Morgan Stanley sold its mutual fund operations to Invesco in 2010.

[d]Zurich Scudder was sold to Deutsche Bank in 2001 and renamed DWS Investments.

Source: Investment Company Institute.

Table 2. Value of U.S. Fund Sponsor Mergers and Acquisitions, 1990–2010

Type of Acquirer	1990–92	1993–96	1997–99	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Asset manager	$1.3	$ 6.4	$ 3.0	$ 5.9	$2.4	$0.3	$0.2	$0.6	$4.1	$ 9.7	$ 2.4	$1.3	$14.9	$2.4
Other	0.4	1.5	5.3	3.3	—	—	3.2	0.5	0.1	1.3	10.9	1.9	1.2	2.8
Banking/insurance	0.2	5.7	9.8	19.7	5.0	2.0	0.2	1.4	0.6	5.0	4.8	—	1.4	0.3
Total	$1.9	$13.6	$18.1	$28.8	$7.4	$2.4	$3.6	$2.5	$4.8	$16.1	$18.1	$3.2	$17.5	$5.5

Notes: Data are in billions. The data are for deals with a publicly disclosed value of $50 million or greater. Data for 2000–2010 are for all asset managers, not just fund sponsors. "Other" includes groups formed to make leveraged buyouts. Data may not sum to totals because of rounding.

Sources: Merrill Lynch; Thomson Reuters information provided by Goldman Sachs.

Deutsche Bank's purchase of Zurich Scudder Investments. U.S. brokerage firms also participated in the deal frenzy as they sought to expand their proprietary fund families. For example, Morgan Stanley bought Van Kampen and Miller, Anderson & Sherrerd during this period.

Compared with the diversified firms, dedicated asset managers played only a small part in the acquisition boom of the early years. Fund sponsors generally did not buy other fund sponsors (although Invesco's purchase of AIM was a notable exception). Instead, they diversified by buying firms that provided personalized investment services to wealthy clients; Alliance Capital's acquisition of Sanford C. Bernstein was the largest deal of this type.

Dedicated Firms as Buyers. In the next period, 2002–2006, the pattern of M&A activity changed dramatically. Diversified firms lost most of their interest in buying fund sponsors during the stock market decline that followed the bursting of the internet bubble. In their place, dedicated asset managers became the leaders in M&A, often buying fund complexes from diversified firms that had decided to divest them after reevaluating their strategies. Most notably, Merrill Lynch exited the proprietary fund business by selling a majority stake in its asset management arm to money manager BlackRock. Similarly, Salomon Smith Barney entered into a swap agreement with Legg Mason; it exchanged its fund family for Legg Mason's brokerage operations—turning the latter into a dedicated asset manager in the process.

Credit Crisis–Driven Divestitures. In the most recent period, 2007–2010, diversified firms continued to divest their asset management units, although these sales were driven by problems at the parent company level. In most cases, the driving factor was the need to bolster capital in the wake of the credit crisis, and the sale of a profitable fund subsidiary was an easy way to raise cash quickly. AIG, Bank of America, Barclays, and Lincoln Insurance all sold investment management operations.

In essence, the deals at the end of the decade reversed much of the effect of the deals from 1993 to 2001. In those earlier years, diversified financial firms were major acquirers as they expanded into the fund business. Starting in 2002–2006 and increasingly in 2007–2010, dedicated asset managers—or their management groups—became buyers when banks, insurers, and brokers became sellers because of a shift in strategy or a need for capital.

Current Situation. The net result of two decades of M&A activity is that diversified firms had only a limited presence in the upper echelons of the mutual fund rankings at the end of 2010. Among the diversified firms, banks have arguably had the most success. Two bank-affiliated fund groups—J.P. Morgan and BNY Mellon—rank among the top 10 fund firms. They have been successful because they capitalized on their traditional strengths as custodians and processors of financial transactions—by focusing on money market funds for institutional investors while diversifying into other asset management products. Three other bank-related groups are in the top 25: Wells Fargo, Goldman Sachs, and DWS Investments (part of Deutsche Bank).

Brokers and insurance companies have fared less well. By the end of 2010, there were no retail brokerage–owned fund firms among the top 10 fund complexes and only two were among the top 25—RiverSource and Schwab Funds. Insurance companies have better representation, with OppenheimerFunds, John Hancock, Prudential, and MFS Investment Management in the top 25, although none of them are in the top 10. Note that we exclude PIMCO from this list and consider it a dedicated manager, even though it is owned by insurer Allianz. PIMCO has grown rapidly but not because it is part of a larger firm. Its success is based on being run separately from Allianz—using its own brand and distribution system in the U.S. market.[2]

The Limits of the Financial Supermarket

The failure of diversified firms to dominate the fund industry shows the limits of the financial supermarket strategy—which was the business model driving much of the acquisition activity we just reviewed. Expectations for the supermarket strategy were high when Citibank kicked off the trend by acquiring Travelers Insurance in 1998. Advocates predicted that the financial supermarket would provide consumers with a greater diversity of services at lower prices. At the same time, industry executives saw diversification as a way for U.S. firms to become more competitive globally because non-U.S. markets were often dominated by multiproduct financial conglomerates. But the heyday of the financial supermarket strategy was short lived. By 2009, the renamed Citigroup had sold off its property and casualty insurance divisions, its brokerage operations, and, as mentioned, its fund group.

Financial supermarkets found the fund industry particularly difficult to enter for four main reasons: open architecture, the challenges of cross-selling, retention of investment professionals, and the volatility of investment performance.

©2011 CFA Institute

Open Architecture. The increased prevalence of open architecture made it much more difficult for diversified firms to sell house brand, or proprietary, products. When diversified financial firms acquired a fund sponsor, they expected to sell the sponsor's mutual funds together with traditional banking and insurance services to their high-net-worth customers. They also planned on giving their sales forces incentives to favor the house brand over offerings from other firms.

But high-net-worth customers soon began to demand access to the best funds regardless of source, while regulators came down hard on practices—particularly compensation practices—favoring affiliated funds. At the same time, the availability of information and services on the internet decreased brand loyalty and the dependence of customers on any particular firm.

All these factors combined to make open architecture the standard at most U.S. financial firms for all mutual funds except money market funds. As a result, diversified firms usually did not see the hoped-for revenue synergies that often justified a high purchase price for an asset manager.

Challenges of Cross-Selling. The challenges of cross-selling are another obstacle for the financial supermarket model. Good customers for one type of financial product may not be good customers for another type. Fidelity learned this lesson when it started a credit card business that was marketed to its mutual fund customers. But Fidelity's mutual fund clients always paid their balances on time, so they did not generate any interest income for Fidelity. They also refused to accept credit cards with annual fees. With shortfalls in both interest and fee income, Fidelity eventually sold the business to a commercial bank with a huge volume of credit cards.

Even when there is congruence in the customer base, cross-selling complex financial products is practically difficult. Employees need to be trained in several fields—as financial advisers, insurance agents, and bankers—and may need multiple licenses to cover all their activities. It is a rare individual who can master the complexities of diverse product offerings well enough to persuade high-net-worth customers to buy them.

Retention of Investment Professionals. Of particular relevance to the fund business is the trouble diversified firms often have in retaining the investment management professionals who are critical to the success of any asset manager. Culturally, investment staff tend to prefer a small-company environment with little bureaucracy or hierarchy. That preference often does not fit well with large diversified firms, which generally have elaborate budgeting processes, active human resources departments, and many layers of middle management.

Executives at diversified firms can also find it hard to pay portfolio managers at competitive rates. These executives may be reluctant to pay a star portfolio manager more than the CEO, even if the pay package is justified by investment performance. Moreover, they may find it politically difficult to structure special compensation programs that give investment staff the equivalent of an equity ownership stake in the asset management unit.

Yet, these programs are essential for retaining portfolio managers, who generally insist that their compensation be closely tied to the fruits of their own work rather than the overall results of the diversified firm. Ownership is so important that the most successful aggregator of investment management firms, Affiliated Managers Group, generally buys only 51–70 percent of a firm—leaving the balance of the shares with the firm's professionals as an incentive to continue to grow revenues and profits.

If investment managers are not committed to the firm—because they find the work environment unattractive or the compensation inadequate or both—it is easy for them to leave. They can defect to another fund firm, an institutional manager, or a hedge fund. They can even consider starting their own fund, which is relatively cheap and easy if they hire outside firms to handle distribution and administration. All a manager needs is $100,000 in seed capital and a reputation for outperformance.

Volatility of Investment Performance. Finally, diversified financial firms may find that they are uncomfortable with the volatility of investment performance. Yet, most diversified financial firms are public companies that report quarterly results to their shareholders—who may very well pressure them to take short-term actions whenever investment returns slip. Fund management is a more comfortable business for privately held firms owned by professionals who are better prepared for the ups and downs of the security markets.

Advantages of the Dedicated Asset Manager: The Example of the Big Three

While diversified firms have faced challenges, the dedicated firms have surged ahead in the mutual fund rankings. To understand why, we will focus on the three firms in the top three spots in Table 1

for 2000 and 2010—Fidelity, Vanguard, and Capital Group. The Big Three, as we will call them, have collectively increased their market share over the last two decades from 19 percent to 33 percent entirely through internal growth rather than external acquisitions.

What are the features of their model? First, they are dedicated to asset management, although Fidelity and Vanguard have diversified significantly outside this business. Fidelity has a record-keeping business for retirement plans, a discount broker for retail investors, and an insurance company to support its variable annuity products. Even so, Fidelity's largest source of revenues is still its asset management business, and its diversified operations provide distribution channels for its funds as well as funds of other managers. Like Fidelity, Vanguard derives most of its net income from fund management, although it runs a record-keeping retirement business, a small discount broker, and an annuity insurance company. Capital Group has remained focused on asset management.

Second, the Big Three each have a nonhierarchical organizational structure, with few layers separating investment staff from the CEO. Capital Group physically demonstrates its flat management structure by making all its offices the same size and by requiring that all executives—including the chairman and president—actively manage money. At all three firms, senior executives make important decisions about their mutual funds only after consulting with key investment personnel.

Third, Fidelity, Vanguard, and Capital Group can develop compensation programs that meet the needs of the investment business by providing adequate incentives for top-performing investment staff, regardless of their level in the organization. For example, they can design a bonus plan that makes it possible for an analyst who picks strong-performing stocks to make as much money as a portfolio manager.

Finally, all three firms are privately held, which means they are not subject to the short-term pressures from public shareholders to increase quarterly earnings. They each have a different legal structure. Fidelity's stock is effectively controlled by members of its founding family, whereas Vanguard has a unique legal form: The management firm is owned by the shareholders of the Vanguard mutual funds. Capital Group is a private partnership similar to other professional services firms.

Unfortunately, although the private partnership model does insulate asset managers from the pressures of the public market, it does have inherent weaknesses. Most significantly, without a publicly traded stock, there is no easy way to value the shares of the management firm, which are issued to the investment professionals as compensation and redeemed when they retire. Fidelity and Capital Group use complex formulas to price their shares, whereas Vanguard's board of directors uses fund and operating performance as a basis for valuing the "partnership plan units" distributed as part of annual bonuses.

Without an independently determined share price, transferring ownership from one generation of owners to the next, as part of a management succession, is a challenge. In essence, the firm must buy back the shares from the retiring generation and sell them to the incoming generation, often providing financing to the incoming generation to facilitate the transaction. Furthermore, none of these firms have a share currency that could be used to acquire smaller managers, which in part explains why these three firms have grown organically with minimal acquisitions.

Public–Private Model

Because of the limitations of the partnership model, only a handful of the dedicated asset managers at the top of the industry rankings in 2010 have followed the lead of the Big Three and remained in private hands. They are Dodge & Cox and Dimensional Fund Advisors—both privately held—and TIAA-CREF, which is a nonprofit cooperative like Vanguard. The other eight dedicated managers in the top 25 all have publicly traded stock.

To maintain their long-term position as dedicated asset managers, four of the eight have developed share ownership structures that keep control of the firm in the hands of a small group of stockholders who are closely tied to the firm. Federated has a dual share class structure, with founders and management owning all the voting shares. A substantial portion of T. Rowe Price's stock is held by current and former employees. More than one-third of the stock of the Franklin Templeton Investments fund group's sponsor is held by its founding family and company executives. As a result of BlackRock's M&A activity, three firms—PNC Financial Services Group, Bank of America (through its subsidiary Merrill Lynch), and Barclays Bank—held substantial minority positions in its stock. (BlackRock repurchased Bank of America's holdings in June 2011.) Although the firms were given seats on BlackRock's board, they are not allowed to increase their share ownership without management's approval.

This structure has distinct advantages over nonpublic partnerships. Publicly traded shares supply an independent market valuation of the firm and eliminate the need for formula-driven

©2011 CFA Institute

estimates. They offer liquidity for top executives and portfolio managers, who can cash out shares more easily. In addition, public shares provide a valuable currency for acquisitions.

The hybrid model has enabled both Franklin Templeton and BlackRock to grow through acquisitions. In 1992, Franklin expanded out of its niche in bond funds by combining with the Templeton family of international funds. More recently, Franklin Templeton has made several successful acquisitions of complementary organizations focused on high-net-worth customers, such as Fiduciary Trust. BlackRock, which also had its roots in the bond business, has used its publicly traded shares to enter the equity business—for example, its purchases of State Street Research in 2005 and Barclays' exchange-traded funds in 2009.

This model, however, has disadvantages as well. Unlike purely private firms, hybrid firms are subject to public reporting requirements, which create quarterly earnings pressure that can interfere with a long-term perspective. Also, public ownership requires disclosure of compensation for the top five executives (although not for most investment personnel). Public firms must comply with the provisions of the Sarbanes–Oxley Act of 2002—including its requirements regarding bonus claw-backs and internal control assessments. Finally, absent a dual share class structure, hybrid firms do not have complete control of their business, unlike their purely private counterparts.

Although these disadvantages are real, they are manageable, as shown by the experiences of BlackRock, Franklin Templeton, and T. Rowe Price. The costs of being public are significantly reduced for hybrid firms because they are effectively controlled by top management. This situation makes the costs much smaller than the benefits of having publicly traded shares available for executive compensation and large acquisitions.

Conclusion

Little support is left for the theory of the financial supermarket that drove diversified firms into the asset management industry from 1993 to 2001. The underlying notion of revenue synergies was undercut by the enthusiasm of high-net-worth investors for open architecture and the intense regulatory scrutiny of potential conflicts of interest. The death knell for revenue synergies was sounded by the transparency and easy accessibility of the internet, which makes comparison shopping easy and convenient for investors. We believe that the future growth of U.S. financial supermarkets will be concentrated in firms specializing in distribution rather than asset management—firms like Charles Schwab, Merrill Lynch, and Citigroup, which offer their clients true open architecture on most financial products outside of money market funds.

Conversely, we predict that most fund sponsors will be dedicated to that specific line of business, not fund distribution. Fidelity and Vanguard may experience the highest growth in their service operations—namely, their retail brokerage and retirement services businesses. But we expect that their asset management arms will continue to be their best source of revenue and be perceived as the heart of both firms.

In our view, Fidelity, Vanguard, and Capital Group are going to continue to be run as private partnerships, given their internal cultures and ownership structures. Private partnerships dedicated to asset management have generally been most successful in structuring compensation programs and creating work environments attractive to investment professionals. Nevertheless, these firms have serious inherent weaknesses: the difficulty in valuing their equity interests and in transferring them from one generation to another and the absence of shares as a noncash currency for making acquisitions of other asset managers.

Although the Big Three became fund giants through organic growth as private partnerships, this approach is no longer viable for most medium-size managers hoping to break into the top ranks of the fund industry. Given the fierce competition in the industry and the performance challenges of huge funds, medium-size managers will be best able to achieve high rates of asset accumulation by a combination of organic growth and a few substantial acquisitions of new business lines. Such a combination is easiest to accomplish in an organization that has publicly traded shares but is controlled by its investment professionals. Although the public–private structure involves additional costs, we believe its potential benefits are far greater.

Over the last two decades, the public–private model has been the engine of growth for dedicated asset managers, such as BlackRock and Franklin Templeton. Over the next decade, we believe that this model will provide the most effective way for a dedicated manager to expand its assets through a combination of organic growth and acquisitions of other fund managers.

This article qualifies for 0.5 CE credit.

Notes

1. For more information on the transactions, see Pozen (2002, pp. 456–470) and Pozen and Hamacher (2011, pp. 408–414). Listings of selected transactions through 2009 are available in Pozen (2002, pp. 472–473) and at www.wiley.com/go/fundindustry under "Additional Material."
2. As an aside, the rankings also illustrate how difficult it has been for non-U.S. firms to be successful in the fund business here. Invesco, which started out in the United Kingdom and is now incorporated in Bermuda, has acknowledged the importance of the U.S. market by moving its headquarters to Atlanta. The only other non-U.S.-owned firms in the top 25 also have a North American locus: Both John Hancock and MFS are subsidiaries of Canadian insurers. Again, we exclude PIMCO because of its operational autonomy.

References

Pozen, Robert. 2002. *The Mutual Fund Business.* 2nd ed. Boston: Houghton Mifflin.

Pozen, Robert, and Theresa Hamacher. 2011. *The Fund Industry: How Your Money Is Managed.* Hoboken, NJ: John Wiley & Sons.

©2011 CFA Institute