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# 1

## *Introduction*

ONE OF THE most important characteristics of financial markets and institutions is change. The industry, and the products and services it offers, is constantly evolving in response to financial innovations developed by entrepreneurs within existing and new institutions and the ever-changing needs of users and suppliers of funds.

This book is about some of the recent innovations—especially new financial instruments—and new institutions that are changing the financial sectors in the United States and Japan. It contains the papers presented, and the formal remarks of discussants, at the third annual conference of financial issues of mutual interest to the two countries held at the Brookings Institution on September 12, 2006, and cosponsored by Brookings and the Tokyo Club Foundation for Global Studies.<sup>1</sup>

As in the volume produced for the second annual conference, which focused on the “financial gatekeepers,” the third annual conference highlighted some interesting contrasts and commonalities in finance in the two countries.<sup>2</sup> For one thing, it will be clear from reading the papers on Japanese finance that financial innovation in Japan has taken its cue from the United States and is proceeding more rapidly than many in America (and possibly in other countries) may realize.

1. The Tokyo Club Foundation for Global Studies was established by Nomura Securities Co., Ltd., in 1987 as a nonprofit organization for promoting studies in the management of the global economy.

2. Fuchita and Litan (2006).

For another, in at least one important market—the secondary market for residential mortgages—Japan shows evidence of learning from the United States, specifically what features are best to adopt and those that are best to avoid.

As for the U.S. financial market, this volume focuses on the growth of two relatively new, and in some circles controversial, financial institutions: hedge funds and private equity funds. The two main financial instruments of interest are *structured products*—investment vehicles whose performance depends on the performance of some other underlying instrument (and thus are analogous to derivatives)—and *exchange-traded funds*, or ETFs, increasingly popular means of asset diversification that are alternatives to mutual funds. All of these institutions and products illustrate the seemingly never-ending ingenuity of the financial services industry to come up with new methods for financing or hedging risks—but at the same time each raises novel legal and policy issues, or in some cases, risks. If Japan's history in adapting U.S. institutions and financial instruments continues to repeat itself, then surely at some future conference we will be considering how Japan has adapted and refined the more innovative U.S. institutions and instruments that we feature here.

Meanwhile, we believe the chapters that follow provide an excellent overview and introduction to some of the more innovative developments in finance today—for the benefit of investors, policymakers, and regulators who may not have the time to keep up with the seemingly dizzying pace of change in the financial markets.

This volume begins with two chapters analyzing recent innovations in the Japanese financial market. Chapter 2, by Yuta Seki, addresses the development and increased use of two types of financial securities first introduced in the United States: exchange-traded funds (ETFs) and real estate investment trusts (REITs). Both securities are collective investment vehicles, offered to both retail and institutional investors. Both are also relatively recent in Japan, having been introduced in that market in 2001, although each had a very different history.

In reviewing the history of investment trusts in Japan, Seki notes that collective investment vehicles of all types (beginning with mutual funds) always have accounted for a much lower share of household financial assets in Japan than in the United States (the same is true of stockholdings). Japanese consumers have been more comfortable with lower-risk investments in bank accounts, especially at the country's Postal Savings Banks. Stocks grew in popularity during the boom of the 1980s, but growth halted after the stock market bubble burst in 1989.

In an effort to boost the flagging stock market in the mid-1990s, the Japanese government eased several restrictions aiming to encourage the growth of mutual funds. In 2001 defined contribution pension plans were first introduced in the

country, which also encouraged demand for mutual funds. An additional boost came in 2005, when Postal Savings Banks for the first time began selling investment trusts. By 2006 net assets in such trusts reached a record level of 60 trillion yen. Still, however, the mutual fund market in Japan remains small relative to that of the United States, composing roughly 3 percent of household financial assets compared with 13 percent in the United States.

By 2001 the stock market was still languishing, as were the fortunes of Japan's banks, which still held significant corporate shares on their balance sheets. In an effort to bolster the stock market, and thus indirectly its banks, the Japanese government borrowed an idea from Hong Kong, where the government purchased shares in companies listed on the Hong Kong exchange. Essentially, the Japanese government did something similar, authorizing an organization capitalized by the banks themselves and other parties to buy Japanese stocks, but through a new index vehicle for the Japanese market, the ETF. But unlike the United States, which allowed exchanges and entrepreneurs to innovate with new indexes to serve as benchmarks for ETFs, the Japanese government strictly limited the indexes to which Japan's ETFs could be linked, ostensibly to "maintain balance in price formation and to prevent price manipulation."

Since 2001 ETFs have grown in Japan, but not at the rapid pace seen in the United States, where by 2006 the outstanding volume of such instruments (roughly \$335 billion) outstripped the volume in Japan by a factor of roughly 10 (at \$35 billion). Given the greater popularity of mutual funds—the ETF's main rival—in the United States, this is not surprising. In addition, Seki points out that the first Japanese ETF was based on a relatively new index, the Nikkei 300, which was not well known to Japanese investors.

Further, after an initial increase in their number, some ETFs in Japan have been delisted in recent years, giving Japanese investors less choice than is available to American investors.

Seki is cautious in predicting the future growth of Japanese ETFs but offers several recommendations for increasing their popularity, including expansion in the number of ETF products, efforts to improve understanding and to promote the purchase of ETFs by Japanese investors, and diversification of distribution channels (primarily in defined contribution pension plans, a step he suggests is also needed in the United States).

Seki next turns his attention to another collective investment vehicle pioneered in the United States and later copied in Japan: the real estate investment trust (REIT). REITs are securities backed by estate holdings and pass through their returns (minus fees of their managers) to investors. They were first introduced in the United States in 1960 and became especially popular for investors with high

fixed returns (with some prospects for capital gains) after the Tax Reform Act of 1986, which among other things also allowed REITs to manage as well as own real estate. Initially REITs were issued as initial public offerings (IPOs), but by the mid-1990s many established REITs were raising funds through secondary offerings. Over time, the investor base for U.S.-issued REITs expanded, especially as pension funds and foreign investors grew interested in the securities as a way to invest in U.S. real estate in an efficient, diversified manner.

REITs were introduced into Japan in 2001, through a vehicle popularly known as the *J-REIT*. That they were not introduced earlier was due to the absence of securitized loan and other investment products in Japan. This began to change in 1998, when the Japanese Parliament enacted legislation authorizing the issuance of corporate bonds and preferred stock backed by leasing credit receivables and revenue from commercial real estate. The legalization of the J-REIT came several years later.

The J-REIT is legally defined in Japan as an investment trust, in contrast to the corporate structure (with pass-through tax features) common in the United States. Seki describes other features of the J-REIT, concluding that it is more complicated from a legal point of view than its U.S. counterpart.

J-REITs have become relatively popular investment vehicles in Japan for several reasons according to Seki. First, they have offered higher yields than have been available on low-interest Japanese government bonds. Second, the low interest rate environment has enabled J-REITs to finance their real estate acquisitions at low cost. Third, Seki argues that the strong disclosure in the prospectuses of the J-REITs, including announcement of the expected amounts of dividends, encourages investors to buy them.

Banks and investment trusts (investment vehicles that purchase shares in as many as 10 to 15 individual REITs) have become the dominant purchasers of J-REITs, although retail investors also have been important purchasers. In the process, J-REITs have lowered the cost of capital (or capitalization rate) for real estate properties, while making the Japanese real estate market more liquid and transparent. Still, as with equity collective investment vehicles, the total REIT market in Japan is about one-tenth as large as that in the United States.

Looking ahead, Seki suggests that in the future it is likely that Japanese policymakers will have to wrestle with how to deal with conflicts and possibly other problems posed by having outside managers oversee the real estate held by J-REITs. In particular, there has been some concern about J-REITs investing in buildings that are not built according to seismic codes (and thus are technically illegal). Meanwhile, the existence and growth of both ETFs and REITs in Japan should continue

to offer global investors a way of investing in Japan through diversified financial vehicles.

Yasuyuki Fuchita in chapter 3 discusses how Japan has successfully adapted, and arguably improved upon, yet another American financial innovation: the securitization of mortgages. The importance of this financial innovation cannot be overstated. The notion has been that individual mortgages can be pooled together in a trust and securities sold to the broader public representing proportionate interests in the trust. Agencies directly or loosely affiliated with the U.S. government—Fannie Mae, Freddie Mac, and Ginnie Mae, in particular—have guaranteed the interest and principal of these securities, giving comfort to a wide class of retail and institutional investors. Today, about 70 percent of all U.S. mortgages are guaranteed in this way. This securitization process has enabled global capital markets, and not just the U.S. financial institutions originating the mortgages, to finance the construction and sale of residential real estate.

Fuchita documents how Japan is in the process of catching up to the United States in the securitization of its residential mortgages. Still, however, the Japanese market in such securities—residential mortgage-backed securities (RMBS)—is small by comparison with that of the United States. But this is rapidly changing, and Fuchita documents how.

In particular, historically Japan encouraged residential ownership largely through government-provided subsidies on mortgage loans. At times, such subsidized loans, extended by the Government Housing Loan Corporation (GHLC), have accounted for over half of new mortgages. In recent years, however, the GHLC has essentially ended its subsidy program, substituting instead a system of securitizing loans originated by private lenders. For example, from roughly 0.5 trillion yen in 2001, the Japanese RMBS market increased to 5.0 trillion yen in 2005. Fuchita describes the institutional arrangements under which GHLC operated during this period, as well as the nature of the subsidies it provided in previous years.

But reform has not stopped there. Writing in late 2006, Fuchita reports that as of April 2007, the GHLC will be dissolved and will be replaced by a new independent housing agency, the Japan Housing Finance Services Agency (JHFSA). The primary task of the new JHFSA will be to provide support for the securitization of residential loans originated by private lenders. The JHFSA will be modeled on the operations of Fannie Mae in the United States—but with one notable exception. Unlike Fannie Mae, which both securitizes loans and also purchases loans and holds them in portfolio, the JHFSA will concentrate only on securitization and will not hold mortgages. Thus the JHFSA should not be subject to the

“interest-rate” risk—the risk to shareholder capital arising from the difference in maturity of assets and liabilities—that has been a lightning rod for criticism of Fannie Mae. Much of Fuchita’s chapter is devoted to explaining how the new JHFSA will operate and the nature of the guarantees it will provide.

Over time, the JHFSA and the new securitization process should change mortgage finance in much the same way securitization changed housing finance in the United States. Currently, about 25 percent of Japan’s residential mortgages are securitized, far short of the nearly 70 percent in the United States. One can reasonably expect this differential to narrow. At the same time, given the rapid aging of the Japanese population, the demand for new housing will not grow as fast as in earlier periods. This will reduce the relative importance of housing in the Japanese economy over time.

Fuchita concludes his analysis by pondering several possible futures for the JHFSA in this environment: It may stay as a government agency, or eventually it may be privatized in some form (as has been the case in the United States with Fannie Mae and Freddie Mac). One potentially heretical possibility if the agency is privatized is that it will merge with another large, private Japanese financial institution.

In sum, Japanese financial markets continue to evolve, as have those in the United States. Japan’s private institutions and its policymakers learn from developments in the United States and adapt them to their market. It is hoped that the learning process will entail fewer difficulties that seem inevitably to come with financial market leadership.

The next two chapters focus on the U.S. financial market and two financial institutions offering new opportunities for investment. One of the major financial institutions, though it has been around since the late 1940s, is the hedge fund, a limited partnership vehicle that typically holds shorter-term positions in the debt and equities of public companies. Some hedge funds invest in other financial instruments as well. We nonetheless treat the hedge fund as “new” primarily because of the rapid growth in this particular form of investment vehicle. In chapter 4, Frank Partnoy and Randall Thomas examine the rise of hedge fund “activism,” which they view as a logical extension of activism by institutional investors in general.

Economists typically distinguish between two ways that shareholders can be active, that is, ways to influence corporate behavior, especially of underperforming companies: “exit” (selling shares) or “voice” (voting their shares in favor of certain directors or corporate governance rules, or more directly by negotiating with managers about ways to improve company performance). Historically, institutional investors have preferred the strategy of exit to voice; it is much easier, after all, simply to sell the stock of a company not doing well than to take the time and

energy to persuade its management to change course. The authors note, however, that this began to change in the 1990s, as some institutional investors—public pension funds and labor unions, in particular—decided to exercise their relatively large voting positions to make their views known to corporate managers. In principle, this should be a welcome development, since precisely because of their relatively large share holdings, institutional investors have a stronger financial incentive than smaller investors to monitor the activities of the corporation and thus to reduce the “agency costs” arising out of the separation of ownership from control of public companies.

The authors point to some recent public policy developments that reflect this view. The Securities and Exchange Commission in 1992 made two major changes in proxy voting rules that facilitated activism by institutional investors. The following decade, in 2003, the SEC required mutual funds, the largest class of institutional investors, to disclose how they were voting the proxies of firms in which they owned shares. The objective of this rule change was to expose any potential conflicts of interests at funds that had close ties with company managements (for example, by managing the employee pension funds at those firms).

These rule changes have helped to offset the effect of other rules that have the effect of discouraging activism on the part of institutional investors. In particular, section 13(d) of the Securities Exchange Act requires any “group” holding more than 5 percent of any class of equity of public companies to disclose their ownership, a rule that has the effect of discouraging institutional investors from acquiring enough stock to trigger this disclosure requirement. In addition, insider trading rules can apply to institutional investors and thus can discourage them from acquiring large blocks of stock as well.

Despite these barriers, the authors report that some institutional investors have found various ways to exercise their voice: by announcing to the public how they have voted their shares, explicitly identifying underperforming companies, and in extreme cases, filing class action lawsuits against management misconduct (the authors discuss the pros and cons of such litigation in some detail). In addition, institutional shareholders have made use of the SEC’s Rule 14a-8, the SEC’s shareholder proposal rule, which allows shareholders, under certain conditions, to force corporations to include shareholder-initiative proposals in proxy materials. The authors note that, not surprisingly, such proposals have tended to be concentrated at poorly performing companies. Although shareholder proposals have met with mixed success, in recent years proposals dealing with executive compensation have attracted increasing levels of shareholder support. In some cases, institutional investors have used their bargaining power to negotiate agreements with company managers for changes in corporate policies.

In principle, the most direct way shareholders can influence corporations is through their votes on corporate directors, but state corporate laws generally give shareholders little or no ability to nominate directors for election. In 2003 the SEC proposed a rule that would have allowed large shareholders to nominate a limited number of directors, but this proposal generated such strong opposition—especially from corporate managers—that the commission withdrew it. The authors note that institutions nonetheless have found other ways to make their views about directors heard, notably by organizing “vote no” campaigns against particular directors. Such a campaign eventually forced the Disney board to remove Michael Eisner from the chairman’s position. In addition, Disney agreed to another tactic employed by some institutional investors: persuading shareholders to adopt a change in the company bylaws to require that directors receive not only just a plurality of votes cast at the annual meeting but a majority of the votes cast. Still, despite the adoption of such bylaw changes at some corporations, at no public companies had shareholders actually withheld more than 50 percent of their votes from a nominated director, at least as of the time the authors wrote their chapter. And even if this occurred, the authors observe that most boards could still appoint any director not elected by the requisite shareholder percentage, even the same person that shareholders may have rejected.

Unlike other institutional investors, hedge funds typically do not buy and hold shares for long periods but instead engage in various types of short-term trading. Partnoy and Thomas distinguish between three broad trading strategies and offer their assessment of the social utility of each. Funds with informational advantages (or “information asymmetries,” as the authors call them) can use their trading of shares to indirectly affect firm performance through their impacts on share prices. The authors note that this kind of trading often occurs when a hedge fund has uncovered negative information about particular companies. The sale of stock of such companies can provide a useful signal to the market, and the threat of this occurring can spur corporate managers to keep their companies from underperforming. The authors take a more cautious view, however, of the social utility of hedge fund trading aimed at inducing firms to change their capital structures, highlighting the dangers of market manipulation. They are even more skeptical of the value of merger arbitrage by hedge funds, when the funds bet that a particular merger will or will not go through. Because the interests of the funds may not be aligned with those of the firms or other shareholders, such activity can lead to mergers that reduce shareholder value.

Each of these strategies involves trading, and until recently these strategies were the only methods by which hedge funds influenced the behavior of firms whose



shares they bought or sold. But some funds have begun to exercise voice in much the same way that some institutional investors have done during the past decade. However, because they are unregulated and operated by managers with strong incentives to realize returns for investors, the authors claim that hedge funds may be even better positioned to monitor corporate behavior than other institutional investors.

Is there any evidence that hedge funds are doing this? In an effort to answer this question, the authors report the results of their examination of a sample of Form 13D filings, which are required under the securities laws when any investor, including a hedge fund, acquires 5 percent or more of a company's shares. Although imperfect, the authors assert that the number of filings by hedge funds is a useful measure of corporate governance–related hedge fund activism. In their sample of filings during a randomly chosen two week period in 2005, the authors found that hedge funds indeed were the leading category among investors reporting a 13D filing, an outcome they argue is consistent with an increase in corporate governance–related hedge fund activism. In general, the authors applaud this development, although they warn of possible manipulations of corporate voting by hedge funds.

Hedge funds have their critics. As the collapse of Long-Term Capital Management (LTCM) in 1998 demonstrated, hedge funds that are permitted to engage in excessive leverage can put the entire financial system at risk. Although banks and other lenders appear to have been far more careful in their lending to hedge funds since LTCM, the authors note that concerted selling or buying by the funds of particular assets also can lead to systemic risk. The authors outline various ways hedge fund trading can destroy rather than enhance shareholder value. More recently, some hedge funds have resorted to litigation to press target companies to change their behavior, which the authors note raises some novel legal issues.

On balance, Partnoy and Thomas conclude that hedge funds are playing a constructive role by helping to align the interests of corporate managers and shareholders. At the same time, they express concern that hedge funds can act in ways that are inconsistent with this objective.

In chapter 5, Thomas Boulton, Kenneth Lehn, and Steven Segal focus on the rise of private equity funds in the United States, the other major financial institution discussed in this volume. Like the typical venture capital fund, private funds are typically organized as limited partnerships by a general partner with expertise in identifying underperforming companies with the objective, in most cases, of “taking them private”—that is, off the public exchanges. The purposes for going private are varied—to avoid the regulatory requirements and public scrutiny that are necessary parts of being a public company and to dispense with the need to satisfy Wall Street with meeting the quarterly earnings targets set by stock market analysts. But

in the end, the main objective is to provide a much healthier return on investors' funds than is available in the public securities markets.

The authors present the results of their examination of a sample of 245 public companies that went private between 1995 and 2005. They offer several findings.

They confirm what anecdotal evidence would suggest, namely that the number and market value of companies going private has increased over time. Between 1995 and 1999, for example, roughly 20 public companies per year went private, with an inflation-adjusted market capitalization averaging \$231 million. During the 2000–05 period, these numbers increased to 24 firms per year, with an average market value of \$431 million.

Manufacturing accounted for approximately one-third of the going private transactions during the entire sample period, followed by firms in the services, retail, financial, and technology industries. Although technology came in last, the 1995–2005 period differed from earlier periods when virtually no technology firms went private.

As one would expect, the stock prices of the firms involved in these transactions typically increased when the going-private decisions were announced. During a three-day window following the announcement, the additional increase (over what would have been expected on the basis of general market movements alone), or the residual return, averaged 21 percent. A related finding is that the average residual return for management-led buyouts exceeded that for other going private transactions by almost 7 percentage points, which is inconsistent with the view (or the criticism) that management-led buyouts somehow involve or create an inherent conflict of interest that deprives shareholders of value. The very opposite is the case.

Firms taken private during the sample period performed substantially worse (measured by stock price returns or return on equity) than their industry peers, which supports the view that the prime motivation for taking firms private was to reverse prior poor returns. At the same time, firms taken private had significantly more cash, as a percentage of their assets, than their industry peers, which made them an attractive source of liquidity for those who took them private.

Finally, the authors shed light on the controversy over the costs of complying with the Sarbanes-Oxley Act of 2002, enacted to prevent the kinds of corporate financial reporting scandals that surfaced in the years before the act from happening again. Supporters of that legislation claimed it was necessary to restore confidence in the corporate sector and in the capital markets. Critics have attacked the act, and specifically the provisions in section 404 that require auditors to attest to the adequacy of a firm's internal controls, for imposing excessive costs on public firms. The data in the authors' sample lend some cre-

dence to the specific criticisms of those who have argued that the compliance costs of Sarbanes-Oxley have been especially burdensome on smaller public companies. For the entire sample of firms that went private, the compliance costs were estimated to be 1.3 percent and 2.6 percent of the firms' market capitalization in 2004 and 2005, respectively. However, for firms with market capitalization less than \$100 million, these costs were estimated at 3.6 percent and 7.2 percent in the two years, respectively. The authors conclude that their compliance cost estimates are consistent with the popular view that firms are going private to avoid the costs of complying with Sarbanes-Oxley.

The next two chapters deal with new financial instruments rather than institutions or investment vehicles. Structured products are examples of such new instruments, and they are the subject of chapter 6, written by Jennifer Bethel and Allen Ferrell.

The authors begin by noting that *financial derivatives*—financial instruments whose value depends on the value of some other underlying financial instrument, such as an option or a futures contract—have been in use for some time, both by those seeking to hedge certain risks and also by speculators. A *structured product* is a new form of financial derivative that has no precise definition; the authors imply that it is simply a more complex, and often more customized, form of a derivative. Examples of these types of products include such exotic-sounding names as equity-linked or commodity-linked debt, collateralized debt obligations, reverse convertibles, and credit-default swaps, among other instruments (new examples of which are continuously developed). The market in structured products is rapidly growing, with nearly \$50 billion placed in 2005 and a further 20 to 25 percent growth expected for 2006.

Structured products are sold to institutions or high net worth individual investors (or accredited investors, defined by the securities laws as individuals with at least \$1 million in net worth, including the equity in their homes, and with at least \$200,000 in annual income). The authors' main purpose in the chapter is to examine whether the disclosures relating to these new products provide sufficient protection, especially to these high net worth retail investors. The question is a relevant one because even for these investors the growing complexity of these products, and the structure of their payoffs or returns, can be difficult to understand, even given their income, wealth, and supposed financial sophistication. Furthermore, even privately placed structured products can be sold to the public, typically after a two-year holding period, with very little in the way of disclosure.

The authors review the various disclosure rules that do exist and find one of them wanting. In particular, while the sponsors of the asset pools that make up these investments must disclose the credit scores of the obligors whose loans are

in the pools, credit scores say nothing about the risk of investing in the pooled product itself. In particular, they note, the product can be very risky (because of the way its payoffs are structured), but the assets that make up the product may have very little or no default risk.

The authors refer to two important changes that affect the registration and sale of structured products. One change is the deregulation of content of permissible communications during the offering of a structured product, although what is known as a free writing prospectus can be sent to potential investors. The authors are implicitly critical of the fact that while this material may not be misleading, there is no requirement that it provide a balanced view of the risks and benefits of the product. The other change, reflected in regulations governing the offering of structured products, is that issuers of these products are unlikely to face liability if the materials promoting the product were prepared and disseminated by third parties.

The authors observe that, while U.S. retail investors do not appear to have suffered significant losses due to disclosure failures relating to structured products, problems have surfaced in Europe. The Financial Services Authority (FSA) in the United Kingdom, for example, has penalized several companies for selling inappropriate structured products to retail investors. The authors worry that as baby boomers in the United States grow older and search for yield they too could find themselves investing in securities whose risks they do not fully comprehend.

The authors conclude by outlining several approaches for addressing this potential problem. One idea is to modify the definition of *financially sophisticated*, which would have the effect of broadening the required disclosures or perhaps even rendering some of these products unsuitable for certain investors who, by reason of their income or wealth, would qualify for them now. A second idea would be to raise the required minimum purchase amount of these products, which effectively would put more of them out of reach for some current retail investors. Third, the SEC or an industry group could maintain a web-based repository of offering memoranda for structured products; more information should lead to better investor understanding.

Each of the foregoing ideas turns on who can qualify or should be able to buy structured products. An alternative approach, being considered by the FSA as of late 2006, would tie the level of investor protection to the type of product, rather than to base it on characteristics of the investor. For example, structured products with shorter maturities (and thus presumably less risk) would be more suitable for a broader investor audience than would products with longer maturities. Whatever is done, the authors caution that too much regulation could drive structured products into the private, unregulated markets, where there is essentially no disclosure.

Chapter 7 deals with the rise of a particular new financial instrument: the exchange-traded fund, or ETF. The authors, Todd Broms and Gary Gastineau, are two individuals who have played an instrumental role in developing this product.

The authors focus their attention on the open-ended ETF, which is analogous to open-ended mutual funds, or investment vehicles that can continuously accept new investors. As distinct from a mutual fund, an ETF is a security that is itself traded. Buyers can “liquefy” their investment not by asking the issuer for a return of their money, at the latest net asset value of the fund (as is the case for mutual funds), but instead by selling the security representing the average value of the financial instruments in which the funds collected by the ETF are invested.

The ETF was first invented in Canada, in 1989, and four years later was introduced in the United States by the American Stock Exchange. Broms and Gastineau devote most of their chapter to discussing what they believe are two major advantages of ETFs relative to mutual funds: the additional shareholder protection they provide and their tax efficiency.

The essence of the shareholder protection advantage arises from the fact that ETFs do not offer what is essentially free liquidity, which is available to investors entering and leaving mutual funds. In the case of mutual funds, anyone purchasing mutual fund shares obtains a share of the securities position already held by the fund, at its latest net asset value. The new investor typically pays no transactions costs, and when he or she leaves the fund, the amount received is calculated on the basis of the net asset value of the fund at the time. To the entering and leaving shareholder, liquidity is essentially free. But the fund itself must absorb the transactions costs associated with these activities, which acts as a drag on the fund’s performance over time.

In contrast, creations and redemptions of ETF shares are typically *made in kind*: baskets of portfolio securities are deposited with the fund in exchange for fund shares when the shares are created; likewise, on redemption, shares are turned into the fund in exchange for a basket of securities. As a result, the creating or redeeming shareholder is responsible for the costs of his or her own activity. The other shareholders do not bear this cost; as a result, the performance of the fund itself is not subject to a downward drag. This is the source of the shareholder protection offered by ETFs, the authors claim.

The tax efficiency of ETFs arises from the fact that investors in an ETF realize capital gains or losses only from the sale of the ETF; they are not responsible for gains and losses on a flow-through basis, reflecting investment decisions of the fund manager. The authors assert that the ETF removes any conflict that may exist between taxable and tax-exempt investors, which is unlike the situation that may exist for mutual funds.

So far, investments made by ETFs are all based on indexes and thus are not actively managed, as is the case with many mutual funds. The authors conclude by suggesting that in the future managed ETFs also may be offered, which would offer the two advantages of the ETF structure generally to investors interested in having an alternative to currently managed mutual funds.

## Reference

Fuchita, Yasuyuki, and Robert E. Litan, eds. 2006. *Financial Gatekeepers: Can They Protect Investors?* (Brookings).