United States General Accounting Office

GAO

Report to the Subcommittee on Oversight, Committee on Ways and Means, House of Representatives

July 2004

MUTUAL FUNDS

SEC Should Modify Proposed Regulations to Address Some Pension Plan Concerns

GAO-04-799

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Highlights

Highlights of GAO-04-799, a report to the Subcommittee on Oversight, Committee on Ways and Means, House of Representatives

MUTUAL FUNDS

SEC Should Modify Proposed Regulations to Address Some Pension Plan Concerns

Why GAO Did This Study

Mutual fund investments represent more than 20 percent of Americans' pension plan assets. Since late 2003, two abusive trading practices in mutual funds have come to light. Late trading allowed some investors to illegally place orders for funds after the close of trading. Market timing allowed some investors to take advantage of temporary disparities between the value of a fund and the value of its underlying assets despite stated policies against such trading. The Securities and Exchange Commission (SEC) has proposed regulations intended to stop late trading and reduce market timing. We were asked to (1) report on what is known about how these practices have affected the value of retirement savings of pension plan participants, (2) describe the actions taken by SEC and the Department of Labor (DOL) to address these practices, and (3) explain how plan participants may be affected by SEC's proposed regulations.

What GAO Recommends

GAO recommends that the SEC Commissioners adopt modifications or alternatives to the proposed regulations that would prevent pension plan participants from being more adversely affected than other investors.

In its response to GAO's draft report, SEC agreed with GAO's analysis and noted that it is considering modifications to the proposed regulations.

www.gao.gov/cgi-bin/getrpt?GAO-04-799.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Barbara Bovbjerg at (202) 512-7215 or bovbjerg@gao.gov.

What GAO Found

The cost of late trading and market timing to long-term investors in mutual funds is unclear; however, it does not appear that these abuses affected pension plan participants more than other investors. While individual instances of abusive trading may not have had a noticeable effect on the value of funds held by long-term investors, the cumulative effect of such trading may be significant. Among 34 brokerage firms surveyed by the SEC, more than 25 percent reported instances of illegal late trading at their firms. However, numerous fund intermediaries that are not regulated by the SEC may also have permitted late trading. Trading abuses can be difficult to identify because, among other reasons, fund brokers aggregate the transactions of their clients and often do not share details of individual transactions with mutual fund companies. Ultimately, the effect of trading abuses on the savings of plan participants and other long-term fund shareholders is a function of which funds they invested in and for how long.

SEC and DOL have taken steps to address abusive trading in mutual funds, and SEC has proposed regulations that aim to stop late trading and curb market timing. SEC and DOL are investigating these trading abuses, and SEC has already reached several settlements. DOL has issued guidance to pension plan sponsors and other plan fiduciaries on how they can fulfill their legal requirements to act "prudently" and in the best interests of plan participants who invest in mutual funds. To stop late trading, SEC has proposed that all fund transactions be received by mutual funds or designated processors before 4:00 p.m. eastern time in order for investors to receive the same day's price. To curb short-term trading, including market timing, SEC has proposed regulations that would impose a 2-percent fee on the proceeds of fund shares redeemed within 5 business days of purchase. DOL is not involved in the process of drafting these regulations because it does not regulate mutual funds, but it is considering how the proposals would affect pension plans.

To the extent that SEC's proposed regulations stop late trading and market timing, they would benefit long-term mutual fund investors; however, the new rules could also affect such investors adversely, and pension plan participants more than others. The new regulations are expected to increase costs (e.g., for technology upgrades) that would be passed on to long-term mutual fund investors. In addition, plan participants could be distinctly affected by the late trading proposal because it creates potential complications in processing certain transactions unique to pension plans (e.g., loans). Further, the market timing proposal may result in plan participants paying fees intended to deter market timing, even when there is clearly no intent to engage in abusive trading. SEC officials told us that they are considering changes and alternatives to the proposed regulations that would address these concerns.

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Abbreviations

DOL	Department of Labor
ERISA	Employee Retirement Income Security Act of 1974
NSCC	National Securities Clearing Corporation
OCC	Office of the Comptroller of the Currency
SEC	Securities and Exchange Commission

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Accountability * Integrity * Reliability

United States General Accounting Office
Washington, DC 20548

July 9, 2004

The Honorable Amo Houghton,
Chairman
The Honorable Earl Pomeroy
Ranking Minority Member
Subcommittee on Oversight
Committee on Ways and Means
House of Representatives

Mutual funds represent a significant portion of Americans' retirement wealth, with 21 percent of the more than $10 trillion in pension plan assets now invested in mutual funds. These funds are particularly popular in defined contribution plans,[1] because they allow investors to pool their savings with those of other investors so that they may benefit from professional investment management and diversification, among other things. Most defined contribution plan assets in mutual funds are allocated to funds that invest in America's equity markets and thus serve as an important source of capital for investment in the economy. Furthermore, while broad stock market indexes fell 22 percent in 2002, continuing contributions into defined contribution plans sustained some of the demand for stocks and may have helped prevent even greater declines in their value.

In September 2003, the New York State Attorney General alleged that some mutual fund companies had allowed some investors to engage in abusive trading practices that hurt the savings of long-term investors, including pension plan participants. Several investors and mutual fund companies have since settled their cases with both federal and state authorities. One type of abusive trading, known as "late trading," allows certain investors to submit orders illegally for fund transactions after the close of the financial markets in New York (when mutual funds usually calculate their share prices) and still receive the same day's price per fund

[1]Defined contribution plans are one type of employer-sponsored pension plan. Employee benefits are based on employer and/or employee contributions and investment returns (gains and losses) on individual accounts. Employees bear the investment risk and often control, at least in part, how their individual account assets are invested. According to the most recent Department of Labor information, most private-sector pension-covered workers in the United States are covered only by defined contribution plans.

share.[2] Late traders were able to purchase or redeem (sell back to the fund) shares in reaction to news, such as corporate earnings announcements, that were released after the markets closed. Such news would often affect the next day's closing prices of fund shares, and thus late traders were able to profit by quickly trading in and out of funds and acting on information before other investors. The second type of abusive trading, known as "market timing," is not illegal but may be used by investors to take advantage of temporary disparities between the value of a fund and the values of the underlying assets in the fund's portfolio. These pricing disparities can occur frequently in certain funds such as those that invest in international markets where securities stop trading hours before American mutual funds typically calculate their net asset values.

Both late trading and market timing impose costs on long-term shareholders. For example, when short-term traders purchase and redeem mutual fund shares, all investors share in the costs of fund managers buying or selling shares of securities held in the fund's portfolio. Many mutual fund companies state in their fund prospectuses that they discourage market timing and may assess fees that are transferred to the fund if shares are sold within a certain period of time following a purchase of fund shares. However, some fund companies allowed certain investors to engage in market timing despite such language in their fund prospectuses.

The Securities and Exchange Commission (SEC), which regulates the nation's securities markets and mutual funds, has recently proposed regulations that are intended to stop late trading and reduce market timing. The Department of Labor (DOL) is not involved in the process of drafting the proposed late trading and market timing regulations because it does not regulate mutual funds. However, it is considering how the regulations would affect defined contribution plans, which frequently invest in mutual funds. The proposed regulations aimed at eradicating late trading would significantly change current industry practices in receiving and processing transaction requests from investors. Since many of the cases of late trading involved orders submitted through intermediaries not regulated by SEC, the proposed amendments would require that all fund

[2] This report assumes, for convenience, that all funds price their securities daily at 4:00 p.m. eastern time. Some funds, however, price their securities more than once per day, and many funds price their securities earlier than 4 p.m. eastern time.

transactions be received by mutual funds or designated processors (also regulated by SEC) before the market closing time of 4:00 p.m. eastern time to receive the same day's price.[3] The proposed regulations intended to curb short-term trading, including market timing, would require mutual funds to impose a 2-percent fee—known as a redemption fee—on the proceeds of shares redeemed within 5 business days of purchase. Given the potential changes that would occur as a result of these new regulations and the importance of mutual funds to the retirement savings plans of millions of American workers, you asked us to

- report on what is known about how market timing and late trading have affected the value of retirement savings of defined contribution plan participants,
- describe what actions SEC and DOL have taken to address late trading and market timing, and
- explain how defined contribution plan participants are likely to be affected by SEC's proposed regulations.

To determine how late trading and market timing have affected retirement savings in defined contribution plans, we reviewed academic studies about the effects of these practices on the values of mutual funds. We then compared this information with data from mutual fund companies and record keepers on how defined contribution plan participants allocate their retirement savings among mutual funds to assess their exposure to abusive trading practices. We also interviewed representatives of mutual fund companies, plan record keepers, and SEC officials to determine if they had any information about how late trading and market timing have affected the values of specific mutual funds. To learn about the regulatory actions taken by SEC and DOL, we interviewed agency officials and reviewed SEC's proposed regulations and DOL's guidance to plan sponsors on how to respond to late trading and market timing. To determine how defined contribution plan participants and service providers might be affected by SEC's proposed regulations, we reviewed comment letters to SEC and interviewed SEC officials, representatives of mutual fund companies, plan record keepers, and employers. While mutual funds are common investment choices in many types of retirement

[3]Types of intermediaries include broker-dealers, banks, insurance companies, and pension plan administrators, all of which may provide record-keeping services for pension plans. We refer to those that do as plan record keepers.

savings plans, our analysis focuses on defined contribution plans because individual employees decide how to invest their retirement savings and thus they bear the risks of changes in the value of their accounts. We conducted our work between March 2004 and June 2004 in accordance with generally accepted government auditing standards. Appendix I describes the scope and methodology of our work in greater detail.

Results in Brief

The cost to long-term investors in mutual funds of late trading and market timing is unclear, however it does not appear that these trading abuses affected pension plan participants more than other investors. While costs of individual instances of abusive trading may not have had a noticeable effect on the value of fund shares held by long-term investors, the cumulative effect of such trading may be significant. Studies of late trading and market timing have yielded varying estimates of their cost to long-term fund investors. These differing results are one indication of the difficulty of measuring the extent and cost of late trading and market timing. Among 34 brokerage firms surveyed by SEC, including some of the largest in the nation, more than 25 percent reported instances of illegal late trading at their firms. However, one SEC official told us that the SEC views these survey results as conservative estimates of the extent of late trading, because there are numerous fund intermediaries that are not registered with and regulated by SEC who may also have allowed late trading to occur. The extent of market timing is also difficult to measure because fund intermediaries usually aggregate their clients' fund transactions and do not necessarily share individual account information with mutual fund companies. Abusive trading appears to have varied among funds, in part because some funds went to greater lengths than others to try to prevent market timing. Ultimately, the effect of late trading and market timing on the savings of retirement plan participants and other long-term fund shareholders is a function of which funds they invested in and for how long.

SEC and DOL have each taken steps to address abusive trading in mutual funds, and SEC has proposed regulations that aim to eradicate late trading and curb market timing. SEC investigations have led to settlements that, among other things, require those who engaged in abusive trading to return money to funds where late trading and market timing took place. In addition to its enforcement activities, SEC adopted new mutual fund disclosure requirements. DOL, meanwhile, has issued guidance to pension plan sponsors on how they and other plan fiduciaries can fulfill their legal requirements to act "prudently" and in the best interests of plan participants in offering investment options in their defined contribution plans. To stop late trading, SEC has proposed that all orders for fund transactions be received by mutual funds or designated processors, who are regulated by the SEC, before 4:00 p.m. eastern time in order to receive the same day's price (the "Hard 4" proposal). According to SEC officials, this rule would effectively eliminate opportunities for late trading by fund intermediaries, where many cases of late trading took place. To address market timing, SEC's proposed regulations would impose a 2-percent redemption fee on the proceeds of fund shares redeemed within 5 business days of purchase. On the basis of comment letters and discussions with representatives of mutual funds and fund intermediaries, SEC officials are considering modifications and alternatives to these proposed regulations. DOL is not involved in the process of drafting the proposed late trading and market timing regulations because it does not regulate mutual funds. However, it anticipates assisting plan sponsors and record keepers on issues relating to how the final regulations affect defined contribution plans, which frequently invest in mutual funds.

While SEC's proposed regulations could both benefit and create new costs for all long-term mutual fund investors, defined contribution plan participants could be more adversely affected than other long-term investors. All long-term investors in mutual funds, including plan participants, would benefit if the proposals result in a cessation of late trading and a reduction in market timing. However, to comply with the requirements of SEC's proposed regulations, mutual fund companies and fund intermediaries, including plan record keepers, are expected to incur costs, such as for upgrading their information systems. Many of these costs would likely be passed on to investors, plan participants, and plan sponsors. Plan participants would be distinctly affected by the late trading proposal because it creates potential complications for the processing of certain transactions unique to defined contribution plans, such as loans. For example, defined contribution plan participants sometimes borrow from their retirement savings, and plan record keepers need to know the value of the participant's shares at the end of the day to be sure that the participant gets the amount requested and that the request complies with the rules of the pension plan. If record keepers had to submit orders to withdraw shares before share values are determined, as SEC's proposed rule would require, participants could receive incorrect loan amounts and in some cases the loan amount could be greater than allowed by the pension plan rules. The market timing proposal could result in plan participants paying fees that are intended to deter market timing, even on certain transactions, such as occasional transfers between funds to meet an investor's investment objectives, for which clearly no intent to engage in abusive trading exists. While SEC attempted to address these potential negative effects by including certain exceptions to the application of the redemption fee, there are still some cases in which a plan participant could be charged such a fee. Therefore, SEC officials have told us that, as of this writing, they are considering modifications or alternatives to the proposed regulations that would prevent these problems from occurring.

Given the significant role that mutual funds play in retirement savings, we are recommending that the SEC Commissioners adopt certain modifications or alternatives to the proposed regulations that are currently under consideration in order to prevent pension plan participants from being more adversely affected than other investors. In its response to our draft report, SEC agreed with our analysis and noted that the commission staff is considering modifications to the proposals that should mitigate certain circumstances that could adversely affect pension plan participants (SEC's comments are reproduced in app. III).

Background

Mutual funds are structured so that each investor in the fund owns shares, which represent a percentage of the fund's investment portfolio, and investors share in the fund's gains, losses, and its costs. Mutual fund families offer investors multiple funds from which to choose, each with its own level of risk and investment objective, such as international equities or U.S. government bonds. Investors may usually exchange assets between funds within a fund family at any time.

Recent investigations of mutual fund trading by the SEC and some state attorneys general have revealed cases of abusive trading practices. Mutual funds have proven to be a vehicle for abusive trading for a few reasons, such as

- **Inefficient pricing of certain funds**. Mutual funds typically determine their net asset values once a day, based on the prices of their underlying securities at 4:00 p.m. eastern time. For funds invested in equities that trade on international stock exchanges, the most current prices for those underlying assets may be as much as 15 hours old and thus not reflect more recent information that may affect the prices of those assets. When the prices of underlying securities do not reflect the most current information that is likely to affect their price, opportunities are created for arbitrage, or profitably exploiting price differences of identical or similar financial instruments, usually over a short time period.
- **Free fund exchanges**. Abusive market timing sometimes took place because investors took advantage of the fact that fund families often allow

their fund shareholders to purchase, redeem, or exchange funds at no cost for a specific transaction. Normally, investors may redeem their shares on any business day.

- **Difficulty of identifying trading abuses**. In many cases trading abuses were committed by investors who purchased and redeemed fund shares through intermediaries, who are not required to share information about their clients' transactions with mutual fund companies. Most funds are sold via intermediaries such as broker-dealers, banks, and pension plans.

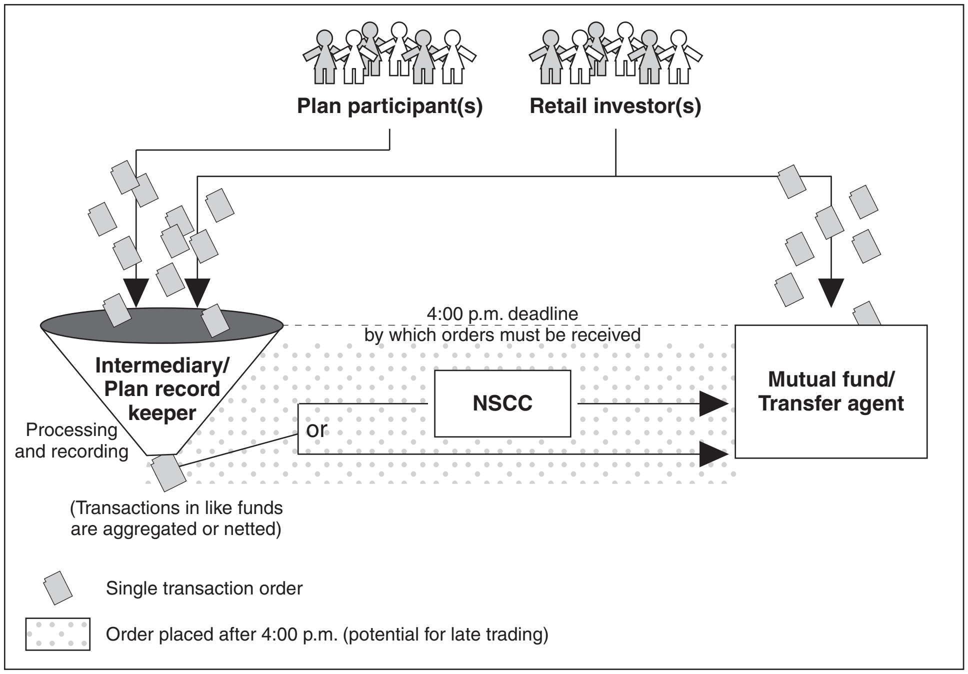
  To simplify and reduce the costs of mutual fund transactions, intermediaries collect orders throughout the day and then aggregate all the transactions they receive for a particular fund. Those intermediaries that are licensed as broker-dealers may net, or match, purchase and redemption orders for the same funds among their own clients. In a simplified example, if one investor were to purchase 15 shares of fund A, and another investor were to redeem 10 shares of fund A, at the end of the day the intermediary would simply transmit one order to purchase 5 shares of fund A—the net result of the day's orders. Intermediaries then transmit the net results of aggregate transactions to the mutual fund companies, where intermediaries hold omnibus accounts representing the collective shares of their clients. Mutual fund companies generally do not have information about the identities and specific transactions of the individual investors in intermediaries' omnibus accounts. Intermediaries have contact with their clients, such as defined contribution plan participants and other individual investors ("retail investors"), and control access to information about their trading activity. Because intermediaries do not typically share this information with mutual funds, the fund companies often cannot discern whether these investors are frequently trading in and out of their funds.

  Mutual fund intermediaries accept purchase and redemption orders throughout the day and are required to stop accepting trades at 4:00 p.m. eastern time for those transactions that will receive the same day's net asset value. According to SEC rule 22c-1 under the Investment Company Act of 1940, purchase and redemption orders submitted by investors to a fund or fund intermediary before the fund next determines its net asset value (usually at 4:00 p.m.) must be executed at that next-computed net asset value. Presently, intermediaries are allowed to aggregate orders after 4:00 p.m. and submit them as omnibus account transactions later in the evening for settlement to mutual fund companies, either directly or via their transfer agents[4] or the National Securities Clearing Corporation (NSCC), an SEC-registered clearing agency.[5] An intermediary or mutual fund that allows investors to engage in late trading could therefore aggregate orders received both before and after 4:00 p.m. and process them as if they had all arrived before 4:00 p.m. Figure 1 illustrates the process of how orders for mutual fund transactions are transmitted from investors and plan participants to mutual fund companies.

[4]Mutual funds employ transfer agents to conduct record-keeping and related functions. Transfer agents maintain records of shareholder accounts, calculate and disburse dividends, and prepare and mail shareholder account statements, federal income tax information, and other shareholder notices.

[5]NSCC is currently the only clearing agency registered with the SEC that operates an automated system, called Fund/SERV, for processing orders for mutual funds and other securities. Fund/SERV provides a central processing system that collects order information from clearing brokers and others, sorts all the incoming order information according to fund, and transmits the order information to each fund's primary transfer agent.

Figure 1: Path of Mutual Fund Transactions



Source: GAO.

Note: Many mutual fund companies act as their own transfer agents, while other funds hire transfer agents to keep records on their behalf. Mutual fund companies may act as plan record keepers and only offer proprietary mutual funds to plan participants; thus, plan participants sometimes submit orders directly to mutual fund companies.

Most employers that sponsor defined contribution plans contract out the various administrative tasks of plan record keeping to companies that have expertise in the administration of plans or investments. Pension plan record keepers keep track of day-to-day transactions for each plan participant's account. The record keeper is responsible for transactions such as crediting accounts with employee and employer contributions, processing changes in participant-directed investment allocations, updating account values (usually each business day) to reflect changes in the values of mutual fund shares held by each plan participant, and acting as a mutual fund intermediary when participants make exchanges between funds. When a plan participant sends the record keeper a request for a transaction, such as for a loan, the record keeper must determine whether the request can be approved in accordance with federal tax and pension laws and the rules of the company's pension plan. In addition, record keepers may function as the primary source of plan information and customer service for plan participants.

Pension plan sponsors often hire a mutual fund company or a plan record keeper to administer their defined contribution plans. Plans administered by a record keeper frequently offer an “open-architecture plan” that permit participants to invest in mutual funds offered by a variety of mutual fund companies. The record keeper itself may be one of these companies, insofar as some companies that are primarily record keepers also offer their own proprietary mutual funds. Plans administered by a mutual fund provider will typically include investment choices offered by that mutual fund provider, and may or may not offer funds of other mutual fund companies. In recent years, open-architecture plans have become more common among defined contribution plans.

Mutual funds are subject to SEC registration and regulation, and are subject to numerous requirements established for the protection of investors. Mutual funds are regulated primarily under the Investment Company Act of 1940 and the rules and registration forms adopted under that act. The 1940 act grants SEC broad discretionary powers to keep the act current with the constantly changing financial services industry environment in which mutual funds and other investment companies operate. The primary mission of the SEC is to protect investors, including pension plan participants investing in securities markets, and maintain the integrity of the securities markets through extensive disclosure, enforcement, and education. In addition to regulating mutual funds, SEC also regulates some of the intermediaries that act as brokers of mutual funds, such as retail broker-dealers and certain pension plan record keepers. However, fund intermediaries that are not registered as broker-dealers are outside SEC’s jurisdiction. For example, insurance companies are regulated by state authorities, banks are regulated by the Office of the Comptroller of the Currency (OCC) and other bank regulators, and pension plan administrators are regulated by DOL. These regulators are required to perform a number of oversight functions—for example, OCC examines the safety and soundness of certain types of banks—therefore, identifying infractions of SEC trading regulations is not the focus of their regulatory activity.

Pursuant to the Employee Retirement Income Security Act of 1974 (ERISA), DOL enforces reporting and disclosure provisions and fiduciary responsibility standards of private employer-sponsored pension plans. While ERISA does not provide specific guidance regarding the steps a plan fiduciary may or should take with regard to late trading and market timing, ERISA established the broad fiduciary requirements relating to private pension plans and was designed to protect the rights of plan participants and their beneficiaries.[6] ERISA Section 401(b)(1) of Title I provides that a plan which invests in a security issued by an investment company registered under the Investment Company Act of 1940, such as mutual fund shares, is only investing in the "security" or shares of that investment company and not in the underlying assets of the investment company. The asset of the plan is the issued security, not any of the assets held by the investment company. Therefore, under ERISA, DOL does not regulate the activities of an investment company.

Mutual Fund Trading Abuses Affected Pension Plan Participants but the Extent Is Unclear

The cost to long-term mutual fund investors of late trading and market timing is unclear, however it does not appear that these trading abuses affected pension plan participants differently than other long-term investors. While costs of individual instances of late trading and market timing may not have a noticeable effect on the value of fund shares held by long-term investors, the cumulative effect of abusive trading may have been significant. Studies of late trading and market timing have yielded varying estimates of their cost to long-term fund investors. The extent of abusive trading appears to have varied among funds, in part because some funds went to greater lengths than others to try to prevent trading abuses. Ultimately, the effect of late trading and market timing on the savings of retirement plan participants and other long-term fund shareholders is a function of which funds they invested in and for how long.

Abusive Short-Term Trading Imposes Costs on Long-Term Shareholders

When some investors are allowed to frequently buy into a fund to benefit from its short-term increases in value and sell shares to avoid its decreases in value, there is a three-fold negative impact on the fund's long-term shareholders:

- **Costs increase**. Abusive trading generates greater transaction costs because fund managers have to more frequently buy or sell shares of the

[6] ERISA generally defines a plan fiduciary as a person who, among other things, exercises discretionary control or authority over the management of a pension plan or any authority or control respecting management or disposition of its assets. Fiduciaries often include the plan sponsor and the investment adviser.

underlying securities in the fund's portfolio to match demand for fund shares.[7]

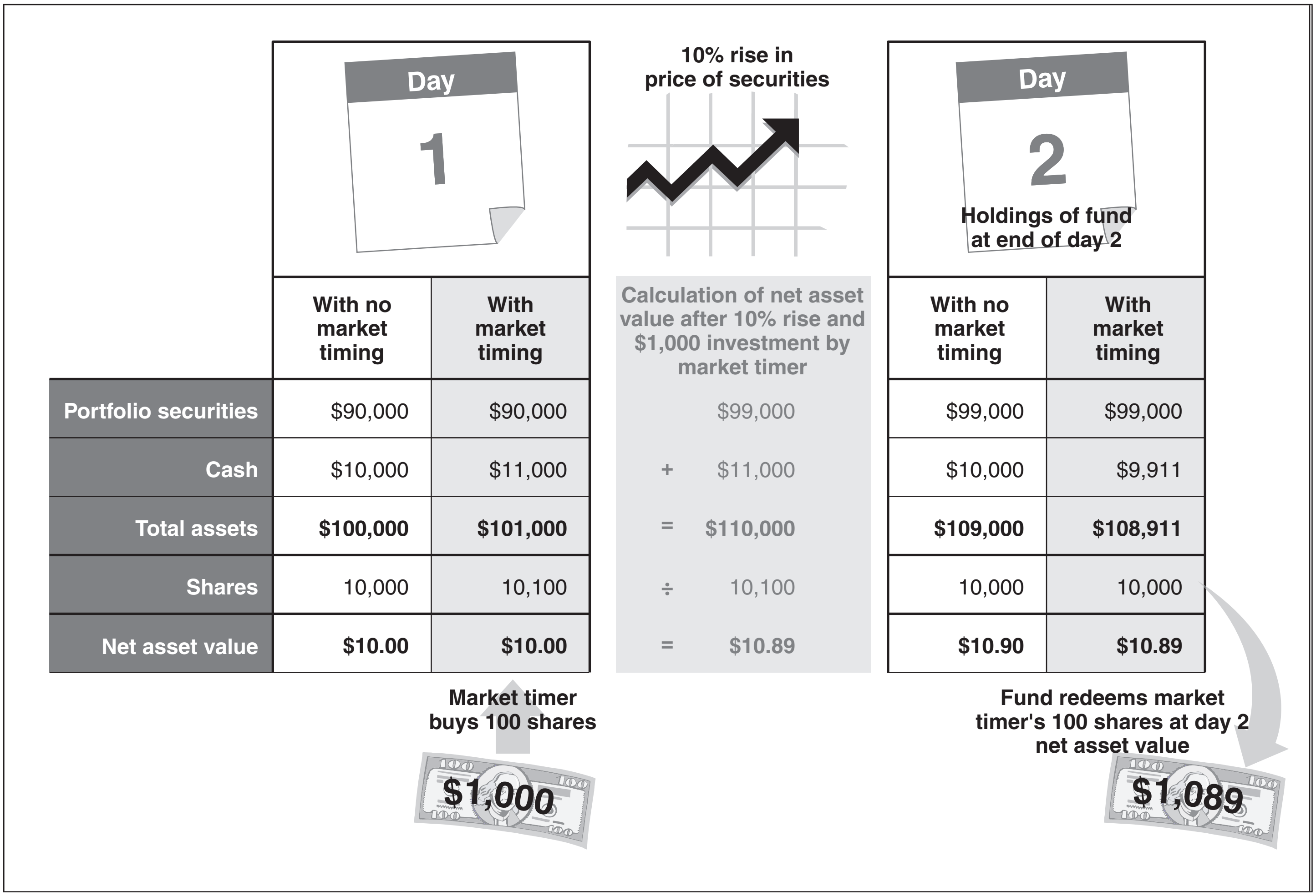
- **Investment returns usually decline over time**. Abusive trading usually results in lower investment returns over the long term when fund managers hold a greater percentage of the fund's assets in cash. Fund managers often increase the percentage of fund assets held in cash in order to accommodate short-term traders' redemptions of shares without having to engage in cost-generating transactions of buying and selling shares of the fund's underlying securities. Over the long term, investments in cash have yielded lower investment returns than stocks and bonds.[8]

- **Gains are diluted**. If short-term traders purchase fund shares and redeem them before their money can be invested in the fund's portfolio, they share in increases in the fund's value, resulting in long-term shareholders receiving a smaller share of these gains—a dilution of fund gains. Conversely, short-term traders can often avoid losses by redeeming fund shares before their value decreases, resulting in long-term investors sharing in a higher proportion of the fund's decrease in value.
  Figure 2 demonstrates the dilution effect of abusive short-term trading on long-term shareholders.

[7]Unlike publicly traded corporate stock, the number of allowable shares in a mutual fund are not finite, since shares may be created and eliminated as investors purchase and redeem them.

[8]Over the short term, in a portfolio that is declining in value, a greater cash position may help to limit the decline in the fund's net asset value.

Figure 2: Comparison of Fund Net Asset Value with and without Market Timing



	Day 1: With no market timing	Day 1: With market timing	Calculation of net asset value after 10% rise and $1,000 investment by market timer	Day 2: With no market timing	Day 2: With market timing
Portfolio securities	$90,000	$90,000	$99,000	$99,000	$99,000
Cash	$10,000	$11,000	+ $11,000	$10,000	$9,911
Total assets	**$100,000**	**$101,000**	= **$110,000**	**$109,000**	**$108,911**
Shares	10,000	10,100	÷ 10,100	10,000	10,000
Net asset value	**$10.00**	**$10.00**	= **$10.89**	**$10.90**	**$10.89**

Source: GAO.

Note: The figure shows how a hypothetical mutual fund is affected by an increase in its portfolio assets with and without market timing. In this example, a market timer invests $1,000 in the fund on day 1 before a 10 percent rise in the value of the securities held by the fund. On day 2 the market timer redeems the shares, yielding a reduction in the fund's net asset value compared to its value without a market timer transaction. The example assumes that the portfolio manager is unable to invest the market timer's cash and thus that amount does not help increase the fund's gain when the market rises.

While a short-term trader can earn large returns from late trading or market timing, the costs of such trades are generally imposed on a large population of shareholders and therefore have a relatively small effect on each individual investor. As shown in the example in figure 2, market timing reduces the net asset value of a share from $10.90 to $10.89, or less than 0.1 percent. However, abusive short-term trading on a large scale and over a period of years could cost long-term shareholders, such as plan participants, more significant percentages of their assets.

Extent of Mutual Fund Trading Abuses Is Unclear

Efforts to quantify the total extent and cost of late trading and market timing have yielded varying results. One academic study found evidence of late trading in 15 of a sample of 50 international funds, and in 12 of a sample of 96 domestic equity funds between 1998 and 2001.[9] On the basis of these samples, the study estimates that during 2001, late trading diluted the gains of the average long-term shareholder in international and domestic equity funds by 0.05 and 0.006 percent, respectively. We were unable to identify other studies on the extent of late trading, though representatives of a mutual fund trade association that we spoke with believe that these estimates are too high. Market timing also appears to have been most prevalent in international equity funds, according to both academic studies and representatives of mutual fund companies we spoke with. Studies show that the most profitable market timing strategies involved trading in and out of international equity funds. Other funds that were used for market timing were small and midsize company domestic equity funds and some types of bond funds. According to one study, market timing has more negatively affected long-term shareholders than late trading.[10] Among the seven studies about market timing we reviewed, estimates of its cost ranged from averages of 0.32 to 2.3 percent of assets per year in international equity funds.[11] The differences in the estimated costs of market timing vary depending on which data and methodology were used by the researchers. These variations also indicate the difficulty

[9]E. Zitzewitz, "How Widespread Is Late Trading in Mutual Funds?" Stanford Graduate School of Business Research Paper Series (2003). The study notes that the existence of late trading in a mutual fund does not necessarily imply that the fund itself colluded with late traders. Many instances of late trading occurred among fund intermediaries.

[10]Zitzewitz, 2003.

[11]W.N. Goetzmann, Z. Ivkovic, and K.G. Rouwenhorst, "Day Trading International Mutual Funds: Evidence and Policy Solutions," *Journal of Financial and Quantitative Analysis Vol. 36, No. 3* (2001); and E. Zitzewitz, "Who Cares About Shareholders? Arbitrage-Proofing Mutual Funds," *The Journal of Law, Economics, and Organization Vol. 19, No. 2* (2003). These studies note that the effect of market timing varied by type of international fund. Among these studies, four provided estimates of the effect of market timing on the values of mutual funds. The studies cited above include the minimum and maximum estimates of the costs of market timing. See appendix I for more details.

of definitively calculating the extent of mutual fund trading abuses and their effect on long-term investors.

The extent of late trading and market timing is very difficult to measure because these practices can be hard to identify. Many cases of late trading occurred at the fund intermediary level, when orders were illegally accepted after 4:00 p.m. and given the same day's price when they were combined with orders accepted before 4:00 p.m. Among 34 brokerage firms surveyed by SEC, including some of the largest in the nation, more than 25 percent reported instances of illegal late trading at their firms. However, one SEC official told us that SEC views these survey results as conservative estimates of the extent of late trading, particularly because there are numerous intermediaries that sell mutual funds, including a significant percentage that are not registered with and regulated by SEC. In one case of late trading, SEC brought charges against Security Trust Corporation, a national bank association, for allowing Canary Capital Partners, a hedge fund, to submit trades after the close of the market and receive same day pricing.[12] Security Trust then aggregated these illegal transactions with legitimate retirement plan transactions and submitted orders after 4:00 p.m. that appeared to be legal to fund companies. Security Trust Corporation has been closed by federal regulators. According to SEC officials, audits of past transactions cannot identify many instances of late trading because late traders often submitted orders before 4:00 p.m. and then were allowed to cancel those orders after the market closed. Canceled orders were then destroyed, which left no record of the illegal trading.

Market timing can also be difficult to identify because, among other reasons, the omnibus accounts of intermediaries obscure individual account transactions. Therefore, mutual fund companies cannot identify the frequency at which an individual investor is exchanging money between funds. SEC has alleged that one intermediary's methods included (1) forming and registering two affiliated broker-dealers through which the intermediary could continue to engage in market timing without detection, (2) changing account numbers for blocked customer accounts, (3) using alternative registered representative numbers for registered

[12]The term "hedge fund" generally identifies an entity that holds a pool of securities and perhaps other assets that does not register its securities offerings under the Securities Act and which is not registered as an investment company under the Investment Company Act of 1940. Hedge funds are also characterized by their fee structure, which compensates the adviser based upon a percentage of the hedge fund's capital gains and capital appreciation.

representatives who were blocked from trading by mutual funds, (4) using different branch identification numbers, (5) switching clearing firms, and (6) suggesting that customers use third-party tax identification numbers or Social Security numbers to disguise their identities.

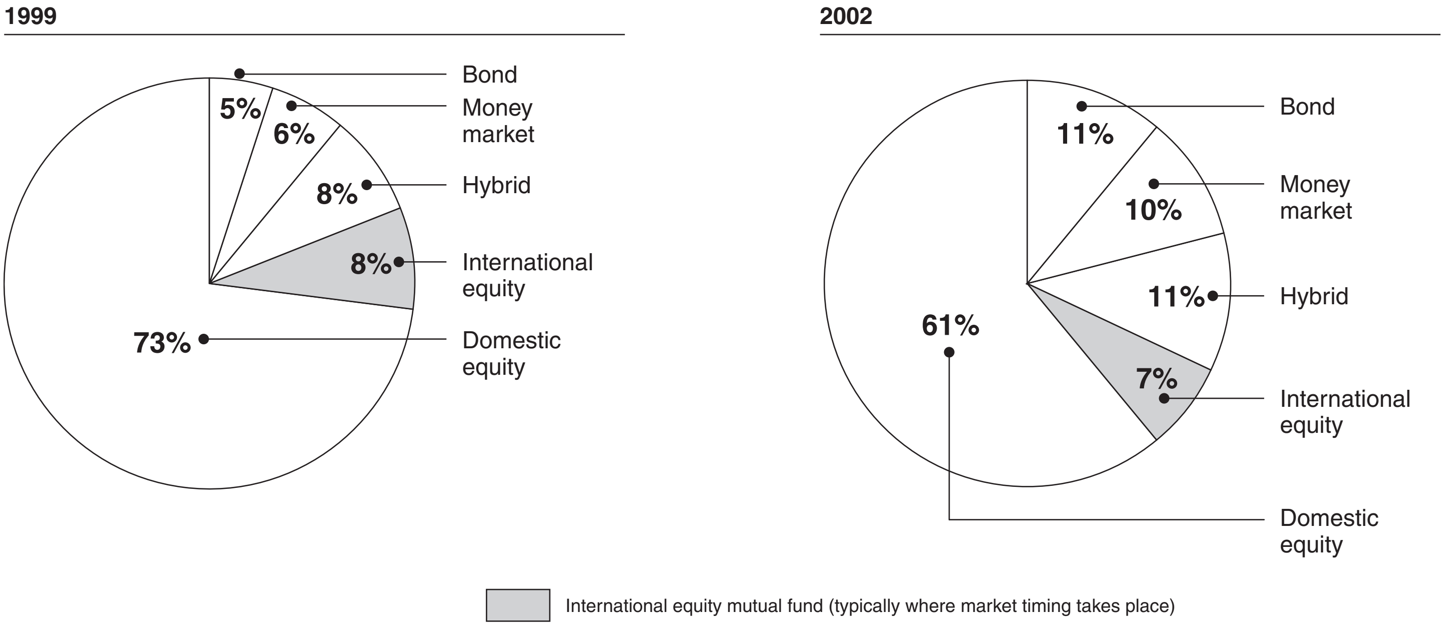
Effect of Mutual Fund Trading Abuses on Plan Participants Varies

Retirement plan participants would have been affected by late trading and market timing just like other long-term investors if they were shareholders in funds where these trading abuses occurred. Since trading abuses appear to have been concentrated in international equity funds, those plan participants that invested in such funds would likely have been affected by late trading and market timing.[13] However, even among investors in international equity funds, some were probably affected more than others because some mutual funds have successfully reduced market timing by employing various tools such as fair value pricing, redemption fees, and other penalties against frequent traders.[14] According to news reports and SEC officials, some plan sponsors have responded to mutual fund trading abuses by reassessing the investment options they offer to their plan participants, and in some cases have removed implicated funds from their offerings. Nonetheless, some funds that tried to stop market timing could still have been used by abusive short-term traders who traded via intermediaries. Most of the assets of plan participants were not affected by market timing in international equity funds because, as shown in figure 3, less than 10 percent of all plan assets were invested in international equity funds.

[13]Investors outside of international equity funds may also have been affected by market timing as some short-term traders exchanged money back and forth between international funds and other funds. Aside from money market funds, we were unable to determine which types of funds market timers used. The value of money market funds should not have been affected by market timing because they hold highly liquid assets and are intended to maintain a stable value of $1.00 per share.

[14]Fair value pricing is a process that mutual funds use to value fund shares (such as for assets traded in foreign markets) in the absence of current market values. SEC requires that when market quotations for a portfolio security are not readily available, a fund must calculate its fair value.

Figure 3: Mutual Fund Defined Contribution Plan Assets by Type of Fund



Source: GAO, based on data from the Investment Company Institute.

Note: Hybrid funds invest in a mix of equity and fixed-income securities.

According to a study by the Investment Company Institute, international equity funds make up less than 10 percent of total defined contribution assets in mutual funds.[15] However, according to two of the nation's largest pension plan record keepers, at least 19 percent of plan participants, for whom they keep records, invest at least part of their retirement savings in international equity funds. Furthermore, any individual investor may allocate his or her plan assets very differently from the average.

Market timing can also harm plan participants if a plan sponsor fails or refuses to limit a participant's market timing. In pension plans, even where a fund company becomes aware of a participant that is engaged in harmful market timing, the fund's ability to restrict only the participant, and not the entire plan, may be limited because the shares of all participants are held

[15]The Investment Company Institute is the national association of the U.S. mutual fund industry. Its membership includes approximately 8,595 mutual funds (including about 400 fund families) and manages about 95 percent of mutual fund assets in the U.S. mutual fund industry.

in the record keeper's omnibus account. If a plan sponsor fails or refuses to act to stop a participant engaged in market timing, a fund has few means with which to stop the market timer, except for perhaps restricting access to the fund for all the plan's participants. According to representatives of one mutual fund trade association we spoke with, plan sponsors have sometimes been reluctant to impose redemption fees or trading restrictions on plan participants for fear that they may be sued for fiduciary violations.

Regulators Are Taking Actions to Address Abusive Mutual Fund Trading

SEC and DOL have each taken steps to address abusive trading in mutual funds, and SEC has proposed regulations that aim to eradicate late trading and curb market timing. SEC has been investigating and has settled several cases of abusive trading in mutual funds and has recently adopted new mutual fund disclosure requirements. DOL, meanwhile, is conducting its own investigations and has issued guidance to pension plan sponsors that covers, among other things, their responsibilities to ensure that they are offering prudent investment options to plan participants. SEC's proposed regulations on late trading would amend the rule that governs how mutual funds price and receive orders for share purchases and redemptions. To try to curb market timing, a separate SEC proposal would require mutual funds to impose a 2-percent redemption fee on the proceeds of shares redeemed within 5 business days of purchase.

SEC and DOL Have Taken Steps to Enforce and Clarify Existing Laws under Their Respective Jurisdictions

SEC has already settled some cases of late trading and market timing abuses with mutual fund companies, hedge funds, and brokers. Though market timing is not illegal, SEC has charged fund companies with defrauding investors by not enforcing their stated policies of discouraging or prohibiting market timing, as written in their prospectuses. Some institutions have been fined hundreds of millions of dollars, and part of this money will be returned to long-term fund shareholders who lost money from these abusive trading practices. Furthermore, SEC has permanently barred some of the individuals at these companies from future work with investment companies and is seeking disgorgement and civil penalties against them.[16] SEC officials told us that more enforcement actions are pending.

[16]Disgorgement is a remedy that requires a violator of federal securities law to give back to investors money obtained as a result of the violation.

In addition to its enforcement actions, SEC has issued guidance and new regulations that address the negative impact of market timing on long-term shareholders. In 2002, SEC issued guidance stating that mutual funds may delay exchanges of shares from one fund to another in order to combat market timing. Permitting delayed exchanges could deter market timing, since market timers seek to effect transactions on a specific day to take advantage of perceived market conditions. SEC also issued new regulations in April 2004 that require mutual funds to disclose the following information in their prospectuses:

- risks to shareholders of frequent purchases and redemptions of shares,
- policies and procedures regarding frequent purchases and redemptions of shares,
- circumstances under which they will use fair value pricing and the effects of using fair value pricing, and
- policies and procedures with respect to the disclosure of their portfolio securities and any ongoing arrangements to make available information about their portfolio securities.

Mutual funds must comply with these new regulations by December 5, 2004.

Separate from SEC's activities, DOL has also begun investigating possible fiduciary violations at some large investment companies, including those that sponsor mutual funds, intermediaries, and plan fiduciaries. More specifically, DOL is determining whether any of ERISA's fiduciary provisions were violated by offering investments in funds that allowed late trading or market timing, and whether employee benefit plans incurred any financial losses as a result. Among other things, DOL expects to address

- whether plan fiduciaries used pension plan accounts to facilitate late trading or market timing of others,
- whether pension plans incurred losses as a result of fiduciaries knowingly directing investments in mutual funds that permitted late trading or market timing, and
- whether plan fiduciaries appropriately monitored plan provisions regarding market timing.

DOL also issued a statement in February 2004 suggesting that plan fiduciaries review their relationships with mutual funds and other investment companies to ensure that they are meeting their responsibilities of acting reasonably, prudently, and solely in the interest of plan participants. According to DOL, for those mutual funds under investigation for trading abuses, fiduciaries should consider the nature of the alleged abuses, the potential economic impact of those abuses on the plan's investments, the steps taken by the fund to limit the potential for such abuses in the future, and any remedial action taken or contemplated to make investors whole. For funds that are not under investigation, DOL suggested that fiduciaries review whether funds have procedures and safeguards in place to limit their vulnerability to trading abuses.

The DOL guidance also explains that if a plan offers mutual funds or similar investments that impose reasonable redemption fees on sales of their shares, this would, in and of itself, not affect the availability of relief to the plan sponsor under Section 404(c) of ERISA.[17] The guidance adds that reasonable plan or investment fund limits on the number of times a participant can move in and out of a particular investment within a particular period would not run afoul of requirements under 404(c). However, the terms and conditions of the plan regarding the imposition of fees and trading restrictions must be clearly disclosed to the plan's participants and beneficiaries. Representatives of mutual fund companies and plan sponsors have told us that additional guidance on what actions plan sponsors may take to prevent market timing by plan participants, without losing relief under ERISA Section 404(c), would be helpful.

SEC Has Proposed New Mutual Fund Trading Regulations

In addition to adopting new mutual fund disclosure requirements, SEC has also proposed regulations to address late trading and market timing abuses. In December 2003, SEC proposed amending the rule that governs how mutual funds price and receive orders for share purchases or sales.[18] Since many of the cases of late trading involved orders submitted through intermediaries, including banks and pension plans not regulated by SEC,

[17]ERISA Section 404(c) generally provides relief for plan fiduciaries of certain individual account plans, such as 401(k) plans, from liability for the results of investment decisions made by plan participants and beneficiaries, under conditions specified in 29 CFR §2550.404c-1.

[18]Securities and Exchange Commission, Proposed Rule: Amendments to Rules Governing Pricing of Mutual Fund Shares, Release No. IC-26288 (Dec. 11, 2003).

the proposed amendments would require that orders to purchase or redeem mutual fund shares be received by a fund, its transfer agent, or a registered clearing agency before the time of pricing (usually 4:00 p.m. eastern time). SEC officials explained to us that given their resources, they cannot examine all intermediaries that accept order information for mutual fund shares. Thus, to lower the risk of additional late trading abuses, it would be necessary to reduce the number of fund intermediaries with the authority to verify the time that orders are received.

To stem market timing, SEC proposed a new rule in March 2004 to require mutual funds to impose a 2-percent redemption fee on the proceeds of shares redeemed within 5 business days of purchase.[19] According to the proposal, the proceeds from the redemption fees would be retained by the fund and would become a part of the total assets managed on the behalf of the fund's shareholders. The imposition of a mandatory redemption fee is intended to serve two purposes: (1) to reimburse a fund for the approximate costs of short-term trading in fund shares, and (2) to discourage short-term trading by reducing its profitability. SEC is aware that the redemption fee by itself is inadequate for eliminating all profitable market-timing opportunities. Therefore, fund companies may use additional measures to try to prevent market timing. In addition, the proposal requires all fund intermediaries, including plan record keepers, to share the details of each client's transactions with mutual fund companies. On at least a weekly basis, intermediaries would be required to provide mutual funds with purchase and redemption information for each shareholder within an omnibus account to enable the fund to detect market timers and ensure that redemption fees are properly assessed. Presently, those intermediaries that are not under the jurisdiction of SEC cannot be required by SEC to share individual account information with mutual fund companies. The proposal also allows for certain exceptions to the application of the redemption fee, such as for unanticipated financial emergencies, and for redemptions of $2,500 or less if the fund chooses to adopt such a policy.

These proposals are part of an open regulatory process, and according to SEC officials, SEC staff have reviewed over 1,400 comment letters and met with various interested parties. SEC officials are considering modifications to the proposals based on feedback from different parties and will

[19] Securities and Exchange Commission, Proposed Rule: Mandatory Redemption Fees for Redeemable Fund Securities, Release No. IC-26375A (Mar. 5, 2004).

ultimately recommend a final set of proposals to the Commissioners of the SEC. SEC also proposed new regulations that address mutual fund boards' independence and effectiveness, fund adviser compensation of broker-dealers that sell fund shares, and mutual fund ethics standards.[20] SEC officials told us that these rules and others should help reduce abusive practices, such as late trading and market timing, throughout the mutual fund industry. DOL is not involved in the process of drafting the proposed late-trading and market-timing regulations because it does not regulate mutual funds. However, it is considering how the regulations would affect pension plans and anticipates providing interpretative assistance to plan sponsors and record keepers, as necessary, regarding any ERISA issues in implementing SEC's final rules.

Most Plan Participants Could Benefit from SEC's Proposed Regulations but Face Greater Costs than Other Investors

SEC's proposed regulations on late trading and market timing would have similar effects on pension plan participants and other investors, but as they were initially written they would also have some effects unique to defined contribution plan participants. To the extent that the proposals would result in a cessation of late trading and a reduction in market timing, plan participants, like other mutual fund investors, would benefit. However, SEC's proposed regulations are expected to create additional costs for mutual fund companies and fund intermediaries, including plan record keepers; many of these costs are likely to be passed on to investors, plan participants, and plan sponsors. Plan participants could be distinctly affected by the late trading proposal because it creates potential complications for the processing of certain transactions unique to defined contribution plans, such as loans. In addition, plan participants may pay fees intended to deter short-term trading, including market timing, even on certain transactions where there is clearly no intent to engage in abusive trading.

[20]See (1) Securities and Exchange Commission, Proposed Rule: Investment Company Governance, Release No. IC-26323 (Jan. 15, 2004); (2) Securities and Exchange Commission, Proposed Rule: Prohibition on the Use of Brokerage Commissions to Finance Distribution, Release No. IC-26356 (Feb. 24, 2004); and (3) Securities and Exchange Commission, Proposed Rule: Investment Adviser Code of Ethics, Release No. IC-26337 (Jan. 20, 2004). For assessment of some of these proposals see U.S. General Accounting Office, *Mutual Funds: Assessment of Regulatory Reforms to Improve the Management and Sale of Mutual Funds*, GAO-04-533T (Washington, D.C.: March 10, 2004).

Plan Participants Would Benefit from a Cessation of Trading Abuses

To the extent that SEC proposals would result in a cessation of late trading and a reduction in market timing, plan participants, like other mutual fund investors, would benefit. SEC officials told us that the Hard 4 proposal would virtually eliminate the possibility of late trading through mutual fund intermediaries. Participants could also benefit from the redemption fee proposal, as many short-term traders are likely to be deterred from abusive market timing that imposes costs on long-term investors. Furthermore, those who engage in market timing would repay to long-term shareholders at least part of the costs that they impose on them.

According to SEC officials, pension plan participants and other fund investors would also benefit from increased confidence in the fairness of the securities markets, knowing that these two types of abusive trading practices were being minimized. Market fairness and the promotion of investor confidence have long been goals of the SEC. The persistence of late trading and market timing could undermine the integrity of, and investor confidence in, the securities markets in general and mutual funds in particular. SEC officials told us that not acting quickly to address these abuses could have resulted in investors withdrawing mutual fund investments and either looking for other investment options or withdrawing from securities markets entirely.

New Regulations Are Expected to Impose Costs on Service Providers and Investors

SEC's proposed regulations on late trading and market timing are expected to create additional costs for mutual funds and fund intermediaries, including pension plan record keepers, which would likely result in increased costs for all mutual fund investors, plan participants, and plan sponsors.[21] SEC's late trading proposal could force intermediaries to require their clients, including pension plan participants, to submit their orders for mutual fund transactions prior to 4:00 p.m. eastern time. Pension plan administrators anticipate that retirement plan participants who submit orders through intermediaries would face cutoffs between 12:00 p.m. and 2:00 p.m. eastern time in order to allow pension plan record keepers time to process purchase and redemption orders before submitting them to the fund, its transfer agent, or NSCC. This earlier deadline for submitting fund transaction orders to plan record keepers

[21]Mutual fund transfer agents and NSCC would also face increased costs from implementation of the proposed regulations. Many of these costs are likely to be passed on to the mutual funds and fund intermediaries who use their services.

should not significantly affect payroll transactions of fund shares because these transactions are a function of the participant's payroll schedule and not usually timed investment decisions made by the plan participant; therefore, the change in price from one day to the next could either be to the benefit or the detriment of plan participants as they purchase or redeem shares at higher or lower prices. According to representatives of two large mutual fund companies that we spoke with, payroll transactions represent about 95 percent of the defined contribution plan transactions that they process. However, some pension plan administrators told us that in some cases of nonpayroll transactions, they may not be able to process any purchase and redemption requests the same day that orders are received. SEC officials told us that implementation of computer system upgrades and modifications to business processes would likely result in intermediaries ultimately being able to accept orders until a time very shortly before 4:00 p.m. eastern time. However, some intermediaries told us that system upgrades and the communication of information to investors, plan participants, and plan sponsors about new requirements for submitting orders for mutual fund transactions could represent a significant expense.

Some pension plan record keepers told us that adoption of the Hard 4 proposal would put intermediaries at a competitive disadvantage if they were unable to modify their systems so that plan participants would be able to submit orders until 4:00 p.m. (or just before then). They argued that investors, including plan participants, have grown accustomed to ever-increasing rates of change in global financial markets and that plan participants want the flexibility to move their money at a moment's notice, without having to wait a day for the transaction to be completed. Indeed, on some of the stock market's most volatile days there have been increases in the percentage of plan participants who exchange money between funds. As a result of this demand, plan record keepers fear that they would not be able to compete with mutual fund companies, who offer their own funds and record-keeping services to pension plans and could therefore allow plan participants to submit orders until 4:00 p.m.[22] Officials of one mutual fund company that also serves as a record keeper expressed concerns that plan participants may demand alternative investment products to mutual funds if they were to no longer be able to place orders

[22]Some plan record keepers and mutual fund companies have suggested alternative regulations to the SEC's Hard 4 proposal. Appendix II describes these alternatives and some of the concerns that have been raised about them.

for fund transactions until the market closing time. However, according to information from two of the nation's largest mutual fund companies, the vast majority of plan participants do not make more than one exchange between mutual funds during the course of a year.

The redemption fee proposal would also create new costs for mutual funds and their intermediaries. SEC has noted that the costs to a fund's transfer agent to store the shareholder information and track the trading activity may be significant and those costs may ultimately be passed on to investors. In some cases, the transfer agent would have to upgrade its record-keeping systems. Commenting on the information-sharing requirement in the proposed redemption fee rule, some plan record keepers that we spoke with explained that it would be inefficient to have transaction information of individual investors stored by both plan record keepers and fund transfer agents. Representatives of one mutual fund company told us that record keeping would be most efficient if intermediaries were only required to share transaction information about individual investors upon the request of mutual funds.

The redemption fee proposal would also increase costs for fund intermediaries who would have to upgrade any systems that are currently unable to either transmit individual shareholder data to mutual fund companies or track transaction patterns of individual accountholders. Many intermediaries have stated that the costs of these technology upgrades would be substantial and would likely be passed on to mutual fund shareholders who invest through intermediaries, including pension plan participants. However, estimates of these costs depend to some extent on the flexibility of systems that intermediaries currently employ.

Some fund intermediaries have argued that SEC should establish a uniform schedule for redemption fees in order to keep the cost of tracking the transactions of individual investors and assessing redemption fees to a minimum. Mutual fund company representatives, however, have told us that because funds vary in characteristics such as investment objective and investor turnover, funds have different needs for cost recovery and market timing deterrence. For example, an international fund might need higher redemption fee amounts and longer holding periods to discourage market timing. Therefore, they say, mutual fund directors should have the flexibility to set redemption fee terms that they feel would best achieve these goals and protect long-term investors.

SEC's Hard 4 Proposal Could Complicate Certain Pension Plan Transactions

Pension plan record keepers note that SEC's Hard 4 proposal would present complications for the processing of certain transactions that are unique to pension plans, such as participant loans, which are held by about 20 percent of 401(k) plan participants, according to three large plan record keepers.[23] Record keepers told us that to process a loan request, a plan record keeper must know the value of the mutual fund shares held by the plan participant to determine how many shares must be redeemed, and from which funds, to meet the participant's request and comply with various rules governing loan transactions. Currently plan record keepers process loan transactions after the net asset values of mutual fund shares have been calculated, which is after 4:00 p.m., and then submit a redemption order for a specified number of dollars or fund shares or a percentage of the participant's total plan assets.[24] Under the Hard 4 proposal, record keepers would have to transmit redemption orders for loan transactions before they could know the net asset value of a participant's shares in different funds; therefore, according to record keepers, they would likely use the prior day's share prices to estimate either the number of shares to be redeemed or the amount of money to be withdrawn from each fund owned by the participant. Because mutual fund share prices usually change from one day to the next, the submission of a redemption order could result in either the participant receiving more or less money than requested or a violation of plan rules that specify the order in which shares may be redeemed. For example, many plans require participants to first redeem those mutual fund shares that were purchased with their own contributions before redeeming shares that were purchased with employer contributions.

Figures 4 and 5 demonstrate the potential problems that may arise with loan transactions were the Hard 4 regulations to be adopted as originally proposed.

[23]A 401(k) plan is a common type of defined contribution pension plan sponsored by a private sector employer that generally allows a participant to make pretax contributions to an individual account. Earnings on contributions likewise accumulate tax-free until the funds are used.

[24]Under Internal Revenue Code Section 72(p), a loan from a qualified plan to a participant or beneficiary will be treated as a taxable distribution, unless the loan amount is the lesser of $50,000 or one-half of the participant's defined contribution account balance.

Figure 4: Potential Complication with Loan Transaction if Dollar Amount Is Specified

When participant requests a $50,000 loan prior to the market close, the record keeper estimates the withdrawal based on the previous day's prices. Plan rules require that all 800 shares of the money rolled over from a previous employer-sponsored plan be sold before contributions are distributed. Keeping the total amounts withdrawn from each money source constant, the record keeper cannot satisfy the withdrawal request and still adhere to plan rules. If share prices go up, plan rules may be violated. If share prices go down, then participant gets less than the amount requested.

Estimate – Before market closes

Money source	Fund	Estimated shares to be sold (Total shares held)	Previous day's price	Total withdrawn
Rollover	A	800.000 (800)	$25.00	$20,000
Employee	B	700.000 (700)	20.00	14,000
Employee	C	500.000 (2,500)	32.00	16,000
				$50,000

Actual – After market closes – Outcome with overall dollar increase

	Money source	Fund	Estimated shares to be sold (Total shares held)	Actual shares sold	(Shares left over)	Actual closing price		Total withdrawn
(X)	Rollover	A	800.000 (800)	792.079	(7.921)	$25.25	(+.25)	$20,000
	Employee	B	700.000 (700)	691.358	(8.642)	20.25	(+.25)	14,000
	Employee	C	500.000 (2,500)	503.937	(1,996.063)	31.75	(-.25)	16,000
								$50,000

Actual – After market closes – Outcome with overall dollar decrease

Money source	Fund	Estimated shares to be sold (Total shares held)	Actual shares sold	(Shares left over)	Actual closing price		Total withdrawn
Rollover	A	800.000 (800)	800.000	(0.000)	$24.75	(-.25)	$19,800 (<)
Employee	B	700.000 (700)	700.000	(0.000)	19.75	(-.25)	13,825 (<)
Employee	C	500.000 (2,500)	503.937	(1,996.063)	31.75	(-.25)	16,000
							$49,625 (<)

(X) Plan rule violated (not all shares in fund were sold)

(<) Participant receives less than requested (not enough shares available because of drop in price)

Source: GAO.

Figure 5: Potential Complication with Loan Transaction if Number of Shares Is Specified

When participant requests a $50,000 loan prior to the market close, the record keeper estimates the withdrawal based on the previous day's prices. Plan rules require that all 800 shares of the money rolled over from a previous employer-sponsored plan be sold before contributions are distributed. The record keeper may honor the plan rules by keeping the number of shares sold constant, but participant's request may not be met depending on the closing prices at the end of the day. Furthermore, if share prices increase, the withdrawal may exceed allowable maximum under the Internal Revenue Code.

Estimate — Before market closes

Money source	Fund	Estimated shares to be sold (Total shares held)	Previous day's price	Estimated total to be withdrawn
Rollover	A	800.000 (800)	$25.00	$20,000
Employee	B	700.000 (700)	20.00	14,000
Employee	C	500.000 (2,500)	32.00	16,000
				$50,000

Actual — After market closes

Outcome with overall dollar increase

Money source	Fund	Estimated shares to be sold (Total shares held)	Actual closing price	Actual total withdrawn	Estimated total to be withdrawn
Rollover	A	800.000 (800)	$25.25 (+.25)	$20,200	$20,000
Employee	B	700.000 (700)	19.75 (-.25)	13,825	14,000
Employee	C	500.000 (2,500)	32.25 (+.25)	16,125	16,000
				$50,150	$50,000

Outcome with overall dollar decrease

Money source	Fund	Estimated shares to be sold (Total shares held)	Actual closing price	Actual total withdrawn	Estimated total to be withdrawn
Rollover	A	800.000 (800)	$24.75 (-.25)	$19,800	$20,000
Employee	B	700.000 (700)	20.25 (+.25)	14,175	14,000
Employee	C	500.000 (2,500)	31.75 (-.25)	15,875	16,000
				$49,850	$50,000

Participant's request not met

Withdrawal exceeds IRS limit of $50,000

Source: GAO.

SEC's Proposed Redemption Fee Rules Could Impose Fees on Plan Participants when Not Intended

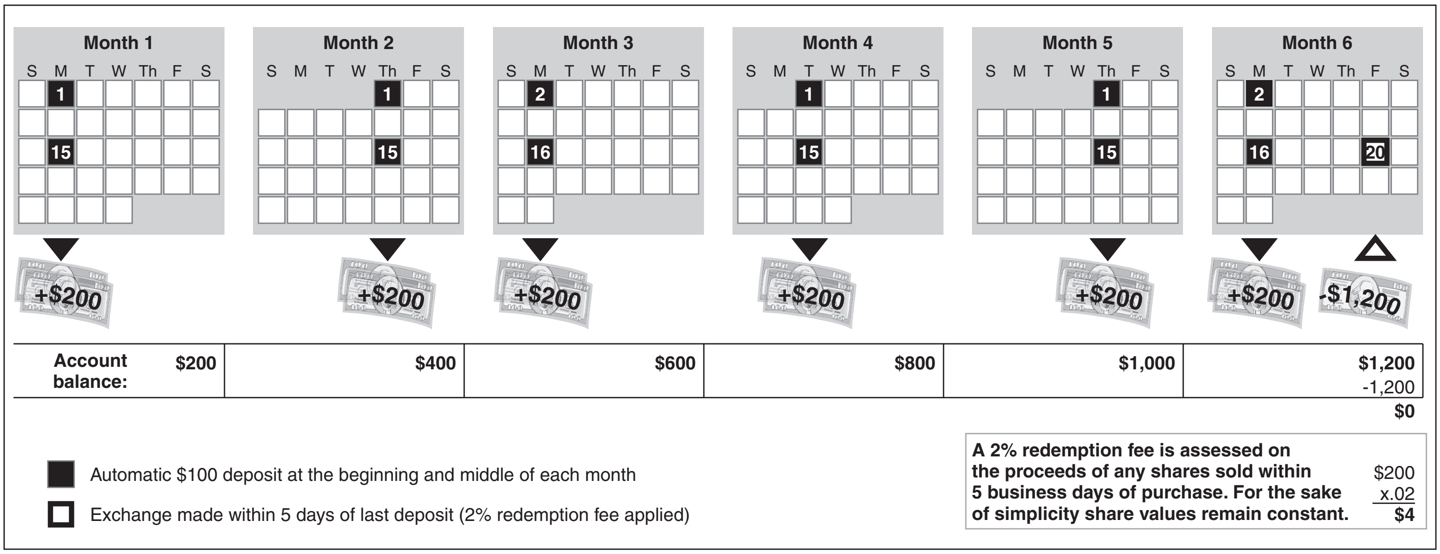
Despite SEC's proposed measures to limit the application of the redemption fee, SEC's redemption fee proposal may in certain circumstances penalize plan participants for certain transactions that could not be construed as attempts to engage in market timing. Plan participants do not control the timing of payroll transactions of fund shares, since plan sponsors and record keepers process these transactions. The transaction of purchasing fund shares in a participant's plan does not necessarily occur on the same day that an employee receives a payroll deposit in the bank, and therefore plan participants may not know when additional fund shares are purchased on their behalf.

Occasionally plan participants rebalance the allocation of their plan assets among their different mutual funds, transfer retirement savings from one fund to another, or take a loan from their plan. In some cases, these participant-directed transactions may occur within 5 days of a payroll purchase of fund shares, and in some of these cases the plan participant would pay a redemption fee of 2 percent on the most recent payroll purchase of fund shares, despite the fact that there was no intent to engage in abusive market timing. The SEC's proposed rule has attempted to address these situations by limiting the application of the redemption fee by (1) mandating a "first-in, first-out" method for determining redemption fees, (2) allowing funds to not collect redemption fees on proceeds of $2,500 or less (de minimis exception), and (3) limiting the rule's holding period to 5 days, thereby targeting the most egregious circumstances of excessive trading.[25] Nonetheless, some funds may choose not to apply the de minimis exception; therefore, in some cases, participants could still end up paying redemption fees. Usually, a 2-percent redemption fee on the last payroll purchase of fund shares would not amount to more than a few dollars. However, plan sponsors and administrators have argued that it would be unfair to penalize plan participants when there is clearly no intent to engage in abusive trading.

Figure 6 illustrates how a plan participant could be assessed a redemption fee for transferring the balance of one fund to another.

[25]The first-in, first-out (FIFO) method would require that funds determine the amount of any fee by treating the shares held the longest time as being redeemed first, and shares held the shortest time as being redeemed last. According to SEC, use of the FIFO method would trigger redemption fees when large portions of an account are rapidly purchased and redeemed (a characteristic of abusive market timing transactions), but not when small portions of an account held over a longer period are redeemed.

Figure 6: Assessment of a Redemption Fee for an Exchange Transaction



Source: GAO.

Note: The proposed rule's de minimis provision permits funds to forgo the assessment of a redemption fee if the value of the shares redeemed is $2,500 or less.

In our most recent discussions, SEC officials told us that as of this writing, they are considering modifications to both the Hard 4 and redemption fee proposals to address the concerns cited above. SEC officials are also considering alternatives to the Hard 4 proposal (see app. II for discussion of two such alternatives) and are actively talking with mutual fund companies and fund intermediaries about the feasibility of these other options.

Conclusions

Pension plans play a significant role in the financial markets of the United States as a primary vehicle for investing savings in the economy, and the use of mutual funds in pension plans often gives participants a great deal of choice about how they allocate their savings. Because late trading and market timing have negatively affected pension plan participants and other long-term investors, we support SEC's efforts to stop these abusive practices. However, in certain circumstances, some pension plan participants may be more adversely affected by SEC's proposed regulations than other mutual fund investors if they were to be adopted as proposed. Amending the proposed regulations to mitigate these potentially negative effects on pension plan participants, as SEC staff are now considering, seems a sensible approach. Without such changes, pension plan participants could face complications with certain transactions that are unique to pension plans and be assessed fees when they would clearly not be engaging in abusive trading.

Recommendations for Executive Action

Given the significant role that mutual funds play in retirement savings, we are recommending that the SEC Commissioners adopt certain modifications or alternatives to the proposed regulations that are currently under consideration in order to prevent defined contribution plan participants from being more adversely affected than other investors.

Agency Comments

We provided a draft of this report to SEC and DOL. We obtained written comments from SEC, which are reproduced in appendix III. SEC agreed with our analysis and noted that the commission staff is considering modifications to the proposals that should mitigate certain circumstances that could adversely affect pension plan participants. SEC and DOL also provided technical comments, which we incorporated as appropriate.

Unless you publicly announce its contents earlier, we plan no further distribution until 30 days after the date of this report. At that time, we will send copies of this report to the Commissioner of the SEC, the Secretary of Labor, appropriate congressional committees, and other interested parties. The report is also available at no charge on GAO's Web site at http://www.gao.gov/.

If you have any questions concerning this report, please contact me at (202) 512-7215 or George Scott at (202) 512-5932. Other major contributors include Gwen Adelekun, Amy Buck, David Eisenstadt, Lawrance Evans, Jr., Cody Goebel, Marc Molino, Derald Seid, and Roger Thomas.

Barbara D Bovbjerg

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Appendix I: Objectives, Scope, and Methodology

To determine how late trading and market timing have affected pension plan participants, we reviewed academic studies of how different types of mutual funds were affected by these trading abuses and compared this information with data about how defined contribution plan participants allocate their retirement savings among different types of funds. In addition, we asked various experts in the pension plan and mutual fund industries for any information about the effect of mutual fund trading abuses on pension plan participants. None of the representatives of pension plan record keepers,[1] mutual fund companies, and officials from the Securities and Exchange Commission (SEC) and the Department of Labor (DOL) were able to provide us an estimate of how late trading and market timing affected plan participants.

We reviewed one study from 2003 on late trading, which estimated its effect on the values of mutual funds. We also identified seven studies done between 1998 and 2003 on market timing, four of which estimated its effects on the values of different types of mutual funds. We reviewed the methodologies used in these studies and found that they are consistent with techniques that are generally accepted in the academic literature. The estimates of the effects of late trading and market timing on long-term shareholders should be interpreted with caution because of data limitations, small samples that may not be representative of the mutual fund sector, and assumptions that underlie the estimates. However, we believe that these studies serve a useful purpose in providing a general sense of the scale of late trading and market timing. Furthermore, the variance in the results of these studies illustrates the difficulty of determining the extent and effects of late trading and market timing.

To assess plan participants' potential exposure to abusive trading practices, we obtained data from two large pension plan record keepers, two of the largest mutual fund companies (who are also plan record keepers), and the Investment Company Institute on how defined contribution plan participants allocate their retirement savings among mutual funds. The information about asset allocations to different types of mutual funds by plan participants was fairly consistent among these studies. We reviewed the methodologies used in these studies and the consistency of their data, and we found the studies to be sufficiently reliable for the purpose of describing the average allocations of pension assets of plan participants.

[1]Plan record keepers include broker-dealers and insurance companies.

To explain the regulatory actions taken by SEC and DOL to address late trading and market timing, we interviewed SEC and DOL officials and reviewed documents from both agencies. To describe SEC's enforcement actions, we reviewed congressional testimony by SEC's Director of Enforcement and press releases from SEC and the New York State Attorney General's office and interviewed SEC officials. To describe new regulations either adopted or proposed by SEC, we reviewed the regulations and spoke with officials from SEC's Investment Management Division who have been involved in writing these regulations. To describe DOL's enforcement actions, we reviewed documents sent to us by DOL officials and interviewed these officials. To explain DOL's guidance to plan sponsors on the duties of plan fiduciaries in light of mutual fund trading abuses, we reviewed the guidance issued by DOL and interviewed DOL officials. We also spoke with representatives of plan sponsors, plan record keepers, and mutual fund companies to obtain their opinions about DOL's guidance.

To determine how defined contribution plan participants and pension plan service providers might be affected by SEC's rule proposals on late trading and redemption fees, we reviewed numerous comment letters submitted to the SEC. In addition, we interviewed representatives of mutual fund companies, pension plan record keepers, officials from the National Securities Clearing Corporation (NSCC), trade associations that represent mutual funds, plan sponsors, pension actuaries and life insurance companies, and officials from SEC and DOL. To assess how plan participants could be affected by an earlier deadline for the submission of mutual fund transactions, we reviewed information from plan record keepers and mutual fund companies about the types of mutual fund transactions that plan participants normally make during the course of a year. In addition, we obtained information about the mutual fund trading activity of plan participants in response to major events that resulted in significant increases or decreases in the values of major stock indexes.

We conducted our work between March 2004 and June 2004 in accordance with generally accepted government auditing standards.

Appendix II: Alternative Proposals to Eliminate Late Trading

While many mutual fund companies and intermediaries support SEC's goal of preventing unlawful trading in mutual fund shares, they have raised concerns about the Hard 4 proposal as a solution to illegal late trading and have suggested alternative solutions. These concerns center on the question of which entity or entities should be allowed to accept orders until the market closing time of 4:00 p.m. eastern time to receive the current day's fund price. One alternative solution, the "Smart 4" proposal, seeks to maintain the flexibility intermediaries currently enjoy of accepting fund orders until the market close and then processing and transmitting them sometime after the market close. A second alternative, the "Clearinghouse" proposal, would require all mutual fund orders to receive an electronic time stamp at a central location that would verify their time of receipt. All orders received at the central clearinghouse by 4:00 p.m. would receive same day pricing.

The Smart 4 proposal would require all companies that want to accept orders until the market close, and process them thereafter, to adopt a three-part series of controls: (1) electronic time stamping of all transactions so all trades could be tracked from the initial customer to the mutual fund company, (2) annual certifications by senior executives that their companies have procedures to prevent or detect unlawful late trading and that those procedures are working as designed, and (3) annual independent audits. The Smart 4 proposal has been advocated by most of the fund intermediaries that we spoke with. Representatives of intermediaries told us that they should be given an opportunity to prove that they can comply with the same policies and procedures as mutual fund companies in accepting and processing fund orders. Furthermore, many intermediaries assert that while SEC's Hard 4 proposal addresses intermediary processing of mutual fund orders, it does not go as far in seeking to prevent late trading at mutual fund companies. Currently, not all intermediaries are subject to SEC jurisdiction; therefore, under the Smart 4 proposal, any unregistered intermediary that forwards mutual fund orders to a fund company after the market close would have to consent to SEC inspection authority. However, SEC officials told us that they do not have the resources to examine the numerous unregulated intermediaries they would have to inspect to ascertain that adequate internal controls are in place to prevent late trading. To date, the Smart 4 proposal has been revised a few times, and representatives of retirement plan intermediaries told us that they are working on developing a more robust network of controls that would allow independent auditors to verify that intermediaries are complying with the laws that prohibit late trading.

The Clearinghouse proposal would require all mutual fund orders to be time-stamped electronically by an SEC-registered central clearing entity before the market close to receive that day's fund price. The clearing entity's time stamp would be considered the official time of receipt of an order for a mutual fund transaction. The National Securities Clearing Corporation is currently the only SEC-registered clearing agency operating an automated processing system for mutual fund orders.[1] The Clearinghouse proposal would expand the NSCC's role, capabilities, and capacity to handle all orders of mutual fund transactions. Each mutual fund company and fund intermediary would consider its technological capabilities and other factors in deciding how to meet the requirement of submitting orders to the NSCC by 4:00 p.m. in order to receive same-day pricing.

By requiring that all mutual fund transactions be processed through the NSCC, the Clearinghouse proposal seeks to ensure that companies that offer their own mutual funds do not gain an advantage over intermediaries that do not. By allowing record keepers to submit order information to the NSCC in two phases, the Clearinghouse proposal, like the Smart 4, would preserve the processing of fund transactions after the market close. First, before the market close, mutual funds and fund intermediaries would submit a fund order that must contain the information essential to establishing the customer's intent.[2] Some orders would require additional information not essential to establishing intent. Under the Clearinghouse proposal, the additional information could be submitted after 4:00 p.m. as long as the submission establishing intent is received by the NSCC before 4:00 p.m.

One major concern surrounding the Clearinghouse proposal is that intermediaries who do not currently use the NSCC's clearinghouse system may face significant costs in upgrading their computer systems and establishing a connection to the NSCC. SEC estimates that each year approximately half of all mutual fund orders are submitted directly to mutual funds through their transfer agents and the other half are

[1]The NSCC is a not-for-profit organization. Investment companies that use NSCC's clearinghouse service pay an annual membership fee plus 17.5 cents for each transaction they submit to the NSCC.

[2]The information required to establish intent includes the specification of the dollar value, amount, or percentage of fund shares to be transacted; whether the order is a purchase or redemption; identification information about the fund to be purchased or redeemed; the shareholder's account number; and an order identification number.

submitted to funds through the NSCC. Intermediaries and funds that do not currently use the NSCC would have to either establish a direct communications link to the NSCC or make arrangements with other mutual funds or intermediaries who would be willing to transmit their orders to the NSCC on their behalf. Some pension plan record keepers are concerned that the costs of establishing a direct connection to the NSCC would be unaffordable. Another concern about the Clearinghouse proposal is that the NSCC may not be able to handle the concentration of orders it would receive just prior to the market close. However, the NSCC's analysis indicates that its current system capacity is sufficient to handle the increase in transactions. Proponents state that a benefit unique to the Clearinghouse proposal is that it would allow plan record keepers and administrators to process plan participants' requests for exchanges between different fund families on the same day.

Appendix III: Comments from the Securities and Exchange Commission

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
INVESTMENT MANAGEMENT

June 30, 2004

Barbara D. Bovbjerg
Director
Education, Workforce, and Income Security Issues
U.S. General Accounting Office
441 G Street, NW
Washington, DC 20548

Re: GAO Draft Report (GAO-04-799)

Dear Ms. Bovbjerg:

Thank you for the opportunity to comment on the General Accounting Office's draft report addressing market timing, late trading, and their effects on pension plan participants' retirement savings. The report assesses the impact that late trading and market timing have had on the value of retirement savings of pension plan participants, describes the actions taken by the Commission and the Department of Labor to address these practices, and explains how plan participants may be affected by the Commission's proposed regulations. I commend the GAO for its thorough analysis of these very complicated, but important issues.

We share the concerns that GAO has identified in the draft report. In particular, we agree that pension plans play a significant role in the financial markets as a primary vehicle for investing savings in the economy, and that late trading and market timing have negatively affected pension plan participants and other long-term investors. As the report noted, the Commission staff is considering recommending modifications to the Commission's proposals that should mitigate against certain circumstances that could potentially adversely affect pension plan participants. In addition to evaluating comments on the rule proposals, we have spoken with representatives from mutual funds, insurance companies, and third party administrators and record keepers for pension plans in order to ensure that the recommendations we make to the

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Commission will effectively prevent abusive trading in mutual fund shares while minimizing costs to investors.

Thank you again for this opportunity to provide comments to the GAO as it prepares its final draft of the report.

Sincerely,

Paul F. Roye
Director

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