



Hands-off: Holders of 401(k) Retirement Accounts Are Not Your Typical Investors

Published : March 08, 2006 in [Knowledge@Wharton](http://knowledge.wharton.upenn.edu)

With \$2.5 trillion invested in 401(k) retirement accounts, 60 million Americans control a powerful chunk of cash. So how much attention do investors pay to this vast pool of savings?

Not much.

According to a new Wharton analysis of retirement accounts managed by The Vanguard Group in 2003 and 2004, participants in 401(k) plans made little effort to tend their defined-contribution plans once they were set up: 80% of participants made no trades at all in the time period, while another 10% made only one trade. Even among those who did trade regularly, turnover rates were one-third that of professional money managers.



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[Olivia S. Mitchell](#), executive director of Wharton's Pension Research Council, Stephen P. Utkus, principal, Vanguard Center for Retirement Research, Gary Mottola, a Vanguard Center researcher, and Takeshi Yamaguchi, a Wharton doctoral student, present their findings in a paper entitled, "The Inattentive Participant: Portfolio Trading Behavior in 401(k) Plans."

"When it comes to managing their portfolio on an ongoing basis," says Utkus, "participants are otherwise occupied." Mitchell, who is also a professor of insurance and risk management, says the inertia uncovered by the study indicates some positive signs about retirement savings behavior, as well as some concerns.

For example, participants show no inclination to engage in risky trades based on market timing or other short-term strategies. "To me, it was comforting to show that most people don't day-trade in their pension plans," says Mitchell, adding that studies indicate investors trading through brokerage accounts tend to buy high, sell low, and spend a great deal on commissions. "Our finding of low turnover in pension accounts builds confidence in the ability of 401(k) participants to invest for the long run." The paper cites 2000 research showing that active traders using brokerage accounts had returns of 11.4%, compared to 16.4% for all households and 17.9% for the market overall.

At the same time, the authors point to potential problems with maintaining a totally hands-off approach to 401(k) investing. Such a "no involvement" attitude can leave portfolios out of balance if market conditions shift. Inertia investing might also leave the plan out of sync with projected retirement age targets. "Inattentive participants could get into trouble if they fail to rebalance their accounts from time to time," Mitchell cautions. For example, during the study period, the Standard & Poor's 500 index rose 43%, which would have shifted portfolio holdings heavily toward equities if there were no adjustments. That can be good when the stock market is soaring, but people close to retirement are typically advised to concentrate an ever increasing part of their portfolio on more stable, lower-risk investments, such as bonds.

The researchers plan to do additional work on the study and could find problems at both ends of the trading spectrum. "We will probably show that the portfolio risk of the participant who didn't trade

increased, and the returns for the traders were lower because they were fiddling around too much," says Utkus. "Both extremes are a problem. In general, we would like to see people trade once a year, or every other year, to keep their portfolio in balance."

Mitchell, who is also executive director of Wharton's Pension Research Council, says the study, which examined the accounts of 1.2 million participants in 1,500 pension plans, is the first large-scale look at trading patterns in 401(k) accounts. These defined-contribution plans now have more assets than traditional defined-benefit pension plans. "Despite the central importance of the defined contribution pension model, there has been remarkably little microeconomic research on how individuals make their asset allocation decisions and trade in their retirement portfolios," says Mitchell.

The average plan participant in their sample has an account balance of \$86,000, is 44 years old, has been on the job for eight years, and has an average household income of just over \$88,000, according to the research paper.

The reasons behind the lack of active participation in 401(k) investing are not obvious. "While it is clear that most participants are inattentive to their portfolios, it remains to be seen whether this inactivity is motivated by rational choice, based on the long-term nature of pension assets, or whether it signals inertia, implying that participants would require additional assistance to manage their portfolios," according to the paper.

Failing to Learn from Enron

One factor that plays an important role in 401(k) trading patterns is company stock, the report noted. "The good news for those interested in retirement security is that most workers tend to buy and hold their pension portfolios," says Mitchell. "On the other hand, plan sponsors should realize that certain plan design features, notably the presence of company stock, can spur trading, even after controlling for other factors." Indeed, the paper states, "perhaps the most significant factor influencing trading is the presence of company stock in the plan investment menu." The probability that a participant will trade is more than 10% higher if company stock is offered.

While 15% of plans offer employer stock, those tend to be the larger firms with a bigger employee base. As a result, 52% of the participants in the database studied have access to employer stock and about one-third, or 32%, hold an employer's stock in their 401(k) plan.

Prior research by Mitchell and Utkus has indicated that employees tend to be more likely to buy and sell their own company's stock because they feel they have "inside information" about the firm's prospects. And, Utkus adds, employees continue to invest heavily in company stock, despite the danger of becoming too dependent on their employer as a source of income and a retirement savings vehicle. Even after learning how employees at Enron Corp. were financially wiped out after the company collapsed, many investors still hold too much company stock, says Utkus.

The study did reveal new information about the demographic make-up of those who trade 401(k) investments frequently. Active traders who made more than six transactions in the two-year period accounted for just 2% of the participants. These participants are overwhelmingly male, white, older, have more assets, and have worked a longer time on their jobs than their counterparts, says Utkus. The lesson in these data, he notes, is that plan sponsors with a high number of employees who fit the active-trader profile may want to take that into account when designing plans or developing employee-education materials.

Mitchell says the results of this study line up with other research that shows women are less likely to actively manage their investments. "That can often be a sensible strategy," says Mitchell. "Whether it's attributable to women being more risk averse, or having greater understanding of trading costs, remains to

be investigated."

Not Big on Borrowing

The average plan reviewed in the study has 776 active participant accounts with assets of \$38.4 million; while it offers over 17 investment choices, plan participants use only 3.5 of the available options. Almost all participants have access to equity index funds (99%) and international funds (98%), but only half of the workers (53%) actually invested in equity funds and only one-fifth (20%) chose international options.

The research also indicates that offering more funds does not increase the level of active trading, whereas including a brokerage option does. "Offering a brokerage option within the 401(k) plan has a large impact on trading activity and turnover rates, though the impact in practical terms is still small since only 3% of participants are currently offered such an option," the report states. "We measure trading only in the non-brokerage component of the 401(k) account. Part of this higher trading may be due to greater movement among the regular fund options in the account; another part is likely due to the movement of money from these regular fund options to the brokerage feature."

One additional finding that suggests either inertia or caution is that, while 85% of participants have access to a 401(k) loan feature, only 11% have a loan outstanding.

The researchers also examined patterns of Internet use in participant management of their 401(k) plans. Of those plan participants studied, one-third (37%) had registered to access their accounts on the Internet as of January 2003. People with web access traded more frequently. They were three times more likely to trade at all, and nine times more likely to be active traders. "What we could not tell is if the people who go to the web are traders, or whether the web itself creates traders," Utkus says.

Mitchell and Utkus plan to continue working with the Vanguard data to gain additional insights into the behavior of 401(k) participants. For now, there are already some implications for fund managers and others involved in retirement security. "One interpretation is that the portfolio inertia identified here suggests that participants may require additional help managing their portfolios," the paper states.

Utkus notes there are tools emerging to help investors manage their 401(k) holdings better. One option is lifecycle funds, which are structured to reallocate assets as the participant comes closer to retirement. Some plans also offer automatic rebalancing services, which reallocate assets to maintain a balance determined by the participant. A third option is to create managed accounts, which reallocate for a fee.

"Automatic rebalancing services, lifecycle funds, and managed accounts can be useful in ensuring that sensible portfolio management takes place on a disciplined schedule -- whether in 401(k) plans, public sector defined-contribution pensions, or even in a reformed Social Security system with private accounts," the authors write. Increased use of any of those tools would raise aggregate turnover rates, they add, given that the current rate for most participants is zero.

Mitchell also suggests that plan sponsors might want to consider the cost of active traders on pension plans as a whole and enact remedial policies targeted to traders. "While only a few 401(k) plan participants actively trade their accounts, such behavior can raise transaction costs for all participants, and their activities may be disruptive to portfolio managers."

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