Testimony for the
House Education and Labor Committee

The Impact of the Financial Crisis
on Workers’ Retirement Security

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Impact of the Current Financial Crisis on Retirement Security
By Jack VanDerhei, EBRI

Mr. Chairman and members of the committee, thank you for your invitation to testify today on the impact of the financial crisis on retirement security. I am Jack VanDerhei, research director of the Employee Benefit Research Institute. EBRI is a nonpartisan research institute that has been focusing on retirement and health benefits for the past 30 years. EBRI does not take policy positions and does not lobby.

Although there is no clear definition of the time period for the “current financial crisis,” this testimony defines it as the first nine months of 2008. During that time, major equity indexes were negative, with the S&P 500 Index losing 19.29 percent. Fixed-income investments fared much better during this period, with the Lehman Aggregate Index gaining 0.63 percent and three-month T-bills gaining 1.54 percent.

The impact of the current financial crisis on defined benefit (pension) plans is impossible to quantify, but it is obvious that a marked reduction in funding ratios and/or increase in volatility may make continued sponsorship of these plans less attractive under some forms of pension accounting modifications. Moreover, the Pension Protection Act of 2006 (PPA) has established specific restrictions with respect to freezing of accruals, plan amendments and lump-sum distributions as a function of funding ratios. Recent estimates from Watson Wyatt projected that pension plans would be 84 percent funded as of Sept. 24, down from 91 percent in the second quarter.\(^1\)

Considerably more is known about the immediate impact of the current financial crisis on defined contribution plan (primarily 401(k)) participants. It should be emphasized that while older employees have average equity allocations that are lower than their younger counterparts (and hence are thought by some to be less vulnerable to negative returns in the equity markets), their average account balances are significantly larger and therefore have more to lose in a significant downturn.

Research has shown that a worker’s age is a major factor in his or her ability to recover from an economic downturn. Holden and VanDerhei (2002) simulated the likely impact of a major bear market—defined as three consecutive years of a –9.3 percent annual return—on the overall (nominal) replacement rates that could be provided by “401(k) accumulations” as a function of when the downturn occurred during the employee’s tenure with the plan sponsor.

Based on a median replacement rate of about 51 percent of final income, the modeled three-year downturn would result in a lower replacement rate for 401(k) participants in the lowest-income quartile of only –3.2 percentage points at the beginning of their career, or –7.5 percentage points for those in mid-career (ages 39–41), or –13.4 percent for those at the end of their career.\(^2\)

However, building and/or modifying a simulation model that is able to quantify the likely impact of a market downturn on eventual retirement income is a lengthy process. Consequently, attention is typically focused on how a decline in the financial markets has impacted the average defined contribution plan balances. For purposes of this testimony, EBRI has taken the most recent information in the EBRI/ICI 401(k) database (year-end 2006) and used employee-specific information as well as financial market indexes\(^3\) to estimate the percentage change in average account balances among the 2.2 million

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\(^1\)“DB plan funding and DC allocations steady,” Pensions and Investments, Sept. 29, 2008.

\(^2\)For 401(k) participants in the highest income quartile, the median replacement rate decreased by 3.7 percentage points if the market downturn would occur at the beginning of the career. The decrease was estimated to be 10.4 percentage points if it took place at the middle of the career. If the market downturn took place at the end of the career, the estimated decrease was 17.7 percent. These percentage point decreases for this group were based on a median replacement rate of 67.2 percent of final income, assuming a regular stochastic simulation of equity returns.

\(^3\)For purposes of this analysis, investment returns were proxied by one of the following three index returns: S&P 500 Index, Lehman Aggregate Index or three-month T-bills. These asset classes were assumed to have fees of 45, 45 and 75 basis points, respectively.
401(k) participants present from year-end 1999 through year-end 2006, by age and tenure for three different periods:

- January 1, 2008, through October 1, 2008 (Figure 1);
- January 1, 2007, through October 1, 2008 (Figure 2); and
- January 1, 2000, through October 1, 2008 (Figure 3).

This “consistent sample” of 401(k) participants was created several years ago in the annual analysis of EBRI/ICI 401(k) data to provide an estimate of changes in average annual account balances that was not biased downward by job turnover of 401(k) participants.

For this analysis, contributions in 2007 and the first nine months of 2008 were assumed to be equal to the participant’s 2006 contributions, adjusted for changes in average national wage during that period. Loan and withdrawal behavior were estimated based on 2006 experience for similar employees. These estimates will be biased if asset allocation of current contributions, or contribution, loan or withdrawal behavior has changed since 2006 (presumably in response to the fluctuations in the financial markets).

However, Hewitt Associates, LLC, has recently stated that participants “appear to be taking a long-term investment strategy for their 401(k) retirement assets by choosing an asset allocation and staying with it,” and that net transfer activity was “consistently low.”4 Fidelity has also reported that participants did not increase their borrowings from 401(k) accounts in 2007 and the first half of 2008.5 However, hardship withdrawals are on the rise in the first half of 2008 compared with the first half of 2007.6

Figure 1 shows that for the first nine months of 2008, the percentage loss in average account balances among 401(k) participants in the consistent sample varies from a low of –7.2 percent for the oldest cohort (age 56–65 in 2006) with the shortest tenure with the 401(k) sponsor (six to 10 years in 2006), to a high of –11.2 percent for the youngest cohort with 21–30 years of tenure. The reason that this particular group has the lowest average loss is a function of the reduced equity exposure they take (on average), as well as the larger ratio of contributions to account balance given their relatively short tenure. The group with the largest average loss is those young enough to still have a relatively large equity exposure in their accounts, compared with the others in the long-tenure cohort.

Figure 3 broadens the time span under analysis and shows that, even with the financial market setback suffered so far in 2008, the percentage change in average account balances from January 1, 2000, through October 1, 2008, was significantly positive for all groups and all age cohorts in the two shortest-tenure categories to have at least doubled their account balances (in nominal terms). The largest increase was again experienced by the group with the youngest workers and shortest tenure (706 percent), in large part due to greater weight of their contributions as compared with investment earnings or losses. Those having the lowest increase were the oldest workers with the longest tenure (55 percent); however this number needs to be interpreted carefully in light of the ability of many employees to start taking in-service distributions from their plans at age 59-¹⁄₂.

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Figure 1
Change in Average Account Balances Among a Consistent Sample of 401(k) Participants, by Age and Tenure, \(^a\) Jan. 1, 2008–Oct. 1, 2008

2007 and 2008 Account Balances: EBRI estimates. The analysis is based on a consistent sample of 2.2 million participants with account balances at the end of each year from 1999 through 2006.

\( ^a \) Age and tenure groups are based on participant age and tenure at year-end 2006.

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Figure 2
Change in Average Account Balances Among a Consistent Sample of 401(k) Participants, by Age and Tenure, \( ^a \) Jan. 1, 2007–Oct. 1, 2008

2007 and 2008 Account Balances: EBRI estimates. The analysis is based on a consistent sample of 2.2 million participants with account balances at the end of each year from 1999 through 2006.

\( ^a \) Age and tenure groups are based on participant age and tenure at year-end 2006.
Additional Research Needed to Better Understand How the Financial Crisis is Affecting 401(k) Participants

The primary reason for using the consistent sample as the basis for analysis in the preceding section is the current inability to track workers as they move from one 401(k) sponsor to another, and/or to follow their retirement assets if the 401(k) assets are rolled into an IRA. EBRI is currently in the process of enhancing our research capabilities to allow this kind of data to be captured. This will allow linking of accounts across data providers within our universe of individual account plans, resulting in a more complete and accurate retirement picture—such as measuring the effect of rollovers, multiple accounts, job turnover, account leakage, etc.

Another research topic that is urgently needed to better understand the vulnerability of 401(k) participants to volatility in the equity markets deals with the topic of target date funds. Figure 4 shows for the consistent sample described above the asset allocation distribution of 401(k) participant account balances to “equity” by age, as of December 31, 2006. Equity in this figure is defined as the percentage of the participant’s 401(k) funds in equity funds, company stock and the equity portion of balanced and/or target date funds. The figure shows that 43 percent of young 401(k) participants (those 35 or younger in 2006) have 90 percent or more of their 401(k) assets in equities (broadly defined). Another 15 percent of this cohort have 80–90 percent of their assets allocated in this fashion, and another 11 percent have 70–80 percent allocated to equities.

Although many asset allocation models and/or financial advisors may suggest that extreme concentrations to equities for the young cohorts would be acceptable, it is less certain that those approaching retirement would receive similar recommendations. Nevertheless, Figure 4 shows that more than 1 in 4 (27 percent) of the oldest 401(k) participants (age 56-65 in 2006) had 90 percent or more of their 401(k) assets in equities. Another 11 percent had 80-90 percent in equities, and 10 percent had 70–80 percent in equities.

Target date funds with automatic rebalancing and a “glide path” ensuring “age-appropriate” asset allocation are likely to become much more common after full implementation of PPA, with the expected increase in automatic enrollment for 401(k) plans and the attendant interest in QDIAs. Based on unpublished EBRI research, the average equity allocation for target date funds designed for individuals in the 56–65 age range was 51.2 percent at year-end 2006. That would imply that approximately one-half of the consistent sample participants in the age 56–65 age category would have had at least a 20 percent reduction in equities at year-end 2006 if they were allocated 100 percent to target date funds.7

EBRI is currently conducting an analysis of target-date funds for defined contribution plans. This project will incorporate three distinct, but interrelated, phases. The first phase will provide an empirical analysis of the use of target-date funds in 401(k) plans. The second phase will focus on a conceptual analysis of the optimal construction of target-date accumulation principles for defined contribution plan participants, including the extension of these principles into the decumulation phase. The third phase will include an empirical analysis of the choice of target-date funds by plan sponsors and correlates with employee demographics and plan design variables. Hopefully, the additional insights generated by this research will assist in providing a more informed asset allocation for those nearing retirement age.

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7 It is possible that some of these participants were invested in company stock via employer matching contributions that were not able to be diversified.
Figure 3
Change in Average Account Balances Among a Consistent Sample of 401(k) Participants, by Age and Tenure, Jan. 1, 2000–Oct. 1, 2008

Sources: 1999 and 2006 Account Balances: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project. 2007 and 2008 Account Balances: EBRI estimates. The analysis is based on a consistent sample of 2.2 million participants with account balances at the end of each year from 1999 through 2006.

*Age and tenure groups are based on participant age and tenure at year-end 2006.

Figure 4
Dec. 31, 2006 Asset Allocation Distribution of 401(k) Participant Account Balances to “Equity,” by Age

"Equity" is defined as equity funds + company stock + the relevant portion of balanced and target date funds

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project. The analysis is based on a consistent sample of 2.2 million participants with account balances at the end of each year from 1999 through 2006.