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EXECUTIVE SUMMARY

Investment Behavior of Target-Date Fund Users Having Other Funds in 401(k) Plan Accounts

WHY TARGET-DATE FUNDS ARE IMPORTANT: Target-date funds (TDFs) are designed to simplify retirement plan asset allocation as an “all-in-one” investment option, which automatically rebalances the account to a mix of asset classes that are more conservative as the investor ages. Because of recent legislative and regulatory inducements, they are rapidly growing as an investment in 401(k) retirement plans, and about 7 percent of all 401(k) assets are currently invested in TDFs.

MIXED TDF USERS: As TDFs grow, a new class of 401(k) investor is emerging: “mixed” target-date fund users who hold the funds in combination with other non-TDF funds in the plan menu.

LACK OF UNDERSTANDING OF TDFS: This study shows that some mixed TDF investors apparently fail to understand either the purpose or the benefit of a TDF designed as an “all-in-one” portfolio solution. However, holding TDFs with other funds could lead to an unexpected result of ending up with a potentially inferior portfolio in terms of risk/return tradeoff from more assets allocated to some sectors than the designers of the target date funds had planned.

What Do We Know About Enrollment in Consumer-Driven Health Plans?

WIDE-RANGING ESTIMATES: Since consumer-driven health plans (CDHPs) were first offered in 2001, estimates of how many workers would be enrolled in these plans has varied widely. The U.S. Treasury Department has predicted that 25–30 million people would be covered by a health savings account (HSA)-eligible plan and would have an account by 2010.

CURRENT RANGE OF ESTIMATES: This article summarizes the literature on CDHP offer rates and enrollment. The percentage of employers offering CDHPs has gone from virtually none in 2000 to 12 percent in 2009. Based on the various sources of data on enrollment in health reimbursement arrangements (HRAs) and HSA-eligible plans, it appears that 15–19 million people were enrolled in these plans in 2009, representing 9–11 percent of the privately insured market.

Investment Behavior of Target-Date Fund Users Having Other Funds in 401(k) Plan Accounts

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Introduction

Target-date funds (TDFs) are designed to simplify retirement plan asset allocation as an “all-in-one” investment option in retirement plans, automatically rebalancing an individual’s account to a mix of asset classes that become more conservative as the investor ages. Because of recent legislative and regulatory inducements—notably the U.S. Labor Department’s approval of them as a qualified default investment alternative in 401(k) retirement savings plans—they are rapidly growing as an investment in 401(k) retirement plans.

According to the most recent data from the EBRI/ICI 401(k) database, the largest of its kind, nearly 7 percent of 401(k) assets in the database were invested in TDF funds at year-end 2008. Among participants in their 20s, 15 percent of their 401(k) assets were invested in TDFs, while among participants in their 60s, almost 6 percent of their 401(k) assets were invested in the funds.¹

As TDFs are offered to plan participants (on either a default or voluntary basis), however, a new class of investors is emerging: TDF users who hold the funds in combination with other funds in the plan menu.² TDF users holding other funds (referred to as “mixed” TDF investors) are usually distinguished from those investing only in TDFs (referred to as “pure” TDF investors).

Pure TDF users are more likely to be younger or lower-salary participants who are automatically enrolled into target-date funds (Copeland, 2009; Mitchell et al., 2009). Meanwhile, mixed TDF users are likely to be middle-income and middle-wealth participants (Mitchell et al., 2009). Mixed TDF users accounted for about 55 percent of the participants holding TDFs in their accounts as of the end of year 2007 (Copeland, 2009).

Because TDFs offer a mechanism (the “all-in-one” portfolio) to diversify asset allocations and rebalance over time based on a defined target-date horizon, participants who lack financial literacy or desire to use institutional expertise in asset allocation and portfolio rebalancing may benefit from investing in these funds. However, holding TDFs with other funds could lead to an unexpected result of ending up with a potentially inferior portfolio in terms of risk/return tradeoff from more assets allocated to some sectors than the designers of the target date funds had planned. Thus, an examination of investment behavior of TDF users holding other funds in 401(k) plans can help policymakers and retirement plan sponsors understand how the TDF investors are actually using this relatively new investment product.

This study examines how mixed TDF users utilize other funds (except TDFs) in their 401(k) plan menu. In order to minimize the effects of plan menu design on participants’ investment behavior, this analysis constructs a sample from the EBRI/ICI 401(k) database of plans offering six fund categories including TDFs: equity funds, bond funds, non-TDF balanced funds, money market funds, and guaranteed investment contracts (GICs)/stable-value funds. However, the sample does not include plans offering company stock.³

Overall, this analysis finds that some mixed TDF investors apparently fail to understand that a TDF is designed as an “all-in-one” portfolio solution. For instance, mixed TDF users are more likely to hold multiple TDFs than are pure users who invest only in TDFs, and low-level mixed TDF users (who invest less than half of their account balances in the funds) are more likely to use two or more TDFs than are high-level mixed users (who invest more than half their balance in the funds). Last, mixed users holding relatively aggressive TDFs for their age group (such as someone in their 50s investing in 2050 funds) are more likely to actively invest in equity funds than those following the age-specific investment rule.

Data and Sample

This study examines a sample from the 2008 EBRI/ICI 401(k) database looking at plans having at least 10 participants and offering any target-date funds in 2008. The sample includes participants between ages 20–69 with an account balance of between \$10,000 and \$250,000 as of year-end 2008 (the lower bound on the account balance minimizes possible effects of a plan design feature related to automatic enrollment with TDFs on investment behavior of mixed TDF users).⁴ In addition, because the study examines investment behavior of TDF users, the sample excludes participants who have no TDFs. In the study, “non-TDF” users are defined as those investing less than 1 percent of their account balance in TDFs. The resulting sample, filtered from the 2008 EBRI/ICI 401(k) database, consists of 759,314 TDF users from 13,815 401(k) plans.

Usage of Target-Date Funds

This study differentiates mixed TDF users from pure TDF users by account balance share at year-end 2008. Specifically, mixed TDF users are defined as those whose TDFs account for at least 1 percent of their account balances but no more than 99 percent, while pure TDF users are those whose funds account for more than 99 percent.

Investments of mixed TDF investors may reflect either naïve decision-making or rational decisions. Some mixed TDF users may naively seek to diversify their portfolios by adding TDFs to other funds, failing to understand TDFs as an “all-in-one” portfolio solution. In contrast, other mixed investors may consciously combine TDFs with other funds, following their own investment strategy, such as a “core/satellite” approach. Under this approach, participants add other funds to a core holding of the target-date funds (Vanguard, 2008).⁵

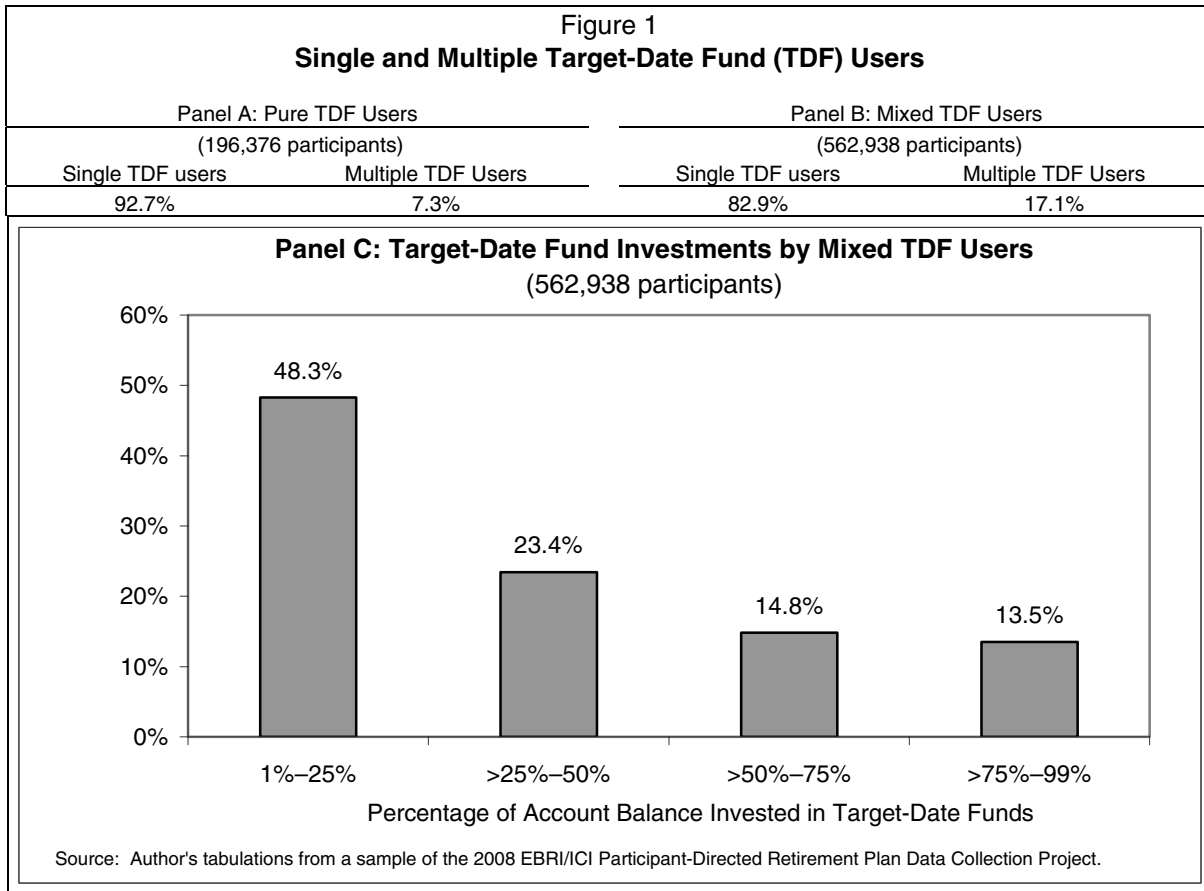
Figure 1 presents overall usage of TDFs from the sample of TDF investors. Key points:

- First, for TDF users between ages 20–69 and having \$10,000–\$250,000 in their accounts, the number of mixed TDF users was greater than that of pure users.
- Second, mixed TDF users may have different preferences with respect to TDF investments. For example, some users invest less than 25 percent of their account balances in TDFs, while others invest more than 75 percent. Panel C of Figure 1 illustrates the distribution of mixed TDF investors by percentage of account balances invested in TDFs. Nearly half of the mixed users are lower users who hold TDFs accounting for 1–25 percent of their account balances. However, considering that a TDF is designed to be an “all-in-one” solution, holding TDFs with other funds tends to defeat TDF’s goal of automatic age-appropriate asset diversification, and could lead to unintended asset allocation.

Two recent surveys, by AllianceBernstein (2009) and Janus Capital Group (2009), find that the majority of the mixed TDF users believe a TDF needs to be combined with other funds to achieve a diversified portfolio. For example, AllianceBernstein finds that 58 percent of the TDF investors don’t want “all of my eggs in one basket [a target-date fund].” Similarly, Janus Capital Group finds that 63 percent of the TDF investors say the same thing.

Some TDF investors hold two or more TDFs, instead of a single one. Mixed TDF users are more likely to use two or more TDFs than are pure TDF users. Only 7 percent of pure users hold two or more TDFs, while 17 percent of mixed users do so (Panels A and B of Figure 1). Furthermore, low-level mixed users who invest half or less of their account balance in TDFs are more likely to hold two or more TDFs than high-level users investing more than half of their balance in TDFs. More than 73 percent of mixed users holding multiple TDFs are the low-level users (Figure 2).

TDF users holding multiple TDFs could have misconceptions about the funds. For example, according to the Janus Capital Group survey (2009), 70 percent of the TDF users cited “not knowing the year to retire” as a reason for holding two or more TDFs, and 61 percent said it was “a bad idea to put all my eggs in one basket [a target-date fund]” as a reason. In fact, target-date funds base their investment allocations on a specific date of retirement (usually reflected in the date name of the fund), and are designed to provide a single, simple, age-appropriate investment that provides automatic diversification and rebalancing of assets.



Asset Allocations of Mixed Target-Date Fund Investors

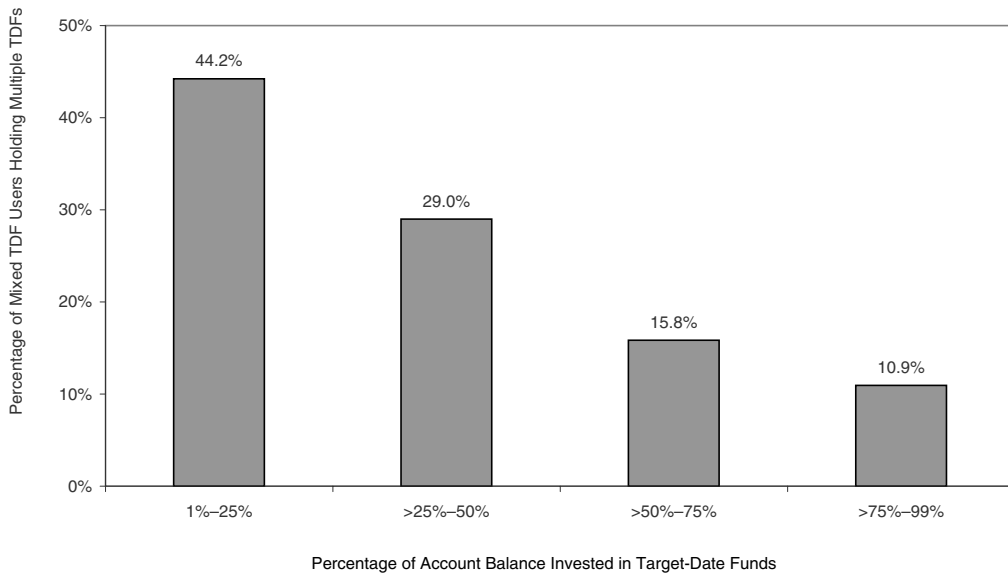
To further investigate investments of mixed TDF users, this study constructed a subset of the sample to include plans offering six fund categories, including TDFs: equity funds, bond funds, non-TDF balanced funds, money market funds, and GICs or stable value funds. However, the subsample does not include the plans offering company stock. This selection procedure intends to minimize the effects of plan menu design on participants' investment behavior. The subsample excludes participants who did not invest in any of the six fund categories (including TDFs) in 2008.

Figure 3 illustrates how mixed TDF investors of the subsample utilize TDFs. A majority of mixed investors (holding either a single or multiple TDFs) do not actively use TDFs, investing 25 percent or less of their balances in the funds. The lower users account for about 60 percent of mixed TDF users holding a single TDF and about 53 percent of mixed users holding multiple TDFs.

What other funds do mixed TDF users invest in? Mainly, they combine TDFs with equity funds. Figure 4 presents the average number of other funds held (except TDFs) by mixed investors. Mixed TDF investors hold, on average, five other funds, including three equity funds. Funds providing stable returns, such as GICs/stable value or money market funds, are next. Low-level users tend to use more "other" funds than high-level users. For example, the lower users (investing up to 25 percent of their account balances in TDFs) hold six funds on average, while the higher users (who invest 75–99 percent of their balances in TDFs) hold two funds (in addition to TDFs).

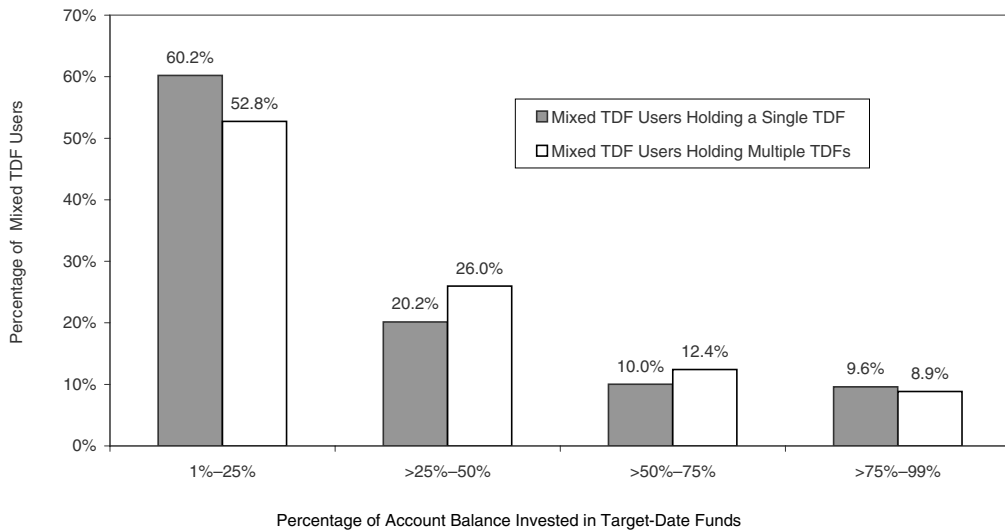
The distribution of account balances invested in other funds also shows that mixed TDF investors mainly combine equity funds with TDFs. Figure 5 shows asset allocations of mixed investors to other funds, excluding TDFs. For mixed users, equity funds account for 48 percent of their account balances (on average) excluding TDFs, while GICs/Stable value or money market funds account for 29 percent.

Figure 2
Target-Date Fund Investments, by Mixed Users
Holding Two or More Target-Date Funds
 Number of mixed users holding multiple TDFs = 96,104



Source: Author's tabulations from a sample of the 2008 EBRI/ICI Participant-Directed Retirement Plan Data Collection Project.
 Note: Percentages do not add to 100 percent because of rounding.

Figure 3
Target-Date Fund Investments, by Mixed Target-Date Fund Users
 (A Subset of the Sample)



Source: Author's tabulations from a subset of the sample of the 2008 EBRI/ICI Participant-Directed Retirement Plan Data Collection Project.
 Note: Percentages do not add to 100 percent because of rounding.

Figure 4					
Average Number of Other Funds Held Except Target-Date Funds, by Mixed Users					
(A Subset of the Sample)					
Funds	Total	Low TDF users		High TDF users	
		1%-25%*	>25%-50%*	>50%-75%*	>75%-99%*
(number of funds held)					
Equity	3.2	4.0	2.7	2.0	1.3
Bond	0.4	0.5	0.4	0.2	0.1
Non-TDF balanced	0.6	0.8	0.5	0.3	0.2
GIC/Stable value or Money Market	1.0	1.1	0.8	0.7	0.7
Other	0.1	0.1	0.1	0.1	0.1
Total number of other funds held	5.4	6.6	4.5	3.3	2.3
Source: Author's tabulations from a subset of the sample from the 2008 EBRI/ICI Participant-Directed Retirement Plan Data Collection Project.					
* Percentage of account balances invested in target-date funds.					

However, as shown in Panels A and B of Figure 5, the average and median percentages show significant deviation between them, which indicates that the average percentage is significantly affected by some large values. Therefore, the median (mid-point) percentage is a better measure to describe the distributions of asset allocations by mixed investors.

The median percentage distributions presented in Panel B seem to show that higher users investing 75–99 percent in TDFs are less likely to hold equity funds than other users, while the mixed users who invest 50–75 percent in TDFs are less likely to hold GICs/stable value or money market funds than others. However, investors' age should be taken into account when examining asset allocations, because target-date fund, equity fund, and stable-value fund investments are typically associated with age.

Since most mixed TDF users hold equity and/or stable return funds (e.g., GICs/stable value or money market funds), analysis of their asset allocations focuses on these two fund categories. Figure 6 presents asset allocations of mixed investors in equity, GICs/stable value, or money market funds by investors' age and by low/high TDF users. The percentages reported in the figure are calculated by using the account balances excluding TDFs, as in Figure 5. Panels A and B show the median percentage of equity funds and stable return funds, respectively.

The data show that equity fund holdings decrease and stable return funds increase as the investors become older (the second column of each panel), as would be expected. Also as expected, high-level users of TDFs (investing more than half of their assets in TDFs) are likely to have more equity exposure than low-level users (investing half or less in TDFs).⁶ In contrast, high-level mixed users in their 20s or 30s are less likely to hold stable return funds than are low-level users. In particular, mixed users who invest 50–75 percent of their balances in TDFs are less likely to hold stable return funds than other types of users across all age cohorts.

A fundamental assumption of target-date fund investors is that they will follow the age-specific basis that underlies this type of investment: Individuals will select the fund with a date close to their expected retirement. That is why target-date funds typically have a date—the target retirement date—in their names. However, some mixed TDF users do not follow the rule. Figure 7 presents asset allocations of mixed users holding a single TDF to equity and stable return funds by age and TDF investments, and shows the following points:

First, although most mixed users invest in TDFs follow the age-specific rule for target-date funds, some users near retirement (in their 50s or 60s) invest in TDFs that are not closely related to their expected retirement age.⁷ For example, some mixed users in their 50s or 60s hold more aggressive 2040 or 2045 funds, instead of more conservative and age-appropriate 2010 or 2015 funds, given that they are 15 years or less away from normal retirement age.

Figure 5
Asset Allocations of Mixed TDF Investors, by Fund Categories
(a Subset of the Sample)
(Percentage of Account Balances Excluding TDFs)

Panel A: Average Percentage					
Funds	Total	Low TDF users		High TDF users	
		1%-25%*	>25%-50%*	>50%-75%*	>75%-99%*
Equity	48.4%	48.2%	50.0%	49.6%	44.3%
Bond	8.8	9.6	9.1	7.1	5.1
Non-TDF balar	10.6	11.5	11.0	9.2	5.6
GIC/Stable value or Money Market	29.4	27.6	27.1	31.5	43.5
Other	2.9	3.1	2.9	2.6	1.4

Panel B: Median (Mid-Point) Percentage					
Funds	Total	Low TDF users		High TDF users	
		1%-25%*	>25%-50%*	>50%-75%*	>75%-99%*
Equity	49.2%	49.2%	51.3%	49.7%	35.4%
Bond	0.0	0.0	0.0	0.0	0.0
Non-TDF balar	0.0	0.5	0.0	0.0	0.0
GIC/Stable value or Money Market	13.6	15.1	8.0	3.1	17.9
Other	0.0	0.0	0.0	0.0	0.0

Source: Author's tabulations from a subset of the sample from the 2008 EBRI/ICI Participant-Directed Retirement Plan Data Collection Project.
* Percentage of account balances invested in target-date funds.

Figure 6
Asset Allocations of Mixed TDF Investors, by Age
(a Subset of the Sample)
(Percentage of Account Balances Excluding TDFs by Fund Categories)

Panel A: Equity Funds: Median (Mid-Point) Percentage					
Age	Total	Low TDF Users		High TDF users	
		1%-25%*	>25%-50%*	>50%-75%*	>75%-99%*
20-29	65.9%	65.9%	67.6%	58.6%	69.0%
30-39	59.5	60.1	59.5	59.3	49.2
40-49	50.4	50.4	52.7	53.2	34.3
50-59	40.8	41.0	43.3	40.1	25.3
60-69	31.1	30.7	35.6	32.8	13.0

Panel B: GICs/Stable Value Funds, Money Market, or Both: Median Percentage					
Age	Total	Low TDF users		High TDF users	
		1%-25%*	>25%-50%*	>50%-75%*	>75%-99%*
20-29	4.6%	8.7%	0.0%	0.0%	0.0%
30-39	8.4	10.5	2.8	0.0	1.0
40-49	12.0	13.9	4.6	1.5	21.7
50-59	19.0	20.7	15.7	8.9	33.1
60-69	26.4	28.7	19.5	19.0	38.2

Source: Author's tabulations from a subset of the sample from the 2008 EBRI/ICI Participant-Directed Retirement Plan Data Collection Project.
* Percentage of account balances invested in target-date funds.

In addition, mixed users (except those in their 20s) holding relatively aggressive TDFs (e.g., 2050 funds, which would be allocated strongly to equities) given their ages are likely to also more actively invest in equity funds than those following the TDF age-specific investment rule.

Second, the median percentages of equity funds are similar across typical TDF investments (shaded cells in Figure 7), although there are some variations among the higher-level users investing 75–99 percent in TDFs. The similar median percentages of equity funds indicate that high-level TDF users are likely to have more equity exposure than low-level ones.

Third, mixed users in their 50s or 60s who hold more aggressive 2040 or 2045 target-date funds tend to invest more in equity funds than do those holding more conservative 2020 or 2025 funds. Furthermore, this investment pattern is stronger among high-level TDF users than low-level ones. Whether these investments reflect a conscious risk tolerance for high-equity investments or misconceptions about target-date funds is a subject for future study.

Finally, high-level TDF users are less likely to use GIC/stable-value or money market funds than low-level users (Panel B, Figure 7). Whether a TDF is regarded among high-level TDF users as a substitute for one providing stable returns is another subject for a future study.⁸

Conclusion

Target-date funds are an important and growing investment option in 401(k) retirement plans, and are giving rise to a new class of 401(k) investor: “mixed” target-date fund users who hold the funds in combination with other non-TDF funds in the plan menu. Although “pure” TDF users holding only TDFs in their accounts have grown due to auto-enrollment and TDFs’ status as a qualified default investment in 401(k) plans, mixed TDF users account for a significant portion of all TDF users.

About 7 percent of all 401(k) assets were invested in TDFs as of year-end 2008, and mixed TDF users accounted for about 55 percent of the participants holding target-date funds in their accounts as of year-end 2007. Pure TDF users are more likely to be younger or lower-salary participants who are automatically enrolled into target-date funds, while mixed TDF users are likely to be middle-income and middle-wealth participants (Copeland, 2009; Mitchell et al., 2009).

Because TDFs offer a mechanism (the “all-in-one” portfolio) to diversify asset allocations and rebalance over time based on a defined target-date horizon, participants who lack financial literacy or desire to use institutional expertise in asset allocation and portfolio rebalancing may benefit from investing in these funds. However, holding TDFs with other funds could lead to an unexpected result of ending up with a potentially inferior portfolio in terms of risk/return tradeoff from more assets allocated to some sectors than the designers of the target date funds had planned.

This analysis, using a sample from the EBRI/ICI 401(k) database, shows that mixed TDF investors are more likely to hold two or more TDF funds than are pure TDF investors. In addition, low-level TDF users (investing less than half their assets in a target-date fund) are more likely to hold multiple TDFs than are high-level ones (investing more than half their assets in a target-date fund). The data also show that some mixed TDF users (especially those in their 50s or 60s) do not choose age-specific target-date funds. Concerning use of other (non-TDF) funds, high-level target-date fund users are less likely to hold GICs, stable value, or money market funds than low-level users.

Overall, this analysis finds that some mixed TDF investors (in particular, low-level TDF users) may fail to understand that a target-date fund is designed as an “all-in-one” retirement portfolio investment solution. The data suggest that additional educational efforts to improve 401(k) participants’ understanding of target-date funds are needed for low-level mixed TDF users.

Figure 7
Asset Allocations of Single Mixed Users, by Age and TDF Investments (a Subset of the Sample)
(Percentage of Account Balances Excluding TDFs)

Panel A. Equity Funds—Median Percentage

Age	Target-Date Funds	Total	Low TDF users		High TDF Users	
			1%–25%*	>25%–50%*	>50%–75%*	>75%–99%*
20–29	Income, 2005	52.2%	52.2%			
	2010, 2015	84.2	84.9	83.1		
	2020, 2025	58.7				
	2030, 2035	100.0	91.6	100.0	100.0	100.0
	2040, 2045	68.0	69.1	69.9	68.0	14.7
	2050	54.0	59.1	54.0	30.8	96.4
30–39	Income, 2005	55.8%	56.8%	47.8%		
	2010, 2015	67.4	67.9	64.0	64.1	
	2020, 2025	67.1	73.5	50.3	76.6	
	2030, 2035	68.5	64.3	78.2	76.9	49.8
	2040, 2045	57.2	59.6	56.0	46.6	3.4
	2050	81.0	76.9	69.0	100.0	97.0
40–49	Income, 2005	46.8%	46.2%	54.5%	17.8%	
	2010, 2015	44.8	43.8	53.2	0.0	0.0
	2020, 2025	47.4	45.0	50.1	53.3	47.5
	2030, 2035	49.0	45.0	56.8	50.6	61.3
	2040, 2045	58.8	59.1	58.8	61.9	37.2
	2050	73.0	69.6	79.4	74.9	50.6
50–59	Income, 2005	37.0%	40.2%	23.8%	23.3%	42.8%
	2010, 2015	24.5	30.8	14.0	48.8	1.9
	2020, 2025	39.5	36.1	45.3	42.4	29.1
	2030, 2035	62.6	60.4	58.2	72.8	82.2
	2040, 2045	46.9	45.2	49.0	50.6	53.4
	2050	71.4	65.9	98.2	96.6	31.1
60–69	Income, 2005	31.0%	27.7%	41.2%	33.2%	72.4%
	2010, 2015	18.7	17.9	26.0	9.0	17.7
	2020, 2025	48.3	43.6	50.5	28.2	100.0
	2030, 2035	52.5	35.3	67.9		59.0
	2040, 2045	37.8	39.3	33.8	33.3	37.5
	2050	62.9	60.4	79.9		

Panel B. GICs/Stable Value Funds, Money Market, or Both—Median Percentage

Age	Target-Date Funds	Total	Low TDF users		High TDF users	
			1%–25%*	>25%–50%*	>50%–75%*	>75%–99%*
20–29	Income, 2005	4.3%	6.4%			
	2010, 2015	0.0	0.0	0.0		
	2020, 2025	0.0				
	2030, 2035	0.0	0.0	0.0	0.0	0.0
	2040, 2045	13.7	14.6	5.5	0.0	47.9
	2050	0.0	0.0	0.0	0.0	0.0
30–39	Income, 2005	0.9%	9.6%	0.0%		
	2010, 2015	4.2	5.5	5.3	0.0	
	2020, 2025	0.0	0.0	0.0	0.0	
	2030, 2035	0.0	0.0	0.0	0.5	0.0
	2040, 2045	14.6	14.9	13.3	0.0	27.9
	2050	0.0	0.0	0.0	0.0	0.0
40–49	Income, 2005	5.2%	9.4%	0.0%	5.4%	
	2010, 2015	6.8	13.1	0.0	0.0	100.0
	2020, 2025	0.4	1.8	0.0	0.7	0.0
	2030, 2035	4.7	11.4	0.0	0.0	0.0
	2040, 2045	17.0	19.4	13.9	1.2	0.2
	2050	0.0	0.0	0.0	0.0	13.7
50–59	Income, 2005	11.4%	16.6%	0.0%	0.0%	0.0%
	2010, 2015	24.4	24.3	31.3	0.0	80.0
	2020, 2025	11.2	15.1	1.5	0.0	24.0
	2030, 2035	0.0	0.7	0.0	0.0	0.0
	2040, 2045	2.4	8.9	0.0	0.0	0.0
	2050	0.0	0.0	0.0	0.0	68.9
60–69	Income, 2005	0.7%	12.4%	0.0%	0.0%	0.0%
	2010, 2015	30.3	34.3	23.7	35.1	0.0
	2020, 2025	7.6	15.2	0.2	0.0	0.0
	2030, 2035	1.0	13.2	0.0		41.0
	2040, 2045	4.8	13.8	0.0	0.0	0.0
	2050	0.0	0.0	0.0		

Source: Author's tabulations from a subset of the sample from the 2008 EBRI/ICI Participant-Directed Retirement Plan Data Collection Project.

Note: The median percentage is reported only if the number of observations in each cell is greater than or equal to 10.

Shaded cells indicate the two largest TDF investments, which represent at least 70 percent of the TDF users in a certain age cohort.

* Percentage of account balances invested in target-date funds.

References

- AllianceBernstein *Defined Contribution Investments. Retirement Savings Attitudes and Actions: Inside the Minds of Plan Participants*. AllianceBernstein Investments L.P., 2009.
- Benartzi, Shlomo. "Excessive Extrapolation and the Allocation of 401(k) Accounts to Company Stock?" *Journal of Finance*. Vol. 56.5 (October 2001).
- Copeland, Craig. "Use of Target-Date Funds in 401(k) Plans, 2007." *EBRI Issue Brief*, no. 327 (Employee Benefit Research Institute, March 2009).
- Janus Capital Group. *The Burden of Good Intentions: Opportunities and Challenges for Target-Date Funds*. Janus Capital Management, LLC, 2009.
- Mitchell, Olivia, Gary Mottola, Stephen Utkus, and Takeshi Yamaguchi. *Default, Framing, and Spillover Effects: The Case of Lifecycle Funds in 401(k) Plans*. Pension Research Council Working Paper, 2009.
- VanDerhei, Jack, Sarah Holden, and Luis Alonso, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2008." *EBRI Issue Brief*, no. 335, and ICI Perspective, Vol. 15, no. 2, October 2009.
- Vanguard Institutional Investor Group. *Target-Date Funds: Plan and Participant Adoption in 2007*. Vanguard Group, Inc., 2008.
- _____. *How America Saves 2009: A Report on Vanguard 2008 Defined Contribution Plan Data*. Vanguard Group, Inc., 2009.

Endnotes

- ¹ See VanDerhei, Holden, and Alonso (2009). "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2008," *EBRI Issue Brief* no. 335, October 2009.
- ² Mitchell et al., (2009) referred to the emergence of mixed TDF users as an unintended "spillover" effect, distinguishing from framing and default effects.
- ³ Employer matching may be directed by the employer into company stock, in which case participants' investment behavior would be different by endorsement effect than otherwise (Benartzi, 2001). Thus, an exclusion of company stock would minimize the endorsement effect.
- ⁴ Participants having account balances of less than \$10,000 are excluded from the sample to minimize the potential effects of automatic enrollment with TDFs on mixed TDF users' investment behavior. The EBRI/401(k) database does not currently have sufficient information to determine whether a plan adopts an automatic enrollment with TDFs. However, Copeland (2009) used an algorithm to create a proxy for those who could be identified as automatically enrolled. His findings on auto enrollees show that TDF users having low account balances are more likely to be auto-enrolled than otherwise. For example, among TDF users having account balances of less than \$10,000, about 22 percent were estimated to be auto-enrolled in 2007. Thus, this study uses \$10,000 as a threshold to minimize the potential effects of automatic enrollment with TDFs.
- ⁵ Otherwise, employer matching may be directed by the employer into a different investment option, such as company stock or a non-TDF balanced fund. As a result, TDF users could have a mixed portfolio.
- ⁶ Although higher-level users in their 50s or 60s who invest 75–99 percent of their assets in TDFs have lower median percentages of equity funds than other types of users, their median equity exposure would be higher than that of lower-level users. For example, if a mixed user in his or her 60s invests 25 percent (an upper bound of 1–25 percent) of his/her balance in a TDF with a 45 percent exposure to equity, he or she would have an equity exposure of 34 percent. However, if the same

user invests 75 percent (a lower bound of 75–99 percent) in the same TDF, he or she would have an equity exposure of 37 percent.

⁷ This may be related to different equity glide paths of TDF fund providers, but the issue needs additional research. For example, if a mixed user in his or her 50s is not satisfied with the equity allocation of the 2020 fund offered because of a level of risk tolerance, he or she would select a relatively more aggressive fund, say a 2040 fund.

⁸ A survey conducted by Janus Capital Group (2009) provides an interesting finding that some TDF investors (19 percent of the respondents) believe that a TDF guarantees a certain income at retirement, like a defined pension plan. However, the survey results do not provide specific information on who is likely to believe so, in terms of demographic characteristics and/or low/high TDF users.

What Do We Know About Enrollment in Consumer-Driven Health Plans?

By Paul Fronstin, Employee Benefit Research Institute

Introduction

In 2001, a handful of employers started offering health reimbursement arrangements (HRAs)—a then-new type of health plan known as a consumer-driven health plan (CDHP) or an account-based health plan. These plans were offered by self-insured employers and administered by a third-party.¹ HRAs were provided under then-existing tax law, although because of the newness of the new plan design and potential legalities, employers were generally hesitant to offer HRAs until the release of IRS Revenue Ruling 2002-41 and Notice 2002-45, which provided guidance clarifying the general tax treatment of HRAs; the benefits offered under an HRA; the interaction between HRAs and cafeteria plans, flexible spending accounts (FSAs), and coverage under COBRA; and other matters under current law.²

Ultimately, HRAs paved the way for health savings accounts (HSAs). The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 included a provision to allow individuals with certain high-deductible health plans to contribute to an HSA. These plans are known as *HSA-eligible plans* because not all persons eligible to contribute to an HSA do, in fact, have one.³ Advocates of HRAs and HSA-eligible plans claimed that they simultaneously provided consumers with broader choices than were currently available, while their aggregate decisions would cap costs more effectively than top-down conventional managed care plans had done. But some analysts warned that consumers lacked the discipline and sophistication to successfully navigate an increasingly complex health care system and understand what care is truly necessary. They saw the initiative as an opportunity for employers to transfer a growing portion of rising costs to employees (Jaffe, 2002).

Initially, projections for growth in HRAs and HSA-eligible plans (referred to collectively as CDHPs) were strong. A 2002 survey found that 44 percent of large employers were expected to offer an HRA by 2004.⁴ A 2004 survey of mostly large employers found that over two-fifths of respondents reported that they were either very likely (8 percent) or somewhat likely (35 percent) to offer an HSA-eligible plan in 2005 (Mercer, 2004). Furthermore, the same survey found that 73 percent were very likely (19 percent) or somewhat likely (54 percent) to offer such a plan in 2006. Another survey conducted at about the same time found that 61 percent of large employers were likely to offer an HSA in the near future.⁵

More recently, predictions for growth in CDHPs remain strong. The U.S. Treasury Department has predicted that 25–30 million people would be covered by an HSA-eligible plan and would have an account by 2010.⁶ Similarly, in 2005, Forrester Research has predicted that CDHP enrollment could account for 19 percent of the market in 2009 and 24 percent by 2010.⁷

Today, there are many estimates of enrollment in CDHPs, and they vary along a number of dimensions. This article summarizes the literature on CDHP offer rates and enrollment. It presents estimates from a number of different sources. Based on the various sources of data on enrollment in HRAs and HSA-eligible plans, it appears that 15–19 million people were enrolled in these plans in 2009, representing 9–11 percent of the privately insured market.

Offer Rates

The percentage of employers offering CDHPs has gone from virtually none in 2000 to 12 percent in 2009 (Figure 1). When examining the entire employment-based market, what had been steady growth in offer rates appears to have slowed. Between 2008 and 2009, the percentage of small firms (3–199 workers) that offered a CDHP declined from 13 percent to 11 percent (although the change was not statistically significant). However, larger firms continued to add a CDHP as an option. The percentage of firms with 1,000 or more workers that offered a CDHP increased from 22 percent in 2008 to 28 percent in 2009. The overall trend rate did not change because employers with 1,000 or more employees account for about 15 percent of all employers.

Figure 1
Offer Rates for HRAs^a and HSA^b-Eligible High-Deductible Health Plans, 2005–2009

Universe	KFF/HRET ^c				Mercer					
	Three or more workers				500 or more workers					
	HRA ^a or HSA ^b -eligible plan				HRA ^a or HSA ^b -eligible plan					
Type of CDHP ^d										
Year	Total	3–199	200–999	1,000 or more	Total	500–999	1,000–4,999	5,000–9,999	10,000–19,999	20,000 or more
2005	4%	4%	4%	10%	5%	4%	4%	10%	19%	22%
2006	7	7	5	17	11	6	12	18	21	37
2007	10	10	13	18	14	9	16	22	36	41
2008	13	13	15	22	20	14	22	28	40	45
2009 ^e	12	11	18	28	25	20	28	28	41	45

^a Health reimbursement arrangements.
^b Health savings account.
^c Kaiser Family Foundation and the Health Research and Educational Trust (HRET).
^d Consumer-directed health plan.
^e 2009 data from Mercer represent the percentage of employers very likely to offer an HRA or HSA-eligible plan in 2009, as reported in 2008.

Even among large employers, offer rates vary by firm size. In 2008, 28 percent of employers with 5,000–9,999 workers offered a CDHP option. In contrast, 45 percent of firms with 20,000 or more workers offered it. Unlike small businesses, where the CDHP tends to be the only option available to workers, large businesses tend to offer the CDHP alongside other available options such as a health maintenance organization (HMO) and preferred provider organization (PPO).

While the overall offer rate may have peaked, offer rates are expected to continue to increase in the mid-size employer market. The percentage of employers with 500–999 workers reporting that they were likely to offer a CDHP in 2009 was 20 percent, or 6 percentage points higher than the actual offer rate in 2008. In the 1,000–4,999 market segment, the expected offer rate for 2009 was 28 percent, also 6 percentage points higher than the actual offer rate in 2008. Expected offer rates in firms with 5,000 or more workers were no higher than the actual offer rates in 2008.

Enrollment

There is strong interest in knowing the number of people in CDHPs. However, there is no single source for this information. The available estimates, as shown in Figure 2, vary but are generally in the same ballpark. All sources for the estimates discussed in this section are also shown in Figure 2.

Figure 2
Enrollment in HRAs^a and HSA^b-Eligible High-Deductible Health Plans, 2005–2009

Survey Universe	AHIP ^c		Booz Allen Hamilton ^e		AAPPO ^d		CDMR ^f		EBRI/MGA ^g		ICDC ^h		KFF/HRET ⁱ	
	All	HSA-eligible	All	HSA-eligible	All	HSA-eligible	All	HSA-eligible	Adults 21–64	HRA or HSA-eligible plan	All	HRA or HSA-eligible plan	Workers	HRA or HSA-eligible plan
Type of CDHP ^j	HSA-eligible		HRA or HSA-eligible plan		HRA or HSA-eligible plan		HRA or HSA-eligible plan		HRA or HSA-eligible plan		HRA or HSA-eligible plan		HRA or HSA-eligible plan	
Source of Insurance	Employment-based and direct purchase		Employment-based and direct purchase		Employment-based and direct purchase		Employment-based and direct purchase		Employment-based and direct purchase		Employment-based and direct purchase		Employment-based	
	HSA-eligible		Total		Total		Total		Total		Total		Total	
2005	1	3.0	3.0	3.0	6.0	6.0	6.0	4.7	2.4	–	–	–	–	–
2006	3.2	6.0	6.0	6.0	8.4	8.4	8.3	3.8	2.7	1.3	1.3	1.4	1.4	1.4
2007	4.5	10.0	10.0	10.0	11.9	11.9	9.8	8.3	3.8	1.9	1.9	1.9	1.9	1.9
2008	6.1	18	18	18	15.1	15.1	11.2	9.8	5.4	2.2	2.2	3.2	3.2	3.2
2009	8							11.2						
2005	1%	2%	2%	2%	3%	3%	3.9%	3.9%	4%	2%	2%	2%	2%	2%
2006	2	3	3	3	5	5	6.6	3.2	4	2	2	2	2	2
2007	3	6	6	6	7	7	7.9	6.6	5	3	3	3	3	3
2008	3	10	10	10	9	9	8.9	7.9	8	3	3	4	4	4
2009	5						8.9	8.9	8	3	3	6	6	6

^a Health reimbursement arrangements.
^b Health savings account.
^c America's Health Insurance Plans, <http://www.ahipresearch.org/pdfs/2009hsacensus.pdf>
^d American Association of Preferred Provider Organizations, http://aappo.org/userfiles/file/2009%20CDHP%20Study/CDHP_Final_Sm.pdf
^e Booz Allen Hamilton, http://www.boozallen.com/media/file/Trends_in_Consumer_Cost-Sharing.pdf
^f Consumer Driven Market Report, personal communication, Sept. 2009.
^g EBRI/MGA. See Fronstin (2009).
^h Inside Consumer-Directed Care (not available online).
ⁱ Kaiser Family Foundation/Health Research and Educational Trust, <http://ehbs.kff.org/pdf/2009/7936.pdf>
^j Consumer-driven health plans.

AHIP: Since 2005, America's Health Insurance Plans (AHIP) has conducted an annual census of health plans to determine the number of people enrolled in plans with an HSA or eligible for one. AHIP estimates that 8 million people were in an HSA-eligible plan in January 2009, up from 6.1 million in 2008. Nearly 6.2 million had coverage through the employment-based market, while an additional 1.8 million had it through the individual market. AHIP's census does not include any HRA enrollees, but it does include workers, nonworking adults, and children. The AHIP estimate accounts for about 5 percent of the combined employment-based and individual markets.

AAPPO: The American Association of Preferred Provider Organizations (AAPPO) provides the highest estimates for combined HRA and HSA enrollment compared with every other source of information on CDHP enrollment. It estimates that in 2008, 18 million people were enrolled in CDHPs. There is no methodology section in the report and very little information overall, but given the size of the estimate, these data should include workers, nonworking adults, and children. The report presents data from Mercer (discussed in more detail below), so it is possible that the data represent only the employment-based market (and would exclude employers with fewer than 10 employees), but the AAPPO report does not cite the Mercer study or any study. Should the AAPPO estimate not include the individual market or firms with fewer than 10 employees, the 18 million person estimate would be even higher.

Booz, Allen, Hamilton: In a document on its Web site, Booz, Allen, Hamilton estimated that there were about 10 million people in CDHPs in 2007. There is no author listed in the report, and an updated document was not identified, so further information about the study cannot be provided.

CDMR: According to enrollment estimates from the Consumer Driven Market Report (CDMR), 15.1 million people were enrolled in HRAs or HSA-eligible plans as of January 2009, up from 11.9 million in 2008. Roughly 9 million were in HSA-eligible plans, and 6.2 million were in HRA-based plans.

EBRI/MGA: According to the 2009 EBRI/MGA Consumer Engagement in Health Care Survey, 11.2 million adults ages 21–64, with either employment-based coverage or individually purchased insurance, were enrolled in an HRA or HSA-eligible plan, up from 9.8 million in 2008. This estimate represents 8.9 percent of adults ages 21–64 with private insurance (up from 7.9 percent in 2008). The EBRI/MGA survey does not include children in its 11.2 million estimate. However, a question was asked regarding who else was covered by the health plan, and when children are factored in the enrollment estimate increases to 19.1 million. Detailed methodological information can be found in Fronstin (2009).

ICDC: *Inside Consumer-Directed Care* (ICDC), a now-defunct industry newsletter published by Atlantic Information Services through mid-2009, followed the movement to consumerism and growth in CDHPs. Various reports provided enrollment data by specific insurer. The most recent data come from a combination of the Aug. 8, 2008, report for 24 of the largest insurers, and the Aug. 22, 2008, report for BlueCross BlueShield plans. According to the data for these two issues, 10.7 million persons were enrolled in HRA or HSA-eligible plans. While many insurers were not included in the ICDC estimates, Aetna, the Blues, Cigna, Humana, and United were included. Collectively, they account for about 140 million lives, and 9.3 million of the 10.7 million persons covered by CDHPs.

KFF/HRET: In 2009, the Kaiser Family Foundation/Health Research and Educational Trust (KFF/HRET) annual survey of nearly 2,000 employers of all sizes found that 8 percent were enrolled in either an HRA or HSA-based plan. Unlike other studies, the survey did not find growth in enrollment between 2008 and 2009. The KFF/HRET survey does not include nonworking adults or children in its estimates. It also does not include federal employees or workers in firms with fewer than three employees. The lack of growth may be due to large margins of error for data related to CDHPs in this survey, as the survey does show growth in offer rates in large firms.

Conclusion

There are a handful of estimates of HRA and HSA-eligible plan enrollment for 2009. AHIP estimates that 8 million people are in HSA-eligible plans, and does not provide an estimate for HRA enrollment. EBRI/MGA estimates that there are 11.2 million adults ages 21–64 in HRAs and HSA-eligible plans. When children are factored in, enrollment increases

to about 19 million, or 10.8 percent. CDMR estimates that 15.1 million people, or 9 percent of the privately insured market, are enrolled in an HRA or HSA-eligible plan. Based on the available data, somewhere between 15–19 million individuals are enrolled in an HRA or HSA-eligible plan, representing 9–11 percent of the privately insured market.

References

Fronstin, Paul. "Findings from the 2009 EBRI/MGA Consumer Engagement in Health Care Survey." *EBRI Issue Brief*, no. 337 (Employee Benefit Research Institute, December 2009).

Jaffe, Jim. "Executive Summary." In Paul Fronstin, ed., *Consumer-Driven Health Benefits: A Continuing Evolution?* Washington, DC: Employee Benefit Research Institute, 2002.

Mercer. *Survey on Health Savings Accounts: Summary of Results*. New York: Mercer Human Resources Consulting, 2004.

Endnotes

¹ Definity Health and Lumenos were the most well-known third-party administrators of HRAs. Early adopters of Definity Health included Aon, Budget, Charter Communications, CompFirst, Countrywide, CVS Pharmacy, Dade Behring, Hannaford Brothers, Louisiana State University, Medtronic, PWPipe, Raytheon, Ridgeview Medical Center, Scientific Atlanta, Supervalu, Textron, University of Minnesota, WelchAllyn, Wise Business Forms, and Woodward. Early adopters of Lumenos included Abbott Laboratories, CIBA Vision, Federated Department Stores, Gerber, Macy's, Novartis, Pharmacia, Pitney Bowes, Radnor Holdings, StyroChem, and WinCup. Definity Health was acquired by UnitedHealthcare in 2004, and Lumenos was acquired by Wellpoint in 2005.

² The Ruling and Notice were published in *Internal Revenue Bulletin* (2002–28), dated July 15, 2002, and can be found at <http://benefitslink.com/IRS/revrul2002-41.pdf> and www.irs.gov/pub/irs-drop/n-02-45.pdf (last reviewed June 2009).

³ The number of people in HSA-eligible plans will always be below the number of HSAs for two reasons. As already mentioned, not all HSA-eligible individuals contribute to an HSA. Also, HSA accounts are individually held, but can be used to reimburse health care expenses for all members of a family covered by a qualified high-deductible health plan.

⁴ See www.forrester.com/ER/Research/Brief/Excerpt/0.1317.15958.00.html (last reviewed June 2009).

⁵ See www.accessmylibrary.com/coms2/summary_0286-20873836_ITM (last reviewed October 2009).

⁶ See www.treas.gov/offices/public-affairs/hsa/pdf/fact-sheet-dramatic-growth.pdf (last reviewed June 2009).

⁷ See *Inside Consumer-Directed Care* (Nov. 4, 2005).



Notes

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