The Savings Preservation Working Group

SPWG members believe everyone deserves the opportunity to retire with dignity and financial independence. Defined contribution plans play an important role in helping people save, but the system could be improved to better facilitate the preservation of retirement savings to and through retirement.

In order to improve the system, the SPWG endeavors to:

• Promote thoughtful discussion of policies that will to help working families preserve their retirement savings;

• Encourage private-sector best practices related to retirement account preservation;

• Deepen the understanding of the factors that erode retirement savings, and serve as a central repository for thought leadership; and

• Develop stakeholder consensus regarding policy options for lawmakers to help preserve retirement savings.

Membership in the SPWG is limited to a select group of individuals that have demonstrated thought leadership in the area of retirement savings and provide a diversity of viewpoints (e.g., political leanings, constituency affiliation, and experience).

Additional Information

For more information about the SPWG or to access the materials cited in this Issue Brief, visit preservingsavings.org or email info@preservingsavings.org.
**Glossary of Key Terms and Abbreviations**

**401(k) Plan.** A tax-favored retirement plan offered by an employer to employees

**Asset-weighted.** Cash-outs determined by a percentage of assets withdrawn from tax favored accounts (e.g., 401(k) plans and IRAs) prior to retirement after participants leave employment

**Cash-outs.** Pre-retirement withdrawals from tax-favored retirement savings accounts (i.e., 401(k) plans and IRAs) after leaving employment

**EBRI.** The Employee Benefit Research Institute, a nonpartisan, tax-exempt organization created in 1978 for the purpose of contributing to sound employee benefit programs and public policy through independent, objective, fact-based research, and education.

**Form 5500.** An annual filing made with respect to 401(k) and other retirement plans that contains data related to plan participation, assets, investments, and fees

**GAO.** The U.S. Government Accountability Office, an independent, nonpartisan agency that works for the U.S. Congress

**ICI.** The Investment Company Institute, an association representing certain regulated investment funds

**IRA.** Individual Retirement Account, a tax-favored retirement savings account for individuals

**Leakage.** Assets withdrawn from tax-favored retirement savings accounts (e.g., 401(k) plans and IRAs) prior to a person’s retirement age

**Participant-weighted basis.** Cash-outs determined by a percentage of terminated participants withdrawn from tax favored accounts (e.g., 401(k) plans and IRAs) prior to retirement after participants leave employment

**PPT.** Participants in a defined contribution retirement plan

**SIPP.** The Survey of Income and Program Participation produced by the U.S. Census Bureau

**SPWG.** Savings Preservation Working Group
Introduction & Summary of Findings

The U.S. retirement system has shifted from traditional defined benefit pension plans to defined contribution plans (e.g., 401(k) plans) over the past generation, and that has resulted in working people having more opportunities to draw on their savings before reaching retirement age. The withdrawal of assets from a retirement plan is typically referred to as “leakage” and generally occurs in three forms:

- Cash-outs;
- Hardship withdrawals (i.e., withdrawals permitted by 401(k) plans in connection with certain unforeseen emergencies and other life events); and
- Loan defaults (i.e., when a plan participant borrows against his or her savings account and does not repay the loan).

Because leakage can have a profound effect on individuals’ retirement security, the SPWG reviewed the available research on leakage and concluded that cash-outs were the most prolific form of leakage. For example, GAO concluded in a 2009 study that leakage from cash-outs was more than eight times greater than leakage from hardship withdrawals and 130 times greater than leakage from loan defaults.

To better understand the impact of cash-outs on the retirement system, the SPWG reviewed recent empirical research reports, surveys, and simulation models estimating cash-outs. The results of this review, including our assessment of the available studies, are memorialized in this report.

Key Findings

- At least 33% and as many as 47% of plan participants withdraw part or all of their retirement plan assets following a job change.
- The lost savings due to cash-outs amounts to between $60 billion and $105 billion annually.
- Approximately 4.5 to 6.4 million participants cash-out annually, which is approximately 6.5% to 9.5% of 401(k) plan participants.
SPWG Review of Cash-Out Research

The SPWG conducted a meta-analysis of seven recent studies of cash-outs, assessing their data sources, populations, and methodology. The estimates of leakage due to cash-outs vary greatly from study to study, based on differences in the data sources and methodology. The chart below shows the variation between the studies.

The SPWG also assessed our confidence in each study and assigned relative confidence levels (i.e., high, medium, low) in terms of studies’ applicability to the entire 401(k) system. In general, we believe the most reliable estimates of 401(k) cash-outs are found in studies that rely upon empirical experience drawn directly from large populations of 401(k) plan participants. Thus, in assigning the confidence levels, we gave more weight to studies that utilized empirical data and to studies that examined larger populations of 401(k) participants. Each of the studies is discussed below.
High Confidence Estimates of Cash-Outs

Employee Benefit Research Institute (EBRI)

EBRI is generally regarded as the most authoritative, influential, and independent retirement savings research organization. Partnering with the ICI and numerous recordkeepers, EBRI manages and annually updates the EBRI/ICI 401(k) Database, which along with other data sources, supports EBRI’s Retirement Savings Projection Model (RSPM). This model is routinely used to evaluate the nation’s retirement income adequacy and to project the impact of various public policy initiatives that promote increased retirement savings.

The most recent EBRI measurement of cash-outs was made in 2018, covering cash-outs from 1996 to 2015.

**Data Source:** EBRI/ICI 401(k) Database with annual updates using RSPM Model version 2017, Form 5500 historical tables

**Population:** 27.1 million participants in 110,794 plans holding $2.0 trillion in assets and covering 49% of the universe of 401(k) plan participants, 20% of plans, and 44% of 401(k) plan assets.

**Methodology:** Estimates cash-outs using proprietary information from recordkeepers to make statistical imputations. Years prior to 2015 were estimated based on active participants and average account balances from 2015 data.

**Key Findings:**

![Cash-Outs by Year in Billions](image-url)
Analysis: To provide an estimate of total number of participants who cashed out all or part of their retirement plan assets in 2015, EBRI applied a composite annual leave ratio (i.e., the percentage of employees who leave employment annually) of 22% and a cash-out rate of 31% (all balances) to derive total number of participant cash-outs of 4.52 million.

Cash-Out Studies by Large Recordkeepers

Since 2010, multiple studies by Fidelity, Vanguard, and Alight have all indicated high levels of cash-outs following a job change. On a participant basis, these studies reflect similar levels and patterns of leakage by age and balance segments. In addition, studies by Alight and Vanguard have examined the levels of cash-outs that occur on an asset-weighted basis.

While their methodologies differ somewhat, the large recordkeeper studies all rely upon empirical data, updated annually, for millions of 401(k) participants. Collectively, Fidelity, Vanguard, and Alight account for 32.6 million participants in defined contribution plans, or about 32% of the total population.

Variations in cash-out experience between studies can be largely explained by methodology. For example, the 2019 Alight study examines all cash-out distributions in a given year, regardless of termination date. Vanguard’s studies examine the actions of participants who terminated in a calendar year and tracks their decisions in that same calendar year. Under Vanguard’s approach, participants who left their jobs late in a given year would be less likely to be observed taking distributions compared to those who leave earlier in the year because it may not occur during the 12-month measurement period. For this reason, these studies may tend to yield slightly lower cash-out figures.

1. Alight (2019)

The most-recent Alight study (What Do Workers Do with Their Retirement Savings after They Leave Their Employers?) is particularly worthy of close examination, as it involved a longitudinal analysis of the distribution behaviors of job-changers over a 10-year period.

Data Source: Alight proprietary data

Population: 2 million participants, terminated between 2008 and 2017, with account balances of $100 billion
Methodology: Measured activity as of December 31, 2017 on both asset-weighted and participant-weighted bases, including participants who took a lump-sum cash distribution.

Key Findings:

![Participant-Weighted Cash-Outs by Balance](chart1)

<table>
<thead>
<tr>
<th>Balance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; $1,000</td>
<td>80%</td>
</tr>
<tr>
<td>$1,000 - $4,999</td>
<td>62%</td>
</tr>
<tr>
<td>$5,000 - $9,999</td>
<td>51%</td>
</tr>
<tr>
<td>$10,000 - $24,999</td>
<td>37%</td>
</tr>
<tr>
<td>$25,000 - $49,999</td>
<td>22%</td>
</tr>
<tr>
<td>$50,000 - $99,999</td>
<td>12%</td>
</tr>
<tr>
<td>$100,000 - $249,999</td>
<td>7%</td>
</tr>
<tr>
<td>&gt; $250,000</td>
<td>2%</td>
</tr>
<tr>
<td>All</td>
<td>40%</td>
</tr>
</tbody>
</table>

![Asset-Weighted Distribution Choices by Distribution Category](chart2)

- Cash-out: 45%
- Remain: 15%
- Roll-over: 40%
Analysis: Alight’s results, when combined with EBRI turnover and balance segment data and Form 5500 data, can be extended to estimate cash-outs for the entire defined contribution system. We estimate aggregate annual cash-outs of $74.1 billion, if participant-weighted, and $105.2 billion, if asset-weighted. Based on the participant weightings, we estimate that approximately 6.4 million participants take cash-outs annually.

2. Fidelity (2010)

In summer 2010, as part of their ongoing Building Futures reports, Fidelity published a comprehensive survey of cash-outs (Plugging the Leaks in the DC System: Bridging the Gap to a More Secure Retirement).

Data Source: Fidelity proprietary data

Population: 11 million participants in nearly 17,000 corporate defined contribution plans as of June 30, 2010

Methodology: To measure cash-outs, the study looked at participants who were actively employed by their plan sponsor at a given point in time and then left their jobs in the following nine months. The study examined the “stay-in-plan” and “withdraw” behavior of these participants for a one-year period.

Key Findings:

![Participant-Weighted Cash-Outs by Balance](chart.png)

- Percentage of Accounts Cashed Out
**Analysis:** The results of the Fidelity study, when combined with EBRI turnover and balance segment data and with Form 5500 data, can be extrapolated to the entire defined contribution system. We estimate annual cash-out of $60.6 billion (based on participant weighting). We further estimate that approximately 4.8 million participants take cash-outs annually.

3. **Vanguard (2018)**

Among 401(k) recordkeepers, Vanguard is the most prolific and consistent supplier of high-quality, detailed studies that reflect their experience with cash-outs. Vanguard produces this information annually as part of their *How America Saves* series. The most recent installment is *How America Saves 2019*.

**Data Source:** Vanguard proprietary data

**Population:** 5 million participants in 1,900 defined contribution plans for which Vanguard directly provides recordkeeping services

**Methodology:** To measure cash-outs, the study examines the actions of participants who terminated in a calendar year and tracks their distribution decisions in that same calendar year.

**Key Findings:**

![Participant-Weighted Cash-Outs by Balance](chart.png)

- **Percentage of Accounts Cashed Out**
**Analysis:** The results of the Vanguard studies, when combined with EBRI turnover and balance segment data and with Form 5500 data, can be extrapolated to the entire defined contribution system. We estimate systemic 401(k) cash-outs to be $71.8 billion (based on participant weighting). We further estimate that approximately 4.5 million participants take cash-outs annually.
Medium Confidence Estimates of Cash-Outs

The studies below utilized empirical data but reflect the experience of slightly smaller populations or were performed for specific participant segments. Therefore, they have limited utility for estimating cash-outs for the entire population of 401(k) participants.

1. **Auto Portability Simulation (for balances under $15,000)**

The Auto Portability Simulation (APS) was performed by Retirement Clearinghouse (RCH) in 2017 in conjunction with Dr. Ricki Ingalls (formerly with Texas State University) and focused exclusively on accounts with assets of less than $15,000.

**Data Sources:** Large recordkeeper cash-out studies (*i.e.*, a composite of Fidelity, Vanguard and Alight data), EBRI turnover & balance data, Form 5500 data, and RCH longitudinal data

**Population:** 7.7 million participants (12% of total) with account balances with less than $15,000 who change jobs each year

**Methodology:** Utilizes a discrete event simulation software (*i.e.*, Simio) to model the effects of job-changing participants in various small-balance segments, with and without auto portability (*i.e.*, the automatic transfer of certain retirement accounts to an active retirement plan account).

Key Findings:

<table>
<thead>
<tr>
<th>Balance Segment</th>
<th>Assets Cashed Out (in Billions of Dollars)</th>
<th>Number of Cash-Outs (in Millions of Participants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $5,000</td>
<td>$4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Less than $10,000</td>
<td>$6.6</td>
<td>6.6</td>
</tr>
<tr>
<td>Less than $15,000</td>
<td>$13.6</td>
<td>13.6</td>
</tr>
<tr>
<td>Less than $20,000</td>
<td>$21.3</td>
<td>21.3</td>
</tr>
</tbody>
</table>

2018 Cash-Outs by Balance Segment
Analysis: Although the APS was developed to estimate participant populations that are (or could be) subject to mandatory distribution provisions, the model’s assumptions can be extended to include cash-outs for all balances. We estimate system-wide 401(k) cash-outs to total $67.9 billion (participant-weighted) and impact 6 million participants annually.


In their 2013 study Eliminating Friction and Leaks in America’s Defined Contribution System, Boston Research Group examined participant decisions in a 190,000+ participant plan over 10 years, comparing leakage results before and after a program of retirement savings portability was implemented.

Data Sources: Participant distribution choices, 2002-2011

Population: A single 190,000 participant plan with 38,000 new hires per year and 43,000 separations. Data specifically included 521,338 job-changers and distribution choices

Methodology: Leakage results for the first five-year period (2002-2006) were compared against the results of the second five-year period (2007-2011) when a program of retirement plan portability was implemented (i.e., IRA accounts established through an involuntary distribution were compared to active 401(k) accounts and, where possible, the accounts were consolidated). Additionally, leakage values were compared against a composite of three large recordkeeper studies (i.e., Fidelity, Aon Hewitt and Vanguard).
Key Findings:

Analysis: These results, when combined with 2013 Form 5500 distribution data and applied to the entire defined contribution system, indicate total cash-outs of $93.5 billion (asset-weighted). We further estimate 7.4 million participants cash-out annually.
Low Confidence Estimates of Cash-Outs

The study below contains valuable insights about cash-outs but was deemed low-confidence due to methodology and/or population limitations, which limit its applicability to understanding the volume of cash-outs in the broader 401(k) system.


GAO’s March 2019 report to the U.S. Senate Special Committee on Aging (Retirement Savings: Additional Data and Analysis Could Provide Insight into Early Withdrawals) estimated the total amount of 401(k) cash-outs at $9.8 billion per year.

Data Sources: SIPP 2014 Panel and Form 5500 Data

Population: Survey sample size included 53,070 households

Methodology: Survey participants were asked if they had received “lump sum payments from a pension or retirement plan” of $1,000 or more. An Event History Calendar (EHC) was utilized. Results were then extrapolated to the entire 401(k) participant population.

Key Findings: In 2013, 401(k) cash-outs of accounts of $1,000 or more totaled $9.88 billion, 1.1% of participants, and 0.3% of plan assets.

Analysis: The data in the 2019 GAO is at odds with the conclusions in GAO’s August 2009 report (401k Plans: Policy Changes Could Reduce the Long-term Effects of Leakage on Workers’ Retirement Savings), which estimated annual 401(k) cash-outs to be $74 billion per year. This could be due to a number of methodological issues (e.g., extending the SIPP survey findings to the much-broader population of 401(k) participants) and/or behavioral changes, including the factors listed below.

Only 1.1% of participants cash out, according to the GAO’s findings. If we assume that the denominator is active, eligible, and contributing participants, then the composite cash-out rate, translated to those participants who change jobs in any given year, would work out to less than 7%. That is well below the range indicated by the large recordkeeper cash-out studies (i.e., 33% to 40%), which are based on actual experience and empirical data.

The GAO’s total 401(k) cash-out estimate of $9.8 billion for all balances represents only a fraction of small-balance 401(k) cash-outs totals derived
by the APS (i.e., 46% of the $21.3 billion for balances less than $15,000 and 72% of the $13.6 billion for balances under $10,000).

The SIPP survey only inquired about lump-sum distributions greater than $1,000, so the GAO’s estimate omits leakage for balances segments under $1,000. According to EBRI, accounts with sub-$1,000 balances represent around 12% of all 401(k) accounts, and cash-out levels are approximately 51% to 80% for this balance segment, according to large recordkeeper study results. Omission of this balance segment could explain a relatively small portion ($2 to $3 billion) of the significant gap between the GAO’s overall estimate and other studies.

The SPWG considered the possibility that the GAO’s new estimate reflects some underlying reduction in cash-outs over time, perhaps in response to improved participant education, assistance or other contributing factors. However, since 2010, large recordkeeper cash-out studies have shown consistently high levels of cash-outs, with the March 2019 Alight study noting that “there has been remarkable consistency in the withdrawal behavior of participants over the last 10 years.” Additionally, job changes, a primary driver of participant cash-out behavior, are increasing. In March 2019, the Bureau of Labor Statistics reported that total employee separations have reached a five-year high.
Conclusions

Leakage can have a profound impact on individuals’ retirement savings, and a review of recent research and studies indicates that cash-outs are the most prolific source of leakage. Although estimates vary, between one-third and almost one-half of those participating in a 401(k) plan withdraw part or all of their retirement savings after a job change. That amounts to an estimated 4.5 to 6.4 million participants cashing out annually resulting in between $60 billion and $105 billion of lost annual savings.

Given the number of individuals cashing out and the amount of retirement savings leaving the retirement system, the SPWG believes cash-outs warrant closer study. That may require utilizing or creating new sources of system-wide leakage data. Additionally, the SPWG encourages an active discussion about options for reducing leakage from cash-outs. There may be legal, policy or operational improvements that could reduce cash-outs and preserve more retirement savings.
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