

## CARES Act: Implications for Retirement Security of American Workers

By Jack VanDerhei, Ph.D., Employee Benefit Research Institute

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### AT A GLANCE

Many provisions of the Coronavirus Aid, Relief, and Economic Security (CARES) Act were designed to provide relief to those American workers who do not have sufficient emergency savings to weather the current storm. These include increasing defined contribution plan loan limits to the greater of \$100,000 or 100 percent of the vested account balance; suspending loan payments due on or before December 31, 2020, and deferring loan payments for up to one year; allowing distributions until December 31, 2020, of the lesser of 100 percent of the vested account balance or \$100,000; and allowing repayment of coronavirus-related distributions (CRDs) over a three-year period.

The question, however, is as follows: What is the cost of effectively using defined contribution plans as emergency savings vehicles in this way when it comes to the future retirement security of American workers?

Using the Employee Benefit Research Institute's (EBRI's) Retirement Security Projection Model® (RSPM), we simulate the impact on retirement balances as a multiple of pay at age 65 for scenarios where employees take full advantage of the CARES Act flexibility to access their defined contribution plan. We generally find:

- There are limited reductions in projected retirement balances as a multiple of pay at age 65 in scenarios where employees pay back CRDs within the prescribed three-year timeframe or take new loans — even when workers reduce future contributions dollar for dollar in order to repay those loans.
- However, we see potentially significant reductions in retirement balances as a multiple of pay at age 65 when employees take full CRDs and fail to pay them back. This is especially true for older age cohorts.
- The most catastrophic scenario is one in which workers are provided CARES-Act-like access to withdrawals time and again as various crises occur. In other words, this is a scenario in which policymakers essentially turn defined contribution plans into de facto emergency savings vehicles. In this scenario, the overall median reduction in retirement balances as a multiple of pay at age 65 is 54 percent.
- Still, further analysis is warranted. In our preliminary analysis of potential actual aggregate utilization of CARES Act provisions based on employer responses to a Plan Sponsor Council of America (PSCA) survey, we find that reductions were very small. Even in the scenario in which employees fail to pay back CRDs, the aggregate impact — because of low estimated actual implementation and utilization of CARES Act provisions — is estimated to be less than one-half a percent.

A future *EBRI Issue Brief* is scheduled to provide additional analysis on the aggregate impact of the CARES Act provisions on retirement income adequacy when comprehensive participant-level information becomes available. This will provide crucial information for policymakers, plan sponsors, and providers as they assess ongoing approaches to helping workers navigate emergency savings needs.

Jack VanDerhei is Director of Research at the Employee Benefit Research Institute (EBRI). This *Issue Brief* was written with assistance from the Institute’s research and editorial staffs. Any views expressed in this report are those of the author and should not be ascribed to the officers, trustees, or other sponsors of EBRI, Employee Benefit Research Institute-Education and Research Fund (EBRI-ERF), or their staffs. Neither EBRI nor EBRI-ERF lobbies or takes positions on specific policy proposals. EBRI invites comment on this research.

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# CARES Act: Implications for Retirement Security of American Workers

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## Introduction

The Coronavirus Aid, Relief, and Economic Security (CARES) Act was passed in late March 2020, allowing certain defined contribution plan sponsors to implement optional provisions designed to help relieve the economic impact felt by participants as a result of the ongoing COVID-19 pandemic. These provisions include:

1. Increasing a plan's loan limit to the greater of \$100,000 or 100 percent of the vested account balance.
2. Suspending loan payments due on or before December 31, 2020, and deferring loan payments for up to one year.
3. Allowing distributions until December 31, 2020, of the lesser of 100 percent of the vested account balance or \$100,000.
4. Allowing repayment of coronavirus-related distributions (CRDs) over a three-year period.

While the CARES Act provisions provide much-needed liquidity for cash-strapped workers during the current pandemic, the question is as follows: What is the cost of effectively using defined contribution plans as emergency savings vehicles in this way when it comes to the future retirement security of American workers?

This *Issue Brief* looks at the conditional impact of the CARES Act on retirement income adequacy. By conditional, we mean the impact based on the assumption that (1) employers offer the provision, (2) employees are eligible to take advantage of the provision, and (3) employees take maximum advantage of the provision. In essence, this provides a worst-case analysis of the expected impact on employees. In the last section of the *Issue Brief*, we will relax those assumptions to provide a preliminary estimate of the aggregate impact of these provisions.

This *Issue Brief* starts with a brief summary of the simulation model used for the analysis. It is followed by an analysis of the impact of four different scenarios on the reduction in retirement balances at age 65 as a multiple of pay:

1. One-time withdrawal with no payback.
2. One-time withdrawal with payback over three years.
3. "Extra" loan with a dollar-for-dollar offset for loan payments against employee contributions.
4. Withdrawal every 10 years with no payback.<sup>1</sup>

This is followed by a preliminary analysis of the aggregate impact of the CARES Act provisions on retirement income adequacy and an appendix with additional detail on the simulation results.

## EBRI's Retirement Security Projection Model®

The simulation model used in this analysis is a variant of the full EBRI Retirement Security Projection Model® (RSPM). The model reflects the real-world behavior of 27 million 401(k) participants as well as 20 million individuals with individual retirement accounts (IRAs) and is typically used to simulate retirement income adequacy for all U.S. households between the ages of 35 and 64.<sup>2</sup> The full model has both an accumulation module and a decumulation module, but for purposes of this analysis, only the former is used.

The analysis for this *Issue Brief* is restricted to current 401(k) participants ages 25–64. The model simulates balances at age 65 from 401(k) plans and IRA rollovers originating in 401(k) plans. 401(k) participant behavior is based on individual administrative records from annual linked records dating back to 1996.<sup>3</sup>

## Results Conditional Upon Maximum Utilization

The results in this section are designed to show the worst-case impact on retirement balances, assuming employees take full advantage of the additional flexibility provided by the CARES Act to access their defined contribution plan for emergency purposes. The results are displayed as medians of the reductions in retirement balances as a multiple of pay at age 65, broken out by:

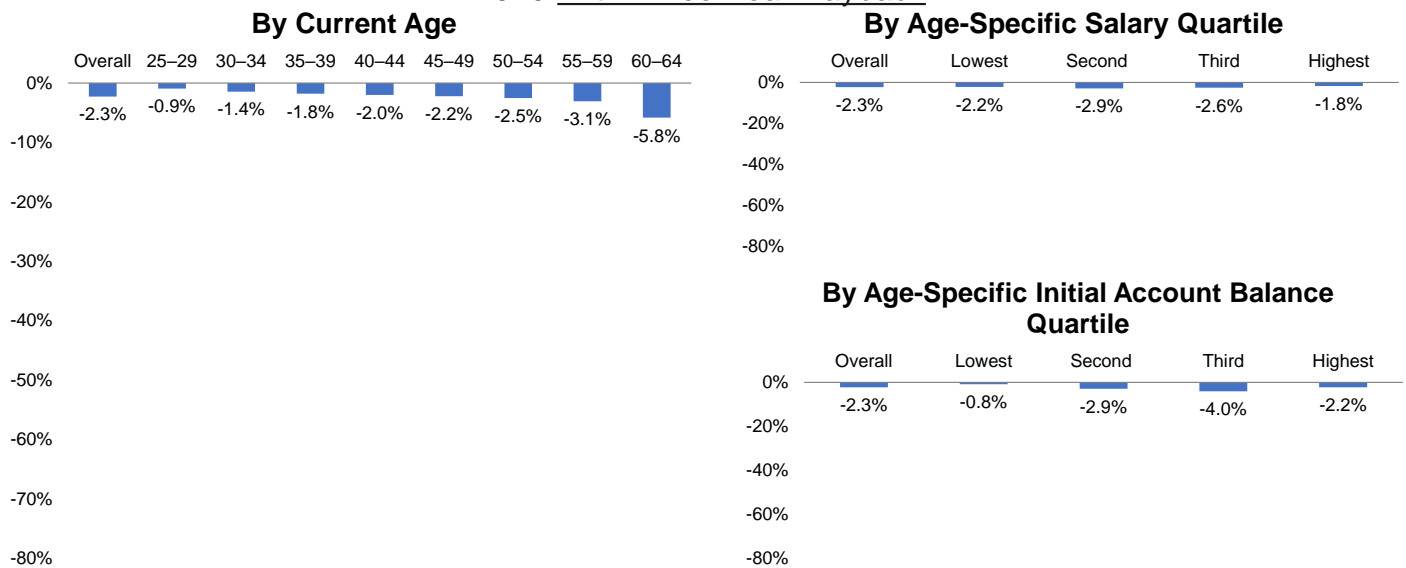
- Age.
- Age-specific salary quartile.<sup>4</sup>
- Age-specific initial account balance quartile.
- Replacement rate proxy.

Additional detail for each of these scenarios is provided in the appendix.

### Full CRD, Three-Year Payback

Figure 1 shows the median reduction in retirement balances as a multiple of pay at age 65 for employees taking the full withdrawal of up to \$100,000 permitted under the CARES Act in 2020, assuming participants use the full permitted three years to pay back the withdrawal.<sup>5</sup> Figure 1 further assumes that there is no impact on employee contributions to their defined contribution plan accounts during the payback period.

Figure 1  
**Median Reduction in Retirement Balances  
as a Multiple of Pay at Age 65**  
Employees Taking Full Withdrawal (up to \$100,000)  
in 2020 With Three-Year Payback\*



\* With the exception of those taking the withdrawal after age 61.  
Source: EBRI Retirement Security Projection Model® Version 3653.

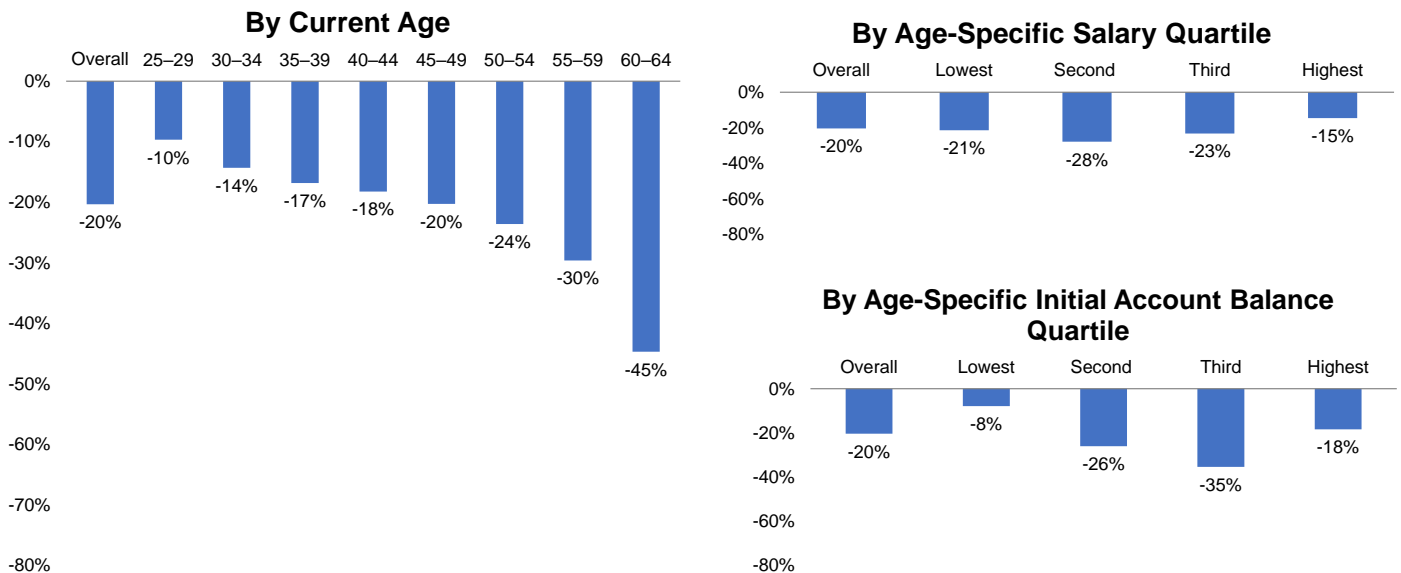
Overall, the projected median reduction in retirement balances as a multiple of pay at age 65 under this scenario is relatively small, at 2.3 percent. However, it more than doubles for older participants — 5.8 percent for those 60–64.

This is true because not all of the participants in this age cohort will have a chance to repay the withdrawal before reaching age 65. The graph on the upper right-hand side of Figure 1 shows the decrease in balance as a multiple of pay at age 65 under this scenario by age-specific salary quartile. Those in the highest age-specific salary quartile would have the smallest decrease, at 1.8 percent. That’s because the highest salary quartile has larger account balances in general — in other words, a \$100,000 withdrawal is relatively smaller for this age-specific salary cohort. The lower right-hand side of Figure 1 shows decreases by age-specific initial account balance quartile. Those in the lowest age-specific initial account balance quartile would have the smallest decrease in retirement balances as a multiple of pay at age 65. This is because they are constrained as to how much they can take out due to account size. Also, there is a high positive correlation between being in the lowest initial balance quartile and being a younger participant.

**Full CRD, No Payback**

Figure 2 shows the same view as Figure 1 but with one difference: It assumes that employees do *not* pay back the withdrawal. Overall, in this new scenario, the median reduction in retirement balances as a multiple of pay increases considerably — to 20 percent. However, the left-hand side of Figure 2 shows that the median reduction is half of that for young participants: 10 percent for those currently ages 25–29. And as with Figure 1, it is also considerably larger for older participants: 45 percent for those 60–64. One of the reasons the reduction is so much lower for the younger participants is that their current account balances are too small for many of them to take the full withdrawal. The upper graph on the right-hand side of Figure 2 shows the results for this scenario by age-specific salary quartile. The highest quartile has the smallest decrease because they have larger account balances in general. The lower graph on the right-hand side of Figure 2 shows the results by age-specific initial account balance quartile. As with the scenario in Figure 1, the lowest age-specific initial account balance quartile is the least impacted by this scenario.

**Figure 2**  
**Median Reduction in Retirement Balances**  
**as a Multiple of Pay at Age 65**  
 Employees Taking Full Withdrawal (up to \$100,000) in 2020 With No Payback



Source: EBRI Retirement Security Projection Model® Version 3653.

**Full CARES Act Loan, Dollar-for-Dollar Offset Against Employee Contributions<sup>6</sup> for New Loan Payments**

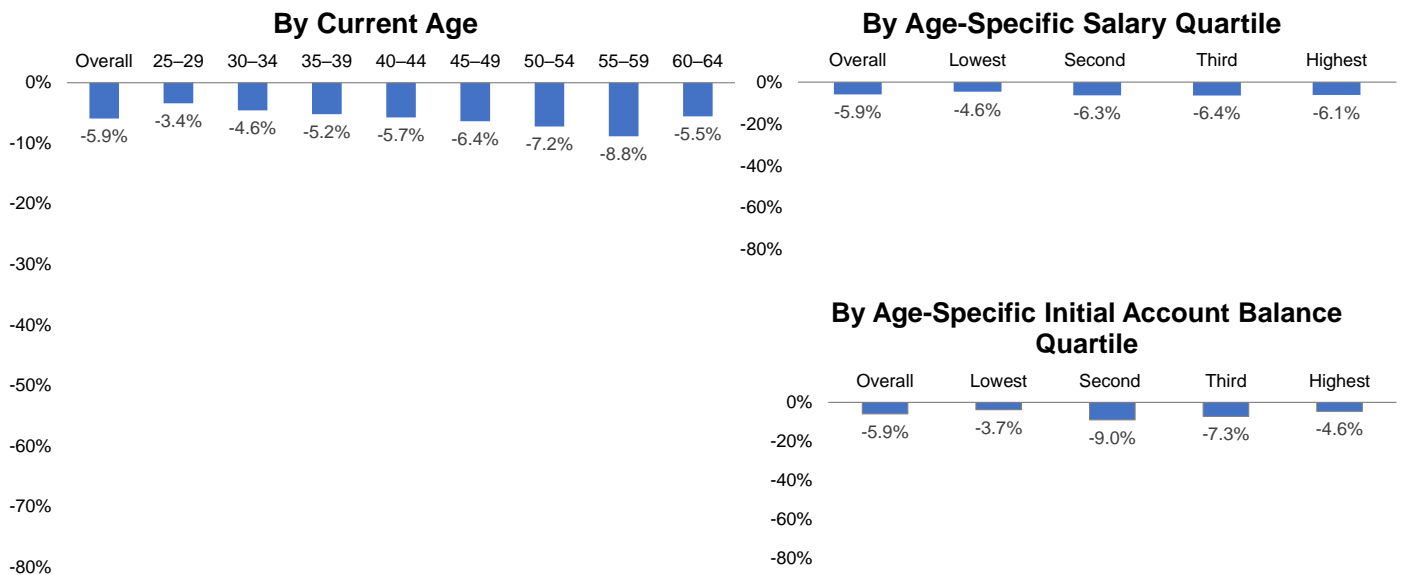
Figure 3 shows the median reduction in retirement balances as a multiple of pay at age 65 for employees taking new loans of up to \$100,000 as permitted under the CARES Act in 2020. In this case, we assume that every dollar used to



repay this new CARES Act loan results in a dollar reduction in new contributions to the defined contribution plan account (to the extent that is possible).<sup>7</sup>

Overall, the median reduction is much smaller than in the prior scenario. This is to be expected, as participants are paying the loan back. However, it is larger than in the first scenario, because the future employee contributions are reduced. Overall, the median reduction is 5.9 percent vs. only 2.3 percent in the first scenario. The graph on the left-hand side of Figure 3 shows the median reduction is smaller for young participants: 3.4 percent for those currently ages 25–29 vs. 8.8 percent for those 55–59 and 5.5 percent for those 60–64.<sup>8</sup> The top and bottom graphs on the right-hand side of Figure 3 show the results for this scenario by age-specific salary quartile and age-specific initial account balance quartile, respectively. The lowest quartile has the smallest decrease for the first breakout because their contributions are not as high, and the lowest quartile also has the smallest decrease in the second breakout.

**Figure 3**  
**Median Reduction in Retirement Balances as a Multiple of Pay at Age 65**  
 Employees Taking New Loans (up to \$100,000) in 2020  
 With Dollar-for-Dollar Offset Against New Loan Payments



Source: EBRI Retirement Security Projection Model<sup>®</sup> Version 3653.

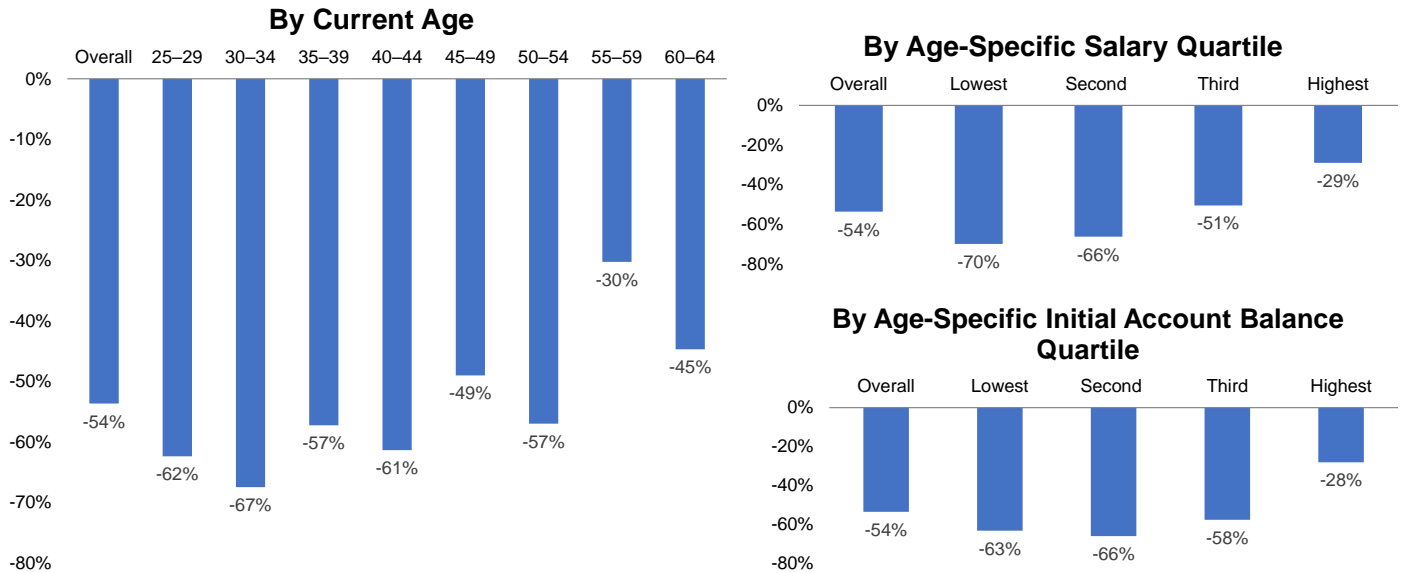
### Full CRD in 2020, and Every 10 Years Thereafter, With No Payback

In Figure 4, we show the most draconian scenario, wherein employees take up to the full CRD in 2020 and further do so every 10 years thereafter with no payback. Essentially, we are assuming that a crisis of some sort (e.g., the financial crisis of 2008–2009 or the current pandemic) happens every decade and that policymakers respond each time by loosening withdrawal provisions within defined contribution plans. In other words, the defined contribution plan acts as a de facto emergency savings vehicle for plan participants.

In such a scenario, the median reduction is large: 54 percent. The graph on the left-hand side of Figure 4 shows the median reduction is no longer monotonically increasing with age as it was with the other figures, because the number of withdrawals is larger for younger participants. For example, a 30-year-old is simulated to have four different withdrawals instead of the one for a 60-year-old. The top and bottom graphs on the right-hand side of Figure 4 show the results for this scenario by age-specific salary quartile and age-specific initial account balance quartile, respectively. The lowest two quartiles have the largest decrease in both cases due to the correlation with age.



**Figure 4**  
**Median Reduction in Retirement Balances as a Multiple of Pay at Age 65**  
 Employees Taking Full Withdrawal (up to \$100,000) in 2020  
 and Every 10 Years Thereafter With No Payback



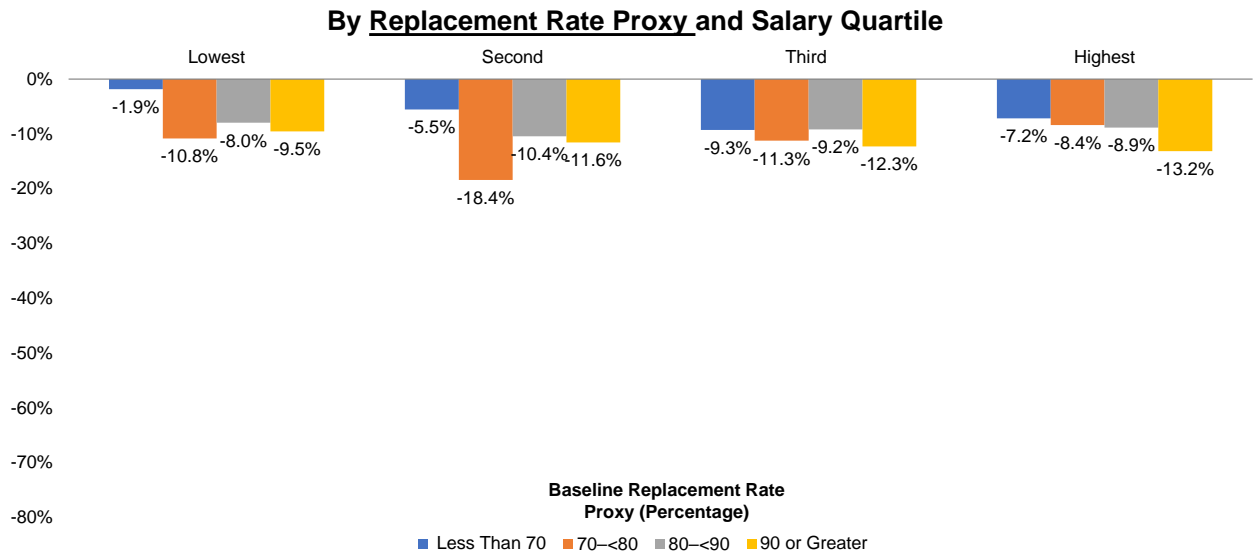
Source: EBRI Retirement Security Projection Model® Version 3653.

**Full CRD With No Payback for Participants Ages 30 and Younger Broken Out by a Replacement Rate Proxy**

Figure 5 focuses on participants ages 30 and younger and the impact of taking a full withdrawal up to \$100,000 under the CARES Act with no payback. In this case, we break out reductions in retirement balances as a multiple of pay at age 65 by a baseline replacement rate proxy as well as salary quartile.<sup>9</sup> The replacement rate proxy is constructed by using the projected Social Security current-law scheduled benefits paid at age 65 expressed as a percentage of career-average earnings<sup>10</sup> and annuitizing the value of the 401(k) and IRA balances at age 65 by an annuity purchase price projected to 2055 based on average historical discount rates.<sup>11</sup>

In this analysis, participants most at risk of having inadequate retirement income would be those with a replacement rate proxy of less than 70 percent. This is also the cohort that would experience the smallest impact from the one-time withdrawal in 2020. None of the four salary quartiles in this cohort would have a median reduction greater than 9.3 percent, and the lowest and second-lowest salary quartiles would have a median reduction of 1.9 and 5.5, respectively. However, three of the four salary quartiles simulated to have a baseline replacement rate proxy between 70 and 80 percent would have double-digit reductions in their balances as a multiple of pay at age 65. Moreover, participants in the second quartile are simulated to have a median reduction of 18.4 percent, or 84 percent greater than the median reduction for all participants in this age cohort (cf, Figure 2).

**Figure 5**  
**Median Reduction in Retirement Balances as a Multiple of Pay at Age 65**  
 Employees Taking Full Withdrawal (up to \$100,000) in 2020  
 With No Payback: Only Participants Ages 30 and Younger



Source: EBRI Retirement Security Projection Model® Version 3653.

### Aggregate Results (Preliminary)

Figure 6 summarizes the overall medians from Figures 1 through 4 using our worst-case assumptions of the impact of the CARES Act on retirement income adequacy. Again, each of these results was conditional on the assumption that (1) employers make the CARES Act provisions available to employees, (2) employees are eligible to utilize the provisions, and (3) employees utilize the provisions to the maximum extent possible.

Figure 6 provides estimates of the aggregate impact of the CARES Act provisions using assumptions based on a snapshot Plan Sponsor Council of America (PSCA) survey of plan sponsors conducted in early June 2020 that asked what changes they made regarding the CARES Act and the COVID-19 pandemic.<sup>12</sup> We refer to these as the “preliminary” aggregate results, as a future EBRI publication is scheduled to simulate a more accurate view of the impact once the requisite data on plan sponsor and participant behavior are available. In Figure 6, we still assume that employees are utilizing the provisions to the maximum extent possible.<sup>13</sup>

The second row in Figure 6 shows that, in the conditional scenario, should employees take the full CRD up to \$100,000 with three-year payback, the overall median reduction in retirement balances as a multiple of pay at age 65 is 2.3 percent. However, when considering the aggregate impact, that figure is reduced to only 0.05 percent (when the weighted probabilities of the employer offering the provision and the employee taking the distribution are introduced). The first row in Figure 6 shows that, in the conditional scenario, should employees take the full CRD up to \$100,000 with no payback, the overall median reduction in retirement balances as a multiple of pay at age 65 is 20 percent. However, the aggregate impact is only 0.43 percent. The fourth row in Figure 6 shows that, in the conditional scenario,

should employees take the full CRD up to \$100,000 with no payback every 10 years, the overall median reduction in retirement balances as a multiple of pay at age 65 is 54 percent. However, the aggregate impact is only 1.16 percent.

The third row in Figure 6 shows the conditional scenario of employees taking new loans up to \$100,000 (the coronavirus-related increased limit) in 2020 and further offsetting their new loan payments dollar for dollar against contributions. In this case, the overall median reduction in retirement balances as a multiple of pay at age 65 is 5.9 percent. In comparison, the aggregate reduction is only 0.03 percent when the weighted probabilities of the employer offering the provision and the employee taking the distribution are introduced.<sup>14</sup>

**Figure 6**  
**Median Reduction in Retirement Balances as a Multiple of Pay at Age 65: Worst-Case Assumption vs. Preliminary Aggregate**

Scenario	Conditional (Worst-Case Assumptions)	Aggregate (Preliminary)
Employees taking full withdrawal up to \$100,000, no payback	-20%	-0.43%
Employees taking full withdrawal up to \$100,000, with three-year payback	-2.3%	-0.05%
Employees taking new loans up to \$100,000 in 2020 with dollar-for-dollar employee contribution offset against new loan payments	-5.9%	-0.03%
Employees taking full withdrawal up to \$100,000, every 10 years, no payback	-54%	-1.16%

Source: EBRI Retirement Security Projection Model® Version 3653 and PSCA, "CARES Act Snapshot — June Follow-Up."

## Conclusions

In 2019, EBRI analyzed "Emergency Savings: The Reality of Workers' Liquid Savings — Evidence From the Survey of Consumer Finances." Even before COVID-19, we found that, of all families with working heads, only 1 in 5 had liquid savings of more than three months of their family income. The CARES Act was implemented to provide relief to those American workers who do not have sufficient emergency savings to weather the current storm. However, the implementation of the CARES Act raises the following question: At what cost to the future retirement security of these same workers does this relief come?

Using RSPM® to simulate the worst-case scenario for employees taking maximum advantage of CARES Act access to their defined contribution plan under four different scenarios, we generally find:

- There are limited reductions of retirement balances as a multiple of pay at age 65 in scenarios where employees pay back CRDs within the prescribed three-year timeframe or take new loans — even when they fully offset new contributions to the defined contribution plan in order to repay those loans.
- However, we see potentially significant reductions in retirement balances as a multiple of pay when employees take full CRDs and fail to pay them back. This is especially true for older age cohorts.

- The most catastrophic scenario is one in which workers are provided CARES-Act-like access to withdrawals time and again as various crises occur. In other words, this is a scenario in which policymakers essentially turn defined contribution plans into de facto emergency savings vehicles. In this scenario, the overall median reduction in retirement balances as a multiple of pay at age 65 is 54 percent.

Still, further analysis is warranted. In our preliminary analysis of potential actual utilization of CARES Act provisions based on employer responses to a PSCA survey, we find that aggregate reductions were very small. Even in the scenario in which employees fail to pay back CRDs, the aggregate impact — because of low estimated actual implementation and utilization of CARES Act provisions — is estimated to be less than one-half a percent.

A future *EBRI Issue Brief* is scheduled to provide additional analysis on the aggregate impact of the CARES Act provisions on retirement income adequacy when participant-level information becomes available. This will provide crucial information for policymakers, plan sponsors, and providers as they assess ongoing approaches to helping workers navigate emergency savings needs.

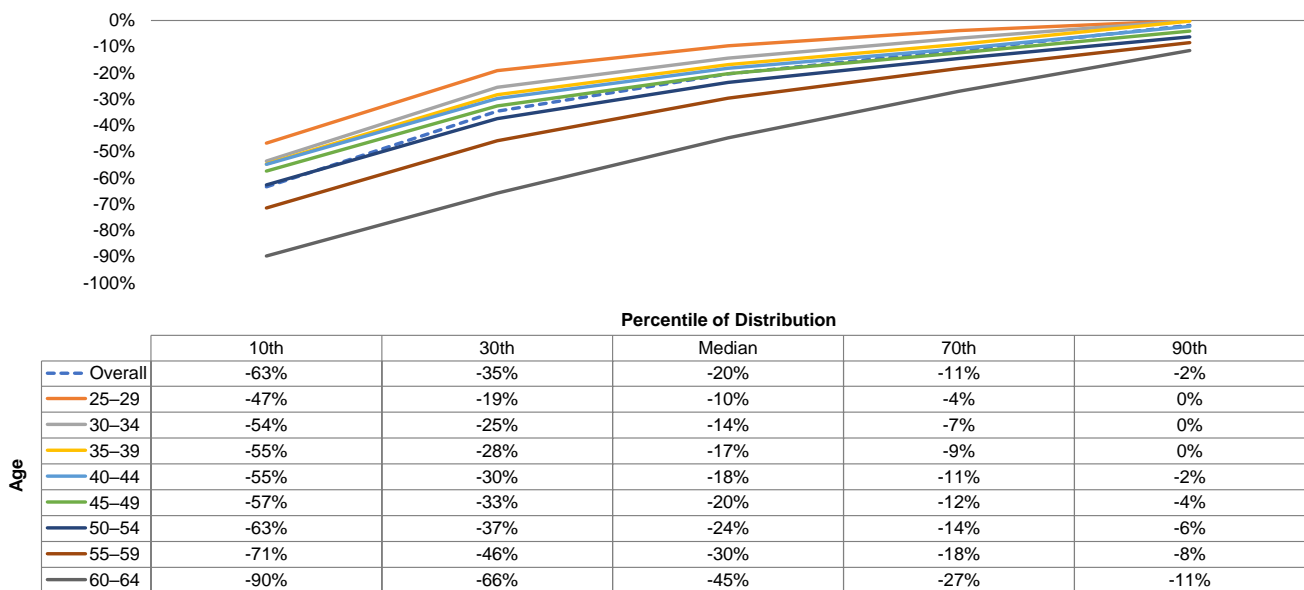
## Appendix

The figures in this section provide additional detail for the analysis conditional upon maximum utilization.

### Employees Taking Full Withdrawal (up to \$100,000) in 2020 With No Payback

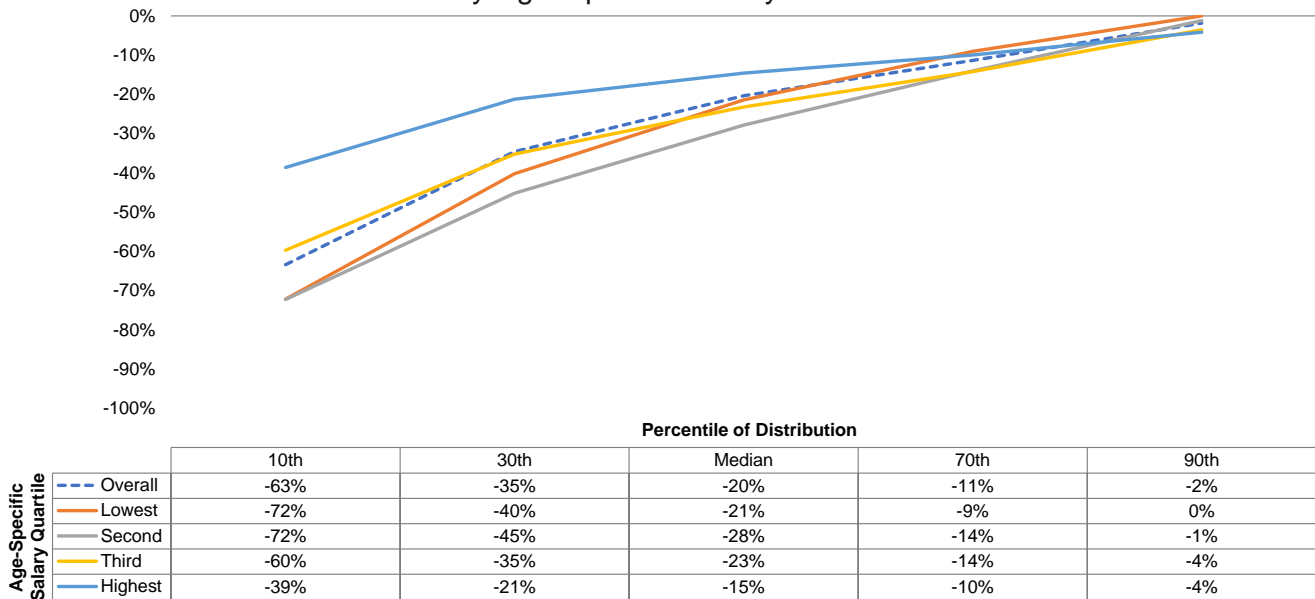
- Figure 7 shows the distribution of reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 with no payback, by current age.
- Figure 8 shows the distribution of reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 with no payback, by age-specific salary quartile.
- Figure 9 shows the distribution of reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 with no payback, by age-specific account balance quartile.
- Figure 10 shows the median reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 with no payback, by current age and age-specific account balance quartile.
- Figure 11 shows the median reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 with no payback, by current age and age-specific salary quartile.

**Figure 7**  
**Reduction in Multiples of Pay Saved at Age 65**  
 Employees Taking Full Withdrawal (up to \$100,000) in 2020 With No Payback,  
 by Current Age



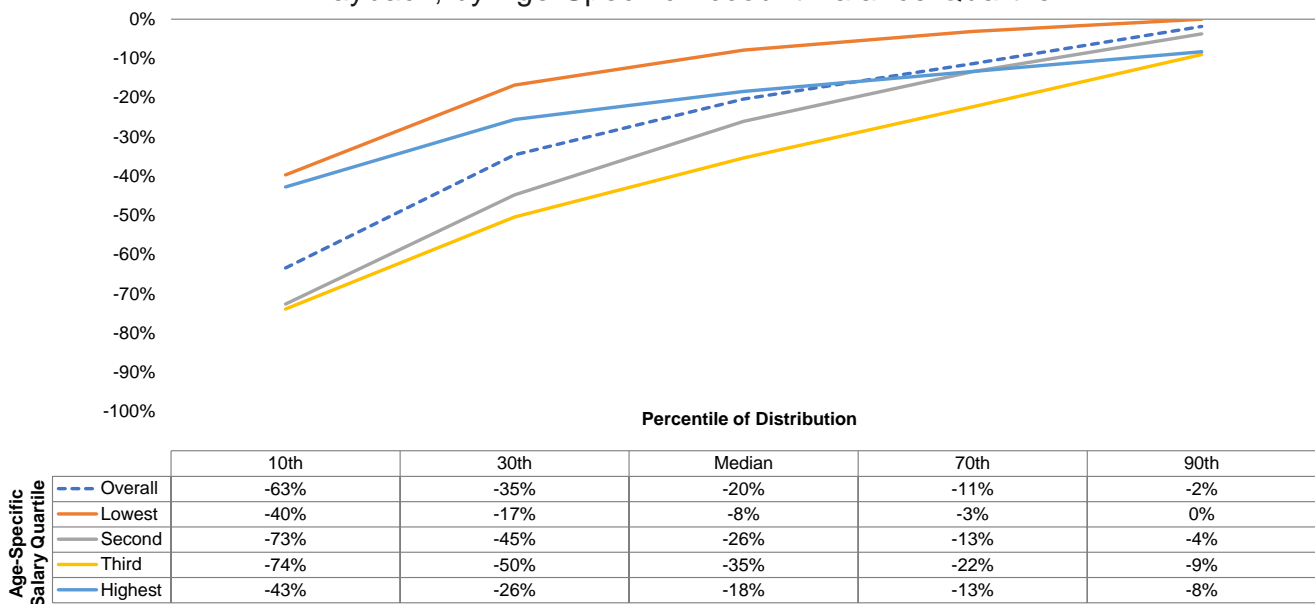
Source: EBRI Retirement Security Projection Model® Version 3653.

**Figure 8**  
**Reduction in Multiples of Pay Saved at Age 65**  
 Employees Taking Full Withdrawal (up to \$100,000) in 2020 With No Payback,  
 by Age-Specific Salary Quartile



Source: EBRI Retirement Security Projection Model® Version 3653.

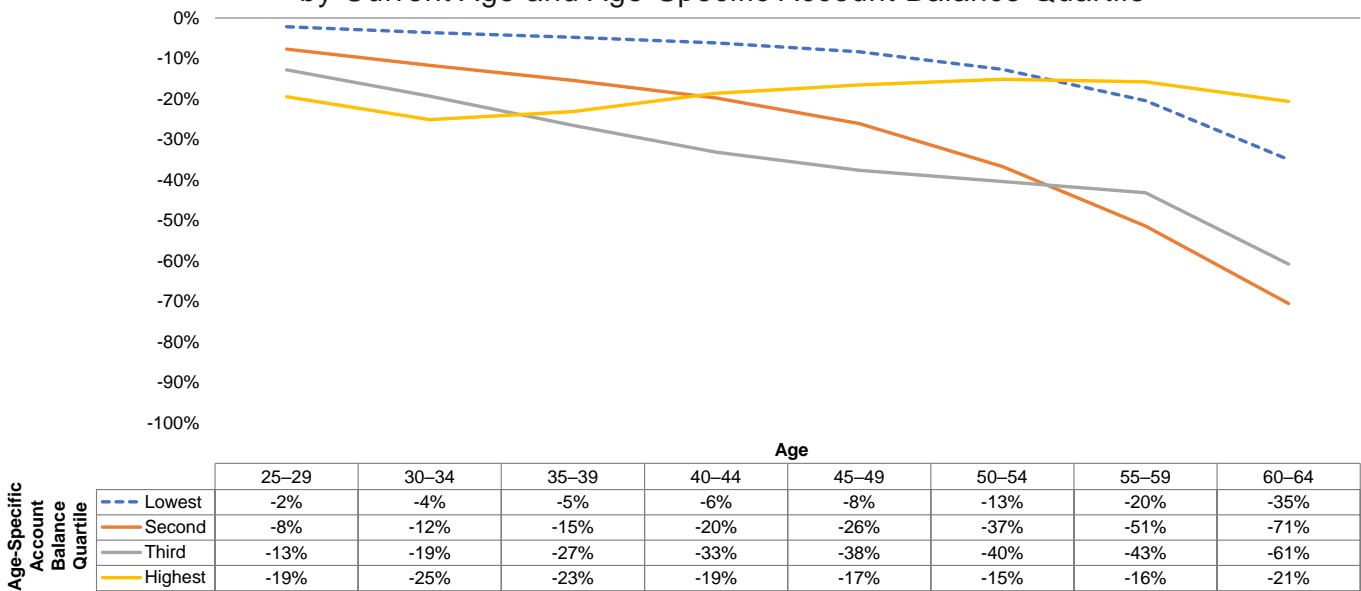
**Figure 9**  
**Reduction in Multiples of Pay Saved at Age 65**  
 Employees Taking Full Withdrawal (up to \$100,000) in 2020 With No  
 Payback, by Age-Specific Account Balance Quartile



Source: EBRI Retirement Security Projection Model® Version 3653.

Figure 10  
**Median Reduction in Retirement Balances  
 at Age 65 as a Multiple of Pay**

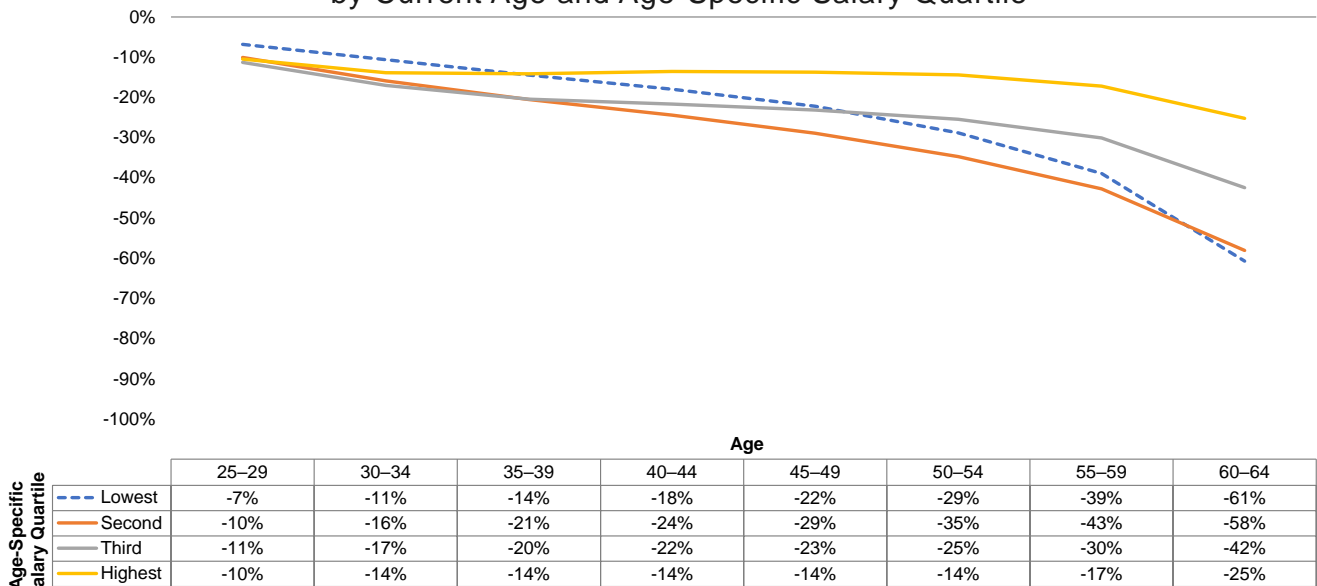
Employees Taking Full Withdrawal (up to \$100,000) in 2020 With No Payback,  
 by Current Age and Age-Specific Account Balance Quartile



Source: EBRI Retirement Security Projection Model® Version 3653.

Figure 11  
**Median Reduction in Retirement Balances  
 at Age 65 as a Multiple of Pay**

Employees Taking Full Withdrawal (up to \$100,000) in 2020 With No Payback,  
 by Current Age and Age-Specific Salary Quartile



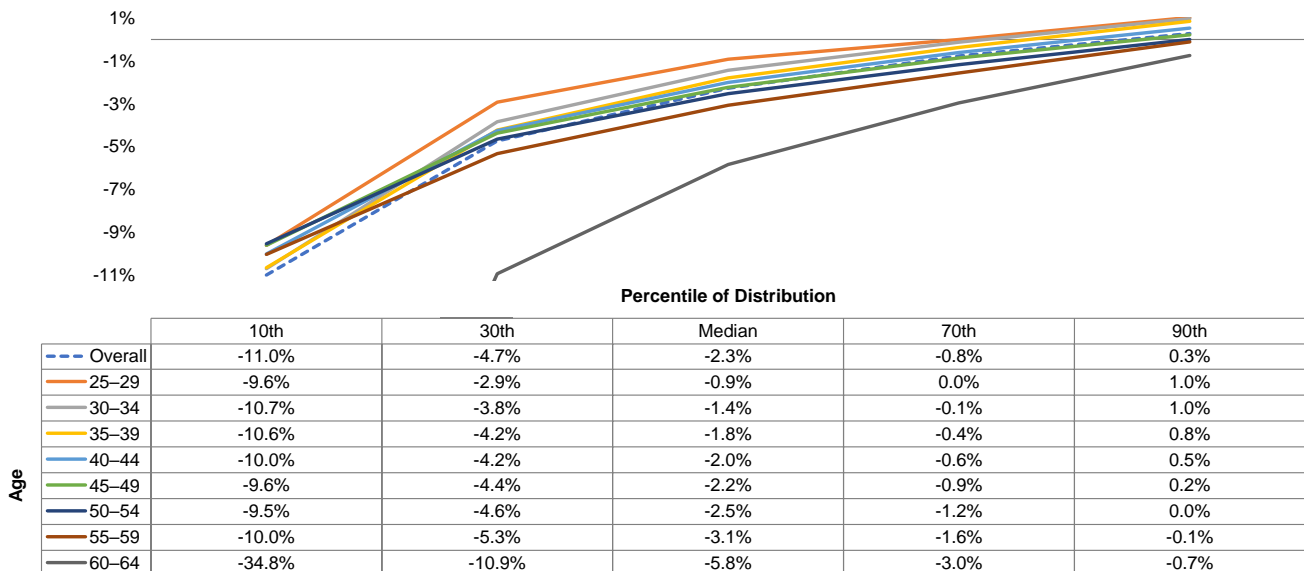
Source: EBRI Retirement Security Projection Model® Version 3653.



## Employees Taking Full Withdrawal (up to \$100,000) in 2020 With Three-Year Payback

- Figure 12 shows the distribution of reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 with three-year payback, by current age.
- Figure 13 shows the distribution of reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 with three-year payback, by age-specific salary quartile.
- Figure 14 shows the distribution of reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 with three-year payback, by age-specific account balance quartile.
- Figure 15 shows the median reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 with three-year payback, by current age and age-specific account balance quartile.
- Figure 16 shows the median reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 with three-year payback, by current age and age-specific salary quartile.

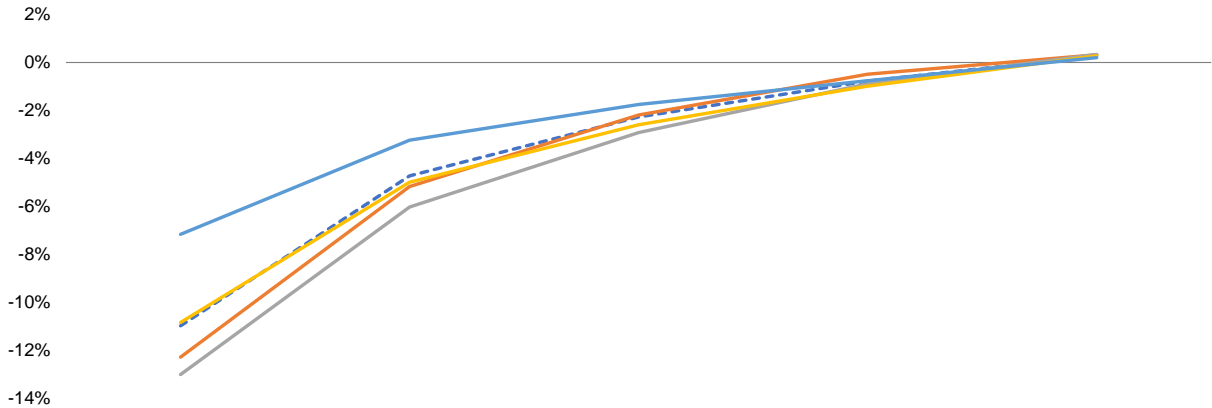
**Figure 12**  
**Reduction in Multiples of Pay Saved at Age 65**  
 Employees Taking Full Withdrawal (up to \$100,000) in 2020 With Three-Year Payback,\* by Current Age



\* With the exception of those taking the withdrawal after age 61.

Source: EBRI Retirement Security Projection Model® Version 3653.

**Figure 13**  
**Reduction in Multiples of Pay Saved at Age 65**  
 Employees Taking Full Withdrawal (up to \$100,000) in 2020 With Three-Year Payback,\* by Age-Specific Salary Quartile



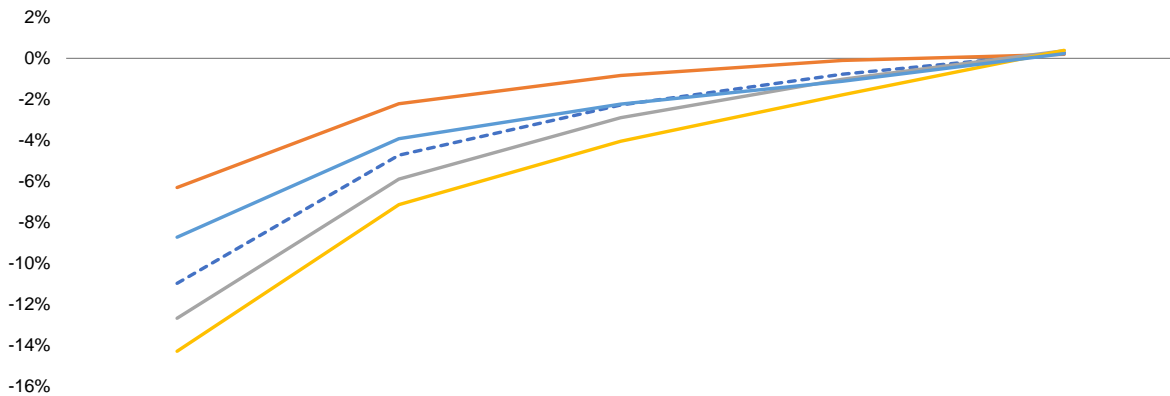
**Percentile of Distribution**

Age-Specific Salary Quartile	Percentile of Distribution				
	10th	30th	Median	70th	90th
Overall	-11.0%	-4.7%	-2.3%	-0.8%	0.3%
Lowest	-12.3%	-5.2%	-2.2%	-0.5%	0.3%
Second	-13.0%	-6.0%	-2.9%	-0.9%	0.3%
Third	-10.8%	-5.0%	-2.6%	-1.0%	0.3%
Highest	-7.2%	-3.2%	-1.8%	-0.8%	0.2%

\* With the exception of those taking the withdrawal after age 61.

Source: EBRI Retirement Security Projection Model® Version 3653.

**Figure 14**  
**Reduction in Multiples of Pay Saved at Age 65**  
 Employees Taking Full Withdrawal (up to \$100,000) in 2020 With Three-Year Payback,\* by Age-Specific Account Balance Quartile



**Percentile of Distribution**

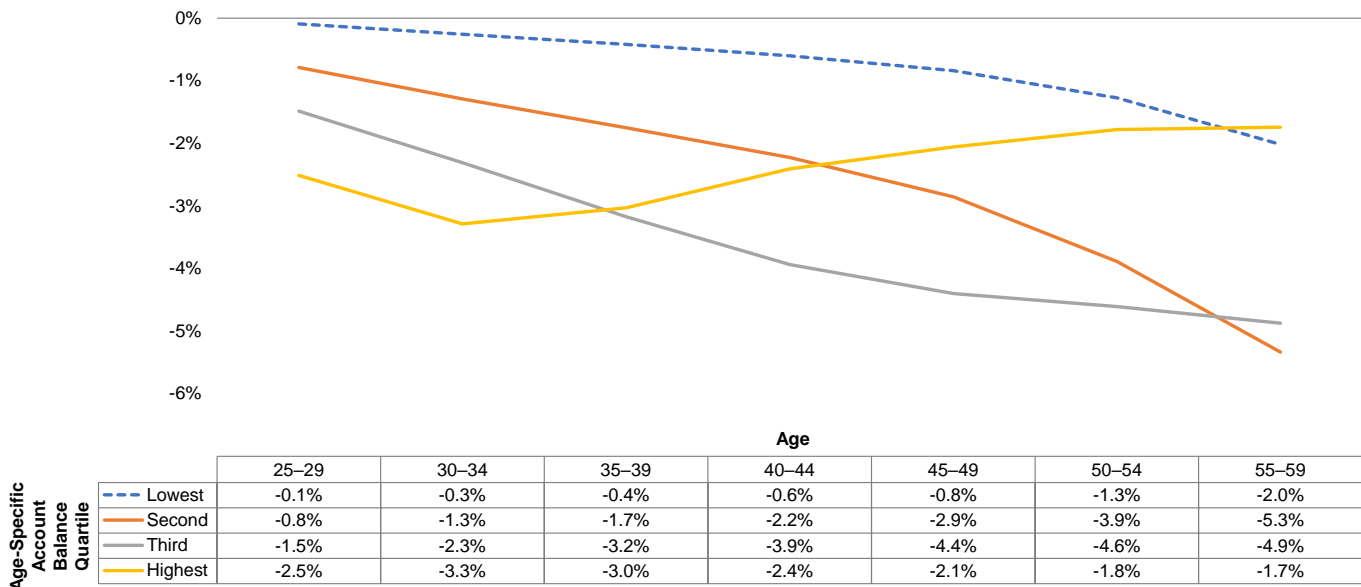
Age-Specific Account Balance Quartile	Percentile of Distribution				
	10th	30th	Median	70th	90th
Overall	-11.0%	-4.7%	-2.3%	-0.8%	0.3%
Lowest	-6.3%	-2.2%	-0.8%	-0.1%	0.2%
Second	-12.7%	-5.9%	-2.9%	-1.0%	0.4%
Third	-14.3%	-7.1%	-4.0%	-1.8%	0.4%
Highest	-8.7%	-3.9%	-2.2%	-1.1%	0.2%

\* With the exception of those taking the withdrawal after age 61.

Source: EBRI Retirement Security Projection Model® Version 3653.

### Figure 15 Median Reduction in Retirement Balances at Age 65 as a Multiple of Pay

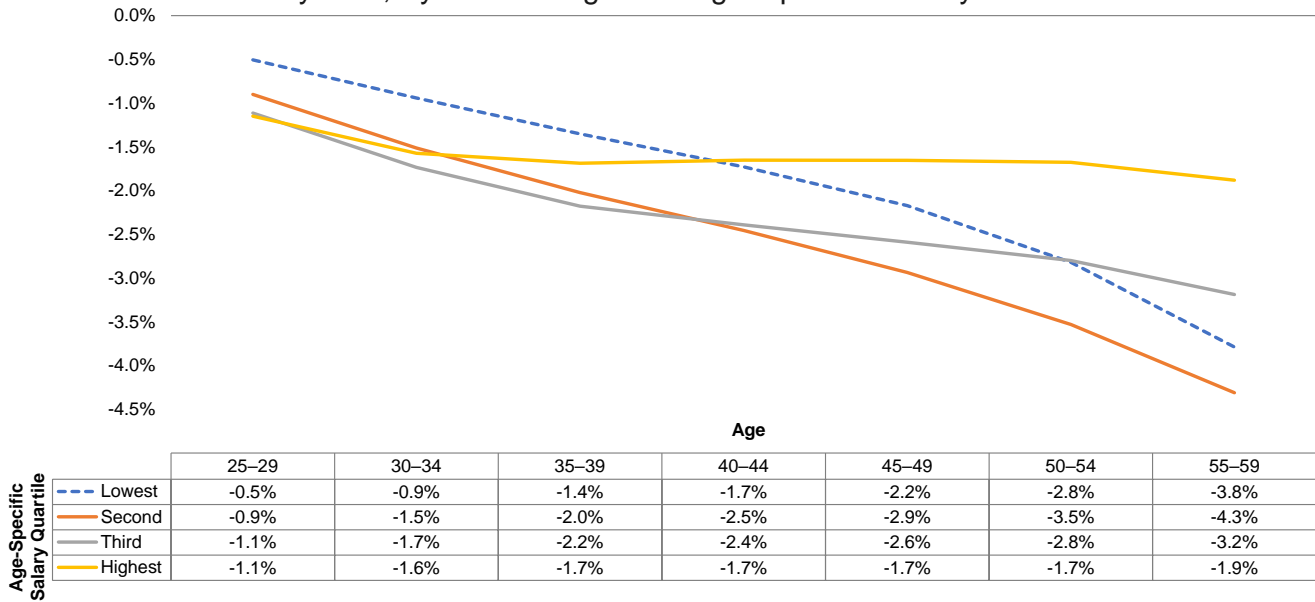
Employees Taking Full Withdrawal (up to \$100,000) in 2020 With Three-Year Payback, by Current Age and Age-Specific Account Balance Quartile



Source: EBRI Retirement Security Projection Model® Version 3653.

### Figure 16 Median Reduction in Retirement Balances at Age 65 as a Multiple of Pay

Employees Taking Full Withdrawal (up to \$100,000) in 2020 With Three-Year Payback, by Current Age and Age-Specific Salary Quartile

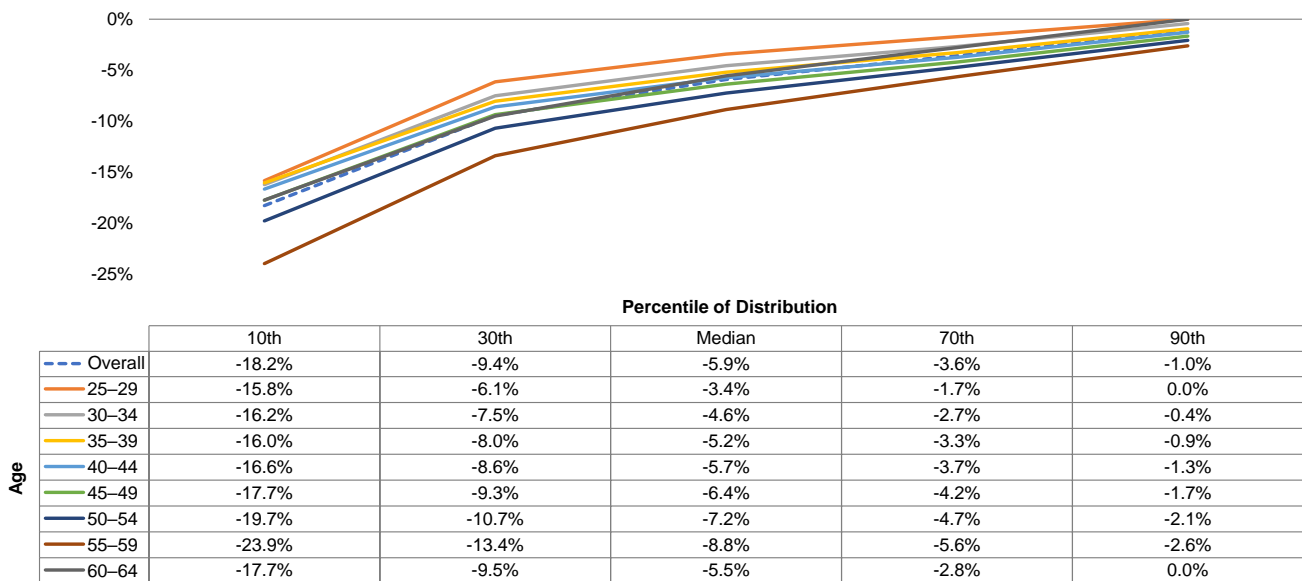


Source: EBRI Retirement Security Projection Model® Version 3653.

**Employees Taking New Loans (up to \$100,000) in 2020 With Dollar-for-Dollar Offset Against Employee Contributions (to the Extent Possible) for New Loan Payments**

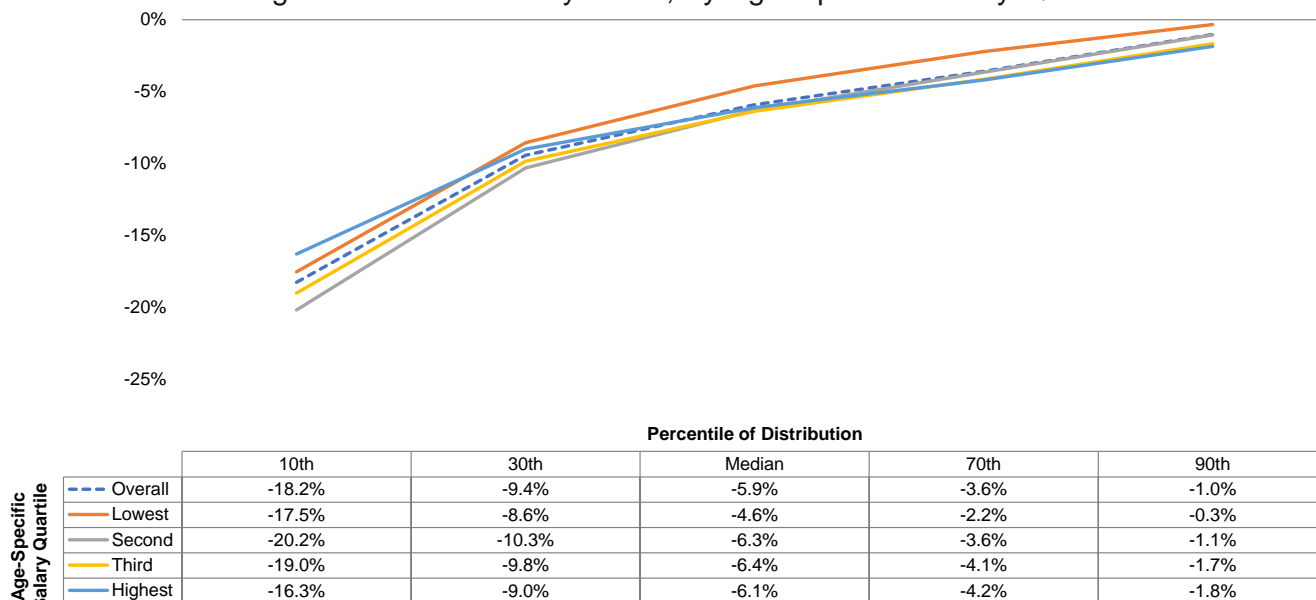
- Figure 17 shows the distribution of reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking new loans (up to \$100,000) in 2020 with dollar-for-dollar offset against new loan payments, by current age.
- Figure 18 shows the distribution of reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking new loans (up to \$100,000) in 2020 with dollar-for-dollar offset against new loan payments, by age-specific salary quartile.
- Figure 19 shows the distribution of reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking new loans (up to \$100,000) in 2020 with dollar-for-dollar offset against new loan payments, by age-specific account balance quartile.
- Figure 20 shows the median reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking new loans (up to \$100,000) in 2020 with dollar-for-dollar offset against new loan payments, by current age and age-specific account balance quartile.
- Figure 21 shows the median reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking new loans (up to \$100,000) in 2020 with dollar-for-dollar offset against new loan payments, by current age and age-specific salary quartile.

**Figure 17**  
**Reduction in Multiples of Pay Saved at Age 65**  
 Employees Taking New Loans (up to \$100,000) in 2020 With Dollar-for-Dollar Offset Against New Loan Payments, by Current Age



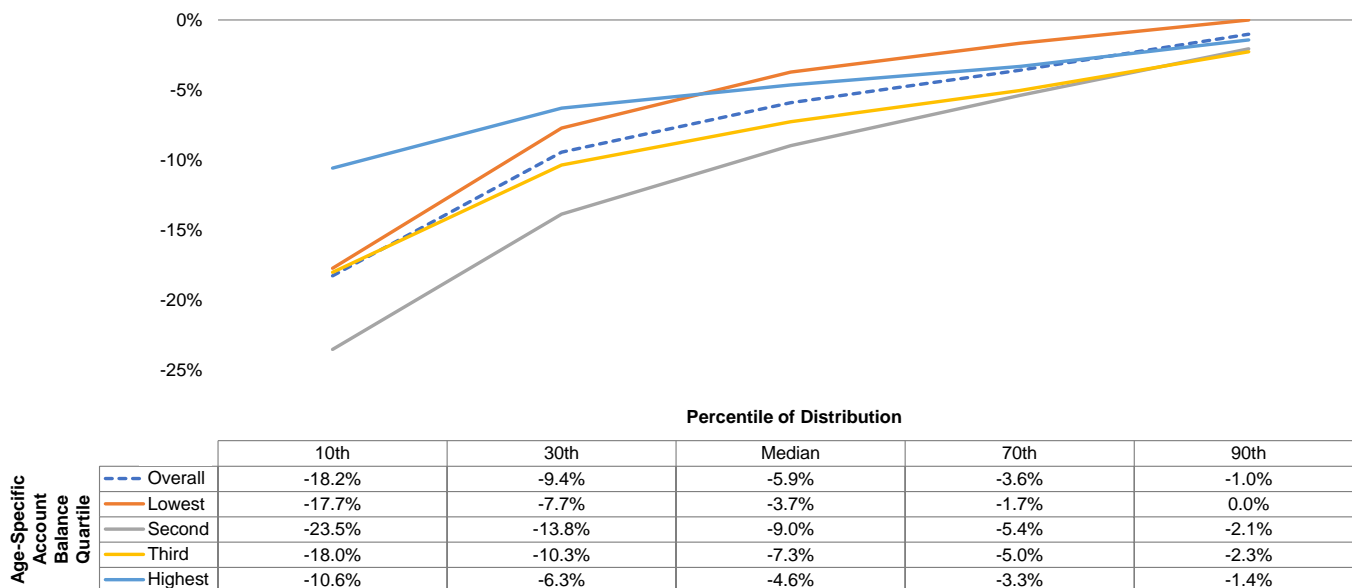
Source: EBRI Retirement Security Projection Model® Version 3653.

**Figure 18**  
**Reduction in Multiples of Pay Saved at Age 65**  
 Employees Taking New Loans (up to \$100,000) in 2020 With Dollar-for-Dollar Offset  
 Against New Loan Payments, by Age-Specific Salary Quartile



Source: EBRI Retirement Security Projection Model® Version 3653.

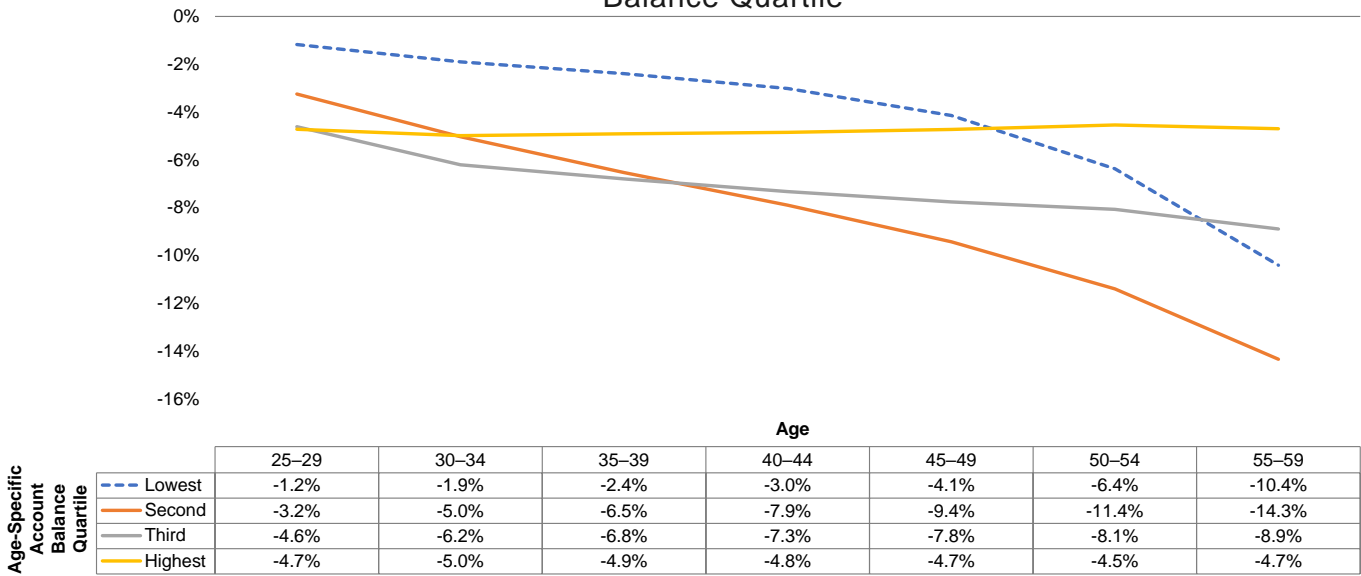
**Figure 19**  
**Reduction in Multiples of Pay Saved at Age 65**  
 Employees Taking New Loans (up to \$100,000) in 2020 With Dollar-for-Dollar Offset  
 Against New Loan Payments, by Age-Specific Account Balance Quartile



Source: EBRI Retirement Security Projection Model® Version 3653.

Figure 20  
**Median Reduction in Retirement Balances  
at Age 65 as a Multiple of Pay**

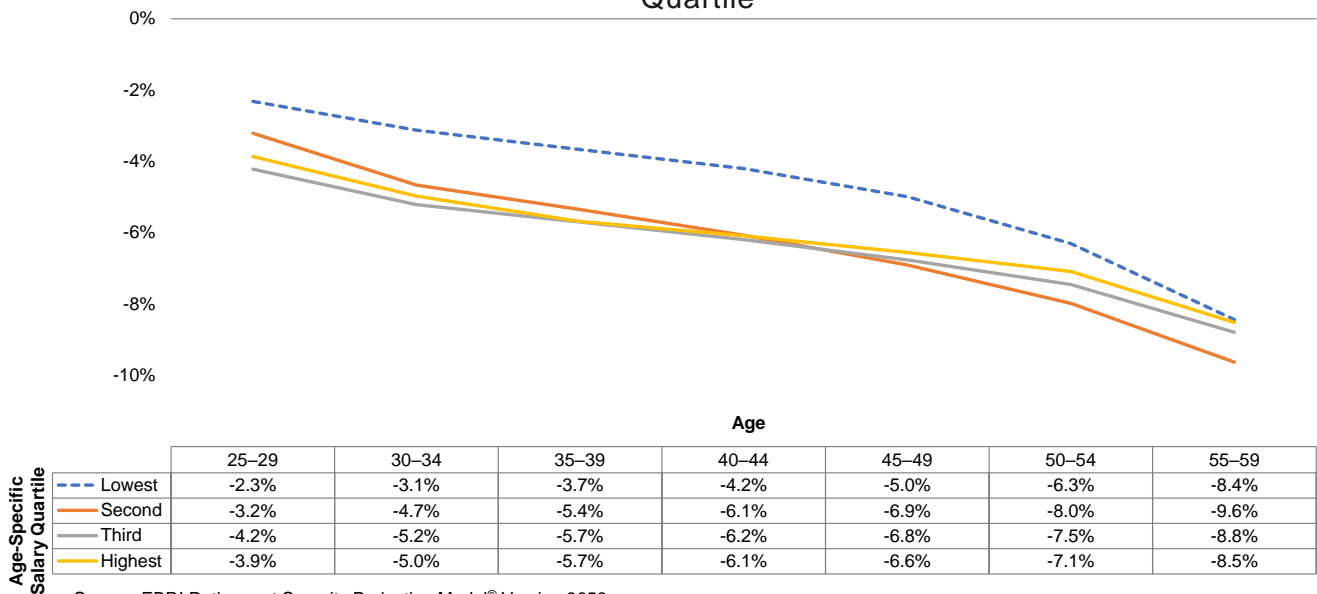
Employees Taking New Loans (up to \$100,000) in 2020 With Dollar-for-Dollar Offset Against New Loan Payments, by Current Age and Age-Specific Account Balance Quartile



Source: EBRI Retirement Security Projection Model® Version 3653.

Figure 21  
**Median Reduction in Retirement Balances  
at Age 65 as a Multiple of Pay**

Employees Taking New Loans (up to \$100,000) in 2020 With Dollar-for-Dollar Offset Against New Loan Payments, by Current Age and Age-Specific Salary Quartile

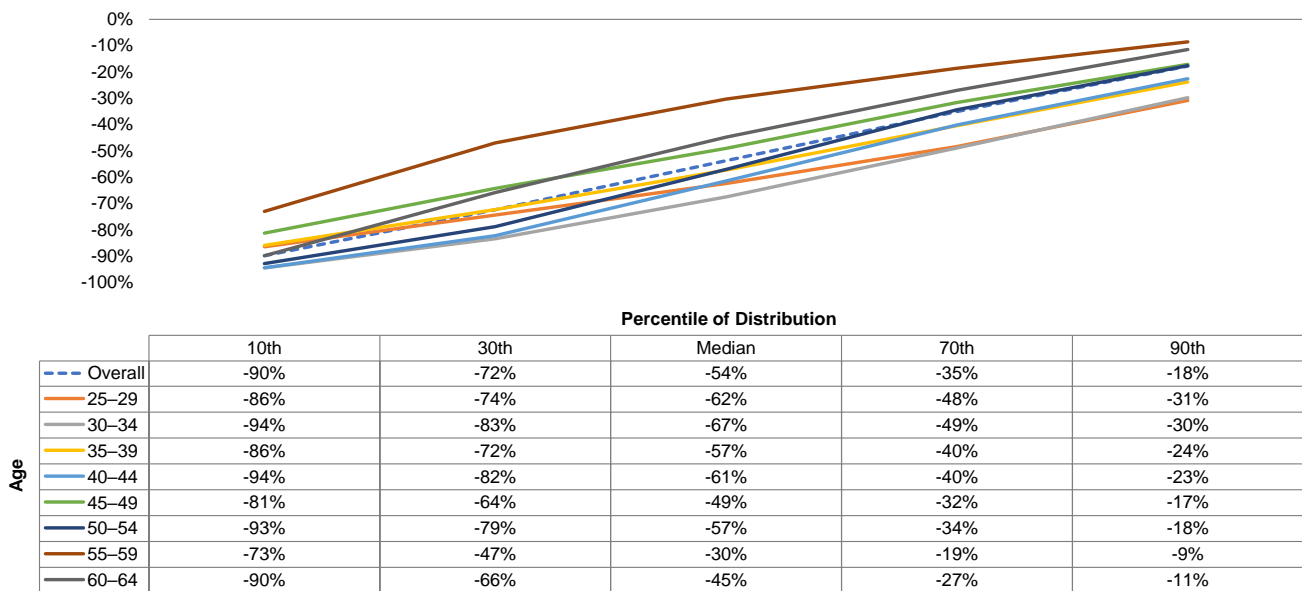


Source: EBRI Retirement Security Projection Model® Version 3653.

## Employees Taking Full Withdrawal (up to \$100,000) in 2020 and Every 10 Years Thereafter With No Payback

- Figure 22 shows the distribution of reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 and every 10 years thereafter with no payback, by current age.
- Figure 23 shows the distribution of reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 and every 10 years thereafter with no payback, by age-specific salary quartile.
- Figure 24 shows the distribution of reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 and every 10 years thereafter with no payback, by age-specific account balance quartile.
- Figure 25 shows the median reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 and every 10 years thereafter with no payback, by current age and age-specific account balance quartile.
- Figure 26 shows the median reduction in retirement balances at age 65 as a percentage of terminal salary for employees taking the full withdrawal (up to \$100,000) in 2020 and every 10 years thereafter with no payback, by current age and age-specific salary quartile.

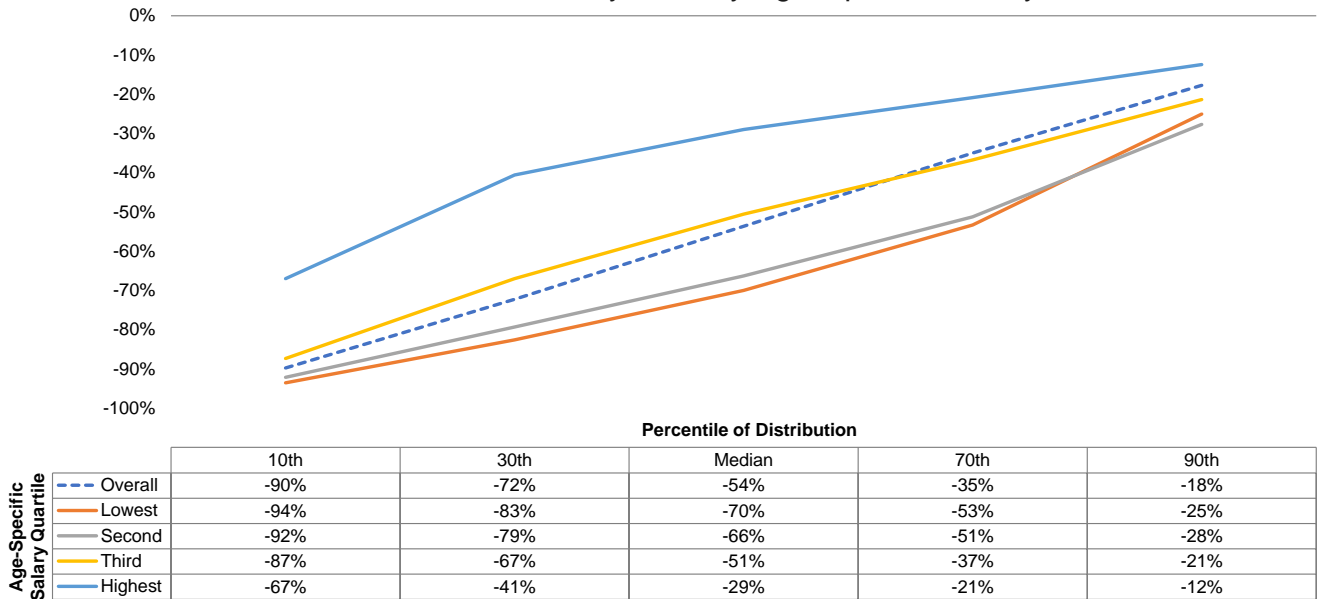
**Figure 22**  
**Reduction in Multiples of Pay Saved at Age 65**  
 Employees Taking Full Withdrawal (up to \$100,000) in 2020 and Every 10 Years Thereafter With No Payback, by Current Age



Source: EBRI Retirement Security Projection Model® Version 3653.

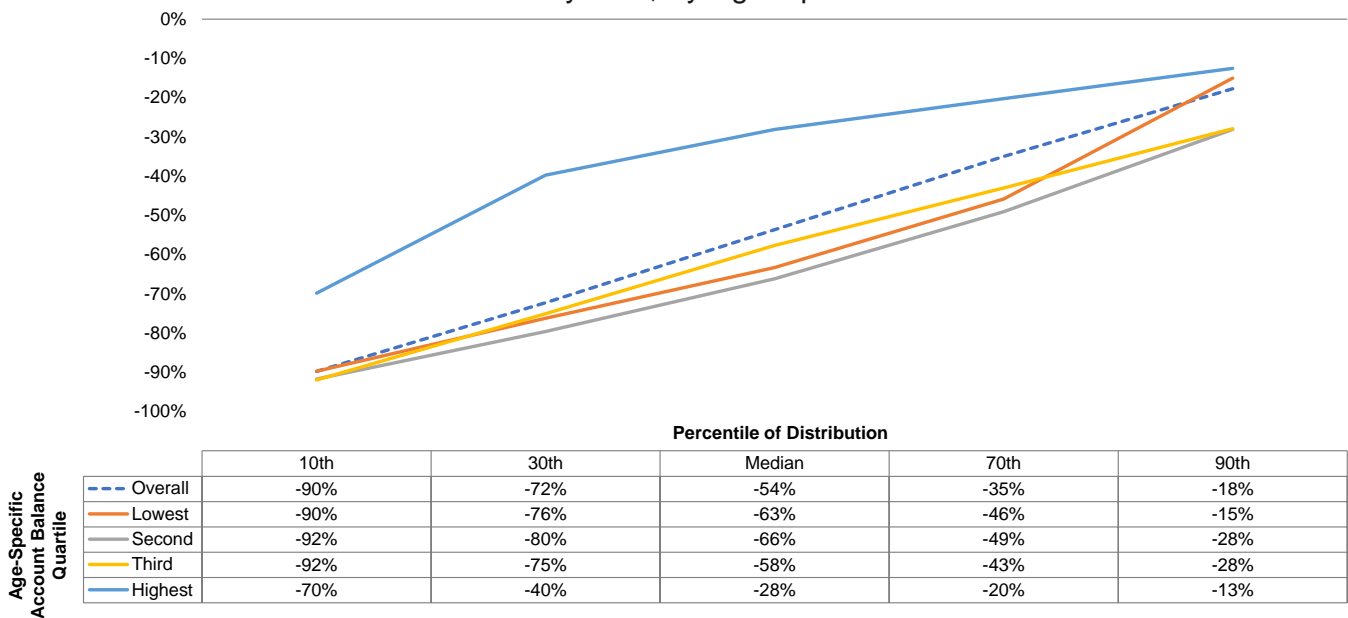


**Figure 23**  
**Reduction in Multiples of Pay Saved at Age 65**  
 Employees Taking Full Withdrawal (up to \$100,000) in 2020 and Every 10 Years Thereafter With No Payback, by Age-Specific Salary Quartile



Source: EBRI Retirement Security Projection Model® Version 3653.

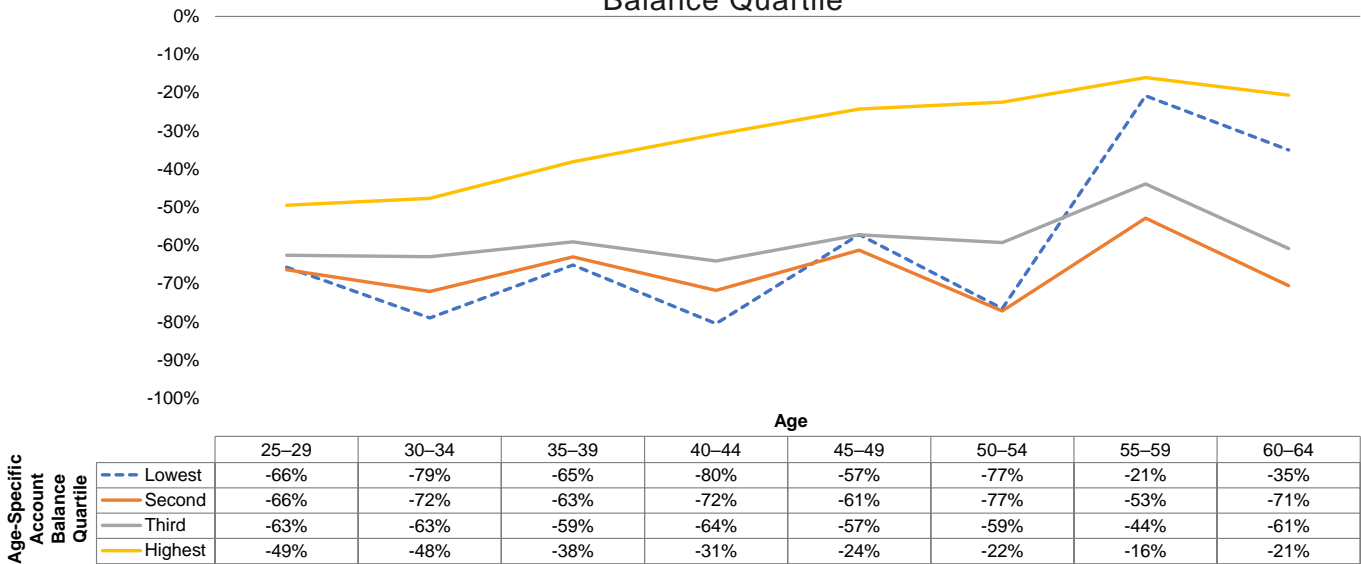
**Figure 24**  
**Reduction in Multiples of Pay Saved at Age 65**  
 Employees Taking Full Withdrawal (up to \$100,000) in 2020 and Every 10 Years Thereafter With No Payback, by Age-Specific Account Balance Quartile



Source: EBRI Retirement Security Projection Model® Version 3653.

## Figure 25 Median Reduction in Retirement Balances at Age 65 as a Multiple of Pay

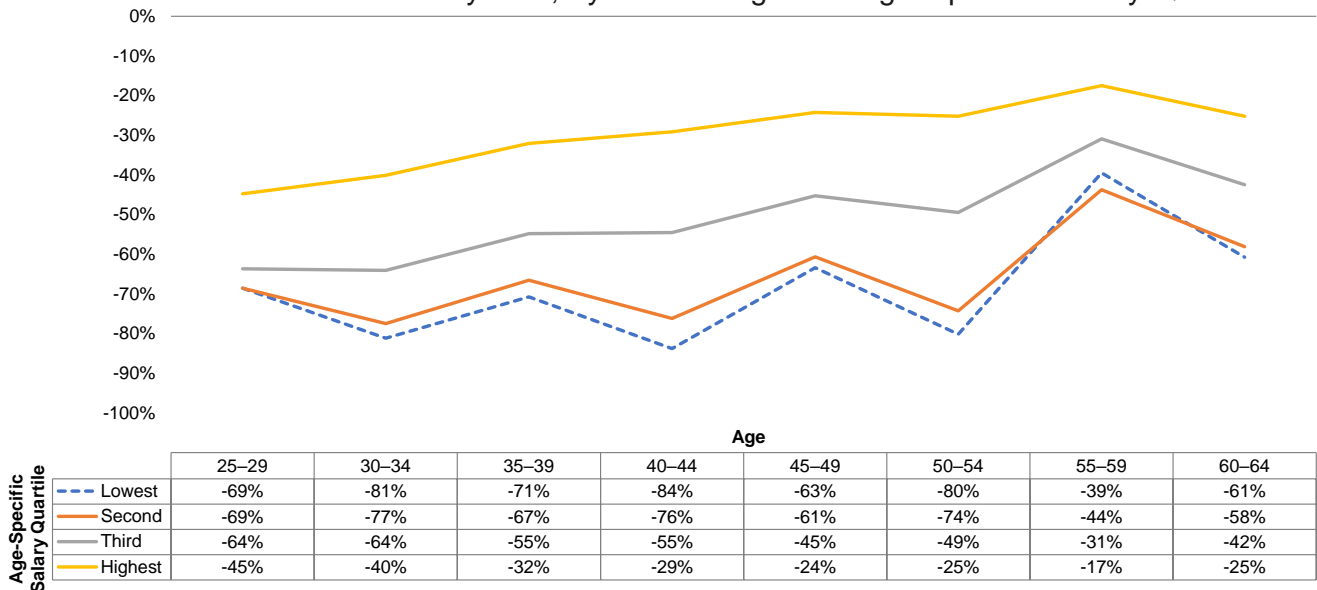
Employees Taking Full Withdrawal (up to \$100,000) in 2020 and Every 10 Years Thereafter With No Payback, by Current Age and Age-Specific Account Balance Quartile



Source: EBRI Retirement Security Projection Model® Version 3653.

## Figure 26 Median Reduction in Retirement Balances at Age 65 as a Multiple of Pay

Employees Taking Full Withdrawal (up to \$100,000) in 2020 and Every 10 Years Thereafter With No Payback, by Current Age and Age-Specific Salary Quartile



Source: EBRI Retirement Security Projection Model® Version 3653.

## References

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- VanDerhei, Jack, Sarah Holden, Luis Alonso, and Steven Bass, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2016," *EBRI Issue Brief* no. 458 (September 2018).

## Endnotes

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- <sup>1</sup> This scenario is admittedly ad hoc, but it was designed to provide a rough estimate of allowing this type of flexibility from regional catastrophes in recent years.
- <sup>2</sup> See the appendix of VanDerhei and Copeland (2010) for additional detail.
- <sup>3</sup> See VanDerhei, Holden, Alonso, and Bass (2018) for additional detail.
- <sup>4</sup> 401(k) participants are split into quartiles based on salary for each five-year age cohort.
- <sup>5</sup> With the exception of those taking the withdrawal after age 61.
- <sup>6</sup> To the extent possible.
- <sup>7</sup> If the simulated employee contributions are not sufficient to pay all of the "new" loan payments, the difference is assumed to come from other resources.
- <sup>8</sup> The reduction for those ages 60–64 appears smaller than it should since they reach age 65 with only some of the contributions reduced.
- <sup>9</sup> The analysis was limited to the younger participants to avoid any bias with respect to 401(k) balances that might have been rolled over to IRAs already.
- <sup>10</sup> Clingman, Burkhalter, and Chaplain (2020).
- <sup>11</sup> See VanDerhei (2015) for details.
- <sup>12</sup> [https://www.pzca.org/research/cares\\_snapshot2](https://www.pzca.org/research/cares_snapshot2)
- <sup>13</sup> EBRI plans to relax this assumption as well as provide analysis of the impact by employee demographics and account details as micro data become available.
- <sup>14</sup> A future EBRI publication is scheduled to simulate the AGGREGATE impact of the CARES Act on retirement income adequacy once the requisite data on plan sponsor and participant behavior is available.