

Understanding Who Would Benefit From a Student Loan Retirement Matching Program and by How Much

By Craig Copeland, Ph.D., Employee Benefit Research Institute

AT A GLANCE

Student loan debt reached \$1.66 trillion dollars in 2026, up from \$0.36 trillion in 2005. This debt type is more prevalent among younger workers, but it also impacts workers of all ages. This can result in these workers falling behind in their retirement savings. The Setting Every Community Up for Retirement Enhancement (SECURE) 2.0 Act included a provision that allows plan sponsors to make matching contributions on qualified student loan payments without requiring employees to make elective deferrals into these plans.

This study, which is the first of two studies examining the potential impact of a student loan retirement matching program, identifies the characteristics of those with student loan debt and the differences in contribution rates, account balances, and participation rates between those with and without this debt. Furthermore, an estimation of the amount of savings from employer matches potentially missed out on as a result of lower participation and any contributions less than the maximum matched by plan sponsors is provided.

- **One in five 401(k) plan participants ages 25–69 carried student loan debt, with younger participants being more likely to have it.** For example, over one in three (35.7 percent) participants ages 25–29 held student loan debt, while 20.8 percent of those ages 40–44 and 12.9 percent of those ages 55–59 did so. This debt shows up across participants with all incomes, tenures, and account balances.
- **Student loan borrowers ages 25–44 were less likely to have participated in a defined contribution (DC) plan when eligible than those without this debt.** For instance, 75.5 percent of those ages 25–34 with student loans participated in a DC plan when eligible, compared with 84.1 percent without them.
- **Not only were the participation rates lower for younger student loan debtholders, but when they did contribute, they contributed at a lower rate.** This difference was as much as 14.7 percent lower for those ages 50–54 with the debt. The lower contribution rates for borrowers persisted across all income levels.
- **The median account balance for participants with student loan debt was significantly lower than for those without it.** The difference was the largest for participants in their 40s at 45 percent lower, with lower median balances among the debtholders persisting across all income and tenure levels.
- **Lower contribution rates and account balances of the debtholders remained when compared longitudinally with those without the debt.** As the age of the participants increased, the more likely the difference in account balances was to remain stable over the period examined. In fact, once participants reached their 50s and 60s, there were virtually no changes in the differences between those with and without the debt.
- **A substantial percentage of participants with student loan debt did not contribute enough to reach common employer matching thresholds.** For three common maximum employer matching thresholds of 4, 5, and 6 percent of income, 39.2 percent of the 401(k) plan participant borrowers contributed less than 4 percent of their income, 49.7 percent below 5 percent, and 61.3 percent below 6 percent.

- ***The median ratio of employer contributions to employee contributions for student loan participants contributing below each maximum matching threshold was found to be in the 60–70 percent range.*** Thus, for every dollar the employee contributed up to the maximum matched, they could expect to receive \$0.60–\$0.70 in employer matching contributions. This median ratio was consistent across all ages and incomes of the participant borrowers.
- ***For two assumed values of matching maximum thresholds, the total potential additional matching contributions to 401(k) plans from a student loan retirement matching program for those ages 25–69 with student loans are estimated to be \$11.2 billion and \$20.2 billion annually.*** This means that each year these debtholders could have over an additional \$10 billion dollars from the universal adoption of the student loan retirement matching program, which could be building up their retirement savings.

The provision in the SECURE 2.0 Act that allows qualified student loan payments of DC-plan-eligible workers to receive employer matching contributions into DC plans directly addresses the gap in retirement savings among those with this debt. By adding this benefit to 401(k) plans, those with student loan debt would be able to at least receive some of the missed matching contributions. These additional contributions would be significant over a career and make a substantial difference in workers' retirement savings.

EBRI was able to support the development of this research through supplemental funding from Candidly.

Craig Copeland is director of wealth 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.

Suggested Citation: Copeland, Craig, “Understanding Who Would Benefit From a Student Loan Retirement Matching Program and by How Much,” *EBRI Issue Brief*, no. 665 (Employee Benefit Research Institute, September 15, 2026).

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Introduction

Student loan debt reached \$1.66 trillion dollars in 2026, up from \$0.36 trillion in 2005.¹ This debt type is particularly acute among younger workers just out of college starting their working careers, but it also impacts workers of all ages who either return to school at older ages or are parents helping to fund their children’s college education. As a result, workers can be forced to decide between paying down their debt or saving for retirement. This can result in these debtholders falling behind in their retirement savings. Understanding this impact of student loan debt, federal legislation for employment-based retirement plans — the Setting Every Community Up for Retirement Enhancement (SECURE) 2.0 Act — included a provision that allowed for plan sponsors to make matching contributions on qualified student loan payments without requiring employees to make elective deferrals into these plans. The matching contributions must follow all rules that would apply for the employee contributions to the plan, e.g., matching formulas and maximum matches, but matching contributions still would go into the accounts and compound while employees are paying down their debt.

There have been a number of studies on student loan debt and retirement savings.² However, none of them have been able to use a large sample of participant-level data to see simultaneously the existence of student loan debt, the demographic characteristics of those with this debt, and their behavior in a 401(k) plan.

This study intends to fill that gap and is the first of two studies examining workers with student loan debt, the impact of holding this debt on retirement savings and income adequacy in retirement, and how much a student loan debt retirement matching program contributing to 401(k) plans can help eligible workers. The focus of this first study is to identify the characteristics of those with student loan debt and the differences in contribution rates, account balances, and participation rates between those with and without this debt. Furthermore, an estimation of the amount of savings from employer matches potentially missed out on as a result of lower participation and any contributions less than the maximum matched by plan sponsors is provided.

Data

401(k) Plan — The data for the 401(k) plan participants are from the EBRI/ICI 401(k) Plan Database, which has participant-level data on account balances, asset allocation, contributions, and plan loans, and contains demographic data on the participant.³

Credit Bureau — Anonymized student loan data for this study were provided by TransUnion. These data reflect how student loan tradelines appeared on consumers’ credit files, as reported by data furnishers.

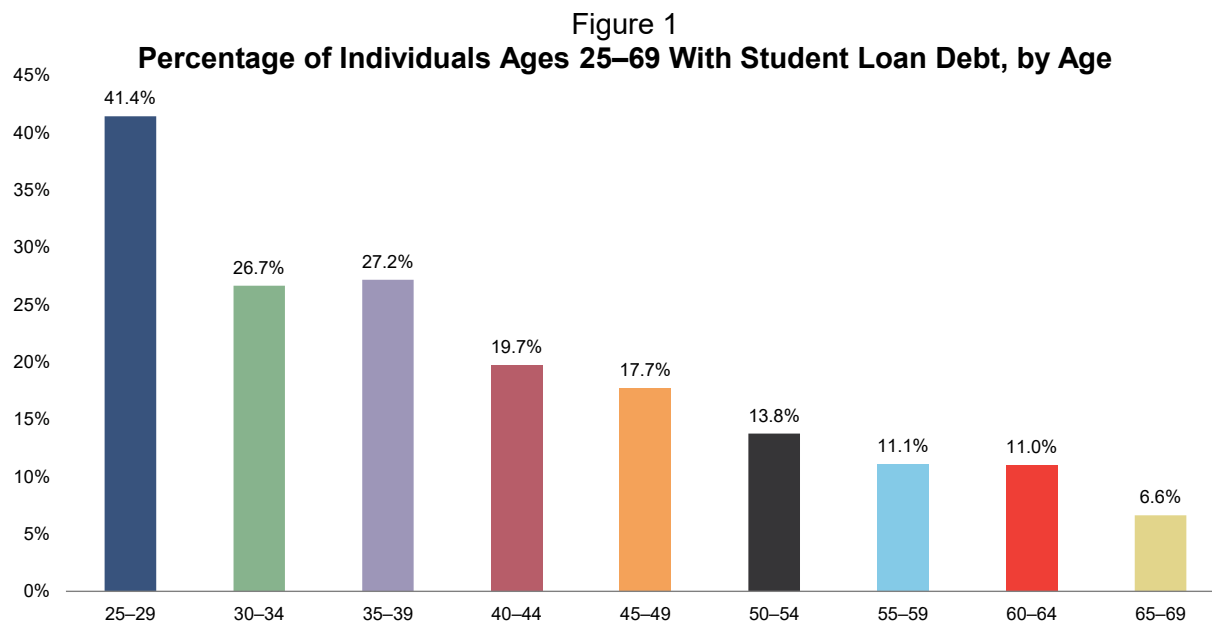
This analysis focuses on the years 2019–2023 for individuals ages 25–69. Averages of the five years of cross-sectional overlapping of the data sources are presented. Each year’s cross section is different due to participants moving into and out of jobs and 401(k) plans. Using the averages over the five years allows for a larger sample of participants and finer demographic comparisons. The cross sections range from just over 600,000 to over 1,000,000 participant observations. A longitudinal analysis of those in all five years of the data is also conducted, which includes 140,000 participant observations.

Overall Incidence of Student Loan Debt

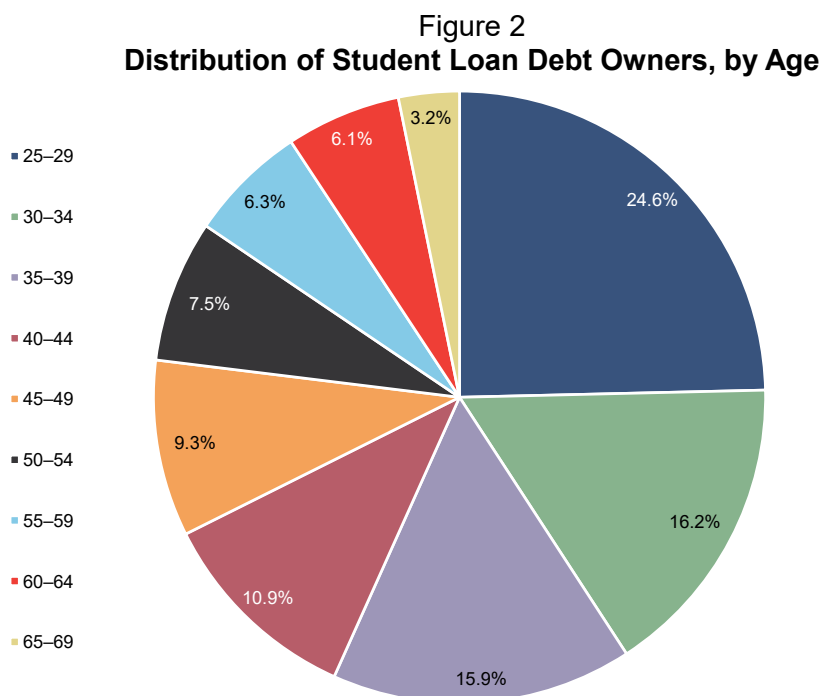
The percentage of all Americans ages 25–69 who had student loan debt during the 2019–2023 period was 19.9 percent. However, younger people were more likely to have this debt than older individuals. In fact, 41.4 percent of

those ages 25–29 had this debt, compared with 11.0 percent of those ages 60–64 (Figure 1). This translates into 24.6 percent of those who had student loan debt being ages 25–29 and another 16.2 percent being ages 30–34 (Figure 2). Only 15.5 percent of those who had this debt were ages 55–69.

The overall student loan debt held by the end of first quarter 2026 had reached \$1.66 trillion.⁴ One-half of this debt was held by those ages 18–39, and 73 percent was held by those ages 18–49.



Source: NY Fed Consumer Credit Panel / Equifax (2025 Student Loan Update, Mangrum). Broad-band NY Fed totals disaggregated to 5-year bands using FSA within-band split ratios. U.S. Census Bureau Population Estimates Program. 2019: Vintage 2019 (nc-est2019-agesex-res.csv). 2020–2023: Vintage 2023 (nc-est2023-agesex-res.csv). SEX=0 (both sexes), AGE 18–24 / 25–29 / ... / 65–69. July 1 reference date each year.



Source: NY Fed Consumer Credit Panel / Equifax (2025 Student Loan Update, Mangrum). Broad-band NY Fed totals disaggregated to 5-year bands using FSA within-band split ratios. U.S. Census Bureau Population Estimates Program. 2019: Vintage 2019 (nc-est2019-agesex-res.csv). 2020–2023: Vintage 2023 (nc-est2023-agesex-res.csv). SEX=0 (both sexes), AGE 18–24 / 25–29 / ... / 65–69. July 1 reference date each year.

Incidence of Student Loan Debt of 401(k) Plan Participants

Among active 401(k) plan participants ages 25–69, the percentage of student loan borrowers was found to be similar to that of all Americans over the 2019–2023 period at 20.0 percent.⁵ Active 401(k) participants also saw the likelihood of having this debt decrease as age increased. Over one in three (35.7 percent) participants ages 25–29 held student loan debt, while 20.8 percent of those ages 40–44 and 12.9 percent of those ages 55–59 did so (Figure 3). As far as the age distribution of participants with this debt, the share who were ages 25–29 was smaller than the overall percentage, but nearly two-thirds were younger than age 45, closely matching the overall share for these ages (Figure 4).

Figure 3
Percentage of 401(k) Plan Participants Ages 25–69
With Student Loan Debt, by Age

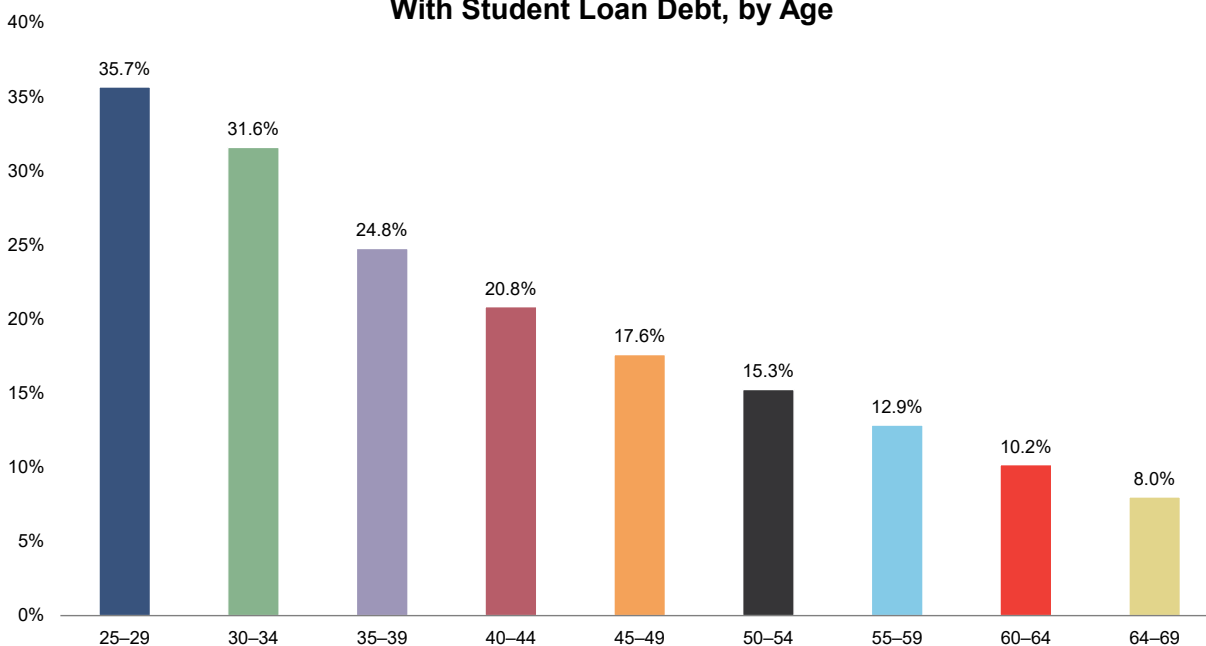
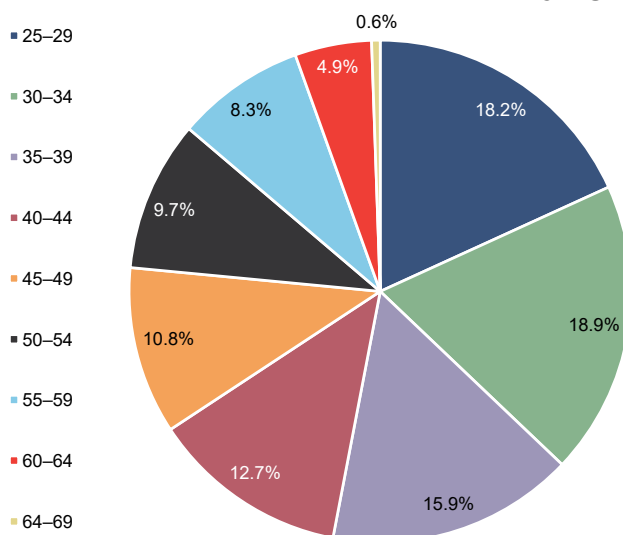


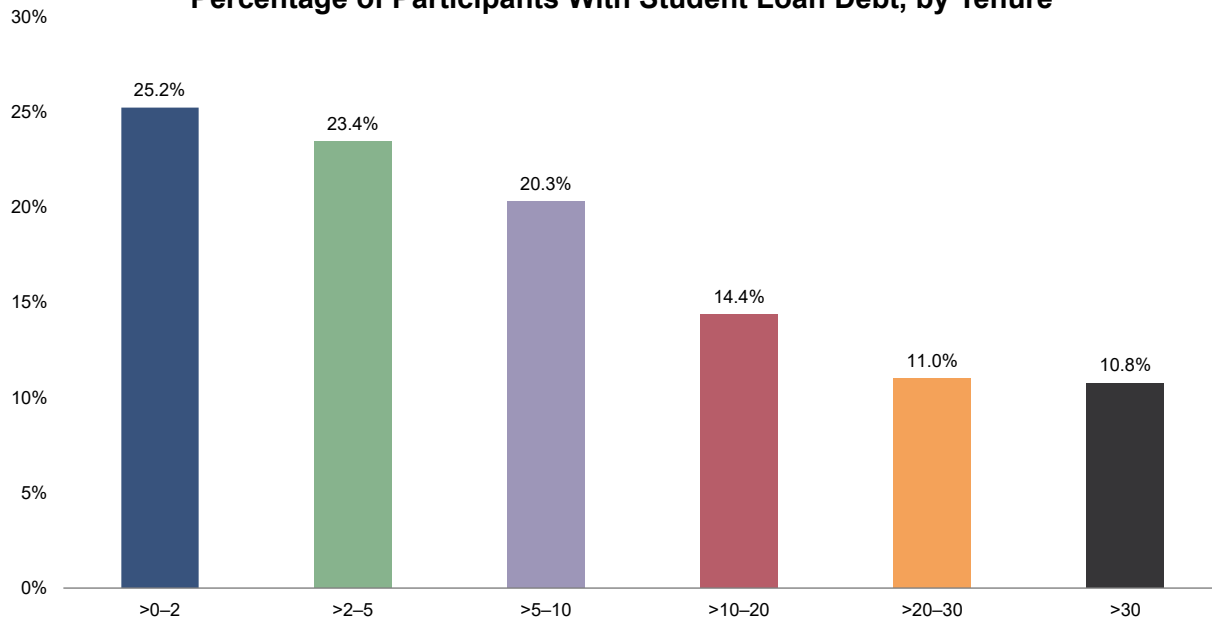
Figure 4
Distribution of 401(k) Plan Participants Who
Have Student Loan Debt, by Age



Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

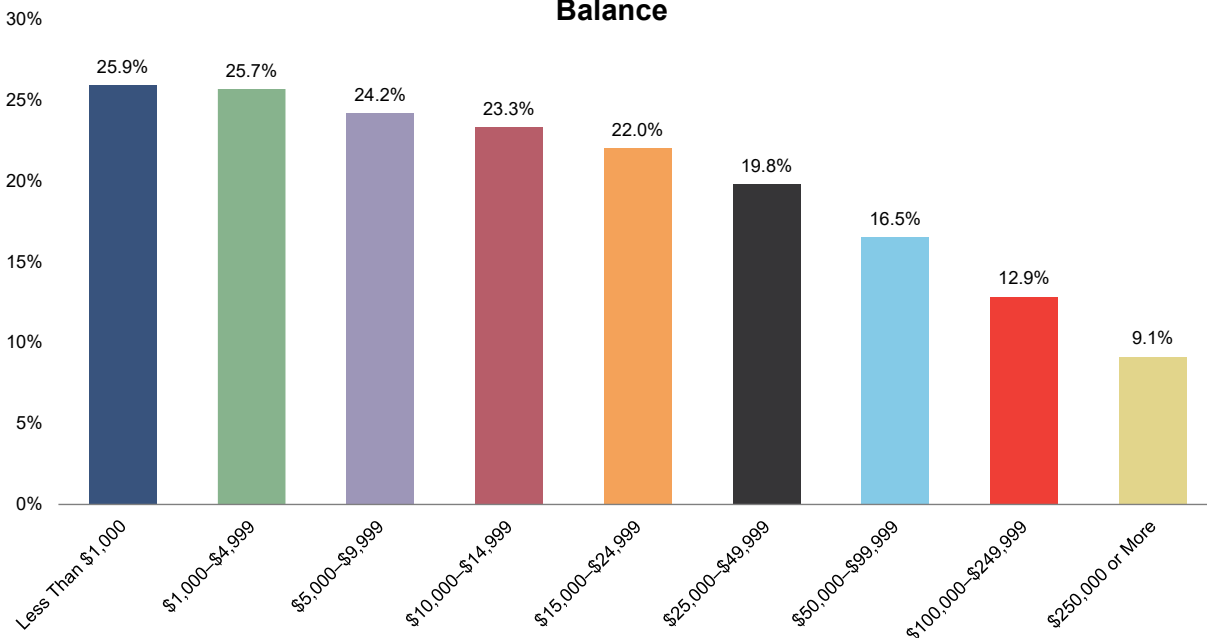
Both participants' tenures with their employer and account balances followed the same pattern, as increases in both were correlated with decreases in the percentage who were student loan borrowers. For example, 25.2 percent of participants with tenures of up to two years had this debt, compared with 11.0 percent of those with more than 20 years of tenure to 30 years of tenure (Figure 5). Approximately 26 percent of participants with account balances of less than \$5,000 had student loan debt, while 12.9 percent of those with account balances of \$100,000–\$249,999 had it (Figure 6).

Figure 5
Percentage of Participants With Student Loan Debt, by Tenure



Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

Figure 6
Percentage of Participants With Student Loan Debt, by Account Balance

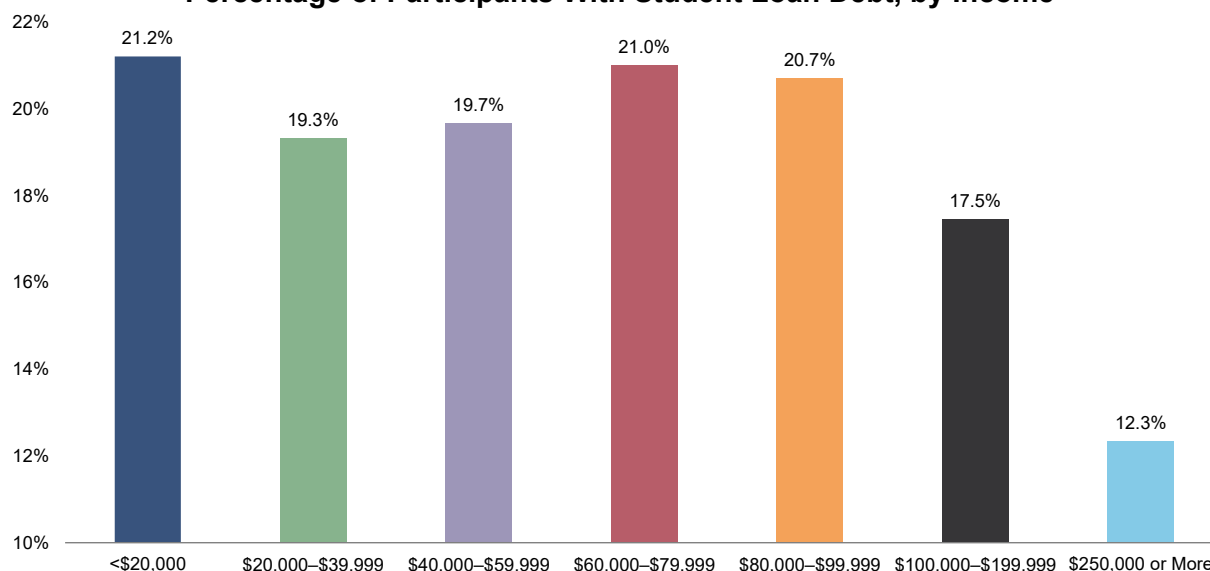


Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

For incomes below \$100,000, the likelihood of having student loan debt did not differ very much, as the percentage having this debt was in the 19–21 percent range (Figure 7).⁶ However, for incomes of \$100,000 or more, the likelihood of having this debt decreased to 17.5 percent for those with incomes of \$100,000–\$199,999 and to 12.3 percent for those with incomes of \$200,000 or more.

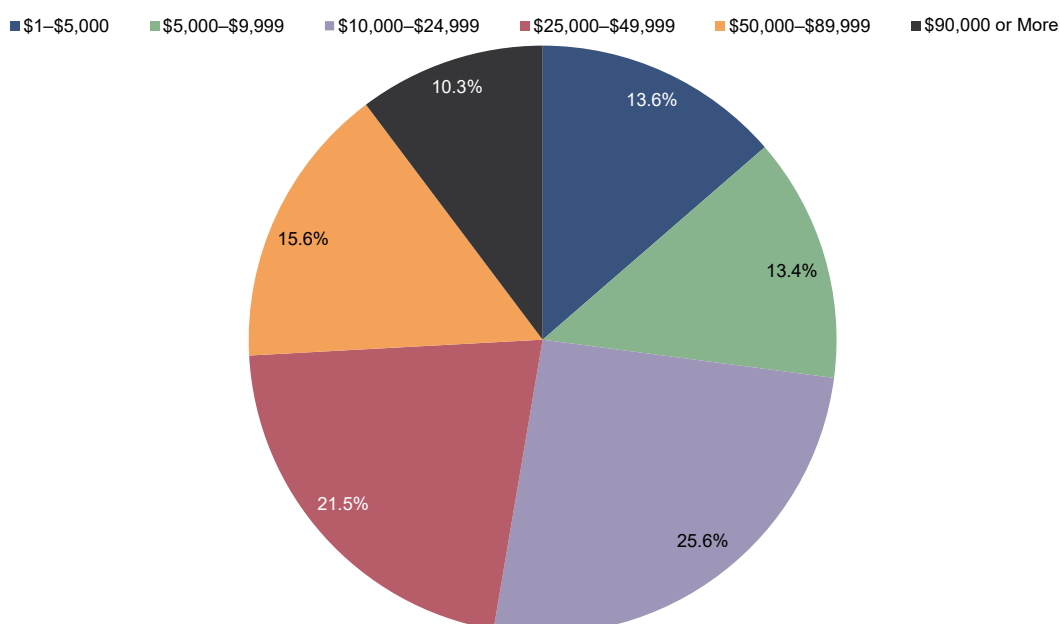
Not only the incidence of student loan debt but also the amount of the debt held could impact contributions to a 401(k) plan. Approximately one-quarter of the 401(k) plan participants who were student loan borrowers had outstanding balances of less than \$10,000, and about half had balances of \$10,000–\$49,999 (Figure 8). Ten percent had outstanding debt of \$90,000 or more. The median outstanding debt was \$23,000.⁷

Figure 7
Percentage of Participants With Student Loan Debt, by Income



Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

Figure 8
Distribution of the Amount of Outstanding Student Loan Debt



Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

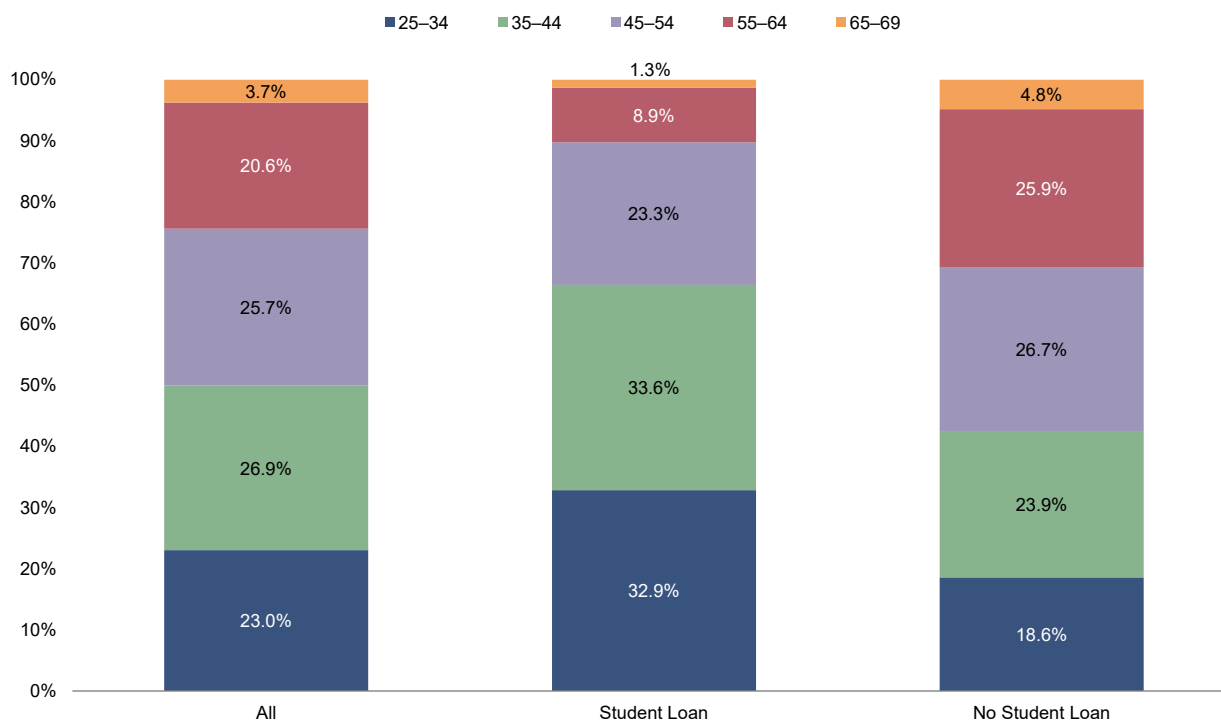
Participation Rates and Contribution Rates by Student Loan Debt Ownership

There are two potential impacts of having student loan debt on 401(k) plan eligible workers. First, having this debt could lower the likelihood of participating in the plan at all. Second, among those who do participate, the amount contributed could be less due to the need to pay off the debt.

In the prior section, active 401(k) plan participants were examined relative to holding student loan debt. However, the 401(k) plan database has only active participants. Therefore, another data source is needed to estimate the share of workers who are eligible for a defined contribution (DC) plan but do not participate. The Federal Reserve's Survey of Consumer Finances (SCF) has the most detailed data on American families' wealth.⁸ This survey allows for the determination of those eligible to participate in a DC plan as well as if those individuals have student loan debt. Since the SCF is collected at a unit similar to the family, the family head is used to determine the age distribution of those eligible for a DC plan and holding student loan debt.⁹ One-third of family heads ages 25–69 eligible for a DC plan while having student loans were ages 25–34 and another third were ages 35–44, meaning that two-thirds were younger than age 45 (Figure 9). This age distribution is very similar to that of the age distribution shown above of those participating in 401(k) plans.

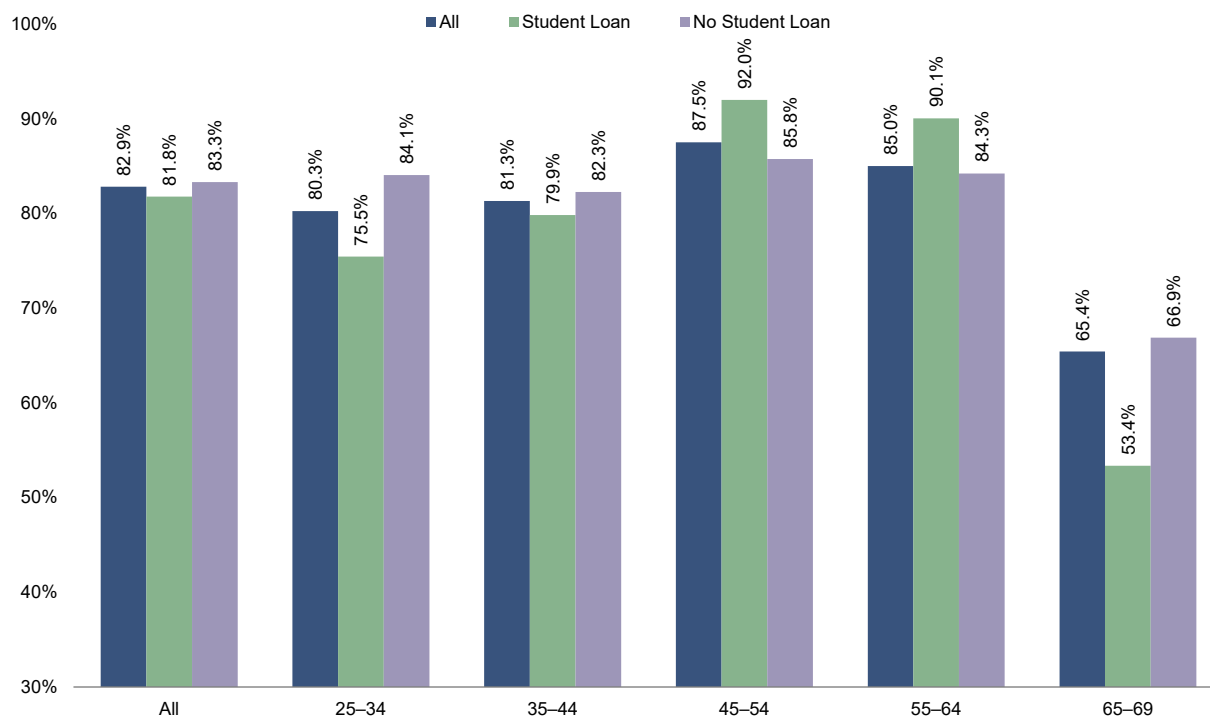
Of those eligible to participate, the percentage actually participating (participation rate) varied by age. Overall, 80.3 percent of family heads ages 25–34 participated in a DC plan when eligible, compared with 87.5 percent of those ages 45–54 (Figure 10). With respect to holding student loan debt, those holding this debt were less likely to have participated in a DC plan among the younger family heads — the ages with the highest concentration of those with student loan debt. Specifically, 75.5 percent of those ages 25–34 who were student loan borrowers participated in a DC plan when eligible. This compares with 84.1 percent of those the same ages without this debt. The lower participation rate for those holding student loan debt was also present among those ages 35–44, where 79.9 percent of those with this debt participated vs. 82.3 percent of those without it.

Figure 9
Distribution of Eligible DC Plan Participants,
by Student Loan Status and Age



Source: EBRI estimates of 2022 Survey of Consumer Finances.

Figure 10
DC Plan Participation Rates, by Student Loan Status and Age



Source: EBRI estimates of 2022 Survey of Consumer Finances.

Not only were the participation rates lower for student loan borrowers who are younger, but when they did contribute, they contributed at a lower rate (Figure 11). For those ages 25–29, the percentage difference in the median contribution rates (contribution amount divided by income) of those with and without student loan debt was 7.4 percent lower for those with student loan debt. This percentage difference generally increased with age, reaching 14.7 percent lower for those with this debt among those ages 50–54, before the differences decreased among the oldest participants. The median contribution rate of student loan borrowers remained lower across all age groups.

Those with student loan debt also had lower median contribution rates across all income groups, with the largest difference being among those making \$100,000–\$199,999 (Figure 12). This income level is where the student loan deduction from federal income taxes has fully phased out for single-filer participants. Once incomes of \$200,000 or more are reached, the plan maximum contribution limits and federal regulation dollar contribution limits would likely constrain the differences among those with the highest incomes. For the \$100,000–\$199,999 income group, the median contribution rate for those with student loan debt was 23.4 percent less than for those without it. For the other income groups, the median contribution rate was around 12–14 percent lower for the debtholders.

While those with this debt consistently had lower median contribution rates than those without it, the level of outstanding debt did not appear to impact the contribution rate (Figure 13). The median contribution rate of those with outstanding loan balances of \$1–\$4,999 was 5.7 percent. The contribution rate remained near this level as the outstanding balance increased, as those with balances of \$90,000 or more had a median contribution rate of 5.3 percent.

Figure 11
Percentage Difference in the Median Contribution Rates of Those With and Without Student Loan Debt, by Age

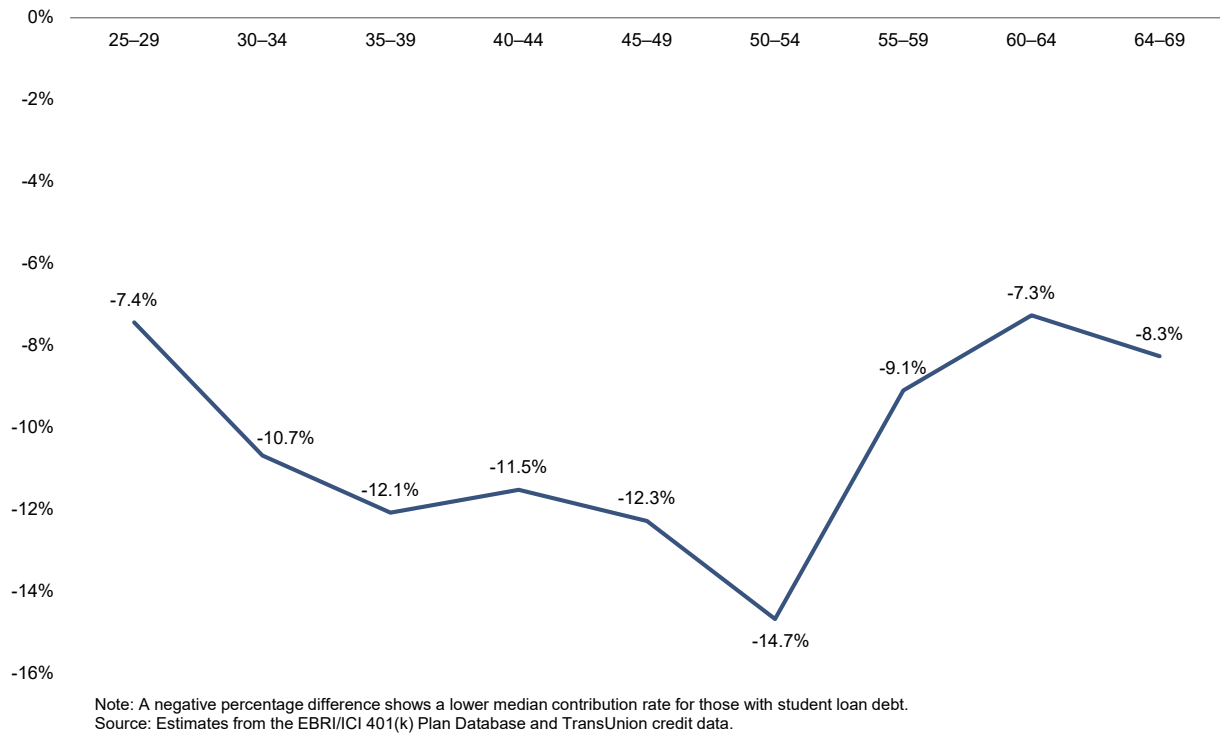


Figure 12
Percentage Difference in the Median Contribution Rates of Those With and Without Student Loan Debt, by Income

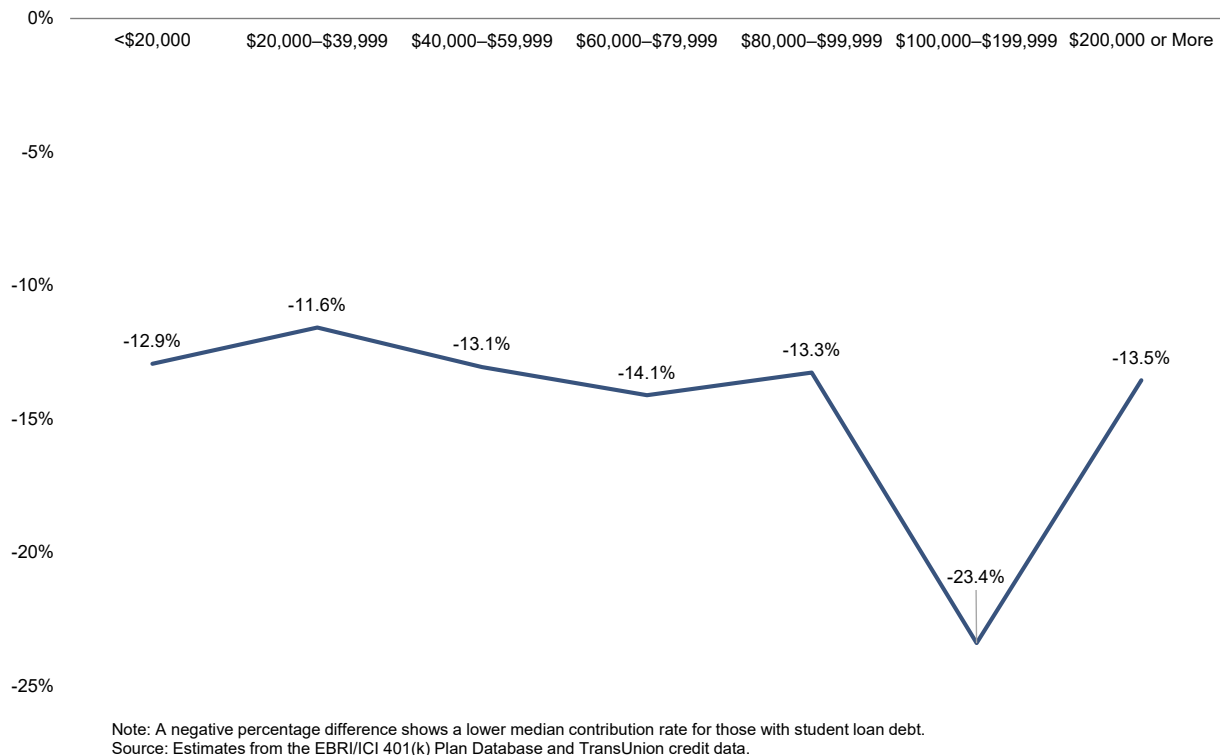
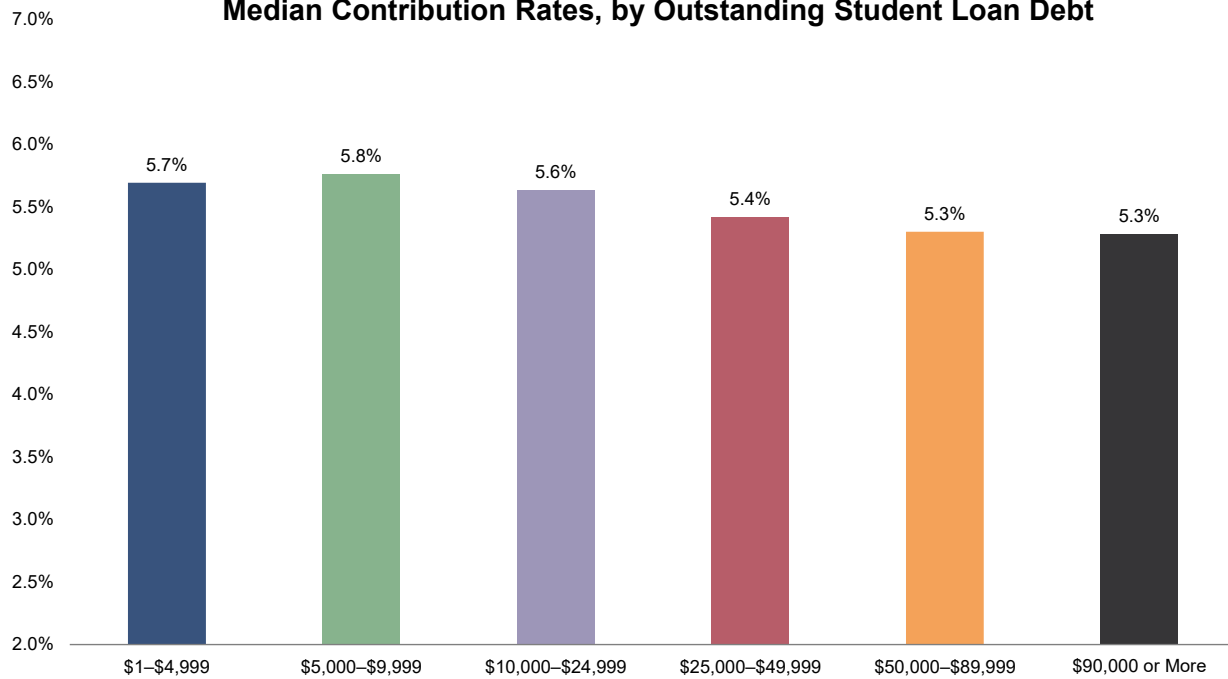


Figure 13
Median Contribution Rates, by Outstanding Student Loan Debt



Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

Account Balances by Student Loan Debt Ownership

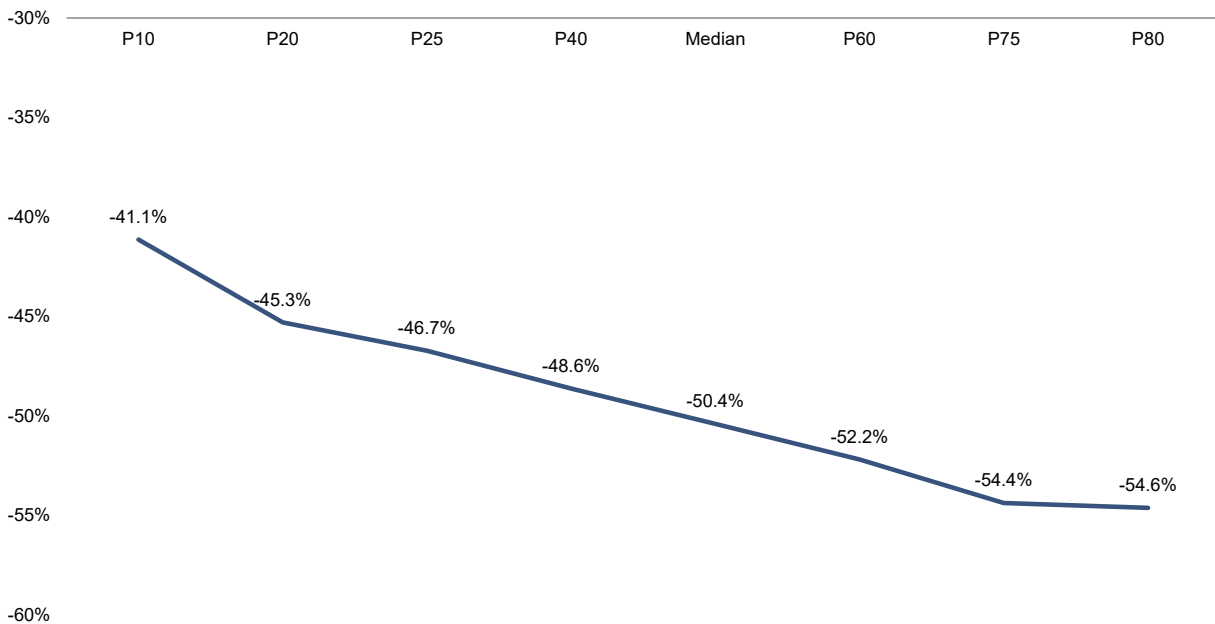
The lower contributions of student loan borrowers found previously show that they are falling behind their counterparts without student loan debt, but it doesn't show how far they have fallen behind. Thus, seeing what those with and without this debt have accumulated in their accounts shows the magnitude of the gap in accumulated balances between those with and without student loan debt. When comparing the distribution of account balances between these two groups, those with student loan debt had lower values across the entire distribution (Figure 14). At the 10th percentile of the account balances, the account balances of those with student loans were 41.1 percent smaller than that of those without it. This gap grew to 54.6 percent at the 80th percentile of account balances.

While the overall differences in the account balances are illustrative, they do not control for possible differences in age, salary, and tenure. When looking at the differences in the median account balances by age, the differences are smaller at the younger and older ages, with the maximum difference among those in their 40s (Figure 15). Specifically, the median difference among those ages 25–29 was 18.5 percent lower for those with student loan debt. This grew to roughly 45 percent lower for those in their 40s, before the difference dropped back to the 24–28 percent range for those ages 55–69.¹⁰

The differences in the median account balances by income were relatively consistent, with median balances of those with this debt being 40–47 percent lower than those without it (Figure 16). The percentages were smaller among the lower incomes, with the difference being 39.9 percent among those with incomes below \$20,000 vs. 47.1 percent among those with incomes of \$200,000 or more.

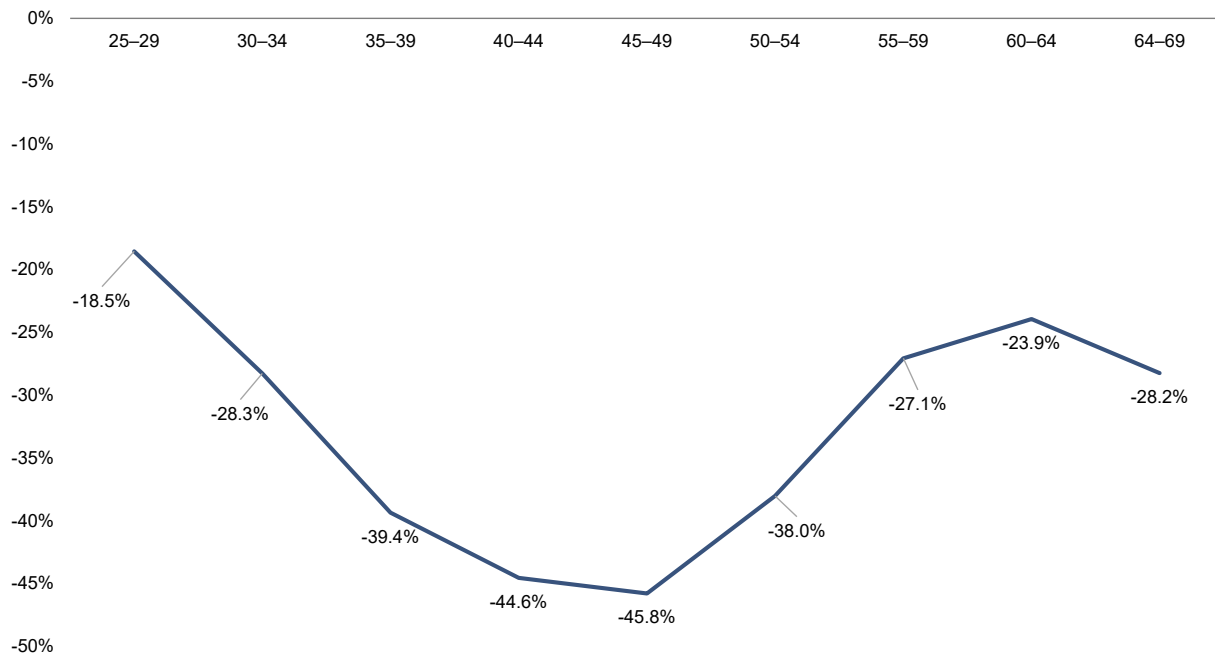
Another important demographic control variable is the tenure of the participant with their current employer, as this allows for those with similar amounts of time being eligible or participating in the same plan to be compared. Again, the student loan borrowers had lower median account balances across all tenure groups (Figure 17). The percentage difference was 19.9 percent lower for those with this debt among those with up to two years of tenure. The differences trended toward becoming larger, as the difference reached 34.1 percent lower for those with the debt among those with more than 30 years of tenure.

Figure 14
Distribution of the Percentage Differences in Account Balances at Various Percentiles Between Those With and Without Student Loan Debt



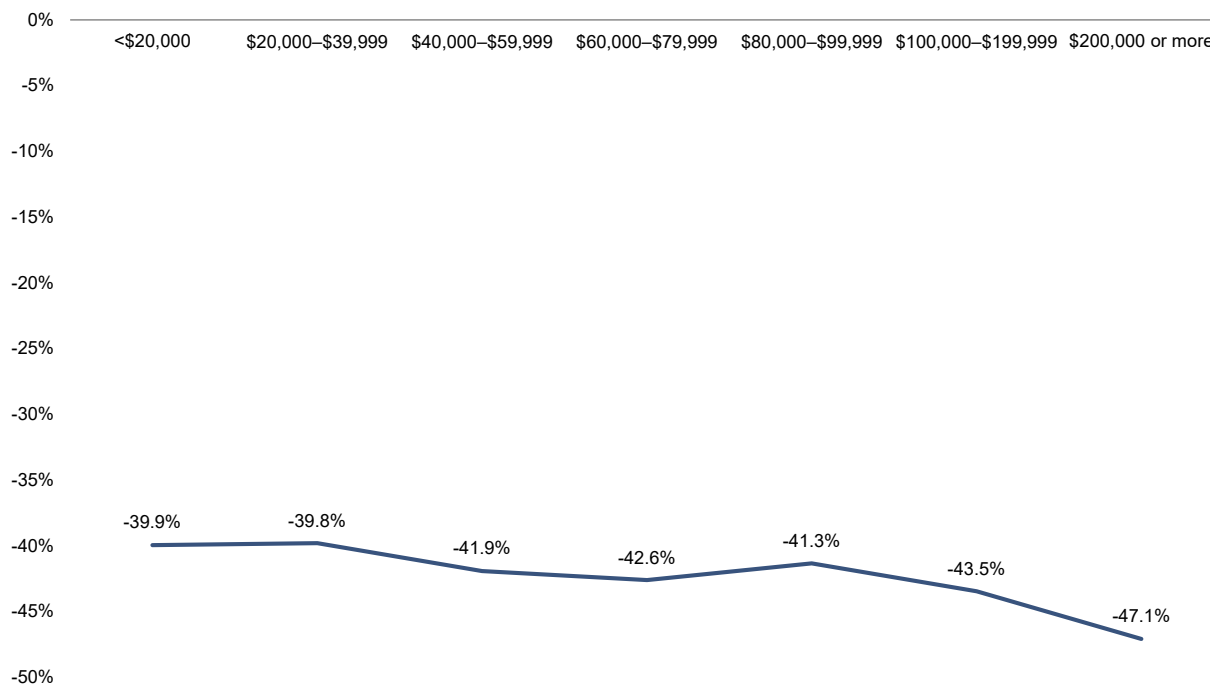
Note: A negative percentage difference shows a lower account balance for those with student loan debt at each percentile.
Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

Figure 15
Percentage Difference in the Median Account Balance of Those With and Without Student Loan Debt, by Age



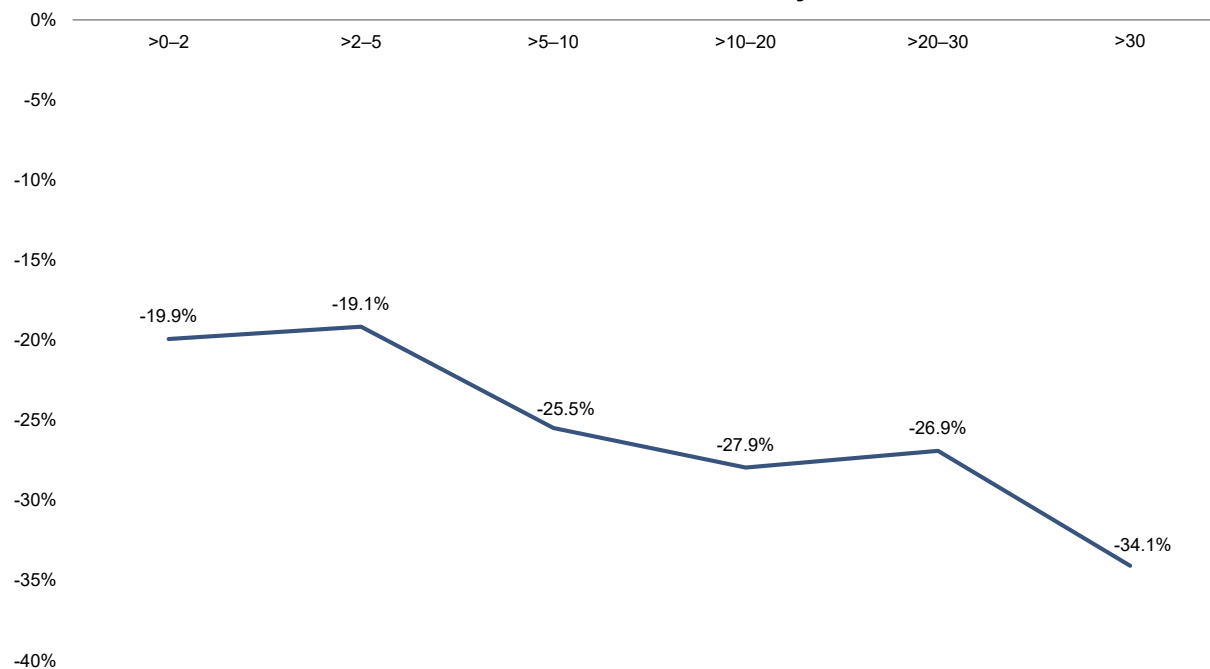
Note: A negative percentage difference shows a lower median account balance for those with student loan debt.
Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

Figure 16
Percentage Difference in the Median Account Balance for Those With and Without Student Loan Debt, by Income



Note: A negative percentage difference shows a lower median account balance for those with student loan debt.
Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

Figure 17
Percentage Difference in the Median Account Balance of Those With and Without Student Loan Debt, by Tenure



Note: A negative percentage difference shows a lower median account balance for those with student loan debt.
Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

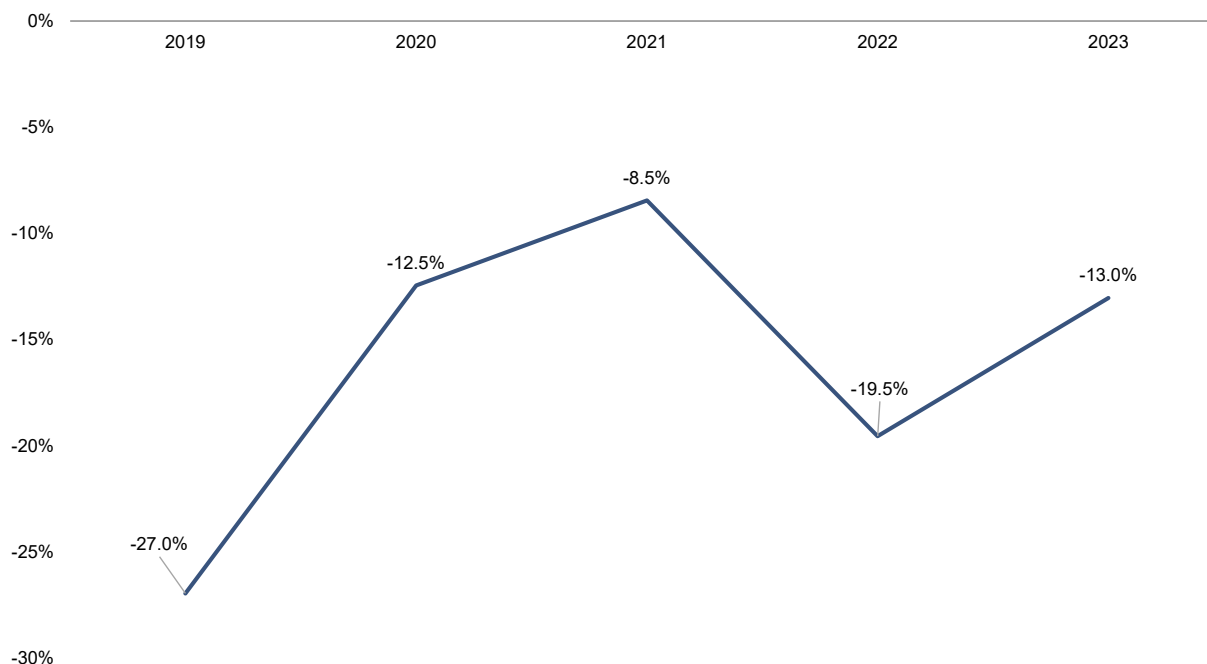
Longitudinal Comparison of Those With and Without Student Loan Debt

Using cross-sectional results misses out on participants' behavior over time, since participants could increase their contributions as they get older and stay with their employer longer. However, these could occur for both those with and without this debt. Therefore, to see if those with student loan debt are moving toward closing the gap in retirement savings, a longitudinal comparison of those with and without the debt over a five-year (2019–2023) period is conducted.

The percentage difference in the contribution rates was relatively large in 2019, the first year observing them but not necessarily their first year in the plan, at 27.0 percent (Figure 18). Those with student loan debt seemed to close the gap in contribution rates at the median, reaching 8.5 percent in the third year (2021). However, the difference jumped back to 19.5 percent in the fourth year. While there was some closing of the gap, those with the debt still had lower median contribution rates, indicating that they were not going to completely close the gap in account balances.

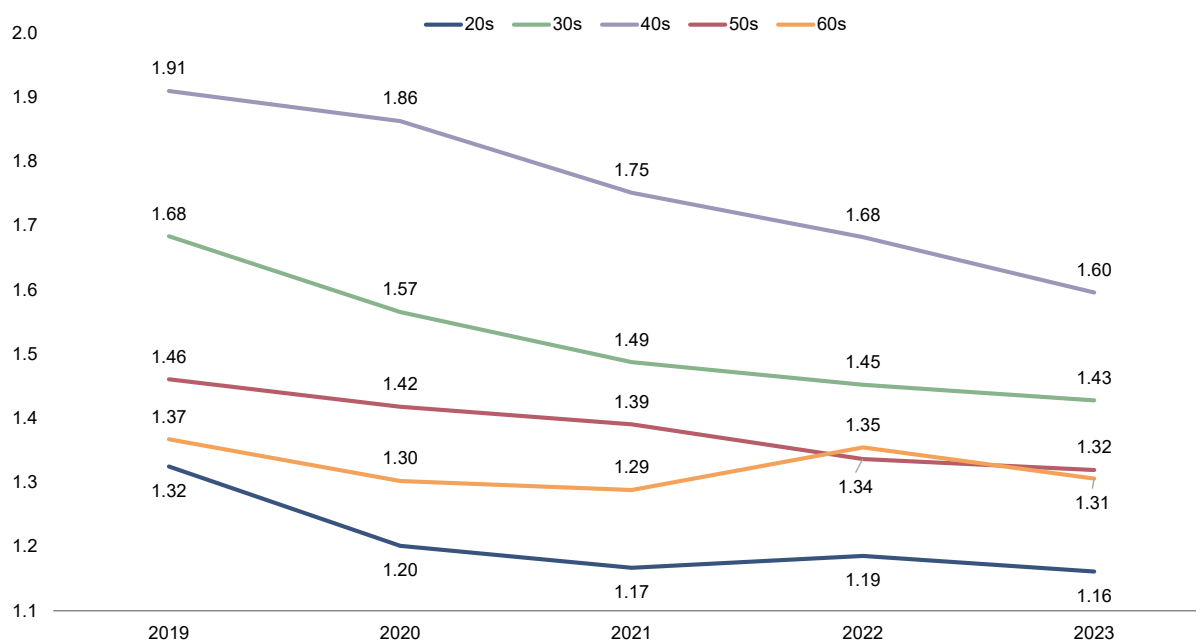
Looking at the relative account balances of those with and without student loan debt all five years can shed light on the extent, if any, of the closing in the gap in account balances between the two groups. For those in their 30s and 40s, the ratio of the median balance of those without the debt to the balance of those with it all five years did become smaller, meaning closer to equal, but showed some flattening out for those in their 30s (Figure 19). In the first year, those without this debt in their 40s had a median account balance 1.91 times larger than those with the debt. This decreased steadily to 1.60 in the fifth year. In contrast, for those in their 30s, the ratio dropped from 1.68 in the first year to 1.49 in the third year and then saw a much slower decrease in the ratio, reaching 1.43 in the fifth year. Interestingly, those in their 50s and 60s had much more consistent ratios over the five years, indicating that there was some closing of the gap in account balances but by no means a complete closing of the gap, and there was an apparent, persistent difference when the participants reached their 50s and 60s.

Figure 18
**Percentage Differences Between the Median Contribution Rates of
401(k) Plan Participants With and Without Student Loans Every Year,
2019–2023**



Note: A negative percentage difference shows a lower median contribution rate for those with student loan debt.
Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

Figure 19
Ratio of the Median Account Balances of Those Without Student Loan Debt Every Year to Those With Student Loan Debt Every Year, by Age, 2019–2023



Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

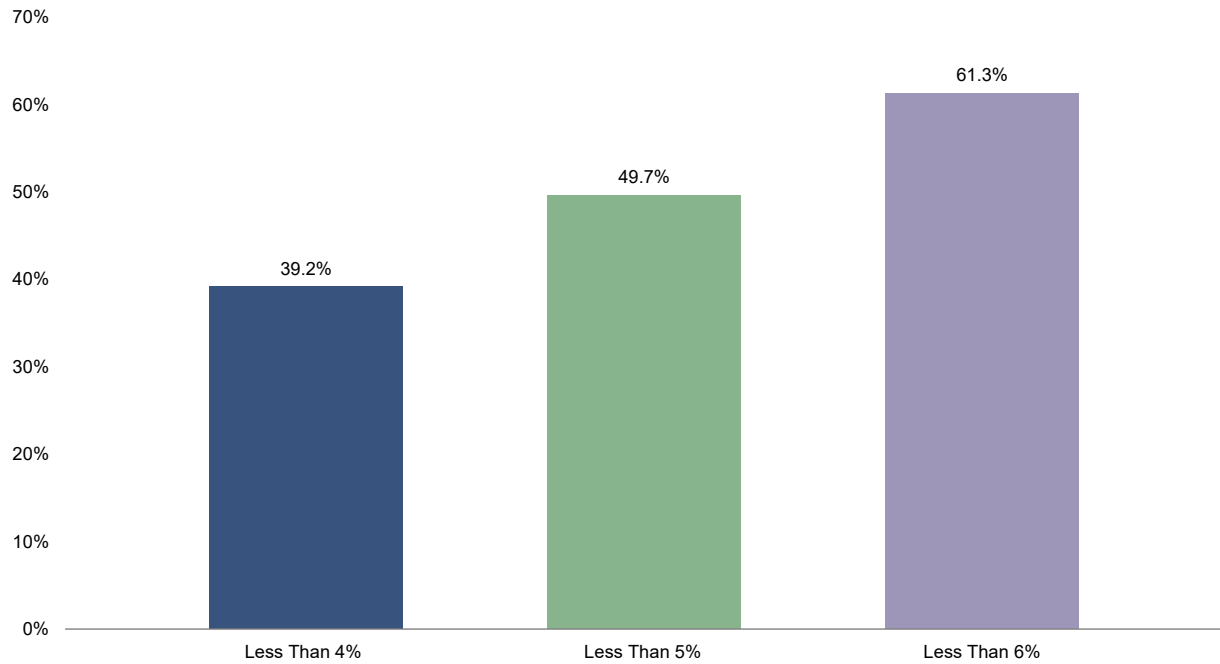
Percentage of Those With Student Loans Contributing Below Common Maximum Matching Thresholds

While it is clear from these results that student loan borrowers are behind in their retirement savings compared with those without it, further investigation is needed to see if those currently contributing would benefit from a student loan retirement matching benefit as added in SECURE 2.0. Therefore, determining the share of participants who contributed below common maximum matching thresholds would add to the number who were not contributing at all to reveal the full number of 401(k) plan eligible participants potentially benefiting from the program.

Three common maximum matching thresholds are 4, 5, and 6 percent of income, meaning that if the employee contributes those amounts of their income, the employer will do so as well. Any contributions by the employee above those amounts would not receive matching contributions. Over the five-year period, 39.2 percent of those participating in a 401(k) plan who had student loan debt contributed less than 4 percent of their income, 49.7 percent below 5 percent, and 61.3 percent below 6 percent. Therefore, there was a substantial percentage of participants who were not reaching these common thresholds (Figure 20).

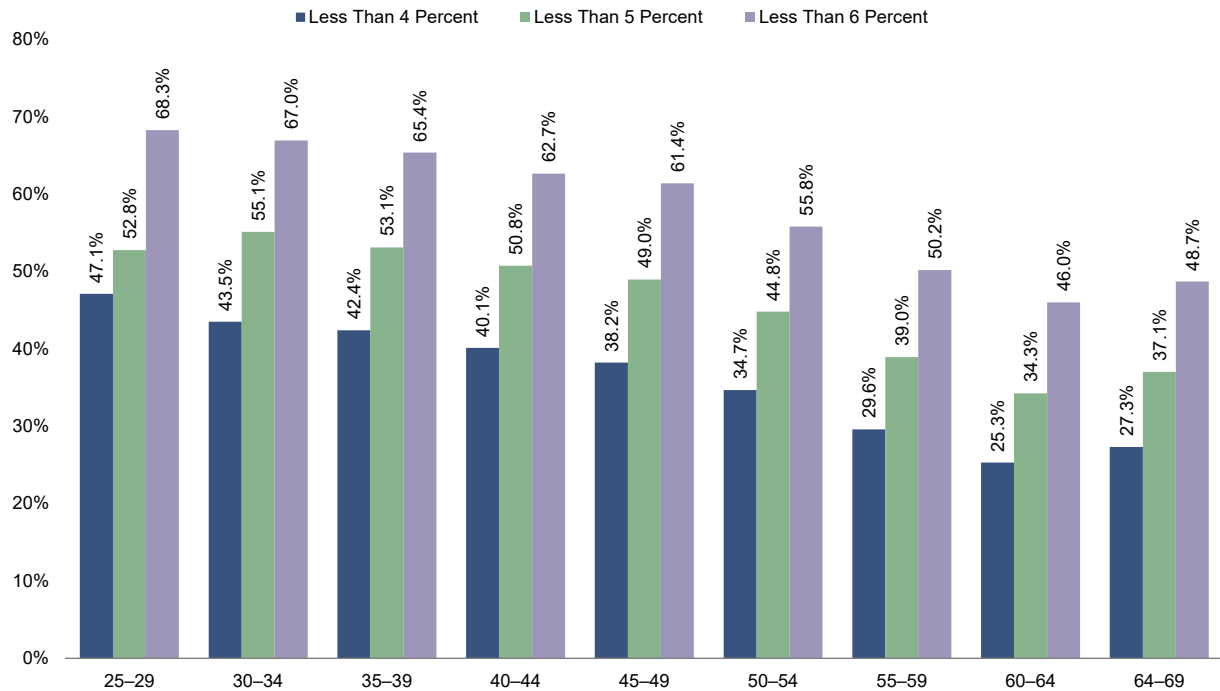
Younger workers, unsurprisingly, were more likely to contribute below these thresholds (Figure 21). Specifically, 68.3 percent of those ages 25–29 contributed below 6 percent, compared with 46.0 percent of those ages 60–64. The younger workers are those who would most benefit from the match, as they are furthest from retirement, allowing for more years of compounding of the matches.

Figure 20
**Percentage of Student Loan Debt Owning Participants Contributing
 Below Common Maximum Matching Thresholds**



Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

Figure 21
**Percentage of Student Loan Debt Owning Participants Contributing
 Below Common Maximum Matching Thresholds, by Age**



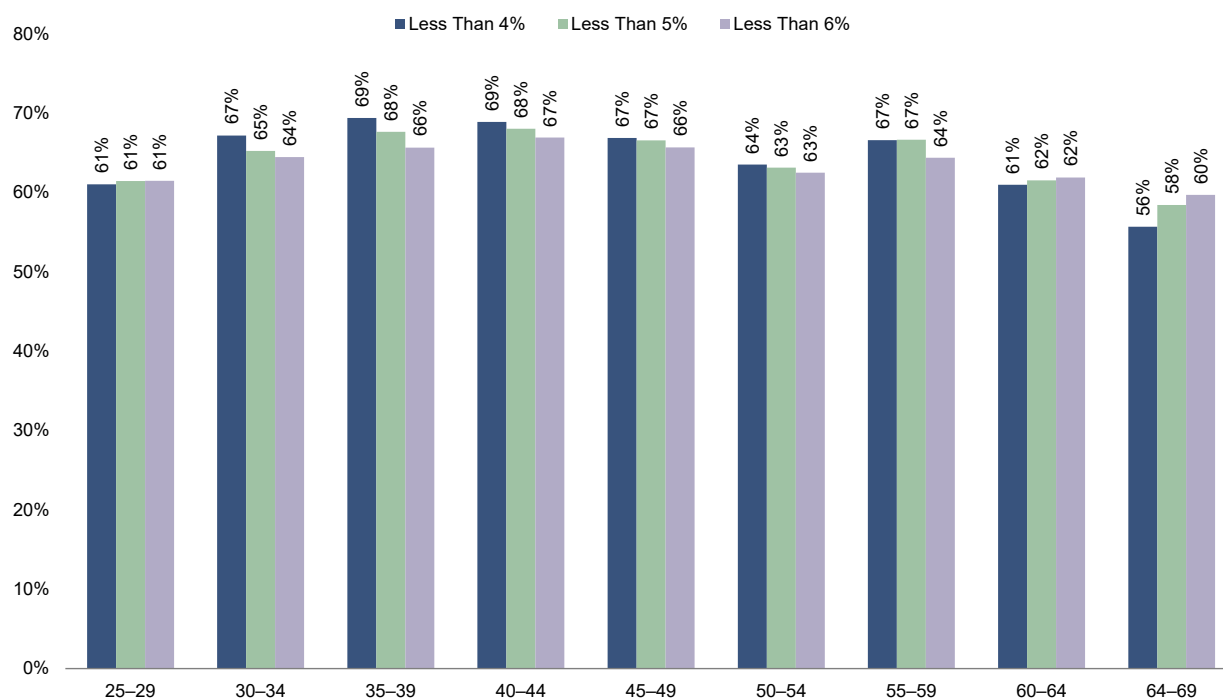
Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

Employer Matching Estimates

The next component in estimating the value of the potential missed matches from contributing below the maximum match is the value of the match. The 401(k) database does not have the specific matching formulas of the plans in the database. However, calculating the ratio of employer contributions to employee contributions can provide an estimate of the employer matching percentage. In other words, this shows how many dollars the employee gets from employer contributions relative to how much they contribute.

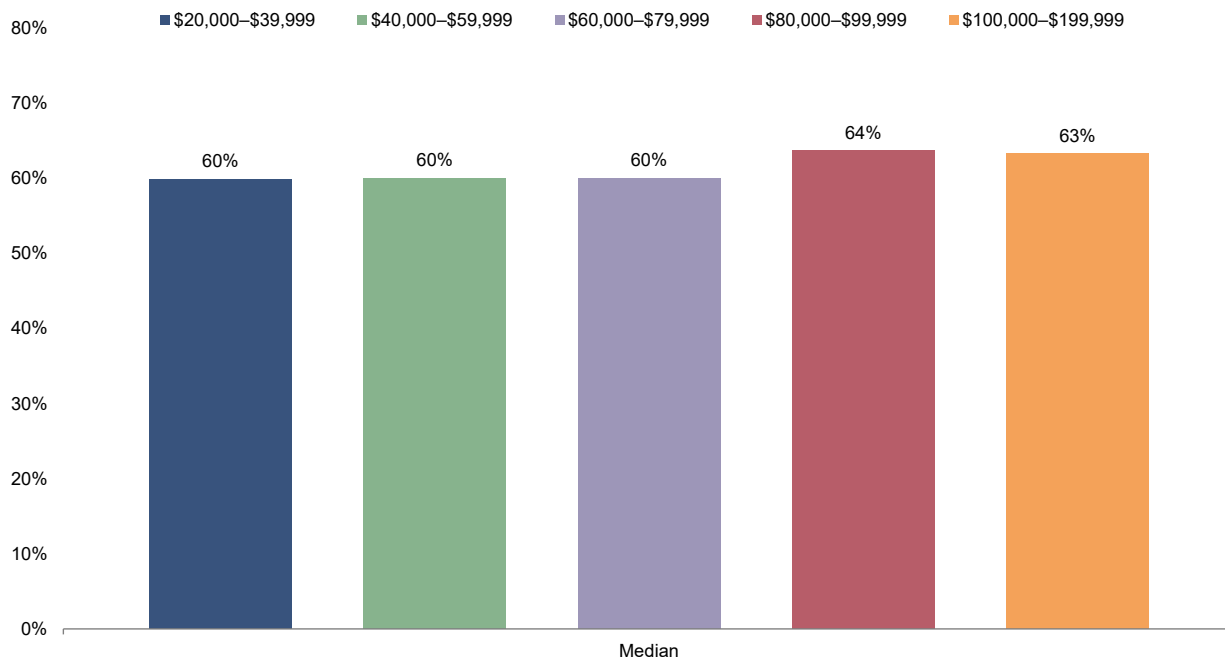
The median ratio, regardless of the age of the participant or the level of the contributions below the common thresholds, found from the database was in the 60–70 percent range (Figure 22). This means that for every dollar the employee contributed up to the maximum matched, they could expect to receive \$0.60–\$0.70 in employer contributions. This median ratio was also consistent across the participants' incomes at 60 percent (Figure 23).

Figure 22
Median Ratio of Employer Contributions to Employee Contribution, by
Various Contribution Thresholds and Age



Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

Figure 23
Distribution of the Ratio of Employer Contributions to Employee Contributions, by Income



Source: Estimates from the EBRI/ICI 401(k) Plan Database and TransUnion credit data.

Total Potential Value of Additional Matches From the Program

The impact of student loan debt on individual participants of various ages with different incomes has been illustrated in this study. However, it would be helpful to understand the total potential value of the additional matches that could be added to the 401(k) plan system from a universal adoption of a student loan retirement matching program. Estimates of this value can be calculated from the results of this study on the percentage of eligible 401(k) plan participants with student loan debt; the share of participants who contributed less than the maximum matched; and participant borrowers' average incomes, average contribution rates, and average estimated match rate, along with the number of eligible active 401(k) plan participants from the Form 5500 summaries compiled by the Department of Labor (DOL).¹¹

Since the distribution of the matching rates cannot be determined from the data in this study, two estimates are provided to show the possible amounts of dollars that could be added from the program depending on the maximum matching thresholds. The smaller estimate assumes that all participants have a maximum matching threshold of 4 percent of compensation (all employee contributions are matched by the employer up to a 4 percent contribution rate but no matching contributions above that level), and the larger estimate assumes a maximum matching threshold of 6 percent of compensation. Therefore, from the data found in this study and based on the number of total participants from the DOL, the total potential value of additional annual matches to 401(k) plans of those ages 25–69 with student loan debt is estimated to be \$11.2 billion for the lower maximum matching threshold and \$20.2 billion for the higher threshold.¹² This means that each year these debtholders could have over an additional \$10 billion dollars from the universal adoption of the student loan retirement matching program, which could be building up their retirement savings.¹³

Conclusion

Student loan debt has grown substantially over the last two decades, particularly among younger Americans, but not exclusively for them. The incidence of student loan debt among workers eligible and participating or not participating in a 401(k) plan is largely reflective of the overall incidence of student loan debt. Therefore, a significant portion of those

eligible for 401(k) plans are also paying off student loan debt. By having to pay for this debt, it appears that those with the debt are falling behind their peers in preparing for retirement.

Student loan borrowers in their 30s and 40s were less likely to participate in a 401(k) plan when eligible. Furthermore, when the 401(k) plan eligible workers did participate, they contributed less on average than those without the debt. Furthermore, even when controlling for age and tenure, those with student loan debt had significantly lower account balances. Those in their 40s with the debt had a median balance 45 percent less than their counterparts without it.

This effect persisted over time when following the same participants with and without the debt. Those with student loan debt continued to have lower contribution rates and have account balances significantly below those of their counterparts. Despite some closing of the gap, for older participants with the debt, the gap in account balances persisted, with those with the debt having balances 30 percent less than those without it.

Not only were the contribution rates lower for student loan borrowers, but the rates were also likely to be below common maximum employer matching contribution thresholds of 4–6 percent. Thus, even though these workers were participating in a plan, they were still missing out on some of the possible employer matching contributions that they would be eligible to receive. This is on top of the lower participation rates of those who were younger. In fact, the total potential value of additional matching contributions to 401(k) plans of those ages 25–69 with student loan debt is estimated to be over \$10 billion annually and possibly reach as high as \$20 billion.

The provision in the SECURE 2.0 Act that allows qualified student loan payments of DC-plan-eligible workers to receive employer matching contributions into DC plans directly addresses the gap in retirement savings among those with this debt. By adding this benefit to 401(k) plans, those with student loan debt would be able to at least receive some of the missed matching contributions. These additional contributions would be significant over a career and make a substantial difference in workers' retirement savings.

The second study in this series on student loan debt and retirement savings will build on the findings in this study on the characteristics of those with the debt, the degree to which those with this debt have fallen behind those without it, and the potential for a student loan payment matching program on additional contributions to 401(k) plans to see the impact of the additional matching contributions from the matching programs on retirement income adequacy. This will be done using EBRI's Retirement Security Projection Model,[®] which estimates the percentage of workers who do not run short of money in retirement and for those who do run short, the amount that they run short.

Appendix: Calculating the Total Potential Value of Additional Matches From a Universal Adoption of a Student Loan Retirement Matching Program

Appendix Figure 1 Calculation of the Total Potential Additional Value of Employer Matches	
Total Eligible Active Participants	81,626,000
Total Participation Rate	82%
Total Nonparticipants	14,692,680
Total Participants	66,933,320
Number of Nonparticipants	14,692,680
Percentage of Nonparticipants Ages 25–69	87%
Number of Nonparticipants Ages 25–69	12,782,632
Percentage of Nonparticipants With Student Loans	33%
Number of Nonparticipants With Student Loans	4,218,268
Average Salary of Nonparticipants With Student Loans	\$52,593
Average Match Rate	\$0.7
Total Additional Matches for the 4% Threshold	\$5,779,267,350
Total Additional Matches for the 6% Threshold	\$8,668,901,025
Number of Participants	66,933,320
Percentage of Participants Ages 25–69	90.3%
Number of Participants Ages 25–69	60,440,788
Percentage of Participants With Student Loans	20%
Number of Participants With Student Loans	12,088,158
Percentage of Participants With Student Loans Contributing Less Than 4%	39.2%
Percentage of Participants With Student Loans Contributing Less Than 6%	61.3%
Number of Participants With Student Loans Contributing Less Than 4%	4,738,558
Number of Participants With Student Loans Contributing Less Than 6%	7,410,041
Average Salary of Those Contributing Less Than 4% With Student Loans	\$96,251
Average Salary of Those Contributing Less Than 6% With Student Loans	\$88,869
Average Contribution Rate of Those Contributing Less Than 4%	2.4%
Rate Between the Average Contribution Rate and the 4% Threshold	1.6%
Average Contribution Rate of Those Contributing Less Than 6%	3.5%
Rate Between The Average Contribution Rate and the 6% Threshold	2.5%
Average Match Rate at 4% Threshold	\$0.66
Average Match Rate at 6% Threshold	\$0.64
Total Additional Matches for the 4% Threshold	\$4,827,583,335
Total Additional Matches for the 6% Threshold	\$10,449,536,015
Total Additional Matches at 4% Threshold (Nonparticipants+Participants)	\$10,606,850,685
Total Additional Matches at 6% Threshold (Nonparticipants+Participants)	\$19,118,437,040
Total Additional Matches at 4% Threshold in 2025 Dollars	\$11,207,688,634
Total Additional Matches at 6% Threshold in 2025 Dollars	\$20,201,424,143
Source: EBRI estimates using data from Survey of Consumer Finances, DOL 5500 Summaries, EBRI/ICI 401(k) Plan Database, and TransUnion.	

Endnotes

¹ Center for Microeconomic Data, “Household Debt and Credit Report (Q1 2026).” (Federal Reserve Bank of New York, May 2026). Available at https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/hhdc_2026q1.pdf.

² For example, see Copeland, Craig, “Student Loan Debt: Who Has It and How Much?,” *EBRI Issue Brief*, no. 524 (Employee Benefit Research Institute, January 28, 2021), and the studies cited in it.

³ See Brady, Peter, Steven Bass, and Craig Copeland, “401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2023,” *EBRI Issue Brief*, no. 655, and *ICI Research Perspective*, vol. 32, no. 2 (April 2026) for more information on the database.

⁴ Center for Microeconomic Data (2026) (see endnote 1).

⁵ The incidence of a student loan is based on the credit bureau data, which in some instances may include only those who are cosigners on the loan. It is not possible to distinguish between the two, but this issue is mitigated by the much larger percentage of participants who are younger, who would not be only cosigners.

⁶ The income in this study is the compensation provided to the 401(k) plan recordkeepers. Typically, this income would be covered compensation that would be used for discrimination testing in the plans.

⁷ The distributions of the outstanding student loan debt amounts were similar across the age groups, with the median amounts being in the \$20,000–\$25,000 range for each age group.

⁸ For more information on the SCF, see Aladangady, Aditya, Jesse Bricker, Andrew C. Chang, Sarena Goodman, Jacob Krimmel, Kevin B. Moore, Sarah Reber, Alice Henriques Volz, and Richard A. Windle. “Changes in U.S. Family Finances from 2019 to 2022: Evidence from the Survey of Consumer Finances.” Washington: Board of Governors of the Federal Reserve System (October 2023). Available at <https://doi.org/10.17016/8799>.

⁹ The basis of this survey is what the Federal Reserve refers to as a primary economic unit (PEU), which is a subset of households and closely resembles families in its definition, although it is not precisely families. However, “families” is the closest concise terminology for the PEU, so the term “families” is used in this study. The Federal Reserve also designates a reference person within the PEU, not to convey a judgment about how an individual family is structured but as a means of organizing the data consistently. For example, the age and educational classifications ascribed to families throughout this report describe the age and education of the reference person. If a couple is economically dominant in the PEU, the reference person is the male in a mixed-sex couple or the older person in a same-sex couple. If a single person is economically dominant, that person is designated as the family reference person in this report. Note that the term “reference person” is a new descriptor as of the 2019 survey, replacing the outdated “household head” terminology used in previous surveys. For further information about this issue, see Aladangady et al. (2023) (see endnote 8).

¹⁰ The decrease in the differences in account balances for the oldest participants could be partially a result of participants these ages being more likely to be a cosigner only.

¹¹ “Private Pension Plan Bulletin, Abstract of 2023 Form 5500 Annual Reports,” Employee Benefits Security Administration, U.S. Department of Labor (January 2026). Available at <https://www.dol.gov/sites/dolgov/files/ebsa/researchers/statistics/retirement-bulletins/private-pension-plan-bulletins-abstract-2023.pdf>.

¹² These estimates are in 2025 dollars. See the appendix to see the calculation process.

¹³ These estimates assume that no current participants would reduce their contributions due to the adoption of the matching program. If employee contributions were reduced, these estimates of the potential matching contributions from the program would be higher. However, the total dollars (employee and employer matching contributions) into 401(k) plans could be smaller than the estimates because of the reduced employee contributions.