Many 401(k) retirement plans allow participants to borrow from their accounts before retirement. Participants with outstanding loans who leave their jobs must repay the loans in full immediately or else be considered in default. Moreover, if the employee is younger than age 59, he or she must repay the entire loan or pay income tax plus a 10 percent penalty tax on the defaulted amount. Accordingly, an important issue for retirement policy is whether these loans pose financial risks and, if so, what policy changes might reduce this risk. Although prior research has shown that assets involved in 401(k) defaults represent only a fraction of the total assets held in this type of retirement plan ($600 million out of $3.7 trillion in assets, or 0.2 percent), these defaults could pose substantial risks for particular groups, such as financially unsophisticated or vulnerable individuals.

To examine this issue, a research team with the Financial Literacy Center analyzed 401(k) loan defaults. The team used a dataset from Vanguard, a leading 401(k) plan administrator, covering over 100,000 401(k) plan participants who terminated employment during the three-year period from July 2005 through June 2008. These data were part of a broader set of information on more than 4.3 million total 401(k) plan participants. The study compared those who terminated employment and defaulted on their 401(k) loans with those who terminated employment and repaid their loans.

Specifically, the team asked

- How many 401(k) participants default on loans?
- What employee characteristics, plan design features, and other factors are associated with 401(k) loan defaults?
- What policy changes could reduce the likelihood of defaults?

Over 80 Percent of Workers Who Left Their Jobs with a 401(k) Loan Defaulted

The results show that of the 4.3 million total 401(k) plan participants, about 20 percent (870,775) had outstanding loans. Of this number, about 12 percent (103,991, or 2 percent of the total number of plan participants) terminated their employment with a loan. For this subset, the default rate was high: nearly 80 percent (83,894) of those who terminated employment with a loan subsequently defaulted (see Figure 1). This means that approximately 1 in 10 loans resulted in a default.

Individuals with Multiple Loans Defaulted at Higher Rates

The research team found that a few specific personal and plan characteristics were associated with a greater likelihood of defaulting. Results showed that individuals with smaller 401(k) balances, lower incomes, and little...
nonretirement wealth were more likely to default. These results suggest that people facing liquidity constraints around the time of job termination were at greater risk of default.

The team also looked at outcomes for participants in plans that allowed more than one loan at a time, comparing them with those in plans permitting only a single loan. Participants with multiple loans defaulted at higher rates than those with a single loan (Figure 2), even in cases where the total loan balances were similar. This suggests possible variation among borrowers in planning skills or in self-control; for example, those with a single loan could have had the foresight to anticipate the possibility of a future default, or to reserve additional loans as a buffer against future needs. Or perhaps employees who take multiple loans are simply more impatient in making financial decisions; further research is needed to disentangle these potential explanations.

The study also examined the impact of broader economic conditions on loan defaults. Given the economic downturn that began in 2008, the team hypothesized that the recession might have worsened default rates. The authors found, however, that poor job market conditions did not significantly affect 401(k) loan defaults. Although job losses are typically higher in an economic downturn, there is also less voluntary job movement. These two trends appeared to cancel each other, in terms of their net effect on defaults.

**Implications and Next Steps**

Based on these results, the researchers identified some potential ways to reduce the number of defaults:

- Limit borrowers to one loan at a time.
- Allow participants to repay 401(k) loans even after a job change (although the researchers caution that this change would likely benefit only participants who immediately begin another job, and would also raise administrative costs and require extra recordkeeping).
- Limit the size and scope of loans—for instance, allow participants to borrow only 25 percent of their account balances instead of the current 50 percent.

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The Financial Literacy Center is a joint center of the RAND Corporation, Dartmouth College, and the Wharton School of the University of Pennsylvania. Established in 2009 with support from the Social Security Administration, its mission is to develop and test innovative programs to improve financial literacy and promote informed financial decisionmaking.

[http://financial-literacy.rand.org](http://financial-literacy.rand.org)