Does 401(k) loan repayment crowd out retirement saving? Evidence and implications for plan design

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Motivation

- Building emergency savings is a challenge for American households
  - Fed survey: 37% of adults could not cover an unexpected $400 expense in cash
- SECURE 2.0 makes it easier to use 401(k) assets for short-term expenses
  - PLESAs
  - Penalty-free $1,000 emergency withdrawals
- Focus on the emergency withdrawal provision because it is simpler and more likely to be taken up by employers

Emergency withdrawals

- Essentially a penalty-free and dollar-capped version of hardship withdrawals
  - Up to $1,000 per year
  - No 10% penalty
  - Self-certification of financial need
- Provides obvious liquidity value and could encourage more 401(k) saving
- But annual $1,000 withdrawals could cause substantial leakage
- **How can plan sponsors offer liquidity value while minimizing long-run costs to retirement wealth?**

Automatic repayment

- Proposal: **automatic repayment**
- We study the feasibility of automatic repayment by analyzing the behavior of participants taking 401(k) loans
  - Repayment occurs through mandatory payroll deferrals; default during employment is rare
  - **Elective contributions are remarkably stable during repayment**: loan takers' contribution rates fall only by **0.8 pp** relative to a control group
  - EW takers would likely show a similar capacity to repay withdrawals while maintaining their elective contributions
  - Most EW takers could repay a $1,000 withdrawal within **12-18 months** via a **2 pp increase** in their elective contribution rate

Caveats

- Need to assume that participants taking small 401(k) loans are similar to future emergency withdrawal takers
- Cannot observe financial behavior outside the 401(k) plan
- Any automatic repayment policy would need to address technical considerations (recordkeeping plumbing, matching and gaming incentives, etc.)

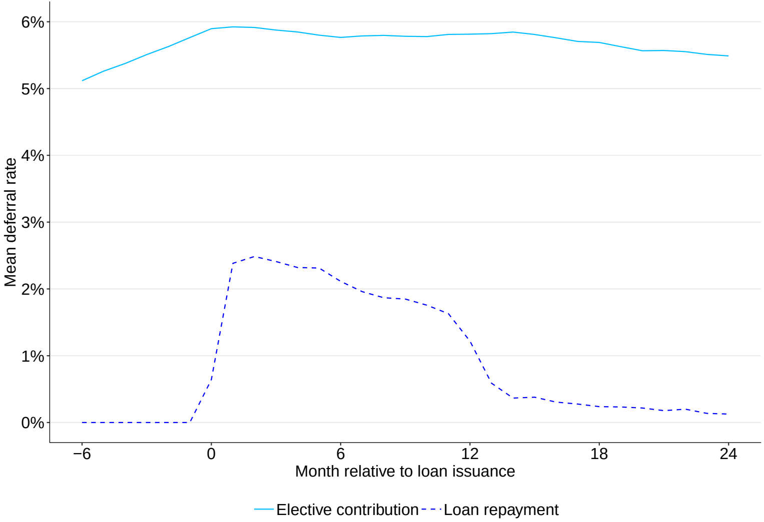
Data

- Administrative recordkeeping data from Vanguard
- Analyze participants with loan issuances in 2021
  - Ensures two years of post-issuance history
  - Obtain similar results in 2017 pre-pandemic sample
- Supplementary analysis of participants taking hardship withdrawals during the same 2017 and 2021 periods

Summary statistics

	Loan issuances	Hardship withdrawals
Median age	42	41
Median plan tenure	5	5
Estimated income		
10th	26,320	22,120
25th	40,229	34,992
Median	56,689	51,257
75th	87,098	73,457
90th	125,769	103,593
Loan/HW amount		
10th	1,419	665
25th	2,988	1,296
Median	7,021	2,985
75th	17,000	7,000
90th	30,000	17,627
Number of participants	253,300	72,118

Elective contributions are stable during repayment of small loans

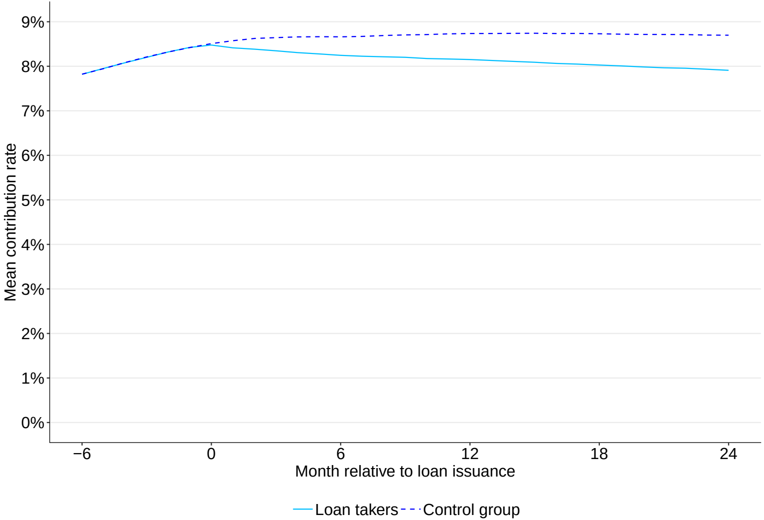


Control group

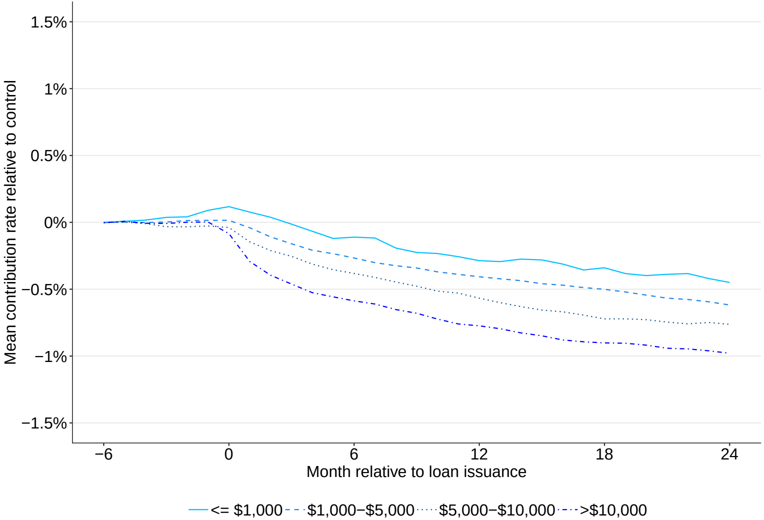
Now compare loan takers to a control group:

- Same plan
- Same tenure
- Absolute age difference of 5 years or less
- Absolute income difference of 25% or less
- No loans or HWs in the six months before the relevant loan issuance
- Same elective contribution rate six months before the relevant loan issuance

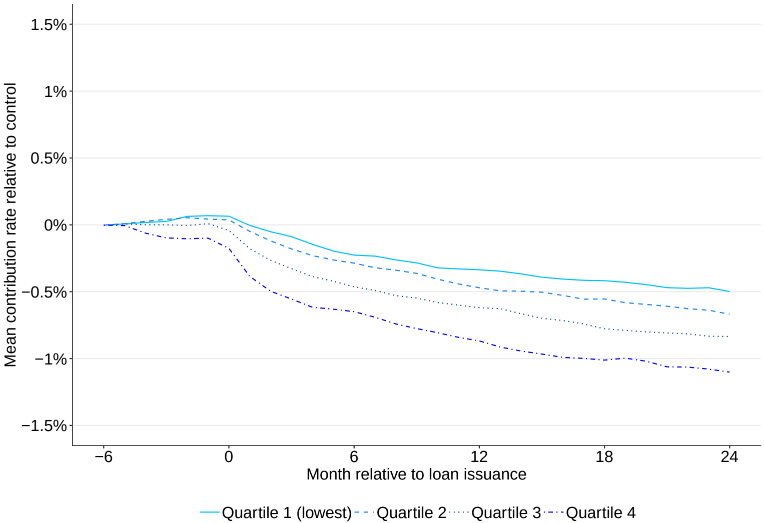
Small contribution crowd-out relative to the control group (all loans)



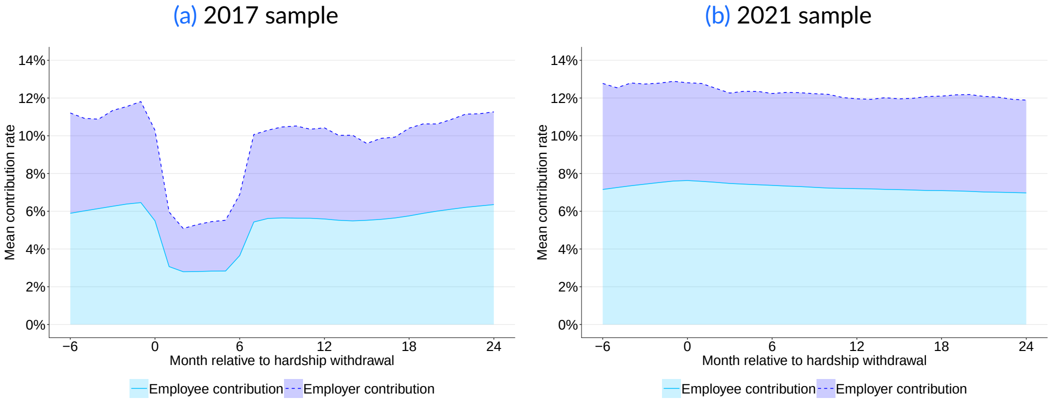
Contribution crowd-out by loan size



Contribution crowd-out by income



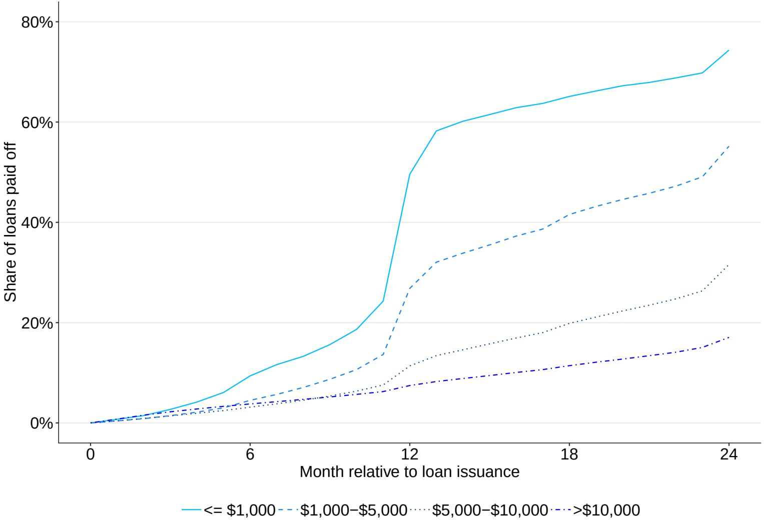
HW takers have stable contributions when not subject to suspensions



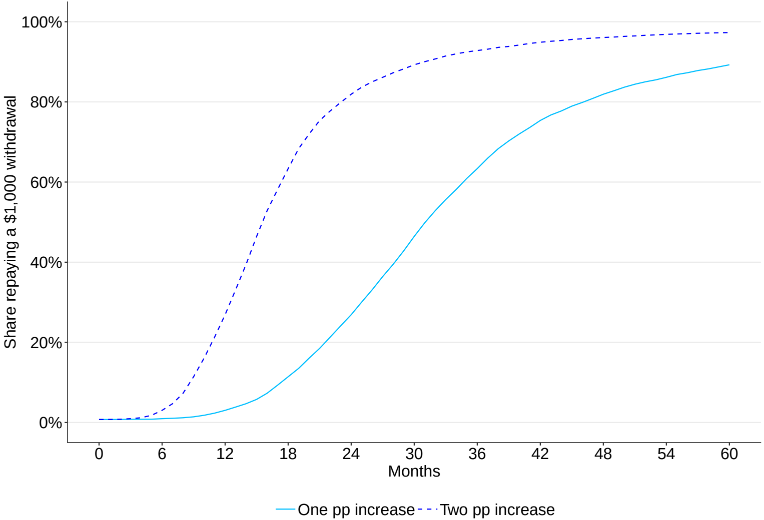
Repayment timelines

- Preceding results suggest that emergency withdrawal takers would be able to repay the withdrawal amount while maintaining their elective contributions
- What should the repayment timeline be? Take guidance from loans $\leq$ \$1,000:
  - Most repaid within 12-18 months
  - Given income distribution of participants taking small loans, achievable with a 2 pp increase in the elective contribution rate

Most loans for $1,000 or less are repaid within 12-18 months



A contribution increase of 2 pp would suffice for most participants



Conclusion

- Emergency withdrawals newly permitted under SECURE 2.0 are a flexible liquidity option but raise the risk of costly retirement saving leakage
- We propose an “automatic repayment” policy in which plan sponsors encourage or default participants into repaying these withdrawals
- The stability of contribution rates during 401(k) loan repayment suggests that most withdrawal takers could repay while maintaining their prior elective contributions
- More generally, stable contribution behavior of loan takers could be seen as revealing “excess” saving capacity among 401(k) participants