Discussion of

"Borrowing to Save? The Impact of Automatic Enrollment on Debt"

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Context

- We know from team's many publications that auto-enrollment increases 401(k) participation and anchors savings rates...
 - In other words, auto-enrollment has causal impact on savings rate within retirement savings plan featuring auto-enrollment
 - Also find heterogeneous treatment w.r.t. proxies for financial sophistication
- Auto-enrollment enshrined in PPA of 2006 and design of statesponsored retirement plans
- Harder to determine whether auto-enrolled savings:
 - a) Crowd out existing savings,
 - b) Leak out to fund non-retirement expenses,
 - c) Result in higher levels of debt (i.e., "borrowing to save")
- Chetty et al. (2014): 1.0% increase in *mandatory* savings rate is associated with 0.8% in total savings rate in Denmark

What Does This Paper Do?

- Natural experiment re: savings rates of civilian Army employees
 - Cohort hired on or after August 1, 2010 auto-enrolled in TSP with default savings rate of 3.0%; earlier cohort was not
 - Default **employEE** rate of 3.0% results in **employER** match of 3.0%
 - Authors compare accumulated contributions and future debt levels of cohorts hired 12 months before and 12 months after this change
- Incremental contributions after **48 months**?
 - On average, additional **EE** contributions of **2.6%**
 - On average, additional **EE+ER** contributions of **5.8%** (thanks to match)
 - Authors observe neither account balances nor investment choices
- Incremental debt after 48 months?
 - Non-auto and non-mortgage debt is unchanged
 - Auto loan balances increase by 2.0% of initial annual income (~ \$1,120)
 - Mortgages balances increase by 7.4% of initial annual income (~ \$4,144)
- Ignoring mortgages, net worth increases by level of ER match

My Take

- This is an important paper that gets us one step closer to understanding net effect of auto-enrollment on household saving, borrowing, and consumption.
- My comments fall into five categories
 - 1. Highlighting how auto-enrollment could increase/decrease participant welfare... with and without an employer match
 - 2. Considering heterogeneous treatment
 - 3. Suggesting possible extensions to the paper
 - 4. Advertising related research in two other settings
 - 5. Asking if there are other potential downsides to defaults?

Auto-Enrollment and Welfare?

EXCLUDING EMPLOYER MATCH:

- 1. Auto-enrollment crowds out IRA savings → (WEAKLY) BENEFICIAL
 - Higher contribution limits plus fiduciary standard of care
- 2. Auto-enrollment crowds out current consumption → BENEFICIAL
 - Thanks to smoother consumption profile (which is underlying policy goal)
 - **Caveat:** Would be helpful to know more about changes in consumption
 - More beneficial if consume fewer lottery tickets
 - Less beneficial if consume fewer healthy foods, medical visits, etc.
- 3. Auto-enrollment crowds out liquid savings → PROBABLY HARMFUL
- Auto-enrollment leads participants to finance current consumption through borrowing → DEFINITELY HARMFUL
- 5. Auto-enrollment relaxes future borrowing constraints → BENEFICIAL(?)
 - ... unless borrowing constraints increase welfare by minimizing amount that individuals can spend on cars and boats and time share

Auto-Enrollment and Welfare?

INCLUDING EMPLOYER MATCH:

- Net benefit of auto-enrollment certainly increases relative to auto-enrollment without a match
- Average auto-enrolled employee makes \$1680 EE contribution and receives \$1680 ER match → 3.0% raise from participating
- If EE contributions crowd out liquid savings, must weigh 3.0% decrease in liquid savings (which authors cannot directly observe) against 6.0% increase in illiquid savings → PROBABLY BENEFICIAL
- If EE contributions lead employee to finance current consumption through borrowing, must weigh costs associated with borrowing 3.0% of income against 6.0% increase in less-liquid savings → PROBABLY HARMFUL

TL;DR: While this paper is measuring the causal impact of auto-enrollment on debt holding match rates constant, the expected welfare effect likely varies with level of ER match, which varies across settings

Heterogeneous Treatment?

- In fully rational model, households that cannot afford to save 3% will opt out... either before or after the first contribution → we shouldn't expect to find debt effects among remaining participants
 - Mullainathan & Shafir (2013): low income individuals good at cash mgmt.
- Madrian and Shea (2001): largest contribution effects on "lowincome, the young, blacks, and Hispanics" → subpopulations had lowest participation rates without auto-enrollment
 - Overall, 39% of auto-enrolled have opted out by month 48
 - What are opt out rates within these subsamples?
 - Do changes in debt in year t-1 predict opt out in year t?
- Subpopulation analysis in Table 5 confirms higher contribution effects among those with lower income and education (as does Figure 3)
 - Lack of positive and significant impact on non-auto and non-mortgage debt is encouraging... although precise estimates would require much larger sample sizes

Possible Extensions?

- Ranked from most to least promising:
 - Study changes in nature of consumption by matching with account-level data from JP Morgan Chase (e.g., Ganong and Noel (2017)), another anonymous bank (Adam Jorring (2017)), or USAA
 - Study changes in liquid savings account balances using supplemental Equifax data on savings account balances (Ankit Kalda (2017))
 - Use auto registrations data to determine if extra dollars are being spent on prestige (Mercedes vs. Honda) or reliability (old vs. young Honda)
 - Survey participants to ask how they funded retirement contributions or why they opted out
 - Exploit geographic variation in housing price appreciation

Coming Attractions

- Study of opt out decisions and debt levels in OregonSaves, state-sponsored retirement that went live **11/17**
 - Administrative data + survey data on reason for opting out or withdrawing funds + credit bureau data (hopefully)
 - Measuring changes in debt levels is long-term goal
- Study of opt out decisions and debt levels in NEST in response to new minimum EE and ER contribution rates
 - Currently 6.3 million participants (8% opt out) with minimum EE+ER of 2% and minimum ER of 1%
 - 4/18: minimum EE+ER becomes 5% and minimum ER becomes 2% → EE likely to increase from 1% to 3%
 - 4/19: minimum EE+ER becomes 8% and minimum ER becomes 3% → EE likely to increase from 3% to 5%

Downsides to Defaults?

- 1. Optimal savings rate may vary with socioeconomic status
 - Fortunately, finding in this paper suggest 3% default savings rate is unlikely to result in increases in non-auto and non-mortgage debt even for those with salary < \$34k and Vantage score < 620
- 2. Optimal investment option may vary with socioeconomic status
 - Systematic risk of default option should condition on income if:
 - Lower equity allocations of lower income households reflects greater risk aversion...
 - ... but not if it reflects a lack of understanding that households with high SSA replacement rates should allocate marginal dollar to equity
- 3. Lack of engagement today w.r.t. savings rates and investment options may result in a lack of engagement in the future w.r.t. asset allocation, retirement income levels and annuitization
 - Cronqvist, Thaler, Yu (2018); Reuter and Richardson (2017)