Optimal Default Retirement Saving Policies: Theory and Evidence from OregonSaves

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Motivation & Question

Impacts of COVID-19 on retirement security:
- Millions of unemployed workers have lost access to employment-based retirement plans
- A third of U.S. population have used money from a savings/retirement account to pay bills (Aug survey by Pew)

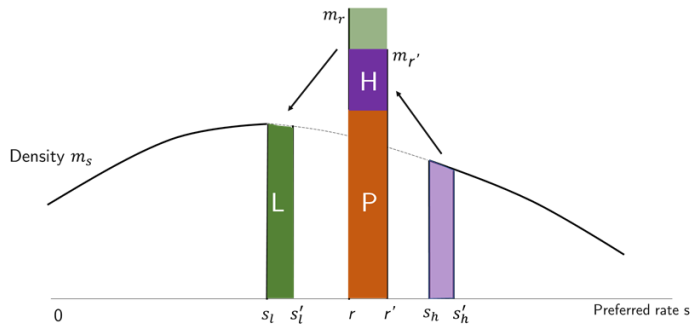
State-level policy responses before COVID-19:
- Seven states are launching/have launched state-sponsored retirement plans for private sector workers (OR, CA, IL, MD, CT, NJ, CO)

OregonSaves (2017):
- First state-sponsored auto-enrollment plan in U.S.
- Employers *must* provide an employer-sponsored plan or access to OregonSaves
- Employees can opt out of the default/program
- 5% default savings rate; 1% auto-escalation/year to 10%

Research Question:
- **What is the optimal default savings rate in auto-enrollment plan?**

Model for Optimal Default Savings Rate

Step 1: : **Individuals decide between default savings rate *r* and preferred rate *s***



*When individuals face two initial defaults **r** and **r'**:*
Group P: passively stay at both defaults;
Group L: passive savers at ***r*** but opt out of ***r'*** because ***r'*** deviates from their preferred rate between s_l and s_l';
Group H: opt out of ***r*** but passive savers at ***r'*** because ***r'*** is close to their preferred rate between s_h and s_h'

Step 2: **Policymaker's objectives**
- Given individual choices, compare all possible defaults and find the optimal default rate *r** to maximize the sum of lifetime utility for Groups **P**, **L**, and **H**
- Derive a formula for *r** depending on statistics that can be empirically estimated

Step 3: **Formula for optimal default *r****

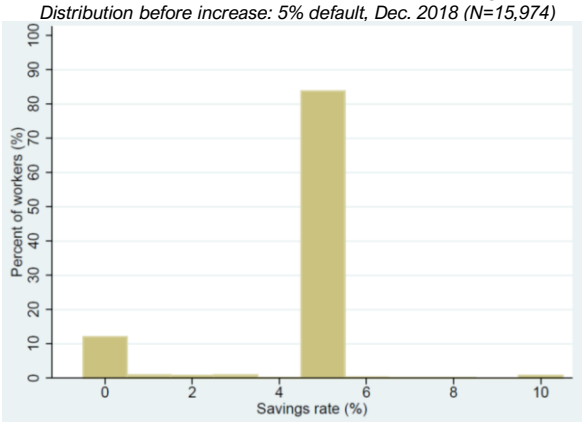
$$r^* = \frac{P - L + K}{-H}$$

*r** is determined by
P: welfare effect of saving at the default
L: welfare effect of saving at the preferred rate
K: welfare benefit of making an active choice for Group L
H: welfare effect of saving at the default

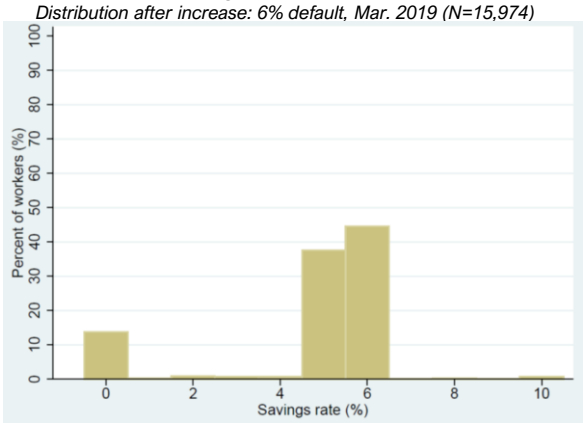
Empirical Estimation of Key Statistics in the Optimal Default Formula

Statistic 1: **Fraction of passive savers becoming active savers as the default rate changes**
- *Data:* individual-level administrative data from OregonSaves
- *Policy variation:* exogenous increase in the default rate from 5% to 6% (2019) and from 6% to 7% (2020)
- *Results:* About half of passive savers stop saving at the default when it rises 1 percentage point

Distribution before increase: 5% default, Dec. 2018 (N=15,974)

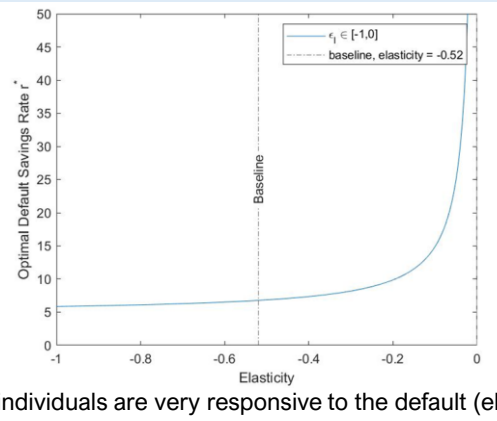


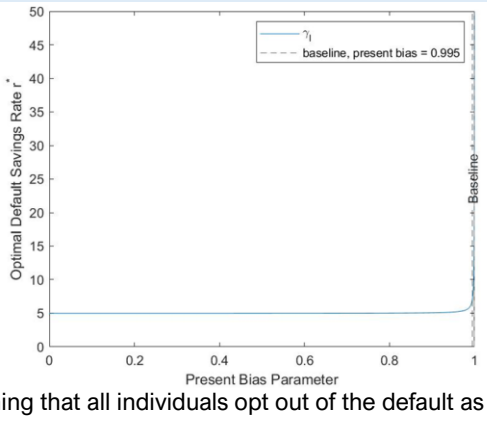
Distribution after increase: 6% default, Mar. 2019 (N=15,974)



Statistic 2: **Degree of undersaving if opting out of the default**
- *Method:* Time preferences collected from survey for OregonSaves-eligible workers in 2019
- *Results:* Present bias parameter = 0.995; Annual discount factor = 0.987

Calibration





- If individuals are very responsive to the default (elasticity → -1, meaning that all individuals opt out of the default as it increases), the optimal default *r** should be set around 6%.
- If individuals are highly present-biased (present bias parameter → 0, meaning that individuals are very likely to undersave if they opt out of the default), *r** should be set around 5%.

Conclusions

- Baseline optimal default rate in OregonSaves: 7%
- Optimal default in other auto-enrollment plans: between 5% and 10% under reasonable assumptions

Determinants of the optimal default rate:
- Individual responsiveness to the default rate: Half of passive savers stop saving at default when it rises 1 percentage point
- Degree of undersaving if opting out of the default: Present bias parameter = 0.995