Plan Design and Participant Behavior in Defined Contribution Retirement Plans: Past, Present, and Future

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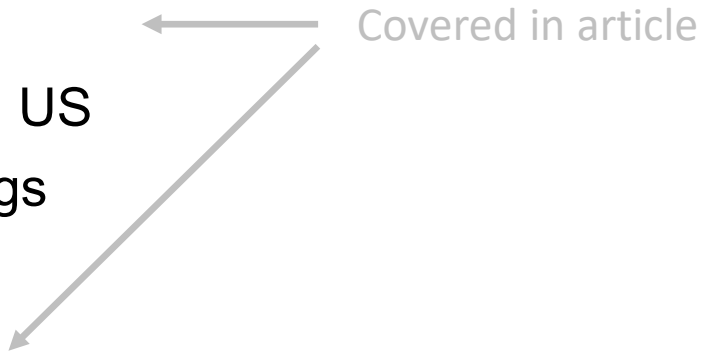
DC Plan is Means to an End

- DC retirement plan is intended to (help) finance consumption in retirement
- At minimum, employees need to decide
  - How much to save each period... **if anything**
  - How to allocate savings across available options
  - When and how to rebalance portfolio
- **Optimal** savings rate and portfolio characteristics vary with employee traits & preferences...
- ... but significant variation in **financial literacy** and susceptibility to **behavioral biases**

Topics

1. Early Evidence on DC Participant Behavior
2. Automatic Enrollment Changed Everything
3. Voluntary Enrollment vs. Defaults vs. Active Choice
   - TDF Pros and Cons
   - Customizing Defaults
4. Automatic Escalation
5. Expanding Access in UK and US
6. Financing Incremental Savings
7. LT versus ST
8. Emergency Savings
9. Distortions in Plan Designs
10. Latest Regulation and Open Research Questions



In the Beginning...

- Retirement plans with **voluntary enrollment (VE)**
  - Employees that *actively chose* to participant had to *actively choose* savings rates and investments
- Voluntary enrollment resulted in
  - Modest participation rates → *almost certainly bad*
  - Wide dispersion in savings rates → *potentially good*
  - Portfolios suffering from naive diversification (Benartzi & Thaler 2001), concentrated holdings of company stock (Benartzi 2001), inertia (Agnew et al. 2003), mental accounting (Choi et al. 2009) → *almost certainly bad*

Automatic Enrollment (AE) Changed Everything

- Automatic enrollment (Madrian & Shea 2001)
  - *Increases participation rates*
  - *Decreases dispersion in savings rates*
  - *Decreases dispersion in allocations*

  } *Heterogeneous effects*

  - Choi et al. 2003: higher participation but similar savings
- Before Pension Protection Act 2006, default savings rates were low and default options very low risk
- See **Beshears et al. 2023** for current AE literature review and **Vanguard 2023** Figure 31 for VE vs AE

VE vs. AE vs. Active Choice

- Choi et al. 2003: optimal default savings rate for hyperbolic discounters depends on level of dispersion in optimal rates
  - *Low → pick default based on mean/mode*
  - *High → pick extreme default to force active choice*
- Carroll et al. 2009: want employees to make active choices when they possess relevant info (e.g., saving rates) but to rely on defaults otherwise (e.g., portfolio management)
  - ***Ideal structure likely combines active choice with defaults***
- Beshears et al. 2023: lots of active choice with 12% default
  - Lower-income workers *more* accepting of 12%, perhaps because they "face higher psychological barriers to active decision making"

TDF Pros and Cons

- Pension Protection Act of 2006 accelerated use of target date funds (TDFs) as default investment options
- TDFs increase equity exposure (Mitchell & Utkus 2021) and satisfy demand for advice (Chalmers & Reuter 2020) → TDFs clearly dominate money market funds
  - Those invested in TDFs unlikely to panick when COVID-19 hit US markets in 2020Q1 (Blanchett, Finke, Reuter 2020)
  - But, employees unlikely to realize different TDFs pursue different investment strategies (Balduzzi & Reuter 2019)
- Reliance on TDFs may crowd out advice seeking (Reuter & Richardson 2022) and crowd out active choice regarding savings rates (Goda et al. 2019)

Customized Defaults?

- Goda & Manchester (2013) highlight welfare benefits of conditioning default options on employee characteristics with respect to choice between DB and DC plans
- In context of DC plan:
  - Default savings rate could depend on age and/or income (e.g., firm in Beshears et al. 2023, could set default rate at 8% for low-income and 12% for high-income)
  - Default TDF could be replaced by managed account that internalizes outside savings, income level, risk tolerance, etc. → *need worker input to improve on TDF*

Expanded Access in UK?

- **In 2012**, 36% private-sector employees participating in ESRP
- ... and **UK began requiring employers to offer automatic-enrollment retirement**, beginning with largest firms
  - Initially: minimum EE rate **1%** and minimum EE+ER rate **2%**
  - 4/2018: **2%** **5%**
  - 4/2019: **3%** **8%**
- Large firms: participation rate increases from 49% to 85% and EE+ER increases by 1.05 pp (Cribb & Emmerson 2020)
- Small firms: participation rate increases from 26% to 70% and EE+ER increases by 1.82 pp (Cribb & Emmerson 2021)
  - Estimation exploits randomization of small firm enrollment dates

Expanded Access in US?

- 3/2020: 36% of employees lacked access to ESRP
  - 59% in bottom quartile of income versus 16% in top quartile
- 1/2024: 14 states have introduced automatic enrollment IRAs; $1.23 billion invested in CA, CO, CT, IL, MD, OR
- 1/2024: OregonSaves: 123,747 funded accounts, $245.5 Mil.
- Participation rates lower than UK (Chalmers et al. 2024)
  - 12 months of eligibility: **50%** opt out, **37%** turnover, **69%** either
  - Those who quickly stop contributing have lower incomes
  - Within 12 months of 1st contribution:
    - mean balance is **$699,** median is **$348**,
    - **10%** have withdrawn everything

Financing Auto. Enrollment?

- Do households could reduce consumption, reduce other savings, or increase borrowing?
- **Answering this question required supplemental data**
  - Beshears et al. 2022 exploit AE in Thrift Savings Plan → no evidence of increased debt or decreased credit scores
  - Choukhmane & Palmer 2023 exploit increases in minimum rates in UK in 4/18 and 4/19 → £1 decrease in take-home pay reduces spending by £0.35; lower liquid savings; higher CC balances
  - Beshears et al. 2024 (following Crimm and Emmerson 2021): additional month under AE increases contributions by £32 - £38 but also increases unsecured debt by £7

Long-term < Short-term? Yes!

- Numerous opportunities for present-biased workers to "undermine" any increases in savings
- Choukhmane 2023 analyzes US and UK data:
  - Sample of US 401(k) plans: cumulative contributions of AE and non-AE (largely) converge after 3 years
  - During UK rollout of AE: workers who were AE at prior firm less likely to enroll at new firm... but only if it lacks AE
- Choi et al. 2024 analyze changes impacting new employees:
  - AE increases savings by **0.6%** of salary; auto. escal. by **0.2%**
  - Why? AE cohort less likely to increase rate and more likely to turnover (triggering leakage); high opt-out from auto. escal.

Lightning Round Predictions

Impact of Recent Regulation?

- §203 of SECURE 1.0 requires lifetime income projections; Goda, Manchester & Sojourner (2014) find saving rate responses to income projections are sensitive to underlying assumptions
- §101 of SECURE 2.0 requires AE for **new** 401(k) and 403(b) but grandfathers existing plans → *effect will be gradual*
- §113 of SECURE 2.0 allows small prizes to reward participation → *unclear how much savings will be generated ST or LT*
- §103 of SECURE 2.0 replaces non-refundable tax credit for low-income households with 50% "Saver's Match" deposited directly into account → *little evidence existing incentive increases savings (Ramnath 2013), so reasonable to experiment*

Lightning Round (cont.)

- §110 of SECURE 2.0 allows employers to treat student loan payments as employee contributions, triggering employer match → *likely to be popular with younger employees, but may have unintended consequences (Horneff et al. 2024)*
- §121 of SECURE 2.0 allows employers to offer "starter 401(k) plans," similar to automatic IRAs → *Bhattacharya and Illanes (2022) estimates suggest low takeup unless plans mandatory*
- §115 of SECURE 2.0 allows participants to withdraw up to $1000 for emergency expenditures → *increase in liquid savings for those without access to loans*
- §127 of SECURE 2.0 allows employers to offer AE liquid savings accounts with 3% contribution rate and max of $2500 → *remains to be seen how many employers adopt and employees accept*

Conclusion

- DC retirement plans come a long way since ERISA
- Automatic enrollment, higher default savings rates with automatic escalation, and sensible default investments nudging employees in right directions... modestly
- We need more research on...
  - Effectiveness of automatic IRAs, their use as liquid savings, and how incremental savings are financed by low-income
  - Benefits of moving beyond one-size-fits-all defaults (e.g., managed accounts versus TDFs or income-contingent AE)
  - Effectiveness of regulation and products intended to help with decumulation of retirement assets