Abandoned Retirement Savings

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Motivation

- Defined contribution system (e.g., 401(k), 403(b)) frequently results in retirement savings being spread across multiple accounts – onus is on account owner to consolidate/manage them

- In parallel, increased default enrollment has led to non-salient savings

- Concern that people may forget or lose track of their accounts – withdrawals must start at age 70.5, else large penalties

- To date, even basic facts about abandonment are unknown

Research questions & preview of findings

1. What is the prevalence of abandoned accounts?
   - In 2017, 2.7% of 72.5-year old IRA-holders abandoned $790 million
   - Cond'l on abandonment, median IRA held $5,400

2. Is imputed abandonment higher for default accounts?
   - Yes, by nearly 10 times (evidence from automatic rollover IRAs)

3. What are the implications of these findings?
   - Model of retirement savings w/forgetting
   - Different impacts on passive and active savers

Data (in brief)

- Individual tax and information returns, 1999-2018
  - Main analysis: 100% draw of 72.5-year-old IRA-holders
  - Automatic rollover analysis: 100% draw of individuals making rollovers to IRAs in relevant dollar ranges

- Account-level state unclaimed property, 1999-2018
  - 13 states representing 40% of population
  - All retirement accounts

Part I:
Abandonment Prevalence

Defining abandoned accounts in the tax data

IRA holders must take a **required minimum distribution** at age 70.5 (now 72) to avoid a large excise tax

We begin w/the universe of traditional IRAs held by 72.5 year-olds, indexed at the individual-custodian level. The account is abandoned if:

1. It has had positive value for at least 4 years
2. It has had no distributions over those 4 years (Form 1099-R)

   Additionally, for owners of multiple IRA accounts:
3. The individual failed to take their RMD in any year since 70.5[1]

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[1]The RMD is calculated with respect to *all* IRA distributions and *all* IRA assets.
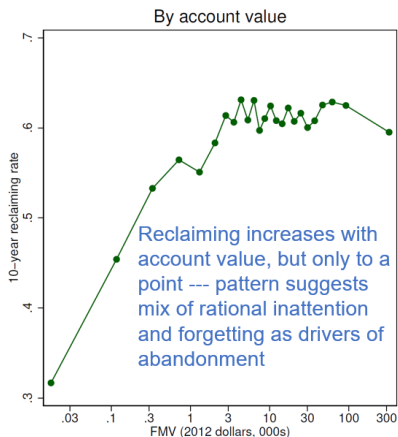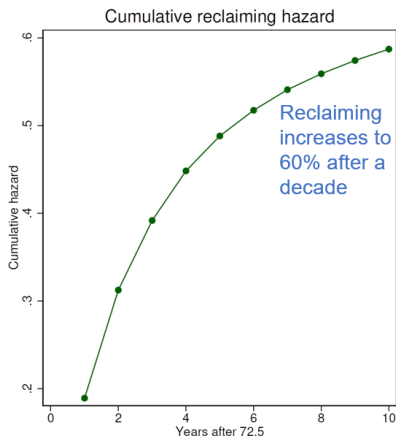
Share of accounts abandoned

Share of accounts abandoned / Dollar value of abandoned accounts
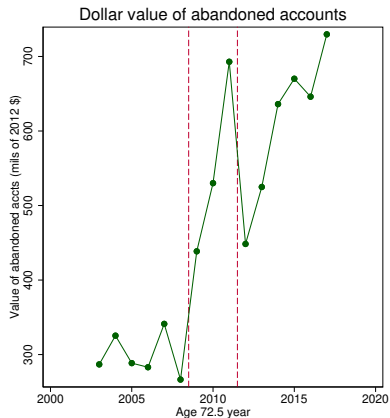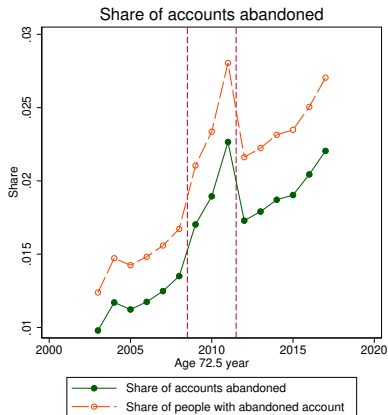
Values of abandoned and non-abandoned accounts

	Abandoned accounts		Non-abandoned accounts	
	2003–2006	2014–2017	2003–2006	2014–2017
Median	$9,015	$6,277	$45,148	$97,065
25th percentile	$2,609	$677	$18,125	$34,300
75th percentile	$27,131	$25,640	$111,772	$250,216

In 2014–17, median abandoned account was 13% of individual income.
All values in $2012

Eventual reclaiming is substantial, but levels off at 60%

Cumulative reclaiming hazard

Reclaiming increases to 60% after a decade

By account value

Reclaiming increases with account value, but only to a point --- pattern suggests mix of rational inattention and forgetting as drivers of abandonment

Analysis includes accounts abandoned in 2008 or earlier.

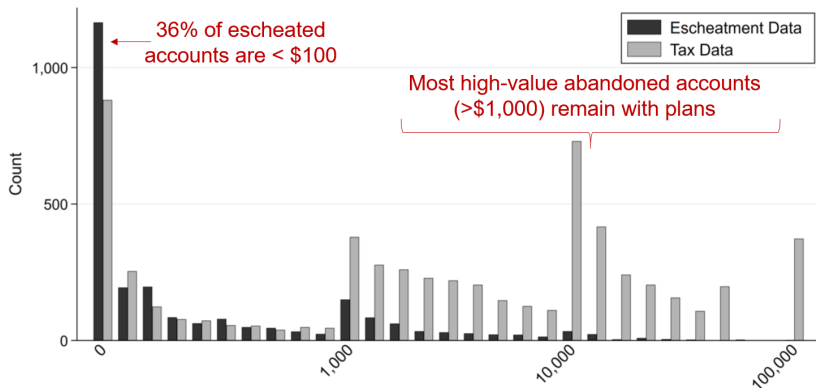# Another path for reclaiming: state unclaimed property

- At age 70.5, states start a dormancy period of 3 to 5 years
- After that, the plan custodian is required to escheat the account
- Account owner then has a long (or indefinite) period to reclaim funds
- Estimated 3% of 74 year-olds with an escheated retirement account; name and zipcode analysis suggests more likely male, urban, Hispanic

Account Summary and Extrapolation   Owner Characteristics

However, plans escheat < 2% of abandoned IRA $$

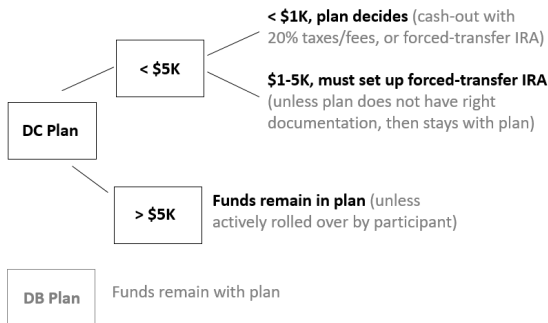

Plot shows counts in state unclaimed property v. tax data for 6 states that have sufficient data to enable comparison;
$170 million in tax data, only $4.4 million (2%) escheated

Additional analyses

- In tax data, less abandonment among financially sophisticated or male; share white in zipcode also reduces abandonment `Correlates`
- Doubling in abandoned accounts since 2003 is not explained by covariates, however `Oaxaca-Blinder decomposition`
- State policy affects reclaiming escheated IRAs—WI's automated system unites 80% (versus 3.4% in MA) of funds within 2 years `MA and WI Comparison`

Part II:
Regression Discontinuity Evidence
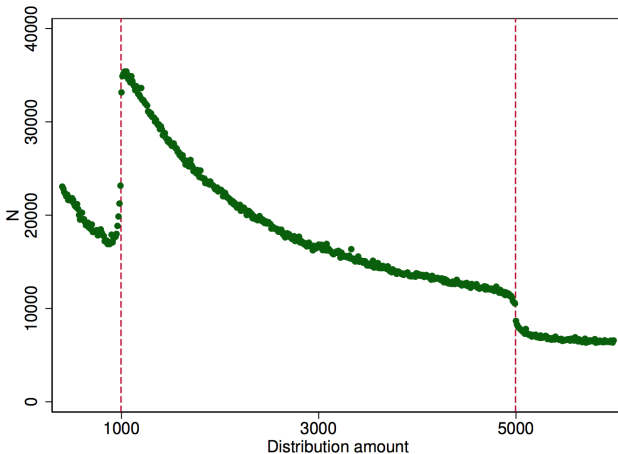## on Abandonment in Automatic Rollovers

Mini-experiment: At job separation, employers must put IRAs between $1-5K that are left behind in an automatic rollover IRA

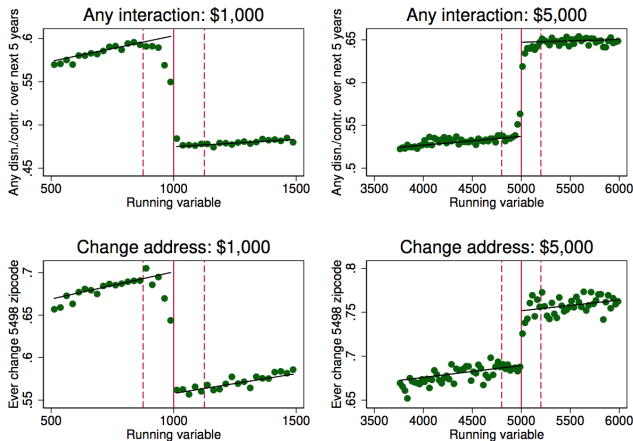**Challenge:** Working-age people, so can't define abandonment by RMDs
Solution: Regression discontinuity & treatment-effects framework to impute abandonment for those induced to save via the plan defaults

Clear evidence of discontinuities at the $1,000 and $5,000 thresholds

These behaviors help characterize the behavior of default compliers in a treatment effects framework (details in paper)

Estimated abandonment in automated rollovers

	Any interaction over next five years		Update address over next five years	
	(1)	(2)	(3)	(4)
	$1,000	$5,000	$1,000	$5,000
Share compliers	0.555	0.377	0.567	0.355
$E(Y|AT)$	0.603	0.647	0.701	0.752
$E(Y|C)$	0.372	0.355	0.449	0.576
Prob. abandoned	0.383	0.452	0.360	0.234
Observations	1,399,000	1,170,000	219,000	161,000

(Recall for full sample, abandonment = 0.027)

Part III: Conceptual and Policy Implications

Highlights (details in paper)

In a basic model of retirement saving, consider that individuals forget active versus passive savings at different rates

- Individuals remember fraction γ_a of active savings (S)
- ... and fraction γ_p of passive savings (d)
- ... and don't forget government benefits (g)

Lifetime utility is given by:

$$U(S, d) = u(W - S - d) + \beta u(\gamma_a S + \gamma_p d + g)$$

Implications for passive savers

Let ($\gamma_a = 1$) to focus on default savings

The passive saver optimizes S without considering the non-salient d. Lifetime utility is:

$$V(d) = u(W - \hat{S}(\beta) - d) + u(\hat{S}(\beta) + \gamma d + g)$$

The derivative of this utility with respect to d, at $d = 0$ is:

$$V'(0) = -u'(W - \hat{S}(\beta)) + \gamma u'(\hat{S}(\beta) + g)$$

$V'(0) > 0$ iff $\gamma > \beta \rightarrow$ **The first dollar of default savings improves welfare if and only if the myopia correction $(1 - \beta)$ exceeds the probability of forgetting $(1 - \gamma)$.**

Implications for Active Savers

Active savers are aware of defaults, so we can group them with actively saved S^* which satisfies:

$$\beta \gamma_a = \frac{u'(W - S^*)}{u'(\gamma_a S^* + g)}$$

> (1) **Forgetting acts like a reduction in rate of return**:
> $\hat{S}(\beta) \geq S^*(\beta, \gamma_a)$
> (2) **Myopia and forgetting are conflated in saving decisions**

Calibration: myopia overestimated by 1.4 percent (log utility, $\beta = 0.71$ if $\gamma_a = 1$ vs. $\beta = 0.72$ if $\gamma_a = 0.97$)

Could also consider naivete v. sophistication w.r.t. forgetting (e.g., naive active savers do not adjust S but end up worse off in period 2)

Conclusion

- First evidence that abandonment is prevalent: $800 million in 2017, from IRAs alone; median account held $5,400, or 12% of income.
- The unclaimed funds remain with plans; only 2% are sent to state unclaimed property, creating challenges in reclaiming funds.
- Abandonment is at least 10 times higher in default plans, informing concerns about promoting auto-enrollment.
- Fear of forgetting or losing track of accounts may reduce ex-ante savings, so aids in account management and memory — esp. with potential cognitive decline at older ages — may prove valuable.

Thank you for your kind attention!

Additional material

Unclaimed and claimed retirement accounts

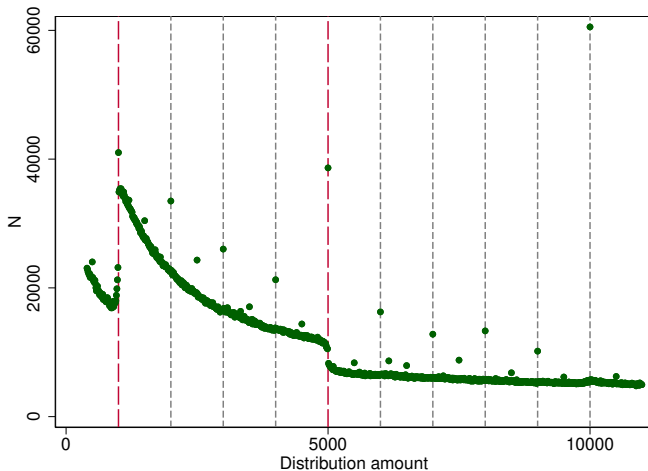|	MA	WI
Summary		
# unclaimed retirement accounts in 2016	3,320	815
Proportion claimed within 2 years	0.034	0.666
Avg account value	$633	$980
...of claimed accounts	$2,110	$812
...of accounts remaining unclaimed	$581	$1,315
Proportion of claims by initiation type		
DOR Auto Match	—	0.801
Online (own)	—	0.122
Online (locator service)	—	0.065
Other	—	0.013

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Oaxaca-Blinder decomposition of increase

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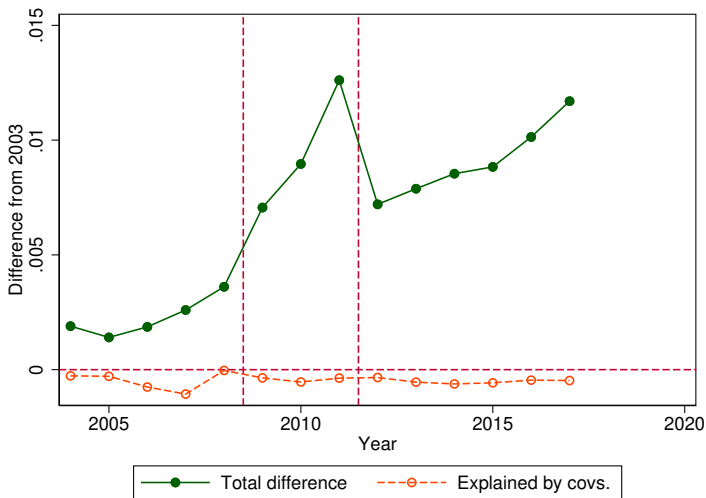
Correlates of abandonment

	(1)	(2)	(3)	(4)	(5)
Financial sophistication metrics:					
Files tax return	-0.0412	-0.0410	-0.0412	-0.0413	-0.0411
	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0005)
Pays estimated tax	-0.0014	-0.0013	-0.0013	-0.0018	-0.0019
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Has dividends or capital gains	-0.0044	-0.0037	-0.0039	-0.0042	-0.0040
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Has interest	-0.0023	-0.0021	-0.0021	-0.0021	-0.0017
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Demographics:					
Male		0.0014	0.0016	0.0016	0.0011
		(0.0001)	(0.0001)	(0.0001)	(0.0001)
Zip share white		-0.0267	-0.0227	-0.0227	-0.0183
		(0.0003)	(0.0003)	(0.0004)	(0.0004)
Observations	6,760,000	6,757,000	6,757,000	6,757,000	6,747,000
Baseline mean	0.0187	0.0187	0.0187	0.0187	0.0187
Year-by-value FE	X	X	X	X	X
Control for zip density			X	X	X
Control for zip educ. and poverty				X	X
Year-by-payer FE					X

Notes: This table reports regression estimates for a regression of a dummy for abandonment (at the account-level) on various outcomes using data from 2012 through 2017, restricted to those observations with valid zip codes from Form 1040 and/or Form 1099-SSA. Each column corresponds to a different regression. Each regression includes fixed effects for year interacted with 500 bins of real IRA value. All coefficients are statistically significant ($p < 0.001$).

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Counts of rollover distributions without dropping round numbers
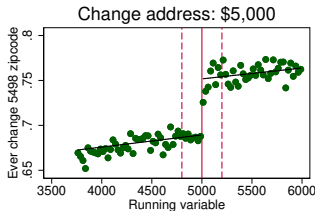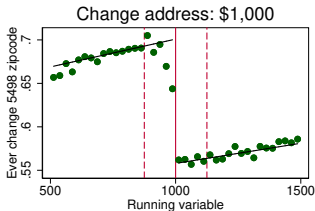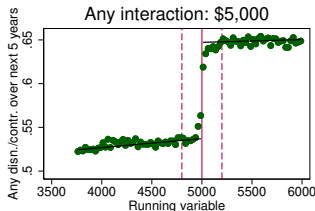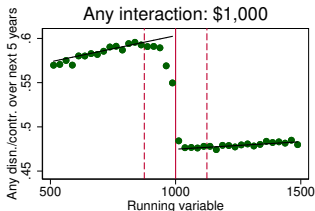
Kaplan-Meier claiming estimates by account value
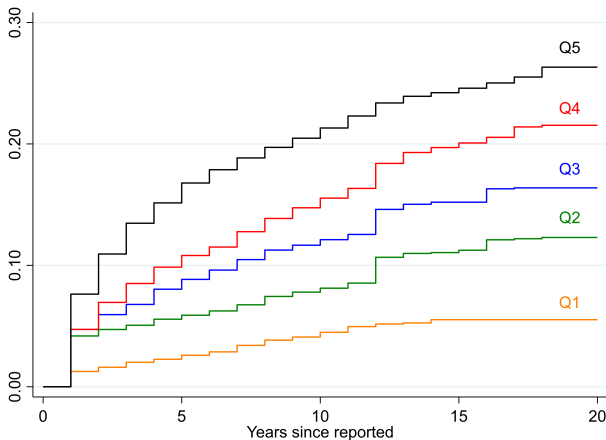
Notes: Figure shows Kaplan-Meier estimates (where the failure is a claim) for whether an account was claimed after being in the state unclaimed property database by quintiles of account value (Q5 is the highest value quintile). *Data Source:* Massachusetts Unclaimed and Claimed Property Data, 1998 to 2018. Back

# Impact of account value on claiming an unclaimed retirement account

	Claimed?						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
ln(Account Value)	0.0106***	0.0159***	0.0205***	0.0235***	0.0257***	0.0272***	0.0282***
	(0.0004)	(0.0005)	(0.0005)	(0.0006)	(0.0006)	(0.0007)	(0.0007)
R-squared	0.172	0.154	0.145	0.139	0.136	0.138	0.133
Observations	50.063	46,524	43,204	41,436	39,709	36,025	34,356
Years Unclaimed	1	2	3	4	5	6	7

	(8)	(9)	(10)	(11)	(12)	(13)
ln(Account Value)	0.0295***	0.0313***	0.0319***	0.0374***	0.0388***	0.0388***
	(0.0008)	(0.0009)	(0.0009)	(0.0010)	(0.0011)	(0.0012)
R-squared	0.130	0.132	0.135	0.139	0.129	0.129
Observations	32,760	30,777	28,063	26,362	25,709	24,376
Years Unclaimed	8	9	10	11	12	13

Notes: Table shows coefficients on ln(Account Value) from separate regressions of whether the account was claimed within 1, 2,..., or 13 years (denoted by the Years Unclaimed row), including property code and year reported unclaimed fixed effects. Since the columns subsequently increase the number of years of possible claiming from 1 to 13, the sample size decreases due to the window of relevant data. Stars denote statistical significance: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *Data Source:* Massachusetts Unclaimed and Claimed Property Data, 1998 to 2018.

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Variation in always-taker means as a function of age and income: $1,000 threshold
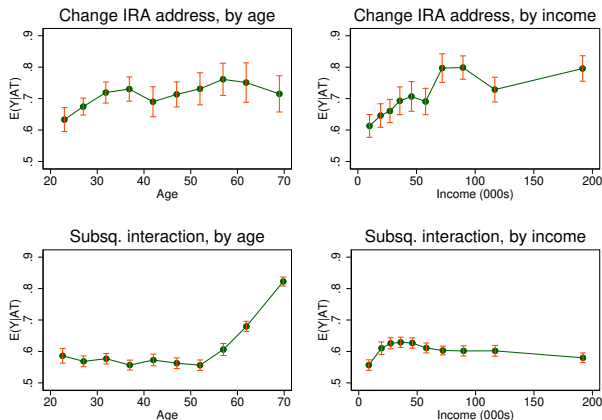
Notes: This figure plots the mean outcomes for always-takers at the $1,000 threshold as a function of age or income. Back

Unclaimed retirement account summary and extrapolation, 2016

Sample	# accts	Total funds ($)	Mean amt ($)	Pop. age 74	Accts per 74	% US 74 pop
Data	36,529	18,347,524	633	898,227	.041	.43
National (extrap.)	69,507	38,012,684	547	2,094,035	.033	1.00

Notes: Table reports aggregate retirement-related unclaimed properties by our sample of 13 states and the extrapolated national sample. Data sources include state unclaimed property data and the U.S. Census Bureau Estimated State Population by Characteristics for 2016.

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Characteristics of unclaimed retirement account owners

	Unclaimed retirement account owners	Overall 74 year old population
Name analysis		
Percent female	0.45	0.54
Percent Hispanic	0.24	0.12
County-level analysis		
Average county population	2,116,785	158,137
Percent age 65+	0.13	0.14
Percent white	0.69	0.72
Percent married	0.48	0.48
Percent bachelor degree	0.31	0.30
Percent born in state	0.57	0.57
Percent moved across state in past year	0.02	0.02
Percent own home	0.63	0.63
Median household income ($)	60,167	58,881
Percent of families below poverty line	0.11	0.11
Unemployment rate	8.60	7.60

Notes: Table reports average characteristics of individuals with unclaimed retirement assets (column 1) and average characteristics of 74 year olds (column 2). Data come from the sample of 13 states in the state unclaimed property data, Census population data, names databases derived from 2000 Census data and Social Security Administration data, and ACS county-level data.

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