

Corina Mommaerts  
University of Wisconsin-Madison

Anita Mukherjee  
University of Wisconsin-Madison

# Lost and Found: Claiming Behavior in Abandoned Retirement Accounts

## Center for Financial Security

University of  
Wisconsin-Madison

1300 Linden Drive  
Madison, WI 53706

608-890-0229  
cfs@mailplus.wisc.edu  
cfs.wisc.edu

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## Abstract

Individual retirement savings are increasingly spread across multiple accounts, putting them at risk of going “unclaimed”. This paper builds on prior research finding that in 2016, Americans held an estimated 70,000 unclaimed retirement accounts totaling \$38 million. The goal of this project is to examine the claiming patterns of these accounts after they are reported as unclaimed. We find significant variation by state procedures: in Massachusetts, where owners must initiate claims, only 3.4% of unclaimed retirement accounts reported in 2016 were “reclaimed” within two years; in Wisconsin, where the state auto-matches unclaimed funds with owners using Social Security matches, a striking 67% of funds were reclaimed in that same time period. We augment these results with primary data collection from a survey fielded to retirement account holders in Wisconsin to ascertain potential reasons underlying unclaimed accounts and reclaiming behavior, and find that a failure to consolidate accounts—an action that could prevent them from becoming unclaimed—arises in part due to plan defaults and rollover difficulties.

Keywords: unclaimed property, retirement, claiming, IRA  
JEL Codes: D14, H2, D8

*Authors:* Mommaerts: Department of Economics, University of Wisconsin-Madison, cmommaerts@wisc.edu; Mukherjee: Department of Risk and Insurance, Wisconsin School of Business, University of Wisconsin-Madison, anita.mukherjee@wisc.edu.

# 1 Project Overview

Workers today have an increasing number of retirement accounts due to growth in job mobility (Farber, 2010) and the shift from defined benefit pensions to defined contribution plans (Friedberg and Webb, 2005). These accounts can become scattered over one’s lifetime and require active management—namely meeting required minimum withdrawals at age 70.5—to avoid heavy penalties that can dissipate the value of the accounts. Policies to reduce unclaimed retirement accounts are increasingly proposed and enacted, but the topic has received disproportionately little research attention. Specific initiatives to help counter such losses include default rollover of retirement funds, including those that are less than \$5,000 Wall Street Journal (2019), or a national database of retirement fund information (Register, 2017; Warren, 2018).

The aim of this study is to build on Mommaerts and Mukherjee (2019), which estimates that in 2016, Americans held an estimated 70,000 unclaimed retirement accounts totaling \$38 million. A natural question emerges about the extent to which these retirement accounts are reclaimed. We document new insights into this behavior by leveraging untapped data from the states of Massachusetts and Wisconsin that provide detailed information on unclaimed and claimed retirement accounts. We also conducted a survey about savings and retirement behavior, focusing on barriers to rollovers and consolidation, with 4,378 state and local workers in Wisconsin who hold retirement accounts.<sup>1</sup>

We refer readers to our companion paper, Mommaerts and Mukherjee (2019), for details on the processes by which retirement accounts become “escheated” to the state unclaimed property databases we study. In short, defined contribution plans feature a “Required Minimum Distribution” (RMD), which is the minimum amount an individual must withdraw from an account each year. Generally, RMD rules start at age 70.5 or the year of retirement for traditional accounts. We consider unclaimed accounts as those in which the owner does not take their RMD by age 70.5 plus a state-defined dormancy period of two to five years. Examples of these state-level dormancy periods are provided in Greenblatt and Rosenman (1996).

Mommaerts and Mukherjee (2019) also provides an overview of the mechanisms by which account holders may claim money that is otherwise categorized as unclaimed. For example, some account holders might have their memory of the account triggered by news postings or by efforts to consolidate accounts in late life. Our project is most related to

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<sup>1</sup>The survey was conducted in partnership with Employee Trust Fund (ETF), which manages retirement plans for state and local employees.

the literature within economics on forgetting, hassle costs, and generally “leaving money on the table”. Models of forgetting have been examined in disparate economic settings such as payments for a lab experiment (Ericson, 2011) and lapse-based insurance (Gottlieb and Smetters, 2014), with the main takeaway being that people exhibit overconfidence in their prospective memory. Such models have not yet been extended to the retirement setting. Hassle costs are another phenomenon that could explain unclaimed accounts. These costs have been found to be important in the context of tax filings (Benzarti, 2015), health insurance (Baicker et al., 2012), and unemployment insurance (Ebenstein and Stange, 2010). In the latter two settings, difficulties with paperwork and processes appear to prevent people from accessing benefits.

These prior papers have strong implications for the present setting in which retirement accounts may remain unclaimed because of frictions in the claiming process, which may vary by account features, individual resources, and state policies. In this project, we specifically study three hypotheses. First, is there a relationship between account value and claiming behavior? We expect that higher value accounts are less likely to be forgotten, and are more worthy of claiming in the presence of costly frictions. Second, does reducing frictions increase claiming? Our analysis of Wisconsin data in particular offers a unique opportunity to test this hypothesis because the state introduced an automated claims processing system in 2015. Third, does claiming behavior respond to individual needs, as measured by economic recessions? There is anecdotal evidence that economic downturns increase claiming behavior (in part due to state efforts), and we test this relationship using our data.

## 2 State Unclaimed Property Data

A key reason that states require dormant retirement accounts to be given over, or “escheated”, to their unclaimed property databases is so that they can use additional information to reunite the funds with their owners. We were able to obtain data on such reclaiming behavior from the states of Massachusetts and Wisconsin. Our data source for unclaimed and claimed retirement accounts comes from these states’ unclaimed property (SUP) databases. These data contain account-level information on each unclaimed property, and include details such as the type of account and amount in the account. A drawback of the SUP data is that states vary in the amount of detail provided to researchers based on state-level Freedom of Information Act obligations. In addition to needing to contact each state individually, this constraint makes it difficult to collect data from many states. Another drawback of the SUP data is that a federal regulation created by ERISA—which limits the types of unclaimed

retirement funds that firms must escheat to the state—supercedes state guidance on this topic, meaning that the SUP data capture only a subset of unclaimed (and thus claimed) retirement accounts.

The SUP data were collected by contacting the relevant department in each state. We use property codes associated with each unclaimed property to identify retirement accounts in these data. The SUP data contain numerous property types—the National Association of Unclaimed Property Administrators (NAUPA) lists 123 categories—including uncashed checks, securities, insurance property, mineral proceeds, and trusts. We isolate retirement accounts according to the codes listed in Table A.1, which include pension checks, Individual Retirement Accounts (IRAs), pension and profit-sharing plans, and annuities.<sup>2</sup>

### 3 Claimed Accounts Analysis

We examine the Massachusetts and Wisconsin data separately because they have different procedures for reuniting unclaimed accounts with their owners. In Massachusetts, like most states, unclaimed account owners must initiate claims to their funds through the state. In Wisconsin, the state uses Social Security number information to match unclaimed funds with their owners. This process started in June 2015 and is rare among states; it is known as the “Wisconsin model” in the unclaimed property community as we learned from our communication with Erin Egan, Director, Bureau of Tax Operations in Wisconsin. The procedures result in stark differences in claim rates: in Massachusetts only 3.4% of unclaimed retirement accounts reported in 2016 were claimed within two years, whereas in Wisconsin, 67% of accounts are claimed in that same timeframe.

Table 1 shows summary statistics on claiming for the two states. In Massachusetts, there were 3,320 retirement accounts reported as unclaimed to the state in 2016, of which only 3.4% were claimed within two years. The average account value of claimed accounts is much higher (\$2,110) than unclaimed accounts (\$581), which is consistent with some lower-value accounts being abandoned or forgotten as owners need to initiate their own claims in the state. In Wisconsin, 815 unclaimed retirement accounts reported to the state in 2016, two-thirds of which were claimed within two years. The average account value is higher than the national average at \$960, and the ones that remain unclaimed are of higher value (\$1,315 versus \$812). As noted, the state uses taxpayer Social Security numbers to match account

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<sup>2</sup>We corroborated this classification, which we created based on the NAUPA codes, with Erin Egan, Vice President of NAUPA’s midwestern region and Director of Wisconsin’s Bureau of Tax Operations.

owners with escheated funds whenever possible. This method appears successful, as 54%<sup>3</sup> of accounts are reunited with their owners via the match. Of the accounts that are claimed, 80% are done so via the Department of Revenue (DOR) Auto Match; an additional 12% of account owners initiate claims on via the state’s website, and 6.5% of owners are connected to their lost accounts via an online locator service.

The relationship between account value and claiming in the Wisconsin data requires care in interpretation because the majority of claims are done “automatically” via Social Security number matches and not by owner initiation. Figure A.3 shows the logged account value by type of claim initiation; we observe that the auto-matched claims are of smallest average value, which follows logically as these will get claimed by the state on behalf of the account owner as long as there is a Social Security number to match. Accounts that are claimed by initiating an online process have higher value, as expected, because these require active participation by the account holder. Claims that are initiated via another channel, for example in person, have the highest value.

Table 1: Summary statistics on unclaimed and claimed retirement accounts

	MA	WI
<i>Summary</i>		
# 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
<i>Proportion of claims by initiation type</i>		
DOR Auto Match	—	0.801
Online (own)	—	0.122
Online (locator service)	—	0.065
Other	—	0.013

*Notes:* Table shows summary statistics on unclaimed and claimed retirement accounts in Massachusetts and Wisconsin. Statistics are for accounts reported as unclaimed in 2016 for ease of comparison. The claim initiation data are not available for Massachusetts. *Data Sources:* Massachusetts Unclaimed and Claimed Property Data, 2016 to 2018; Wisconsin Unclaimed and Claim Property Data, 2016 to 2018.

The remaining analysis focuses on the Massachusetts data, as we have records available from 1999 to 2018, while we only have records since 2015 for Wisconsin. However, the Massachusetts data do not allow us to investigate many predictors of claiming behavior:

<sup>3</sup>This equals the proportion claimed, 0.67, multiplied by the proportion claimed via DOR Auto Match, 0.80, from Table 1.

names are not available, and zip codes are missing for the vast majority (87%) of observations. What we do have in great detail, however, is the account value. This is of specific interest to the present research because it allows us to test theories of account abandonment. For example, if accounts go unclaimed because of claiming frictions, then accounts that remain unclaimed for longer durations should be of lower value than accounts that are more quickly reclaimed. This relationship between account value and claiming is present in the summary statistics, and here we explore that relationship more formally in a regression analysis.

Figure 1 shows patterns among those who claim: we observe from the gray bars that there is a high rate of claim activity (38%) in the year following the date at which the property is reported as unclaimed to the state. This makes sense given that the state likely makes an equal effort to contact all unclaimed account holders when receiving their property, and some of those who have the correct address or are willing to do the steps for claiming do so quickly. Of the accounts that are claimed, 53% are claimed within two years of being escheated to the state, as shown in the cumulative density plot in red corresponding to the right axis. There remains activity in subsequent years, but the proportion claiming decreases quickly after the first year. The cumulative proportion claimed since year reported as unclaimed shows that the claim rate is roughly linear after the first year. Note that the longest timespan over which we can study claiming behavior is 13 years, and in this (smaller) sample we find that about 17% of unclaimed retirement accounts are claimed over that period.<sup>4</sup>

Next we examine whether account value predicts claiming behavior. We begin by showing the raw data in Figure 2, which shows that older accounts which are claimed are of higher mean value. This is consistent with a story of claiming frictions that increase with time since the account is reported as unclaimed, which is plausible as the necessary paperwork may be more difficult to locate and submit.

To more formally test this relationship, we estimate the following regression for each unclaimed account  $i$  separately for cutoffs of 1, 2, ..., 13 years since the property was reported as unclaimed:

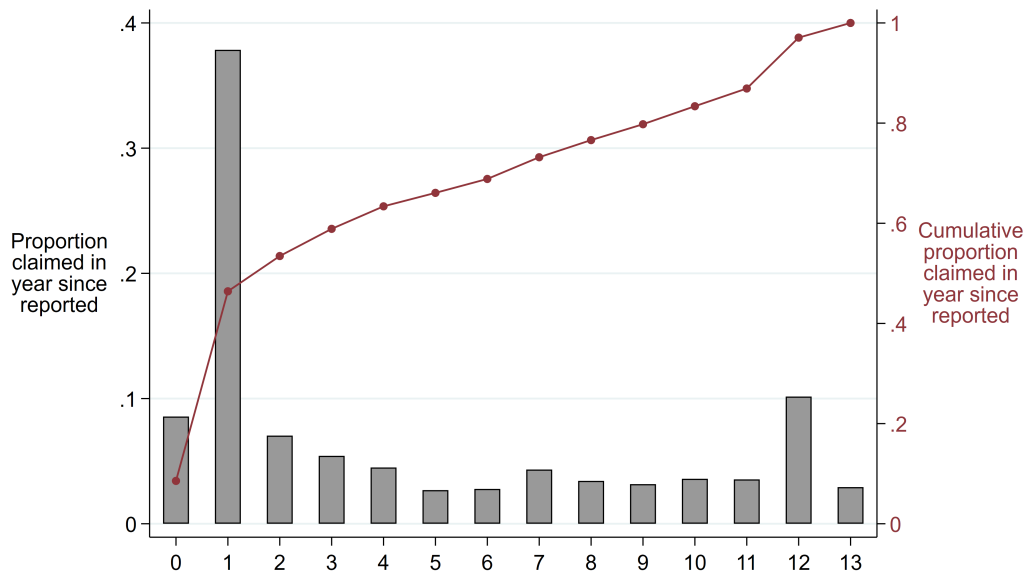
$$\text{Claimed}_i = \beta \ln(\text{Account Value}_i) + \eta_p + \gamma_y, \quad (1)$$

where  $\text{Claimed}_i$  is whether the property was claimed *within* 1, 2, ..., 13 years (13 separate regressions, with decreasing sample size), and  $\text{Account Value}$  is in units \$10,000, though the

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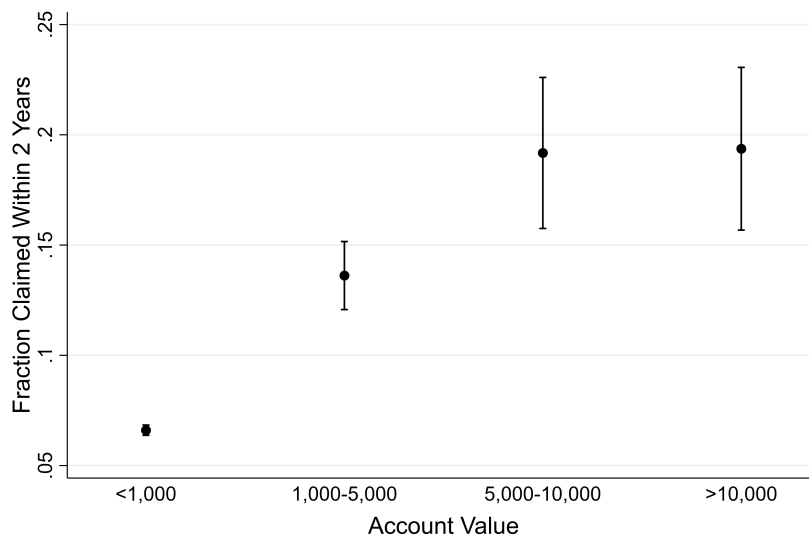
<sup>4</sup>The analogous plot for the Wisconsin data is provided in Figure A.4. There are similar patterns with the highest claim activity being in the one year following escheatment to the state. Because of the auto-match, many more accounts (80%) are claimed within four years, however.

Figure 1: Claiming patterns by year property was reported as unclaimed



Notes: Figure shows the proportion of unclaimed property that was claimed in the year since reported (columns) and the cumulative proportion of unclaimed property that is claimed since year reported (line). Data source: Massachusetts unclaimed and claimed property data, 1998-2018.

Figure 2: Fraction of accounts claimed within two years by account value



Data source: Massachusetts Unclaimed and Claimed Property Data, 1998 to 2018.



units do not matter as it is logged.<sup>5</sup> The fixed effects  $\eta_p$  and  $\gamma_y$  are for property codes and year reported as unclaimed, respectively. Figure 3 (with corresponding regression results in Table A.3) shows that the relationship between account value and claiming increases with time since the property is reported as unclaimed. In other words, higher value accounts are more likely than lower value accounts to be claimed many years after being reported as unclaimed. This pattern suggests that some low value accounts may be knowingly abandoned, creating a concern over frictions in accessing these funds due to state procedures and other constraints.<sup>6</sup> We also examined a panel model in which we can examine heterogeneity by time since the account was reported; the results are in Figure A.2. Here, we observe that while account value increases the likelihood of claiming for older accounts, that effect has a decreasing rate as the account ages.

Next, we examine whether claiming behavior responds to economic downturns as measured by the addition of recession periods to the regression equation in (1). The recession periods in our data are March to November of 2001, and December 2007 to June 2009.<sup>7</sup> The results from linear regression models are in Table A.6. We observe in columns (2) and (3) that the effect of the recession is quite large and statistically significant, though we caution reading too much into this particular result given that it is not possible to control for both a time trend and the effect of the recessions in this analysis.

In summary, the Massachusetts data is likely to be more representative of the country as most states are unable to use Social Security numbers to match unclaimed funds with their owners. With this view, the vast majority of unclaimed retirement funds remain unclaimed even after decades of being escheated to the state. Wisconsin's use of Social Security numbers to auto-match unclaimed funds with their owners is rare and has particular return in matching retirement accounts to their owners as such information is frequently available.

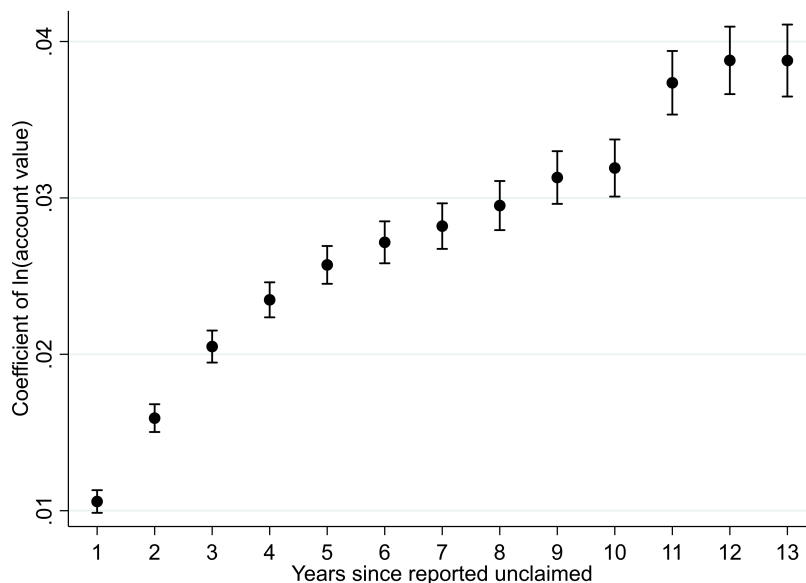
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<sup>5</sup>We also estimate an accelerated failure time (AFT) model of the following form for each unclaimed account:  $\log(t_i) = \beta \text{Account Value}_i + \eta_p + \gamma_y$ , where  $t$  is the years until claim if the account is claimed, or years until 2018, the final year of observation, if the claim is not observed. *Account Value* is measured in units of \$10,000, and  $\eta$  and  $\gamma$  are the same as in equation (1). The AFT model takes into account the censored data (i.e., we do not observe all claims); the results are reported in Table A.2. An advantage of the AFT model is that we can interpret the coefficient of interest  $\beta$  as the impact on the time to an event, in our case a claim; the coefficient of -0.0893 in column (3) means that the time to claim decreases by 8.93% for each \$10,000 in unclaimed account value. These results appear monotonic; Figure A.1 plots the Kaplan-Meier hazard rates of claiming by account value, and we observe that the probability of claim at every year since reported as unclaimed increases with account value.

<sup>6</sup>The analogous plot for the Wisconsin data is provided in Figure A.5; we observe similar patterns in that the older accounts which are claimed tend to be of higher value.

<sup>7</sup>The source for these dates is NBER: <https://www.nber.org/cycles.html>.

Figure 3: Coefficient plot of the impact of account value on claiming



*Notes:* Figure shows the coefficients, each from a separate regression, on  $\ln(\text{Account Value})$  as the window of years since reported unclaimed increases from 1 to 13. The coefficients are from regressions of the following form:  $\text{Claimed} = \beta \ln(\text{Account Value}) + \eta + \gamma$ , where *Claimed* is whether the property was claimed within 1, 2,...,13 years (each separate regressions), *Account Value* is measured in units of \$10,000,  $\eta$  represents property type fixed effects, and  $\gamma$  represents year reported as unclaimed fixed effects. The full regression results corresponding to these coefficients are shown in Table A.3. *Data source:* Massachusetts unclaimed and claimed property data, 1998-2018.

## 4 ETF Survey Data Analysis

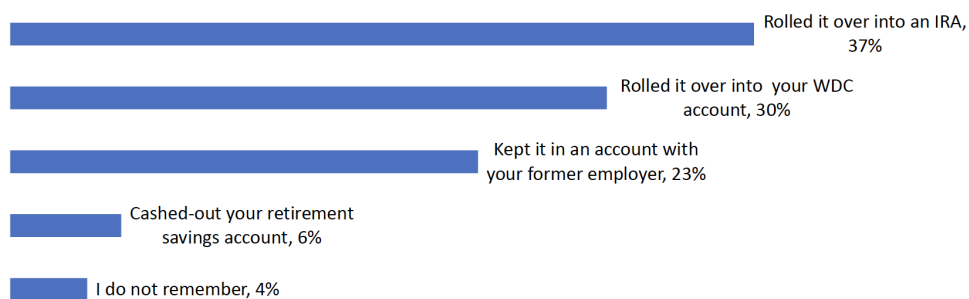
To better understand drivers of unclaimed retirement accounts and retirement account management decisions, we fielded a survey with the Wisconsin Department of Employee Trust Fund (ETF) to complement our state unclaimed property data analysis. The survey was conducted as an annual participant survey for the Wisconsin Deferred Compensation (WDC) Program, a supplemental retirement savings plan for working state and local employees which allows them to save money directly from their paycheck for retirement. The survey was sent to active and retired account holders. By excluding inactive members, a limitation of the survey is that it misses out on a group that is vulnerable to having unclaimed retirement assets. The survey was an add-on to the annual questions about participant satisfaction and consisted of a module about how respondents managed their retirement savings accounts.

The survey was fielded in November and December of 2019 to 4,378 employees and as in previous years, there was a response rate of 22%. About 93% of respondents reported

having a defined contribution plan, with half currently contributing. Tables A.4 and A.5 report characteristics of these respondents. The majority are current state employees, saving a wide range of amounts in their WDC plans. The current employees are almost all actively contributing to their retirement plans in monthly amounts from less than \$50 (19% of the sample) to over \$1,000 (13% of the sample). The respondents have had WDC for relatively long periods of time, with 44% having a WDC account for 20 or more years. The vast majority (93%) do not anticipate rolling over these funds to another account in the near future. Figure A.6 shows the age breakdown of the survey respondents, which is an important variable given that retirement account consolidation may be most salient for those at or near retirement. Indeed, about half of the sample is aged 60 or over. Additionally, as shown in Figure A.7, 45% of respondents have account balances over \$100,000.

The survey elicited information about how respondents managed retirement accounts from previous jobs. Figure 4 shows that two-thirds of those who had previous retirement savings rolled over these accounts into an Individual Retirement Account (IRA) (37%) or their WDC account (30%). Most others kept the accounts with their former employer. Those who did not roll over their previous account were asked the primary reason for doing so. As Figure 5 shows, about 53% noted that leaving it behind was the “easiest thing to do”, highlighting the potential for defaults to have a meaningful effect in this setting. This was followed by 23% respondents believing it was safer there, 14% indicating lack of knowledge on how to roll over funds, and 9% indicating not knowing that rollover was an option. Of the respondents who did roll over their previous savings, 70% indicated the primary reason was to keep track of their savings (see Figure 6).

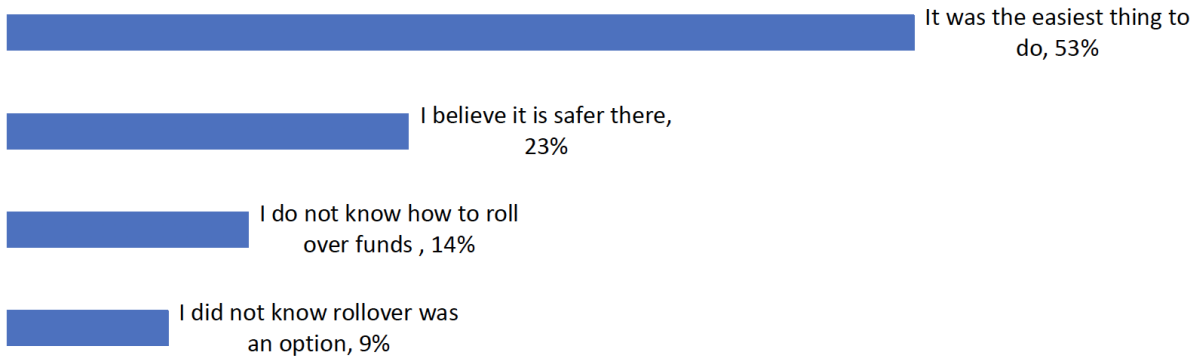
Figure 4: Action with savings from previous employer



Notes: Figure plots the distribution of responses to the survey question: “What did you do with your savings from your previous employer?”. Data Source: Employee Trust Fund (ETF) Survey.

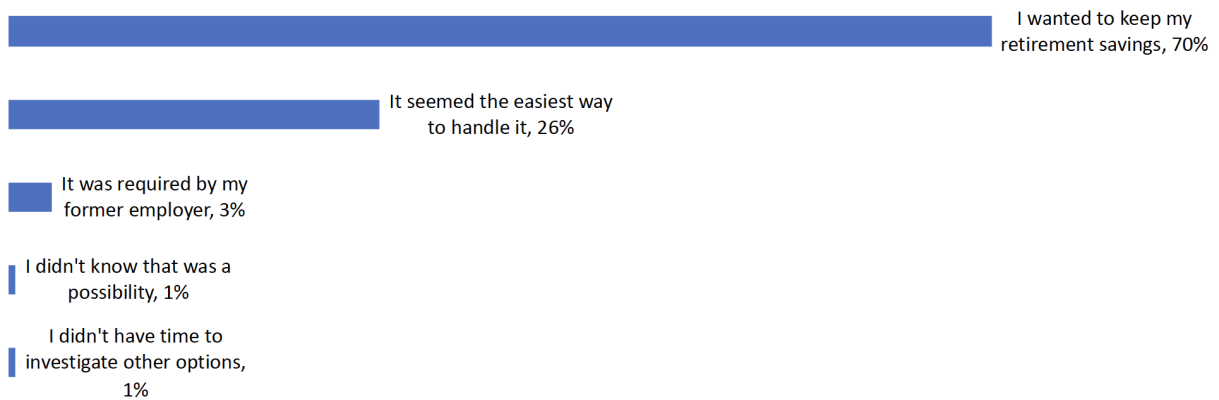
The survey is limited in its ability to test competing hypotheses, but it helps contribute

Figure 5: Reason kept savings with previous employer



Notes: Figure plots the distribution of responses to the survey question: "What was the reason you kept the account with your previous employer?". Data Source: Employee Trust Fund (ETF) Survey.

Figure 6: Reason for rollover



Notes: Figure plots the distribution of responses to the survey question: "What was your reason for rolling over your funds?". Data Source: Employee Trust (ETF) Fund Survey.

new insights about rollover behavior at least among long-term retirement account holders. The key takeaways are that defaults matter, as a substantial fraction of individuals left funds with their previous employer because it was the “easiest thing to do”, and that many potentially underestimate the amount of time it takes to rollover funds in the future—respondents indicated an average of two hours in active time. These beliefs likely contribute to the stock of unclaimed retirement accounts and are of policy interest if we wish to reduce the incidence of lost accounts.

## 5 Conclusion

The retirement savings landscape in the U.S. places a great deal of responsibility on individuals: how much to save, which saving vehicles to use, choice of investment funds, and more. Additionally, individuals must keep track of the increasingly numerous savings accounts accumulated over their working lives. Failing to do so can result in serious penalties that eventually erode the balances in unclaimed accounts. While there is considerable literature on various aspects of retirement saving, there is a marked gap in the study of these unclaimed accounts. The present report complements Mommaerts and Mukherjee (2019) by examining the extent to which unclaimed retirement accounts are “reclaimed” after being escheated to the state. The contribution is extended by a primary survey of Wisconsin state and local employee retirement account holders to better understand barriers in rollover and retirement account management.

The empirical analysis uncovered three main patterns. First, we found that the longer an account remains unclaimed with the state, the more likely it is that higher value accounts are claimed relative to lower value accounts. This is consistent with the idea that larger accounts are less likely to be forgotten in the long-run, and are worth claiming even in the presence of frictions. Second, we found that reducing frictions—to the extreme, as demonstrated by Wisconsin’s auto-match program which does not require any active participation by the account holder—dramatically increases the rate of reclaimed accounts. Third, we found that account holders appear more likely to claim abandoned accounts during recessions, though this analysis is limited due to our inability to also control for time trends with the available data. Such a relationship is plausible, however, both because people may have more need for the money, and because states increase efforts to locate unclaimed property account holders. We note that the welfare relevance depends on the size of the unclaimed property to the holder’s overall wealth, specifically retirement wealth. Unfortunately, this is not something we can detect in our data.

The findings in this report help inform a variety of potential policy considerations. For example, states vary in the effort they exert to connect unclaimed property with their owners, and there could be greater coordination to improve these efforts. In Wisconsin, the unclaimed property division matches account owners' Social Security numbers to addresses using the state's tax database, and sends a check for unclaimed property to owners without them having to undergo any formal process. Automating and facilitating efforts in these ways can help reduce the amount of unclaimed property. Specific to retirement, tax codes could be modified to remove the penalty associated with early withdrawals of retirement savings due under a larger amount than is currently allowed during job changes to help people port their savings and avoid losing them.

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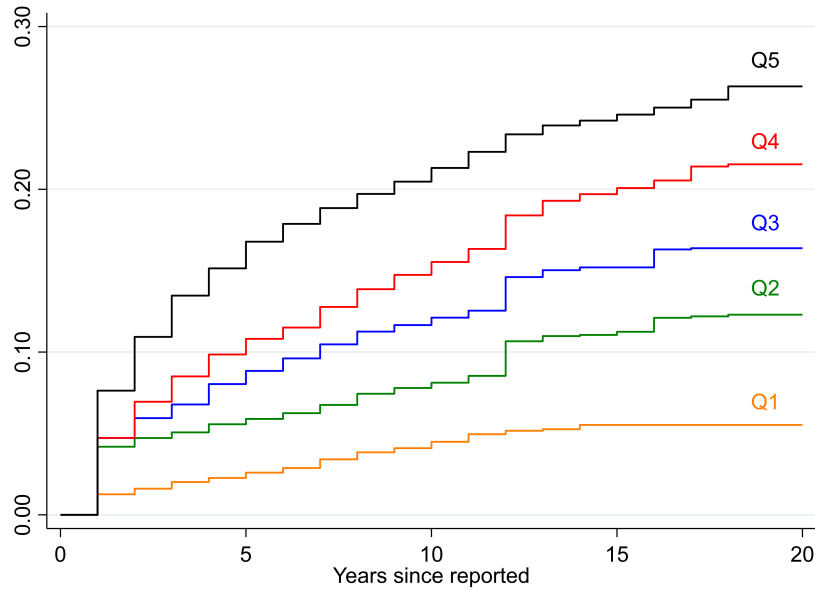
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## Appendix Figures and Tables

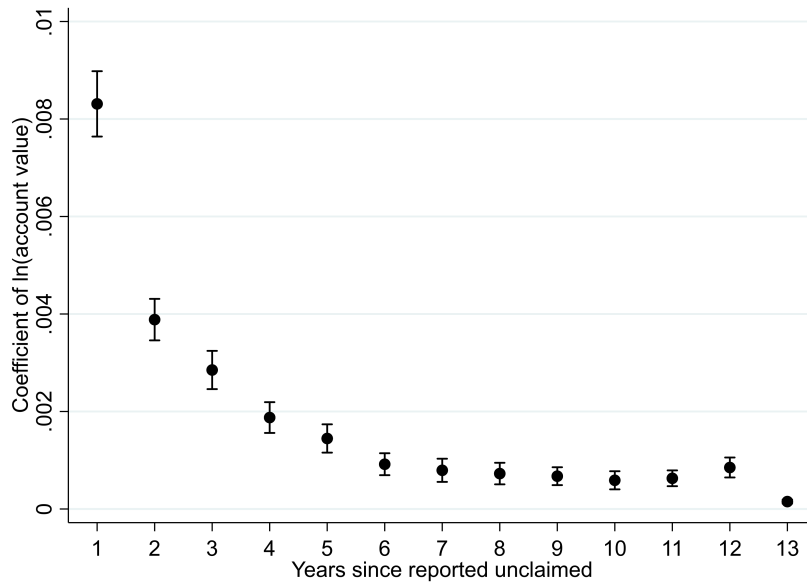
Figure A.1: Kaplan-Meier claiming estimates by account value



*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). Stars denote statistical significance: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . *Data Source:* Massachusetts Unclaimed and Claimed Property Data, 1998 to 2018.



Figure A.2: Coefficient plot of the impact of account value on claiming (panel model)



Notes: Figure shows the interaction coefficients from one regression:  $Claimed_{ity} = \beta_0 \ln(\text{Account Value}_i) + \delta \ln(\text{Account Value}_i)\theta_t + \theta_t + \eta_p + \gamma_y$ , where  $i$  is the account,  $p$  is the property code, and  $t$  is the year reported as unclaimed. The coefficient vector  $\delta$  is plotted. Data source: Massachusetts unclaimed and claimed property data, 2015-2018.

Table A.1: NAUPA codes categorized as retirement accounts

Code	Description
CK11	PENSION CHECKS
IR01	TRADITIONAL IRA - CASH
IR02	TRAD IRA - MUTUAL FUNDS
IR03	TRAD IRA - SECURITIES
IR04	RESERVED FOR TRADITIONAL IRA
IR05	ROTH IRA - CASH
IR06	ROTH IRA - MUTUAL FUNDS
IR07	ROTH IRA - SECURITIES
IR08	RESERVED FOR ROTH IRA
IR09	IRA OTHER - RESERVED 1
IR10	IRA OTHER - RESERVED 2
MS14	PENSION & PROFIT SHARING PLANS
05	IRA's-Securities
55	Annuities
71	IRAs
78	Pensions, retirement funds

*Notes:* NAUPA (National Association of Unclaimed Property Administrators) Codes used to categorize unclaimed property. Codes starting with "IR" were introduced in 2010 and gradually adopted by states. Codes without any alphabetic characters are exclusive to California.

Table A.2: Impact of account value on claiming

	(1)	(2)	(3)
Account Value (\$0000)	-0.0810*** (0.0074)	-0.0830*** (0.0076)	-0.0893*** (0.0076)
Year FEs	N	Y	Y
Property Type FEs	N	N	Y
Observations	51,858	51,858	51,858

*Notes:* Table shows coefficients from accelerated failure time (AFT) models for the number of years until an account was claimed (if observed) after being in the state unclaimed property database by account value. *Data source:* Massachusetts unclaimed and claimed property data, 1998-2018.

Table A.3: Impact of account value on claiming an unclaimed retirement account

	Claimed?						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
ln(Account Value)	0.0106*** (0.0004)	0.0159*** (0.0005)	0.0205*** (0.0005)	0.0235*** (0.0006)	0.0257*** (0.0006)	0.0272*** (0.0007)	0.0282*** (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*** (0.0008)	0.0313*** (0.0009)	0.0319*** (0.0009)	0.0374*** (0.0010)	0.0388*** (0.0011)	0.0388*** (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. *Data Source:* Massachusetts Unclaimed and Claimed Property Data, 1998 to 2018.

Table A.4: Additional survey questions and responses (1 of 2)

Q: Which public employer do you work for?	
State	35%
Local Public Employer (county, city, school district, etc.)	24%
University of Wisconsin System	6%
Not a current employee	35%
<i>N</i>	<b>3,628</b>
Q: Which type of employee are you?	
Current Employee	58%
Separated Employee	42%
<i>N</i>	<b>2,650</b>
Q: What percent of your income do you save in your WDC account?	
0	15%
<1%	1%
1-2%	9%
3-4%	10%
5-6%	13%
7-8%	8%
≥9 %	26%
I don't know	17%
<i>N</i>	<b>192</b>
Q: How much (in dollars) do you save in your WDC account on a monthly basis?	
1-50	19%
51-100	13%
101-500	39%
501-1000	15%
>=1001	13%
<i>N</i>	<b>2,088</b>
Q: How do you contribute to the WDC?	
Percentage amount	5%
Dollar Amount	58%
I'm not contributing	37%
<i>N</i>	<b>3,735</b>
Q: How long have you had your WDC account?	
Less than 1 year	4%
1 to 5 years	15%
6 to 10 years	11%
11 to 15 years	12%
16 to 20 years	15%
Over 20 years	44%
<i>N</i>	<b>3,797</b>

Notes: Data Source Employee Trust Fund Survey fielded in Nov-Dec 2019.

Table A.5: Additional survey questions and responses (2 of 2)

Q: Do you plan to roll your WDC account over in the next six months (either to your employer plan or to an IRA)	
Yes	7%
No	93%
<i>N</i>	<b>1,061</b>
Q: [If no] Why not? (Select the primary reason)	
It is easier to leave it in my WDC account	31%
I believe it is safer to leave it in my WDC account	60%
I do not know how to rollover funds from my WDC account	1%
I am not sure what I should do	8%
It will take too much time	0%
<i>N</i>	<b>979</b>
Panel C: How long do you think it would take in active time spent to roll it over to either an IRA or an account with the WDC?	
< 2 hours	55%
3-5 hours	30%
6-10 hours	6%
More than 10 hours	9%
<i>N</i>	<b>149</b>

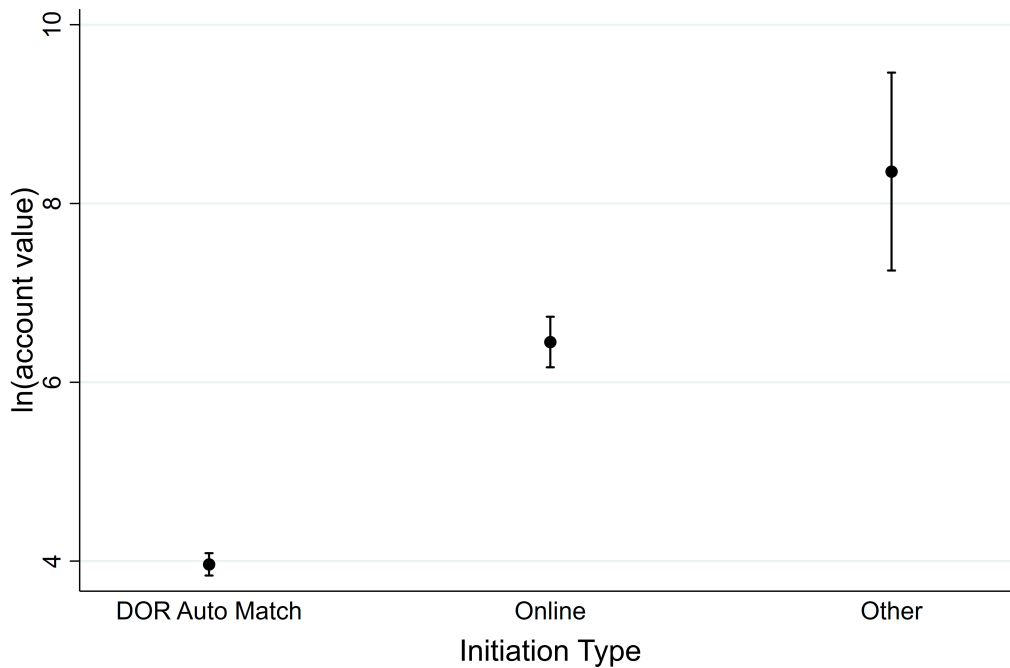
*Notes: Data Source Employee Trust Fund Survey fielded in Nov-Dec 2019.*

Table A.6: Impact of business cycles on claiming

	(1)	(2)	(3)
ln(Account Value)	0.0159*** (0.0005)	0.0146*** (0.0005)	0.0146*** (0.0005)
Recession		0.2776*** (0.0103)	0.2770*** (0.0103)
Property Type FEs	N	N	Y
Observations	46,524	46,524	46,524

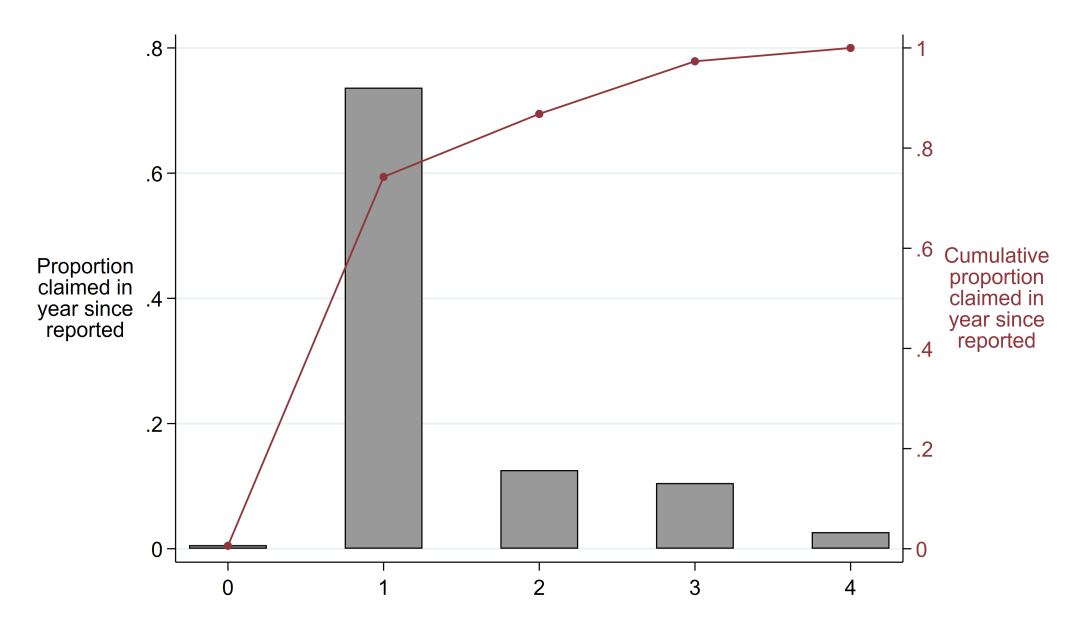
*Notes:* Table shows coefficients from linear regression. The dependent variable is whether the account was claimed within two years of being reported missing. *Data source:* Massachusetts unclaimed and claimed property data, 1998-2018.

Figure A.3: Account value by claim initiation method



*Data source:* Wisconsin unclaimed and claimed property data, 2015-2018.

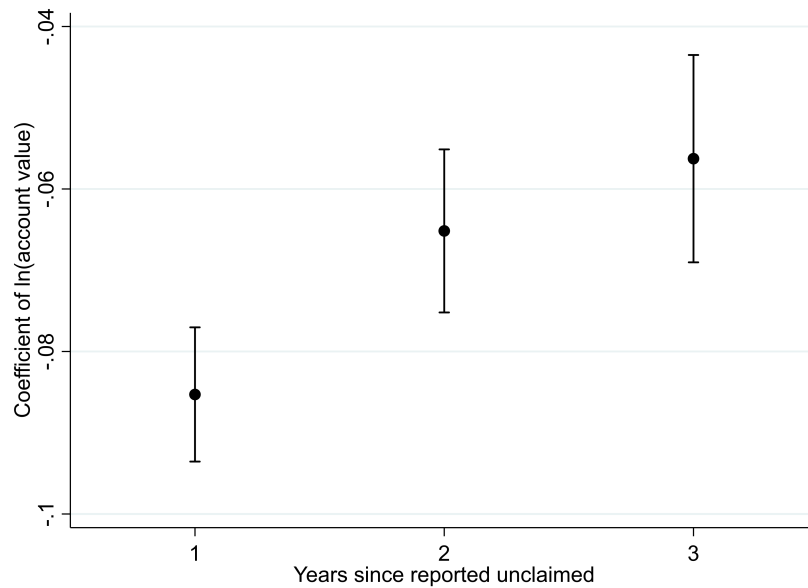
Figure A.4: Claiming patterns by year property was reported as unclaimed



Notes: Figure shows the proportion of unclaimed property that was claimed in the year since reported (columns) and the cumulative proportion of unclaimed property that is claimed since year reported (line). Data source: Wisconsin unclaimed and claimed property data, 2015-2018.

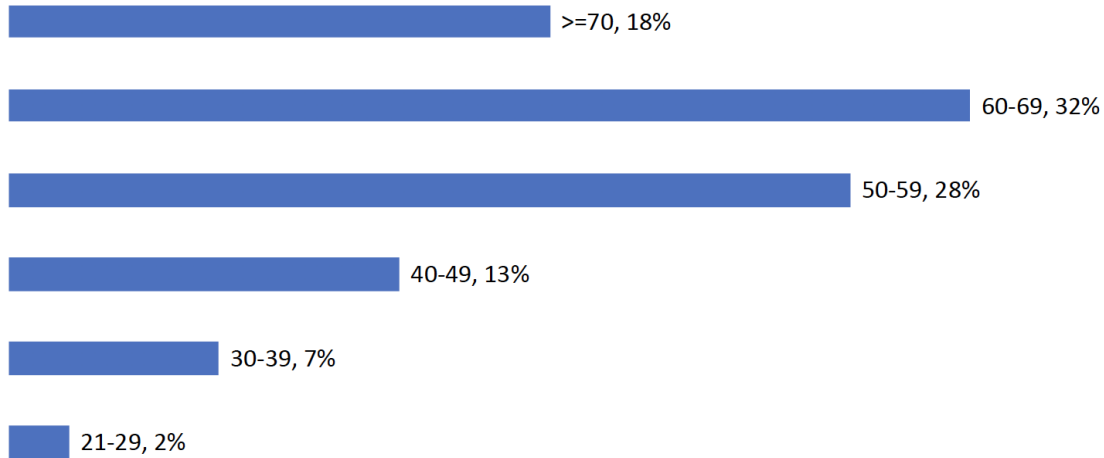


Figure A.5: Coefficient plot of the impact of account value on claiming



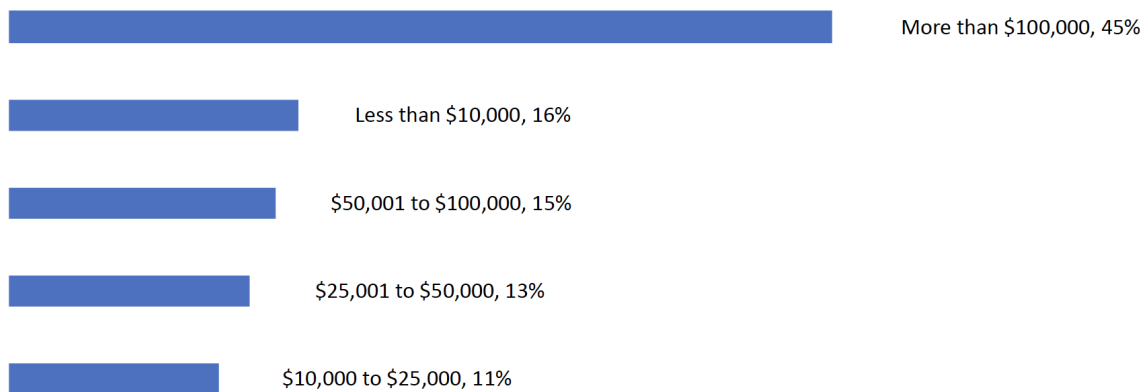
*Notes:* Figure shows the coefficients, each from a separate regression, on  $\ln(\text{Account Value})$  as the window of years since reported unclaimed increases from 1 to 13. The coefficients are from regressions of the following form:  $\text{Claimed} = \beta \ln(\text{Account Value}) + \eta + \gamma$ , where *Claimed* is whether the property was claimed within 1, 2, and 3 years (each separate regressions), *Account Value* is measured in units of \$10,000,  $\eta$  represents property type fixed effects, and  $\gamma$  represents year reported as unclaimed fixed effects. The full regression results corresponding to these coefficients are shown in Table A.3. *Data source:* Wisconsin unclaimed and claimed property data, 2015-2018.

Figure A.6: Age distribution of survey respondents



Data Source: Employee Trust Fund (ETF) Survey.

Figure A.7: Account balance distribution of survey respondents



Notes: This figure plots the distribution of responses to the survey question "What is your current account balance?". Data Source: Employee Trust Fund (ETF) Survey.