

2023 Small Business Retirement Savings Survey

Methodology Report

Prepared for The Pew Charitable Trusts

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Study Overview

The Pew Charitable Trusts (Pew) engaged SSRS to conduct the 2023 Small Business Retirement Savings Survey among small-business owners or decision-makers about employee benefits at companies with six to 101 employees, in three states: Massachusetts, Pennsylvania, and Washington.

At present, an increasing number of states are considering the use of statewide retirement savings programs (also known as auto-IRAs) that can enroll workers in retirement savings programs. While some states have already adopted these programs, and others have plans to adopt them in the future, many states are still actively considering this option. In this context, Pew's retirement savings project team wanted to conduct research to better understand how small-business owners/benefits decision-makers are evaluating these plans and what might make them more or less inclined to support the state enacting an auto-IRA program.

SSRS and Clear Insights (SSRS team) partnered to field the 2023 Small Business Retirement Savings Survey via telephone. The survey was conducted from July 27 to Sept. 28, 2023, across three states: Massachusetts, Pennsylvania, and Washington. A total of n=500 business owners or decision-makers in each state completed the survey.

This report provides information about the sampling procedures, questionnaire design, and the methods used to collect and process data for the 2023 Small Business Retirement Savings Survey.

Sample Design

This study used a sample from the Dun & Bradstreet (D&B) database to target small-business owners and decision-makers about employee benefits in Massachusetts, Pennsylvania, and Washington. Updated quarterly, the D&B database includes phone numbers for each business, in addition to data regarding firm size, revenue, and industry type. For each state, SSRS procured a private employer sample from D&B for U.S. employers with six to 101 employees.

The target sample size in each state was n=500, with the goal of obtaining at least n=200 responses from businesses that do not offer an employer-sponsored retirement plan. Under the informed assumption that smaller businesses (those with between six and 26 employees) are less likely to offer employer-sponsored retirement plans, the SSRS project team originally planned to oversample smaller businesses to obtain that minimum sample of those that do not offer retirement benefits. However, SSRS found that a majority of the sample in all three states had between six and 26 employees, rendering the oversampling unnecessary.¹

¹ In Massachusetts, 88% of the sample universe had between six and 26 employees; in Pennsylvania, 85% fell into this category; in Washington, 88% had between six and 26 employees.

In order to allow for adjustments to the sample design during fieldwork, the SSRS project team released the sample for each state in two waves. Following the first wave, we reviewed the proportion of businesses that do not offer an employer-sponsored retirement plan overall and determined that no adjustments were needed to the sample design for the second wave in order to reach those targets. To note: The production rate in Massachusetts was lower than in the other two states. As such, we released more sample in Massachusetts in the second wave than in Pennsylvania or Washington to reach the target sample for this population. The sample counts for both waves can be found in Table 1.

Table 1: Sample Counts by State by Wave

	Massachusetts	Pennsylvania	Washington
Wave 1	25,726	25,737	25,683
Wave 2	30,986	26,610	26,770
Total	56,712	52,347	52,453

Questionnaire Development

Survey Design

The questionnaire for the 2023 Small Business Retirement Savings Survey was developed by the Pew team in consultation with SSRS. The Pew team based the survey instrument on the 2022 AARP Pennsylvania Small Business Owner Work & Save Survey, as well as the 2016 Pew Survey of Decision-Makers at Private Sector Small and Midsize Businesses. The SSRS project team reviewed the questionnaire and provided feedback regarding question wording, order, clarity, and other issues related to questionnaire quality in order to maximize response rates, reliability, and validity. The SSRS project team also worked in collaboration with the Pew team to sharpen new questions and integrate them into the survey instrument.

Cognitive Pretest Interviews

Prior to launching the survey, SSRS completed nine (9) cognitive pretest interviews. The primary goal of cognitive pretest interviews is to identify questions that might be associated with measurement error because of possible confusion or because they are not understood as intended. Prior to the cognitive pretests, and with feedback from the Pew team, SSRS did a close review of the survey to identify questions that might be difficult to answer or understand.

SSRS provided a detailed memo of the pretest findings to Pew. Based on the respondent feedback, minor changes were made to the survey instrument.

Questionnaire Programming and Hosting

Once the survey instrument was finalized, it was programmed for telephone administration, hosted on Clear Insights' platform. Prior to launching data collection, the SSRS project team conducted extensive testing of the survey to ensure it was working as anticipated.

Training Materials and Interviewer Training

Prior to the start of the study, the SSRS project team provided Clear Insights with an overview of the study's objectives, project-specific targets, and the questionnaire. In addition, SSRS set up a kickoff meeting with Clear Insights to review all project materials live.

In turn, Clear Insights managed the briefing and interview training with the interviewers. This encompassed:

1. A live, in-depth review of the questionnaire that included reading through each question, a review of sections that may be challenging for respondents, and a review of proper pronunciation.
2. Information about the target audience and how to manage study-specific obstacles, such as bypassing gatekeepers to reach business owners or decision-makers.
3. Information about the goals of the study, potential obstacles to be overcome in obtaining meaningful answers to particular questions, and respondent problems that could be anticipated ahead of time as well as strategies for addressing them.

Data Collection and Field Monitoring

The 2023 Small Business Retirement Savings Survey was fielded from July 27 to Sept. 28, 2023. SSRS released the sample in two waves.

The SSRS team carried out several strategies to maximize survey response by minimizing non response and maximizing refusal conversion. The survey fielding enacted the following best-practice procedures for B2B studies:

- The call rule included one initial call plus up to five callbacks on all no answers, busies, or answering machines before considering a sampling unit exhausted.
- To increase the probability of completing an interview, consistent with previous experience, the interviewers prioritized landline records in the morning and cellphone records in the late afternoon and early evenings.
- A replicate method was used for unanswered calls or those that went to voicemail, so those numbers were tried again after a two-hour wait.
- Specially trained interviewers were utilized to attempt refusal conversions.

SSRS received daily reports from Clear Insights and spoke directly with the project manager as needed to ensure the appropriate procedures were being followed.

Throughout the field period, SSRS provided Pew with weekly updates with key information that tracked overall progress of the study. These reports, designed to provide snapshot information of key variables of interest, included tables for completes per state and by key variables. SSRS and Pew also participated in weekly calls during the field period, where we discussed the weekly updates provided, field progress and any other aspects of the project the team wanted to discuss.

In total, n=500 respondents completed the survey in each state. Table 2 shows completes by state by whether a retirement plan is offered, or not.

Table 2: Completes by State by Retirement Plan

	Massachusetts	Pennsylvania	Washington
Offers retirement plan	274	252	244
Does not offer retirement plan	218	241	245
Don't know	8	7	11
Total	500	500	500

Data Processing

The survey data were thoroughly cleaned with a computer validation program written by our data processing programmers. This program established editing parameters in order to locate any errors including data that do not follow skip patterns, out of range values, and errors in data field locations.

SSRS reviewed data for speeders and high volumes of missing data and included variables to identify such cases in the final dataset. Furthermore, the SSRS project team ran logic checks to check for inconsistencies across questions. While some amount of inconsistency is expected in responses, anything out of the ordinary was further scrutinized. After initial data checks, one case was removed for not meeting the age requirements of the survey and was subsequently replaced with a qualified interview.

In addition, nine cases were flagged for refusing to provide an answer to all of the demographic questions. Upon further investigation, it was determined that in eight of the nine cases, respondents were not asked all the demographic questions.² Rather, after respondents answered

² In one case, the respondent was asked all demographic questions and refused each, when asked. This interview was kept in the final data.

the first demographic question, they indicated that they no longer wished to continue the interview, and the interviewer subsequently refused the remaining unasked questions. Once the eight cases were determined to be invalid completes, they were removed from the dataset and replacement interviews were completed — seven in Massachusetts and one in Washington. Notably, most of these invalid interviews occurred on the last day of the field period.

Weighting

Data were weighted to represent the population of small-business owners in the U.S. states of Massachusetts, Pennsylvania, and Washington. For the purposes of the study, small businesses were defined as those having six to 101 total employees.

The data were weighted by applying a base weight and balancing the demographic profile of the sample to target population parameters.

Base Weight

Design Weight

The design weight adjusts for the specific process of sampling from the frame and is calculated as the inverse of the selection probability for each sampled record from the frame. This corrects for the oversampling of some strata and the undersampling in others. Design weights were computed within the U.S. state strata (MA vs. PA vs. WA).

For all sample pieces released for the study across two waves, the design weight (d_{0i}) for each piece of sample drawn from stratum i is $d_{0i} = N_i/n_i$ where N_i is the size of stratum i and n_i is the amount of sample released in stratum i .

Unknown Eligibility and Nonresponse Adjustments

The unknown eligibility adjustment distributes the weights of cases whose eligibility cannot be determined among the cases for which eligibility is known.

The nonresponse adjustment distributes the weights of eligible nonresponders among eligible responders. Given the analytical needs of the study, the nonresponse adjustment was computed within the U.S. state sampling strata crossed by phone type (landline vs. cell).

Both the unknown eligibility and nonresponse adjustments were combined into one overall adjustment, as follows. Within each cell c , the nonresponse adjustment factor was calculated as:

$$f = \frac{\sum_{R,c} d_0 + \sum_{N,c} d_0 + e \times \sum_{U,c} d_0}{\sum_{R,c} d_0}$$

Where:

$$e = \frac{\sum_{R,c} d_0 + \sum_{N,c} d_0}{\sum_{R,c} d_0 + \sum_{N,c} d_0 + \sum_{I,c} d_0}$$

The adjusted weight d_1 is then calculated as $d_0 \times f$ for completes, and 0 otherwise.

Raking

With the adjusted base weight applied, the data were weighted to balance the demographic profile of the sample to the target population parameters.

Missing data in the raking variables were imputed using hot decking. Hot deck imputation replaces the missing values of a respondent randomly with another similar respondent without missing data. Hot decking was done using an SPSS macro detailed in “Goodbye, Listwise Deletion: Presenting Hot Deck Imputation as an Easy and Effective Tool for Handling Missing Data” (Myers, 2011).

Weighting was accomplished using SPSSINC RAKE, an SPSS extension module that simultaneously balances the distributions of all variables using the GENLOG procedure.³

Data were weighted to distributions of employee size, industry, and revenue per U.S. state. The population parameters for calibration were derived from the sampling frame itself, as provided by Dun & Bradstreet (D&B) through Marketing Systems Group (MSG).

Weights were trimmed at the second and 98th percentiles to prevent individual interviews from having too much influence on survey-derived estimates. The tables below compare unweighted and weighted sample distributions to target population benchmarks in each state.

³ <https://community.ibm.com/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=17fd2f0b-7555-6ccd-c00c-5388b082161b&forceDialog=0>

Table 3: Sample Demographics - Massachusetts

	Massachusetts		
	Unweighted	Weighted	Parameter
Employee size			
6-10	36.2%	56.5%	56.7%
11-29	44.4%	29.7%	29.6%
30-49	12.0%	7.3%	7.3%
50-74	5.4%	3.9%	3.9%
75+	2.0%	2.6%	2.6%
Industry			
Agriculture/forestry/mining/construction	9.6%	9.6%	9.7%
Wholesale/retail/utilities/manufacturing/transportation, warehousing	31.4%	25.0%	24.9%
Information/finance/real estate/prof. /business services	16.0%	14.3%	14.3%
Educ./health care/ social services/public admin./other services	24.6%	29.7%	29.8%
Arts, entertainment, recreation/hospitality/food	18.4%	21.3%	21.3%
Revenue			
Lowest 20%	18.8%	20.0%	20.0%
2	16.8%	20.0%	20.0%
3	21.4%	20.1%	20.0%
4	24.0%	20.1%	20.0%
Highest 20%	19.0%	19.8%	20.0%

Table 4: Sample Demographics - Pennsylvania

	Pennsylvania		
	Unweighted	Weighted	Parameter
Employee size			
6-10	33.6%	57.1%	57.6%
11-29	43.2%	29.6%	29.3%
30-49	15.0%	7.2%	7.1%
50-74	5.6%	3.8%	3.8%
75+	2.6%	2.3%	2.3%
Industry			
Agriculture/forestry/mining/construction	12.0%	10.7%	10.6%
Wholesale/retail/utilities/manufacturing/transportation, warehousing	29.8%	26.0%	25.7%
Information/finance/real estate/prof. /business services	19.6%	11.1%	11.0%
Educ./health care/ social services/public admin./other services	24.2%	30.5%	30.2%
Arts, entertainment, Recreation/hospitality/food	14.4%	21.6%	22.4%
Revenue			
Lowest 20%	14.0%	19.2%	20.0%
2	18.0%	20.2%	20.0%
3	21.8%	20.2%	20.0%
4	25.6%	20.2%	19.9%
Highest 20%	20.6%	20.2%	20.1%

Table 5: Sample Demographics - Washington

	Washington		
	Unweighted	Weighted	Parameter
Employee size			
6-10	36.2%	62.5%	63.0%
11-29	42.8%	26.6%	26.3%
30-49	11.4%	5.9%	5.8%
50-74	6.8%	3.1%	3.1%
75+	2.8%	1.9%	1.9%
Industry			
Agriculture/forestry/mining/construction	15.0%	11.1%	11.0%
Wholesale/retail/utilities/manufacturing/transportation, warehousing	25.2%	22.6%	22.4%
Information/finance/real estate/prof. /business services	16.6%	10.1%	10.0%
Educ./health care/ Social Services/public admin./other services	23.8%	30.5%	30.7%
Arts, entertainment, recreation/hospitality/food	19.4%	25.6%	25.9%
Revenue			
Lowest 20%	14.8%	19.1%	20.0%
2	17.0%	20.2%	20.0%
3	21.2%	20.2%	20.0%
4	24.6%	20.2%	20.0%
Highest 20%	22.4%	20.2%	20.0%

Effects of Sample Design on Statistical Inference

Post-data collection statistical adjustments require analysis procedures that reflect departures from simple random sampling. SSRS calculates the effects of these design features so that an appropriate adjustment can be incorporated into tests of statistical significance when using these data. The so-called “design effect” or *deff* represents the loss in statistical efficiency that results from a disproportionate sample design and systematic non-response. SSRS calculates the composite design effect for a sample of size *n*, with each case having a weight, *w*, as:⁴

$$deff = \frac{n \sum w^2}{(\sum w)^2}$$

The survey’s margin of error is the largest 95% confidence interval for any estimated proportion based on the total sample—the one around 50%. For example, the margin of error for the Massachusetts sample is ± 1.36 percentage points. This means that in 95 out of every 100 samples drawn using the same methodology, estimated proportions based on the total Massachusetts sample will be no more than 1.36 percentage points away from their true values in the population. Margins of error for subgroups will be larger. It is important to remember that sampling fluctuations are only one possible source of error in a survey estimate. Other sources, such as

⁴ Kish, L. (1992). Weighting for Unequal Pi. *Journal of Official Statistics*, Vol. 8, No.2, 1992, pp. 183-200.

respondent selection bias, questionnaire wording, and reporting inaccuracy, may contribute additional error of greater or lesser magnitude.

The table below reports the sample design effects and margins of error for this study, per U.S. state and analytical subgroups of interest (offering retirement plan vs. not).

Table 6: Design Effect and Margin of Error

	n=	Design effect	Margin of error
Massachusetts total	500	1.36	+/- 5.1 percentage points
<i>Yes, retirement plan</i>	274	1.32	+/- 6.8 percentage points
<i>No, no retirement plan</i>	218	1.38	+/- 7.8 percentage points
Pennsylvania total	500	1.63	+/- 5.6 percentage points
<i>Yes, retirement plan</i>	252	1.50	+/- 7.6 percentage points
<i>No, no retirement plan</i>	241	1.65	+/- 8.1 percentage points
Washington total	500	1.60	+/- 5.5 percentage points
<i>Yes, retirement plan</i>	244	1.64	+/- 8.0 percentage points
<i>No, no retirement plan</i>	245	1.51	+/- 7.7 percentage points

Response Rate

Table 7: AAPOR3 Response Rate Calculation for Massachusetts

Disposition	Total - Massachusetts
Eligible, interview (Category 1)	
Complete	500
Eligible, non-interview (Category 2)	
Refusal and breakoff	73
Breakoff	6
Deleted interview	7
Unknown eligibility, non-interview (Category 3)	
No answer or busy	11,268
Answering machine	30,372
Unknown if eligible respondent	4,402
No screener completed	7,663
Not eligible (Category 4)	
Fax/data line	135
Non-working number	1,397
Residence	491
No eligible respondent	398
Total phone numbers used	56,712
Response Rate 3	2.0%

Table 8: AAPOR3 Response Rate Calculation for Pennsylvania

Disposition	Total - Pennsylvania
Eligible, interview (Category 1)	
Complete	500
Eligible, non-interview (Category 2)	
Refusal and breakoff	61
Breakoff	19
Deleted interview	--
Unknown eligibility, non-interview (Category 3)	
No answer or busy	10,384
Answering machine	25,527
Unknown if eligible respondent	5,463
No screener completed	7,941
Not eligible (Category 4)	
Fax/data line	126
Non-working number	1,438
Residence	430
No eligible respondent	458
Total phone numbers used	52,347
Response Rate 3	2.1%

Table 9: AAPOR3 Response Rate Calculation for Washington

Disposition	Total - Washington
Eligible, interview (Category 1)	
Complete	500
Eligible, non-interview (Category 2)	
Refusal and breakoff	37
Breakoff	1
Deleted interview	2
Unknown eligibility, non-interview (Category 3)	
No answer or busy	8,622
Answering machine	19,872
Unknown if eligible respondent	5,592
No screener completed	5,354
Not eligible (Category 4)	
Fax/data line	92
Non-working number	1,865
Residence	414
No eligible respondent	593
Total phone numbers used	42,944
Response Rate 3	3.1%

Contact

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