#### SUPPORTING STATEMENT - PART B

Small Business Lending Survey (OMB Control No. 3064-0203)

## **B.** <u>Collection of Information Employing Statistical Methods</u>

## 1. <u>Universe and Sample Selection</u>

The universe for the Small Business Lending Survey (SBLS) will be provided by the FDIC, and includes approximately 5,400 FDIC-insured depository institutions that were operating in the United States as of December 31, 2021. The universe is then stratified along two dimensions: whether the institution was a respondent in the earlier cycle in 2016 (called "Panel" in the table below), and a measure of size based on assets. Using these two criteria creates 12 strata. The strata and the universe sizes shown in Table 1 below are from June 30, 2020.

**Table 1: Strata Definitions and Population Sizes** 

Strata	Universe
1. < \$500 million not in Panel	3,180
2. < \$500 million Panel	510
3. \$500 million to < \$1 billion not in Panel	594
4. \$500 million to < \$1 billion Panel	164
5. \$1 billion to < \$3 billion not in Panel	426
6. \$1 billion to < \$3 billion Panel	172
7. \$3 billion to < \$10 billion not in Panel	136
8. \$3 billion to < \$10 billion Panel	76
9. \$10 billion to < \$50 billion not in Panel	65
10. \$10 billion to < \$50 billion Panel	48
11. >= \$50 billion not in Panel	28
12. >= \$50 billion Panel	22
TOTAL	5,421

The sampling methodology is a disproportionate stratified sample of the first 6 strata, making those non-certainty strata. Sampling of the last 6 strata, those with the largest assets, will be with certainty, making them certainty strata. This is effectively a census of the largest institutions, with a sampling of the remainder. The census of strata 7 through 12 will reduce the available sample for use in strata 1 through 6. The allocation of the remaining sample will be based on a formula to minimize variance while seeking to build a big enough panel of respondents in both survey cycles for analysis. This precision constraint is based on assumptions of a binomial characteristic, a stratum response rate informed by the previous sampling cycle, an initial allocation used in variance estimation, and the number of units in each strata. Simple random sampling (SRS) will be used for sampling within each stratum.

Using a finite population correction factor, a Horvitz Thompson estimator (HT) for the number in the strata with the chosen characteristic, and using the Sen Yates Grundy (SYG) variance formula for the HT estimator under the assumption of SRS, a sample size required to achieve the desired precision can be calculated. The sample will be proportionally adjusted either up or down to meet the sample size restraint.

Table 2 illustrates a possible allocation, resulting in a sample of 2000 selected units.

**Table 2: Illustration of Possible Sample Allocation** 

Strata	Universe Size	Sample Size
1. < \$500 million not in Panel	3,180	625
2. < \$500 million Panel	510	150
3. \$500 million to < \$1 billion not in Panel	594	225
4. \$500 million to < \$1 billion Panel	164	152
5. \$1 billion to < \$3 billion not in Panel	426	321
6. \$1 billion to < \$3 billion Panel	172	152
7. \$3 billion to < \$10 billion not in Panel	136	136
8. \$3 billion to < \$10 billion Panel	76	76
9. \$10 billion to < \$50 billion not in Panel	65	65
a. \$10 billion to < \$50 billion Panel	48	48
10. >= \$50 billion not in Panel	28	28
11. >= \$50 billion Panel	22	22
TOTAL	5,421	2,000

### 2. <u>Procedures for Collecting Information</u>

Data collection will be conducted entirely online. However, a mixed mode approach will be used to invite and prompt participation by bank headquarters management.

An advance contact letter, signed by the Chairman of the FDIC, will be sent to the sample cases informing them that the FDIC is conducting this survey and that the Census Bureau will be the data collection agent. Recipients will be informed that, if desired, they can update their mailing and contact information at Census' Respondent Portal. The letter will provide a due date of May 2, 2022 for contact changes.

On May 16, 2022, the initial survey request will be sent by mail, by means of a letter jointly written by the FDIC and the Census Bureau, which will introduce the

study and outline procedures for logging on to the Census Bureau's Respondent Portal to respond to the survey.

The Census Bureau's Centurion data collection instrument will be the only means of reporting for the Small Business Lending Survey. The data collection period will begin on May 16, 2022, and have a due date of June 30, 2022. Centurion will remain active and open to collect response data until December 30, 2022.

# 3. <u>Methods to Maximize Response</u>

### a. Follow-up procedures

Respondents are asked to complete the survey within 45 days of receipt. There will be a toll-free telephone number associated with the survey, in which respondents can receive troubleshooting advice from trained call center representatives in the National Processing Center, as well as contact analysts at the Census Bureau headquarters who can help with survey specific questions.

Two weeks before the due date, respondents will receive a due date reminder letter. Those who do not respond to the survey receive a follow-up letter one week after the due date. The follow-up letter will also include a flyer with instructions about how to submit their survey answers online. A second follow-up letter will be sent to those respondents who have not completed the survey, and this letter will be sent via certified mail and addressed to the attention of the CEO. Throughout the collection process, the Census Bureau will periodically check response rates for each of the strata, and focus on targeted telephone follow-up to maximize responses.

Starting in July 2022 through September 2022, Census will follow-up with the remaining non-respondents through follow-up letters, emails, and automated calls.

### b. Estimating for Missing Data

Estimation will use a Horvitz Thompson estimator. Each selected institution will have a sampling weight that is the inverse of its probability of selection within that stratum. This sampling weight will be a multiplier that will reflect the characteristics of institutions in the population that were not selected. This multiplier will also feature in the precision of the statistics derived from the survey. For instance, in stratum 3, if 225 of the 594 are selected for sampling, each of those 225 will have a sampling weight of 594 over 225 or 2.64.

The certainty strata will have sampling weights of 1. While they do affect the accuracy of the estimate, they do not affect the precision of the estimates, which is based on probability theory on observing only a subset of the population.

To be considered a respondent, a bank has to answer IA.1 of the survey. Nonrespondents will receive weights of zero and be excluded from tabulations. If

banks respond to some questions in the survey but not to IA.1, their responses will remain in the database, but data from these banks will not be included in tabulations or analyses and they will be designated as nonrespondents.

Institutions that do respond will have their sampling weights increased to account for nonresponding sampled institutions within their sampling stratum. In this way, responding institutions will still be representing the collection of all eligible units, whether sampled or not. This adjustment will be a weighting adjustment based only on the ratio of the number of eligible institutions within a stratum to those that responded from within that stratum.

For instance, in stratum 10, all 48 eligible institutions will be selected and have an initial sampling weight of 1. However, if only 40 respond, then their sampling weights will be increased by the ratio of 48 over 40, or 1.2. Information collected about them will be affected by this increase in their sampling weights. They still will not feature in the variance estimate of precision, since all 48 were selected for every possible sample.

In a similar way, if only 150 of the 225 sampled in stratum 3 respond, they will have final weights of 3.96 instead of their original weight of 2.64. This will increase the variance, however, which is seen as a decrease in precision. This reduction in precision will reduce the ability to discern statistically significant differences between groups.

## 4. <u>Testing of Procedures</u>

Throughout the survey development phase, the FDIC and the Census Bureau conducted three rounds of cognitive interviews with 46 banking institutions of various sizes headquartered in 23 different states. The cognitive testing was conducted to ensure that the survey questions are clearly worded and understood by bank personnel, and to ensure that the requested information could be provided by the respondents while minimizing response burden. The multiple rounds of interviews helped shape the survey content, flow, and focus.

The draft instrument used in the first round of cognitive testing included roughly the same number of questions as SBLS 2016. Approximately one quarter of the questions were repeated from the 2016 survey, and the remainder were either reworded questions of similar content or questions on new topic areas. The draft survey used in the second round of testing incorporated feedback from the first round of testing and included several alternative versions of the same question in order to identify the version that elicited the desired information with the most ease. The survey draft used for round three testing only included the questions that were most well-received in round two testing, returning the survey to a similar number of questions as SBLS 2016 and the first-round draft. In response to bank feedback, the final version also includes an "About This Survey" narrative and a table of contents providing an overview of all the sections before

the survey begins and descriptive text at the beginning of each section explaining the purpose of the section.

Similar to SBLS 2016 testing, response choices were significantly revised and expanded to capture the range and diversity of experiences of the banks that participated in the cognitive testing. In addition, the FDIC retained only the qualitative questions that rely on expert knowledge and do not require the gathering of data, or quantitative questions that require only data that can be provided from core data systems or from existing internal reports. Lastly, the number of quantitative questions that will be answered by banks with less than \$1 billion in assets are substantially fewer than those to be answered by larger banks.

Prior to survey launch, the Census Bureau will test the usability of the survey instrument on 15 to 20 participants. Separate OMB clearances will be submitted by the Census Bureau for these pretests. During the instrument usability testing, the Census Bureau will test that the Centurion data collection instrument functions as intended. In addition, FDIC will test the instrument and input data exactly as will be done by respondents. The Census Bureau also utilizes its internal Testing Support Branch, which tests every possible outcome of data entry and survey flow to ensure the respondent does not run into issues involving the instrument.

## 5. <u>Contacts: Statistical Aspects and Data Collection</u>

The following Census Bureau staff may be contacted on the statistical data collection and analysis operations:

Person responsible for statistical methodology:

James Hunt Methodology Director for Retail, Wholesale, and Services Programs Economic Statistical Methods Division U.S. Census Bureau (301) 763-6599

Person responsible for data collection:

Richard S. Hough Assistant Division Chief for R&D and Special Surveys Economic Reimbursable Surveys Division U.S. Census Bureau (301) 763-4823