

## SUPPORTING STATEMENT – PART B

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

#### **B. Collection of Information Employing Statistical Methods**

##### **1. Universe and Sample Selection**

The universe for the Small Business Lending Survey (SBLs) was provided by FDIC, and includes approximately 6,500 FDIC-insured depository institutions that were operating in the United States as of December 31, 2015. The universe is then stratified along two dimensions: whether a majority of the institution's deposits are within a metropolitan statistical area (MSA), and a measure of size based on assets. Using these two criteria creates 8 strata. The strata and the universe sizes shown in Table 1 below are from June 30, 2014.

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

<b>Strata</b>	<b>Universe</b>
1. < \$250 million, MSA	1,828
2. < \$250 million, non-MSA	2,209
3. \$250 million - < \$1 billion, MSA	1,201
4. \$250 million - < \$1 billion non-MSA	666
5. \$1 billion - < \$10 billion MSA	466
6. \$1 billion - < \$10 billion, non-MSA	86
7. \$10 billion - < \$50 billion	68
8. >= \$50 billion	36
<b>TOTAL</b>	<b>6,560</b>

The sampling methodology is a disproportionate stratified sample of the first 6 strata, making those noncertainty strata. Sampling of the last 2 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 and 8 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. This precision constraint is based on assumptions of a binomial characteristic, a stratum response rate, 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 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 1994 selected units.

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

<b>Strata</b>	<b>Universe Size</b>	<b>What is the Precision you would like the estimate of a characteristic to have?</b>	<b>Sample Size Given the Assumptions</b>
1. < \$250 million, MSA	1,828	10%	411
2. < \$250 million, non-MSA	2,209	10%	424
3. \$250 million - < \$1 billion, MSA	1,201	10%	373
4. \$250 million - < \$1 billion non-MSA	666	10%	306
5. \$1 billion - < \$10 billion MSA	466	10%	291
6. \$1 billion - < \$10 billion, non-MSA	86	10%	85
7. \$10 billion - < \$50 billion	68	5%	68
8. >= \$50 billion	36	5%	36
<b>TOTAL</b>	<b>6,560</b>		<b>1994</b>

2. Procedures for Collecting Information

Data collection will be conducted entirely online, although 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 log into the self-service option on the Business Help Site (BHS) and update mailing and contact information. The letter will provide a due date of June 15, 2016 for contact changes.

On June 29, 2016, 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 data collection website to respond to the survey.

The Census Bureau's Centurion data collection website will be the only means of reporting for the Small Business Lending Survey. The data collection period will begin on June 29, 2016, and have a due date of August 10, 2016. The Centurion online reporting website will remain active and open to collect response data until December 23, 2016.

### 3. Methods to Maximize Response

#### a. Follow-up procedures

Respondents are asked to complete the survey within 45 days of receipt. Those who do not respond to the survey receive a follow-up letter. There will be a toll-free telephone number associated with the survey, in which respondents can receive troubleshooting advice from trained call center representatives, as well as contact analysts at the Census Bureau who can help with survey questions related to content. 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 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.

#### 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 4, if 306 of the 666 are selected for sampling, each of those 306 will have a sampling weight of 666 over 306 or 2.18.

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 question 2 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 question 2, 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 7, all 68 eligible institutions will be selected and have an initial sampling weight of 1. However, if only 60 respond, then their sampling weights will be increased by the ratio of 68 over 60, or 1.13. 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 68 were selected for every possible sample. In a similar way, if only 250 of the 306 sampled in stratum 4 respond, they will have final weights of 2.67 instead of their original weight of 2.18. 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. Testing of Procedures

Throughout the survey development phase, the FDIC and the Census Bureau conducted 3 rounds of cognitive interviews with 40 banking institutions of various sizes and geographic settings in 10 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 and flow. Specifically, 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, in response to feedback from the cognitive testing, the FDIC has significantly reduced the number of questions in the survey, retaining only questions that rely on expert knowledge and do not require the gathering of data, or questions that only require data that can be provided from core data systems or from existing internal reports. Additionally, the FDIC has also reduced the number of questions that will be answered by banks with less than \$1 billion in assets. Furthermore,

the FDIC has revised the survey to include screener questions that will also reduce the number of questions for banks with \$1 billion or more in assets whose systems do not collect specific information. Therefore, the revised survey is now significantly shorter for banks of all sizes.

Prior to survey launch, the Census Bureau will test the usability of the survey instrument on 15 to 20 participants. Separate OMB clearances were submitted by the Census Bureau for these pretests, which were conducted under OMB control number 0607-0725. 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. Contacts: Statistical Aspects and Data Collection

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

Person responsible for statistical methodology:

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Person responsible for data collection:

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