

Stratification

The primary stratification of the sampling frame is by industry group based on the detail required for publication. We further stratify the sampling units within industry group by a measure of size (substratify) related to their annual sales. Sampling units expected to have a large effect on the precision of the estimates are selected "with certainty." This means they are sure to be selected and will represent only themselves (i.e., have a selection probability of 1 and a sampling weight of 1). Within each industry stratum, we determine a substratum boundary (or cutoff) that divides the certainty units from the noncertainty units. We base these cutoffs on a statistical analysis of data from the 2012 Economic Census. Accordingly, these values are on a 2012 sales basis. We also used this analysis to determine the number of size substrata for each industry stratum and to set preliminary sampling rates needed to achieve specified sampling variability constraints on sales estimates for different industry groups. The size substrata and sampling rates are later updated through analysis of the sampling frame.

Sample Selection

The first step in the sample selection identified firms selected with certainty. If a firm's annual sales or end-of-year inventories are greater than the corresponding certainty cutoff, we select that firm into the MWTS sample with certainty.

All firms not selected with certainty we subject to sampling. To be eligible for the initial sampling, a firm had to have nonzero payroll in 2014. We stratify the firms according to their major industry and their estimated sales (on a 2012 basis). Within each noncertainty stratum, we select a simple random sample of firms without replacement. We conduct this process separately for each wholesale type of operation. The selected noncertainty firms were divided into two approximately equal groups. For merchant wholesalers excluding Manufacturers Sales Branches and Offices, one group is canvassed for both the monthly and the annual survey, the other group is canvassed for only the annual survey. The Manufacturers Sales Branch or Office and Agents and Brokers samples are only canvassed in the annual survey. However, firms selected into the Manufacturers Sales Branch or Office or Agent and Broker sample are included in the Monthly Wholesale Trade Survey sample if that firm had activity inscope to the Monthly Wholesale Trade Survey.

Sample Maintenance

We update the sample on a quarterly basis to represent EINs issued since the initial sample selection. These new EINs, called births, are EINs recently assigned by the Internal Revenue Service (IRS) that have an active payroll filing requirement on the IRS Business Master File (BMF). An active payroll filing requirement indicates that the EIN is required to file payroll for the

next quarterly period. The Social Security Administration attempts to assign industry classification to each new EIN.

EINs with an active payroll filing requirement on the IRS BMF are said to be "BMF active" and EINs with an inactive payroll filing requirement are said to be "BMF inactive."

We sample EIN births on a quarterly basis using a two-phase selection procedure. To be eligible for selection, a birth must either have no industry classification or be classified in an industry within the scope of the Service Annual Survey (SAS), the Annual Wholesale Trade Survey (AWTS), or the Annual Retail Trade Survey (ARTS), and it must meet certain criteria regarding its quarterly payroll. In the first phase, we stratify births by broad industry groups and a measure of size based on quarterly payroll. A relatively large sample is drawn and canvassed to obtain a more reliable measure of size, consisting of revenue in two recent months and a new or more detailed industry classification code. We contact births by telephone if they have not returned their questionnaire within 30 days.

Using this more reliable information, in the second phase we subject the selected births from the first phase to probability proportional-to-size sampling with overall probabilities equivalent to those used in drawing the initial AWTS sample from the December 2015 Business Register. Because of the time it takes for a new employer firm to acquire an EIN from the IRS and because of the time needed to accomplish the two-phase birth-selection procedure, we add births to the sample approximately nine months after they begin operation.

If a firm was selected with certainty and had more than one establishment at the time of sampling, any new establishments that the firm acquires, even if under new or different EINs, are included in the sample with certainty.

However, if a firm was selected with certainty and had only one establishment at the time of sampling, only future establishments associated with that firm's originally-selected EIN are included in the sample with certainty; any new EINs that might later be associated with that firm are subjected to sampling through the quarterly birth-selection procedure.

To be eligible for the sample canvass and tabulation, a single establishment EIN, or at least one EIN associated with a firm selected in the noncertainty sampling operations must meet both of the following requirements:

- It must be on the active payroll filing requirement on the IRS BMF.
- It must have been selected from the Business Register in either the initial sampling or during the quarterly birth-selection procedure.

We include any new establishments that a firm acquires, even if under new or different EINs, into the sample with the same sampling status as the original firm i.e., with the same initial sampling weight. For noncertainty firms, additional evaluation may be done in some instances to determine the feasibility of adding the new establishments by evaluating the effect of the new establishments on the industry estimates.

Similarly each quarter, we check against the current Business Register to determine if any EINs on the survey have become BMF inactive. Typically, we do not canvass BMF inactive EINs during the reference month. Likewise, if any EIN on the survey was BMF inactive in a previous

reference month, or was part of an inactive sampling unit in the survey, and is now BMF active on the current Business Register, we again include these EINs in the canvass. In both cases, we only tabulate data for that portion of the reference month that these EINs reported payroll to the IRS.