

Annual Wholesale Trade Survey – Imputation

A potential source of bias in the estimates is nonresponse. Nonresponse is defined as the inability to obtain all the intended measurements or responses about all selected units. Two types of nonresponse are often distinguished. *Unit nonresponse* is used to describe the inability to obtain any of the substantive measurements about a sampled unit. In most cases of unit nonresponse, the questionnaire was never returned to the Census Bureau after several attempts to elicit a response. *Item nonresponse* occurs either when a question is unanswered or the response to the question fails computer or analyst edits. For both unit and item nonresponse, a missing value is replaced by a predicted value obtained from an appropriate model for nonresponse. This procedure is called imputation and uses survey data and administrative data as input. In any given year, the dollar volume of imputed data amounts to:

- Approximately 6-11 percent of the total sales estimate for merchant wholesale (excluding MSBOs).
- Approximately 5-10 percent of the total end-of-year inventory estimate for merchant wholesale (excluding MSBOs).
- Approximately 13-19 percent of the total purchases estimate for merchant wholesale (excluding MSBOs).
- Approximately 18-23 percent of the total operating expenses estimate for merchant wholesale (excluding MSBOs).
- Approximately 25-30 percent of the total sales estimate for MSBOs.
- Approximately 18-25 percent of the total end-of-year inventory estimate for MSBOs.
- Approximately 22-28 percent of the total operating expenses estimate for MSBOs.
- Approximately 17-20 percent of the sales estimate for agents and brokers.
- Approximately 21-26 percent of the total operating expenses estimate for agents and brokers.
- Approximately 33-35 percent of the total commissions estimate for agents and brokers.
- Approximately 32-38 percent of the gross selling value estimate for agents and brokers.
- Approximately 17-32 percent of the sales on own account estimate for agents and brokers.