

**Frequently Asked Questions (FAQs)
Effects of Hurricanes Katrina and Rita for the
Manufacturers' Shipments, Inventories, and Orders (M3)
September 2005**

Can the Census Bureau estimate the effect of Hurricanes Katrina and Rita on the shipments, inventories, and orders estimates?

No. We cannot quantify the effect of the hurricanes on the M3 survey estimates for September 2005 since the survey measures manufacturing activity on a national level and not at specific geographic areas. The areas most affected by the hurricanes ordinarily account for a minimal percentage of total U.S. manufacturing based on the 2002 Economic Census. See <http://www.census.gov/econ/census02/guide/Hurricanes.HTM> for the 2002 data.

Even though we cannot quantify the effect of the hurricanes, we did receive indications from some companies that the hurricanes did have a negative effect on their manufacturing activity, especially in the petroleum industry and in petrochemical products. However, the volatile increases in gasoline prices more than offset any temporary closures. We will continue to closely monitor these industries.

Can the M3 survey produce estimates for the affected areas?

No. The M3 survey is designed to estimate data for the national level only.

Was the Census Bureau able to collect information from firms operating within the affected areas?

Yes. We found that there was minimal impact in collecting data from companies within the affected areas. In Louisiana, Mississippi, and Alabama, 73% of the single-unit respondents in the affected areas reported. Over the previous six months, we received between 77% and 83% of the reports from these states. In Texas, we received data from 73% of the single-unit respondents. This compares to a usual range of between 74% and 80%. Furthermore, many large, regional and other multi-location firms with reporting offices outside the affected states responded at a normal rate and included data for plants both open and closed, located in the affected areas.

Did the Census Bureau modify its data collection procedures for the M3 survey in affected areas?

No. We attempted to collect September data from all firms in the survey through various means, including fax, e-mail, and telephone follow-up. We collected data from multi-location firms with reporting offices outside the heavily damaged areas. We had minimal difficulty collecting data from single plant locations and multi-location firms with reporting offices located in the damaged areas. Missing data were accounted for through our estimation procedure.

Did you change your analytical procedures in September?

Yes. In addition to the usual analysis done every month, we reviewed independent data sources and discussed the effects of the hurricanes with companies in the survey.

What estimation procedures are being modified to compensate for Hurricanes Katrina and Rita effects?

As part of our standard procedure, imputation was done to account for missing respondents. Imputes were reviewed and adjusted by analysts according to information we collected regarding the various industries. The estimation procedure assumes that for a given industry, the month-to-month change for firms that report is similar to the month-to-month change for firms that do not report. This assumption is supported if sufficient reports from the affected area are received or if the reports received are representative of the area.

Did the Census Bureau alter the seasonal adjustment options for the month?

No. The review of the seasonal adjustment output and diagnostics did not indicate that adjustments to the options were necessary for this month. We will continue to review the seasonal adjustment output and diagnostics to see if they indicate that adjustments to the options are necessary.

Has the reliability of the shipments, inventories, and orders estimates changed because of the hurricanes?

No. The reliability has not changed substantially. Most firms in the panel were able to report data for September. A few individual firms reported large increases or decreases in their data because of the effects of the hurricanes, but this additional variation is not large enough to affect the reliability of national estimates.

What activities is the Census Bureau planning to ensure the affected areas will continue to be accurately represented?

During our data collection for next month, we will continue to ask questions of respondents that will help us monitor any impact from the hurricanes as part of our regular follow-up. We will monitor data responses and make adjustments if necessary.

Source: U.S. Census Bureau
Manufacturing and Construction Division
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