

# **The Complementary Estimate of the Great East Japan Earthquake for the Labour Force Survey**

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## **Abstract**

Japan's Labour Force Survey (LFS) was suspended in Iwate, Miyagi and Fukushima prefectures due to the damage caused by the East Japan earthquake. Hence, nationwide, except for these three counties, results were released from March through August 2011. After that, nationwide results were estimated from the three counties' complementary estimate values. Estimates were based on other relevant available data, under certain assumptions, to reflect the facts about the disaster area as accurately as possible.

Estimates were made on numbers of unemployed and employed in the three prefectures. The number of unemployed was estimated based on the time-series model in the short term using the numbers of the effective jobseekers at the public employment security office. These time series models were classical regression models. Differences from the previous month were estimated, and then real-values were estimated sequentially. With respect to the number of employed, these decline rates, which were compared to the same month in the previous year, were estimated using the numbers of those insured by the employment insurance, and adjusted using the numbers of the regular employees from the establishment survey. Completion estimates are used in the year-to-year comparison with long-term time-series comparison as a reference value.

**Key words: Labour Force Survey (LFS), Great East Japan Earthquake, Complementary estimate method**