Session 6: Data Sources, Quality and Analyses

Data Quality of Oldest-Old Population in Taiwan: 2003 Census for Ages 89 and Above

Chin-Syang Jack Yue

The mortality data of the elderly is usually in insufficient sizes and with questionable data quality. It is often not easy to verify that it satisfies certain mortality assumptions such as the Gompertz law. The data quality of the elderly is particularly difficult to deal with. In fact, although the census data is one of the major sources for constructing life tables, the mortality rates of the elderly are seldom calculated solely from the census data. One of the reasons for not using the census data alone is the low response rate of the elderly. For example, in a 2000 mail-back questionnaire population census of the Taiwan area, more than 93 percent of the elderly between the ages of 90 and 99 responded, but only approximately 80 percent responded for ages 100 and over.

In order to increase the data quality of the elderly and the accuracy of their mortality rates, the Taiwan government conducted a face-to-face interview census for people ages 89 and over, a population of around 50,000 persons. Due to the large size of the population for face-to-face interviews, the census period is six months, between August 2003 and February 2004. This new census data will be used to modify the census records and the 1999 to 2001 complete life tables in the Taiwan area. In this paper, we introduce the details of the census for the elderly and discuss the difficulty in collecting the data. We also compare the differences of the elderly data between these two censuses (2000 and 2003) and check if the mortality rates of the elderly in Taiwan satisfy frequently used mortality assumptions.