

In This Issue

Like other subdomains in our discipline, governmental statistics is of interest in part because its applications are important to our larger society, and also for purely intellectual reasons, raising problems with special features that challenge us to extend methodology and demand us to consider carefully our basic tenets. This issue contains four papers that disseminate to a wider audience discussions of two controversial topics. Our interview also focuses on governmental statistical activity as practiced by one of our leading figures.

CENSUS ADJUSTMENT

Whether procedures proposed to adjust national census counts would produce more accurate figures remains a subject of statistical debate. In this issue, two papers are devoted to different sources of difficulty for adjustment of a census. In the first, focusing on the 1990 U.S. Census, Leo Breiman considers errors that arise in the Post-Enumeration Survey (PES) together with the necessary matching of PES and Census records used to estimate the Census undercount; he argues that these errors may have a substantial effect. In the second, D. Freedman and K. Wachter discuss the effects of heterogeneity in the demographic subgroups known as "post strata" used by the U.S. Census Bureau in their decision-theoretic assessment of the adjustment procedure. Freedman and Wachter find the effects potentially substantial and consider the Census Bureau's analysis flawed.

A third paper, by Thomas Belin and John Rolph, responds to the first two after providing an overview of the adjustment debate. Belin and Rolph find the technical analysis by Freedman and Wachter commendable, but they see different implications for the assessment of adjustment. Of Breiman's work Belin and Rolph are much more critical. In ending their paper they ask their colleagues for a "negotiated settlement" that would avoid future wasteful litigation.

Eugene Ericksen, Stephen Fienberg and Joseph Kadane have previously advocated adjustment; in a comment here they react to the papers of Breiman and Freedman and Wachter by offering counterarguments aimed at refuting the conclusions. Views

from outside the United States are presented by Ian Diamond and Chris Skinner (U. K.), Lars Lyberg and Sixten Lundström (Sweden) and David Steel (Australia).

MULTIPLE IMPUTATION

Multiple imputation of missing data in large, complex surveys makes heavy use of statistical models and relies substantially on Bayesian inference for its logical foundation. On the other hand, "design-based" methods avoid specific modeling assumptions and rely on the frequentist theory of randomization for their validity. In his article here, Xiao-Li Meng reviews recent criticisms of multiple imputation, especially due to Robert Fay who has discussed its seemingly poor behavior in several examples. The situations described by Fay arise when an analyst's procedure does not correspond to the imputation model. Meng characterizes such procedures formally and calls them "uncongenial." Following this he provides some conditions under which multiple imputation will improve inferences in a frequentist sense, generalizing previous results due to Donald Rubin. Meng concludes with a strong endorsement of multiple imputation. Commentaries by Fay and by Chris Skinner provide contrasting viewpoints, while those by Joseph Schaefer and Alan Zaslavsky elaborate upon Meng's presentation.

JANET NORWOOD

Born in 1923, Janet Norwood joined the U.S. Bureau of Labor Statistics in 1963 and became its head in 1979, retiring in 1991. In an interview conducted by Stephen Fienberg she talks about her activities there, including her extensive work on the Consumer Price Index. She also discusses the Current Population Survey, gives her views on the U.S. federal statistical system and the need for interdisciplinary education, and comments on her involvement in the American Economics Association, where she was on the Executive Committee, and the American Statistical Association, where she served as both Vice President and President.