# Special Section on Statistical Analysis of Errors in Population Forecasting and Its Implications on Policy

Official population forecasts, such as those produced by the central statistical offices of many countries, typically provide the user with three forecast variants: high, middle, and low. However, the probability with which the future falls between the high and low predictions is not reported and is not even known by the official forecasters. During the past 10–15 years there has emerged an extensive literature giving estimates of the magnitude of past forecast errors and providing new probabilistic methods that take into account the uncertainty of future developments.

A symposium with the above title was held at Koli, Finland, in March 30–April 2, 1995.[1] It gathered academics and persons responsible for the production of official forecasts to discuss the possibilities to implement the recent advances in the statistical analysis of population forecasting error in official demographic forecasts, and to consider the implications of the new methods for social and health planning.

This special section presents revised versions of four papers presented at the symposium. Alho and Spencer discuss ''The Practical Specification of the Expected Error of Population Forecasts.'' They present models that can combine past data on forecast errors with subjective judgment to formulate predictive distributions for future populations. Joop de Beer reports on ''Experiences from Including Uncertainty of Migration in National Population Forecasts in the Netherlands.'' He has applied time series models to past migration data and considers alternatives that can incorporate judgment for long-term forecasting. Nico Keilman reviews ''Ex-Post Errors in Official Population Forecasts in Industrialized Countries.'' He shows that there have been clear similarities between the countries and assesses the magnitude of different types of error. William Bell considers ''Time Series Methods for Forecasting Age-Specific Demographic Rates.'' In particular, he considers principal components techniques as a tool for reducing the dimensionality of the age-specific data.

The articles presented in the special section were refereed according to the usual practices of JOS.

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