

**ACTUARIAL RESEARCH CLEARING HOUSE
1984 VOL. 1**

INTRODUCTION

Each year since 1966 the Committee on Research, Society of Actuaries, with the cooperation of a host university, has sponsored an actuarial research conference. The 1983 conference was held September 29 through October 1 at the University of Wisconsin, Madison. The topic was Population Projections: Techniques and Implications.

The principal papers and discussions presented at the conference appear in this proceedings. There is a major exception to this statement. In conversations at the conference, Nathan Keyfitz expressed the view that because of the changing age structure of most industrialized nations, a continuation of current cost financing of social insurance programs will create severe strain on the societies having such systems. He agreed to write an essay on this topic in the form of a discussion of Robert J. Myers' paper. However, Keyfitz's essay raised issues not covered in Myers' paper. Therefore, Myers was asked to write a reply to Keyfitz' essay to provide a balanced view.

In the industrialized nations fertility rates increased after World War II and then declined dramatically. Fertility rates are now somewhat below the level required for long-term population stability. Mortality probabilities also declined during this period. These movements are producing profound changes in the demographic structure of most industrialized nations, changes that will severely strain social insurance and employee benefit systems designed under conditions favorable to low current costs. One of the lessons to be learned from these changes is that actuaries, economists, business managers

and public policy makers responsible for the design and management of such systems need to have the best possible tools for making population projections and for understanding the implications of current trends.

A careful study of the papers presented here will introduce readers to many of the tools currently available. We trust they will prove useful.

Conference Coordinators

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