UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Statistics For Insurance

2021-3-E3301M215

Learning objectives

The main objective is to understand the main pricing and reserving techniques of a non-life insurance company.

Contents

The program of the module, after an initial introduction, addresses the main issues of a statistical nature typical of companies operating in the
non-life insurance (motor, liability, home, accident & health, etc.), : the calculation of premiums , reinsurance, verification of the correct consistency to estimate claims reserves and finally the statistical indices calculated from the financial statements of insurance companies.

Detailed program

Introductory notions

- Descriptive descriptions of the various non-life classes: civil liability, personal protection, asset protection

- Quantitative data on the Italian insurance market

- The determination of the prices

- The processes underlying the prices of insurance products

- Similar risks, pure premium and premium rate

- Uploads and commercial prizes

- The customization of Rc fares Motor vehicles Reinsurance: outline and types, effects on subscription limits

Technical reserves

- The Premium reserve

- The claims reserve: provision for undefined claims and IBNR

- Main statistical methods for estimating claims reserves

- Other technical reserves Statistical indexes of the Insurance Balances

Prerequisites

knowledge of basic statistics, probability, financial mathematics and actuarial mathematics.

Teaching methods

Assessment methods

The exam consists of questions about theory and exercises. The former test students' knowledge and understanding of the main concepts of the subject. The latter measure students' ability in the application of such concepts to solve simple practical problems.

Textbooks and Reading Materials

L.Daboni, Lezioni di tecnica attuariale delle assicurazioni contro i danni , Lint

Semester

First semester

Teaching language

Italian