

ACTUARIAL RESEARCHES AND STUDIES

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ACTUARIAL EDUCATION IN WEST AFRICA

Proposed content of the lectures

The content of the lectures are presented in an abridged form for a preliminary consideration. If approved, a more detailed text will be worked out. The final text will contain mathematical formulae, whose level will depend on the degree of knowledge of the participants. It is, then, essential to know as soon as possible what are the requirements to participate to the seminar and the scheduled dates.

2. Social Security lectures

It is generally recognised that social protection is needed to guarantee the well being of individuals and families and the economy and society as a whole. Nowadays, there is an ample debate on the role of the public sectors in managing and financing the social security during periods of severe economic constraints. Actuaries should be aware of the various arguments and have a sound background to discuss with other professionals operating in the fields, such as economists.

The scope of the national protection (considered contingencies and covered population) varies from country to country. An overview of the different systems and of the ways to finance them is required. Even if the participants have experience of schemes having a limited coverage, they should find it of interest to study the full range of techniques applicable to different branches and models used in social security.

In long-term benefits (pensions), actuaries have worked out projection models, whose implementation is based on financial and demographic assumptions. The process of actuarial valuation may be illustrated, by taking into account the different steps needed for the practical carrying out of the work. In this field, it is essential to know the techniques used by non-actuaries (such as World Bank specialists) and learn some new indexes and terminology recently introduced.

Another branch, which requires an actuarial involvement, is the one dealing with employment injury benefits. In this field special techniques, adopted in setting up the contribution rates as well as financial systems, may be explained and illustrated by some examples. Techniques used in other short-term benefit branches may be dealt with.

Public health care insurance is a branch that deserves a particular attention. Undoubtedly, public sectors are more and more interested in seeking ways of protecting people against health risk. Hence, the branch will develop in the next future and actuaries should be interested in applying quantitative methods in order to assist policy makers and social security organizations. In this field the work will be of a particular interest because it presumes a stimulating teamwork with other specialists, such as doctors, providers, health economists and health statisticians. The actuarial techniques are still evolving and some models that have been proposed may be illustrated.

For every branch, attention should be given to the content of the actuarial report for social security valuations.

Main references

- *Plamondon P., Drouin A., Binet G. et al. (2002) « Actuarial practice in social security » ILO-ISSA – Quantitative Methods in Social Protection series*
- *Thompson L. (1998) “Older & Wise” The Urban Institute Press*
- *Cichon M., Newbrander W., Yamabana H. et al. (1999) “Modelling in health care finance” ILO- ISSA – Quantitative Methods in Social Protection series*