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978-1-316-50971-5 - Valuation and Surplus  
R. K. Lochhead  
Frontmatter  
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INSTITUTE OF ACTUARIES STUDENTS' SOCIETY'S  
CONSOLIDATION OF READING SERIES

*Editor: C. W. KENCHINGTON, F.I.A.*

# VALUATION AND SURPLUS

BY

R. K. LOCHHEAD

FELLOW OF THE INSTITUTE OF ACTUARIES

CAMBRIDGE

*Published for the Institute of Actuaries Students' Society*

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It will be understood, of course, that the Society is  
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INTRODUCTION  
BY THE PRESIDENT

I regard it as a privilege to be given the opportunity of writing an introduction to the series of books on “Consolidation of Reading” to be issued by the Students’ Society.

The Students’ Society in my opinion owes much of its success to the foresight of its Committee in the matter of its publications. The Committee has kept in view the help which clearly written papers on broad principles give to students both in assisting them to get a thorough grasp of a subject and in encouraging them to further reading.

The projected publication of a series of books on “Consolidation of Reading” is ambitious and calls for much careful thought, but the idea is an excellent one and it has been welcomed warmly by the Council of the Institute. If the first book by Mr Lochhead is a measure of the success of the series as a whole, then the project will be more than justified.

I am particularly glad to see that Mr Lochhead has aimed at giving a guide to reading rather than a text-book, and I have no hesitation in regarding his book as a very valuable introduction to what he himself refers to as the literature of the profession.

H. M. T.

81 KING WILLIAM STREET  
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*January 1932*

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## EDITOR'S PREFACE

When I was asked to edit a series of books to be designated under the descriptive title "Consolidation of Reading" for the use of students, I gladly undertook the task in the hope that it might provide some real practical assistance to them.

The idea underlying the production of the books emanated from the Institute of Actuaries Students' Society. After considerable discussion in Committee and otherwise, it was determined that each book in the series should be designed to serve as an introduction to the subject with which it deals, leading the student by definite stages and in logical order to the position in which he can advantageously read the literature bearing on that subject. The "Consolidation of Reading" books are not, therefore, intended as a substitute for the reading of original papers and discussions.

The present volume is the first of the series. The subjects with which it deals are of the utmost practical importance and, as they are so interlocked, it was felt to be desirable that they should be embraced in a single volume.

It is particularly gratifying to me that Mr R. K. Lochhead has been able to find time to write this book, and I feel sure that for many years to come students will appreciate his efforts on their behalf.

C. W. K.

BIRMINGHAM

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## AUTHOR'S PREFACE

Experience has shown me that the average student finds considerable difficulty in bridging the gap between the strict mathematics of life contingencies and the severely practical problems of Life Office Valuations.

The volumes of the *Journal* of the Institute and kindred publications are rich in papers dealing with every aspect of this subject, but this is often an embarrassment and the contributions are frequently too advanced for first-year students. Nevertheless, it is to the literature of the profession that students must be directed, and it has been my object in preparing this booklet to build it round the standard papers. In consequence I have not hesitated to refer to papers in which the subject is clearly developed, and have only embarked on original work where introductory notes appeared to be required and for the purpose of trying to weld the scattered references into a coherent whole.

As its form will show, the booklet has been written primarily for students. It is not a text-book, but rather a guide to reading, and I feel that it will fail to be of assistance if it is not employed in this way. Consolidation of reading can never mean condensation of reading.

I gladly take this opportunity of acknowledging the assistance that I have received from many who are probably unaware of having helped me, and from others who have kindly revised the proofs and criticized my work.

R. K. L.

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