COMPOUND INTEREST
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PREFACE

The subject of 'Compound Interest' and the name 'Todhunter' have been indissolubly linked in the minds of actuaries and of actuarial students for over fifty years. In preparing a new text-book on this subject I have been very conscious of the comparison that will necessarily be made with a work which has so well withstood the passage of time. It would be idle to challenge comparison with a text-book which for its completeness and its value as a work of reference could hardly be improved. Experience as a tutor has, however, led me to wonder whether its very completeness has not sometimes been a stumbling-block to the student approaching the subject for the first time. His needs may at times best be served by a strictly practical and even numerical method of approach, and from his point of view some aspects of the application of the theory of compound interest found in the previous text-book might well be left for study at a later stage of his career. I have not hesitated to exclude from this book anything which is not of direct use to the student, even though this has meant a limitation of its scope as compared with the previous work.

Perhaps the main difficulty in studying compound interest is the relative unfamiliarity of the types of transactions on the Stock Exchange which give rise to most of the problems encountered in practice. At the risk of seeming to labour the obvious I have therefore tried to explain what the basic nature of each problem really is, and to focus attention on the application of general principles to its solution. In the earlier stages I have tried to avoid undue complications, and for that reason have deferred all consideration of the effect of income tax to one chapter occurring towards the end of the book.

Compound interest is essentially a practical subject, and it is only by practice in numerical work that confidence can be obtained. Numerous illustrative examples have been included in each chapter. These should be studied carefully. Once the points of principle have been grasped the numerical working should be checked. In addition to the illustrative examples a certain number of exercises

have been provided. In the early stages these are intended mainly to give practice in handling compound interest tables, but some of the later questions have been selected from examination papers of the Institute and the Faculty. It is hoped they will be useful to the student both in consolidating knowledge already gained and in helping him in the revision stages of his work.

My indebtedness to Todhunter is obvious. I have had the benefit of access to the notes provided for students by the Actuarial Tuition Service and I must also record my thanks to a number of my professional colleagues who have helped with advice and criticism—particularly to Mr A. F. Ross, who, apart from much useful general comment, undertook the laborious task of checking the solutions to the illustrative examples. For any ambiguities, errors or imperfections which remain I am, however, entirely responsible.

D.W.A.D.