## Contents

### Part I  Life Insurance Context

1. **Paradigms in Life Insurance** ............................. 3  
   Ragnar Norberg

2. **About Market Consistent Valuation in Insurance** .......... 43  
   Pierre-E. Théron

### Part II  Design and Implementation of Life Insurance Models

3. **Cash Flow Projection Models** ............................ 63  
   Jean-Paul Felix

4. **Economic Scenario Generators** ........................... 81  
   Thierry Moudiki and Frédéric Planchet

5. **From Internal to ORSA Models** .......................... 105  
   Frédéric Planchet and Christian-Yann Robert

6. **Building a Model: Practical Implementation** ............... 125  
   Patrice Palsky

### Part III  Model Validation and Steering Processes

7. **Ex-ante Model Validation and Back-Testing** ............... 151  
   Stéphane Loisel and Kati Nisipasu

8. **The Threat of Model Risk for Insurance Companies** ......... 161  
   Christian-Yann Robert

9. **Meta-Models and Consistency Issues** ........................ 181  
   Jean-Paul Laurent
Part IV Models and Business Processes

10 Model Feeding and Data Quality ................................. 205
   Jean-Paul Felix, Nathalie Languillat and Amélie Mourens

11 The Role of Models in Management Decision-Making ........ 223
   Bernard Bolle-Reddat and Renaud Dumora

12 Models and Behaviour of Stakeholders ......................... 237
   David Ingram and Stéphane Loisel

Bibliography .................................................................. 249