Contents

Part I Reference Theories

1 From Social and Natural Science Comes a Historical Overview on the Concepts of Uncertainty and Risk ........................................ 3
  1.1 Risk... Beginning with Newton and Heisenberg. ................. 3
  1.2 Uncertainty and Risk: Loss and Gain—A Historical View .... 4
  1.3 The First Risk Classifications ........................................... 7
 References ........................................................................... 8

2 Governance and Risk Management ........................................... 9
  2.1 Three Interpretative Models: The Paradigm of “Structure-Conduct-Performance”, “System Theory”, and “Value-Based Management” ................................................. 9
    2.1.1 The North-American School and the Structure-Conduct-Performance Paradigm ................................................. 9
    2.1.2 Business as an Open System and the Systemic Approach to Business Governance .............................................. 10
    2.1.3 Value-Based Management ............................................ 11
  2.2 Governance and Value Creation ......................................... 12
  2.3 Corporate Governance: Regulatory Evolutions ..................... 14
 References ........................................................................... 17

3 Risk Management Perspectives ............................................. 19
  3.1 Risk is Transversal ......................................................... 19
  3.2 From the Risk Spectrum to the Four Big Risks ................. 20
  3.3 Four Risk Observation and Management Perspectives .... 22
  3.4 Risk Management: A Brief Historical Evolution .............. 26
 References ........................................................................... 27
Part II  Risk Assessment: Approaches, Techniques  
and Good Practices

4  The Need for an Enterprise-Wide Approach  
to Risk Management .................................. 31
4.1  Enterprise Risk Management .......................... 31
   4.1.1  Internal Auditing and Risk Management:  
   Collaboration, Not Overlap! ....................... 33
4.2  Business Risk Management .......................... 33
4.3  Risk Management in the Organizational Structure ....... 35
4.4  ISO 31000 (2009) .................................. 38
References .................................................. 41

5  Risk Identification .................................... 43
5.1  What is Risk Identification? ......................... 43
   5.1.1  Organizational Charts .......................... 45
   5.1.2  Flow Charts ................................... 46
   5.1.3  Vulnerability Analysis and Matrix  
of Interdependencies ................................ 48
   5.1.4  Checklists ..................................... 49
   5.1.5  Event Chain Diagrams and Decision Trees ....... 51
References .................................................. 52

6  Risk Analysis ........................................ 53
6.1  Qualitative or Quantitative Analysis? ................. 54
6.2  Introduction to Basic Statistical Tools ................. 54
   6.2.1  Discrete Probability Distribution ............... 55
   6.2.2  Continuous Probability Distribution ............. 55
6.3  Probable Maximum Loss and Annual Aggregate Loss ... 57
6.4  Qualitative and Semi-Qualitative Methods for Risk Analysis .... 59
   6.4.1  Event Tree Analysis and Fault Tree Analysis .... 60
   6.4.2  Business Impact Analysis ........................ 60
   6.4.3  Business Continuity Planning (BCP) ............. 61
   6.4.4  FMEA ........................................ 61
   6.4.5  Dependency Modeling ........................... 61
6.5  How Can the Risk Be Assessed when the Historical  
   Data is Insufficient or Lacking? ..................... 62
6.6  Risk Analysis for a Better Performance Improving .... 63
   6.6.1  Risk Analysis for Measuring Monetary Losses .... 63
   6.6.2  Risk Analysis for Measuring Underperformance ... 64
6.7  Risk Evaluation ..................................... 65
6.8  External contribution 6.1: Analysis of Economic, Financial  
   and Equity Indicators for the Assessment of Business Risk  
   and Client Risk in an Industrial Group ................. 68
Risk Management
How to Assess, Transfer and Communicate Critical Risks
Borghesi, A.; Gaudenzi, B.
2013, X, 142 p., Hardcover
ISBN: 978-88-470-2530-1