

WILEY FINANCE

$$c = Se^{-qT} N(d_1) - Ke^{-rT} N(d_2)$$

$$p = Ke^{-rT} N(-d_2) - Se^{-qT} N(-d_1)$$

Financial Modeling

Using Excel and VBA



$$d_2 = \frac{\ln(S/K) + (r - q - \sigma^2/2)T}{\sigma\sqrt{T}} = d_1 - \sigma\sqrt{T}$$

$$\ln \frac{S_T}{S} \sim \phi \left[\left(\mu - \frac{\sigma^2}{2} \right) T, \sigma\sqrt{T} \right]$$

CHANDAN SENGUPTA

About This Book	xi
------------------------	-----------

CHAPTER 1 Introduction to Financial Modeling	1
---	----------

Part One: Excel for Financial Modeling

CHAPTER 2 Excel Basics	13
-------------------------------	-----------

Improving Your Excel Skills	14
-----------------------------	----

The Basic Excel Features	20
--------------------------	----

CHAPTER 3 Advanced Excel Features	28
--	-----------

CHAPTER 4 Excel's Built-In Functions and Analysis Tools	71
--	-----------

Financial Functions	73
---------------------	----

Logical Functions	86
-------------------	----

Statistical Functions	86
-----------------------	----

Mathematical and Trigonometric Functions	97
--	----

Lookup and Reference Functions	101
--------------------------------	-----

Date and Time Functions	107
-------------------------	-----

Text Functions	110
----------------	-----

Information Functions	112
-----------------------	-----

The Analysis ToolPak	113
----------------------	-----

Part Two: Financial Modeling Using Excel

CHAPTER 5 How to Build Good Excel Models	119
---	------------

Attributes of Good Excel Models	119
---------------------------------	-----

Documenting Excel Models	122
--------------------------	-----

Debugging Excel Models	124
------------------------	-----

Using Formula Auditing Tools for Debugging	127
--	-----

Learning Modeling Using Excel	128
-------------------------------	-----

CHAPTER 6 Financial Statements Forecasting	131
Review of Theory and Concepts	131
Modeling Examples	141
CHAPTER 7 Time Value of Money	185
Review of Theory and Concepts	185
Modeling Examples	199
CHAPTER 8 Financial Planning and Investments	223
Review of Theory and Concepts	223
Modeling Examples	230
CHAPTER 9 Analyzing Market History	247
Review of Theory and Concepts	247
Modeling Examples	252
CHAPTER 10 Bond Pricing and Duration	267
Review of Theory and Concepts	267
Modeling Examples	274
CHAPTER 11 Simulating Stock Prices	285
Review of Theory and Concepts	285
Modeling Examples	295
CHAPTER 12 Options and Option Portfolios	307
Review of Theory and Concepts	307
Modeling Examples	317
CHAPTER 13 Binomial Option Pricing	345
Review of Theory and Concepts	345
Modeling Examples	349
 Part Three: VBA for Financial Modeling	
CHAPTER 14 Introduction to VBA	363
Example of a VBA Model	368
Recording Macros	378
Using VBA's Help	382
The Strategy to Learn VBA Efficiently	384
CHAPTER 15 VBA Essentials	385
The Visual Basic Editor	386
Some Basics	390
Variables, Constants, and Arrays	401
Objects, Properties, and Methods	413

Branching	417
Looping	423
Using Built-In Functions	430
CHAPTER 16 Sub and Function Procedures	433
Sub Procedures	433
Functions Procedures	438
CHAPTER 17 Debugging VBA Models	445

Part Four: Financial Modeling Using VBA

CHAPTER 18 How to Build Good VBA Models	453
Attributes of Good VBA Models	453
Documenting VBA Models	457
Learning Modeling Using VBA	459
CHAPTER 19 Time Value of Money	483
Review of Theory and Concepts	463
Modeling Examples	467
CHAPTER 20 Financial Planning and Investments	519
Modeling Examples	519
CHAPTER 21 Analyzing Market History	549
Modeling Examples	549
CHAPTER 22 Simulating Stock Prices	575
Modeling Examples	575
CHAPTER 23 Options and Option Portfolios	583
Modeling Examples	583
CHAPTER 24 Binomial Option Pricing	599
Modeling Examples	599

Appendix A Keyboard Shortcuts for Excel	613
Appendix B VBA Quick Reference	615
Appendix C Excel and VBA Built-In Functions	617
Index	635
About the CD-ROM	655