

This is a list of books that have been proved to be useful in the education of many Quants. Many of these books are used in the MFE programs. Feel free to suggest other titles in different categories and I will add to the master list.

FREE QUANT CAREER GUIDES

- 1) What do quant do? A guide by Mark Joshi.
- 2) Paul & Dominic's Guide to Quant Careers
- 3) Career in Financial Markets - a guide by efinancialcareers.
- 4) Interview Preparation Guide by Michael Page: Quantitative Analysis, and Quantitative Structuring.

LIFE AS A QUANT

- 1) How I became a Quant : Stories of 25 Top Quants
- 2) My life as a Quant, by Emmanuel Derman
- 3) Working the Street by Erik Banks
- 4) Liar's Poker by Michael Lewis
- 5) Fooled by Randomness by Nassim Nicholas Taleb
- 6) The Complete Guide to Capital markets for Quantitative Professionals

BOOKS FOR QUANT INTERVIEWS

- 1) Basic Black-Scholes: Option Pricing and Trading by Timothy Falcon Crack

2) [Heard on the Street: Quantitative Questions from Wall Street Job](#)

Interviews by Timothy Falcon Crack

3) Frequently asked questions in Quantitative finance

4) Starting Your Career as a Wall Street Quant

5) A Practical Guide to Quantitative Finance Interviews by Xinfeng Zhou

6) Fifty Challenging Problems in Probability with Solutions by Frederick Mosteller

7) Quant Job Interview Questions and Answers by Mark Joshi
Quant Job Interview Questions and Answers by Mark Joshi, Andrew Downes, Nick Denson (Book) in Business & Economics

GENERAL

1) The Concepts and Practice of Mathematical Finance, by Mark S. Joshi

2) Paul Wilmott on Quantitative Finance, by Paul Wilmott

3) Options, Futures, and Other Derivatives, by John C. Hull

4) A Primer for the Mathematics of Financial Engineering by Dan Stefanica

5) Principles of Financial Engineering (2nd Ed) by Salih Neftci

FINITE DIFFERENCES

1) Option Pricing: Mathematical Models and Computation, by P. Wilmott, J.N. Dewynne, S.D. Howison

2) Pricing Financial Instruments: The Finite Difference Method, by Domingo Tavella, Curt Randall

MONTE CARLO

1) Monte Carlo Methods in Finance, by Peter Jaeckel. Errata available at jaeckel.org

2) Monte Carlo, by Bruno Dupire (Editor)

3) Monte Carlo Methods in Financial Engineering, by Paul Glasserman

STOCHASTIC CALCULUS

1) Steven Shreve: Stochastic Calculus and Finance

2) An Introduction to the Mathematics of Financial Derivatives, Second Edition, by Salih Neftci free solution manual available on-line

3) Bernt Oksendal: Stochastic Differential Equations: An Introduction with Applications

VOLATILITY

1) Volatility and Correlation, by Riccardo Rebonato

2) Volatility, by Robert Jarrow (Editor)

INTEREST RATE

1) Interest Rate Models - Theory and Practice, by D. Brigo, F. Mercurio. Updates available on-line Professional Area of Damiano Brigo's web site

2) Modern Pricing of Interest Rate Derivatives, by Riccardo Rebonato

3) Interest-Rate Option Models, by Riccardo Rebonato

4) Efficient Methods for Valuing Interest Rate Derivatives, by Antoon Pelsser

5) Interest Rate Modeling, by Nick Webber, Jessica James

FOREIGN EXCHANGE

- 1) Foreign Exchange Risk, by Jurgen Hakala, Uwe Wystup
- 2) Mathematical Methods for Foreign Exchange, by Alexander Lipton

STRUCTURED FINANCE

- 1) The Analysis of Structured Securities: Precise Risk Measurement and Capital Allocation (Hardcover) by Sylvain Raynes and Ann Rutledge
- 2) Salomon Smith Barney Guide to MBS & ABS, Lakhbir Hayre, Editor
- 3) Securitization Markets Handbook, Structures and Dynamics of Mortgage- and Asset-backed securities by Stone & Zissu
- 4) Securitization, by Vinod Kothari
- 5) Modeling Structured Finance Cash Flows with Microsoft Excel: A Step-by-Step Guide (Wiley Finance) (Paperback) (good for understanding the basics)
- 6) Structured Finance Modeling with Object-Oriented VBA (Wiley Finance) (a bit more detailed and advanced than the step by step book)

STRUCTURED CREDIT

- 1) Collateralized Debt Obligations, by Arturo Cifuentes (out of print but worth picking up if you find a copy)
- 2) An Introduction to Credit Risk Modeling by Bluhm, Overbeck and Wagner (really good read, especially on how to model correlated default events & times)
- 3) Credit Derivatives Pricing Models: Model, Pricing and Implementation by Philipp J. Schönbucher

4) Credit Derivatives: A Guide to Instruments and Applications by Janet

M. Tavakoli

5) Structured Credit Portfolio Analysis, Baskets and CDOs (Chapman &

Hall/Crc Financial Mathematics Series) by Christian Bluhm and Ludger

Overbeck (Hardcover - Sep 29, 2006)

VALUE AT RISK

1) VAR, by various authors

2) Value at Risk, by Philippe Jorion

3) RiskMetrics Technical Document RiskMetrics Group

4) Risk and Asset Allocation by Attilio Meucci

SAS/S/S-PLUS

1) The Little SAS Book: A Primer, Third Edition by Lora D. Delwiche and

Susan J. Slaughter

2) Modeling Financial Time Series with S-PLUS

3) Statistical Analysis of Financial Data in S-PLUS

4) Modern Applied Statistics with S

SQL PROGRAMMING

HANDS ON

1) Implementing Derivative Models, by Les Clewlow, Chris Strickland

Errata available at [Error](#)

2) The Complete Guide to Option Pricing Formulas, by Espen Gaarder

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EXCEL AND FINANCE

- 1) Advanced modelling in finance using Excel and VBA, by Mary Jackson, Mike Staunton
- 2) Financial Modelling, by Simon Benninga

EXCEL

- 1) Definitive Guide to Excel VBA, by M. Kofler
- 2) Excel 2002 VBA Programmer's Reference, by John Green, Stephen Bullen, Rob Bovey, Robert Rosenberg
- 3) Excel 2003 Power Programming with VBA, by John Walkenbach
- 4) Excel 2003 Formulas, by John Walkenbach
- 5) Microsoft Excel 2002 Visual Basic for Applications Step by Step, by Reed Jacobson
- 6) Excel Hacks

PROGRAMMING

- 1) Problems Solving with C++, 6th Edition, by Walter Savitch
- 2) Absolute C++, 3rd Edition by Walter Savitch
- 3) The C++ Programming Language, Special Edition, by Bjarne Stroustrup
- 4) Thinking in C++: Introduction to Standard C++, Volume One, by Bruce Eckel
- 5) Numerical Recipes in C, also available on-line from Numerical Recipes Home Page
- 6) GNU Autoconf, Automake, and Libtool, also available as free book

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7) Open Source Development with CVS, by Karl Fogel, also available as free book from A CVS Book

8) UML Distilled, by Martin Fowler, Kendall Scott

9) Design Patterns, by E. Gamma, R. Helm, R. Johnson, J. Vlissides

NOT ENOUGH YET?

1) Energy Derivatives, by Les Clewlow, Chris Strickland

2) Hull-White on Derivatives, by John Hull, Alan White

3) Exotic Options: The State of the Art, by Les Clewlow (Editor), Chris Strickland (Editor), Hardcover (June 1997), International Thomson Business Press; ISBN: 0412631709

4) Market Models, by C.O. Alexander, Hardcover - 514 pages (26 September, 2001), John Wiley and Sons Ltd; ISBN: 0471899755

5) Pricing, Hedging, and Trading Exotic Options, by Israel Nelken

6) Modelling Fixed Income Securities and Interest Rate Options, by Robert A. Jarrow, Hardcover (October 1995), McGraw Hill College Div; ISBN: 0070323739

7) Black-Scholes and Beyond, by Neil A. Chriss, Hardcover - 500 pages (30 September, 1996), Irwin Professional (USA); ISBN: 0786310251

8) Risk Management and Analysis: Measuring and Modelling Financial Risk, by Carol Alexander (Editor), Hardcover - 304 pages Revised Ed (12 November, 1998), John Wiley and Sons Ltd; ISBN: 0471979570

9) Mastering Risk: Volume 2 - Applications: Your Single-Source Guide to
Becoming a Master of Risk, by Carol Alexander, Paperback - 264 pages 1
(24 October, 2001), Pearson Education; ISBN: 0273654365