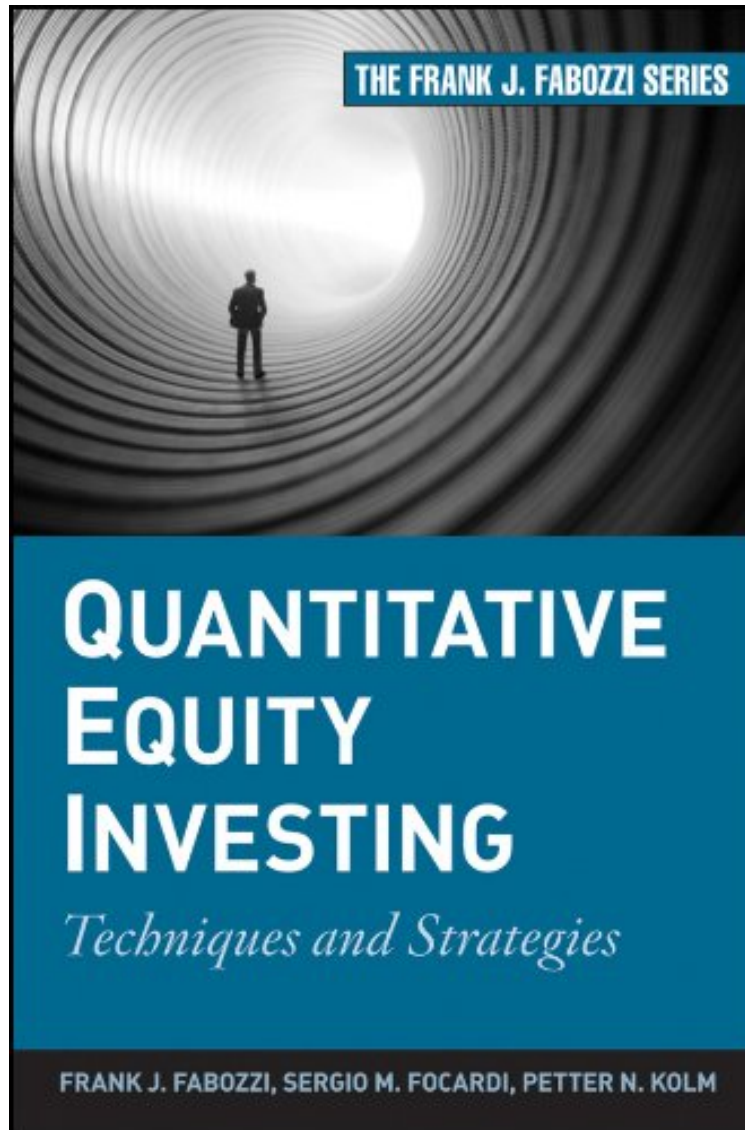


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## Quantitative Equity Investing: Techniques and Strategies (Frank J. Fabozzi Series)

*Frank J. Fabozzi, Sergio M. Focardi, Petter N. Kolm*  
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**Frank J. Fabozzi, Sergio M. Focardi, Petter N. Kolm : Quantitative Equity Investing: Techniques and Strategies (Frank J. Fabozzi Series)** before purchasing it in order to gauge whether or not it would be worth my time, and all praised Quantitative Equity Investing: Techniques and Strategies (Frank J. Fabozzi Series):

14 of 15 people found the following review helpful. Nice book for hardcore quants  
By Thomas Pan  
In this Great Recession, quants have become notorious again, since Black Monday, October 19th, 1987. At that time, it is called "program trading". Fast forward to May 6th, 2010, the "flash crash" happened, causing Dow to drop more than 1000

points in couple of minutes. Now, it is called high-frequency trading, which accounts for 40% to 70% of all trading on every stock market in U.S.. Regardless of program trading or high-frequency trading, it is based on quantitative techniques, which makes the book "Quantitative Equity Investing -- Techniques and Strategies" interesting, particularly so for these who want to understand what these "crazy" quants from Wall Street are doing and outsmart the markets or market makers. Modern quantitative techniques are based on modern portfolio theory, introduced by Harry Markowitz in 1952, in which he suggested that investors should decide the allocation of their investment funds on the basis of the trade-off between portfolio risk, as measured by the standard deviation of investment returns, and portfolio return, as measured by the expected value of the investment return. .... Developing the necessary inputs for constructing portfolios based on modern portfolio theory has been facilitated by the development of Bayesian statistics, shrinkage techniques, factor models, and robust portfolio optimization(, with the help of powerful computers). All these techniques have been skillfully depicted by the expert authors, who have all worked closely with hedge fund and quantitative asset management firms, who are famous university professors with series of books focusing on related financial topics. The book starts with the role and use of mathematical techniques in finance. The authors' argument is very powerful: As there are unpredictable events with a potentially major impact on the economy, it is claimed that financial economics cannot be formalized as a mathematical methodology with predictive power. In a nutshell, the answer is that black swans exist not only in financial markets but also in the physical sciences. But no one questions the use of mathematics in the physical sciences because there are major events that we cannot predict. The book continues with financial model building, which covers modern regression theory, applications of Random Matrix Theory, dynamic time series model, vector autoregressive models, cointegration analysis. Then, it moves on to include financial engineering, static and dynamic factor models, asset allocation, portfolio models, transaction costs, trading strategies, etc. Overall, the book is math-heavy except the first chapter. It is an excellent textbook for students majored in finance. It is also a good guide book for traders who focus on quantitative trading techniques in a daily basis. It is also a recommendation for power investors who start to leverage brokerages' open trading APIs. It is not recommended for these who don't have math background and who don't understand any mathematical terms mentioned in the earlier paragraphs of this review.

4 of 6 people found the following review helpful. Another Book Review by the Aleph Blog By David Merkel Quantitative Equity Investing is a book for practitioners with strong math skills, not average investors. It reviews basic econometrics and factor analysis, and then applies these tools in an effort to sort out anomalies in investment markets, tease out important factors driving markets, and find workable trading strategies, considering execution costs, slippage, etc. It has a brief section on algorithmic and high frequency trading. On the whole, I didn't find anything that new or amazing in the book. Though there were a few things in the book that I hadn't seen before, they were trivial things that I looked at and said, "Oh, yeah, of course." The book is generic in the way that it deals with the topic. It is no going to give you ideas to pursue, but only tools that you can use if you have ideas that you want to analyze, and turn into strategies. Who would benefit from this book? You have to have a very strong math background, including the type of Matrix Algebra that one would use in graduate-level Econometrics. To that end, this book would be most useful to grad students wanting an introduction to how to apply their math skills to the markets.

5 of 6 people found the following review helpful. Unexciting but solid By Dimitri Shvorob I will disagree with Hu's description of this book as one for "hardcore quants". Quants dealing with derivatives - my definition of "hardcore" - read very different books. Quants from algo arena cannot be satisfied with Chapter 11, the only one of relevance to them. Quants working with models of equity returns do stand to benefit - especially if they need a refresher on things like linear regression, VAR (and VaR), factor/canonical/principal-components analysis, mean-variance optimization (theory plus implementation, including "robust" techniques), CAPM and Black-Litterman, and prominent financial-economics research. The authors themselves suggest the book for a graduate or advanced undergraduate course. (To me, command of basic matrix algebra appears to be the only prerequisite). The pedagogical orientation is in line with other titles in the Fabozzi series. So is the quality, which can't be taken for granted in a Wiley book. Authors know the subject, go beyond "textbook" material with critical review and pointers to implementation issues, and cover a wide range of topics. (A special thank-you for the helpful references). There are some problems. As depth is sacrificed for breadth, the include/exclude logic isn't always apparent. (For example, why is time-series stuff limited to VARs and dynamic factor models?) Frequent annoyances are "name-checks", where something is mentioned but not adequately explained (Fama-MacBeth regressions?), and passages that kick into a higher math gear, with no payoff. (Cf. the section on "random matrix theory", appreciated by Hu; this could have been replaced by a single sentence). If I were a student in a course based on "Quantitative equity investing", checking out Chincarini and Kim (2006) and Cochrane (2005) would be a good idea. Any particular section of this book may be "dominated" by a different source, but having all this material together is a major convenience and selling point.

A comprehensive look at the tools and techniques used in quantitative equity management Some books attempt to extend portfolio theory, but the real issue today relates to the practical implementation of the theory introduced by Harry Markowitz and others who followed. The purpose of this book is to close the implementation gap by presenting

state-of-the art quantitative techniques and strategies for managing equity portfolios. Throughout these pages, Frank Fabozzi, Sergio Focardi, and Petter Kolm address the essential elements of this discipline, including financial model building, financial engineering, static and dynamic factor models, asset allocation, portfolio models, transaction costs, trading strategies, and much more. They also provide ample illustrations and thorough discussions of implementation issues facing those in the investment management business and include the necessary background material in probability, statistics, and econometrics to make the book self-contained. Written by a solid author team who has extensive financial experience in this area Presents state-of-the art quantitative strategies for managing equity portfolios Focuses on the implementation of quantitative equity asset management Outlines effective analysis, optimization methods, and risk models In today's financial environment, you have to have the skills to analyze, optimize and manage the risk of your quantitative equity investments. This guide offers you the best information available to achieve this goal.

From the Inside Flap In 1952, Harry Markowitz introduced a critical innovation in investment management—popularly referred to as modern portfolio theory—in which he suggested that investors should decide the allocation of their investment funds on the basis of the trade-off between portfolio risk, as measured by the standard deviation of investment returns, and portfolio return, as measured by the expected value of the investment return. Entire new research areas grew from his groundbreaking idea, which, with the spread of low-cost powerful computers, found important practical applications in several fields of finance. Developing the necessary inputs for constructing portfolios based on modern portfolio theory has been facilitated by the development of Bayesian statistics, shrinkage techniques, factor models, and robust portfolio optimization. Modern quantitative techniques have now made it possible to manage large investment portfolios with computer programs that look for the best risk-return trade-off available in the market. This book shows you how to perform quantitative equity portfolio management using these modern techniques. It skillfully presents state-of-the-art advances in the theory and practice of quantitative equity portfolio management. Page by page, the expert authors—who have all worked closely with hedge fund and quantitative asset management firms—cover the most up-to-date techniques, tools, and strategies used in the industry today. They begin by discussing the role and use of mathematical techniques in finance, offering sound theoretical arguments in support of finance as a rigorous science. They go on to provide extensive background material on one of the principal tools used in quantitative equity management—financial econometrics—covering modern regression theory, applications of Random Matrix Theory, dynamic time series models, vector autoregressive models, and cointegration analysis. The authors then look at financial engineering, the pitfalls of estimation, methods to control model risk, and the modern theory of factor models, including approximate and dynamic factor models. After laying a firm theoretical foundation, they provide practical advice on optimization techniques and trading strategies based on factors and factor models, offering a modern view on how to construct factor models.

From the Back Cover Quantitative Equity Investing Techniques and strategies for successful quantitative equity management Quantitative equity portfolio management is a fundamental building block of investment management. This hands-on guide closes the gap between theory and practice by presenting state-of-the-art quantitative techniques and strategies for managing equity portfolios. Authors Frank Fabozzi, Sergio Focardi, and Petter Kolm—all of whom have extensive experience in this area—address the essential elements of this discipline, including financial model building, financial engineering, static and dynamic factor models, asset allocation, portfolio models, transaction costs, trading strategies, and much more. They provide numerous illustrations and thorough discussions of implementation issues facing those in the investment management business and include the necessary background material in financial econometrics to make the book self-contained. For many of the advanced topics, they also provide the reader with references to the most recent applicable research in this rapidly evolving field. In today's financial environment, you need the skills to analyze, optimize, and manage the risk of your quantitative equity portfolio. This guide offers you the best information available to achieve this goal.

About the Author Frank J. Fabozzi is Professor in the Practice of Finance and Becton Fellow at the Yale School of Management and Editor of the Journal of Portfolio Management. He is a Chartered Financial Analyst and earned a doctorate in economics from the City University of New York. Sergio M. Focardi is Professor of Finance at EDHEC Business School in Nice and a founding partner of the Paris-based consulting firm The Intertek Group. He is also a member of the Editorial Board of the Journal of Portfolio Management. Sergio holds a degree in electronic engineering from the University of Genoa and a PhD in mathematical finance from the University of Karlsruhe as well as a postgraduate degree in communications from the Galileo Ferraris Electrotechnical Institute (Turin). Petter N. Kolm is the Deputy Director of the Mathematics in Finance Master's Program and Clinical Associate Professor of Mathematics at the Courant Institute of Mathematical Sciences, New York University; and a founding Partner of the New York-based financial consulting firm the Heimdall Group, LLC. Previously, Petter worked in the Quantitative Strategies Group at Goldman Sachs Asset Management. He received an MS in mathematics from ETH in Zurich; an MPhil in applied mathematics from the Royal Institute of Technology in Stockholm; and a PhD in applied mathematics from Yale University.