THE VOLATILITY COURSE WORKBOOK

Step-by-Step Exercises to Help You Master *The Volatility Course*

George A. Fontanills
Tom Gentile

JOHN WILEY & SONS, INC.

THE VOLATILITY COURSE WORKBOOK

Founded in 1807, John Wiley & Sons is the oldest independent publishing company in the United States. With offices in North America, Europe, Australia and Asia, Wiley is globally committed to developing and marketing print and electronic products and services for our customers' professional and personal knowledge and understanding.

The Wiley Trading series features books by traders who have survived the market's ever changing temperament and have prospered—some by reinventing systems, others by getting back to basics. Whether a novice trader, professional, or somewhere in-between, these books will provide the advice and strategies needed to prosper today and well into the future.

For a list of available titles, please visit our web site at www.WileyFinance.com.

THE VOLATILITY COURSE WORKBOOK

Step-by-Step Exercises to Help You Master *The Volatility Course*

George A. Fontanills
Tom Gentile

JOHN WILEY & SONS, INC.

Copyright © 2003 by George A. Fontanills, Tom Gentile, and Richard M. Cawood.
All rights reserved.

Published by John Wiley & Sons, Inc., Hoboken, New Jersey.
Published simultaneously in Canada.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, 978-750-8400, fax 978-750-4470, or on the Web at www.copyright.com. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, 201-748-6011, fax 201-748-6008, e-mail: permcoordinator@wiley.com.

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

For general information on our other products and services, or technical support, please contact our Customer Care Department within the United States at 800-762-2974, outside the United States at 317-572-3993 or fax 317-572-4002.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

For more information about Wiley products, visit our web site at www.wiley.com.

ISBN 0-471-39817-9

Printed in the United States of America.

10 9 8 7 6 5 4 3 2 1

It is with great love
that we dedicate this book to
Alexandria, Benjamin, and Christina Cawood.

Disclaimer
Hypothetical or simulated performance results have certain limitations. Unlike an actual performance record, simulated results do not represent actual trading. Also, since the trades have not actually been executed, the results may have under- or overcompensated for the impact, if any, of certain factors, such as lack of liquidity. Simulated trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. No representation is being made that any account will or is likely to achieve profits or losses similar to those shown. There is a risk of loss in all forms of trading.

Important Notice
Trading stocks and options has large potential rewards, but also large potential risks. You must be aware of the risks and willing to accept them in order to invest in the markets. Do not trade with money you cannot afford to lose. This is neither a solicitation nor an offer to buy or sell stocks or options. This book is published for educational purposes only and should not be relied upon for current prices, for example. Consult a licensed professional about your individual trading. Prior to buying or selling an option, you should receive from your brokerage firm a copy of *Characteristics and Risks of Standardized Options*. Copies of this document are also available from the Chicago Board Options Exchange, 400 South La Salle Street, Chicago, IL 60605; or it can be viewed at the CBOE web site at www.cboe.com or at www.optionetics.com.

Contents

Questions and Exercises

1

Crisis and Chaos in Financial Markets

Summary

Most investors understand that, historically, stock prices rise. This has been the case ever since securities started trading after the signing of the Buttonwood Agreement in 1792. It is undeniable that, over time, stocks appreciate. At the same time, however, there are times when stocks do not perform well. So-called bear markets surface periodically in which stock prices fall and shareholders lose money. In addition, sometimes the stock market's decline can be violent, such as the crash of 1987—an extreme example. That sharp market decline stands out in the history books as a period of extreme volatility and lost wealth for stock market investors.

The volatility trader has a different perspective on the market than the traditional stock market investor. The volatility trader understands that times of falling stock prices and rising volatility are inevitable. However, periods of high volatility offer an equal number of trading opportunities as when stock prices are rising. Therefore, volatility is not a negative. There are ways to profit regardless of market direction, and volatility is not a nemesis. Instead, volatility can offer some of the best financial rewards to the savvy trader.

Recent events highlight the value in trading volatility rather than blindly buying stocks and hoping they increase in value. In the fall of 1998, financial markets around the globe were rattled in a widespread panic. A short time later, after a surge in technology stocks and the creation of a speculative bubble in Internet stocks, the floor caved in and stocks suffered sharp declines for more than 18 months. By the middle of the year 2001, many companies saw their share prices trade at fractions of their year 2000 peaks. Then, in September 2001, the U.S. stock market suffered another blow when terrorists attacked the heart of the world's financial center—

downtown Manhattan. All of these events, in less than five years, served to highlight some of the risks investors face. Some were economic, some political, and others military. Nevertheless, they all made the traditional approach to investing a gut-wrenching experience.

While trading volatility makes a great deal of sense given the complex nature of the stock market today and the myriad of uncertainties investors face, it is not a passive approach to the market. The volatility trader is actively involved in the day-to-day activity of the market. This does not necessarily mean trading every day and losing sleep at night due to the uncertainty of financial markets. However, it does require a certain time commitment that is not needed when simply buying stocks in anticipation that the market will be higher 10 years from now than it is today.

The savvy volatility trader understands the following key principles:

- Falling stock prices occur roughly one-third of the time.
- Profits can be made regardless of whether stocks are rising or falling.
- Volatility is a fact of life when investing.
- There are times when volatility in the stock market is high and makes the headlines in the financial press.
- There are times when volatility is low.
- Whether volatility is high or low, however, there are ways to generate profits using the strategies outlined in *The Volatility Course*.

Questions and Exercises

1. The U.S. stock market suffered its greatest point decline in history on _____________.

   A. October 29, 1929
   B. October 19, 1987
   C. April 4, 2000
   D. September 17, 2001

2. True or False: The bear market that preceded the Great Depression of the 1930s began on September 29, 1929, and lasted until June 1938.

3. What is an index, and why are indexes helpful when it comes to studying the stock market?

   ____

   ____

4. True or False: Rising interest rates hurt stock market investors.

5. The primary goal of the Federal Reserve is to ____________.
   A. Stabilize prices
   B. Promote economic growth
   C. Strive for full employment
   D. All of the above
6. Prior to the market slide from September 2000 until September 2001, the market was vulnerable and eventually collapsed because of ____________.
   A. Overpriced Internet stocks
   B. Excess speculative activity on the part of individual investors
   C. Rising interest rates
   D. Global economic decline
   E. All of the above
7. As a general rule, a bull market is identified by a ____________ rise from a low in the Dow Jones Industrial Average or other measure of the market.
   A. 10%
   B. 15%
   C. 20%
   D. 25%
8. As a general rule, a bear market is identified by a ____________ decline from a high in the Dow Jones Industrial Average or other measure of the market.
   A. 10%
   B. 15%
   C. 20%
   D. 25%
9. Can volatility in one financial market spread to other markets, or does it remain isolated? Why?

   ____

   ____
10. True or False: Ultimately, the stock market falls more than it rises.
11. The world's largest auction-style stock exchange dates back to the Buttonwood Agreement of 1792. Today it is known as the ____________.
    A. New York Stock Exchange
    B. American Stock Exchange
    C. Philadelphia Stock Exchange
12. True or False: Volatility equals risk.

13. True or False: It is usually profitable to bet against the financial system over the long term.
14. Briefly describe why rising and falling markets are named “bull” and “bear.”

____

____

Media Assignment

There are a number of different media tools available to the option strategist today—financial newspapers, magazines, the Internet, and television. The most valuable, by far, is the Internet. Today, while the cost of a personal computer has fallen dramatically, its speed, memory, and efficiency have enjoyed explosive growth. In addition, the proliferation of financial-related Internet sites coupled with the new high-speed Internet access capabilities (cable, DSL, broadband, etc.) have made tasks that once took hours possible in only minutes. There is no question that Internet access and subscriptions to a few key services greatly facilitate the process of identifying and implementing efficient option strategies.

While the Internet is the most important tool available to the option strategist today, this chapter focuses on events that cause volatility in the stock market, and following these events does not necessarily require the use of a computer. The chapter is concerned largely with the financial press in *all* its forms—television, radio, print, Web-based, and so on. Therefore, the first media assignment requires access to financial-related news services. These include, but are not limited to, financial television programs such as the *Nightly Business Report* on PBS, and *Moneyline* on CNN, and newspapers like the *Wall Street Journal*, the *Financial Times*, and *Investor’s Business Daily*, along with Web-based financial news from Bloomberg.com, Yahoo! Finance, and Optionetics.com.

When evaluating the financial press, the reader is trying to answer the question, “What is moving the markets?” As described in Chapter 1 of *The Volatility Course*, there are a number of different factors that can trigger periods of volatility. Some stem from the stock market itself—such as earnings, concerns over corporate accounting, or stock mergers. Others are economic in nature and include changes in interest rates, energy prices, or economic growth. Finally, some events fall outside of finance altogether, but still rattle the nerves of investors. The terrorist attacks of September 11, 2001, are the most recent example, but there are others. Wars, politics, and other noneconomic events can all shake investor nerves.

The goal of the first media assignment, then, is to uncover what factors are driving the markets higher or lower on a day-to-day basis. To accomplish this assignment, start a trading journal. Each day, try to write a short account of the day’s significant events and their apparent effects on the financial and business community. Keep in mind when doing so, however, that investors do not always react correctly. In addition, when markets begin to swing wildly the media often adds to the situation by dramatizing it since the financial press receives a lot more interest from market watchers when the situation appears chaotic and out of control. During those times, the option strategist must be careful not to get caught up in the excitement of short-term events, and to focus on the bigger picture instead. While it is important to understand what is moving the markets, the strategist must be able to stay emotionally detached from the situation in order to keep thought processes clear. If not, investment decisions are likely to be made out of fear or greed, rather than based on rational decision making.

Vocabulary List

Please define the following terms:

- Bear market
- Black Tuesday
- Bloody Monday
- Bull market
- Buy and hold
- Chicago Board Options Exchange (CBOE)
- Commodities
- Contagion
- Correction
- Dow Jones Industrial Average
- Exchange-traded fund (ETF)
- Federal Reserve
- Fed funds rate
- Futures markets
- Global financial crisis
- Index fund
- Liquidity
- Long Term Capital Management
- Margin
- Margin call
- Mutual fund
- Nifty Fifty
- Options
- Prime rate
- Pullback
- S&P 500

2

Volatility in the Stock Market

Summary

The stock market is a fascinating place. Its day-to-day movements reflect the buying and selling decisions of millions of investors around the world. Often trading is orderly and uneventful. During periods of quiet trading, investors develop a sense of safety and comfort. There is nothing to worry about, and the action of the market gets no coverage from the mainstream press. At other times, however, investors are rattled. News events, crises, and panic cause stock prices to fall, sometimes quite rapidly. During those times, the term "volatility" begins to surface on the evening news. Yet, while volatility is often associated with falling stock prices, a rising market can also sometimes be characterized as having high volatility—for example, when stocks are skyrocketing and investors are reacting out of optimism and greed. Basically, periods of high volatility are often the result of an emotionally driven market. The two key emotions are fear and greed; they can cause stocks to have high volatility when moving higher or lower. The successful volatility trader remains emotionless and understands that market volatility does not mean lost wealth. No matter what the market delivers, the volatility trader is prepared and ready to take advantage of the unique trading opportunities various states of market volatility foster.

While increasing volatility generally is a result of changes in investor emotions and psychology in the marketplace, it does not occur in a vacuum. That is, investors are continually absorbing new information concerning the outlook for individual companies, industries, and the economy. As information arrives, investment decisions are made. When there are no unusual occurrences, stocks can trade quietly for long periods of time. Volatility will remain low. But if investors are taken aback by events, there is often an impulsive or knee-jerk reaction. In addition, there is a tendency for investors to trade with the trend. They are attracted to moving prices. Therefore, when news events drive investors to react emotionally, stocks begin

heading in one direction or another, and this often leads to herdlike behavior or the bandwagon effect. It takes a combination of new information and emotion to trigger high levels of market volatility.

Obviously, understanding that volatility can change from one moment to the next is not enough information to trade for profits. Among other things, the options trader needs a means of quantifying volatility. Tools for doing so are discussed in later chapters. Before that, it is important to understand how stock and index prices are determined and disseminated, because all measures of volatility are derived from prices—generally the closing values. Therefore, this chapter covers some of the basics of trading like stocks, indexes, quotes, and basic definitions of volatility.

Questions and Exercises

1. Name the three indexes (and their ticker symbols) reporters most often use to comment on the performance of the stock market.
   1. ______________________________
   2. ______________________________
   3. ______________________________
2. By recent estimates ____________ of all American households own stocks in one form or another today.
   A. 30%
   B. 40%
   C. 50%
   D. 60%
3. When a company wants to start selling shares of stock to the public, it issues the ____________.
   A. Initial public offering (IPO)
   B. Venture capital shares
   C. Publicly traded preferred stock shares
4. Name the three principal stock exchanges.
   1. ______________________________
   2. ______________________________
   3. ______________________________
5. As an off-floor trader, you buy at the ____________ price and sell at the ____________ price.
   A. Ask/Bid
   B. Offer/Ask
   C. Bid/Ask

6. Match the terms with their respective definitions in Table 2.1.

Table 2.1 Match Term to Definition

Data	*Definition*
Last	A. The highest price a prospective buyer (floor trader) is prepared to pay for a specified time for a trading unit of a specified security.
Open	B. The highest price for the current trading day.
Change	C. The percentage the price has changed since the previous day's closing price.
% Change	D. The bottom line (net pretax profit) divided by the number of shares outstanding.
High	E. The last price that the security traded for at the exchange.
Low	F. The lowest price acceptable to a prospective seller (floor trader) of a security.
Bid	G. The total number of shares the company has issued.
Ask	H. The price of the first transaction of the current trading day.
52-Week High	I. The total number of shares traded in a day.
52-Week Low	J. This indicates where a company lists, or registers, its shares.
Earnings per Share	K. The lowest price the stock traded at in the past 52-week period.
Volume	L. Stock price divided by the earnings per share.
Shares Outstanding	M. The lowest price for the current trading day.
Market Cap	N. The amount the last sale differs from the previous trading day's closing price.
P/E Ratio	O. The highest price the stock traded at in the past 52-week period.
Exchange	P. Shares outstanding multiplied by the closing stock price.

7. The purpose of computing an index is to measure the performance of ____________.

   A. An entire group of stocks

   B. A specific sector of stocks

   C. A specific industrial sector of stocks

   D. All of the above

8. True or False: The Russell 2000 is an index that primarily tracks the performance of small cap stocks.

9. True or False: An index can be used as an investment.

10. Match the indexes with their respective ticker symbols in Table 2.2.