# Preface

#### **COMPANION BOOKS**

*Mean Reversion Trading Systems* is a companion to *Modeling Trading System Performance* and an extension of *Quantitative Trading Systems*. While, primarily for continuity, some of the material from each of those other books has been included in this book, the majority of this book is new material not covered in either of the others.

*Quantitative Trading Systems* focuses on the design, testing, and validation of trading systems. It is available at its website: *http://www.QuantitativeTradingSystems.com* 

Modeling Trading System Performance focuses on analysis of trading systems. Major topics include Monte Carlo simulation, estimation of risk and profit potential, techniques for dynamic determination of position size based on recent system performance. It is available at its website: http://www.ModelingTradingSystemPerformance.com

*Introduction to AmiBroker* is an introduction to the AmiBroker trading system development platform. It is free for personal use, and available from its website:

http://www.IntroductionToAmiBroker.com

### Blog

Dr. Bandy hosts a blog with periodic postings and articles, including links to reference material.

http://www.blueowlpress.com/WordPress/

#### **EDUCATIONAL MATERIAL**

This book is intended to be educational. Trading systems, portions of trading systems, and results of applying trading systems are shown to illustrate points of discussion. None of the results are from trades actu-

ally taken. All of the results are simulated. None of these systems, or the ideas behind them, are intended to be used as trading systems as they are presented. Always do your own research, system development, and validation before trading any system.

All of the ideas, methods, and techniques discussed are either original developments made by Dr. Bandy, are available from easily accessible non-copyrighted materials, or are used with permission. When known, original authors are given credit. No non-disclosure agreements have been violated.

### AMIBROKER TRADING SYSTEM DEVELOPMENT PLATFORM

In order to describe trading system topics unambiguously, it is necessary that they be coded into the language of a development platform so that they can be tested. Programs in this text are coded in AmiBroker's afl language. The AmiBroker platform was chosen because, in the opinion of this author, it is the highest quality platform available to retail-level developers. Programs written in afl are clear and concise. Execution is fast. The language is capable of implementing all of the topics to be discussed.

This text is not an AmiBroker reference or instructional manual. For that, I recommend both my companion book, *Introduction to AmiBroker*, and AmiBroker's reference and tutorial materials. The AmiBroker website is: *http://www.amibroker.com/* 

AmiBroker Version used: 5.60

End-of-day data is provided by Premium Data. *http://www.premiumdata.net/* 

Intra-day data is provided by IQFeed. *http://www.dtniq.com/index.cfm* 

## EXCEL SPREADSHEETS

Analysis of trading system results is done using Excel spreadsheets and the techniques described in *Modeling Trading System Performance*. The Excel add-in that performs the simulations is provided from MTSP's website.

#### **INTENDED AUDIENCE**

Experienced trading system developers wanting more information about methods for mean reversion and swing trading systems.

### **O**RGANIZATION OF THE **B**OOK

Chapter 1 describes mean reversion systems, compares them to other types of trading systems, and gives an overview of the characteristics of the systems that are developed in this book.

Chapter 2 is a general discussion of the trading system development process, followed by a discussion of analysis of trading system results.

Chapter 3 describes a mean reversion trading system based on a simple concept and shows that mean reversion systems are feasible.

Chapter 4 provides a development template. System settings are specified, and sections for entries and exits are provided.

Chapter 5 discusses data transformations. Whether price data or an indicator, transformations are useful to change the distribution of data —converting unbounded to bounded, changing boundaries, normalizing, linearizing, etc.

Chapter 6 discusses exits. Several exits that work well for mean reversion systems are described, and suggested for general use.

Chapter 7 discusses entries. The most frequently used methods for entering trades are discussed.

Chapter 8 discusses ways to control risk. Topics include filters, position size, and options.

Chapter 9 illustrates more complete mean reversion trading systems.

Chapter 10 discusses issues related to multi-system systems.

Chapter 11 gives suggestions for dealing with systems that are no longer working as well as they once did.

## THE AUTHOR

Dr. Howard Bandy:

- Has university degrees in mathematics, physics, engineering, and computer science.
- Has specialized in artificial intelligence, applied mathematics, modeling and simulation.
- Was professor of computer science and mathematics, and a university dean.
- Designed and programmed a well-known program for stock selection and timing.
- Was a senior research analyst for a CTA trading firm.

Readers who appreciate this book are encouraged to visit our websites and learn about the other materials available at *http://www.BlueOwlPress.com*