In this book is the knowledge needed to become a more successful trader of commodities. As a comprehensive reference and system developer's guide, the book explains many popular techniques and puts them to the test, and explores innovative ways to take profits out of the market and to gain an extra edge. As well, the book provides better methods for controlling risk, and gives insight into which methods perform poorly and could devastate capital. Even the basics are covered: information on how to acquire and screen data, how to properly back-test systems using trading simulators, how to safely perform optimization, how to estimate and compensate for curve-fitting, and even how to assess the results using inferential statistics. This book demonstrates why the surest way to success in trading is through use of a good, mechanized trading system.

For all but a few traders, system trading yields mm-e profitable results than discretionary trading. Discretionary trading involves subjective decisions that frequently become emotional and lead to losses. Affect, uncertainty, greed, and fear easily displace reason and knowledge as the driving forces behind the trades. Moreover, it is hard to test and verify a discretionary trading model. System-based trading, in contrast, is objective. Emotions are out of the picture. Through programmed logic and assumptions, mechanized systems express the trader's reason and knowledge. Best of all, such systems are easily tested: Bad systems can be rejected or modified, and good ones can be improved. This book contains solid information that can be of great help when designing, building, and testing a profitable mechanical trading system. While the emphasis is on an in-depth, critical analysis of the various factors purported to contribute to winning systems, the essential elements of a complete, mechanical trading system are also dissected and explained.

To be complete, all mechanical trading systems must have an entry method and an exit method. The entry method must detect opportunities to enter the market at points that are likely to yield trades with a good risk-to-reward ratio. The exit method must protect against excessive loss of capital when a trade goes wrong or when the market turns, as well as effectively capture profits when the market moves favorably. A considerable amount of space is devoted to the systematic back-testing and evaluation of exit systems, methods, and strategies. Even the trader who already has a trading strategy or system that provides acceptable exits is likely to discover something that can be used to improve the system, increase profits, and reduce risk exposure.

Also included in these pages are trading simulations on entire portfolios of tradables. As is demonstrated, running analyses on portfolios is straightforward, if not easy to accomplish. The ease of computing equity growth curves, maximum drawdowns, risk-to-reward ratios, returns on accounts, numbers of trades, and all

the other related kinds of information useful in assessing a trading system on a whole portfolio of commodities or stocks at once is made evident. The process of conducting portfolio-wide walk-forward and other forms of testing and optimization is also described. For example, instruction is provided on how to search for a set of parameters that, when plugged into a system used to trade each of a set of commodities, yields the best total net profit with the lowest drawdown (or perhaps the best Sharpe Ratio, or any other measure of portfolio performance desired) for that entire set of commodities. Small institutional traders (CTAs) wishing to run a system on multiple tradables, as a means of diversification, risk reduction, and liquidity enhancement, should find this discussion especially useful.

Finally, to keep all aspects of the systems and components being tested objective and completely mechanical, we have drawn upon our academic and scientific research backgrounds to apply the scientific method to the study of entry and exit techniques. In addition, when appropriate, statistics are used to assess the significance of the results of the investigations. This approach should provide the most rigorous information possible about what constitutes a valid and useful component in a successful trading strategy.

So that everyone will benefit from the investigations, the exact logic behind every entry or exit strategy is discussed in detail. For those wishing to replicate and expand the studies contained herein, extensive source code is also provided in the text, as well as on a CD-ROM (see offer at back of book).

Since a basic trading system is always composed of two components, this book naturally includes the following two parts: "The Study of Entries" and "The Study of Exits." Discussions of particular technologies that may be used in generating entries or exits, e.g., neural networks, are handled within the context of developing particular entry or exit strategies. The "Introduction" contains lessons on the fundamental issues surrounding the implementation of the scientific approach to trading system development. The first part of this book, "Tools of the Trade," contains basic information, necessary for all system traders. The "Conclusion" provides a summary of the research findings, with suggestions on how to best apply the knowledge and for future research. The 'Appendix" contains references and suggested reading.

Finally, we would like to point out that this book is a continuation and elaboration of a series of articles we published as Contributing Writers to Technical ***Analysis of Stocks and Commodities*** from 1996, onward.

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