TAMING THE PITS

A Technical Approach to Commodity Trading

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A RONALD PRESS PUBLICATION

JOHN WILEY & SONS
New York Chichester Brisbane Toronto

Library of Congress Cataloging in Publication Data:

Barnes, Robert M
A management science approach to commodity trading.

"A Ronald Press publication."
Bibliography: p.
Includes index.
1. Commodity exchange. I. Title.

HG6046.B34 332.6'44 79-12107
ISBN 0-471-05795-9

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

Dedicated to
Serious Investors

Preface

On a cold January night in 1966 I started reading a soft-cover book on commodity trading. The high leverage, fast pace, and pyramiding profits stirred dreams of the fast buck, but I was even more interested in the intriguing challenge of developing methods for unlocking the treasure chest to see how and why prices moved. That is still my principal interest—the study of investment methods.

In those early days many traders, including myself, investigated relatively simple techniques, such as charting and moving averages. The first sophisticated method I examined was linear regressions, a form of forecasting. At that point I used daily data only, and for analysis I usually considered just closing prices. But as time went on, price models became more sophisticated (due to influence from academic articles—mostly on random price behavior) and timing techniques more complex. I also started using more advanced methods, from forecasting to testing, from mathematical statistics.

The concept of systems evolved from applications in other industries. I had applied diverse ones (computer simulations, sampling, game theory) to oil research, military war gaining, and airline income problems. The idea of treating commodities trading as a *total system,* with disparate

but interlocking and dependent parts such as timing, risk capital, capital allocation, selection of investments, and even the trader himself, slowly began to gel. After all, much of life today depends on things that are highly coordinated. A car will not work unless each part works, in conjunction with all other parts. Success of commodity trading also depends on each part doing well and interlocking with the others.

The intent of this book is to look at a systematic way of commodity trading and to examine all parts of trading as a related matter. I do not intend to discuss the basic mechanics of commodities, such as how to open an account, how to place orders, or what wheat contracts are. This, hopefully, will constitute an inclusive study on proper trading for profits.

Various texts and articles on commodity trading (see the Bibliography) are currently available to the investor. Some are broadly oriented toward the basic mechanics of trading, explanations of terms, information available, and methods of trading. Others are more intensive and present specific models and mathematical concepts for timing trades. The former are aimed at the general investing public with no background in commodities or mathematics, whereas the latter limelight one or two aspects of trading and require sometimes little quantitative experience and other times a great deal.

I have tried in this book to explore, sometimes in depth and other times in a survey manner, various topics that make up the elements of a total commodity system—risk, selection, timing, capital management, and discipline. In some cases the topic does not require advanced training in mathematics. The sections on risk, selection, and discipline, and the introductory chapters that explore and tie everything together, do not demand extensive quantitative background. Likewise some chapters on timing methods (for example, charting) are elementary and well described in prior texts.

Some approaches in other sections to the timing of trades and capital management, however, do require at least one year of college mathematics to fully understand and use the results. Specifically, one should be familiar with basic concepts of calculus and probability to follow all the material in these particular chapters. I have endeavored, however, to briefly explain in nonmathematical terms in those chapters the rationale, general principles, and results of more rigorous mathematics. In most cases simple usable calculation procedures have been arrived at, even though the development of some might require more background than the reader possesses.

The depth of treatment varies from chapter to chapter, reflecting both the state of the art and my attempts to elaborate and expound on new and

relatively new concepts. For instance, charting is well known and extensively described in the literature; hence I considered it superfluous to expound on and on about it and be redundant in addition. This and other well-tread subjects can be read in more depth by choosing from the Bibliography. In other areas, such as new timing methods (statistical testing methods, Chapter 16) and account growth simulation (Chapter 22) have not been explored at all and require extensive treatment. Even in these areas the work is new, there is a lot of unexplored material, and entire texts could be built around them (for example, velocity and acceleration methods).

The objective of this text is manyfold. For many it can serve as an introduction to the elements of the total trading concept (exclusive of mechanics, treated extensively in other texts). It may be a springboard to other, more intensive studies covered elsewhere. Others may use the book as a reference text on many timing systems, for example. The Bibliography may spur some on to other studies. Individual chapters on timing methods, risk attitudes, or capital management may give enough detailed information to the commodity trader to apply to trading without additional work.

Most chapters do not require any preparatory reading or courses. Even many of the timing chapters are self-contained and do not require prerequisite or supplementary outside reading. Some, like the chapter on wave theories, are survey in nature and are so broad that extensive, reasonable coverage would encompass a text on each. Here it is advisable to consult the Bibliography (for example, books on Eliot wave theory and Dow theory) to have complete understanding and be able to apply the concepts in actual trading.

Some chapters, however, require careful attention and a good mathematical bent on the part of the reader. Specifically Chapters 16–22 require, in varying amounts, calculus and probability background. If the reader does not have it, he can still understand the results and final formulas applications and accept the critique of the method. Barring taking a year of calculus and probability, he may wish to borrow the services of an engineer or scientist friend. However, he can still, in most cases, use the final formulas, without too much difficulty. For instance, he could use the little probability formula in Chapter 21 and some data on his account's growth to project future account decays to let him know how bad the account could falter and to see whether its growth was still on target.

Greenwich, Connecticut
April 1979

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Introduction

Perhaps the space age did it, maybe industrial engineering made it happen, or possibly even transcendental meditations revealed it. In any case, people are talking systems. A transportation system, federal budgeting system, or stereophonic sound systems—all involve sophisticated parts interdependent on each other for a complete effect.

And so it is with commodity trading. First, the complete effect (profitable results) depends on having enough *risk moneys* to start trading and to withstand periods of losses. Second, it means an investor in this arcane endeavor must *select* the right commodities for trading to ensure the most efficient use of the investment dollars. Third, *timing* of trades is ultraimportant to make sure trades are basically profitable. Fourth, the investment dollar must be *well-managed*, too, to bring about optimum growth at minimum risk. Managing an account means also knowing what to expect in trading performance. Fifth, the trader must be a guru, self-disciplined and able to run the trading system like an automaton. I try to cover all aspects of a systematic approach to trading in this book.

Section 1 is devoted to general discussions of a trading system. Chapter 1 compares different areas of investments (stocks, bonds, real estate, commodities, etc.) for risk and return and different ways commodity traders now have for attaining success in trading. Chapter 2 is an essay about

how to define, model, and solve trading problems and how to construct and use a general systematic method for trading profitably. The latter part of this chapter serves as a broad introduction to the whys and wherefores of the rest of the book.

Section 2 (Chapter 3) concerns risk: who, why, how much, and under what circumstances. A survey and psychological examination of risk attitudes toward investments and commodities in particular is also reviewed.

Section 3 (Chapter 4) is devoted to selecting proper commodities for trading. Judged against many criteria, some commodities are shown to be unsuited for systematic trading opportunities and others ideally so. Each commodity is discussed, graphed, and examined in detail.

Section 4, timing, contains fifteen chapters, each devoted to a major or innovative trade timing (when to buy, when to sell) method. There are essentially four schools of timing: forecasting prices, detecting trends, no trend (trading market), and pattern recognition. The fifteen timing methods pretty much span the gamut of new or used interesting approaches: fundamental, charting, moving averages, contrary opinion, oscillator, congestion phase, breakout, wave theories, secondary reaction, marrying methods (trend and contrary here), statistical testing, velocity and acceleration, equilibrium, and adaptive forecasting.

Section 5, capital management, concerns the optimum initial and reinvestment strategies (Chapter 20); evaluating how well or poorly an account is doing compared to preset guidelines (Chapter 21); and simulations of several account growths—one a coin-toss, and two examples of actual account statistics fed in (Chapter 22).

Section 6 discusses personal trait characteristics needed to assure good investment discipline to follow a trading system faithfully. Nearly twenty traits are considered.

Section 7 concludes with an extensive bibliography on writings bearing on investment methods.

SECTION I

THE TRADING SYSTEM

1 The Sweet Smell of Success

Success is a funny thing. Like beauty, it is in the eye of the beholder. Most people desire it. But unlike beauty, it has a more tangible meaning to individuals. Most often success is measured by the possession of material objects (e.g., house, office, boat). Climbing the corporate ladder also has the obvious material reward of high salary with the added ego gratification of increased recognition and power.

Others, especially since the onslaught of the beatnik and hippie eras in United States history, have different concepts of success. The definition has widened and stretched. Success can encompass a wider variety of areas—from acrobatics to Zen Buddhism. Success to some, then, depends on very personal achievement—virtuosity in craftmaking, home (commune) building, growing vegetables, and so on.

But success in intangibles also becomes important. The attainment of inner calm, control, and sharpening of all the senses are considered just as or more desirable than monetary or other tangible achievements. Recently, transcendental meditation, extrasensory perception (ESP) and Eastern religious rituals have greatly influenced United States and Western goals and mores, too. Physical training (participatory sports such as tennis,

hiking, jogging) has become both an aid and an end in itself in attaining success.

In fact, it is not uncommon to see an individual wake up early, meditate in an awkward position with a funny smell lingering about; jog and sweat for a few miles, play a set or two of tennis, shower and sauna, and then drive to a client's office and close a $3 million deal.

SUCCESS IN INVESTMENTS

Perhaps second only to the recent deluge of books on attaining inner (self) success is the proliferation of writings on investment success (see bibliography). They range from rather esoteric self-discipline treaties to hard-nosed mathematical concepts of trading formulas. Included are a number of important books and essays on stock-market techniques, and details and critiques of a few that would pertain to the commodity futures markets. But the main body of references and discussion in this book concerns the area of commodity futures.

THE SPECTRUM OF INVESTMENTS

Generally, the first decision a person seeking success in investing must make, after deciding he does indeed have enough moneys for investments, is to determine which area or areas in which to concentrate his capital commitments. Of course, this decision is dependent on funds available for real risk and how much riskbearing he can afford. This clinker can be serious; if an individual has an adequate income to meet current and projected needs but only has $4000 of idle capital, he probably would want to consider only investments that have little risk and great liquidity to meet sudden or unanticipated living needs. Assuming this individual has real investment money (not needed for any foreseeable living needs), he is faced with a kaleidoscope of possibilities for investing. Figure 1 presents a representative (but not complete) spectrum of investment alternatives, a speedometer of investments. The stepping order is approximate, and in particular times and instances some places should be interchanged.

On the low edge of the risk rainbow lie government obligations: mortgage notes, treasury bills, savings bonds, and so on, which are backed by the United States government. Obviously, if the federal government can-

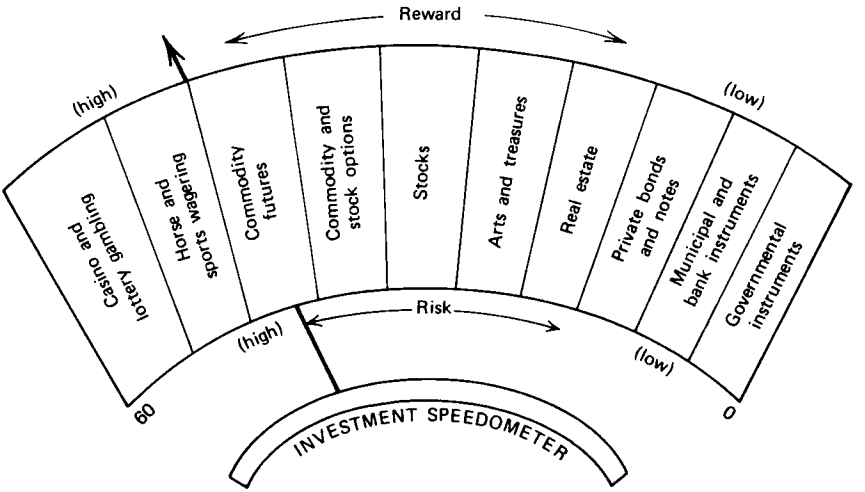

Figure 1. The spectrum of investments.

not meet its obligations, the entire economy is really in jeopardy and it doesn't matter whether your particular investment is safe. *Nothing* would be safe at this point; anarchy may occur.

Next, with a higher degree of risk, are municipal bonds and various bank instruments. Cities will generally be around and solvent for a long time and banks are backed, to a large extent (though limited to $40,000 for each savings account), by the federal government. But even here there are occasional pitfalls. Banks (recently even large ones) have gone bankrupt, and more and more frequently, towns and cities and even New York City have or are faced with possible defaults on interest and principal payments. Further on up, private (corporate) bonds and interest-bearing notes are paid to holders before profits to stockholders but are still vulnerable to corporate failure.

Real estate represents solid footing in the investment arena, as values generally increase year to year (reflecting general inflationary tendencies in the economy and the fact that it is a limited, nonproducible good). But individual circumstances vary. Lake and ocean-front recreational property values have been rising steadily and fast for the past several decades, reflecting an acute shortage of space, increasing prosperity of individuals and their rising aspirations for recreational space; likewise for suburban property, especially around large cities. Here the situation is accentuated because of growing population and racial overtones. In the other direction,

however, there are many borderline properties, especially in big-city urban areas, which are highly risky, speculative undertakings. Changing living habits and building patterns can and do affect real-estate values over the years very radically.

Arts and treasures, like real estate, can hold their value very well. Diamonds especially do and will move up easily with inflation but rarely depreciate. However, like real estate, great bargains or solid values (e.g., owning a Rembrandt) can occur, but so can values drop precipitously, especially on works of unknown artists.

Securities can rise substantially, of course, but can also fall dramatically. General economic, governmental, worldwide, and even narrow industry and geographical area influences can be felt on a particular stock. And for seemingly no reason at all, stocks can plunge. Investor lack of confidence (e.g., the 1974 market crash) due to economic recession can sharply affect stock values. Prolonged doldrums have persisted with an adverse, frustrating effect on stock owners.

Stock and commodity options probably rank next highest in risk. For a certain period of time the holder of an option has the right to purchase (or sell) a given amount of the stock or commodity at a previously set price. For this right he pays a fixed amount of money (the premium). If the stock's price prior to the expiration date is considerably better than the set price and results in a profit large enough for him, he will exercise the option. However, there is often less profit or even none before the period is up, resulting in partial or total loss of the investment (the premium).

Commodity futures can be even more speculative than options. Because the investor is putting up only a small portion of the value of what he is trading (e.g., typically 30¢ on a $3.00 bushel of wheat), a change in price of 10% or more could not only wipe out his original investment but make him owe the broker more (if the price of wheat dropped, say 40¢ from the price at which he had bought and he had only put up 30¢). This type of risk can be reduced substantially (but not eliminated) by the use of loss-mitigating and -limiting methods, such as stop losses, diversification into many commodities, and adequate reserves.

Finally, two areas of quick return—quick loss are, from a probability basis, the most risky of investments. Horse and other sports betting results in either gain or total loss (of the committed money). Usually within minutes (horses) or hours (sports) you'll know whether you've won or lost. With casino games (blackjack, roulette, one-armed bandits, or craps) and state lotteries, the elation or disappointment will register on your face within seconds. Here, too, loss of the investment is total.

Curiously, there is a relationship between the extent of risk and the speed with which the outcome occurs. The faster the outcome, the larger the potential loss. In a craps throw it takes seconds to find out if you've won or lost, whereas a government bond won't mature in perhaps twenty or thirty years.

Likewise, there is a strong correlation between risk and reward (return) of the investment. Gambling returns can pay as low as two or three times the original stake up to hundreds of times. Lotteries are cherished by afficionados for the instant millionaire potential of a dollar bet or less. Of course, the risk of total loss is very high, balancing off the high potential reward.

Going down the spectrum, horse bets pay off from 20% return to 20 : 1 gains and sports bets generally less of a range.

Commodity futures, with less risk from a practical standpoint (few lose their whole stake or more right off the bat), can produce winnings in the same range as horse bets. There is also more information handy and less luck involved than with horses.

Commodity and stock options generally have less reward to investment ratios than with commodity futures because the premiums for options are generally larger than the margins or deposits required to trade the same commodity futures or stocks.

Stocks have the great potential for doubling, tripling, or even ten- and twentyfold increases, but the time involved to accomplish that is long compared to commodity futures and occurs less often.

Real estate values can also skyrocket—three and fourfold increases over five years is not completely rare. Occasionally you hear about Las Vegas real estate increasing from $100 an acre before World War II to several hundred thousand dollars now, but such cases (including Florida booms) are fairly rare, over and done with, or touched by scandal. Normally, real estate will keep pace with a combined growth rate of inflation and population.

Corporate bonds and notes usually pay better than do bank interest but are held to 7–20% per year payouts. Convertible corporate bonds add a little tickler to this category and act a little like a stock or stock option, with a mixture of (low) fixed return plus good-sized growth potential, depending on its cousin's, the stock's, price-movement inclinations.

Bank savings pay nearly the lowest reward of any of the investments, although they are quite safe. Inflation, however, makes this investment worth less in buying power in the future almost certain; hence this is an almost certain *losing* investment, with virtually no hope of reward if any sizable inflation is present.