



Agricultural Futures and Options

Principles and Strategies

S E C O N D E D I T I O N

Wayne D. Purcell
Stephen R. Koontz

SECOND EDITION

AGRICULTURAL FUTURES AND OPTIONS

Principles and Strategies

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CONTENTS

Preface ix

CHAPTER 1 The Basics of Commodity Futures 1

Commodity Futures: What	2
How Trade Is Conducted	3
The Accounting Process	5
Months Traded and Why	8
Commodity Futures: Why	11
Commodity Futures and Price Discovery	11
The Hedging Mechanism	15
Commodity Futures: How	20
Hedgers' Strategies	20
Speculators' Strategies	25
Futures Market Regulation	27
Summary	28
Key Points	28
Useful References	29
Appendix 1A: Contracts, Contract Sizes, Exchanges	30
Appendix 1B: Months for Which Futures Are Traded by Commodity	31

CHAPTER 2 Cash-Futures Basis: The Concept, Uses, Issues 32

Calculating and Recording	32
Level of Basis	36
Basis as a Barometer	38
Uses of Basis Patterns	40
Basis as a Decision Criterion	46
Basis Contract	46
Delayed Pricing Contracts	47
Sell Cash, Buy Futures	48
Basis Contracts in Production Programs	50
Summary	51
Key Points	52

Useful References	53
Appendix 2A: Speculation and Tax Implications	54

CHAPTER 3 Fundamental Analysis: Supply and Demand 56

Introduction	56
The Supply-Demand Framework	57
The Supply Side: Crops	60
The Demand Side: Crops	68
Ending Stocks	69
The Supply Side: Livestock	72
Seasonal Patterns: Cattle	74
Seasonal Patterns: Hogs	80
The Demand Side: Livestock and Poultry	84
Monitoring Short-Run Demand	91
Summary	93
Key Points	94
Useful References	95
Appendix 3A: USDA Information Services	96
Appendix 3B: Models and Applications	99

CHAPTER 4 Technical Analysis: The Bar Chart 104

Introduction	104
Technical Analysis in Perspective	104
The Bar Chart	105
Trend Lines	106
Resistance Planes	111
Support Planes	118
Double Tops, Bottoms	121
Head-and-Shoulders Formations	124
Key Reversals	128
Hook Reversals	130
Consolidation Patterns	133
Additional Chart Signals	141
Complements to Chart Patterns	147
Trading Volume	147
Open Interest	148
Relative Strength Index	151
Analysis of the 1996, 1997, 1998 Corn Futures	154
Long-Term Bar Charts	159
Summary	160
Key Points	160
Useful References	161
Appendix 4A: Types of Orders and Demonstrations of Use	162

CHAPTER 5 Technical Analysis: Alternatives to Bar Charts 167

Point-and-Figure Charts	167
Moving Averages	174

Summary	180
Key Points	181
Useful References	181
Appendix 5A: Moving Averages: Added Discussion, Refinements	183

CHAPTER 6 Psychology of the Markets 186

Introduction	186
The Herd Complex	186
Aids to Discipline	188
Open Interest	188
Relative Strength Index	190
Positions of Traders	192
Chart-Related Aids	193
Alternatives to Bar Charts	196
An Overall Philosophy	199
Summary	201
Key Points	201
Useful References	202

CHAPTER 7 Options on Futures Contracts 203

Introduction	203
Basic Options Trading	204
Combining Cash with Futures and Options Positions	213
Basic Strategies for Forward-Pricing with Options	216
Comparing Price Floors, or, What Option to Choose?	220
When to Use Options	221
More Advanced Options Trading	225
Advanced Strategies for Forward-Pricing with Options	232
Option Pricing with Black's Formula	236
Historical Volatility and Implied Volatility	245
Other Advanced Strategies for Forward-Pricing with Options	248
Distribution of Futures Prices and Returns to Hedging	251
Summary	253
Key Points	255
Useful References	256

CHAPTER 8 Currency Markets and Exchange Rate Futures 257

Introduction	257
Currency and Exchange Rate Basics	258
Exchange Rate Trading Examples	260
Exchange Rate Hedging Examples	262
Pricing Models	266
Exchange Rate Fundamentals	269
Summary	272
Key Points	273
Useful References	274

CHAPTER 9 Interest Rate Futures 275

Introduction	275
Interest Rate and Debt Pricing Basics	277
Interest Rate Futures Trading Examples	283
Interest Rate Hedging Examples	285
Interest Rate Fundamentals	295
Summary	298
Key Points	300
Useful References	300

CHAPTER 10 Index Futures Contracts 302

Introduction	302
Definition of Various Common Indexes	303
Index Trading Examples	307
Index Hedging Examples	310
Index Pricing Models	316
Index Fundamentals	317
Summary	320
Key Points	321
Useful References	322

CHAPTER 11 Price Risk Management Strategies 323

Introduction	323
Attitude Toward Risk	324
Financial Position of the Firm	326
Management Ability	328
Management Strategies	329
Conservative Strategies	329
Intermediate Hedging Strategies	335
Sophisticated Hedging Strategies	351
Hedging Strategies in Perspective	359
Summary	360
Key Points	360
Useful References	361

CHAPTER 12 Cash-Futures Relationships: Causes and Criticisms 362

Some Common Conceptions and Misconceptions	363
Futures Trade Is Not Needed	363
Futures Prices Cause Breaks in the Cash Market	365
Futures Trade Increases Variability in Cash Prices	370
The Supply Response Issue	371
The Convergence Issue	373
Basis Problems	375
Cash Settlement Issues, Concerns	376
An Overall Observation	378

Summary	379
Key Points	380
Useful References	380

CHAPTER 13 An Overall Perspective 382

Background	382
The Total Picture	384
A Final Word	389
Useful References	390

Glossary 391

Index 397

PREFACE

In a historical context, highly visible trade in commodity futures is still relatively new. During the 1960s and 1970s, price volatility in the agricultural commodities increased significantly. Changes in government policies and increased exposure to a world market brought price uncertainty to the grain and oilseed complex. Volatile prices for feedstuffs, fluctuating demand for beef and pork, and short-run changes in the number of cattle and hogs in feeding programs brought increased price variability to the livestock complex. Exposure to the risk of unpredictable price fluctuations became a major economic problem for agricultural producers.

In the 1980s, still other sources of risk surfaced. Interest rates moved to unprecedented levels and became more volatile. Exchange rates for the major world currencies fluctuated. The U.S. stock market proved vulnerable to the surrounding economic instability and stock prices began to fluctuate, often wildly. The 1985 farm bill legislation paved the way for loan rates often well below market prices, and grain prices became even more volatile as exposure to global market uncertainties was accentuated.

To an economic environment that was increasingly characterized by exposure to price risk came new futures instruments and a revitalization of older instruments. The grain and oilseed futures were more widely used. Futures contracts in live (slaughter) cattle were initiated in 1964, and trade in hog futures followed in 1966. Feeder cattle futures were started in 1971. Interest rate and foreign currency futures were initiated in the 1970s, and trade in stock index futures burst on the scene in 1982. A bit later in the 1980s, trade in options on futures for the agricultural commodities was authorized, and a significant new and flexible price risk management tool was introduced. All the developments were motivated by a common objective: to provide a means of protecting against increasingly dangerous and unpredictable fluctuations in cash prices.

In the 1990s, the trends toward uncertain market conditions increased their speed. The North American Free Trade Agreement and the General Agreement on Tariffs and Trade formalized the moves toward increased world trade. New farm bill legislation, passed in early 1996, brought an end to the long-standing programs of acreage set-asides and deficiency payments. Even the dairy farmer was now facing price risk. The need for effective price risk management escalated.

Potential users of the futures and options markets are sometimes intimidated by change and the introduction of new services. Adaptation and use are often delayed.

Beginners often perceive the markets to be complex and obscure, but they are neither. The primary objective of this book is to provide the beginning student of the markets with the understanding and basic tools needed to use the futures markets and options on futures contracts effectively.

In terms of level, the first edition of this book was written with a third-year student in a college or university program in mind. It was intended also to fit the needs of the second-year student in a two-year program. It was definitely a beginning-level book. The only prerequisites were an interest in the markets and some exposure to basic principles of economics. The student or the private-sector reader who is interested and curious and who has no formal education in economics should have been very comfortable with the book.

The book was designed for a one-semester course or a two-quarter sequence. Each succeeding chapter was designed to take a logical step forward in the education process. Both fundamental (supply–demand) and technical analysis (charts, chart interpretations, etc.) are stressed. The orientation is toward the agricultural sector, but the relatively new financial futures were also covered.

This second edition builds on the basic framework of the first edition. Coverage of options on futures is expanded, with more attention to option premiums. Options on futures are increasingly popular with decision makers, and more detailed coverage is merited. Separate chapters on foreign currencies and on stock market applications have been added. As our exposure to a global market grows, currency exchange risk becomes more important and has direct ramifications for the American farmer. And all the markets—stock, financial, agricultural, currency—are becoming closely intertwined.

Each chapter contributes to the base of understanding on risk management, but Chapter 11 is perhaps the most important chapter in the book. It integrates the fundamental and technical analyses of the markets and demonstrates strategies tied to the financial position of the firm and to the abilities of the firm manager. Chapters 1 through 10 provide the necessary base and Chapter 11 pulls it all together in what is intended to be a unique and creative way.

Chapters 12 and 13 put it all in a proper perspective. The tools that will allow successful use of the futures markets and options are relatively easy to acquire. The perspective and the discipline that are sufficient conditions for effective use of the markets are not that easy to acquire. Throughout this new edition, that thread of thought is present, and a conscious effort is made to deal with the intangibles of the market as well as the more apparent and observable dimensions. An explicit example of this orientation is Chapter 6, which deals with the psychology of the markets and of the trader.

In putting the initial book together some choices had to be made. Not everything can be or should be covered in one book. Many futures instruments including crude oil, gasoline, and lumber are not covered in any detail. The coverage of financial futures and foreign currencies was limited to one chapter, and that reflects another choice that was difficult to make. It is important for the beginner in these markets to recognize the risk of volatile interest rates and the implications to export demand of changing exchange rates. The expanded coverage demonstrates those issues and contributes to the breadth of the book that is so important in a beginning treatment. The new chapter on stock market futures and options applications reflects the growing importance of futures-based risk management in this important market.

References listed at the ends of the chapters were selected because they deal with the concepts in the chapters. There is no attempt, in a beginning-level book, to provide an extensive listing of the literature, and that approach represents another choice

that had to be made. In the end, we focused on a coverage that is sufficiently broad to give the reader an accurate impression of the scope of activity in futures, but is sufficiently detailed to give the important working knowledge of futures trade.

All this is important. The futures markets offer tremendous economic potential to the individual decision maker and to sectors of our economy. The individual has the opportunity to manage exposure to price risk. A particular sector, such as the agricultural sector, has the opportunity to transfer the costs of exposure to price risk to the speculator who is outside the sector and who is willing to accept that risk.

We need to move to use of the markets from an understanding of what they can and cannot do with an open mind and from an informed perspective as to what trade in futures and options on futures can offer. Contributing to that perspective has been an equally important objective of the book. As readers, we hope you enjoy reading this edition of the book as much as we have enjoyed preparing it.

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