



Wiley Trading Advantage

SEASONALITY

SYSTEMS, STRATEGIES,
AND SIGNALS

JAKE BERNSTEIN

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Systems, Strategies, and Signals

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PREFACE

Traders have given considerable attention to the role of supply, demand, earnings, underlying economic conditions, interest rates, inflation trends, money supply, and a host of other variables regarding the prices of stocks and commodities, but they have consistently and persistently ignored the importance of seasonality. Although traders, investors, and analysts may have their private reasons for ignoring seasonal factors and forces as significant to market trends, the primary reason, I believe, is their ignorance. The simple fact is that most traders and market analysts are not aware of the impact that seasonal price tendencies can have on trends in stock and commodity prices.

Another reason for the general lack of interest in seasonality is that many traders confuse seasonality with weather, often equating the two. This error leads them to the wrong conclusion that a market such as the Swiss franc cannot exhibit a seasonal pattern because it cannot be affected by weather. Based on my extensive seasonal research since the early 1970s, such a conclusion is incorrect; it also reveals ignorance and closed-mindedness. Traders who seek success would do well to heed the lessons of seasonality.

In addition to my own research, a number of respected market analysts and economic researchers have helped further the cause of seasonality, including MBH Commodity Advisors, Inc. (Winnetka, Ill.), and Commodity Research Bureau (Chicago). The pioneering work of the

Foundation for the Study of Cycles (Wayne, Pa.) and the seasonally oriented findings of W. D. Gann, Art Merrill, Burton Pugh, Samuel Benner, and Yale Hirsch have been significant but have barely scratched the surface of what may yet be achieved by detailed statistical analysis of seasonal price trends. Paradoxically, traders and investors strive relentlessly to find systems, methods, indicators, techniques, schemes and approaches that yield consistent profits with limited or reasonable risk, yet they tend to ignore those methods that are among the most effective and logical. Today, seasonality in stock and commodity prices remains one of the best-kept market secrets. Perhaps the concepts and methods explained in this book will help to increase the awareness and use of seasonal concepts.

IS COMPLICATED BETTER THAN SIMPLE?

We live in an age of fascination with the complex. We have been mentally and behaviorally conditioned to place great value on what is difficult to understand and achieve, and to look askance at that which is logical, readily understandable, or otherwise uncomplicated. The age of elementary Cartesian logic and empiricism, which formed the cornerstones of scientific advances, has been lost to the lure of fuzzy logic and artificial intelligence. I have no argument with the need for more advanced forms of intellectual and scientific reasoning, but we must also remember that many of the basics still apply.

Of all the concepts that a futures trader can learn, one of the simplest is seasonality. In fact, of all the logical concepts that a futures trader can learn, the most basic, the most readily understandable, and the most easily applied is seasonality. Yet many traders seem to prefer to wallow in a sea of complexities. They struggle with subjective concepts and work laboriously for hours on end, analyzing markets with numerous indicators, rather than complete their arduous task by using time-tested and reliable concepts.

Seasonality may not be the Holy Grail of futures trading; nevertheless, the use of seasonal concepts and methods in futures trading can do the following:

- Lead to objective decisions based on a logical and operational methodology.

- Facilitate the development of a solid, analytical decision-making framework.
- Provide a backdrop of probable market trends in most time frames and in most markets.
- Improve your odds of success as a trader by focusing on historically valid patterns and methodologies.
- Assist in the selection of historically valid seasonal spread trends.
- Provide historically valid input for use as an adjunct to other analytical methods and timing indicators.

That is what the use of seasonal concepts in futures trading *can* do for you. Here is what the use of seasonal concepts *cannot* do for you:

- Be the ultimate, fail-safe method to achieving vast wealth.
- Give you perfect market timing.
- Be correct all the time.
- Eliminate the risk of futures trading.
- Give you deep insights as to the meaning of market trends or their causes.

The following are my primary goals in publishing this book:

- *To increase public awareness of seasonality.* This is my most ambitious goal. For too many years, too few traders have been aware of how reliable seasonals have been in virtually all markets. My intent is not only to make the major seasonals known to all readers, but also to point out their relative accuracy (or lack thereof) and to highlight the ideal time frames of high probability up-and-down moves in the various markets as well as in spreads. I illustrate the history and efficacy of seasonality in daily, weekly, and monthly time frames and in an objective and historically valid fashion so as to dispel any ideas that seasonal patterns are merely random events or artifacts of historical data.
- *To provide a logical and effective trading framework for the use of seasonals.* I provide objective and logical seasonal methods that range from market analysis to precise seasonal trade implementation complete with risk management. Traders who are

interested in progressing beyond the methods outlined in this book will be able to do so readily, using any of several timing methods that I suggest.

- *To emphasize the validity of seasonality as a long-term as well as a short-term method.* The fact that seasonality exists in all time frames is a strong testimonial to its validity as an underlying fact of market life. This book provides numerous examples of seasonality in different time frames and suggests various ways to use the seasonal time frames.
- *To balance facts and underlying causes.* Traders can profit in several ways by using technical market methods. They can impose their own framework on the markets, trading within the dictates of their parameters, or they can attempt to trade within parameters that are a function of underlying market behavior. This duality is similar to the analogy in medicine between the treatment of symptoms and the treatment of underlying causes. Both methods can be effective; both can be ineffective. The purist would argue that understanding underlying causes is the only valid approach, since it deals in reality. Technicians would argue that merely understanding the “why” of things does not guarantee profitable timing or trading, and they would argue as well that timing is more important than understanding.

In fact, seasonality combines some of the best features of both approaches. On the one hand, it is both the explanation of the fact and the fact at the same time. Seasonality has a basis in fact, not in theory. In other words, most of the time we know what causes a seasonal move to occur. In addition, we know how often seasonal moves have occurred. Although I do not attempt to predict the future use of seasonality, I do believe that seasonals that have shown a particular tendency for many years are likely to continue that tendency. Hence, a seasonal is a technical fact as well as a fundamental condition. If this distinction is unclear to you now, I assure you that it will become abundantly clear as you read this book.

To demonstrate that seasonality has a place in all trading systems. Filtering a trading system by including major seasonal moves as an input can substantially improve overall performance. This is not to say that the marriage between seasonals

and technicals will always be effective. Sometimes, of course, seasonals are either wrong or have shifted in their timing, and the sad but true fact is that during such times, seasonals lose money. There is no avoiding the market reality that seasonality is not perfect; nevertheless, it can be a great asset.

A CAVEAT

I assume that readers are well acquainted with the risk of loss in futures trading and that they have sufficient knowledge, intelligence, and risk capital to trade the markets and understand the inherent risks. Yet by decree of the regulatory agencies that oversee the futures markets, as well as those of us who write about the markets, I am required to restate the caveat. Please consider this warning to be my due diligence in fulfilling the legal mandate to forewarn you of the risks.

JAKE BERNSTEIN

*Northbrook, Illinois
February 1998*

CONTENTS

CHAPTER 1

Seasonality, Price History, and Humankind 1

CHAPTER 2

An Overview of Seasonal Research 19

CHAPTER 3

Seasonal Price Patterns in Cash Market Data 33

CHAPTER 4

Seasonal Price Patterns in Weekly Futures Market Data 47

CHAPTER 5

Seasonal Spread Relationships 65

CHAPTER 6

Daily Seasonal Price Tendencies 85

CHAPTER 7

Critical Seasonal Month Concept 99

CHAPTER 8

Key Date Seasonals 109

CHAPTER 9

An Overview of Seasonal Trading Systems, Methods,
and Concepts 119

CHAPTER 10

Combining Seasonality with Timing 135

CHAPTER 11

Conclusions and Suggestions for Further Research 147

APPENDIX A

Examining Daily Seasonal Cash Tendencies 153

APPENDIX B

Monthly Seasonal Cash Charts 171

APPENDIX C

Selected Weekly Seasonal Charts 185

APPENDIX D

Key Date Seasonal Trades 197

APPENDIX E

Software Used in Writing This Book 209

INDEX 211

1

SEASONALITY, PRICE HISTORY, AND HUMANKIND

THE AGE-OLD QUEST

For thousands of years, people have been fascinated with the prospect of someday controlling nature. This hope continues to flourish to this day, and technological advances in weather forecasting have kept the dream alive. Advances in genetic engineering as well as in weather forecasting have fueled the flames of control. The ability to control nature, which in fact controls us, has vast ramifications in virtually every area of life: social, political, economic, and agricultural. Nevertheless, it is unlikely that we will ever be able to control or predict nature fully.

Arguably, the desire to control nature originated in the human quest for survival. Inasmuch as nourishment and shelter are two of the most basic human needs, issues relating to their fulfillment have always been central considerations in human life. The utopian view of an environment constantly stable and perfectly engineered to maximize comfort and the growth of crops and livestock will not likely be achieved in our lifetime, but the hope is nonetheless undiminished.

Imagine an environment perfectly suited to the most efficient production of crops and livestock. Imagine as well a world tailored to optimum conditions for recreation. In such a perfectly engineered world,

humans would be free to follow their pursuits without concern about the limitations of weather. The most significant benefits of weather control, of course, would be those that would ultimately help feed all the peoples in the world. Starvation would disappear (provided the politics of food distribution did not interfere with the increased production of crops and animals).

POSSIBILITIES, UNDERSTANDINGS, AND POTENTIAL

The possibilities of what might be achieved in such a state are vast. What would our priorities be: to feed the starving, or to achieve the greatest profit? Would the control of weather become a political tool for ruthless rulers? Would it become the basis for still more political conflict? It is unlikely that we will ever know the answers to these questions in the course of our lifetime. Clearly, the control of nature is a task so immense, a goal so lofty and ambitious, that in spite of our advanced and steadily growing technological skills, it is most likely unattainable in the foreseeable future. I am not saying that certain limited aspects of our environment are beyond control, nor am I saying that minor environmental changes cannot be achieved in the near future. I am, however, expressing doubt about the extent to which such control is attainable.

Of course, the term *control* as applied to virtually any endeavor nowadays is politically incorrect. A necessary aspect of control is responsibility. If control of the weather ever becomes a reality, it will bring with it a plethora of issues—ethical, moral, legal, and social—that will require resolution. Indeed all progress has negative and regressive aspects as well as positive ones.

Perhaps the next best thing to control is understanding. In understanding the cause-and-effect relationships of a situation, it is often possible to predict, within reasonable limits, when changes will occur. This view is a mechanistic or empirical one, which assumes that cause and effect actually do exist. There is a considerable body of philosophical thought that calls into serious question the value of and/or the existence of cause and effect. These are, however, beyond the scope of my discussion and analysis in this book.

The skill to predict when environmental change is most likely to occur adds immeasurably to the repertoire of our preparedness to cope

with nature's changes. Therefore, advance knowledge of nature's possible changes can lead to action, and positive action ultimately leads to survival and growth. However, positive action cannot proceed without an understanding of how the forces of weather operate to bring about change. In this respect, the ability to forecast weather patterns correctly is a function of the ability to understand the dynamics and scientific basis of weather.

The ability to forecast weather—to understand the seasonal changes in nature and prepare for these events—is vital to human survival. Consider the catastrophic events that have occurred as a result of our inability to forecast and prepare for cataclysmic changes in weather. Unexpected twisters, storms, hurricanes, and floods have taken a vast toll through the centuries. Immense loss of life, crops, livestock, shelter, and natural resources could have been avoided or significantly reduced had we been able to predict such catastrophes.

The Cyclical Nature of Weather Patterns

Research has shown that weather patterns tend to repeat themselves, often following cycles that can be up to hundreds of years in length.¹ The writings, research, and teachings of Leonard W. Wing are only one small aspect of the effort made in this direction. Wing discovered many critical relationships in weather and temperature patterns, yet his work is still relatively unknown. There is a growing body of evidence to suggest that the ultimate cause of weather patterns is related to the cycles in sunspot numbers. The Foundation for the Study of Cycles (in Wayne, Pennsylvania) has examined sunspot cycles extensively and has documented their existence, as well as their predictability and correlation with weather patterns on earth.²

Weather Patterns and Human Emotion

The Russian professor S. L. Tchijevsky was specific in his assertion that humanity is a slave to the seasons. In 1926, he wrote:

¹E. R. Dewey, *Cycles—Selected Writings* (Pittsburgh: Foundation for the Study of Cycles, 1970), pp. 761–765.

²*Ibid.*, pp. 750–759.

In the middle points of the cycle, the mass activity of all humanity, assuming the presence in human societies of economical, political or military exciting factors, reaches the maximum tension, manifesting itself in psychomotoric pandemics, revolutions, insurrections, expeditions, migrations, etc.—thus creating new formations in the existing separate states and new historical epochs in the life of humanity. It is accompanied by an integration of the masses, a full expression of their activity and a form of government consisting of a majority.

In the extreme points of the cycle's course, the tension of the all human military-political activity falls to the minimum, giving way to creative activity and is accompanied by a general decrease of military or political enthusiasm, by peace and peaceful relations, science and art, with a pronounced tendency towards absolutism in the governing powers and a disintegration of the masses.³

W. D. Gann: High and Low Seasonality in the Stock Market and Soybean Prices

The work of W. D. Gann, the legendary stock and commodity trader, was quite clear in its tenets regarding seasonality in the stock and commodity markets. In *How to Make Profits in Commodities*, Garr noted the seasonal pattern of soybean prices from 1913 to 1941, as follows:

Soy Beans—Months When the Most High and Low Prices Have Been Reached

This covers the period from 1913 to 1941, or 28 years.

During this period:

January	High 4 times	Low 7 times
February	High 3 times	Low 7 times
March	High 2 times	No Lows
April	High 1 time	No Lows
May	High 3 times	No Lows
June	High 3 times	No Lows
July	High 3 times	Low 2 times

³S. L. Horner, "Tchijevsky's Index of Mass Human Excitability 500 B.C.—A.D. 1922," *Journal of Cycle Research*, vol. 9, no. 1, January 1960, p. 23.

August	High 1 time	Low 2 times
September	High 1 time	Low 1 time
October	High 3 times	Low 11 times
November	High 1 time	Low 5 times
December	High 2 times	Low 5 times

From the above you can see that most *Highs* have been reached in January, the month when seasonal *Lows* are usually reached in Corn and Wheat. Soy Beans have made, *High* 3 times during May, June and July and 3 times during October and 3 times in February. The months when the least number of *Highs* have been made are April, August and September; also November. In each of these months only one *High* has been reached during the 28-year period. From this record you would expect seasonal *Highs* in January and February at certain times when the market was running opposite the seasonal trend, then you would watch the *Highs* in May, June and July. And, if the crops were very short and the market running against seasonal trend, you would expect *Highs* in October.⁴

Furthermore, Gann states: "Because stocks run according to seasonal changes and make extreme highs in certain months . . . it is important to go over past records . . . of these important moves."⁵

Figure 1-1 shows the monthly cash soybean seasonal trend from 1930 through 1996. Clearly the chart agrees with Gann's findings. Seasonal grain and soybean prices have been highly reliable.

That there are seasonal price patterns in stock and commodity prices is the primary subject of this book, yet my ideas regarding seasonal fluctuations in the markets are not new. What may be unique or relatively new is my methodology and point of view that seasonality in the markets is not always a function of weather or the seasons. Rather, seasonality exists in virtually all stock and commodity markets, as well as in virtually all aspects of economic data, and its existence can be demonstrated logically, empirically, and statistically. Although I state my case with regard to the causal factors of seasonal price movements in the markets, I am not a proponent of discovering underlying causes.

⁴W. D. Gann, *How to Make Profits in Commodities* (Pomeroy, Wash.: Lambert-Gann, 1942), p. 127.

⁵*Ibid.*, p. 82.

MONTHLY SEASONAL CASH TENDENCY: SOYBEANS**YEARS: 1930 - 1996**

IDEAL SEASONAL HIGH MONTH : MAY HIGH % SEASONAL UP MONTHS : MAR DEC
 IDEAL SEASONAL LOW MONTH : SEP HIGH % SEASONAL DOWN MONTHS : AUG

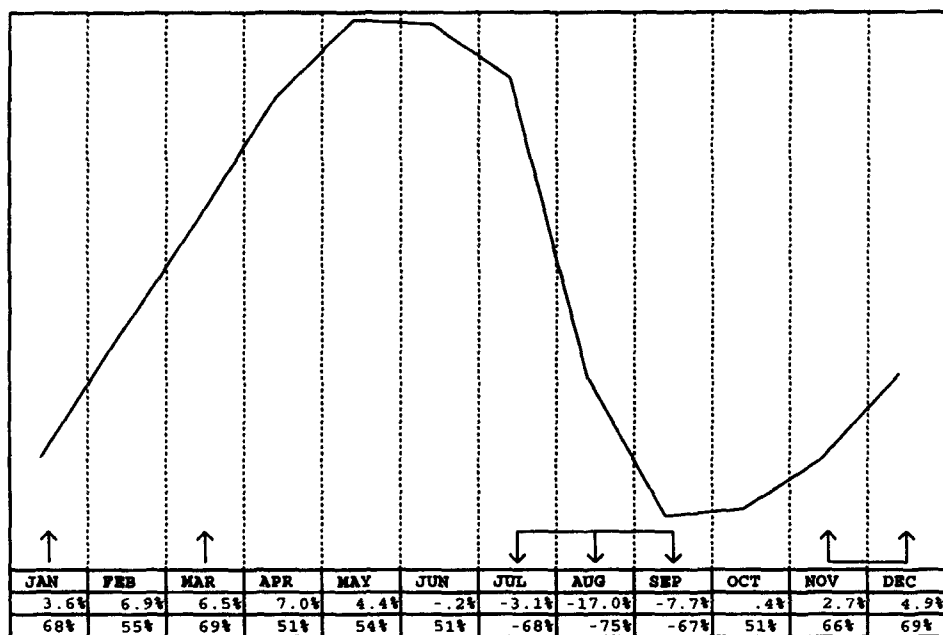


Figure 1-1 Yearly high and low counts of soybeans by month; 1930–1996. In this and similar charts, the line plot shows the average seasonal trend and the arrows indicate a high probability of up and down moves. At the bottom of the chart, the first row of percentages are the average percent change for the month; the second row shows the percentage of time the average price has moved up or down for the month. (Copyright © 1997 by MBH Commodity Advisors, Inc.)

An up movement in the Swiss franc caused by recurrent banking activity at given times of the year is no less significant than is an up movement in orange juice prices resulting from cold weather in January. To the speculator, underlying causes are of little value unless he or she can know the underlying causes well in advance of their occurrence. When I awake in the morning and see the sun, I spend little, if any, time wondering why the sun rises. When I awake in the morning and fail to see the sun under its cover of dark clouds, I do not ask why the sun fails to shine or why the clouds threaten rain. I accept these events as the ways of nature and the world.