*To Suzie,*
*Milton, Oskar, and Nash—felinus economicus*

*This page intentionally left blank*

# Acknowledgments

THIS PROJECT COULD NEVER have been completed without the support and assistance of my wife, Suzie. She has helped in countless and immeasurable ways. Families play an integral role in dreams, aspirations, and accomplishments. My family has paved a clear path for any and every ambition that I could possibly have. They are indubitably responsible for all of my successes. My mother and father have always instilled the importance of education, hard work, free thinking, and discipline. For that I could never thank them enough. A special thanks to my brother Robert and to my in-laws, Richard and Nancy McCabe.

Educators can have a profound influence on one's life. My life, as well as this project, was no exception in the way of encouragement and wisdom disseminated by those in academia. Professors and mentors have helped, not only in the understanding of some of the roles that economic indicators and statistics assume, but as counselors to a not-so-quick-to-learn student. They include, and are not limited to, David W. Ring, William O'Dea, Robert Carson, and Thomas Gergel of the State University of New York at Oneonta. Prof. Ring taught me to work hard, Prof. Carson to look at each situation from alternative perspectives, and Prof. Gergel to have a passion about whatever task I might take on. I practice these three lessons every day of my life.

The list of professional associates who have helped me with this project could easily take up the entire book, but some individual recognition is essential. In my eighteen-plus years of work experience on Wall Street I have never been associated with a more professional outfit than Bloomberg News. To the scores of friends and acquaintances at the Bloomberg offices all around the world, thanks for all your help and input into this project. You are unaware

of how helpful you have been. I especially wish to thank Vinny Del Giudice, Vince Golle, Yvette Fernandez, Monee Fields-White, Jackie Jozefek, and Al Yoon.

Undoubtedly the greatest gratitude with respect to the creation of this work has to go to my editors at Bloomberg Press, namely Kathleen Peterson, Chris Miles, Tracy Tait, and mostly, Betsy Ungar. Betsy's extraordinary talents have transformed my muddled manuscript into a more readable and effective publication.

Many thanks to the analysts at Argus Research Corp., which help me each day with insight into their respective industries, particularly, Wendy Abramowitz, Robert Becker, Kevin Calabrese, Marie Driscoll, Jeffrey Gildersleeve, Gary F. Hovis, Jim Kelleher, David Kerans, and David Ritter. I must tip my hat in appreciation to John Eade, Argus Research's CEO and Director of Research, as well as the Dorsey family for the opportunity to work at the most prestigious research institution on Wall Street.

Acknowledgment wouldn't be complete without special thanks to Charles Gilbert and Michele Johnson (Board of Governors of the Federal Reserve System); Lynn Franco (The Conference Board); Richard Deitz (Federal Reserve Bank of New York); Guhan Venkatu (Federal Reserve Bank of Cleveland); Scott Scheleur (Service Sector Statistics Division, U.S. Census Bureau); Kristen Kioa (Institute for Supply Management); Jeannine Aversa and Marty Crutsinger (Associated Press); Garrett Bekker (Kim & Co.); Steve Berman (U.S. Department of Commerce, Bureau of Census); George Hager, Barbara Hagenbaugh, Sue Kirchhoff (*USA Today*); Jason Hecht (Ramapo College); Robert Bricken (Prebon, Yamane (USA) Inc.); David Jozefek (Morgan Stanley); Thomas Feeney (Shippensburg University); Jeffrey J. Junior (Aries Appraisal Group, Inc.); and Joe Pregiato (Arbor & Ivy).

Any errors or oversights that may exist in this book were not intentional and are not the fault of any of those individuals named above.

# Introduction

INVESTING WITHOUT UNDERSTANDING the economy is like taking a trip without knowing anything about the climate of your destination. Inclement weather can wreak havoc with a vacation, especially if it involves outdoor activities. Just so, putting hard-earned money into the stock or bond market when economic conditions are unfavorable can destroy financial plans for a comfortable retirement, a new house, or a child's college education.

No one understands this better than Wall Street investment banks, brokers, and research institutions. All of these have adopted a top-down approach to securities analysis that begins with a forecast of the general economic climate, including interest rate projections, currency forecasts, and estimates of domestic and foreign economic growth. In this, they are following one of the precepts laid down by Benjamin Graham and David Dodd in their 1940 investors' bible, *Security Analysis:* "Economic forecasts provide essential underpinning for stock and bond market, industry, and company projections."

You don't need to manage millions or billions of dollars, however, to study economic conditions and plan your investment strategy accordingly. You can get much of the same information that Wall Street professionals use in their analyses from the business sections of the nation's newspapers, magazines, and evening news programs. Furthermore, you don't need a degree in economics or mathematics to interpret this information. In fact, many graduates of such programs at the nation's top universities find themselves entirely unprepared for the real world of finance. This book attempts to bridge the wide gap between the sometimes mind-numbing theories of textbook economics—the principles that are taught on college campuses across the country—and the everyday world of

Wall Street. It does so by focusing on a dozen economic indicators that are among the most important of any analyst's or economist's tools. Understanding these indicators will make the study of economics more palatable and exciting.

Over the past century, thousands of economic indicators have emerged, predicting everything from the demand for gasoline to the size of harvests. Some are more fun than functional, such as those claiming links between stock performance for the year and which conference, the NFC or the AFC, wins the Super Bowl, or whether women's hemlines rise to midthigh or fall to midcalf. Others indicators are more serious, solidly based in economic observations. These range from the arcane—such as the indicator connecting the production level of titanium dioxide, an ingredient of pigments used in paints and plastics, with the demand for building materials—to the commonsensical. The price of copper, used in wiring and many other construction elements, for instance, has a clear relationship with the pace of housing activity. The same could be said of economic growth and railroad car loadings, shipping container production, wooden pallet shipments, and the manufacture of corrugated boxboard and packaging, all of which are connected with transporting freight or manufactured goods.

Over time, economists have weeded out the least successful indicators, based on the most dubious relationships, to arrive at a core of about fifty consistently reliable ones. This book presents the dozen that are must-haves in any analytical toolbox. Virtually all Wall Street economists use these indicators in the analyses and their writings. Federal Reserve officials conduct monetary policy with respect to the trends that these indicators project. They are also considered "must haves" in the sense that they are among the most accurate at depicting economic relationships as well as attendant market-movability. That is, each of these indicators at one time or another typically figures among the top-tier factors to engender big swings in the financial markets.

Some of the dozen indicators discussed are constructed by U.S. government agencies such as the U.S. Department of Commerce's Census Bureau, the U.S. Department of Labor, and the Board of

Governors of the Federal Reserve. Others are the products of private organizations such as the Institute for Supply Management, the Conference Board, and the University of Michigan. Some have excellent predictive powers. Others reflect principally the current state of the economy, and still others highlight industries that might outperform and so help identify the likely path of economic activity. All have one thing in common, however: In one way or another, they all relate to the business cycle.

## THE BUSINESS CYCLE

The business cycle is one of the central concepts in modern economics. It was defined by celebrated economists Arthur Burns and Wesley Mitchell in their pioneering 1946 study, *Measuring Business Cycles*, written for the National Bureau of Economic Research (NBER), which today is the official arbiter of the U.S. business cycle. According to Burns and Mitchell, the business cycle is "a type of fluctuation found in the aggregate economic activity of nations that organize their work mainly in business enterprises: a cycle consists of expansions occurring at about the same time in many economic activities, followed by similarly general recessions, contractions, and revivals, which merge into the expansion phase of the next cycle."

No two business cycles are the same. As illustrated in **FIGURE I-1**, during the relatively short time that people have been measuring the U.S. economy, the length of expansions, from economic trough to peak, and of contractions, from peak to trough, have varied widely—although the former, especially recently, have generally been longer and steadier than the latter. Expansions have ranged from 120 months (April 1991 to April 2001) to 10 (March 1919 to January 1920), and downturns from 43 months (September 1929 to March 1933) to 6 (February 1980 to July 1980). The amplitude of the peaks and troughs has also differed significantly from cycle to cycle.

One way to think of the business cycle is as a graphical representation of the total economic activity of a country. Because the accepted benchmark for economic activity in the United States

## Figure I-1 U.S. Business Cycle Durations

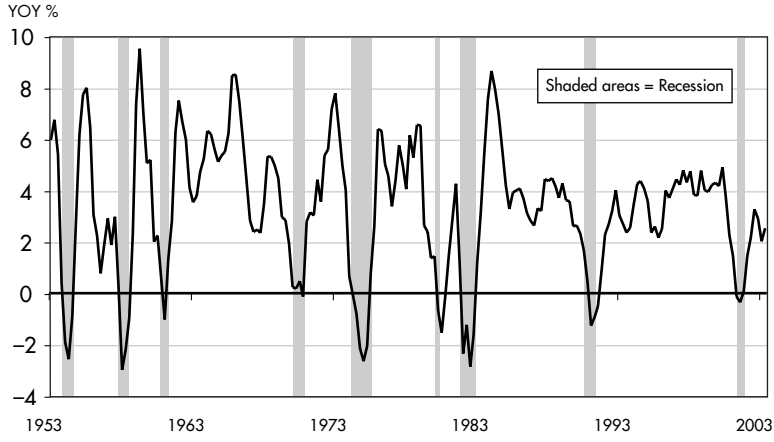
| *Business Cycle Reference Dates* | | *Duration in Months* | | | |
|---|---|---|---|---|---|
| **Peak** *Quarterly dates are in parentheses* | **Trough** | **Contraction** *Peak to trough* | **Expansion** *Previous trough to this peak* | **Cycle** *Trough from previous trough* | **Cycle** *Peak from previous peak* |
| | December 1854 (IV) | — | — | — | — |
| June 1857 (II) | December 1858 (IV) | 18 | 30 | 48 | — |
| October 1860 (III) | June 1861 (III) | 8 | 22 | 30 | 40 |
| April 1865 (I) | December 1867 (I) | ***32*** | ***46*** | ***78*** | ***54*** |
| June 1869 (II) | December 1870 (IV) | 18 | 18 | 36 | 50 |
| October 1873 (III) | March 1879 (I) | 65 | 34 | 99 | 52 |
| March 1882 (I) | May 1885 (II) | 38 | 36 | 74 | 101 |
| March 1887 (II) | April 1888 (I) | 13 | 22 | 35 | 60 |
| July 1890 (III) | May 1891 (II) | 10 | 27 | 37 | 40 |
| January 1893 (I) | June 1894 (II) | 17 | 20 | 37 | 30 |
| December 1895 (IV) | June 1897 (II) | 18 | 18 | 36 | 35 |
| June 1899 (III) | December 1900 (IV) | 18 | 24 | 42 | 42 |
| September 1902 (IV) | August 1904 (III) | 23 | 21 | 44 | 39 |
| May 1907 (II) | June 1908 (II) | 13 | 33 | 46 | 56 |
| January 1910 (I) | January 1912 (IV) | 24 | 19 | 43 | 32 |
| January 1913 (I) | December 1914 (IV) | 23 | 12 | 35 | 36 |
| August 1918 (III) | March 1919 (I) | ***7*** | ***44*** | ***51*** | ***67*** |
| January 1920 (I) | July 1921 (III) | 18 | 10 | 28 | 17 |
| May 1923 (II) | July 1924 (III) | 14 | 22 | 36 | 40 |
| October 1926 (III) | November 1927 (IV) | 13 | 27 | 40 | 41 |
| August 1929 (III) | March 1933 (I) | 43 | 21 | 64 | 34 |
| May 1937 (II) | June 1938 (II) | 13 | 50 | 63 | 93 |
| February 1945 (I) | October 1945 (IV) | ***8*** | ***80*** | ***88*** | ***93*** |
| November 1948 (IV) | October 1949 (IV) | 11 | 37 | 48 | 45 |
| July 1953 (II) | May 1954 (II) | ***10*** | ***45*** | ***55*** | ***56*** |
| August 1957 (III) | April 1958 (II) | 8 | 39 | 47 | 49 |
| April 1960 (II) | February 1961 (I) | 10 | 24 | 34 | 32 |
| December 1969 (IV) | November 1970 (IV) | ***11*** | ***106*** | ***117*** | ***116*** |
| November 1973 (IV) | March 1975 (I) | 16 | 36 | 52 | 47 |
| January 1980 (I) | July 1980 (III) | 6 | 58 | 64 | 74 |
| July 1981 (III) | November 1982 (IV) | 16 | 12 | 28 | 18 |
| July 1990 (III) | March 1991(I) | 8 | 92 | 100 | 108 |
| March 2001 (I) | November 2001 (IV) | 8 | 120 | 128 | 128 |
| Average, all cycles: | | 17 | 38 | 55 | 56* |
| 1854–1991 (32 cycles) | | 22 | 27 | 48 | 49† |
| 1854–1919 (16 cycles) | | 18 | 35 | 53 | 53 |
| 1919–1945 (6 cycles) | | 10 | 57 | 67 | 67 |
| 1945–1991 (10 cycles) | | | | | |
| Average, peacetime cycles: | | 18 | 33 | 51 | 52‡ |
| 1854–1991 (27 cycles) | | 22 | 24 | 46 | 47§ |
| 1854–1919 (14 cycles) | | 20 | 26 | 46 | 45 |
| 1919–1945 (5 cycles) | | 10 | 52 | 63 | 63 |
| 1945–1991 (8 cycles) | | | | | |

*31 cycles, †5 cycles, ‡26 cycles, §13 cycles

Figures printed in ***bold italic*** are the wartime expansions (Civil War, World Wars I and II, Korean War, and Vietnam War), the wartime contractions, and the full cycles that include the wartime expansions.

Source: NBER

Figure I-2 GDP and Highlighted Recessions




Sources: U.S. Department of Commerce, Bureau of Economic Analysis; NBER

is currently gross domestic product (GDP), economists generally identify the business cycle with the alternating increases and declines in GDP. Rising GDP marks economic expansion; falling GDP, a contraction (see **FIGURE I-2**). That said, the business cycle, as defined by Burns and Mitchell, can't be fully captured by one indicator, even the GDP. Rather, it is a compendium of indicators that reflects various aspects of the economy.

Economic indicators are classified according to how they relate to the business cycle. Those that reflect the current state of the economy are *coincident;* those that predict future conditions are *leading;* and those that confirm that a turning occurred are *lagging*.

## INDICATORS AND THE MARKETS

The organization responsible for an indicator generally distributes its report about an hour before the official release time to financial news outlets such as Bloomberg News, Dow Jones Newswires, Reuters, CNBC, and CNNfN. The reporters, who are literally locked in a room and not permitted to have contact with anyone outside, ask questions of agency officials and prepare headlines and analyses of the report contents. These stories are embargoed until

the official release, at which time they are transmitted over the newswires to be dissected by the Wall Street community. Most Wall Street firms employ economists to provide live broadcasts of the numbers as they run across the newswires, together with interpretation and commentary regarding the likely market reaction. This task, known as the "hoot-and-holler" or tape reading, is among the most stressful performed by an economist. One slip-up can cost a trader or entire trading floor millions of dollars.

The more an indicator deviates from Street expectations, the greater its effect on the financial markets. A 0.1 percent decline in retail sales, for example, might not move the markets much if economists were looking for a flat reading or a 0.1 percent rise. But if the consensus were for an increase of 0.7 percent, and instead the 0.1 percent decline hit the tape, the markets might well be rocked. That said, it is always prudent for traders and other market participants to keep apprised of what the Street expectations are for key economic indicators such as those covered here.

## How to Use This Book

You've no doubt read in a paper or heard on TV or the radio forecasts of economic expansion or recession. You also probably realize that the one is desirable and the other is not. But you may not know how the economists quoted came up with their predictions. Without this knowledge, how can you judge how well considered or rash they are—and whether to trust them in creating your investment strategy? This book seeks to help you form your own opinions about the possible direction of the economy and the markets and to decide how to act based on those opinions.

Each chapter corresponds to an indicator, beginning with the most comprehensive—the GDP and indices of leading, lagging, and coincident indicators—and continuing with those tied to particular aspects or segments of the overall economy, such as consumer prices, manufacturing, housing, and retail sales. Every chapter contains four principal sections: an introduction sketching out the major attributes of the indicator and its effect on the mar-

kets; a discussion of its origins and development; a description of how the relevant data are obtained, analyzed, and presented; and an explanation of how to incorporate these data into your investment process. The last section also contains at least one "trick"—involving either a little-known subcomponent of the indicator or a combination of subcomponents—that Wall Street economists use to get a clearer or more timely picture of business activity. At the end of the book is a listing of additional reading and resources, organized by chapter, pointing those interested to references that discuss the relevant indicator in greater detail.

In putting what you learn from this book into practice, you might take some pointers from Wall Street. Just about every investment firm has a pre-market-opening meeting in which the day's events and potential trading strategies are presented. This always includes a discussion of the economic indicators scheduled for release that day. No trader wants to be caught off guard by an unexpected market-moving release. For the same reason, many traders have on their desks calendars showing which economic release is scheduled for a particular day and indicating both the value or percentage change of the previous report and the Street's estimates—highest, lowest, and consensus—for the upcoming one. That way, when the actual figure is released, they will know how it compares with expectations and can react accordingly.

Of course, no single economic indicator will tell you all you need to know about the current or future economic climate. Each has drawbacks and may send false signals because of unforeseen shocks, faulty measurements, or suspect collection processes. Piecing together the information from all twelve indicators discussed in this book like tiles in a mosaic will give you a dynamic representation of the economy. But if you are truly serious about understanding the macroeconomic climate and individual industry conditions, you should also take advantage of the Securities and Exchange Commission's Regulation Fair Disclosure of 2000, which mandates for individual investors the same access to companies' quarterly earnings conference calls that professional analysts have.

These calls provide a great deal of insight into corporate spending plans, manufacturing and production activity, international

conditions, pricing, and the general business climate. Especially informative are the announcements of industrial behemoths such as Alcoa, Boeing, Caterpillar, Cummins, Emerson Electric, Ford Motor Company, General Electric, Illinois Tool Works, Johnson Controls, and United Technologies. Many companies also offer slide presentations, handouts, and supplemental data with these quarterly presentations, which often provide even greater detail on their buying intentions, prospective employment changes, and any threats to performance that they foresee. There's no cheaper and easier way to gather anecdotal evidence about business conditions. If you can't listen in, the presentations are almost always archived on company websites, from which they may be readily retrieved 24/7.

## Who Can Benefit From This Book?

This book was written primarily for those traders and investors lacking a formal introduction to the most popular economic indicators on Wall Street. Just because an individual is entrusted with investing millions of dollars does not guarantee a practical command of economic indicators and their meaning for investment. When newly minted MBAs arrive on the trading floors of financial firms, for example, few are equipped with a complete appreciation of these indicators—no matter from which institution that degree has come. My years of experience on a few of the largest trading floors in the world has suggested the need to fill what can be viewed as a surprisingly expansive void regarding indicators, statistics, the economic meaning of the associated figures, and the market's likely reaction.

Those new to the field of investing and economics, including students of the subject, also should benefit from the fundamental, application-oriented nature of this book. As most academics know, if students cannot see the results or directly test theories with practical data, the knowledge they hold tends to remain more theoretical than real-world and they eventually may lose interest in the field. It is here that many future economists are lost. As exercises within an imperfect "science," experiments conducted in the social discipline of economics are predominantly theorized or hypothesized and

seldom tested with tangible data. In this sense, economists are not as fortunate as physicists or natural scientists, who conduct experiments in a controlled environment such as a laboratory, riverbed, or ocean. The economic indicators contained in these chapters serve as concrete guideposts within the discipline of economics, and as such make experimentation, testing, and study for investments not only possible but understandable.