PETER W. MADLEM, CFA LARRY D. EDWARDS, CFA

THE INVESTOR'S
GUIDE TO EXCHANGETRADED FUNDS



St. Lucie Press

PONER INVESTING BASIES SECURIES

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Preface

Power Investing with Basket Securities, The Investor's Guide to Exchange-Traded Funds, represents the second volume in the Power Investing series of books. Several years ago, when the publisher originally suggested the idea, there was some hesitancy regarding the series title. Power seemed, well, a bit robust as a title theme. However, upon consulting the dictionary, the primary definition was found to be, "the ability or capacity to act or perform effectively." Who can quarrel with that? After all, that is exactly what the series is intended to do, impart to readers the ability and capacity to perform effectively with their investments. Each volume presents an investment strategy or approach that empowers the investor, whether professional or individual, with proven and innovative approaches to improve performance in the convoluted and confounding world that makes up the financial marketplace.

This book is about basket securities and how investors can use them. Spiders, Sectors, Holders, ETFs, iShares, Vipers, and Qubes, are all acronyms for members of this relatively new class of financial products. Most investors know them as exchange-traded funds, or ETFs. However, not all basket securities are exchange-traded funds, in the strictest sense. The fundamental concept of a basket is any grouping or combination of financial assets that underlie the value of a single exchange-traded security. Many, but not all, are based on indices, or subsectors of indices. In addition, most are structured as securities issued by unit investment trusts or mutual funds, but not all. The term "basket security" covers a broader spectrum of useful securities than just index fund products issued by registered investment companies.

Most baskets are designed to track specific indices or subgroups. Others select specified portfolios within an industry group such as telecommunications and pharmaceuticals. Because they are basically passive portfolios, baskets incur lower expenses than actively managed mutual funds. Moreover, they typically entail a lesser tax burden, since the underlying stocks are generally traded when an index needs to be rebalanced.

Like stocks, you can buy baskets on margin and trade them anytime the market is open. Baskets also are easy to short because they are exempt from the uptick rule, which forbids the selling of a stock short in a declining market. Baskets can be used to manage portfolio risk through hedging. Professional traders can swap shares of a basket security for the underlying stocks, or vice versa. This form of arbitrage keeps basket security prices very close to their net asset value, which means they can track an index better than a closed-end mutual fund.

This book describes the origins of basket securities and reviews their beneficial features and structures. It covers the broad array of currently available basket securities, and suggests the likelihood of others on the horizon. Most importantly, the book presents some strategies for their successful and powerful applications in managing portfolios.

Those who can benefit from reading and using this book include investors who have made asset allocation decisions as to their overall financial assets, and are now considering how to achieve an appropriate level of diversification in the equity portion of their portfolios. The authors hope that this book will be useful to its readers in accomplishing such diversification, and perhaps in providing some further insights into the portfolio management process.

About the Authors

Both authors are currently portfolio managers with the Trust Investment Services Division of Santa Barbara Bank & Trust, located in Santa Barbara, CA. Their professional backgrounds, while significantly different, share much in common.

Peter W. Madlem, CFA, has nearly 20 years of diverse investment experience. In the mid-1980s he cofounded two publishing and investment advisory firms specializing in closed-end funds and REITs. His market and financial comments have appeared in *The Wall Street Journal, Investor's Business Daily, Kiplinger's*, and *Money Magazine*.

A published author and composer, Madlem has written six investment-related books and his musical compositions have been performed at the Sydney Opera House, the National Cathedral in Washington, D.C., and London's Wigmore Hall, and have been recorded on Sony/Classical



and Sonora records. Madlem earned a Master's degree from the University of California, Santa Barbara. He lives with his wife, Katherine, and two children in Carpinteria, CA.

Larry D. Edwards, CFA, has more than 30 years of broad experience in the investment management industry. In addition to being an experienced portfolio manager, he served as President of Leland O'Brien Rubinstein Associates Incorporated (LOR) and its subsidiary, SuperShare Services Corporation from 1984 to 1988. In these capacities, Edwards had an integral role in the creation of "The SuperTrust" and its various securities that are described in Chapter 1 and Appendix B. One of these securities, the Index Trust SuperUnit, was the first successful U.S. exchange-traded basket security, preceding the introduction of the Spider by about 3 months.



Prior to joining LOR as president, Edwards was chief investment officer for Western Asset Management Company. He began his professional career with Scudder Stevens and Clark Inc.

A graduate of Occidental College and the Stanford Graduate School of Business, Edwards and his wife, Janice, reside in the Santa Ynez Valley.

At Santa Barbara Bank & Trust, Madlem and Edwards, together with their associates, are developing creative applications for basket securities, some of which are described in this book.

Introduction

Tremendously versatile, basket securities have the potential to change the way money is managed. They are similar to index funds but trade like stocks, so they enjoy the advantages of both worlds. Baskets provide a way to obtain the diversification of, say, the Standard & Poor's 500 Stock Index in a single security that can be bought and sold during market hours just like any other stock.

Unlike regular mutual fund shares, which calculate their net asset values at the end of each trading day, baskets trade continually on a stock exchange, where their prices can change from trade to trade.

This book provides the proper definition of the basket security, a brief exploration of their true history, and simple yet powerful ways to exploit their advantages. To that end the book is organized into three broad sections containing nine chapters, and three appendices.

Section I contains Chapters 1 through 3. The first chapter reviews the origin of basket securities, as we know them today. The need for baskets became clear during the stock market "Crash" of October 1987. It took 5 years to develop one that worked and that had a sound regulatory structure.

In Chapter 2, some of the primary structural characteristics and related benefits of baskets are reviewed, using the "Spider," or SPDR, as a model. These innovative securities can provide instant diversification, price efficiency, tax efficiency, liquidity, and cost efficiency. When used as part of equity portfolios, they can reduce the likelihood of bombshells and, over time, assure freshness.

Chapter 3 surveys the major participants in the basket securities business and those firms that are sponsors or managers. Many of the currently available baskets have come to market only recently.

Section II, encompassing Chapters 4 through 7, represents the applied portion of the book. Chapter 4 explores simple, yet effective, ways basket securities can be used in asset management strategies, including trading the market, building a diversified core, or creating a "thousand stock portfolio."

Chapter 5 presents a more technical look at trading strategies using basket securities, including using baskets together with individual securities, the application of momentum screens, and how to utilize straightforward and useful charting techniques. A sample basket portfolio strategy, the Basket Case Portfolio, is introduced.

Chapter 6 acknowledges the ongoing debate between active and passive management and suggests a portfolio management approach to blending them. Based on a comparison between the capitalization-weighted and equal-weighted S&P 500 returns, two variants are introduced to ascertain whether active or passive investment is more likely to succeed. Next, a method for determining the appropriate blend of the diversified core indices using an iterative historical value at risk computation is presented.

Chapter 7 explores the use of S&P 500 Select Sector SPDRs as the investment vehicle for the active portion of the Basket Case Portfolio. A sector approach is presented whereby an assessment is made regarding the current position in the business cycle in order to create a rationale for the selection of specific SPDRs for investment. Computation of relative strength is discussed with implications for verifying the market's perception of the business cycle position.

Section III consists of Chapters 8 and 9. Chapter 8 delves briefly into what is currently available through basket securities on the international scene, presents evidence on the efficacy of international diversification, and offers a momentum strategy for trading these securities.

Finally, Chapter 9 considers what may lie ahead in the ongoing development of basket securities and similar tools for portfolio management. Bonds and folios are reviewed.

Section IV contains the appendices. Appendix B describes the structure, securities, and investment payoffs of "The SuperTrust," a pioneering effort by a small company that, among other things, created the first U.S. exchange-traded basket security as we know them today. Appendix C describes the active/passive indicator.

Appendix A contains information and data on many exchange-traded basket securities and is presented as a convenient resource to readers.

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Section 1

Origins and Participants

1 Origins of Basket Securities

PROLOGUE

October, 1987

From the close of trading on Tuesday, October 13, 1987, to the close of trading on October 19, 1987, the Dow Jones Industrial Average ("Dow") fell 769 points or 31 percent (see Figure). In those four days of trading, the value of all outstanding U.S. stocks decreased by almost \$1.0 trillion. On October 19, 1987, alone, the Dow fell by 508 points or 22.6 percent. Since the early 1920's, only the drop of 12.8 percent in the Dow on October 28, 1929 and the fall of 11.7 percent the following day, which together constituted the Crash of 1929, have approached the October 19 decline in magnitude.

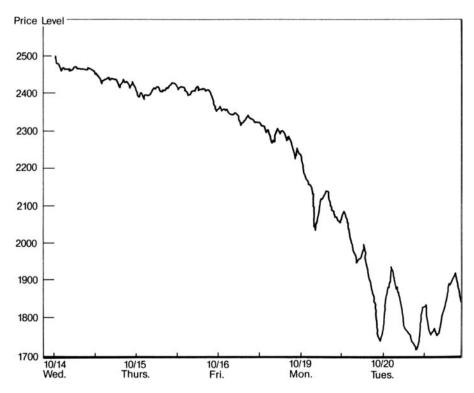
Report of THE PRESIDENTIAL TASK FORCE on MARKET MECHANISMS, Nicholas F. Brady, Chairman; U.S. Government Printing Office, Washington, D.C., January 1988, page 1.

THE NEED — BORN OF THE CRASH

By the time of the stockmarket "Crash" in October of 1987, many institutional investors had concluded that they would frequently prefer to trade *portfolios* rather than individual stocks. Institutional investors such as the managers of corporate and public pension funds, profit-sharing funds, mutual funds, endowment funds, and foundations often had a need to control the overall equity exposure of the funds they managed. In addition, many large investment firms were actively engaged in "index arbitrage." Both of these interests involved the trading of market exposure.

Let's take a quick look at how certain trading practices contributed to the development of basket securities.

In 1987, the primary means of transacting in portfolios, or large amounts of equity market exposure at one point in time, were stock index futures contracts and program trading. A stock index futures contract is essentially an agreed upon obligation of the buyer to pay to the seller the difference in price of some index if the price declines, and of the seller to pay to the buyer the price difference if the price rises subsequent to entering into the agreement. Buying or selling futures contracts on an index such as the Standard & Poor's 500 Stock Index (S&P 500) was (and is) a way to effectively and efficiently buy or sell a substantial amount of equity exposure.



Dow Jones Industrial One-Minute Chart, October, 14, 1987 to October 20, 1987.

In October 1987 one S&P 500 Stock Index Futures contract had an underlying value of about \$125,000 (i.e., 500 times the index level of about 250). Changes in this value were based upon (or derived from) changes in the price level of the index — hence, the term *derivative* instrument as applied to the futures contract. Trading volume of the S&P 500 contract was running at an annual rate of more than 20 million contracts, or about \$2.5 trillion, roughly equal to the total dollar volume of trading on the U.S. stock market at that time. (Page II-13, Report of the Presidential Task Force on Market Mechanisms, January 1988.)

Program trades, by contrast, are the simultaneous execution of actual buy or sell orders for many stocks, often an entire index, such as the S&P 500. In 1987, program trades could be executed directly through the various specialist posts on the floors of the stock exchanges, or through the use of the designated order turnaround (DOT) automated execution system on the New York Stock Exchange.

Two primary types of program trades were (and are) used. Straight program trading takes place when there are no offsetting transactions in stock index futures contracts. Such a program trade, involving a basket or index of stocks, is typically used because of the speed and efficiency of execution, lower commission costs, and reduced market impact.

By contrast, a program trade executed simultaneously with an offsetting transaction in stock index futures contracts is known as index arbitrage. An index

arbitrageur attempts to profit from perceived mispricing of the futures contract relative to the level of the index. (The difference in price of a futures contract and its underlying index is called the *basis*; usually the contract's price is higher than the index.) A futures price is considered abnormal when the basis differs from fair value, which relates to the difference between the yield on Treasury Bills and the dividend yield on the index, each calculated to the date of expiration of the futures contract. (Think of it as "cost of carry.") When an abnormal basis becomes large enough, the arbitrageur attempts to lock in a profit by simultaneously buying stocks and selling futures if the contract's price is too high, and by doing the reverse if the price of the futures is too low.

Index arbitrage acts to make the market more efficient. For example, if investors have bought or sold equity exposure through buying or selling stock index futures contracts, and in the process have created a futures price that is too high or too low, the subsequent action of the index arbitrageur tends to offset the mispricing and move the price of the futures back toward fair value. As the basis moves back toward fair value, the arbitrageur makes a profit, and the price relationship becomes more efficient.

The relevance of this quick review of futures, program trading, and index arbitrage to the 1987 stockmarket crash and the genesis of basket securities is that at that time the specialists at their posts had no way of knowing the source or purpose of the flood of sell orders they were receiving. Were they information-based trades from investors acting on new information? Were they part of straight program trades from investors managing the equity exposure of their portfolios? Or were they part of index arbitrage programs, taken due to perceived mispricing between futures and the index level?

The uncertainty as to the source and purpose of the multitude of sell orders arriving at their posts made the specialists more risk averse than would otherwise have been the case and less willing to commit capital to maintain an orderly market. And the volume of index arbitrage trading was insufficient to correct the abnormally large discount of the futures price relative to the index, in part due to the difficulty of executing program trades.

Following the crash, there were a number of studies published that attempted to diagnose its causes and prescribe remedies so that such an event would not be repeated. One such study, "The October 1987 Market Break: A Report by the Division of Market Regulation, U.S. Securities and Exchange Commission," suggested the following as one such remedial step:

One of several alternatives that may be worthy of examination is the proposal to create one NYSE specialist post where the actual **market baskets** could be traded. A market basket post would alter the dynamics of program trading, in effect consolidating program trades back to a single order. The index specialist would have the informational advantage, not available to specialists in the individual stocks, of seeing the entire program order.... While the feasibility and design of **basket trading** would require substantial analysis, we believe the concept of basket trading deserves the Commission's and the NYSE's attention. (emphasis added) (*Black Monday and the Future of Financial Markets*, p. 366, 1989).

EARLY FAILURES

During the period following the October 1987 stockmarket crash, there were several attempts to develop viable basket securities. In May 1989, two exchangecreated instruments began trading. One was the American Stock Exchange's equity index participations (EIPs); the other was the Philadelphia Stock Exchange's cash index participations (CIPs). Both began trading under Securities and Exchange Commission (SEC) registrations. The new securities featured procedures whereby sellers would deliver to buyers (or vice versa) the subsequent total return on the S&P 500 at some future time. The Chicago Mercantile Exchange and the Chicago Board Options Exchange promptly sued, claiming that the products were inherently futures contracts and should be regulated by the Commodity Futures Trading Commission (CFTC) rather than by the SEC. In August 1989, the U.S. Court of Appeals of the Seventh Circuit ruled that the products in fact should fall under CFTC jurisdiction. This ruling made it necessary for all investors to close their positions in the new Index Participations, and the instruments were delisted. (Harvard Business School Case N9-294-050; Leland O'Brien Rubinstein Associates, Inc.: SuperTrustTM, page 14, June 6, 1994.)

AN EARLY SUCCESS — THE INDEX TRUST SUPERUNIT

Meanwhile, the small Los Angeles-based investment management firm of Leland O'Brien Rubinstein Associates Incorporated (LOR) was busily pursuing the creation of an innovative mutual fund/unit investment trust product called, "The SuperTrust." LOR had seen the demand soar for its Dynamic Asset Allocation (DAA) hedging strategies prior to the crash. Afterward, such demand largely evaporated. Indeed, various studies of the crash pointed to the selling by *portfolio insurers* (the name assigned LOR and other firms using dynamic hedging technology to implement protective strategies) as having at least exacerbated the severity of the decline.

Having witnessed heavy demand for investment payoff patterns that simultaneously featured downside protection together with upside capture, LOR was convinced that a substantial demand for such strategies could be rekindled if the delivery of the strategy could be assured. The means for such assurance would be to have the payoff backed with actual securities in the context of investment companies registered under The Investment Company Act of 1940 (the 1940 Act), the federal statute under which all mutual funds and unit investment trusts are regulated.

LOR established SuperShare Services Corporation (SSC) as a majority-owned subsidiary to create and bring the new product to market. (A further description of The SuperTrust is available in Appendix B.) For 5 years, from October 1987 until November 1992, SSC worked to design, develop, and market the SuperTrust product. Among the obstacles that were overcome were design features that were not previously accommodated by the 1940 Act, for which exemptive relief had to be obtained from the SEC.

Finally, on November 5, 1992, having raised approximately \$1 billion from institutions and individuals as the initial investors, the SuperTrust was launched. One of the six securities was the Index Trust SuperUnit, a security that was issued by a unit investment trust under the 1940 Act, that was fully backed by the securities

of an S&P 500 Index Fund managed by Wells Fargo Investment Advisors, and that traded on the American Stock Exchange. The first successful U.S. exchange-traded basket security had arrived!

In a Stock Index Research report dated November 1992, Goldman Sachs published a report titled, "Special Feature: *SuperTrust Is Launched*!" It included the following under "Who Are the Likely Users of SuperTrust?"

"We believe that the major users of the product will be the following:

- **Individual Investors** For individual investors, the product provides a way to easily buy and sell the market in small amounts without the paperwork or operational hurdles of trading futures and options.
- Active Investment Advisors Many active equity managers both inside and
 outside the U.S. do not have approval or are not set up operationally to handle
 futures. For them, the Index SuperUnit or SuperShare may be the easiest way to
 put cash into the market if they have not decided what specific stocks to buy or
 hedge market risk should they become bearish. Mutual funds may find them especially useful in helping them manage their cash balances.
- Small Indexers Investment advisors wishing to establish small index funds for their clients may find SuperUnits a more efficient way to get index exposure than setting up their own fund."

The SuperTrust was on its way!

ALONG CAME A SPIDER

As described previously with regard to index participations, The American Stock Exchange (AMEX) had maintained a long-standing interest in the creation of basket securities. With two of the SuperTrust's securities trading on the AMEX (the other being the Money Market Trust SuperUnit), the AMEX had, of course, known about the SuperTrust in detail and had not only followed its developmental progress closely, but had also assisted in gaining clearance for exchange listings. Once the SuperTrust had received critical exemptive relief under the 1940 Act from the SEC, such relief could be (and was) conveniently cited by AMEX as precedent, thus vastly shortening the time for regulatory approval of similar products. In January 1993, 3 months after the SuperTrust launch, the AMEX dangled rubber spiders from the ceiling of its exchange, and to the delight of its members introduced the Standard & Poor's Depositary Receipt (SPDR, or Spider, exchange symbol "SPY"). The rest, as they say, is history, and is what the remainder of this book is about.

2 Structure and Benefits of Basket Securities

WHAT ARE THEY?

A basket security, as the term is used in this book, is a single security that trades on a stock exchange, that represents and tracks an underlying combination of securities (such as an index), and that has some structural mechanism to assure that its price on the exchange closely follows the value of its underlying securities. A primary benefit of such a security is that it can provide **instant diversification**. For example, in a single security an investor can own the risk and return characteristics of the entire S&P 500.

HOW BASKETS ARE STRUCTURED

Originally, basket securities were issued by unit investment trusts (UITs), which are investment companies regulated by the SEC under the Investment Company Act of 1940. UITs are similar to mutual funds, which are also registered investment companies under the 1940 Act. One significant difference is that a UIT has no board of directors and so is prevented by the 1940 Act from holding a managed portfolio. However, the SEC has permitted UITs to hold indexed portfolios that are only administered in accordance with preestablished guidelines.

While the structure and characteristics vary somewhat over the spectrum of basket securities, they share many common features. The approach taken here is to describe in some detail the characteristics and related benefits of the Standard & Poor's Depositary Receipt (SPDR), as the "granddaddy" of all currently trading baskets. Various differences from the SPDR are noted later in the discussion of other baskets.

CHARACTERISTICS AND BENEFITS OF THE STANDARD & POOR'S DEPOSITARY RECEIPT (SPDR)

Based upon the S&P 500 Index, the SPDR was introduced on January 22, 1993, with the initial issuance of 150,000 SPDRs, worth about \$6 million. (As of May 31, 2001, SPDR assets amounted to about \$28.7 billion.) The issuing entity is the SPDR Trust, a UIT registered under the 1940 Act. The sponsor is PDR Services LLC, solely owned by the American Stock Exchange LLC. The trustee is State Street Bank and Trust; and the distributor is ALPS Mutual Fund Services, Inc.

PORTFOLIO DEPOSITS AND REDEMPTIONS

Not just anybody can deal directly with the SPDR Trust. SPDRs are issued by its trust in multiples of 50,000 SPDRs, each of which constitutes one "creation unit." Only those investors that have entered into a "participating agreement" with the SPDR Trust may transact in creation units. These participants who deal directly with the SPDR Trust are of necessity large investment organizations such as investment banking firms. Moreover, transactions with the SPDR Trust in creation units do not take place using cash. Rather, deposits to, and redemptions from, the SPDR Trust take place predominantly *in kind*, with the actual basket of stocks that make up the S&P 500 Index.

These deposit and redemption procedures are highly significant for two primary reasons. One benefit is a mechanism they provide to ensure that the price of the SPDR, as it trades during normal market hours on the American Stock Exchange (AMEX), remains close to the net asset value (NAV) of its underlying shares that are held in the SPDR Trust. This is so because of the potential for arbitrage profits to be made by participants should the price of SPDR deviate too far in either direction from its underlying value. Hence, the price of the exchange-traded SPDR (stock symbol SPY) is relatively **price efficient**. This is important to know because the typical investor, like most of us, cannot buy from or sell directly to the SPDR Trust.

A further benefit of the portfolio deposit and redemption features is **tax efficiency**. Because transactions directly with the SPDR Trust are conducted predominantly in kind, the Trust does not have to sell stocks inside the Trust to meet redemptions. And because the portfolio is an index fund, changes in portfolio holdings are made only when the index changes. So, unlike an open-end actively managed mutual fund, realized capital gains inside the SPDR Trust are minimal. As a result, a total of only about \$0.09 in realized capital gains have been distributed to SPDR holders since inception in January 1993.

While not all basket securities are as efficient as the SPDR, price efficiency and tax efficiency are hallmark benefits of basket securities in general.

EXCHANGE TRADING

While creation unit transactions are the way the "Big Guys" deal with the SPDR Trust, trading of SPY on the AMEX is the route for the rest of us. A primary benefit is **liquidity**. In contrast to open-end mutual funds, with which transactions can be made only as of the market close each day at NAV, SPDRs trade during all normal market hours. SPDRs are priced at one-tenth of the level of the S&P 500 Index, so their price can be checked for efficiency. For example, if the S&P 500 Index is 1250, the price of SPY on the AMEX should be about \$125. The Indicative Optimized Portfolio Value (IOPV), an approximated NAV of a SPDR, is calculated and disseminated about every 15 seconds during normal market hours, so if the forces of supply and demand (which determine the price for SPY in the short run) move the price too far from its NAV, the potential for arbitrage profits (discussed in the previous section) comes into the pricing relationship and can move the market price toward NAV. SPDRs are highly liquid and can be bought "in size." The minimum purchase (or sale) is one share. So liquidity is a major benefit that spans the spectrum of transaction size.

As additional benefits of their exchange-traded nature,SPDRs can be margined and can be sold short on a "downtick" in price, for those investors who are so inclined to engage in such activities. Margin is simply borrowing (typically from a broker) to buy more shares than the amount of cash available would otherwise support. Generally, regulations do not permit shorting a stock on a downtick because such transactions could potentially put undue price pressure on a single issue. However, the SEC permits shorting on downticks in SPY because SPDR represents all 500 stocks in the S&P 500 Index, whick makes it unlikely that such transactions could impact the price of the entire index.

COST EFFICIENCY

It was noted earlier that UITs do not have a board of directors. (They do have a sponsor and a trustee.) Because its portfolio redemption and deposit procedures deal only with the Big Guys, SPDR does not have a multitude of shareholder service representatives to answer inquiries from shareholders. Because it holds an index fund, the SPDR Trust does not have to pay for investment research. The result of all this is **cost efficiency**. The annual expense ratio for SPDR is currently 12 basis points, or 0.0012.

FRESHNESS

As portfolio managers, the authors often encounter situations in which a substantial portion of an individual's wealth is accounted for by an individual stock or just a few stocks. Typically, the stock has been owned for a long while (sometimes decades), and has a low cost basis for tax purposes. It is not unusual to find that the stock is not performing as well as the market as a whole. In such situations (and even if the stock is performing), greater diversification is called for in order to reduce the risk of the specific holding. Such diversification can be costly from the standpoint of taxes to be paid on realized capital gains. Even if a diversification program is spread over several years, the risk of the portfolio is higher by virtue of the concentration that remains.

By contrast, since the S&P 500 Index is updated from time to time, by deleting some stocks and adding others, it continues to represent the present economic structure over time. That is, its holdings are up-to-date, or fresh. Accordingly, not only does the SPDR provide the diversification of the entire index, its composition is likely to be as fresh decades from now as it is today. The risk/return profile of the portfolio described in the previous paragraph is strikingly different from a portfolio constructed around basket securities. More about such portfolio construction later, but for now it is useful to know that a benefit of baskets is **freshness**.

REDUCING BOMBSHELLS

Similar to freshness, the reduction of the occurrence of "bombshells" is another portfolio construction topic. Bombshell is the term we apply to a stock that blows up and declines severely in price. This can happen for any of a variety of disappointments related to sales, earnings, margins, growth rates, or even, in the case of

a major software firm in 2000, the body language of the chief financial officer. Also, data confirms that bombshells are considerably more frequent since the end of 1999 than was previously the case. To the extent basket securities are used in portfolio construction, the exposure to potential damage from bombshells is reduced.

This chapter has explored a number of structural characteristics and their related benefits that are associated with basket securities. With a focus on the SPDR as a representative model, we have seen that the benefits of basket securities include instant diversification, price efficiency, tax efficiency, liquidity, cost efficiency, freshness, and the reduction of bombshells. Not bad for one single security!

3 A Survey of Major Participants

While Chapter 2 focused on the Standard & Poor's Depositary Receipt as a model for understanding the primary structural characteristics and benefits of basket securities generally, this chapter surveys the major participants presently involved in creating and operating various aspects of the basket securities market. These participants serve in one or more roles such as sponsor or investment manager/adviser. The reader is encouraged to use the data in Appendix A at the end of the book for further detail regarding the various baskets.

THE AMERICAN STOCK EXCHANGE (AMEX)

As described in Chapter 1 regarding the origins of basket securities, the AMEX has for a long time had an interest in the basket concept. An early attempt in 1989 with its Equity Index Participations failed due to the instruments being deemed by the U.S. Court of Appeals of the Seventh Circuit to be inherently futures contracts. Such contracts fall under the regulatory jurisdiction of the Commodity Futures Trading Commission, not the Securities and Exchange Commission; and so the product was withdrawn from the market.

Then in January 1992, just less than three months after the Index Trust SuperUnit was launched on the AMEX, the exchange introduced its own S&P 500 Index basket, the SPDR. This latter security has become the granddaddy of baskets (at least in terms of longevity) and was described in some detail in Chapter 2.

The AMEX is the sole owner of PDR Services LLC, which is the sponsor of the SPDR Trust, the UIT (unit investment trust) that holds the underlying stocks and issues exchange-traded securities that are based on the various Standard & Poor's indices. Through this sponsor, the AMEX has brought to market and currently trades a broad variety of basket securities (exchange-traded funds). It also trades many basket securities that are sponsored by other organizations, discussed below. The AMEX clearly dominates basket trading.

In addition to the SPDR, other **broad-based index** baskets trade on the AMEX. These include the Midcap SPDR, based on the S&P 400 Stock Index (trading symbol MDY) and Diamonds, based on the Dow Jones Industrial Average (DIA).

Also traded on AMEX is the Nasdaq 100 Tracking Stock (QQQ) that represents the largest 100 nonfinancial companies on Nasdaq. This security is issued by the Nasdaq 100 Trust; and the index is weighted about 75 percent in large technology companies. It has become dominant, in terms of asset growth and trading volume, among all the basket securities, even though it was not introduced until 1999.

According to *The Wall Street Journal*, as of July 2001 the QQQ had assets of about \$23 billion and daily trading volume of about 67 million shares.

The AMEX (through PDR Services LLC) has also introduced and currently trades a number of SPDR **sector** baskets. Representation in economic sectors is available for basic industries, consumer services, consumer staples, cyclical/transportation, energy, financial, technology, and utilities.

Other sector baskets available on the AMEX are **streetTRACKS Sector Funds**. At present these include the Fortune e-50 Index Tracking Stock (FEF), streetTRACKS Morgan Stanley High Tech 35 Index Fund (MTK), and streetTRACKS Morgan Stanley Internet Index Fund (MII).

Virtually all other basket securities that have been introduced by *sponsors other than* the AMEX PDR Services LLC also trade on the AMEX. [Exceptions include the iShares S&P Global 100 that trades on the New York Stock Exchange and the OEX100 (S&P100) that trades on the Chicago Board Options Exchange.] Information on all these baskets can be found online at www.amex.com, under "Exchange Traded Funds."

BARCLAYS GLOBAL INVESTORS, N.A. (BGI)

BGI, together with its wholly owned subsidiary, Barclays Global Fund Advisors (BGFA), is the world's largest investment advisor of institutional investment assets, and the largest manager of indexed products. BGI's association with basket securities also dates from their inception. As described in the appendix regarding the Super-Trust, Wells Fargo Nikko Investment Advisors, which through a series of corporate changes has become a part of BGI, served for a time as the subadvisor (i.e., investment manager) for the Index Series of Capital Market Fund. Shares of the Index Series were the basis for the Index Trust Super-Unit which tracked the S&P 500 Stock Index and was the first successful basket security, predating the launch of AMEX's SPDR by nearly 3 months.

BGI has continued and, especially since about mid-2000, has accelerated its involvement with basket securities. When WEBS (World Equity Benchmark Shares) were introduced in April 1996, BGI became their investment manager through a previous entity (Wells Fargo Nikko Investment Advisors), and remains investment advisor today through BGFA. WEBS have been renamed as iShares MSCI Series and are offered through iShares, Inc., an index mutual fund consisting of separate series'. Each of these basket securities respectively tracks a particular index provided by Morgan Stanley Capital International Inc. (MSCI) for a geographic region, mostly individual foreign countries. They have traded on the AMEX since inception.

It seems only natural that BGI, the firm that now includes what was the investment operation of Wells Fargo, should be in the forefront of advancing the scope and role of basket securities/exchange-traded funds based upon indexing. *The Wall Street Journal*, in an April 9, 2001 review, "Index Funds: 25 Years in Pursuit of the Average," provided useful historical perspective regarding the development of this important market: