LEARNING MADE EASY

3rd Edition

Exchange-Traded Funds

for dummies®

A Wiley Brand

Navigate the ETF marketplace with confidence

Construct a portfolio that will serve you for life

Avoid investment mistakes that could cost you

Russell Wild, MBA

Financial Advisor, NAPFA member

Exchange-Traded Funds

3rd Edition

by Russell Wild, MBA

for dummies
A Wiley Brand

Exchange-Traded Funds For Dummies®, 3rd Edition

Published by: **John Wiley & Sons, Inc.,** 111 River Street, Hoboken, NJ 07030-5774, www.wiley.com

For general information on our other products and services, please contact our Customer Care Department within the U.S. at 877-762-2974, outside the U.S. at 317-572-3993, or fax 317-572-4002. For technical support, please visit https://hub.wiley.com/community/support/dummies.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at http://booksupport.wiley.com. For more information about Wiley products, visit www.wiley.com.

Library of Congress Control Number: 2021948230

ISBN: 978-1-119-82883-9 (pbk); ISBN 978-1-119-82884-6 (ebk); ISBN 978-1-119-82885-3 (ebk)

Contents at a Glance

Table of Contents

Introduction

Every month, it seems, Wall Street comes up with some newfangled investment idea. The array of financial products (replete with 164-page prospectuses) is now so dizzying that the old, lumpy mattress is starting to look like a more comfortable place to stash the cash. But there is one product that is definitely worth looking at, even though it's been around not even 30 years. It's something of a cross between an index mutual fund and a stock, and it's called an *exchange-traded fund,* or ETF.

Just as computers and fax machines were used by big institutions before they caught on with individual consumers, so it was with ETFs. They were first embraced by institutional traders — investment banks, hedge funds, and insurance firms — because, among other things, they allow for the quick juggling of massive holdings. Big traders like that sort of thing. Personally, playing hot potato with my money is not my idea of fun. But all the same, over the past not-even 20 years, I've invested most of my own savings in ETFs, and I've suggested to many of my clients that they do the same.

I'm not alone in my appreciation of ETFs. They have grown exponentially in the past few years, and they will surely continue to grow and gain influence. While I can't claim that my purchases and my recommendations of ETFs account for much of the growing, global $9 trillion-plus ETF market, I'm happy to be a (very) small part of it. After you've read this third edition of *Exchange-Traded Funds For Dummies,* you may decide to become part of it as well, if you haven't already.

Since the First Edition. . .

Many changes have taken place in the investment world, both on Wall Street and Main Street, since the first edition of this book was published in 2007. For one thing, a much larger pot of money (dollars, euros, yen) is now invested in ETFs: $9.1 trillion as of this writing (up from a mere $800 billion in 2007). Also, when I introduce myself as the author of *Exchange-Traded Funds For Dummies,* I no longer get a look as if I'm speaking some strange language with a lisp. Many people today, perhaps most, are at least somewhat familiar with the term *exchange-traded funds.* ETFs have, after all, made a few headlines.

Out of the shadows

The rising popularity of ETFs has been a news story in and of itself. Many educated folks are now aware that ETFs are low-cost investment vehicles that can serve as building blocks for a diversified portfolio.

And that is what I concentrate on most in this third edition: how ETFs may be used by you — the individual investor — to maximize your investment returns while minimizing risk. I tried to do that same thing in the first and second editions, but, since then, without question, there have been many changes, both positive and negative. Today, you'll find a much greater selection of ETF offerings, although not all of them are prizes.

Filling the investment voids

One very positive change in the past several years is that the "black holes" that I identified in the first edition of this book have largely been filled. That is, when I wrote the first edition, you could not buy an ETF that would give you exposure to tax-free municipal or high-yield bonds. Or international bonds. Or international REITs. All that has changed. There are now ETFs that represent all those asset classes, and many more. Building an entire well-diversified portfolio out of ETFs was not humanly possible several years ago; it is very possible today. I've done it numerous times!

Another very positive development: ETFs have recently been making a grand entrance into employer-sponsored 401(k) plans, where many of America's hard-working people store the bulk of their savings. And they've been appearing lately in 529 College Savings Plans, too. Insurance companies have also jumped into the fray, offering ETFs in some of their annuity plans (which, unfortunately, are still often overpriced).

Creations of dubious value

Many of the newer ETFs are bad investments, pure and simple. They were introduced to take advantage of the popularity of ETFs. They are overly expensive, and they represent foolish indexes (extremely small segments of the market, or indexes constructed using highly questionable methodologies). Much of this book is designed to help you tell the good from the bad.

Many of the newer ETFs are also specifically designed for short-term trading — which you would know if you read the really small print at the bottom of the advertisements — and short-term trading usually gets small investors into big trouble.

A scary number of the newer ETFs are based on "back-tested" models: They track whatever indexes, or invest in whatever kinds of assets, have done the best in recent months or years. These ETFs (or the indexes they track) have shining short-term performance records, which induce people to buy. But past short-term performance is a very, very poor indicator of future performance.

A number of new ETFs are focused on "meme stocks" — those stocks most highlighted on social media, often ballyhooed in memes as surefire ways to get rich. I could say "Tesla" right now, but by the time you're reading this, Tesla will be out and some other company will be in. Buying what's most fashionable — by investing directly in the meme stocks or in an ETF filled with meme stocks — is not a wise investment move.

Morphing into new creatures

Actively managed ETFs (that might, for example, buy and sell meme stocks) have been much slower to take off than Wall Street had hoped but have made inroads since the first edition of this book.

These ETFs differ radically from the original index ETFs. Actively managed ETFs don't track any indexes at all but instead have portfolios built and regularly traded by managers attempting to beat the indexes. Study after study has shown that active management usually doesn't work all that well for investors, even though the managers themselves often get very rich (more in Chapter 18).

Some of the newest ETFs, called *defined outcome* ETFs, are everything that an ETF shouldn't be: actively managed, expensive, and almost absurdly complex. Whereas other ETFs are cousins of mutual funds, these complicated funds are more like variable annuities.

About This Book

As with any other investment, you're looking for a certain payoff in reading this book. In an abstract sense, the payoff will come in your achieving a thorough understanding and appreciation of a powerful financial tool called an exchange-traded fund. The more concrete payoff will come when you apply this understanding to improve your investment results.

What makes me think ETFs can help you make money?

- **ETFs are intelligent.** Most financial experts agree that playing with individual stocks can be hazardous to one's wealth. Anything from an accounting scandal to the CEO's sudden angina attack can send a single stock spiraling downward. That's why it makes sense for the average investor to own lots of stocks — or bonds — through ETFs or mutual funds.
- **ETFs are cheap.** At least 250 ETFs charge annual management expenses of 0.10 percent or lower, and a few charge as little as 0.00 percent a year! In contrast, the average actively managed mutual fund charges 0.63 percent a year. Index mutual funds generally cost a tad more than their ETF cousins. Such cost differences, while appearing small on paper, can make a huge impact on your returns over time. I crunch some numbers in Chapter 2.
- **ETFs are tax-smart.** Because of the very clever way ETFs are structured, the taxes you pay on any growth are minimal. I crunch some of those numbers as well in Chapter 2.
- **ETFs are open books.** Quite unlike mutual funds, an ETF's holdings are, by and large, readily visible. If this afternoon, for example, I were to buy 100 shares of the ETF called the SPDR (pronounced "spider") S&P 500 ETF Trust, I would know that exactly 6.37 percent of my money was invested in Apple, Inc., and 5.92 percent was invested in the Microsoft Corporation. You don't get that kind of detail when you buy most mutual funds. Mutual fund managers, like stage magicians, are often reluctant to reveal their secrets. In the investment game, the more you know, the lower the odds that you will get sawed in half.

  (News flash: Regulators are still debating just how open the portfolios of the newer actively managed ETFs will have to be. For the time being, however, most ETFs track indexes, and the components of any index are readily visible.)

And speaking of open books, if the one you're now reading were like some (but certainly not all) mutual funds, it would be largely unintelligible and expensive. (It might be doubly expensive if you tried to resell the book within 90 days!) Luckily, this book is more like an ETF. Here's how:

- ***Exchange-Traded Funds For Dummies* is intelligent.** I don't try to convince you that ETFs are your best investment choice, and I certainly don't tell you that ETFs will make you rich. Instead, I lay out facts and figures and summarize some hard academic findings, and I let you draw your own conclusions.

- ***Exchange-Traded Funds For Dummies* is cheap.** Hey, top-notch investment advice for only $29.99 (plus or minus any discounts, shipping, and tax). . . . Where else are you going to get that kind of deal? *And* should you come to the conclusion after reading this book that ETFs belong in your portfolio, you'll likely get your $29.99 (plus any shipping costs and tax) back — in the form of lower fees and tax efficiency — in no time at all.
- ***Exchange-Traded Funds For Dummies* is tax-smart.** Yes, the money you spent for this book, as all other outlays you make for investment advice, may be deducted from your federal income taxes (provided you itemize your deductions). Go for it!
- ***Exchange-Traded Funds For Dummies* is an open book.** You've already established that!

If you've ever read a *For Dummies* book before, you have an idea of what you're about to embark on. This is not a book you need to read from front to back. Feel free to jump about and glean whatever information you think will be of most use. There is no quiz at the end. You don't have to commit it all to memory.

Foolish Assumptions

I assume that most of the people reading this book know a fair amount about the financial world. I think that's a fairly safe assumption. Why else would you have bought an entire book about exchange-traded funds?

If you think that convertible bonds are bonds with removable tops and that the futures market is a place where fortunetellers purchase crystal balls, I help you along the best I can by letting you know how to find out more about certain topics. However, you may be better off picking up and reading a copy of the basic nuts-and-bolts *Investing For Dummies* by Eric Tyson (published by John Wiley & Sons, Inc.). After you spend some time with that title, c'mon back to this book. You'll be more than welcome!

Icons Used in This Book

Throughout the book, you find little globular pieces of art in the margins called *icons.* These cutesy but handy tools give you a heads-up that certain types of information are in the neighborhood.

TIP

Although this is a how-to book, you also find plenty of whys and wherefores. Any paragraph accompanied by this icon, however, is guaranteed pure, 100 percent, unadulterated how-to.

WARNING

The world of investments offers pitfalls galore. Wherever you see the bomb icon, know that there is a risk of your losing money — maybe even Big Money — if you skip the passage.

REMEMBER

Read twice! This icon indicates that something important is being said and is really worth putting to memory.

TECHNICAL STUFF

If you don't really care about the difference between standard deviation and beta, or the historical correlation between U.S. value stocks and REITs, feel free to skip or skim the paragraphs with this icon.

GREED ALERT

The world of Wall Street is full of people who make money at other people's expense. Where you see the starburst icon, I'm describing an instance where someone may try to sucker punch you and take your loot.

Beyond the Book

Aside from the information in this book, you have access to even more help and information online at `Dummies.com`. There, you can find information on all manner of topics.

`Dummies.com` is also where you'll find the *Exchange-Traded Funds For Dummies* Cheat Sheet, which suggests topics to discuss with your financial professional, explains how to choose the best ETFs, and succinctly explains how ETFs differ from mutual funds.

Where to Go from Here

Where would you like to go from here? If you want, start at the beginning. If you're interested only in stock ETFs, hey, no one says that you can't jump right to Part 2. Bond ETFs? Go ahead and jump to Part 3. It's entirely your call.

1

The ABCs of ETFs

IN THIS PART . . .

Delve into the early history of ETFs and their development ever since.

Find out what makes ETFs so special, and what makes them such darned good investments.

Discover where and how ETFs are created and traded.

IN THIS CHAPTER

» Discovering the origins of ETFs

» Understanding their role in the world of investing today

» Getting a handle on how ETFs are administered

» Finding out how ETFs are bought and sold

» Tallying the phenomenal growth of ETFs

Chapter 1

No Longer the New Kid on the Block

There are, no doubt, a good number of pinstriped ladies and gentlemen on and around Wall Street who froth heavily at the mouth when they hear the words *exchange-traded fund.* In a world of very pricey investment products and very well-paid investment-product salespeople, ETFs have been the ultimate killjoys.

Since their arrival on the investment scene in the early 1990s, some 3,300 ETFs have been created, and ETF assets have grown faster than those of any other investment product, by far. That's a good thing. ETFs enable the average investor to avoid shelling out fat commissions or paying layers of ongoing, unnecessary fees. And they've saved investors oodles in taxes.

Hallelujah.

In the Beginning

When I was a lad growing up in the 'burbs of New York City, my public school educators taught me how to read, write, and learn the capitals of the 50 states. I also learned that anything and everything of any importance in this world was, ahem, invented in the United States of America. I've since learned that, well, this isn't entirely true. Take ETFs. The first ETF was introduced in Canada. It was a creation of the Toronto Stock Exchange — no Wall Streeters were anywhere in sight!

I'm afraid that the story of the development of ETFs isn't quite as exciting as, say, the story behind penicillin or modern rocketry. As one Toronto Stock Exchange insider once explained to me, "We saw it as a way of making money by generating more trading." Thus was born the original ETF known as TIP, which stood for Toronto Index Participation Unit. It tracked an index of large Canadian companies (Bell Canada, Royal Bank of Canada, Nortel, and 32 others) known as the Toronto 35. That index was then the closest thing that Canada had to the Dow Jones Industrial Average index that exists in the United States.

Enter the traders

TIP was an instant success with large institutional stock traders, who saw that they could now trade an entire index in a flash. The Toronto Stock Exchange got what it wanted — more trading — and the world of ETFs got its start.

TECHNICAL STUFF

TIP has since morphed to track a larger index, the so-called S&P/TSX 60 Index, which — you probably guessed — tracks 60 of Canada's largest and most liquid companies. The fund also has a different name, the iShares S&P/TSX 60 Index ETF, and it trades (in Canada) under the ticker XIU. It is now managed by BlackRock, Inc., which, upon taking over the iShares lineup of ETFs from Barclays in 2009 (part of a juicy $13.5 billion deal), has come to be the biggest player in ETFs in the world. I introduce you to BlackRock and other ETF suppliers in Chapter 3. (A completely different BlackRock-managed U.S. ETF now uses the ticker TIP, but that fund has nothing to do with the original TIP; the present-day TIP invests in U.S. Treasury Inflation-Protected Securities.)

Moving south of the border

The first ETF didn't come to the United States for three or so years after its Canadian birth. (Oh, how my public school teachers would cringe!) On January 22, 1993, the Mother of All U.S. ETFs was born on the American Stock Exchange (which, in January 2009 — a big year for mergers and acquisitions — became part of NYSE Euronext). The first U.S.-based ETF was called the S&P Depositary

Receipts Trust Series 1, commonly known as the SPDR (or Spider) S&P 500, and it traded (and still does) under the ticker symbol SPY.

The SPDR S&P 500, which tracks the S&P 500 index, an index of the 500 largest U.S. companies, was an instant darling of institutional traders. It has since branched out to become a major holding in the portfolios of many individual and institutional investors — and a favorite of favorites among day-traders.

Fulfilling a Dream

ETFs were first embraced by institutions, and they continue to be used big-time by banks and insurance companies and such. Institutions sometimes buy and hold ETFs, but they are also constantly buying and selling ETFs and options on ETFs for various purposes, some of which I touch on in Chapter 23. For us noninstitutional types, the creation and expansion of ETFs has allowed for similar juggling (usually a mistake for individuals); but more importantly, ETFs allow for the construction of portfolios possessing institutional-like sleekness and economy.

Goodbye, ridiculously high mutual fund fees

The average mutual fund investor with a $150,000 portfolio filled with actively managed funds will likely spend $945 (0.63 percent) in annual expenses, per the Investment Company Institute and Morningstar. By switching to an ETF portfolio, that investor might incur — if they incur any trading costs at all — perhaps $50 or so to set up the portfolio, and maybe $20 or so a year thereafter. But now the investor's ongoing annual expenses will be about $270 (0.18 percent). That's a difference, ladies and gentlemen of the jury, of big bucks. We're looking at an overall yearly savings of $625, or more if your brokerage has eliminated trading commissions altogether, which many have. Keep in mind that your $625 or more a year will be compounded every year the money is invested.

REMEMBER

Loads, those odious fees that some mutual funds charge when you buy or sell their shares, simply don't exist in the world of ETFs.

Capital gains taxes, the blow that comes on April 15th to many mutual fund holders with taxable accounts, hardly exist. In fact, here's what my predominately buy-and-hold clients with their taxable money in ETFS have paid in capital gains taxes in the past three years: $0.00.

In Chapter 2, I delve much deeper into both the cost savings and the tax efficiency of ETFs.

Hello, building blocks for a better portfolio

In terms of diversification, my own and my clients' portfolios include large stocks; small stocks; micro cap stocks; English, French, Swiss, Japanese, and Korean stocks; intermediate-term bonds; short-term bonds; and real estate investment trusts (REITs) — all held in low-cost ETFs. I discuss diversification and how to use ETFs as building blocks for a Class A portfolio, in Parts 2 and 3.

Yes, you could use other investment vehicles, such as mutual funds, to create a well-diversified portfolio. But ETFs — at least most ETFs — make it much easier because they tend to track very specific indexes. They are, by and large, much more "pure" investments than mutual funds. An ETF that bills itself as an investment in, say, small growth stocks is going to give you an investment in small growth stocks, plain and simple. A mutual fund that bills itself as an investment vehicle for small growth stocks may include everything from cash to bonds to shares of Microsoft (no kidding, and I give other examples in the next chapter).

Will you miss the court papers?

While scandals of various sorts — hidden fees, "soft-money" arrangements, after-hours sweetheart deals, and executive kickbacks — have plagued the world of mutual funds and hedge funds, this is the number of ETF scandals that have touched my life or the lives and fortunes of my clients: 0. That's in good part because the vast majority of ETF managers, forced to follow existing indexes, have very little leeway in their investment choices. Unlike many investment vehicles, ETFs are closely regulated by the U.S. Securities and Exchange Commission. And ETFs trade during the day, in plain view of millions of traders — not after hours, as mutual funds do, which can allow for sweetheart deals when no one is looking.

In Chapter 2, I discuss in greater detail the transparency and cleanliness of ETFs.

Not Quite as Popular as the Beatles, But Getting There

With all that ETFs have going for them, I'm not surprised that they have spread like mad. Per the Investment Company Institute, there were, at the beginning of 2000, only 80 ETFs on the U.S. market; by mid-year 2021, there were nearly 2,300 ETFs, and the total assets invested in ETFs rose from $66 billion to just about $6 trillion. Yes, trillion. That's just in the U.S. alone. In the world, we're looking at $9 trillion invested in ETFs.

THE LITTLE KID IS GROWING FAST: ETFs' PHENOMENAL GROWTH

Following are a few facts and figures from the Investment Company Institute that indicate how the ETF market compares with the mutual fund market and how rapidly ETFs are gaining in popularity.

The amount of money invested in U.S.-based ETFs and mutual funds as of mid-year 2021 is as follows.

- ETFs: ~ $6 trillion
- Mutual funds: ~ $25 trillion

The total number of U.S.-based ETFs and mutual funds as of mid-year 2021 is as follows.

- ETFs: ~ 2,300
- Mutual funds: ~ 7,600

The number of U.S.-based ETFs in recent years is as follows.

- 2005: 204
- 2010: 923
- 2015: 1,597
- 2020: 2,204
- Mid-2021: 2,300

The total net assets invested in ETFs in recent years are as follows.

- 2005: $300.8 billion
- 2010: $992.0 billion
- 2015: $2.1 trillion
- 2020: $5.5 trillion
- Mid-2021: $6.0 trillion

Six trillion isn't quite the $25 trillion or so invested in mutual funds. But if current trends continue, ETFs may indeed become as popular as were John, Paul, George, and Ringo. And I would bet that the current trends will continue to gain popularity, especially among institutions and younger investors. Among my own clients, I can tell you that those under 40 tend to think of mutual funds as akin to landline telephones and disco music.

Part of ETFs' popularity stems from the growly bearish market of the first decade of this millennium. Investors who had been riding the double-digit annual returns of the 1990s suddenly realized that their portfolios weren't going to keep growing in leaps and bounds, and perhaps it was time to start watching investment costs. Then, as the first decade of the millennium turned into the second decade, there was also a huge awakening to the power of *indexing*, aka *passive* investing (investing in entire markets or market segments) and its superiority to so-called *active* investing (trying to cherry-pick stocks and time markets). Much more on that topic in Chapter 2.

Moving from Wall Street to Main Street

In the world of fashion, trendsetters — movie stars or British royals — wander out in public wearing something that most people consider ridiculous, and the next thing you know, everyone is wearing that same item. Investment trends work sort of like fashion trends, but a bit slower. It took from 1993 until, oh, 2001 or so (around the time I bought my first ETF) for this newfangled investment vehicle to really start moving. By about 2003, insiders say, the majority of ETFs were being purchased by individual investors, not institutions or investment professionals.

BlackRock, Inc., which controls more than a third of the U.S. market for ETFs, estimates that approximately 60 percent of all the trading in ETFs is done by individual investors. The other 40 percent consists of institutions and fee-only financial advisors, like me.

TIP

Fee-only, by the way, signifies that a financial advisor takes no commissions of any sort. It's a very confusing term because *fee-based* is often used to mean the opposite. Check out Chapter 26, where I talk about whether and what kind of financial professional you need to build and manage an ETF portfolio.

REMEMBER

Actually, individual investors — especially the buy-and-hold kind of investors — benefit much more from ETFs than do institutional traders. That's because institutional traders have always enjoyed the benefits of the very best deals on investment vehicles. That hasn't changed. For example, institutions often pay much less in management fees than do individual investors for shares in the same mutual fund. (Fund companies often refer to *institutional class* versus *investor class* shares. All that really means is "wholesale/low price" versus "retail/higher price.") And institutions almost always bypass nefarious "loads" (high commissions to buy and sell) on mutual funds.

Keeping up with the Vanguards

It may sound like I'm pushing ETFs as not only the best thing since sliced bread but as a replacement for sliced bread. Well, not quite. As much as I like ETFs, good old mutual funds still enjoy their place in the sun. That's especially true of inexpensive index mutual funds, such as the ones offered by Vanguard, Fidelity, and Schwab. Mutual funds, for example, are clearly the better option when you're investing in dribs and drabs and don't want to have to pay for each trade you make. . .although, starting a couple of years ago, a number of brokerage houses, including Charles Schwab, TD Ameritrade, Vanguard, and Fidelity, started to allow customers to trade ETFs for free.

One of the largest purveyors of ETFs is The Vanguard Group, the very same people who pioneered index mutual funds. In the case of Vanguard, shares in the company's ETFs are the equivalent of shares in one of the company's index mutual funds. In other words, they are different share classes of the same fund — the same representation of companies but a different structure and generally slightly lower management fees for the ETFs.

TIP

Because Vanguard funds allow for an apples-to-apples comparison of ETFs and index mutual funds, and because the company presumably has no great stake in which you choose, Vanguard may be a good place to turn for objective advice on which investment is better for you. But rest assured — a point that I'll make again in this book — this ain't rocket science. For most buy-and-hold investors, ETFs will almost always be the better choice, at least in the long run. I look more closely at the ETFs-versus-mutual-funds question when I design specific portfolios and give actual portfolio examples in Chapter 21.

THE RIPPLE EFFECT: FORCING DOWN PRICES ON OTHER INVESTMENT VEHICLES

You don't need to invest in ETFs to profit from them. They are doing to the world of investing what Chinese labor has done to global manufacturing wages. That is, they are driving prices down. Thanks to the competition that ETFs are giving to index mutual funds (ETFs now claim more than 60 percent of all money invested in all index funds), mutual fund providers have been lowering their charges. If you look at all funds in America, the average fee has declined from 0.81 percent in 1990 to 0.49 percent today. Zeroing in on just index funds — both traditional index mutual funds and ETFs — the average cost has fallen from 0.30 percent in 1990 to 0.18 percent today.

Ready for Prime Time

Although most investors are now familiar with ETFs, mutual funds remain the investment vehicle of choice by a margin of almost 4:1. Several reasons exist for the dominance of mutual funds — at least for the moment. First, mutual funds have been around a lot longer and so got a good head start. (The first mutual fund, called the Massachusetts Investors Trust, was founded in 1929.) Second, largely as a corollary to the first reason, most company retirement plans and pension funds still use mutual funds rather than ETFs; as a participant, you have no choice but to go with mutual funds. And finally, the vast majority of ETFs, unlike mutual funds, are index funds, and index funds have only fairly recently — after a long, uphill battle — caught the eye of millions of investors.

Index mutual funds, which most closely resemble ETFs, have been in existence since 1976 when Vanguard, under visionary John Bogle, first rolled out the Index Investment Trust fund. Since that time, Vanguard and other mutual fund companies have created hundreds of index funds tracking every conceivable index. But it has taken a long time for them to catch fire. As recently as 1998, actively managed stock funds had 6.5 times the assets as index funds. By 2020, index funds finally caught up to actively managed funds, and in 2021 surpassed them. Yes, Americans now have more money invested in index funds — initially referred to by many as "Bogle's folly" — than actively managed funds.

Why would anyone want to invest in index funds or index ETFs? After all, the financial professionals who run actively managed mutual funds spend many years and tens of thousands of dollars educating themselves at places with real ivy on the walls, like Harvard and Wharton. They know all about the economy, the stock market, business trends, and so on. Shouldn't we cash in on their knowledge by letting them pick the best basket of investments for us?

Good question! Here's the problem with hiring these financial whizzes, and the reason that index funds or ETFs generally kick their Ivy League butts: When these whizzes from Harvard and Wharton go to market to buy and sell stocks, they are usually buying and selling stock (not directly, but through the markets) from *other* whizzes who graduated from Harvard and Wharton. One whiz bets that ABC stock is going down, so he sells. His former classmate bets that ABC stock is going up, so he buys. Which whiz is right? Half the time, it's the buyer; half the time, it's the seller. Meanwhile, you pay for all the trading, not to mention the whiz's handsome salary while all this buying and selling is going on.

Economists have a name for such a market; they call it "efficient." It means, in general, that there are soooo many smart people analyzing and dissecting and studying the market that the chances are slim that any one whiz — no matter how whizzical, no matter how thick his Cambridge accent — is going to be able to beat the pack.

CAN YOU PICK NEXT YEAR'S WINNERS?

Okay, study after study shows that most actively managed mutual funds don't do as well in the long run as the indexes. But certainly some do much better, at least for a few years. And any number of magazine articles will tell you exactly how to pick next year's winners.

Alas, if only it were that easy. Sorry, but studies show rather conclusively that it is anything but easy. Morningstar, on a great number of occasions, has earmarked the top-performing mutual funds and mutual fund managers over a given period of time and tracked their performance moving forward. In one representative study, the top 30 mutual funds for sequential five-year periods were evaluated for their performance moving forward. In each and every five-year period, the "30 top funds," as a group, did worse than the S&P 500 in subsequent years.

That, in a nutshell, is why actively managed mutual funds tend to lag the indexes, usually by a considerable margin. If you want to read more about why stock-pickers and market-timers almost never beat the indexes, I suggest picking up a copy of the seminal *A Random Walk Down Wall Street* by Princeton economist Burton G. Malkiel. The book, now in something like its 200th edition, is available in paperback from W. W. Norton & Company. There's also a website — `www.ifa.com` — run by something of an indexing fanatic (hey, there are worse things to be) that is packed with articles and studies on the subject. You could spend days reading!

The proof of the pudding

One study, done in 2010 by Wharton finance professor Robert F. Stambaugh and University of Chicago finance professor Lubos Pastor, looked back over 23 years of data. The conclusion: Actively managed funds have trailed, and will likely continue to trail, their indexed counterparts (whether mutual funds or ETFs) by nearly 1 percent a year. That may not seem like a big deal, but compounded over time, 1 percent a year can be *HUGE.*

REMEMBER

Let's plug in a few numbers. An initial investment of $100,000 earning, say, 7 percent a year, would be worth $386,968 after 20 years. An initial investment of $100,000 earning 8 percent for 20 years would be worth $466,096. That's $79,128 extra in your pocket, all things being equal, if you invest in index funds. And if that investment were held in a taxable account, the figure would likely be much higher after you account for taxes. (Taxes on actively managed funds can be considerably higher than those on index funds.)

But wait, what if you carefully pick which actively managed funds to invest in? Good luck! Every year, Standard & Poors issues what they call the SPIVA Scorecard, which shows your odds of beating the indexes by investing in actively managed funds. It's scary (like, Stephen King–scary) reading. In 2020, 57 percent of active U.S. stock funds lagged the S&P 500 index, and that was an exceptionally good year for active funds. In 2019, 70 percent lagged the indexes; in 2018, 69 percent.

But it is over longer time periods that active funds really show their lack of spine. Again, according to the 2020 SPIVA Scorecard, only 17 percent of actively managed stock funds beat their benchmark indexes over the 10-year period prior to December 31, 2020. Actively managed bond funds tended to do even worse.

Moving to a real-ETF-world example, let's look at that very first ETF introduced in the United States, the SPDR S&P 500 (SPY). Since its inception in January 1993, that fund has enjoyed an average annual return (as of mid-2021) of 10.4 percent — not bad, considering that it survived several very serious bear markets (2000–2002, 2008–2009, and 2020). Very few actively managed funds can match that record. (You'll find some performance specifics in the next chapter.)

By the way, SPY, as well as it has performed, has several flaws that make it far from my first choice of ETF for most portfolios; I will divulge these flaws in Chapter 5. But despite its flaws — and I'm certainly not the only investment professional privy to them — SPY remains by far the largest ETF on the market, with total assets of $363 billion. In terms of average number of shares traded daily, nothing even comes close to SPY: 83 million shares.

The major players

In Parts 2, 3, and 4 of this book, I provide details about many of the ETFs on the market. Here, I want to introduce you to just a handful of the biggies. You will likely recognize a few of the names.

In Table 1-1, I list the six largest ETFs based on their assets, as of mid-August 2021.

In Table 1-2, I list the six largest ETFs on the market as of mid-August 2021, as calculated by the number of shares traded.

TABLE 1-1 The Six Largest ETFs by Assets

Name	Ticker	Assets (in billions of dollars)
SPDR S&P 500	SPY	$363
iShares Core S&P 500 ETF	IVV	$278
Vanguard Total Stock Market	VTI	$239
Vanguard S&P 500 ETF	VOO	$220
Invesco QQQ	QQQ	$160
VEA	IVV	$97

TABLE 1-2 The Six Largest ETFs by Number of Shares Traded

Name	Ticker	Average daily trading volume
ProShares UltraPro Short QQQ	SQQQ	96 million shares
ProShares Ultra VIX Short-Term Futures	UVXY	86 million shares
SPDR S&P 500 ETF	SPY	83 million shares
Financial Select Sector SPDR Fund	XLF	58 million shares
Invesco QQQ	QQQ	52 million shares
iShares MSCI Emerging Markets ETF	EEM	42 million shares

Twist and shout: Commercialization is tainting a good thing

Innovation is a great thing. Usually. In the world of ETFs, a few big players (BlackRock, Vanguard, State Street Global Advisors) jumped in early when the going was hot. Now, in order to get their share of the pie, a number of new players have entered the fray with some pretty wild ETFs. "Let's invest in all companies whose CEO is named Fred!" Okay, there's no Fred portfolio, but the way things are going, it could happen.

I tend to like my ETFs vanilla plain, maybe with a few sprinkles. I like them to follow indexes that make sense. And, above all, I like their expense ratios looooow. When ETFs first hit the market, most had expense ratios, I'd say, in the 0.20–0.40 percent range. Strangely, the growth in the market has created a big divide. The more basic ETFs, such as those that track the S&P 500, have, due to a lot of competition, come down in price. At present, there are dozens upon dozens of ETFs that carry expense ratios of 0.10 percent or less. Heck, all the competition out there has forced down mutual fund fees, as well.

Conversely, many of the newer, more complicated ETFs (and I don't use "complicated" as a compliment), have expense ratios edging up into the ballpark of what you would pay — even what you would've paid several years back — for mutual funds. Approximately 140 ETFs now carry net expense ratios of 1 percent or more; 19 of these have an expense ratio of over 2 percent.

I'm not saying that all ETFs must follow traditional indexes. The ETF format allows for more variety than that. (Actually, when I think about it, some of the traditional indexes, like the Dow, are darn dumb. I explain why in Chapter 3.) But the ETF industry has lost some of its integrity over the past few years with higher expenses and some awfully silly investment schemes.

The rest of this book will help you to sidestep the greed and the silliness — to take only the best parts of ETF investing and put them to their best use.

RIP THESE ETFs

New ETFs are being born every week, but at the same time, others are dying. Over 1,000 ETFs in the past several years have been zipped up, closed down, folded, and sent to that Great Brokerage in the Sky. In 2020 alone, according to the Investment Company Institute, as 313 ETFs came into existence, 182 disappeared.

No need to shed tears for the investors, however; they are okay.

If you are holding shares in a particular ETF that closes down, you will generally be given at least several weeks' notice. You can sell, or you can wait till the final day and receive whatever is the value of the securities held by the ETF at that point. It isn't like holding a bond (or an exchange-traded note) that goes belly up. You may have a bit of a hassle redoing your portfolio, and you may face sudden tax consequences. If the ETF tracks a very small segment of the market, there may be a bit of investor panic that could depress prices. But you aren't going broke.

As for the purveyors of the ETFs that have closed, I may shed only a crocodile tear or two. Most of the ETFs that have gone under are exactly the kinds of ETFs that I try to steer you away from in this book: They tracked narrow segments of the market (companies based in Oklahoma, for example); or they tracked somewhat silly and complex indexes (dividend rotation); or they were highly leveraged, exposing investors to excessive risk; or they were overpriced; or all of the above! The public simply would not buy. Bravo, public.

Here is just a small sampling from the ETF graveyard:

- WisdomTree Middle East Dividend Fund (GULF)
- Forensic Accounting Long-Short ETF (FLAG)
- HealthShares Dermatology and Wound Care ETF (HRW)
- Goldman Sachs Human Evolution ETF (GDNA)
- Global X Fertilizers/Potash ETF (SOIL)
- Claymore/Zacks Country Rotation ETF (CRO)
- Claymore/Zacks Dividend Rotation ETF (IRO)
- Geary Oklahoma ETF (OOK)
- JETS DJ Islamic Market International ETF (JVS)
- Guggenheim Inverse 2x Select Sector Energy ETF (REC)

According to ETF Deathwatch, any ETF that is at least six months old and has an "Average Daily Value Traded" of less than $100,000 for three consecutive months — or that has assets under management of less than $5 million for three consecutive months — is probably not an ETF you should get overly attached to. To find the Deathwatch blog, go to `www.thestreet.com` and type "ETF deathwatch" in the search box.

IN THIS CHAPTER

- » Distinguishing what makes ETFs unique
- » Appreciating ETFs' special attributes
- » Understanding that ETFs aren't perfect
- » Taking a look at who is making the most use of ETFs, and how
- » Asking if ETFs are for you

Chapter 2
What the Heck Is an ETF, Anyway?

Banking your retirement on stocks is risky enough; banking your retirement on any individual stock, or even a handful of stocks, is about as risky as wrestling crocodiles. Banking on individual bonds is less risky (maybe wrestling an adolescent crocodile), but the same general principle holds. There is safety in numbers. That's why teenage boys and girls huddle together in corners at school dances. That's why gnus graze in groups. That's why smart stock and bond investors grab onto ETFs.

In this chapter, I explain not only the safety features of ETFs but also the ways in which they differ from their cousins, mutual funds. By the time you're done with this chapter, you should have a pretty good idea of what ETFs can do for your portfolio.

The Nature of the Beast

Just as a deed shows that you have ownership of a house, and a share of common stock certifies ownership in a company, a share of an ETF represents ownership (most typically) in a basket of company stocks. To buy or sell an ETF, you place an order with a broker, generally (and preferably, for cost reasons) online, although you can also place an order by phone. The price of an ETF changes throughout the trading day (which is to say from 9:30 a.m. to 4:00 p.m., New York City time), going up or going down with the market value of the securities it holds. Sometimes there can be a little sway — times when the price of an ETF doesn't exactly track the value of the securities it holds — but that situation is rarely serious, at least not with ETFs from the better purveyors.

Originally, ETFs were developed to mirror various indexes:

- The SPDR S&P 500 (ticker SPY) represents stocks from the S&P (Standard & Poors) 500, an index of the 500 largest companies in the United States.
- The DIAMONDS Trust Series 1 (ticker DIA) represents the 30 or so underlying stocks of the Dow Jones Industrial Average index.
- The Invesco QQQ Trust Series 1 (ticker QQQ; formerly known as the NASDAQ-100 Trust Series 1) represents the 100 stocks of the NASDAQ-100 index.

Since ETFs were first introduced, many others, tracking all kinds of things, including some rather strange things that I dare not even call investments, have emerged.

The component companies in an ETF's portfolio usually represent a certain index or segment of the market, such as large U.S. value stocks, small growth stocks, or micro cap stocks. (If you're not 100 percent clear on the difference between *value* and *growth*, or what a micro cap is, rest assured that I define these and other key terms in Part 2.)

Sometimes, the stock market is broken up into industry sectors, such as technology, industrials, and consumer discretionary. ETFs exist that mirror each sector.

REMEMBER

Regardless of what securities an ETF represents, and regardless of what index those securities are a part of, your fortunes as an ETF holder are tied, either directly or in some leveraged fashion, to the value of the underlying securities. If the price of Microsoft stock, U.S. Treasury bonds, gold bullion, or British Pound futures goes up, so does the value of your ETF. If the price of gold tumbles, your portfolio (if you hold a gold ETF) may lose some glitter. If Microsoft stock pays a dividend, you are due a certain amount of that dividend — *unless* you happen to have bought into a leveraged or inverse ETF.

As I discuss in Chapter 18, some ETFs allow for leveraging, so that if the underlying security rises in value, your ETF shares rise doubly or triply. If the security falls in value, well, you lose according to the same multiple. Other ETFs allow you not only to leverage but also to *reverse* leverage, so that you stand to make money if the underlying security falls in value (and, of course, lose if the underlying security increases in value). I'm not a big fan of leveraged and inverse ETFs, for reasons I make clear in Chapter 18.

Choosing between the Classic and the New Indexes

Some of the ETF providers (Vanguard, iShares, Charles Schwab) tend to use traditional indexes, such as those I mention in the previous section. Others (Dimensional, WisdomTree) tend to develop their own indexes.

For example, if you were to buy 100 shares of an ETF called the iShares S&P 500 Growth Index Fund (IVW), you'd be buying into a traditional index (large U.S. growth companies). At about $70 a share (at this writing), you'd plunk down $7,000 for a portfolio of stocks that would include shares of Apple, Microsoft, Amazon, Facebook, Alphabet (Google), and Tesla. If you wanted to know the exact breakdown, the iShares prospectus found on the iShares website (or any number of financial websites, such as `http://finance.yahoo.com`) would tell you specific percentages: Apple, 11.3 percent; Microsoft, 10.3 percent, Amazon, 7.8 percent; and so on.

Many ETFs represent shares in companies that form foreign indexes. If, for example, you were to own 100 shares of the iShares MSCI Japan Index Fund (EWJ), with a market value of about $69 per share as of this writing, your $6,900 would buy you a stake in large Japanese companies such as Toyota Motor, SoftBank Group, Sony Group, Keyence, and Mitsubishi UFJ Financial Group. Chapter 9 is devoted entirely to international ETFs.

Both IVW and EWJ mirror standard indexes: IVW mirrors the S&P 500 Growth Index, and EWJ mirrors the MSCI Japan Index. If, however, you purchase 100 shares of the Invesco Dynamic Large Cap Growth ETF (PWB), you'll buy roughly $7,100 worth of a portfolio of stocks that mirror a very unconventional index — one created by the Invesco family of exchange-traded funds. The large U.S. growth companies in the PowerShares index that have the heaviest weightings include

Facebook and Alphabet, but also NVIDIA and Texas Instruments. Invesco PowerShares refers to its custom indexes as *Intellidex* indexes.

A big controversy in the world of ETFs is whether the newfangled, customized indexes offered by companies like Invesco make any sense. Most financial professionals are skeptical of anything that's new. We are a conservative lot. Those of us who have been around for a while have seen too many "exciting" new investment ideas crash and burn. But I, for one, try to keep an open mind. For now, let me continue with my introduction to ETFs, but rest assured that I address this controversy later in the book (in Chapter 3 and throughout Parts 2, 3, and 4).

Another big controversy is whether you may be better off with an even newer style of ETFs — those that follow no indexes at all but rather are "actively" managed. As I make clear in Chapter 1, I prefer index investing to active investing, but that's not to say that active investing, carefully pursued, has no role to play. More on that topic later in this chapter and throughout the book.

Other ETFs — a distinct but growing minority — represent holdings in assets other than stocks, most notably, bonds and commodities (gold, silver, oil, and such). And then there are exchange-traded notes (ETNs), which allow you to venture even further into the world of alternative investments — or speculations — such as currency futures. I discuss these products in Parts 3 and 4 of the book.

Preferring ETFs over Individual Stocks

Okay, why buy a basket of stocks rather than an individual stock? Quick answer: You'll sleep better.

You may recall that in 2018, supermodel Kate Upton accused the executive and cofounder of GUESS of harassment. The company's shares fell 18 percent overnight. A few months later, Tesla's CEO Elon Musk smoked marijuana and sipped whiskey during a bizarre podcast. Tesla's stock fell 9 percent the next day.

Those sorts of things — sometimes much worse — happen every day in the world of stocks.

A company I'll call ABC Pharmaceutical sees its stock shoot up by 68 percent because the firm just earned an important patent for a new diet pill; a month later, the stock falls by 84 percent because a study in the *New England Journal of Medicine* found that the new diet pill causes people to hallucinate and think they are Genghis Khan — or Elon Musk.

Compared to the world of individual stocks, the stock market as a whole is as smooth as a morning lake. Heck, a daily rise or fall in the Dow of more than a percent or two (well, maybe 2 or 3 percent these days) is generally considered a pretty big deal.

TIP

If you, like me, are not especially keen on roller coasters, then you are advised to put your nest egg into not one stock, not two, but many. If you have a few million sitting around, hey, you'll have no problem diversifying — maybe individual stocks are for you. But for most of us commoners, the only way to effectively diversify is with ETFs or mutual funds.

Distinguishing ETFs from Mutual Funds

So what is the difference between an ETF and a mutual fund? After all, mutual funds also represent baskets of stocks or bonds. The two, however, are not twins. They're not even siblings. Cousins are more like it. Here are some of the big differences between ETFs and mutual funds:

REMEMBER

- ETFs are bought and sold just like stocks (through a brokerage house, either by phone or online), and their prices change throughout the trading day. Mutual fund orders can be made during the day, but the actual trading doesn't occur until after the markets close.
- ETFs tend to represent indexes — market segments — and the managers of the ETFs tend to do very little trading of securities in the ETF. (The ETFs are *passively* managed.) Most mutual funds are actively managed.
- Although they may require you to pay small trading fees, ETFs usually wind up costing you much less than mutual funds because the ongoing management fees are typically much lower, and there is never a *load* (an entrance and/or exit fee, sometimes an exorbitant one), as you find with many mutual funds.
- Because of low portfolio turnover and also the way ETFs are structured, ETFs generally declare much less in taxable capital gains than mutual funds.

Table 2-1 provides a quick look at some ways that investing in ETFs differs from investing in mutual funds and individual stocks.

TABLE 2-1 ETFs versus Mutual Funds versus Individual Stocks

	ETFs	Mutual Funds	Individual Stocks
Are they priced, bought, and sold throughout the day?	Yes	No	Yes
Do they offer some investment diversification?	Yes	Yes	No
Is there a minimum investment?	No	Yes	No
Are they purchased through a broker or online brokerage?	Yes	Yes	Yes
Do you pay a fee or commission to make a trade?	Rarely	Sometimes	Rarely
Can that fee or commission be more than a few dollars?	No	Yes	No
Can you buy/sell options?	Sometimes	No	Sometimes
Are they indexed (passively managed)?	Typically	Atypically	No
Can you make money or lose money?	Yes	Yes	You bet

Why the Big Boys Prefer ETFs

When ETFs were first introduced, they were primarily of interest to institutional traders — insurance companies, hedge fund people, banks — whose investment needs are often considerably more complicated than yours and mine. In this section, I explain why ETFs appeal to the largest investors.

Trading in large lots

Prior to the introduction of ETFs, a trader had no easy way to buy or sell instantaneously, in one fell swoop, hundreds of stocks or bonds. Because they trade both during market hours and, in some cases, after market hours, ETFs made that possible.

Institutional investors also found other things to like about ETFs. For example, ETFs are often used to put cash to productive use quickly or to fill gaps in a portfolio by allowing immediate exposure to an industry sector or geographic region.

Savoring the versatility

Unlike mutual funds, ETFs can also be purchased with limit, market, or stop-loss orders, taking away the uncertainty involved with placing a buy order for a mutual fund and not knowing what price you're going to get until several hours after the market closes. See the sidebar, "Your basic trading choices (for ETFs or stocks)," if you're not certain what limit, market, and stop-loss orders are.

And because many ETFs can be sold short, they provide an important means of risk management. If, for example, the stock market takes a dive, then *shorting* ETFs — selling them now at a locked-in price with an agreement to purchase them back (cheaper, you hope) later on — may help keep a portfolio afloat. For that reason, ETFs have become a darling of hedge fund managers who offer the promise of investments that won't tank should the stock market tank. See Chapter 23 for more on this topic.

YOUR BASIC TRADING CHOICES (FOR ETFs OR STOCKS)

Buying and selling an ETF is just like buying and selling a stock; there really is no difference. Although you can trade in all sorts of ways, the vast majority of trades fall into the following categories.

- **Market order:** This is as simple as it gets. You place an order with your broker or online to buy, say, 100 shares of a certain ETF. Your order goes to the stock exchange, and you get the best available price.
- **Limit order:** More exact than a market order, you place an order to buy, say, 100 shares of an ETF at $23 a share. That is the maximum price you will pay. If no sellers are willing to sell at $23 a share, your order will not go through. If you place a limit order to sell at $23, you'll get your sale if someone is willing to pay that price. If not, there will be no sale. You can specify whether an order is good for the day or until canceled (if you don't mind waiting to see if the market moves in your favor).
- **Stop-loss (or stop) order:** Designed to protect you should the price of your ETF or stock take a tumble, a stop-loss order automatically becomes a market order if and when the price falls below a certain point (say, 10 percent below the current price). Stop-loss orders are used to limit investors' exposure to a falling market, but they can (and often do) backfire, especially in very turbulent markets. Proceed with caution.
- **Short sale:** You sell shares of an ETF that you have borrowed from the broker. If the price of the ETF then falls, you can buy replacement shares at a lower price and pocket the difference. If, however, the price rises, you are stuck holding a security that is worth less than its market price, so you pay the difference, which can sometimes be huge.

For more information on different kinds of trading options, see the U.S. Securities and Exchange Commission discussion at `www.sec.gov/investor/alerts/trading101basics.pdf`.

Why Individual Investors Are Learning to Love ETFs

Clients I've worked with are often amazed that I can put them into a financial product that will cost them a fraction in expenses compared to what they are currently paying. Low costs are probably what I love the most about ETFs. But I also love their tax efficiency, transparency (you know what you're buying), and — now in their third decade of existence — good track record of success.

The cost advantage: How low can you go?

In the world of actively managed mutual funds (which is to say most mutual funds), the average annual management fee, according to the Investment Company Institute and Morningstar, is 0.63 percent of the account balance. That may not sound like a lot, but don't be misled. A well-balanced portfolio with both stocks and bonds may return, say, 5 percent over time. In that case, paying 0.63 percent to a third party means that you've just lowered your total investment returns by one-eighth. In a bad year, when your investments earn, say, 0.63 percent, you've just lowered your investment returns to *zero.* And in a *very* bad year. . .you don't need me to do the math.

Active ETFs, although cheaper than active mutual funds, aren't all that much cheaper, averaging 0.51 percent a year, although a few are considerably higher than that.

GREED ALERT

I'm astounded at what some funds charge. Whereas the average active fund charges between .51 (for ETFs) and 0.63 percent (for mutual funds), I've seen charges five times that amount. Crazy. Investing in such a fund is tossing money to the wind. Yet people do it. The chances of your winding up ahead after paying such high fees are next to nil. Paying a *load* (an entrance and/or exit fee) that can total as much as 6 percent is just as nutty. Yet people do it.

In the world of index funds, the expenses are much lower, with index mutual funds averaging 0.06 percent and ETFs averaging 0.17 percent, although many of the more traditional indexed ETFs cost no more than 0.06 percent a year in management fees, and as more competition has entered the market, even that price now seems high. A handful are now under 0.03 percent. And one purveyor, BNY Mellon, has actually introduced two ETFs with NO fees.

No fees?

How can no fees make sense?

The multibillion-dollar BNY Mellon Bank didn't enter the ETF game until 2020, and they took the price-cutting war to a new level. The bank issued two ETFs with an expense ratio of ZERO. How can the company do that and expect to make money? They don't. "It's a courtesy to investors, and we're hoping that they'll look at our other ETFs," says a BNY Mellon official. Indeed, it got me looking at the BNY Mellon line-up, and I showcase a few of their other ETF offerings later in the book, all of which are very reasonably priced. However, there may be no more freebies in the pipeline, and to date, no other ETF purveyors have dropped their price to zero, although a number of index mutual fund purveyors have.

Do keep in mind that price is just one of the characteristics — albeit a very important one — that you'll be looking at in deciding how to pick "best-in-class" when choosing an ETF.

Some fees, as you can see in Table 2-2, are so low as to be negligible (or even less than negligible). Each ETF in this table has a yearly management expense of 0.05 percent or less.

TABLE 2-2 Rock-Bottom-Priced ETFs

ETF	Ticker	Total Annual Management Expense
BNY Mellon Core Bond ETF	BKAG	0.00%
JPMorgan BetaBuilders U.S. Equity ETF	BBUS	0.02%
Charles Schwab U.S. Broad Market	SCHB	0.03%
Vanguard S&P 500	VOO	0.03%
Vanguard Total Stock Market	VTI	0.03%
Charles Schwab U.S. Large-Cap	SCHX	0.03%
SPDR Portfolio S&P 500 Index	SPLG	0.03%
iShares Core U.S. Aggregate Bond ETF	AGG	0.04%
Invesco PureBeta SM US Aggregate Bond ETF	PBND	0.05%
Charles Schwab 1000 Index ETF	SCHK	0.05%

REMEMBER

Numerous studies have shown that low-cost funds have a huge advantage over higher-cost funds. One study by Morningstar looked at stock returns over a five-year period. In almost every category of stock mutual fund, low-cost funds beat the pants off high-cost funds. Do you think that by paying high fees you're getting better fund management? Hardly. The Morningstar study found, for example, that among mutual funds that hold large blend stocks (*blend* meaning a combination of value and growth — an S&P 500 fund would be a blend fund, for example), the annualized gain was 8.75 percent for those funds in the costliest quartile of funds; the gain for the least costly quartile was 9.89 percent.

Why ETFs are cheaper

The management companies that bring us ETFs, such as BlackRock and Invesco, are presumably not doing so for their health. No, they're making a good profit. One reason they can offer ETFs so cheaply compared to mutual funds is that their expenses are much less. When you buy an ETF, you go through a brokerage house, not BlackRock or Invesco. That brokerage house (Merrill Lynch, Fidelity, TIAA CREF) does all the necessary paperwork and bookkeeping on the purchase. If you have any questions about your money, you'll likely call Fidelity, not BlackRock. So, unlike a mutual fund company, which must maintain telephone operators, bookkeepers, and a mailroom, the providers of ETFs can operate almost entirely in cyberspace.

ETFs that are linked to indexes do have to pay some kind of fee to S&P Dow Jones Indices or MSCI or whoever created the index. But that fee is *nothing* compared to the exorbitant salaries that mutual funds pay their dart throwers, er, stock pickers, er, market analysts.

An unfair race

Active mutual funds (and the vast majority of mutual funds are active mutual funds) really don't have much chance of beating passive index funds — whether mutual funds or ETFs — over the long run, at least not as a group. (There are individual exceptions, but it's virtually impossible to identify them before the fact.) Someone once described the contest as a race in which the active mutual funds are "running with lead boots." Why? In addition to the management fees that eat up a substantial part of any gains, there are also the trading costs. Yes, when mutual funds trade stocks or bonds, they pay a spread and a small cut to the stock exchange, just like you and I do. That cost is passed on to you, and it's on top of the annual management fees previously discussed.

An actively managed fund's annual turnover costs will vary, but one study several years ago found that they were typically running at about 0.8 percent. And active mutual fund managers must constantly keep some cash on hand for all those trades. Having cash on hand costs money, too: The opportunity cost, like the turnover costs, can vary greatly from fund to fund, but a fund that keeps 20 percent of its assets in cash — and there are many that do — is going to see significant cash drag. After all, only 80 percent of its assets are really working for you.

So you take the 0.63 percent average management fee, and the perhaps 0.8 percent hidden trading costs, and the cash-drag or opportunity cost, and you can see where running with lead boots comes in. Add taxes to the equation, and while some actively managed mutual funds may do better than ETFs for a few years, over the long haul, I wouldn't bank on many of them coming out ahead.

Uncle Sam's loss, your gain

Alas, unless your money is in a tax-advantaged retirement account, making money in the markets means that you have to fork something over to Uncle Sam at year's end. That's true, of course, whether you invest in individual securities or funds. But before there were ETFs, individual securities had a big advantage over funds in that you were required to pay capital gains taxes only when you actually enjoyed a capital gain. With mutual funds, that isn't so. The fund itself may realize a capital gain by selling off an appreciated stock. You pay the capital gains tax regardless of whether you sell anything and regardless of whether the share price of the mutual fund increased or decreased since the time you bought it.

WARNING

There have been times (pick a bad year for the market — 2000, 2008,. . .) when many mutual fund investors lost a considerable amount in the market, yet had to pay capital gains taxes at the end of the year. Talk about adding insult to injury! One study found that over the course of time, taxes have wiped out approximately 2 full percentage points in returns for investors in the highest tax brackets.

In the world of ETFs, such losses are very unlikely to happen. Because most ETFs are index-based, they generally have little turnover to create capital gains. Perhaps even more importantly, ETFs are structured in a way that largely insulates shareholders from capital gains that result when mutual funds are forced to sell in order to free up cash to pay off shareholders who cash in their chips.

CAPITAL GAINS, INVESTOR PAINS

If you hold a mutual fund, and that fund sells shares for more than their purchase price, you, as an existing shareholder, will likely get slapped with a capital gains tax. Capital gains tax rates are always subject to change, but at the time of this writing, you're most likely going to have to cough up between 15 percent and 20 percent of the appreciation.

No tax calories

The structure of ETFs makes them different than mutual funds. Actually, ETFs are legally structured in three different ways: as exchange-traded open-end mutual funds, exchange-traded unit investment trusts, and exchange-traded grantor trusts. The differences are subtle, and I elaborate on them somewhat in Chapter 3. For now, I want to focus on one seminal difference between ETFs and mutual funds, which boils down to an extremely clever setup whereby ETF shares, which represent stock holdings, can be traded without any actual trading of stocks.

Think of the poker player who plays hand after hand, but thanks to the miracle of little plastic chips, he doesn't have to touch any cash.

Market makers and croupiers

In the world of ETFs, you don't have croupiers, but you have market makers. *Market makers* are people who work at the stock exchanges and create (like magic!) ETF shares. Each ETF share represents a portion of a portfolio of stocks, sort of like poker chips represent a pile of cash. As an ETF grows, so does the number of shares. Concurrently (once a day), new stocks are added to a portfolio that mirrors the ETF. See Figure 2-1, which may help you envision the structure of ETFs and what makes them such tax wonders.

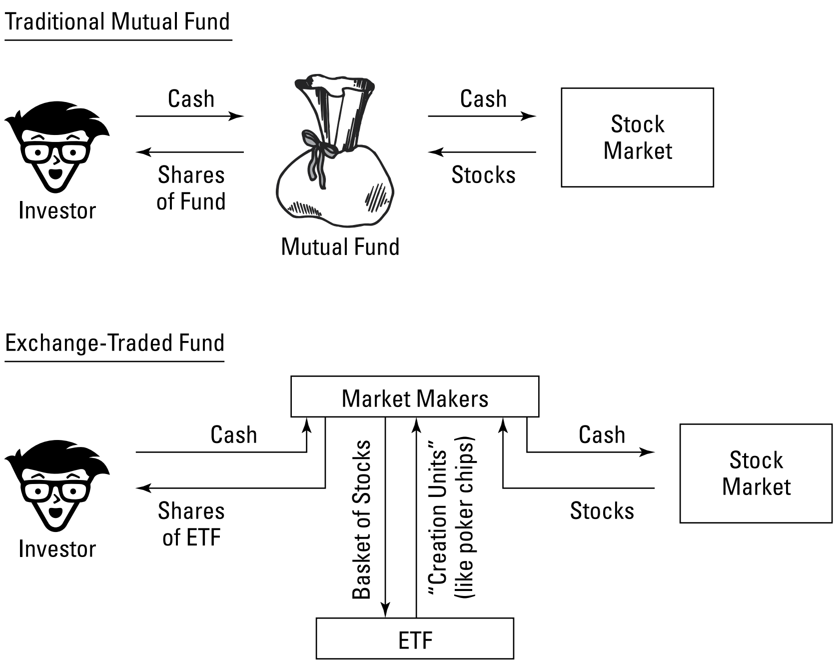


FIGURE 2-1: The secret to ETFs' tax friendliness lies in their very structure.

When an ETF investor sells shares, those shares are bought by a market maker who turns around and sells them to another ETF investor. By contrast, with mutual funds, if one person sells, the mutual fund must sell off shares of the underlying stock to pay off the shareholder. If stocks sold in the mutual fund are being sold for more than the original purchase price, the shareholders left behind are stuck paying a capital gains tax. In some years, that amount can be substantial.

In the world of ETFs, no such thing has happened or is likely to happen, at least not with the vast majority of ETFs, which are index funds. Because index funds trade infrequently, and because of ETFs' poker-chip structure, ETF investors rarely see a bill from Uncle Sam for any capital gains tax. That's not a guarantee that there will never be capital gains on any index ETF, but if there ever are, they are sure to be minor.

The actively managed ETFs — currently a small fraction of the ETF market, but almost certain to grow — may present a somewhat different story. They are going to be, no doubt, less tax friendly than index ETFs but more tax friendly than actively managed mutual funds. Exactly where will they fall on the spectrum? It may take another few years before we really know.

REMEMBER

Tax efficient does not mean tax-free. Although you won't pay capital gains taxes, you will pay taxes on any dividends issued by your stock ETFs, and stock ETFs are just as likely to issue dividends as are mutual funds. In addition, if you sell your ETFs and they are in a taxable account, you have to pay capital gains tax (15 percent for most folks; 20 percent for those who make big bucks) if the ETFs have appreciated in value since the time you bought them. But hey, at least you get to decide when to take a gain, and when you do, it's an actual gain.

ETFs that invest in taxable bonds and throw off taxable-bond interest are not likely to be very much more tax friendly than taxable-bond mutual funds.

ETFs that invest in actual commodities, holding real silver or gold, tax you at the "collectible" rate of 28 percent. And ETFs that tap into derivatives (such as commodity futures) and currencies sometimes bring with them very complex (and costly) tax issues.

Taxes on earnings — be they dividends or interest or money made on currency swaps — aren't an issue if your money is held in a tax-advantaged account, such as a Roth IRA. I love Roth IRAs! More on that topic when I get into retirement accounts in Chapter 24.

What you see is what you get

A key to building a successful portfolio, right up there with low costs and tax efficiency, is diversification, a subject I discuss more in Chapter 4. You cannot diversify optimally unless you know exactly what's in your portfolio. In a rather infamous example, when tech stocks (some more than others) started to go belly up in 2000, holders of Janus mutual funds got clobbered. That's because they learned after the fact that their three or four Janus mutual funds, which gave the illusion of diversification, were actually holding many of the same stocks.

Style drift: An epidemic

REMEMBER

With a mutual fund, you often have little idea of what stocks the fund manager is holding. In fact, you may not even know what *kinds* of stocks they are holding — or even if they are holding stocks! I'm talking here about *style drift,* which occurs when a mutual fund manager advertises their fund as aggressive, but over time it becomes conservative, and vice versa. I'm talking about mutual fund managers who say they love large value but invest in large growth or small value.

One classic case of style drift cost investors in the popular Fidelity Magellan Fund a bundle. The year was 1996, and then fund manager Jeffrey Vinik reduced the stock holdings in his "stock" mutual fund to 70 percent. He had 30 percent of the fund's assets in either bonds or short-term securities. He was betting that the market was going to sour, and he was planning to fully invest in stocks after that happened. He was dead wrong. Instead, the market continued to soar, bonds took a dive, Fidelity Magellan seriously underperformed, and Vinik was out.

One study by the Association of Investment Management concluded that a full 40 percent of actively managed mutual funds are not what they say they are. Some funds bounce around in style so much that you, as an investor, have scant idea of where your money is actually invested.

ETFs are the cure

When you buy an indexed ETF, you get complete transparency. You know exactly what you are buying. No matter what the ETF, you can see in the prospectus or on the ETF provider's website (or on any number of independent financial websites) a complete picture of the ETF's holdings. See, for example, either `www.etfdb.com` or `http://finance.yahoo.com`. If I go to either website and type the letters *IYE* (the ticker symbol for the iShares Dow Jones U.S. Energy Sector ETF) in the box in the upper-right corner of the screen, I can see in an instant what my holdings are. You can see, too, in Table 2-3.

TABLE 2-3 Holdings of the iShares Dow Jones U.S. Energy Sector ETF as of mid-August 2021

Name	% Net Assets
ExxonMobil Corporation	23.9
Chevron Corporation	19.6
ConocoPhillips	4.8
EOG Resources, Inc.	4.3
Schlumberger Ltd.	3.8
Marathon Petroleum Corporation	3.6
Phillips 66	3.5
Kinder Morgan, Inc.	3.3
Pioneer Natural Resources Company	3.2
Valero Energy Corporation	3.0

You simply can't get that information on most actively managed mutual funds. Or, if you can, the information is both stale and subject to change without notice.

Transparency also discourages dishonesty

The scandals that have rocked the mutual fund world over the years have left the world of ETFs untouched. There's not a whole lot of manipulation that a fund manager can do when their picks are tied to an index. And because ETFs trade throughout the day, with the price flashing across thousands of computer screens worldwide, there is no room to take advantage of the "stale" pricing that occurs after the markets close and mutual fund orders are settled. All in all, ETF investors are much less likely ever to get bamboozled than are investors in active mutual funds.

Getting the Professional Edge

I don't know about you, but when I, on rare occasions, go bowling and bowl a strike, I feel as if a miracle of biblical proportions has occurred. And then I turn on the television, stumble upon a professional bowling tournament, and see guys for whom *not* bowling a strike is a rare occurrence. The difference between amateur and professional bowlers is huge. The difference between investment amateurs and investment professionals can be just as huge. But you can close much of that gap with ETFs.

Consider a few impressive numbers

By investment professionals, Lord knows I'm not talking about stockbrokers or variable-annuity salesmen, or my barber, who always has a stock recommendation for me. I'm talking about the managers of foundations, endowments, and pension funds with $1 billion or more in invested assets. By amateurs, I'm talking about the average U.S. investor with a few assorted and sundry mutual funds in their 401(k).

Let's compare the two: During the 30-year period from 1990 through to the end of 2020, the U.S. stock market, as measured by the S&P 500 Index, provided an annual rate of return of 10.7 percent. Yet the average stock fund investor, according to a study by the Massachusetts-based research firm Dalbar, earned an annual rate of 6.24 percent over that same period. The Bloomberg-Barclays U.S. Aggregate Bond Index earned 5.86 percent a year over that same period, while the average bond fund investor earned but 0.45 percent.

Why the pitiful returns? Although there are several reasons, here are three main ones:

- Mutual fund investors pay too much for their investments.
- These investors jump into hot funds in hot sectors when they're hot and jump out when those funds or sectors turn cold. (In other words, they are constantly buying high and selling low.)
- Small investors panic easily, and all too often cash out when the going gets rough.

Professionals tend not to do those things. To give you an idea of the difference between amateurs and professionals, consider this: For the 10-year period ended December 31, 2020, the average small investor, per Dalbar, earned a 4.9 percent annual return on their investments. Compare that to, say, the endowments of MIT (11.4 percent), Yale (10.9 percent), or Dartmouth (10.4 percent).

You can do what they do!

Professional managers, you see, don't pay high expenses. They don't jump in and out of funds. They know that they need to diversify. They tend to buy indexes. They know exactly what they own. And they know that asset allocation, not stock picking, is what drives long-term investment results. In short, they do all the things that an ETF portfolio can do for you. So do it. Well, maybe. . .but first, read the rest of this chapter!

Passive versus Active Investing: Your Choice

Surely, you've sensed by now my preference for index funds over actively managed funds. For the first years of their existence, all ETFs were index funds.

On March 25, 2008, Bear Stearns introduced an actively managed ETF: the Current Yield ETF (YYY). As fate would have it, Bear Stearns was just about to go under, and when it did, the first actively managed ETF went with it. Prophetic? Perhaps. In the years since, hundreds of actively managed ETFs have hit the street. Many have died. Today, there are 586, but they are not enjoying enormous commercial success. At the time of this writing, active ETFs, per Morningstar Direct, accounted for a very measly 2.8 percent of the nearly $7 trillion invested in ETFs.

According to Cerulli Associates, however, the majority (79 percent) of U.S. ETF issuers, as of end of year 2020, were either developing or planning to develop active ETFs.

I don't think the advent of actively managed ETFs is necessarily a bad thing, but I'm not frothing at the mouth to invest in actively managed ETFs, either.

Let's looks at a few of the pros and cons of index investing versus investing in actively managed funds, and then let's look at how the ETF wrapper throws a wrinkle into the equation.

The index advantage

The superior returns of indexed mutual funds and ETFs over actively managed funds have had much to do with the popularity of ETFs to date. As discussed, the vast majority of ETFs — 77 percent in terms of actual numbers, and nearly 98 percent in terms of assets — are index funds (which buy and hold a fixed collection of stocks or bonds). And, as index funds, they can be expected to outperform actively managed funds rather consistently. According to Standard & Poors SPIVA Scorecard, 88 percent of large-cap core stock funds underperformed their benchmark index in the past five years. High yield bond funds? Ninety-five percent underperformed. Flipping that around, only 5 to 12 percent of actively managed funds succeeded at beating the index funds.

Here are some reasons why index funds (both mutual funds and ETFs) are hard to beat:

- They typically carry much lower management fees, sales loads, or redemption charges.

» Hidden costs — trading costs and spread costs — are much lower when turnover is low.
» They don't have cash sitting around idle (as the manager waits for what they think is the right time to enter the market).
» They are more — sometimes much more — tax efficient.
» They are more "transparent"; you know exactly what securities you are investing in.

GREED ALERT

Perhaps the greatest testament to the success of index funds is how many allegedly actively managed funds are actually index funds in (a very expensive) disguise. I'm talking about closet index funds. According to a report in *Investment News,* a newspaper for financial advisers, the number of actively managed stock funds that are closet index funds has tripled over the past several years. As a result, many investors are paying high (active) management fees for investment results that could be achieved with low-cost ETFs.

TECHNICAL STUFF

R squared is a measurement of how much of a fund's performance can be attributed to the performance of an index. It can range from 0.00 to 1.00. An R squared of 1.00 indicates *a perfect match*: When a fund goes up, it's because the index was up — every time; when the fund falls, it's because the index fell — every time. An R squared of 0.00 indicates no such correlation. This measurement is used to assess tracking errors and to identify closet index funds.

According to a study done by Credit Suisse, of all the funds in America — both mutual funds and ETFs — 27 percent are true index funds, 58 percent are actively managed funds, and a full 15 percent are closet index funds, meaning they invest as an index fund would, but charge what an active fund would.

When you get to Chapter 25, I'll fill you in on how you can readily recognize — and avoid! — purchasing a closet index fund.

The allure of active management

Speaking in broad generalities, actively managed mutual funds have been no friend to the small investor. Their persistence remains a testament to people's ignorance of the facts and the enormous amount of money spent on (often deceptive) advertising and PR that give investors the false impression that buying this fund or that fund will lead to instant wealth. The media often plays into this nonsense with splashy headlines, designed to sell magazine copies or attract viewers, that promise to reveal which funds or managers are currently the best.

Still, active management can make sense — and that may be especially true when some of the best aspects of active management are brought to the ETF market and some of the best aspects of ETF investing are brought to active management.

Some managers actually do have the ability to "beat the markets," but they are few and far between, and the increased costs of active management often nullify any and all advantages these market-beaters have. If those costs can be minimized, and if you can find such a manager, you may wind up ahead of the game. Actively managed ETFs cost more than indexed ETFs, but they are cheaper than actively managed mutual funds.

Active management in ETF form may also be both more tax efficient and more transparent than it is in mutual fund form. "Transparent" means you get to see the manager's secret sauce. Active managers like to keep their secret sauce, well, secret. To date, this has been easier when the wrapper has been a mutual fund, rather than an ETF. However, this may not continue to be the case, as the active managers have already gotten okay from the SEC for partial intransparency and are busy petitioning the SEC to allow yet more smoke.

And finally, with some kinds of investments, such as commodities and micro cap stocks, active management may simply make more sense in certain cases. I talk about these scenarios in Parts 2 and 4.

Why the race is getting harder to measure. . .and what to do about it

Unfortunately, the old-style "active versus passive" studies that consistently gave passive (index) investing two thumbs up are getting harder and harder to do. What exactly qualifies as an "index" fund anymore, now that many ETFs are set up to track indexes that, in and of themselves, were created to outperform "the market" (traditional indexes)? And whereas index investing once promised a very solid cost saving, some of the newer ETFs, with their newfangled indexes, are charging more than some actively managed funds. Future studies are only likely to become muddier.

Here's my advice: Give a big benefit of the doubt to index funds as the ones that will serve you the best in the long run. If you want to go with an actively managed fund, follow these guidelines:

- Keep your costs low.
- Don't believe that a manager can beat the market unless that manager has done so consistently for years, and for reasons that you can understand. (That is, avoid "Madoff" risk!)

- Pick a fund company that you trust.
- Don't go overboard! Mix an index fund or two in with your active fund(s).
- All things being equal, you may want to choose an ETF over a mutual fund. But the last section of this chapter can help you to determine that. Ready?

Do ETFs Belong in Your Life?

Okay, so on the plus side of ETFs, you have ultra-low management expenses, super tax efficiency, transparency, and a lot of fancy trading opportunities, such as shorting, if you are so inclined. What about the negatives? In the sections that follow, I walk you through some other facts about ETFs that you should consider before parting with your precious dollars.

Calculating commissions

I talk about commissions when I compare and contrast various brokerage houses in Chapter 3, but I want to give you a heads-up here: You may have to pay a commission every time you buy and sell an ETF. But, as I'm writing these words, another brokerage house may have eliminated commissions altogether.

Trading commissions for stocks and ETFs (it's the same commission for either) have been dropping faster than the price of desktop computers. What once would have cost you a bundle, now — if you trade online, which you definitely should — is really pin money, perhaps a few dollars a trade, and increasingly, nothing at all. So, unless you are investing a very small amount of money, you needn't worry about commissions anymore. They are the smallpox of Wall Street.

Moving money in a flash

The fact that ETFs can be traded throughout the day like stocks makes them, unlike mutual funds, fair game for day-traders and institutional wheeler-dealers. For the rest of us common folk, there isn't much about the way that ETFs are bought and sold that makes them especially valuable. Indeed, the ability to trade throughout the day may make you more apt to do so, perhaps selling or buying on impulse. As I discuss in detail in Chapter 22, impulsive investing, although it can get your endorphins pumping, is generally not a profitable way to proceed.

Understanding tracking error

At times, the return of an ETF may be greater or less than the index it follows. This situation is called *tracking error.* At times, an ETF may also sell at a price that is a tad higher or lower than what that price should be, given the prices of all the securities held by the ETF. This situation is called selling at a *premium* (when the price of the ETF rides above the value of the securities) or selling at a *discount* (when the price of the ETF drops below the value of the securities). Both foreign-stock funds and bond funds are more likely to run off track, either experiencing tracking errors or selling at a premium or discount. But the better funds do not run off track to any alarming degree.

In Chapter 3, I offer a few trading tricks for minimizing "off track" ETF investing, but for now, let me say that it is not something to worry about if you are a buy-and-hold ETF investor — the kind of investor I want you to become.

Making a sometimes tricky choice

Throughout this book, I give you lots of detailed information about how to construct a portfolio that meets your needs. Here, I just want to whet your appetite with a couple of very basic examples of decisions you may be facing.

Say you have a choice between investing in an index mutual fund that charges 0.06 percent a year and an ETF that tracks the same index and charges the same amount. Or, say you are trying to choose between an actively managed mutual fund and an ETF with the very same manager managing the very same kind of investment, with the same costs. What should you invest in?

TIP

If your money is in a taxable account, and you're looking at stock index funds, go with the ETF, provided there are no commissions to pay; it may wind up being more tax efficient. If you're looking at bond index funds, I'd say this decision is a flip of the coin. Managed funds? Same.

But say you have, oh, $5,000 to invest in your Traditional IRA. (All Traditional IRA money is taxed as income when you withdraw it in retirement, and therefore the tax efficiency of securities held within an IRA isn't an issue.) In this case, I'd say that the choice between the ETF and the mutual fund is nothing to sweat over. If all else is the same, I'd have a very slight preference for the ETF, if for no other reason than its portability. (See the sidebar, "The index mutual fund trap.")

THE INFAMOUS "FLASH CRASH" OF 2010

On the afternoon of May 6, 2010, the stock market, if you'll indulge me for a moment and allow for the use of a highly technical term, went kablooey. No terrorist attacks occurred that day — no earthquakes or tsunamis or heart attacks in the White House, either. With no real reason to explain it, the stock market suddenly plunged by nearly 10 percent. Some ETFs fell in value to mere pennies on the dollar. It seemed like the start of another Great Depression.

Ooops.

The "flash crash" of 2010 was just a big mistake — a few computer glitches, essentially — and within 10 minutes, the market nearly recovered. Trades made in those 10 minutes were corrected, and life went on as normal. Sort of. In the months that followed, market authorities scratched their collective chins, trying to figure out what exactly went wrong and how to make sure that it didn't happen again. They've since, they assure us, instituted circuit breakers so that the same kind of swift movement again will result in the temporary shutting down of the market, allowing troublesome computer glitches to be addressed.

So now you're safe. Probably. I'd say very probably.

Still, if you feel nervous about another "flash crash," perhaps one in which trades won't be corrected, exercise caution when trading your ETF holdings. A "stop order" tells your broker to sell your ETF if it drops below a certain price — say, for example, below $10 a share. In theory, that protects you from a market crash. But in reality, it may actually subject you to a crash. If, say, the price of your ETF shares drops precipitously enough, as prices did on May 2, 2010, your order to sell if the price dips below $10 may kick in at 10 *cents* a share. Solution: Instead of a "stop order" use a "stop-limit" order, which tells the broker to sell your ETF if the price drops below, say, $10 a share, but not to sell if you can't get, say, at least $9 a share.

Or — perhaps a better solution — don't use stop orders at all. Rather, be prepared for some bumps in the road, and only invest money in the stock market that you or your family won't need for a good time to come. More on risk control in Chapter 4.

And what if your brokerage still charges a commission? Avoid it by going with the mutual fund (provided the mutual fund doesn't cost you a commission). What if there's a difference in management fees between the two funds? Say, an ETF charges you a management fee of 0.10 percent a year, and a comparable index mutual fund charges 0.15 percent, but buying and selling the ETF will cost you $5 at either end. Now what should you do?

THE INDEX MUTUAL FUND TRAP

Some brokerage houses, such as Vanguard and Fidelity, offer wonderful low-cost index mutual funds. Fidelity even offers a small handful of no-cost indexed mutual funds. But a problem with them is that you either can't buy them at other financial "supermarkets" (such as Charles Schwab or T. Rowe Price), or you have to pay a substantial fee to get into them. So building an entire portfolio of index mutual funds can be tough. If you want both Fidelity and Vanguard funds, you may be forced to pay high fees or to open up separate accounts at different supermarkets, which means extra paperwork and hassle. With ETFs, you can buy them anywhere, sell them anywhere, and keep them — even if they are ETFs from several different providers — all parked in the same brokerage house. I know of no major brokerage house that now charges more than a few dollars to make an online ETF trade.

The math isn't difficult. The difference between 0.10 and 0.15 (0.05 percent) of $5,000 is $2.50. It will take you two years to recoup your trading fee of $5. If you factor in the cost of selling (another $5), it will take you four years to recoup your trading costs. At that point, the ETF will be your lower-cost tortoise, and the mutual fund your higher-cost hare.

REMEMBER

Warning: If you have a trigger finger, and you are the kind of person who is likely to jump to trade every time there's a blip in the market, you would be well advised to go with mutual funds (that don't impose short-term redemption fees). You're less likely to shoot yourself in the foot!

IN THIS CHAPTER

» Setting up an account for your ETFs

» Meeting the brokerage houses

» Finding out who supplies ETFs to the brokers

» Introducing the indexers

» Distinguishing between the exchanges

Chapter 3
Getting to Know the Players

I love to shop on Christmas Eve. It's the only time of the entire year when men — who have finally realized that they need to buy a gift, quickly — outnumber women at the mall. I see these hulking figures, some in bright-orange hunting jackets, walking the fluorescent-lit halls of the mall, looking themselves like scared prey.

Sometimes, when I suggest to a client that they buy a few ETFs for their portfolio, I see the same look of dire trepidation. I need to reassure them that buying ETFs isn't that difficult. In this chapter, I want to do the same for you.

This chapter is something of a shopper's guide to ETFs — a mall directory, if you will. I don't suggest which specific ETFs to buy (I will, I will — but that's for later chapters). Instead, I show you where to find the brokerage houses that allow you to buy and sell ETFs; the financial institutions that create ETFs; the indexes on which the financial institutions base their ETFs; and the exchanges where millions of ETF shares are bought, sold, and borrowed each day.

Creating an Account for Your ETFs

You — you personally — can't just buy a share of an ETF as you would buy, say, a sweater. You need someone to actually buy it for you and hold it for you. That someone is a broker, sometimes referred to as a *brokerage house* or a *broker-dealer.* Some broker-dealers, the really big ones, are sort of like financial department stores or supermarkets where you can buy ETFs, mutual funds, individual stocks and bonds, or fancier investment products like puts and calls. You'll recognize, I'm sure, the names of such financial department stores as Fidelity, Vanguard, and Charles Schwab.

ETFs are usually traded just as stocks are traded. Same commissions. . .or lack of commissions. Mostly the same rules. Same hours (generally 9:30 a.m. to 4:00 p.m., Manhattan Island time). Through your brokerage house, you can buy 1 share, 2 shares, or 10,000 shares. Recently, some have begun to allow for the purchase of partial shares. (Not that any ETF shares are selling for the high price of, say, a new iPhone.) I know this sounds silly, but it can make trading in ETFs a lot easier for those who are math-challenged. Where partial shares are allowed, you don't need to figure out how many shares you want to buy with your, say, $1,000. You can invest the whole $1,000, and you may wind up with, oh, 9.75 or 12.34 shares, or some such number.

Here's one difference between ETFs and stocks: Although people today rarely do it, you can sometimes purchase stocks directly from a company, and you may even get a pretty certificate saying you own the stock. (I *think* some companies still do that!) Not so with ETFs. Call BlackRock or State Street and ask to buy a share of an ETF, and they will tell you to go find yourself a broker. Ask for a certificate, and. . .well, don't even bother.

The first step, then, prior to beginning your ETF shopping expedition, is to find a brokerage house, preferably a financial department store where you can keep all your various investments. It makes life a lot easier to have everything in one place, to get one statement every month, and to see all your investments on one computer screen.

Answering a zillion questions

The first question you have to answer when opening an account is whether it will be a retirement account or a non-retirement account. If you want a retirement account, you need to specify what kind (IRA? Roth IRA? SEP?). I cover the ins and outs of retirement accounts — and how ETFs can fit snugly into the picture — in Chapter 24. A non-retirement account is a simpler animal. You don't need to know any special tax rules, and your money isn't committed for any time period unless you happen to stick something like a CD into the account.

DON'T MARGIN YOUR HOUSE AWAY!

I once knew a woman whose husband handled all of the finances. (More often than not, one spouse handles much, if not all, of the money matters. In this case, as it happens, it was the man who handled the money, even though the woman was quite capable.) Then they divorced. Divorcing couples usually split the family assets, but they also split the liabilities. This client had no idea until she divorced, that her husband had been playing with stocks and ETFs, buying them on margin. Suddenly, the woman inherited a rather enormous debt.

"Buying on margin" means that the brokerage house is lending you money, and charging you interest, so you can purchase securities. Ouch. One of the often touted "advantages" of ETFs is that you can buy them on margin — something you often can't do with mutual funds. Margin buying is a very dangerous business. The fact that you can buy an ETF on margin is *not* an advantage as I see it. The stock market is risky enough. Don't ever compound that risk by borrowing money to invest. You may wind up losing not only your nest egg but also your home. This client was able to save their home; not everyone is so lucky.

Two things about margin you should know:

- The brokerage house can usually change the rate of interest you're paying without notice.
- If your investments dip below a certain percentage of your margin loan, the brokerage house can sell your stocks and bonds right from under you.

Once again, it can be a dangerous business; margin only with great caution.

The next question you have to answer is whether you want to open a *margin* account or a *cash* account. A margin account is somewhat similar to a checking account with overdraft protection. It means that you can borrow from the account or make purchases of securities (such as ETFs, but generally not mutual funds) without actually having any cash to pay for them on the spot. Cool, huh?

TIP

Unless you have a gambling addiction, go with margin. You never know when you may need a quick (and, compared to credit cards, inexpensive) and potentially tax-deductible loan. If you think you may have a gambling addiction, however, read the sidebar, "Don't margin your house away!"

You're also asked questions about beneficiaries and titling (or registration), such as whether you want your joint account set up with rights of survivorship. I'll just say one quick word about naming your beneficiaries: Be certain that who you name is who you want to receive your money when you die.

REMEMBER

Beneficiary designations supersede your will. In other words, if your will says that all your ETFs go to your sister, and your beneficiary designation on your account names someone else, your sister loses; all the ETFs in your account will go to that other person.

Finally, you're asked all kinds of personal questions about your employment, your wealth, and your risk tolerance. Don't sweat them! Federal securities regulations require brokerage houses to know something about their clients. Honestly, I don't think anyone ever looks at the personal section of the forms. I've never heard any representative of any brokerage house so much as whisper any of the information included in those personal questions.

Placing an order to buy

TIP

After your account is in place, which should take only a few days, you're ready to buy your first ETF. Most brokerage houses give you a choice: Call in your order, or do it yourself online. Calling is typically much more expensive because it requires the direct assistance of an actual person. Being the savvy investor that you are, you're not going to throw money away, so place all your orders online! If you need help, a representative of the brokerage house will walk you through the process step-by-step — for free!

Keep in mind when trading ETFs that the trading fees charged by the brokerage house may nibble seriously into your holdings (although usually not all that much). Even if you work with a brokerage house that charges nothing for trading ETFs, there will still be a small cost called the *spread* that you don't readily see. The spread is where you may lose a penny or two or three to middlemen working behind the scenes of each trade. Spreads can nibble at your portfolio just as the more visible fees do. Here's how to avoid getting nibbled:

- **Don't trade often.** Buy and hold, more or less (see Chapter 22). Yes, I know that headlines from time to time declare that "buy and hold is dead." That's nonsense. Don't believe it. "Buy and hold," by the way, doesn't mean you *never* trade. But if you're making more than a few trades every few months, that's too much.
- **Know your percentages.** In general, don't bother with ETFs if the trade is going to cost you anything more than one-half of one percent. In other words, if making the trade is going to cost you $5, you want to invest at least $1,000 at a pop. If you have only $900 to invest, or less, you are often better off purchasing a no-load mutual fund, preferably an index fund, or waiting until you've accumulated enough cash to make a larger investment. Alternatively, you might choose a no-commission ETF, even if it's slightly less attractive than

the ETF you'd have to pay a commission for. You may swap for the better alternative down the road, especially if you are funding a retirement account where swapping will have no tax consequences.

- **Be a savvy shopper.** Keep the cost of your individual trades to a minimum by shopping brokerage houses for the lowest fees, placing all your orders online, and arguing for the best deals. Yes, you can often negotiate with these people for better deals, especially if you have substantial bucks. Also know that many brokerage houses offer special incentives for new clients: Move more than $100,000 in assets and get your first 50 trades for free, or that sort of thing. Always ask.

But wait just a moment!

REMEMBER

Please don't be so enthralled by anything you read in this book that you rush out, open a brokerage account, and sell your existing mutual funds or stocks and bonds to buy ETFs. Rash investment decisions almost always wind up being mistakes. Remember that whenever you sell a security, you may face serious tax consequences. (Vanguard offers a unique advantage here; see the sidebar, "The Vanguard edge," later in this chapter.) If you decide to sell certain mutual funds, annuities, or life insurance policies, there may also be nasty surrender charges. If you're unsure whether selling your present holdings would make for a financial hit on the chin, talk to your accountant or financial planner.

Trading ETFs like a pro

If you're familiar with trading stocks, you already know how to trade ETFs. If you aren't, don't sweat it. Although there are all kinds of fancy trades you could make, and I'll touch on a few later, I'm going to ask you now to familiarize yourself with only the two most basic kinds of trades: market orders and limit orders.

REMEMBER

A *market order* to buy tells the broker that you want to buy. Period. After the order is placed, you will have bought your ETF shares. . .at whatever price someone out there was willing to sell you those shares for.

A *limit order* to buy asks you to name a price above which you walk away and go home. No purchase will be made. (A limit order to sell asks you to name a price below which you will not sell. No sale will be made.)

Market orders are fairly easy. You should be just fine as long as you are buying a domestic ETF that isn't too exotic (the kind of ETFs I'll be recommending throughout this book); as long as you aren't trading when the market is going crazy; or as long as you aren't trading right when the market opens or closes (9:30 a.m. and 4:00 p.m., Manhattan time weekdays).

A limit order may be a better option if you are placing a purchase for an ETF where the "bid" and the "ask" price may differ by more than a few pennies (indicating the middlemen are out to get you), or where there may be more than a negligible difference between the market price of the ETF and the net asset value of the securities it is holding. This would include ETFs that trade not that many shares — especially on a day when the market seems jumpy. The risk with limit orders is that you may not get your price, and so the order may not go through.

To execute a limit order without risk that you'll miss out on your purchase, place the order slightly above the last sale. If your ETF's last sale was for $10 a share, you may offer $10.03. If you're buying 100 shares, you may have just blown a whole three dollars, but you'll have your purchase in hand.

Introducing the Shops

I've read that the motorcycle industry boasts the highest level of consumer loyalty in the United States. A Harley man would *never* be caught dead on a Yamaha. Not being a motorcyclist, I have no idea why that is. In the world of brokerage houses, after someone has a portfolio in place at a house such as Fidelity, Vanguard, or Charles Schwab, that client is often very hesitant to switch. I know *exactly* why that is: Moving your account can sometimes be a big, costly, and time-consuming hassle. So, whether you're a Harley man or a Yamaha mama, if you have money to invest, it behooves you to spend some serious time researching brokerage houses and to choose the one that will work best for you. Perhaps I can help.

What to look for

Here's what you want from any broker who is going to be holding your ETFs:

- Reasonable fees
- Good service, meaning they answer the phone without putting you through answering-system hell
- A user-friendly website
- Good advice, if you think you're going to need advice — reps that don't stand to earn a commission for steering you into high-priced products
- A service center near you, if you like doing business with real people
- Financial strength

CAN YOU LOSE YOUR ETFs IF YOUR BROKERAGE HOUSE COLLAPSES?

Brokerage houses, as part of their registration process with the federal government, are automatically insured through the Securities Investor Protection Corporation (SIPC). Each individual investor's securities are protected up to $500,000 should the brokerage house go belly up. Almost all larger brokerage houses carry supplemental insurance that protects customers' account balances beyond the half-million that SIPC covers. TD Ameritrade, for example, has insurance through Lloyd's of London that provides each customer $149.5 million worth of protection for securities and another $2 million for cash.

For additional information on SIPC, check out its website at `www.sipc.org`. For information on a prospective broker's supplemental insurance, check the brokerage's website, or call and ask.

Financial strength really isn't as important as the others because all brokerage houses carry insurance. Still, a brokerage house that collapses under you can be a problem, and it may take time to recoup your money. See the sidebar, "Can you lose your ETFs if your brokerage house collapses?"

I give you my take on some of the major brokerage houses in just a moment, but I first want to talk a bit about fees, which can be downright devilish to compare and contrast.

Price is no longer key

Shopping for shoes? Beer? Pickled herring? Go to one store. Go to another. Or open up an issue of *Consumer Reports.* Compare the prices. Easy business.

Comparing the prices at brokerage houses was once very difficult, with trading commissions varying depending on how much money you had in your portfolio. Fortunately, those days are almost over. The majority of brokerage houses — including every one of the largest — have, over just the past year or two, killed all trading commissions. (Don't worry, they make their money elsewhere!)

So whereas trading costs were once all-important in choosing a brokerage house, that's no longer the case, although you do need to concern yourself with other, ancillary fees. And then there are several nonmonetary considerations to take into account, which I address on the following pages. The following section may be of help in choosing where to house your ETFs. I'll start with the biggest of the brokers: Vanguard, Fidelity, Charles Schwab, E*Trade, and TD Ameritrade.

SHRINKING, SHRINKING COMMISSIONS

Back in 2004, most big brokerage houses charged commissions ranging from $15 to $20 on average to trade an ETF online. According to Cerulli Associates, that started to change in 2010, when the prices dropped to between $8 and $10, with selected ETFs trading for free. In 2017, Charles Schwab dropped its commission to between $5 and $7, and competitors followed suit. In late 2019, facing pressure from Robinhood and a few other emerging platforms, Charles Schwab dropped its online-trading commission to zero, and others, beginning with TD Ameritrade, E*Trade, and Fidelity, were not far behind.

Turn to Appendix A for websites and phone numbers of the financial supermarkets listed next.

The Vanguard Group

I mention Vanguard frequently in this book for a number of reasons. For one, I like Vanguard because of its leadership role in the world of index investing. Vanguard is also both an investment house that serves as a custodian of ETFs and a major provider (second in the nation after BlackRock) of ETFs.

Like nearly all of the financial supermarkets, Vanguard allows you to buy and sell most ETFs with no commission. Previously, you could buy only Vanguard ETFs commission-free, but that has recently changed. Now *all* ETFs held at Vanguard can be purchased and sold without a fee.

But that's become pretty standard these days. What really shines about Vanguard is, well, a few things. . .first, its broad array of top-rated index mutual funds. I know, I know, this is a book about ETFs. But index mutual funds and ETFs are close cousins, and sometimes it makes sense to have both in a portfolio. (More on that subject in Chapter 25.)

TIP

If you do want to hold Vanguard index mutual funds alongside your ETFs, Vanguard is an awfully logical place to hold them because you can buy and sell Vanguard mutual funds at no charge, provided you don't do it often. And if you should ever want to switch from a mutual fund to an ETF, it's easy at Vanguard. (See the sidebar, "The Vanguard edge," later in this chapter.)

I also like the very structure of the company. Vanguard is owned "mutually" by its shareholders, unlike, say, Fidelity, which is privately owned, or just about all the other brokerage houses, which are publicly owned. The mutual ownership means that investors are shareholders in the company, and that means the Vanguard elite, although certainly well paid, have an obligation to serve your best interests. That gives me trust in the company.

Vanguard reps, by the way, do not ever work on commission. Yes, if you ask for advice, they may try to steer you toward Vanguard products, but not because they'll be taking a cut. Salespeople masquerading as "advisors" or "brokers" are rampant in the finance business. At Vanguard, you needn't worry about that.

Fidelity Investments

Fidelity is a giant in the field, a very competitive giant. Like Vanguard, Fidelity also has some excellent low-cost index mutual funds — as well as a handful of NO-cost index mutual funds — of its own, which you may want to keep alongside your ETF portfolio. Unlike some other brokerages, Fidelity mutual funds have no minimums. (ETFs never have minimums, unless you consider one share a minimum.)

The Fidelity website has some really good tools — some of the best available — for analyzing your portfolio and researching new investments. Fidelity's reps are very knowledgeable and helpful, although post-COVID-19 phone wait times have been disappointingly long. But that problem, alas, affects the whole industry.

Charles Schwab

"Invest with Chuck" Schwab was the nation's first discount broker, and they offer a lineup of sensible ETFs of their own creation, which trade free — along with other ETFs (since October 2019) — when you open an account with this brokerage house.

Whenever I've had occasion to do business with "Chuck's" staff, I found them friendly and knowledgeable. I just wish I could forgive Chuck for investing — and losing — so much of its clients' money in the mortgage crisis of 2008, and then admitting no wrong and making no restitution until being strong-armed by the court. (For those familiar with the case, I'm referring to Schwab's YieldPlus Fund debacle.)

In 2019, Charles Schwab acquired the brokerage house TD Ameritrade, and the scuttlebutt is that in 2023, all TD accounts will be integrated into Schwab.

E*Trade

As the name implies, E*Trade was born in the digital age, and has since become a major player, known especially for its easy-to-use mobile apps and on-the-fly trading tools, colorful graphics, and orientation toward younger investors. (Go to their website, click New to Online Investing, and view the introduction from Alex, a handsome 30-something gentleman with five days' growth on this face, wearing an open, denim shirt. You'll see that this is not your grandfather's brokerage house.)

As with the other biggies, commissions on ETFs have been obliterated.

In 2020, E*Trade was purchased by Morgan Stanley, so it is possible that E*Trade may be changing its name in time.

Other brokerage houses

The houses I discuss in the previous sections aren't the only players in town. Here are a few more to consider.

- **Interactive Brokers** (`www.interactivebrokers.com`): A very popular firm among international and institutional and serious active traders, Interactive Brokers is also open to smaller, buy-and-hold investors. ETF trading is commission-free, but be aware that small accounts may be subject to maintenance fees. If you're planning to retire abroad, especially to Europe, this firm is worth considering.
- **T. Rowe Price** (`www.troweprice.com/`): This Baltimore-based shop has several claims to fame, including its bend-over-backward friendliness to small investors and its plethora of really fine financial tools, especially for retirement planning, that are available to all customers at no cost. The service at this firm is excellent (reps tend to be very chummy). Trading ETFs? No commissions.
- **TIAA** (`www.tiaa.org`): This is a good company, but I can't work with them directly because I'm not a teacher. This brokerage house works only with people who have chalk under their fingernails. (If you're married to such a person, you qualify, too.) There are some ETFs that trade with no commissions, and others that do.
- **Ally** (`www.ally.com`): Primarily an online savings bank, Ally is also where you can house an ETF portfolio, as you can at many savings banks. But, as with many savings banks, not all the ETFs trade commission-free, and even those that do are subject to short-term trading costs. Ally has good rates on savings accounts and CDs, and if you have a chunk of your portfolio in these safe (but low-yielding) investments, and you want an ETF portfolio housed under the same roof, consider Ally.

Presenting the Suppliers

There are more than 1,000 mutual fund providers. Many of these firms offer just one fund, and they sometimes give the impression that the entire business is run out of someone's garage. Not so with ETFs. Fewer providers exist (currently about 160), and they tend to be larger companies. The top five providers — BlackRock, Vanguard, State Street Global Advisors, Invesco, and Charles Schwab — control 89 percent of the ETF market. Why is that? In large measure, it's because ETFs' management fees are so low that a company can't profit unless it enjoys the economies of scale and multiple income streams that come from offering a bevy of ETFs.

It's okay to mix and match — with caution

I want to emphasize that while picking a single brokerage house to manage your accounts makes enormous sense, there is no reason that you can't own ETFs from different sources. Like your favorite professional sports team or clothing store, each supplier of ETFs has its own personality. A portfolio with a combination of BlackRock, Vanguard, and State Street ETFs can work just fine. In fact, I would recommend *not* wedding yourself to a single ETF supplier but being flexible and picking the best ETFs to meet your needs in each area of your portfolio.

Note that brokerage houses typically do not sell every available mutual fund. But I've never heard of a brokerage house limiting which ETFs it will sell.

TIP

When mixing and matching ETFs, I would just caution that you don't want holes in your portfolio, and you don't want overlap. Mixing and matching, say, a total U.S. stock fund from one ETF provider with a European stock fund of another provider would be just fine because there's virtually no chance for either overlap or gaps. However, I would recommend that in putting together, say, a U.S. value and a U.S. growth fund, or a U.S. large-cap and a U.S. small-cap fund, in the hopes of building a well-rounded portfolio, you may want to choose ETFs from the same ETF provider, using the same index providers (Russell, Morningstar, S&P, and so on). That's because each indexer uses slightly (and sometimes not so slightly) different definitions of "value," "growth, "large," and "small." So mixing and matching funds from different providers may be less than ideal.

There's much more on mixing in matching in Part 5, "Putting It All Together."

One last preliminary note before I introduce the players: You'll recall that when I introduced you to the brokerage houses, I said that price is no longer key. That's because most brokerage houses have reduced their trading commissions to zero, and where there is a charge to trade an ETF, it is almost always miniscule. In choosing ETF providers — and more importantly, individual ETFs — price *is* key.

Every dollar you pay a fund provider in fees is probably, in the long run, one less dollar you're going to earn.

Table 3-1 offers a handy reference to the largest ETF providers, which I introduce you to in a moment. Note that I list the companies in order of the total assets each has in all its ETFs.

TABLE 3-1 **Providers of ETFs**

Company	Total Assets (Trillions)	Number of ETFs	Claim to Fame
BlackRock iShares	$2.24	388	Biggest variety of funds
Vanguard	$1.76	80	Sensible, classic indexes
State Street Global Advisors	$0.90	130	Oldest and single-largest ETF
Invesco	$0.33	228	Quirky indexes
Charles Schwab	$0.24	26	Cheap, basic
First Trust	$0.12	174	Creative portfolios

Check your passport

A quick word for you readers who live outside of the United States: All ETFs (and mutual funds) sold in the United States must be approved by the U.S. Securities and Exchange Commission. Other countries have their equivalent governmental regulatory authorities. None of the ETFs listed in this section or in Part 2 of this book are sold beyond the borders of the United States. Some of the ETF providers mentioned — particularly BlackRock and Vanguard — do sell ETFs in other countries, but not the same ETFs.

BlackRock Financial Management iShares

With 338 ETFs for sale and $2.24 trillion in ETF assets (about a third of the U.S. ETF market), iShares is the undisputed market leader. The firm behind iShares, BlackRock, Inc., merged in 2009 with Barclays Global Investors, the mega-corporation that is now one of the largest investment banks in the world ($8.7+ trillion in assets under management). Through its iShares, BlackRock offers by far the broadest selection of any ETF provider. You can buy iShares that track the major S&P indexes for growth and value, large-cap and small-cap stocks. Other iShares equity ETFs track the major Russell and Morningstar indexes. You can also find industry-sector iShares ETFs from technology and healthcare to financial services and software.

In the international arena, you can buy an iShares ETF to track either an intercontinental index, such as the MSCI EAFE (Europe, Australia, and the Far East), or much narrower markets, such as the Malaysian or Brazilian stock markets. iShares also offer a broad array of fixed-income (bond) ETFs, including 18 ETFs for U.S. government bonds alone, 15 for tax-free municipals, and others for corporate bonds and mortgage-backed securities of many different maturities and credit ratings.

Management fees vary from a low of 0.03 percent for its short-term Treasury Bond fund (SGOV) and its plain-vanilla S&P 500 stock fund (IVV). Most of the offerings cost in the range of 0.05 to 0.30 percent. Only the niche, more exotic offerings are what I would call really expensive. The BlackRock Future Tech ETF (BTEK) carries an expense ratio of 0.88, and the iShares India 50 ETF (INDY) costs an eyebrow-raising 0.93 percent.

The single-country ETFs tend to run in the 0.60 ballpark, but BlackRock may be forced to cut that cost or lose market share to Franklin Templeton, which launched a very similar lineup of individual-country ETFs for a fraction of the price.

Russell's review: Generally, you won't go too wrong with BlackRock/iShares. The firm has done an outstanding job of tracking indexes and offering variety. It also has done a good job of maintaining tax efficiency. I caution you, however, not to get sucked into the iShares candy store. Some of the ETFs track very small markets and market segments and clearly don't belong in most people's portfolios. I suggest that you think twice, for example, before making the iShares MSCI Peru ETF (EPU) a major part of your portfolio. It's expensive at 0.59 percent a year, and the market capitalization of the entire Lima Stock Exchange — including every publicly owned corporation issuing stock — is about $97 billion. That may sound like a good sum, but it is less than half the size of PepsiCo, Inc., America's thirty-fifth largest company! For more information, visit `www.ishares.com`.

Vanguard ETFs

It goes without saying that these people know something about index investing. In 1976, Vanguard launched the first index-based mutual fund for the retail investor, the Vanguard Index Trust 500 Portfolio. (Wells Fargo already had an index fund, but it was available only to endowments and other institutions.) In 2001, Vanguard launched its first ETF. Why Vanguard wasn't exactly in the ETF vanguard is anyone's guess, but by the time Vanguard ETFs were introduced to the market, iShares (then under Barclays) had already taken a solid lead. But Vanguard ETFs are quickly moving up. As of this writing, 80 Vanguard ETFs hold $1.76 trillion in assets, making Vanguard the second-largest ETF provider.

TIP

THE VANGUARD EDGE

If you own a Vanguard mutual fund and you want to convert to the Vanguard ETF that tracks the same index, you may be able do so without any tax ramifications. The conversion is tax-free because you will actually be exchanging one class of shares for another class of shares, all within the same fund. You can do this *only* with Vanguard ETFs. Vanguard actually has a U.S. patent that gives it a lock on this share structure. Most, but not all, Vanguard funds are eligible.

For example, if you own shares in the Vanguard Total Stock Market Index Fund Admiral Shares (VTSAX), and you decide that you want to exchange them for the Vanguard Total Stock Market ETF (VTI), you can do so and not worry about having to take any tax hit. So should you do it? The expense ratio on the mutual fund is 0.04. The expense ratio on the ETF is 0.03. If you have, say, $20,000 in the account, moving from the mutual fund to the ETF will save you $2 a year in management fees.

Note that the tax-free transfer works only in one direction. If you have ETF shares that have appreciated in value, you can't convert them to mutual fund shares without incurring a taxable gain (unless you hold them in a retirement account).

Vanguard is the fastest-growing ETF provider due to its sensible methodologies and its low costs. How low is low cost? The lowest-cost Vanguard ETFs — the Vanguard S&P 500 ETF (VOO) and the Vanguard Total Stock Market ETF (VTI) — will set you back 0.03 percent in total management expenses per year. (That's 30 cents per $1,000 invested.) Even the *most* expensive of Vanguard's offerings, the Vanguard International High Dividend Yield Index Fund (VYMI), costs only 0.27 percent — not at all outrageous.

Russell's review: I *love* Vanguard's low costs. Who wouldn't? Vanguard's lineup of ETFs, in line with Vanguard's corporate personality, is sensible and direct. In fact, Vanguard is perhaps the only major supplier of ETFs that offers nothing I would consider wacky or inappropriate for most investors' portfolios. In other words, Vanguard doesn't market something simply because it will sell. The company uses reasonable indexes, tracks them well, and takes the utmost care to avoid capital gains taxes and make certain that all dividends paid are "qualified" dividends subject to a lower tax rate. For more information, visit `https://investor.vanguard.com/home`.

State Street Global Adviser's SPDRs

State Street's flagship ETF, the first ETF on the U.S. market, is the SPDR S&P 500 (SPY). It boasts more than $364 billion in net assets, considerably larger than any other ETF on the market. State Street Global Adviser's (SSgA) pet spider gives it a firm perch as the third-largest provider of ETFs, having recently fallen well behind number-two Vanguard. State Street's initial ETFs tended to follow more traditional indexes but have since branched out into some awfully niche areas. The more basic ETFs (the ones I prefer) carry reasonable fees, and are varied enough to allow for a very well-diversified portfolio. All told, SSgA's 130 U.S.-based ETFs hold about $900 billion in assets.

Russell's review: The management expenses — with most of the basic ETFs costing less than 0.20 percent a year — are generally reasonable. The SPDRs offer a very efficient way of investing in various industry sectors (if that's your thing), both at home and abroad. Some of the newer offerings are, like BlackRock's, awfully niche and a tad on the pricey side — although not nearly as niche and pricey as the ETF offerings of some of the smaller purveyors.

One drawback to SSgA's offerings is the legal structure of some of its ETFs. The oldest ETFs, such as SPY, are set up as unit investment trusts rather than open-end funds as most of the newer ETFs are. That means the older funds can't reinvest dividends on a regular basis, creating a cash drag that can bring down long-term total returns by a smidgen. It's hard to actually measure the impact, but a recent glance at three S&P 500 ETFs — Vanguard's VOO, iShares's IVV, and SPY — show VOO's and IVV's one-year returns clocking in at one basis point (1/1,000) higher than SPY's. Not a huge deal.

For more information, visit `www.ssga.com/us/en/individual/etfs`.

Invesco

Invesco, formerly Invesco PowerShares, gobbled up ETF provider Guggenheim (which formerly gobbled up Rydex) to become number four in size and number two in number of fund offerings among ETF providers. The ETFs tend to be a bit pricier than those of the Big Three, and the methodologies might often be called innovative or nutty, depending on your point of view. Invesco is perhaps the leader in so-called "smart beta" indexing, where the line between passive and active management can get a wee bit blurry.

That is to say that most of the ETFs do follow indexes, but the indexes themselves are designed to beat the market, where "the market" is defined as classic indexes, such as the S&P 500. These indexes choose securities, generally not based on the market cap company, but on other criteria, such as low volatility, high volatility, momentum, sensitivity to interest rates, growth in revenue, and so on.

Some of the ETFs are based on multiple valuation criteria. That means potential high turnover and some added trading expenses. It also means that if you choose

PowerShares ETFs to build your portfolio, you are no longer a true index investor, which (judging by historical data over the long haul) may put you at something of a disadvantage.

The company has been quite creative in its offerings, and allows you to slice and dice your portfolio in 228 ways.

Russell's review: Nothing about Invesco's alternative indexes scares me too much. The problem is which alternative indexes are going to beat the classical indexes? You don't know. And if you choose a whole bunch of the alternative indexes — momentum, low-volatility, high-revenue, and so on — you'll be buying the whole stock market but paying a boatload more than you would for any whole-stock-market ETF.

I have used one Invesco ETF, despite the relatively high expense ratio of 0.40 percent: the Invesco S&P 500 Equal Weight Consumer Staples ETF (RHS). In the next chapter, I discuss how I diversify a portfolio, which can include the mild overweighting of certain industry sectors, notably Consumer Staples. The problem with most Consumer Staple funds is that they offer only large-cap companies, whereas RHS gives you large, medium, and small. If the expense ratio were lower, I would use this fund more. For more information, visit `www.invesco.com/us/en/individual-investor.html`.

Table 3-2 shows the average expense ratio (weighted by assets under management) of all the ETFs issued by one purveyor. The six largest ETF providers tend to have relatively low costs, which is one reason why they are the largest. The data is provided by ETF Database.

TABLE 3-2 **Expense Ratio Comparison**

Company	Average Expense Ratio (%)
BlackRock iShares	0.19%
Vanguard	0.06%
State Street Global Advisors	0.23%
Invesco	0.30%
First Trust	0.65%
Charles Schwab	0.08%

Charles Schwab

Brokerage giant Charles Schwab came into the ETF game late — 2009 — but immediately caught market share by offering free trading of Schwab ETFs on the Schwab platform (you can now trade all ETFs free) and by offering ETFs with lower expense ratios than anyone else. At present, only Vanguard can match Schwab in terms of economy. And like Vanguard, Schwab has been prudent in its offerings.

Nothing flashy. Nothing off-the-wall. Of Schwab's 26 ETFs, 20 are plain-vanilla market-weighted offerings, such as the Schwab U.S. Large-Cap ETF (SCHX) with an expense ratio of 0.03 percent, and the Schwab U.S. Aggregate Bond ETF (SCHZ) with an expense ratio of 0.04 percent. Six of the ETFs are based on what Schwab on its website calls "fundamental" indexes. . . "a complement to traditional market cap index and actively managed strategies, helping to create the potential for more attractive risk-adjusted portfolios."

The fundamental-index funds have expense ratios of 0.25 percent to 0.39 percent, so it will be hard for these passive-active funds to beat the much cheaper passive-index ETFs over the long haul. Not impossible, but hard.

Russell's review: I've become a recent Schwab convert, switching over my portfolios to sell off the iShares TIPS fund (TIP) — TIPS stands for Treasury Inflation-Protected Securities — and buy the very, very similar Schwab U.S. TIPS ETF (SCHP). The cost is 0.19 percent for the iShares but only 0.04 for the Schwab model. For more information, visit `www.schwab.com`.

First Trust

First Trust, which is sixth among the largest ETF providers, comes with only half the assets of Schwab (which is in the number-five spot). Like most of the smaller contenders, the management fees are higher. However, if you are looking for active management or truly different, unusual asset classes, First Trust may be the place to turn. Where else will you find such investments as the First Trust Merger Arbitrage ETF (MARB) or the First Trust Hedged BuyWrite Income ETF (FTLB)?

First Trust also offers structured-product ETFs, otherwise known as defined-outcome ETFs, which have just hit the market in the past year or so. I talk more about them in Chapter 18. I'm not a fan.

Russell's review: Buying a basic portfolio-building-block kind of ETF through First Trust just doesn't make any sense. The prices are too high. On the other hand, First Trust doesn't offer much in the way of basic. Most of its ETFs are one-of-a-kind. As with any investment of this ilk, proceed with caution. For more information, visit `www.ftportfolios.com`.

Other suppliers

At present, there are 200 or so issuers of ETFs in addition to the six I talk about. These include some fairly strong brands that offer a bevy of ETFs at fairly reasonable prices, such as ProShares, WisdomTree, Van Eck Associates, Franklin Templeton, and Mirae Asset Global Investments.

The list includes some financial giants that got into the ETF game late, but with all the muscle they have, they may become major players. Fidelity, JPMorgan Chase, BNY Mellon Bank, Dimensional, New York Life, and TIAA are examples.

Some of the real niche providers are the World Gold Council, ARK, Cambria, Innovator, Amplify Investments, and Sprott. Some are pretty small companies with only a handful of offerings — or one — and some of their novel ideas may pan out. Unfortunately, the small fries too often try to make up for the lack of economies of scale by throwing economy out the window and charging you as much as, or more than, you'd pay for an actively managed mutual fund, greatly diminishing your odds of seeing a healthy return. Many of the small providers will be gone in the years to come. On the other hand, some awfully overpriced and underachieving mutual funds have been around for years.

Familiarizing Yourself with the Indexers

At the core of most ETFs is an index. The index is the blueprint on which the ETF is based. Some ETF providers use old, established indexes. Others create their own, often in conjunction with seasoned indexers. (That association helps them get approval from the SEC.) As a rule, for an ETF to be any good, it has to be based on a solid index. On the other hand, a solid index doesn't guarantee a good ETF because other things, like costs and tax efficiency, matter as well. That being said, I turn now to the five indexers that create and re-create the indexes on which most ETFs are based.

S&P Dow Jones Indices

Once known as Standard & Poors, and today simply S&P Global, or S&P, the company maintains hundreds of indexes, including the S&P 500 (the one you're most likely to see flashed across your television screen on the business channel). Trillions in investors' assets are directly tied to S&P Dow Jones indexes (or indices, if you prefer) — close to all other indexes combined.

More ETFs are based on S&P and Dow indexes than any other, by far. These include many of the offerings of BlackRock, Vanguard, Charles Schwab, State Street Global Investors, Invesco, ProShares, WisdomTree, and Direxion.

For more information, visit `www.spglobal.com`.

MSCI

With indexes of all kinds — stocks, bonds, hedge funds, U.S. and international securities — MSCI (formerly Morgan Stanley Capital International), although not quite a household name, has been gaining ground as the indexer of choice for many ETF providers.

MSCI indexes are the backbone of many of the iShares global-industry funds and single-country ETFs. MSCI is also a pre-eminent provider of ESG benchmarks. (See Chapter 17.) For more information, visit `www.msci.com`.

FTSE/Russell

The largest 1,000 U.S. stocks make up the Russell 1000 index, although it remains relatively obscure because the Dow Industrial and the S&P 500 hog the spotlight when it comes to measuring large-cap performance. The next 2,000 largest stocks on the U.S. market are in the Russell 2000. And the Russell 1000 plus the Russell 2000 make up the Russell 3000. Those are Russell's more popular indexes, but it has plenty of others as well.

Many of the iShares domestic ETFs are based on FTSE/Russell indexes, as are a good number of Vanguard's U.S. offerings. ProShares and Direxion also use Russell indexes. For more information, visit `www.ftserussell.com`

CRSP

CRSP (pronounced "crisp") stands for The Center for Research in Security Prices. For 60 years, CRSP, a baby of the University of Chicago's Booth School of Business, has been creating indexes used mostly by academics. All that changed in 2012 when Vanguard dumped MSCI for a number of its U.S. indexed funds (both mutual funds and ETFs) and started to use CRSP. The changeover wasn't so much Vanguard preferring one indexer's indexes more than the others; the industry scuttlebutt is that the CRSP deal saved Vanguard a lot of money, part of which saving could presumably be passed on to investors. For more information, visit `www.crsp.org`.

Bloomberg

Lehman Brothers for years was the leading indexer in the world of fixed-income investments. The firm was acquired by Barclays Capital in 2008 (just as Barclays was leaving the ETF business), and thus the long-famous Lehman Brothers Aggregate Bond Index, the closest thing the fixed-income world had to the S&P 500, was changed to the Barclays Capital Aggregate Bond Index. Then in 2016, the index was turned over to Bloomberg, L.P., which renamed it the Bloomberg Barclays Aggregate Bond Index, which in 2021 became the Bloomberg US Aggregate Bond Index. WHEW! This thing has had more incarnations than any character from Bollywood!

Although the Bloomberg Aggregate Bond Index is the firm's most famous product, there are dozens of other bond indexes, and they are used by BlackRock, Vanguard, and State Street. Just about any company that issues plain-vanilla bond funds uses Bloomberg indexes for their fixed-income ETFs. For more information, visit `www.bloomberg.com`.

Meeting the Middlemen

In the beginning, most ETFs were traded on the American Stock Exchange. In July 2005, however, iShares decided to move its primary listings for 81 of its ETFs to the New York Stock Exchange, citing superior technology. Then, in 2008, the American Stock Exchange was gobbled up by the New York Stock Exchange, which today goes by the name NYSE Arca. Most ETFs today are listed on either the NYSE Arca or the NASDAQ, but a fair number are also traded on BATS, a stock exchange run by Cboe Global Markets.

TIP

Note that there is a difference between an ETF being *listed* on, say, the NYSE Arca, and an ETF being *traded* on the NYSE Arca. And ETF or stock that is listed (meaning more or less proffered for sale) on the NYSE Arca can trade on any number of exchanges simultaneously. In fact, the Securities Exchange Act of 1934 permits securities listed on any national securities exchange to be traded by all other such exchanges.

Does it matter to you on which exchange your ETF is listed or traded? No, not really, except to the extent that the stock exchanges love ETFs, and if you are an ETF investor, they will love *you.* The reason is fairly obvious: The stock exchanges make their money on, uh, exchanges of stocks. Mutual funds, per se, are not exchanged. ETFs are. And to promote ETFs, the stock exchanges offer some good information on their websites that you might want to check out.

NYSE Arca

Tracing its origins to 1792, the New York Stock Exchange (NYSE) Arca today lists about 8,000 securities, has about 3,000 member companies, and trades billions of shares a day. About 80 percent of all ETFs are listed on the NYSE Arca. Most of the others are listed on the NASDAQ. The website for NYSE Arca is `www.nyse.com`.

NASDAQ

No bricks and mortar here — the NASDAQ is a uniquely electronic exchange. The acronym NASDAQ, by the way, stands for National Association of Securities Dealers Automatic Quotation. If you go to `www.nasdaq.com` and click Market Activity and then Funds and ETFs, there's fun information at your fingertips, such as which ETFs are trading the most and which have seen the most price movement in the past day.

BATS

About 220 ETFs are traded on BATS, an outfit run by Cboe Global Markets, Inc. (Cboe). Once upon a time, Cboe stood for Chicago Board Options Exchange, and even though there are lots of securities that now trade on BATS, the emphasis is still on options. So if you want to learn anything about options (on ETFs or other securities), the website — `www.cboe.com` — offers a good education.

Meeting the Wannabe Middlemen

On January 24, 1848, James Marshall found gold at Sutter's Mill, touching off the California gold rush. About 150 years later, ETFs were the hottest investment product in the land, and so began the ETF rush. Everyone wants in on the game. So we have our ETF providers, the brokerage houses where ETFs are bought and sold, the exchanges where they are listed, and the indexes on which they are based. Who else is there? Ah, the wannabe middlemen: They are about as necessary as forks in a soup kitchen, but be assured that they will continue to try to muscle in on the money.

Commissioned brokers

Most often they call themselves "financial planners," and some may actually do some financial planning. Many, however, are merely salespeople in poor disguise, marketing pricey and otherwise inferior investment products and living off the "load." The *load* — or entrance fee — to buying certain investment products, such as some mutual funds, most annuities, and virtually all life insurance products, can be ridiculously high. Thank goodness they don't exist in the world of ETFs — yet.

When first introduced, the PowerShares lineup of ETFs was designed to be sold through commissioned brokers at 2 percent a pop. The Securities and Exchange Commission killed the idea. But in time, the commissioned brokers may return to the world of ETFs, with their lobbyists in tow.

Separately managed accounts

Separately managed accounts, or SMAs, have traditionally been aimed at the well-to-do. Instead of buying into mutual funds, the wealthy hire a private manager with Persian rugs in his lobby to do essentially what a mutual fund manager does: pick stocks. But now many SMAs are billing themselves as ETF gurus. Instead of picking stocks, they pick ETFs — at a price.

WARNING

ETF SMAs that promise to beat the market through exceptional ETF selection or market timing are unlikely to do any better than stock SMAs. You should not hold your breath waiting for these guys to make you rich. Some SMA managers may be very good at what they do, but much of what they do can be learned in this book. If you want to hire someone to manage your ETFs, that's fine, but if they start talking about skimming 2 percent a year off your assets. . .heck, you'll very likely do better on your own (with this book in hand!). Trust me.

Annuities and life insurance products

I've seen ads of late from variable annuity companies that feature ETFs in their portfolio. Great! That's better than high-priced mutual funds. But still, most variable annuities are way overpriced, carry nasty penalties for early withdrawal, and prove to be lousy investments. The same is true for many life insurance products other than simple term life. Investments in ETFs can make these products better, but that's a relative thing. As a rule, it's best to keep your investment products apart from your insurance products. And never buy an annuity unless you are absolutely sure you know what you are buying.

Funds of funds

GREED ALERT

Question the purchase of any mutual fund that features ETFs among its top holdings. Or any ETF that is made up of other ETFs. Ask yourself if there's a good reason for you to be paying two layers of management fees. There are times when such layering makes sense. Such is the case with many "target date" or "lifecycle" funds, which I discuss in Chapter 21. But in all cases, if those two layers add up to, say, more than half a percentage point, you need to *really* start to question your purchase.

2

Building the Stock (Equity) Side of Your Portfolio

IN THIS PART . . .

Learn the basics of using ETFs to tap into stock-market growth.

Understand what makes large-growth stocks integral to a portfolio.

Find out why large-value stocks are Warren Buffett's faves.

Evaluate small-growth stocks for their pitfalls and potential.

Grasp the power of investing in small-value stocks through ETFs.

Take a tour of the world to discover non-U.S. stock opportunities.

Delve into the nitty gritty of sector investing with ETFs.

Get savvy about investing in real estate investment trusts (REITs).

IN THIS CHAPTER

» Understanding the relationship between risk and return

» Measuring risk

» Introducing Modern Portfolio Theory

» Addressing the assertion that "MPT is dead"

» Seeking a balanced portfolio

Chapter 4
Risk Control, Diversification, and Some Other Things You Need to Know

October. This is one of the peculiarly dangerous months to speculate in stocks. The others are July, January, September, April, November, May, March, June, December, August, and February.

MARK TWAIN

A peculiarly good writer, but also a peculiarly bad money manager, Twain sent his entire fortune down the river on a few bad investments. A century and a half later, investing, especially in stocks, can still be a peculiarly dangerous game. But today you have low-cost indexed ETFs and a lot more knowledge about the power of diversification. Together, these two things can help lessen the dangers and heighten the rewards of the stock market. In this chapter, I hope to make you a better stock investor — at least better than Mark Twain.

Risk Is Not Just a Board Game

Well, okay, actually Risk *is* a board game, but I'm not talking here about *that* Risk. Rather, I'm talking about investment risk. And in the world of investments, risk means but one thing: volatility. Volatility is what takes people's nest eggs, scrambles them, and serves them up with humble pie. Volatility is what causes investors insomnia and heartburn. Volatility is the potential for financially crippling losses.

Ask people who had most of their money invested in stocks in 2008. For five years prior, the stock market had done pretty darned well. Investors were just starting to feel good again. The last market downfall of 2000–2002 was thankfully fading into memory. And then. . .*POW*. . .the U.S. stock market tanked by nearly 40 percent over the course of the year. Foreign markets fell just as much. Billions and billions were lost. Some portfolios (which may have dipped more than 40 percent, depending on what kind of stocks they held) were crushed. Many who had planned for retirement had to readjust their plans.

There was nothing pretty about 2008.

In early 2020, when the COVID-19 pandemic hit, investors got another taste of how quickly the markets can turn. It wasn't quite as bad as 2008 or 2000–2002 (between February and March, the Dow lost "only" 37 percent), and it lasted for just a short time, but it was still a shocker.

REMEMBER

Is risk to be avoided at all costs? Well, no. Not at all. Risk is to be mitigated, for sure, but risk within reason can actually be *a good thing.* That is because risk and return, much like Romeo and Juliet or Coronas and lime, go hand in hand. Volatility means that an investment can go way down or way up. You hope it goes way up. Without some volatility, you resign yourself to a portfolio that isn't poised for any great growth. And in the process, you open yourself up to another kind of risk: the risk that your money will slowly be eaten away by inflation.

WARNING

If you are ever offered the opportunity to partake in any investment scheme that promises you oodles and oodles of money with "absolutely no risk," run! You are in the presence of a con artist or a fool. Such investments do not exist.

The trade-off of all trade-offs (safety versus return)

To get to the Holy Grail — a big, fat payoff from your investments — you need to take on the fire-breathing dragon of risk. There simply is no way that you are going to make any sizeable amount of money off your investments without a willingness to get hurt. The Holy Grail is not handed out to people who stuff money in their mattresses or carry their pennies to the local savings bank.

If you look at different investments over the course of time, you find an uncanny correlation between risk (volatility risk, not inflation risk) and return. Safe investments — those that really do carry genuine guarantees, such as U.S. Treasury bills, FDIC-insured savings accounts, and CDs — tend to offer very modest returns (often — especially these days — negative returns after accounting for inflation). Volatile investments — like stocks and "junk" bonds, the kinds of investments that cause people to lose sleep — tend to offer handsome returns if you give them enough time.

REMEMBER

Time, then, is an essential ingredient in determining appropriate levels of risk. You would be wise to keep any cash you are going to need within the next six months to a year in a savings bank, or possibly in an ETF such as the iShares Barclays 1–3 Year Treasury Bond Fund (SHY), a short-term bond fund that yields a modest return but is very unlikely to lose value. You should *not* invest that portion of your money in any ETF that is made up of company stocks, such as the popular SPY or QQQ. True, SPY or QQQ can (and should), over time, yield much more than SHY, but they are also much more susceptible to sharp price swings. Unless you are not going to need your cash for at least a couple of years (and preferably not for six or seven or more years), you are best off avoiding any investment in the stock market, whether it be through ETFs or otherwise.

So just how risky are ETFs?

Asking how risky, or how lucrative, ETFs are is like trying to judge a soup knowing nothing about the soup's ingredients, only that it is served in a blue china bowl. The bowl — or the ETF — doesn't create the risk; what's inside it does. Thus stock and real estate ETFs tend to be more volatile than bond ETFs. Short-term bond ETFs are less volatile than long-term bond ETFs (I explain why in Part 3). Small-stock ETFs are more volatile than large-stock ETFs. International ETFs often see more volatility than U.S. ETFs. And international "emerging-market" ETFs see more volatility than international developed-nation ETFs.

Figure 4-1 shows some examples of various ETFs and where they fit on the risk-return continuum. Note that it starts with bond ETFs at the bottom (maximum safety, minimum volatility), and nearer the top, it features the EAFE (Europe, Australia, Far East) Index and the South Korea Index Fund. (An investment in South Korean stocks involves not only all the normal risks of business but also includes currency risk, as well as the risk that some deranged North Korean dictator may decide he wants to pick a fight. Buyer beware.)

FIGURE 4-1: The risk levels of a sampling of ETFs.

Keep in mind when looking at Figure 4-1 that I am segregating these ETFs — treating them as stand-alone assets — for illustration purposes. As I discuss later in this chapter (when I discuss something called Modern Portfolio Theory), stand-alone risk measurements are of limited value. The true risk of adding any particular ETF to your portfolio depends on what is already in the portfolio. (That statement will make sense by the end of this chapter. I promise!)

Smart Risk, Foolish Risk

There is safety in numbers, which is why teenage boys and girls huddle together in corners at school dances. In the case of the teenagers, the safety is afforded by anonymity and distance. In the case of indexed ETFs and mutual funds, safety is provided (to a limited degree only!) by diversification in that they represent ownership in many different securities. Owning many stocks, rather than a few, provides some safety by eliminating something that investment professionals, when they're trying to impress, call *nonsystemic risk.*

Nonsystemic risk is involved when you invest in any individual security. It is the risk that the CEO of the company will be strangled by their pet python, that the national headquarters will be destroyed by a falling asteroid, or that the company's stock will take a sudden nosedive simply because of some Internet rumor started by an 11th-grader in the suburbs of Des Moines. Those kinds of risks (and more serious ones) can be effectively eliminated by investing not in individual securities but in ETFs or mutual funds.

Nonsystemic risk contrasts with *systemic risk*, which, unfortunately, ETFs and mutual funds cannot eliminate. Systemic risks, as a group, simply can't be avoided, not even by keeping your portfolio in cash. Examples of systemic risk include the following.

- **Market risk:** The market goes up, the market goes down, and whatever stocks or stock ETFs you own will generally (though not always) move in the same direction.
- **Interest-rate risk:** If interest rates go up, the value of your bonds or bond ETFs (especially long-term bond ETFs such as TLT, the iShares 20-year Treasury ETF) will fall.
- **Inflation risk:** When inflation picks up, any fixed-income investments that you own (such as any of the conventional bond ETFs) will suffer. And any cash you hold will start to dwindle in value, buying less and less than it used to.
- **Political risk:** If you invest your money in Canada, France, or Japan, there's little chance that revolutionaries will overthrow the government anytime soon. When you invest in the stock or bond ETFs of certain other countries (or when you hold currencies from those countries), you'd better keep a sharp eye on the nightly news.
- **Grand scale risks:** The government of Japan wasn't overthrown, but that didn't stop an earthquake and ensuing tsunami and nuclear disaster from sending the Tokyo stock market reeling in early 2011. Similarly, in 2020 COVID-19 hit most of the world's stock markets hard — some harder than others.

Although ETFs cannot eliminate systemic risks, don't despair. For while nonsystemic risks are a bad thing, systemic risks are a decidedly mixed bag. Nonsystemic risks, you see, offer no compensation. A company is not bound to pay higher dividends, nor is its stock price bound to rise simply because the CEO has taken up mountain climbing or hang gliding.

REMEMBER

Systemic risks, on the other hand, do offer compensation. Invest in small stocks (which are more volatile and therefore incorporate more market risk), and you can expect (over the very long term) higher returns. Invest in a country with a history of political instability, and (especially if that instability doesn't occur) you'll probably be rewarded with high returns in compensation for taking added risk. Invest in long-term bonds (or long-term bond ETFs) rather than short-term bonds (or ETFs), and you are taking on more interest-rate risk. That's why the yield on long-term bonds is almost always greater.

In other words,

> Higher systemic risk = higher historical returns
>
> Higher nonsystemic risk = zilch

That's the way markets tend to work. Segments of the market with higher risks *must* offer higher returns or else they wouldn't be able to attract capital. If the potential returns on emerging-market stocks (or ETFs) were no higher than the potential returns on short-term bond ETFs or FDIC-insured savings accounts, would anyone but a complete nutcase invest in emerging-market stocks?

How Risk Is Measured

In the world of investments, risk means volatility, and volatility (unlike angels or love) can be seen, measured, and plotted. People in the investment world use different tools to measure volatility, such as standard deviation, beta, and certain ratios such as the Sharpe ratio. Most of these tools are not very hard to get a handle on, and they can help you better follow discussions on portfolio building that come later in this book. Ready to dig in?

Standard deviation: The king of all risk measurement tools

So, you want to know how much an investment is likely to bounce? The first thing you do is look to see how much it has bounced in the past. Standard deviation measures the degree of past bounce and, from that measurement, gives you some notion of future bounce. To put it another way, standard deviation shows the degree to which a stock/bond/mutual fund/ETF's actual returns vary from its average returns over a certain time period.

Table 4-1 presents two hypothetical ETFs and their returns over the last six years. Note that both portfolios start with $1,000 and end with $1,101. But note, too, the great difference in how much they bounce. ETF A's yearly returns range from −3 percent to 5 percent while ETF B's range from −15 percent to 15 percent. The standard deviation of the six years for ETF A is 3.09; the standard deviation for ETF B is 10.38.

Predicting a range of returns

What does the standard deviation number tell you? Let's take ETF A as an example. The standard deviation of 3.09 tells you that in about two-thirds of the months to come, you should expect the return of ETF A to fall within 3.09 percentage points of the mean return, which was 1.66. In other words, about 68 percent of the time, returns should fall somewhere between 4.75 percent (1.66 + 3.09) and −1.43 percent (1.66 − 3.09). As for the other one-third of the time, anything can happen.

TABLE 4-1 Standard Deviation of Two Hypothetical ETFs

Balance, Beginning of Year	Return (% Increase or Decrease)	Balance, End of Year
ETF A		
1,000	5	1,050
1,050	–2	1,029
1,029	4	1,070
1,070	–3	1,038
1,038	2	1,059
1,059	4	1,101
ETF B		
1,000	10	1,100
1,100	6	1,166
1,166	–15	991
991	-8	912
912	15	1,048
1,048	5	1,101

It also tells you that in about 95 percent of the months to come, the returns should fall within two standard deviations of the mean. In other words, 95 percent of the time, you should see a return of between 7.84 percent [$1.66 + (3.09 \times 2)$] and −4.52 percent [$1.66 - (3.09 \times 2)$]. The other 5 percent of the time is anybody's guess.

Making side-by-side comparisons

The ultimate purpose of standard deviation, and the reason I'm describing it, is that it gives you a way to judge the relative risks of two ETFs. If one ETF has a 3-year standard deviation of 12, you know that it is roughly twice as volatile as another ETF with a standard deviation of 6 and half as risky as an ETF with a standard deviation of 24. A real-world example: The standard deviation for most short-term bond funds falls somewhere around 0.7. The standard deviation for most precious-metals funds is somewhere around 26.0.

Important caveat: Don't assume that combining one ETF with a standard deviation of 10 with another that has a standard deviation of 20 will give you a portfolio with an average standard deviation of 15. It doesn't work that way at all, as you will see when I introduce Modern Portfolio Theory, later in this chapter. The combined standard deviation will not be any greater than 15, but it could (if you do your homework and put together two of the right ETFs) be much less.

Beta: Assessing price swings in relation to the market

Unlike standard deviation, which gives you a stand-alone picture of volatility, beta is a relative measure. It is used to measure the volatility of something in relation to something else. Most commonly that "something else" is the S&P 500. Very simply, beta tells you that if the S&P rises or falls by *x* percent, then your investment, whatever that investment is, will likely rise or fall by *y* percent.

The S&P is considered your baseline, and it is assigned a beta of 1. So if you know that Humongous Software Corporation has a beta of 2, and the S&P shoots up 10 percent, Jimmy the Greek (if he were still with us) would bet that shares of Humongous are going to rise 20 percent. If you know that the Sedate Utility Company has a beta of 0.5, and the S&P shoots up 10 percent, Jimmy would bet that shares of Sedate are going to rise by 5 percent. Conversely, shares of Humongous would likely fall four times harder than shares of Sedate in response to a fall in the S&P.

WARNING

In a way, beta is easier to understand than standard deviation; it's also easier to misinterpret. Beta's usefulness is greater for individual stocks than it is for ETFs, but nonetheless it can be helpful, especially when gauging the volatility of U.S. industry-sector ETFs. It is much less useful for any ETF that has international holdings. For example, an ETF that holds stocks of emerging-market nations is going to be volatile, trust me, yet it may have a low beta. How so? Because its movements, no matter how swooping, may happen independently of movement in the U.S. market. (Emerging-market stocks tend to be more tied to currency flux, commodity prices, interest rates, and political climate.)

The Sharpe, Treynor, and Sortino ratios: Measures of what you get for your risk

TECHNICAL STUFF

Back in 1966, a goateed Stanford professor named Bill Sharpe developed a formula that has since become as common in investment-speak as RBIs are in baseball-speak. The formula looks like this:

$$\frac{\text{Total portfolio return} - \text{Risk-free rate of return}}{\text{Portfolio standard deviation}} = \text{Sharpe measure (or Sharpe ratio)}$$

REAL-LIFE EXAMPLES OF STANDARD DEVIATION AND BETA

Following are the (three-year) standard deviations and betas of several diverse ETFs. Note that iShares MSCI Hong Kong (EWH) is more volatile than iShares MSCI U.K. Index (EWU) as measured by its standard deviation, but EWH has a lower beta. That tells you that the volatility of the Hong Kong market, however great it is, seems to be less tied to the fortunes of the S&P 500 than is the volatility of the U.K. market.

ETF	Ticker	Standard Deviation	Beta
SPDR S&P 500	SPY	18.5	1.0
Consumer Staples Select Sector SPDR	XLP	14.1	0.60
Health Care Select Sector SPDR	XLV	15.9	0.71
iShares MSCI U.K. Index	EWU	19.3	1.07
Invesco QQQ Trust Series 1	QQQ	20.1	1.02
iShares MSCI Hong Kong	EWH	19.7	0.89

The risk-free rate of return generally refers to the return you could get on a short-term U.S. Treasury bill. If you subtract that from the total portfolio return, it tells you how much your portfolio earned above the rate you could have achieved without risking your principal. You take that number and divide it by the standard deviation (discussed earlier in this section). And what *that* result gives you is the Sharpe ratio, which essentially indicates how much money has been made in relation to how much risk was taken to make that money.

Suppose Portfolio A, under manager Bubba Bucks, returned 7 percent last year, and during that year Treasury bills were paying 5 percent. Portfolio A also had a standard deviation of 8 percent. Okay, applying the formula,

$$\frac{7\% - 5\%}{8\%} = \frac{2\%}{8\%} = 0.25$$

That result wasn't good enough for Bubba Buck's manager, so the manager fired Bubba and hired Donny Dollar. Donny, who just read *Exchange-Traded Funds For Dummies*, 3rd Edition, takes the portfolio and dumps all its high-cost active mutual funds. In their place, Donny buys ETFs. In his first year managing the portfolio, he achieves a total return of 10 percent with a standard deviation of 7.5. But the interest rate on Treasury bills has gone up to 7 percent. Applying the formula,

$$\frac{10\% - 7\%}{7.5\%} = \frac{3\%}{7.5\%} = 0.40$$

The higher the Sharpe measure, the better. Donny Dollar did his job much better than Bubba Bucks.

TECHNICAL STUFF

The Treynor approach was first used by — you guessed it — a guy named Jack Treynor in 1965. Instead of using standard deviation in the denominator, it uses beta. The Treynor measure shows the amount of money that a portfolio is making in relation to the risk it carries relative to the market. To put that another way, the Treynor measure uses only systemic risk, or beta, while the Sharpe ratio uses total risk.

Suppose that Donny Dollar's portfolio, with its 10 percent return, had a beta of 0.9. In that case, the Treynor measure would be

$$\frac{10\% - 7\%}{0.9} = \frac{3\%}{0.9} = \frac{.03}{0.9} = 0.033$$

Is 0.033 good? That depends. It's a relative number. Suppose that the market, as measured by the S&P 500, also returned 10 percent that same year. It may seem like Donny isn't a very good manager. But when you apply the Treynor measure (recalling that the beta for the market is always 1.0),

$$\frac{10\% - 7\%}{1.0} = \frac{3\%}{1.0} = \frac{.03}{1.0} = 0.03$$

you get a lower number. That result indicates that while Donny earned a return that was similar to the market's, he took on less risk. Put another way, he achieved greater returns per unit of risk. Donny's boss will likely keep him.

Another variation on the Sharpe ratio is the Sortino ratio, which basically uses the same formula:

$$\frac{\text{Total portfolio return} - \text{Risk-free rate of return}}{\text{Portfolio standard deviation (downside only)}} = \text{Sortino ratio}$$

Note that instead of looking at historical ups and downs, it focuses only on the downs. After all, say members of the Sortino-ratio fan club, you don't lose sleep fretting about your portfolio rising in value. You want to know what your downside risk is. The Sortino-ratio fan club has been growing in size, but as yet, it is difficult to find Sortino-ratio calculations for any given security, including ETFs. I'm sure it will get easier over time, as comparing downside risk among various ETFs can be a helpful tool.

Meet Modern Portfolio Theory

For simplicity's sake, I've discussed the choice of one ETF over another (SHY or SPY?) based on risk and potential return. In the real world, however, few people, if any, come to me or to any financial planner asking for a recommendation on a single ETF. More commonly, I'm asked to help build a portfolio of ETFs. And when looking at an entire portfolio, the riskiness of each individual ETF, although important, takes a back seat to the riskiness of the entire portfolio.

In other words, I would rarely recommend or rule out any specific ETF because it is too volatile. How well any specific ETF fits into a portfolio — and to what degree it affects the risk of a portfolio — depends on what else is in the portfolio. What I'm alluding to here is something called *Modern Portfolio Theory*: the tool I use to help determine a proper ETF mix for my clients' portfolios. You and I will use this tool throughout this book to help you determine a proper mix for your portfolio.

Tasting the extreme positivity of negative correlation

Modern Portfolio Theory is to investing what the discovery of gravity was to physics. Almost. What the theory says is that the volatility/risk of a portfolio may differ dramatically from the volatility/risk of the portfolio's components. In other words, you can have two assets with both high standard deviations and high potential returns, but when combined, they give you a portfolio with modest standard deviation but the same high potential return. Modern Portfolio Theory says that you can have a slew of risky ingredients, but if you throw them together into a big bowl, the entire soup may actually splash around very little.

REMEMBER

The key to whipping up such pleasant combinations is to find two or more holdings that do not move in synch: One tends to go up while the other goes down (although both holdings, in the long run, will see an upward trajectory). In the figures that follow, I show how you'd create a fantasy ETF portfolio consisting of two high-risk/high-return ETFs with perfect negative correlation. It is a fantasy portfolio because perfect negative correlations among asset classes don't exist; they simply serve as a target.

Figure 4-2 represents hypothetical ETF A and hypothetical ETF B, each of which has high return and high volatility. Notice that even though both are volatile assets, they move up and down at different times. This fact is crucial because combining them can give you a nonvolatile portfolio.

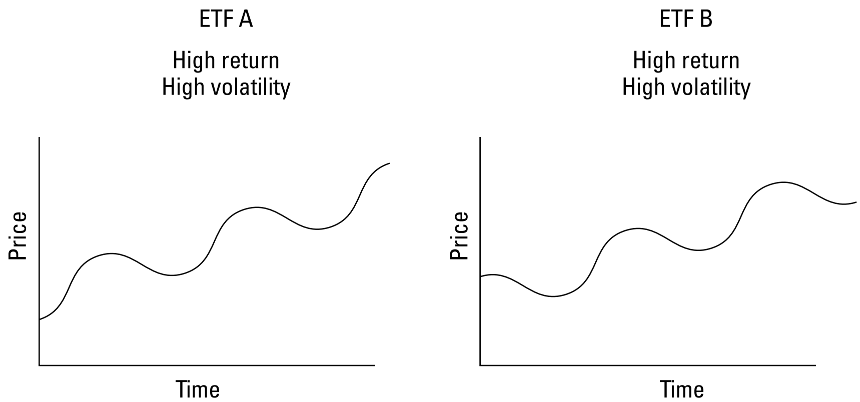


FIGURE 4-2: ETFs A and B each have high return and high volatility.

Figure 4-3 shows what happens when you invest in both ETF A and ETF B. You end up with the perfect ETF portfolio — one made up of two ETFs with perfect negative correlation. If only such a portfolio existed in the real world! (***Note:*** I'm ignoring for the moment the so-called inverse ETFs, which promise negative correlation, but don't always deliver. Chapter 18 covers those.)

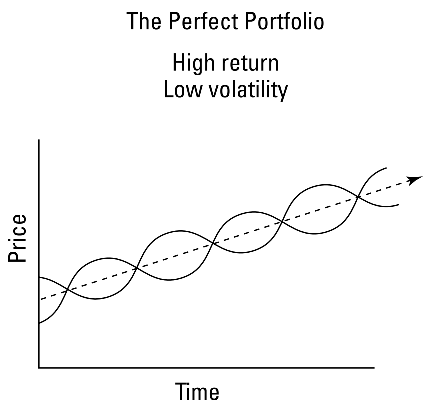


FIGURE 4-3: The perfect ETF portfolio, with high return and no volatility.

Settling for limited correlation

When the U.S. stock market takes a punch, which happens on average every three years or so, most U.S. stocks fall. When the market flies, most stocks fly. Not many investments regularly move in opposite directions. I do, however, find investments that tend to move independently of each other much of the time, or at least they don't move in the same direction all the time. In investment-speak, I'm talking about investments that have *limited* or *low correlation.*

Different kinds of stocks — large, small, value, and growth — tend to have limited correlation. U.S. stocks and foreign stocks — especially small-cap foreign stocks — tend to have even less correlation; see the sidebar, "Investing around the world." But the lowest correlation around is between stocks and bonds, which historically have had almost no correlation.

Say, for example, you had a basket of large U.S. stocks in 1929, at the onset of the Great Depression. You would have seen your portfolio lose nearly a quarter of its value every year for the next four years. Ouch! If, however, you were holding high-quality, long-term bonds during that same period, at least that side of your portfolio would have grown by a respectable 5 percent a year. A portfolio of long-term bonds held throughout the growling bear market in stocks of 2000 through 2003 would have returned a hale and hearty 13 percent a year. (That's an unusually high return for bonds, but at the time the stars were in perfect alignment.)

During the market spiral of 2008, there was an unprecedented chorus-line effect in which nearly all stocks — value, growth, large, small, U.S., and foreign — moved in the same direction: down. . .depressingly down. At the same time, all but the highest-quality bonds took a beating as well. But once again, portfolio protection came in the form of long-term U.S. government bonds, which rose by about 26 percent in value.

INVESTING AROUND THE WORLD

Investing in the U.S. stock market has limited correlation to investing in stock markets outside of the United States, as these five years of returns attest. If you had ETFs that tracked the following indexes — easy to find! — you could see how your returns each year would smooth out.

	2016	2017	2018	2019	2020
U.S. Stock Market (S&P 500)	12.0	21.8	–4.4	31.5	18.4
Developed World (MSCI World except USA)	2.8	24.2	–14.1	22.5	7.6
Emerging Markets (MSCI Emerging Markets)	11.9	37.3	–14.6	18.4	18.3

In August 2011, as S&P downgraded U.S. Treasuries, the stock markets again took a tumble, and — guess what? — Treasuries, despite their downgrade by S&P (but none of the other raters), spiked upward!

Reaching for the elusive Efficient Frontier

Correlation is a measurable thing, represented in the world of investments by something called the *correlation coefficient.* This number indicates the degree to which two investments move in the same or different directions. A correlation coefficient can range from −1 to 1.

REMEMBER

A correlation of 1 indicates that the two securities are like the Radio City Rockettes: When one kicks a leg, so does the other. Having both in your portfolio offers no diversification benefit. On the other hand, if investment A and investment B have a correlation coefficient of −1, that means they have a perfect negative relationship: They always move in the opposite directions. Having both in your portfolio is a wonderful diversifier. Such polar-opposite investments are, alas, very hard to find.

A correlation coefficient of zero means that the two investments have no relationship to each other. When one moves, the other may move in the same direction, the opposite direction, or not at all.

As a whole, stocks and bonds (not junk bonds, but high-quality bonds) tend to have little to negative correlation. Finding the perfect mix of stocks and bonds, as well as other investments with low correlation, is known among financial pros as looking for the *Efficient Frontier.* The Frontier represents the mix of investments that offers the greatest promise of return for the least amount of risk.

Fortunately, ETFs allow you to tinker easily with your investments so you can find just that sweet spot.

Accusations that MPT is dead are greatly exaggerated

Since the market swoon of 2008, some pundits have claimed that Modern Portfolio Theory (MPT) is dead. This claim is nonsense. As I mentioned, U.S. government bonds more than held their own during this difficult period. And even though all styles of stock moved down in 2008, they moved at different paces. And the degree to which they recovered has differed significantly. The same thing happened again in 2020 with the COVID-19 dip. You'll see these differences in the charts in the upcoming sections, "Filling in your style box" and "Buying by industry sector."

The investors who were hurt terribly in 2008 were those who sold their depressed stocks and moved everything into cash or "safe" bonds. Those bonds, at least long-term government bonds, then lost about 16 percent of their value in 2009. Those who flipped from stocks to bonds would have been doubly wounded. But those who kept the faith in MPT and rebalanced their portfolios, as I discuss fully in Chapter 23, would not have been so badly wounded. These investors would have been buying stock in 2008 instead of selling it. And any investor with a fairly well-balanced portfolio of stocks and bonds would have recouped their losses within two years after the market bottomed in March 2009. In 2020, buyers and holders saw their losses reverse even more quickly. . .a sign, I believe, of things to come. I do more crystal-ball gazing in Chapter 28.

THE CORRELATION OF VARIOUS ETFs

The following correlations of several iShares ETFs show to what degree different ETFs moved in the same direction over a recent three-year period. The lower the correlation, the better from a portfolio-building point of view. Low correlations reduce portfolio risk. High correlations do not. Negative correlations are, alas, not that easy to find in the real world, but portfolio managers are forever looking.

ETF 1	ETF 2	Correlation Coefficient	Rating
iShares S&P Small Cap 600 Growth (small growth)	iShares S&P 500 Value (large value)	0.92	Medium to high correlation
iShares S&P 500 Growth (large growth)	iShares Barclays 7–10 Year Treasury (bonds)	–0.19	Negative correlation
iShares MSCI Japan Index (Japanese stocks)	iShares S&P Small Cap 600 Value (small value)	0.74	Modest correlation
iShares S&P Small Cap 600 Growth (small growth)	iShares S&P Small Cap 600 Value (small value)	0.98	High correlation
iShares Dow Jones Utilities Sector	iShares S&P Small Cap 600 Value (small value)	0.61	Modest correlation

Mixing and Matching Your Stock ETFs

Reaching for the elusive Efficient Frontier means holding both stocks and bonds — domestic and international — in your portfolio. That part is fairly straightforward and not likely to stir much controversy (although, for sure, experts differ on what they consider optimal percentages). But experts definitely don't agree on how best to diversify the domestic-stock portion of a portfolio. Two competing methods predominate:

- One method calls for the division of a stock portfolio into domestic and foreign, and then into different styles: large cap, small cap, mid cap, value, and growth.
- The other method calls for allocating percentages of a portfolio to various industry sectors: healthcare, utilities, energy, financials, and so on.

My personal preference for the small to mid-sized investor, especially the ETF investor, is to go primarily with the styles. But there's nothing wrong with dividing a portfolio by industry sector. And for those of you with good-sized portfolios, a mixture of both, without going crazy, may be optimal.

Filling in your style box

Most savvy investors make certain to have some equity in each of the nine boxes of the grid in Figure 4-4, which is known as the *style box* or *grid* (sometimes called the *Morningstar Style Box*).

Large-cap value	Large-cap blend	Large-cap growth
Mid-cap value	Mid-cap blend	Mid-cap growth
Small-cap value	Small-cap blend	Small-cap growth

FIGURE 4-4: The style box or grid.

The reason for the style box is simple enough: History shows that companies of differing cap (capitalization) size (in other words, large companies and small companies), and value and growth companies, tend to rise and fall under different economic conditions. I define *cap size, value,* and *growth* in Chapter 5, and I devote the next several chapters to showing the differences among styles, how to choose ETFs to match each one, and how to weight those ETFs for the highest potential return with the lowest possible risk.

Table 4-2 shows how well various investment styles, as measured by four Vanguard index ETFs that track each style, have fared in the past several years. Note that a number of ETFs are available to match each style.

TABLE 4-2 Recent Performance of Various Investment Styles

	2016	2017	2018	2019	2020
Large-Cap Growth	6.17	27.75	–3.32	37.26	40.27
Large-Cap Value	16.95	17.14	–5.45	25.83	2.29
Small-Cap Growth	10.79	21.93	–5.78	32.86	35.4
Small-Cap Value	24.8	11.84	–12.28	22.77	5.91

Buying by industry sector

The advent of ETFs has largely brought forth the use of sector investing as an alternative to the grid. Examining the two models toe-to-toe yields some interesting comparisons — and much food for thought.

One study on industry-sector investing, by Chicago-based Ibbotson Associates, came to the very favorable conclusion that sector investing is a potentially superior diversifier to grid investing because times have changed since the 1960s when style investing first became popular. As Ibbotson concluded,

> Globalization has led to a rise in correlation between domestic and international stocks; large-, mid-, and small-cap stocks have high correlation to each other. A company's performance is tied more to its industry than to the country where it's based, or the size of its market cap.

The jury is still out, but I give an overview of the controversy in Chapter 10. For now, I invite you to do a little comparison of your own by looking at Tables 4-2 and 4-3. Note that by using either method of diversification, some of your investments should smell like roses in years when others stink. Also, recall what I stated earlier about how all stocks crashed in 2008 but recovered at significantly different paces; this is true of various styles and sectors. And it is certainly true for various geographic regions. Modern Portfolio Theory is not dead!

Table 4-3 shows how well various industry sectors (as measured by the returns of Vanguard indexed ETFs that match the index of each of the respective sectors) fared in recent years. Yes, there are ETFs that track each of these industry sectors — and many more.

TABLE 4-3 Recent Performance of Various Market Sectors

	2016	2017	2018	2019	2020
Healthcare	–3.32	23.35	5.49	22.0	18.34
Real Estate	8.53	4.90	–5.97	28.89	-4.64
Information Technology	13.75	37.04	2.43	48.75	46.09
Energy	28.93	–2.35	–20.01	9.37	-33.03

Don't slice and dice your portfolio to death

One reason I tend to prefer the traditional style grid to industry-sector investing, at least for the nonwealthy investor, is that there are simply fewer styles to contend with. You can build yourself, at least on the domestic side of your stock holdings, a pretty well-diversified portfolio with but four ETFs: one small value, one small growth, one large value, and one large growth. With industry-sector investing, you would need a dozen or so ETFs to have a well-balanced portfolio, and that may be too many.

I hold a similar philosophy when it comes to global investing. Yes, you can, thanks largely to the iShares lineup of ETFs, invest in about 50 individual countries. (And in many of these countries, you can furthermore choose between large-cap and small-cap stocks, and in some cases, value and growth.) Too much! I prefer to see most investors go with larger geographic regions: U.S., developed markets, emerging markets. . .

You don't want to chop up your portfolio into too many holdings, or the transaction costs (even if trading ETFs commission-free, there are still small, frictional costs when you trade) can start to bite into your returns. Rebalancing gets to be a headache. Tax filing can become a nightmare. And, as many investors learned in 2008 — okay, I'll admit it, as *I* learned in 2008 — having a very small position in your portfolio, say, less than 2 percent of your assets, in any one kind of investment isn't going to have much effect on your overall returns anyway.

WHAT CREATES RETURNS, AND WHAT KIND OF RETURNS WILL THE FUTURE BRING?

In the world of stock markets, with their by-and-large juicy long-term returns, the juice comes from three sources:

- Dividends
- Earnings growth
- Price/earnings multiples (the measure of market expectations), otherwise known as P/E

Dividends, it may surprise you to learn, account for the lion's share of stock market returns over the past two centuries. The stock market has given us roughly a 7 percent post-inflation rise during that period. Perhaps three-quarters of that 7 percent is attributable to dividends. That's history, of course. Today's dividend yield on the S&P 500, although it has grown in the past several years, is only about 1.8 percent and is very unlikely to exceed 5 percent ever again. Instead of paying dividends, companies today funnel much of their profits into internal growth, repurchasing shares of their own stock, and dishing out astronomical compensation for top executives.

In the future, you may be looking at a 2 percent dividend yield, tops, plus whatever good fortune brings you in the way of earnings growth. The price/earnings multiple — the factor by which investors are willing to invest in stocks in hopes of future earnings — has soared in recent years. The historical average is about 15, but when interest rates are very low, as they are while I'm writing these words, the average tends to rise to about 20. In mid-2021, it had risen to 44. Stocks, by historical standards, are pricey. . .very pricey.

But clearly, many feel the P/E could continue to rise. Or it could crash. You don't know. Assuming it remains around the same, that means that earnings growth would need to pick up where dividend yield left off to continue providing investors with the 7 percent returns after inflation that they've come to expect.

When I look into my crystal ball (I really try not to do that very often), I can't see what returns will be, but I do know for sure that the stock market will continue to be volatile. Many investors may end up jumping overboard long before they get to any port where they'll find the Holy Grail. Fortunately, with a well-balanced portfolio of ETFs, you will be in a position to complete the voyage.

But don't presume that you can avoid all risk or that the future will mirror the past, and don't put everything you have into stocks.

TIP

As a rough rule, if you have $50,000 to invest, consider something in the ballpark of a 5- to 10-ETF portfolio, and if you have $250,000 or more, perhaps look at a 15- to 25-ETF portfolio. Many more ETFs than this won't enhance the benefits of diversification but will entail additional trading costs every time you rebalance your holdings. (See my sample ETF portfolios for all sizes of nest eggs in Chapter 21.)

IN THIS CHAPTER

» Sizing up the size factor in stock investing

» Understanding what makes large large and growth growth

» Recognizing ETFs that fit the style bill

» Knowing how much to allocate

» Choosing the best options for your portfolio

Chapter 5

Large Growth: Muscular Money Makers

Pick up a typical business magazine and look at the face adorning the cover. He's Mr. CEO. Tough and ambitious and looking for acquisitions under every rock, his pedigree is Harvard, his wife is the former Miss Missouri, his salary (not to mention other perks) exceeds the gross national product of Peru, and his house has 14 bathrooms. (Yeah, I know this is a gross stereotype, but U.S. CEOs do tend to be a rather homogenous lot.) The title of the cover story emblazoned across Mr. CEO's chest suggests that buying stock in his company will make you rich. Without knowing anything more, you can assume that Mr. or Ms. CEO heads a large-growth company.

In other words, Mr. CEO's company has a *total market capitalization* (the value of all its outstanding stock) of at least $10 billion, earnings have been growing and growing fast, the company has a secure niche within its industry, and many people envision the Borg-like corporation eventually taking over the universe. Think Apple, Microsoft, and Facebook. Think Amazon, Tesla, and Alphabet (Google).

In this chapter, I explain what role such behemoths should play in your portfolio. But before getting into the meat of the matter, take a quick glance at Figures 5-1 and 5-2. Figure 5-1 shows where large-growth stocks fit into a well-diversified stock portfolio. (I introduce this style box or grid, which divides a stock portfolio into large cap and small cap, value and growth, in Chapter 4.) Figure 5-2 shows their historical returns.

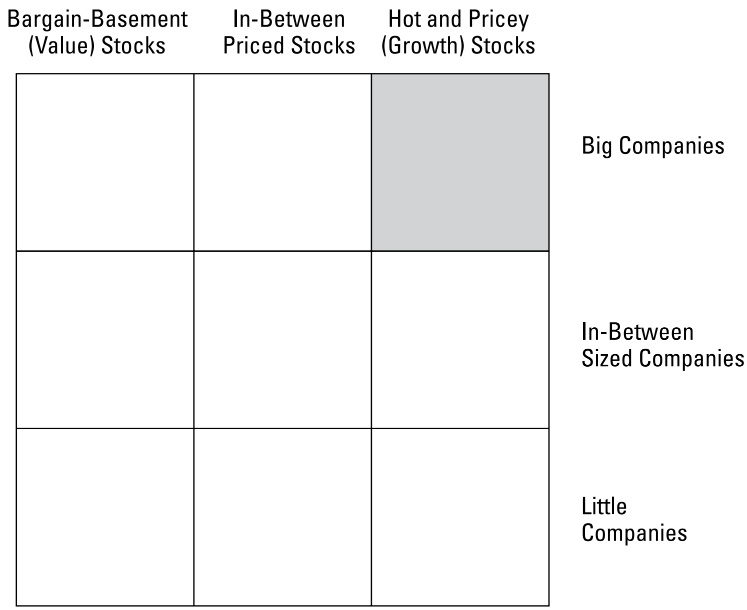
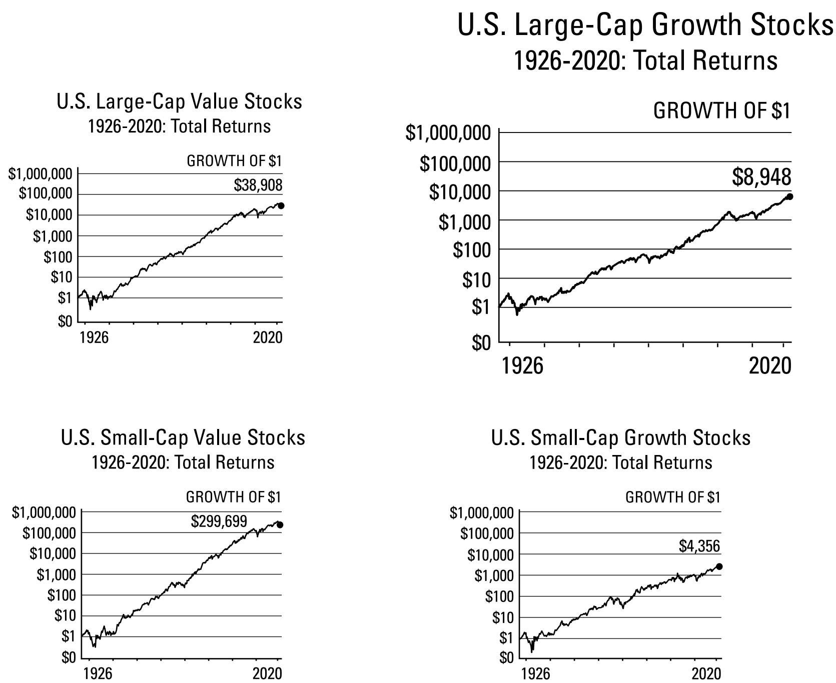


FIGURE 5-1: The place of large-growth stocks in the grid.



Source: Colby Davis, RHS Financial, based on data provided by Ken French's Data Library.

FIGURE 5-2: Large-growth stocks have given investors ample returns over the decades.

Style Review

In Chapter 4, I note that one approach to building a portfolio involves investing in different styles of stocks: large cap, mid cap, small cap, value, and growth. How did the whole business of style investing get started? Hard to say. Benjamin Graham, the "Dean of Wall Street," the "Father of Value Investing," who wrote several oft-quoted books in the 1930s and 1940s, didn't give investors the popular style grid that you see in Figure 5-1. But Mr. Graham certainly helped provide the tools of fundamental analysis whereby more contemporary brains could figure things out.

In the early 1980s, studies out of the University of Chicago began to quantify the differences between large caps and small caps, and in 1992, two economists named Eugene Fama and Kenneth French delivered the seminal paper on the differences between value and growth stocks.

What makes large cap large?

Capitalization or *cap* refers to the combined value of all shares of a company's stock. The lines dividing large cap, mid cap, and small cap are sometimes as blurry as the line between, say, *Rubenesque* and *fat.* The distinction is largely in the eyes of the beholder. If you took a poll, however, I think you would find that the following divisions are generally accepted.

REMEMBER

- **Large caps:** Companies with more than $10 billion in capitalization
- **Mid caps:** Companies with $2 billion to $10 billion in capitalization
- **Small caps:** Companies with $300 million to $2 billion in capitalization

Anything from $50 million to $300 million would usually be deemed a *micro cap.* And your local pizza shop, if it were to go public, might be called a *nano cap* (*con aglio*). There are no nano-cap ETFs. For all the other categories, there are ETFs to your heart's content.

How does growth differ from value?

Many different criteria are used to determine whether a stock or basket of stocks (such as an ETF) qualifies as *growth* or *value.* (In Chapter 6, I list six ways to recognize value.) One popular measure is the P/B or price-to-book ratio, which looks at the price of the stock in comparison to the book value, which is a company's total assets minus its liabilities. But perhaps the most important measure (if I were forced to pick one) would be the ratio of price to earnings: the *P/E ratio,* sometimes referred to as the *multiple.*

The P/E ratio is the price of a stock divided by its earnings per share. For example, suppose McDummy Corporation stock is currently selling for $40 a share. And suppose that the company earned $2 last year for every share of stock outstanding. McDummy's P/E ratio would be 20. (The S&P 500 currently has a P/E of about 45, but that ratio changes frequently. Historically, the average is about 15.)

REMEMBER

The higher the P/E, the more investors have been willing to pay for the company's earnings. Or to put it in terms of growth and value,

- **The higher the P/E, the more *growthy* the company:** Either the company is growing fast, or investors have high hopes (realistic or foolish) for future growth.
- **The lower the P/E, the more *valuey* the company:** The business world doesn't see this company as a mover and shaker.

Each ETF carries a P/E reflecting the collective P/E of its holdings and giving you an indication of just how growthy or valuey that ETF is. A growth ETF is filled with companies that look like they are taking over the planet. A value ETF is filled with companies that seem to be meandering along but whose stock can be purchased for what looks like a bargain price.

Putting these terms to use

Today, most investment pros develop their portfolios with at least some consideration given to the cap size and growth or value orientation of their stock holdings. Why? Because study after study shows that, in fact, a portfolio's performance is inexorably linked to where that portfolio falls in the style grid. A mutual fund that holds all large-growth stocks, for example, will generally (but certainly not always) rise or fall with the rise or fall of that asset class.

Some research shows that perhaps 90 to 95 percent of a mutual fund's or ETF's performance may be attributable to its asset class alone. In other words, any large-cap growth fund will tend to perform similarly to other large-cap growth funds. Any small-cap value fund will tend to perform similarly to other small-cap value funds. And so on. That's why the financial press's weekly wrap-ups of top-performing funds will typically list a bunch of funds that mirror each other very closely. (That being the case, why not enjoy the low cost and tax efficiency of the ETF or index mutual fund?)

Big and Brawny

Large-growth companies grab nearly all the headlines, for sure. The pundits are forever singing their praises — or trumpeting their faults when the growth trajectory starts to level off. Either way, you'll hear about it; the northeast corner of the style grid includes the most recognizable names in the corporate world. If you're seeking employment, I strongly urge you to latch on to one of these companies; your future will likely be bright. But do large-growth stocks necessarily make the best investments?

Er, no.

Contrary to all appearances. . .

According to Fama and French (who are still operating as a research duo), over the course of the last 94 years, large-growth stocks have seen an annualized return rate (not accounting for inflation) of about 10 percent. Not too bad. But that compares to 12 percent for large-value stocks, which don't, on the face of it, seem to be any more volatile. Theories abound as to why large-growth stocks haven't done as well as value stocks. Value stocks pay greater dividends, say some. Value stocks really *are* riskier; they just don't look it, argue others.

REMEMBER

The theory that makes the most sense, in my opinion, is that growth stocks are simply hampered by their own immense popularity. Because growth companies grab all the headlines, because investors *think* they must be the best investments, the large-growth stocks tend to get overpriced by the time you buy them. In the past few months, for example, everyone I know seems to be talking about Tesla, America's futuristic, computerized, electric car manufacturer. Yes, the stock has surged, and the company is certainly growing, and it probably will continue to grow. But with a price-to-earnings ratio of 605, your stock investment in Tesla is dependent on future supersonic growth; anything less than supersonic growth, and the stock is not going to shine. If people expect a stock to tank (in which case, the P/E will be much lower), value investors might jump in and make a profit even if the company doesn't grow at all — but merely doesn't tank!

HOT STOCKS OFTEN COOL

Oh! In case you still have a copy of *Exchange-Traded Funds For Dummies,* 2nd Edition, you'll note that the example of a high-flying company I used 10 years ago was the Chinese Internet sensation Baidu. *Everyone* 10 years ago wanted a piece of Baidu. It was the poster-boy of growth companies. It was growing in leaps and bounds. It was the investing public's great love. Baidu stock's 10-year return as of today? It's 3.6 percent. So, um, maybe you don't want to throw your life savings into Tesla.

Let history serve as only a rough guide

So given that large-value stocks historically have done better than large-growth stocks, and given (as I discuss in Chapters 7 and 8) that small caps historically have knocked the socks off large, does it still make sense to sink some of your investment dollars into large growth? Oh yes, it does. The past is only an indication of what the future may bring. No one knows whether value stocks will continue to outshine large-growth stocks. In the past decade, in fact, large-growth stocks have outperformed both value and small-cap stocks — shooting far ahead of the pack in 2020 when COVID-19 hit, and everyone stopped going to stores and hung out on their computers all day. So far, 2021 seems to be bringing a reversal, back to more historical norms.

(Please don't accuse me of market timing! I'm not saying that because a reversal seems to be in gear, that you should dump growth for value or large for small cap, or any such thing. I have no idea what will happen over the coming months. But to a small and limited degree, a little timely *tactical* tilting, I feel, is an okay thing. That is, it may make some sense to tilt a portfolio *gently* toward whatever sectors seem to be sagging and away from sectors that have been blazing. If you do that subtly, and regularly, and don't let emotions sway you — and if you watch out carefully for tax ramifications and trading costs — history shows that you may eke out some modest added return. Read more on tactical tilting in Chapter 23.)

TIP

Stocks of large companies — value and growth combined — should make up between 50 and 70 percent of your total domestic stock portfolio. The higher your risk tolerance, the closer you'll want to be to the lower end of that range.

Whatever your allocation to domestic large-cap stocks, I recommend that you invest anywhere from 40 to 50 percent of that amount in growth. Take a tilt toward value, if you want, but don't tilt so far that you risk tipping over.

ETF Options Galore

The roster of ETFs on the market now includes hundreds upon hundreds of (roughly 1,700) stock funds, and most of them are going to include at least some large-cap U.S. growth stocks. In fact — and this may surprise you — if you look at a “total stock market” fund, such as, say, the popular Vanguard Total Stock Market fund (VTI), you’re going to find that a full 73 percent of it is made up of large-cap stocks. That’s because it is, like the vast majority of ETFs, a fund based on a “market-weighted” index. And because large-cap stocks have lots of weight, you’ll find that they tend to dominate most indexes.

These large-cap stocks that you’ll find in VTI are value and growth as well as in-between (blend) stocks. If you have a very small portfolio, and you really want to keep things super simple, then VTI (which just celebrated its 20th birthday) is a great ETF to hold. But for most investors, it would be wise to have large-cap stocks separate from small-cap stocks, and to have growth stocks separate from value stocks. That approach gives you the opportunity to rebalance once a year and, by so doing, keep a cap on risk, and possibly juice out a higher return. (More on rebalancing in Chapter 23.) It also allows for fine-tuning your portfolio, to give it a value tilt, if you so desire, and to give your portfolio more than a sprinkling of small-cap stocks, which is exactly what you’ll get in “total-market” funds.

Winnowing the field

In addition to finding large-cap growth stocks in total-market funds, you’re also going to find them, of course, in funds that are specifically large-cap funds and in just about all industry-sector funds, be they technology, healthcare, or consumer discretionary ETFs. You’ll also find large-cap growth in actively managed ETFs. But the ETFs I’m about to introduce you to are broad-based large-growth funds, covering all industry sectors. And they are indexed funds. . .because, well, as I discussed in Part 1, index funds are really where you want to be — just ask any academic who has studied market performance and investor returns.

There are, of course, differences among index funds. I look for reasonable indexes with very low costs. And when I’m looking for growth, I want more growthy rather than less (a high P/E ratio is a good sign), and when I’m looking for large cap, I want LARGE.

TECHNICAL STUFF

“LARGE” means that the portfolio has a high average market cap — higher than others in the pack. Unfortunately, different fund companies measure “average” in different ways, so it can be hard to compare apples to apples because fund companies can’t agree on exactly what weight to give, say, Apple stock (among others) when it appears in the portfolio. So rather than go to each ETF purveyor directly for the average market cap, I went to Morningstar Direct. If you're a math geek, know that Morningstar Direct uses a "geometric mean" for a stock fund's average cap size, whereas others may use an "arithmetic mean," or a median. If you're not a math geek, think of Morningstar's measure as a "center of gravity" that is found by looking not only at the raw size of the companies in the portfolio but also at the importance that each company has within the portfolio mix, so that one company with a market cap of $100 gazillion-gazillion doesn't ridiculously inflate the average.

Strictly large growth, best options

For a focus on large growth (complemented elsewhere in the portfolio by large value, of course), the five options I list here all provide good exposure to the asset class.

Vanguard Growth ETF (VUG)

Indexed to: CRSP U.S. Large Cap Growth Index (280 or so of the nation's largest growth stocks)

Expense ratio: 0.04 percent

Average market cap: $276.4 billion

P/E ratio: 42

Top five holdings: Apple, Microsoft, Amazon, Alphabet, Facebook

Russell's review: The price is right. The index makes sense. There's good diversification. The companies represented are certainly large, even though they could be a bit more growthy. This ETF is certainly a very good option. There's also "The Vanguard edge" (see Chapter 3), which gives this fund another advantage for those who may already own the Vanguard Growth Index mutual fund.

Vanguard Mega Cap 300 Growth ETF (MGK)

Indexed to: CRSP U.S. Mega Cap Growth Index (110 or so of the largest growth companies in the United States)

Expense ratio: 0.07 percent

Average market cap: $435.7 billion

P/E ratio: 40.5

Top five holdings: Apple, Microsoft, Amazon, Alphabet, Facebook

Russell's review: Bigger is better. . .sometimes. If you have small caps in your portfolio, this mega cap fund will give you slightly better diversification than the Vanguard Growth ETF (VUG), but this fund is also a tad less growthy than VUG, so you'll get a bit less divergence from your large-value holdings. Nothing to sweat. Either fund, given Vanguard's low expenses and reasonable indexes, would make for a fine holding.

Schwab U.S. Large-Cap Growth ETF (SCHG)

Indexed to: Dow Jones U.S. Large-Cap Growth Total Stock Market Index (230 or so of the largest and presumably fastest-growing U.S. firms)

Expense ratio: 0.04 percent

Average market cap: $335.8 billion

P/E ratio: 40

Top five holdings: Apple, Microsoft, Amazon, Facebook, Alphabet

Russell's review: For the sake of economy alone, this fund, like nearly all Schwab ETFs, makes a good option. The management fee is one of the lowest in the industry. Most importantly, the index is a good one, and you can expect Schwab to do a reasonable or better job of tracking the index.

iShares Morningstar Large-Cap Growth ETF (ILCG)

Indexed to: Morningstar U.S. Large-Mid Cap Broad Growth Index (420 or so of the largest and most growthy U.S. companies)

Expense ratio: 0.04 percent

Average market cap: $231.2 billion

P/E ratio: 45.5

Top five holdings: Microsoft, Amazon, Apple, Facebook, Alphabet

Russell's review: This ETF offers more growthiness than its competitors, which is good. And the price is right. Morningstar indexes are crisp and distinct: Any company that appears in the growth index is not going to be popping up in the value index. Even though that crispness could lead to slightly higher turnover, I like it.

Nuveen ESG Large-Cap Growth ETF (NULG)

Indexed to: This ETF provides passive exposure to the 105 or so companies that are in MSCI's TIAA USA Large-Cap Growth Index. If you don't know what ESG is, it stands for environmental, social, and governance criteria, and you should turn to Chapter 17 to learn more.

Expense ratio: 0.35 percent

Average market cap: $165.7 billion

P/E ratio: 47

Top five holdings: Microsoft, Alphabet, Tesla, NVIDIA Corporation, Visa

Russell's review: The average market cap is smaller than the other large-cap growth ETFs, and the expense ratio is higher. . .significantly higher. To date, however, Nuveen offers you the only option to invest in ETFs with style (value, growth, large, small), and to have a portfolio constructed with ESG considerations. Given that the portfolio holdings of this ETF differ appreciably from the other large-growth ETFs, you could see a significant difference in performance. Higher or lower? Probably, in the long run, higher. But that's due largely to the smaller average market cap, which brings with it greater volatility.

ETFs I wouldn't go out of my way to own

None of the following ETFs are horrible. But given the plethora of choices, barring very special circumstances, I would not recommend them.

- **SPDR Dow Jones Industrial Average ETF Trust (DIA):** Based on the index on which this ETF is based, I don't like it. The Dow Jones Industrial Average is an antiquated and somewhat arbitrary index of about 30 large companies that some committee pulled together by S&P Global thinks represents Corporate America. That isn't enough on which to build a portfolio.
- **Invesco QQQ (QQQ):** This ETF tracks the Nasdaq-100 Index, which includes the 100 largest nonfinancial companies listed on the Nasdaq Stock Market. Lots of tech; definitely large and definitely growth; but rather random (it includes Apple and Microsoft, but not Amazon or Alphabet). Randomness in a portfolio is not a good thing.

- **First Trust Large Cap Growth AlphaDEX (FTC):** I see a net expense ratio of 0.60 percent, and I see lead boots that you're going to be running in if you buy this ETF. At the time of this writing, this fund has returned 13.58 percent annually over the past 10 years. That compares to 16.5 percent for the S&P Growth Index. Surprise, surprise.
- **Invesco Dynamic Large Cap Growth ETF (PWB):** This ETF doesn't make me recoil in horror; you could do somewhat worse. But the high-by-ETF-standards expense ratio (0.56 percent) is something of a turn-off. And the "enhanced" index reminds me too much of active investing, which has a less-than-gleaming track record.

IN THIS CHAPTER

» Evaluating value investing

» Weighing value against growth for performance and risk

» Recognizing ETFs that fit the value bill

» Knowing how much to allocate

» Choosing the best options for your portfolio

Chapter 6 Large Value: Counterintuitive Cash Cows

Why do American suburbanites gingerly cultivate their daisies, yet go nuts swinging spades or spraying poison chemicals at their dandelions? Why is a second cup of coffee in a diner free, but a second cup of tea isn't? Some things in this world just don't make a lot of sense. Why, for example, would slower-growing companies (the dandelions of the corporate world) historically reward investors better than faster-growing (daisy) companies? Welcome to the shoulder-shrugging world of value investing.

I'm talking about companies you've probably heard of, yes, but they aren't nearly as glamorous as Microsoft or as exciting as Tesla. I'm talking about companies that usually ply their trade in older, slow-growing industries, like insurance, petroleum, and transportation. I'm talking about companies such as UnitedHealth Group, Procter & Gamble, ExxonMobil, and Exelon Corporation (providing electricity and gas to customers in Illinois and Pennsylvania).

I see you yawning! But before you fall asleep, consider this: Since 1927, large-value stocks have enjoyed an annualized growth rate of roughly 12 percent, versus 10 percent for large-growth stocks — with roughly the same standard deviation (volatility). And thanks to ETFs, investing in value has never been easier.

In this chapter, I explain not only the role that large-value stocks play in a portfolio, but also why you may want them to be the largest single asset class in your portfolio. Take a gander at Figures 6-1 and 6-2. They show where large-value stocks fit into the investment style grid (which I introduce in Chapter 4) and the impressive return of large-value stocks over the past nine or so decades.

Pass the dandelion fertilizer, will ya?

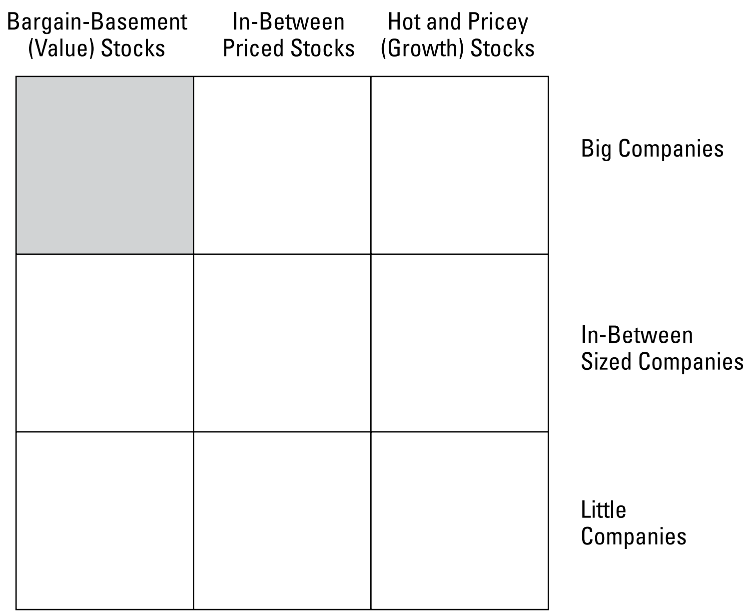


FIGURE 6-1: Large-value stocks occupy the northwest corner of the grid.

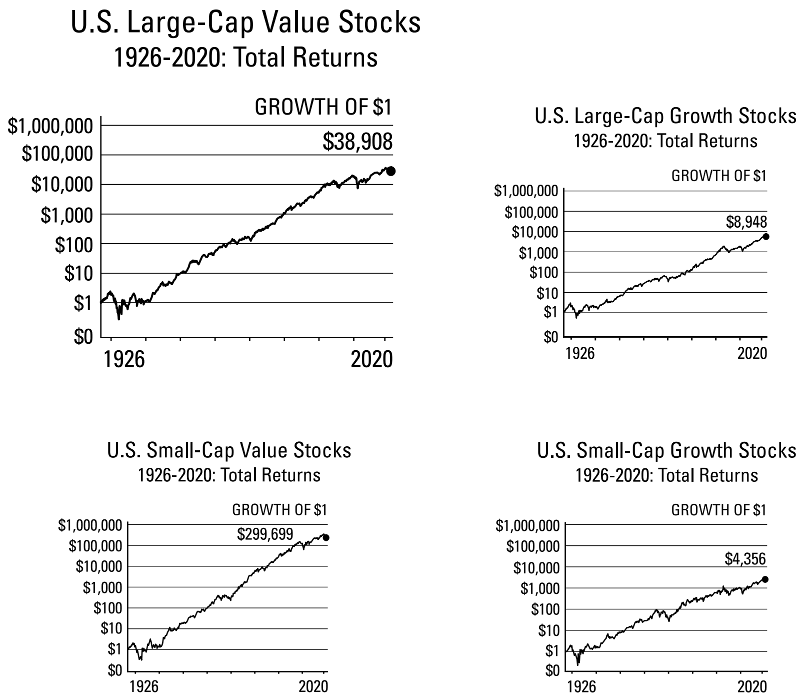


FIGURE 6-2: This chart shows the growth of $1 invested in a basket of large-value stocks from 1927 to the present.

Source: Colby Davis, RHS Financial, based on data provided by Ken French's Data Library.

Six Ways to Recognize Value

Warren Buffett knows a value stock when he sees one. Do you? Different investment pros and different indexes (upon which ETFs are fashioned) may define "value" differently, but here are some of the most common criteria.

REMEMBER

- **P/E ratio:** As early as 1934, Benjamin Graham and David Dodd (in their book with the blockbuster title, *Security Analysis*) suggested that investors should pay heavy consideration to the ratio of a stock's market price (P) to its earnings (E) per share. Sometimes called the *multiple,* this venerable ratio sheds light on how much the market is willing to cough up for a company's earning power. The lower the ratio, the more "valuey" the stock. (The P/E ratio as it relates to growth stocks is addressed in the previous chapter.)
- **P/B ratio:** Graham and Dodd also advised that the ratio of market price to book value (B) should be given at least "a fleeting glance." Many of today's investment gurus have awarded the P/B ratio the chief role in defining value versus growth. A ratio well below sea level is what floats a value investor's boat. *Book value* refers to the guesstimated value of a corporation's total assets, both tangible (factories, inventory, and so on) and intangible (goodwill, patents, and so on), minus any liabilities.

- **Dividend distributions:** You like dividends? Value stocks are the ones that pay them.
- **The cover of *Forbes:*** Magazine covers are rarely adorned with photos of the CEOs of value companies. While growth companies receive broad exposure, value companies tend to wallow in obscurity.
- **Earnings growth:** Growth companies' earnings tend to impress, whereas you can expect value companies to have less than awe-inspiring earnings growth.
- **The industry sector:** Growth stocks are typically found in high-flying industries, such as Internet commerce, computers, wireless communications, and biotechnology. Value stocks are more often found in older-than-the-hills sectors, such as energy, banking, transportation, foodstuffs, and toiletries.

Looking for the Best Value Buys

Many academic types have looked at the so-called *value premium* and have tried to explain it. No one can agree on why value stocks have historically outperformed growth stocks. (A joke I remember from my college days: Put any three economists in a room, and you'll get at least five opinions.)

Some people say there is hidden risk in value investing that warrants greater returns. They explain that although the standard deviation for the two asset classes is about the same, value stocks tend to plummet at the worst economic times. This argument is not all that persuasive. During some serious market downturns, such as 2008 and again in 2020, value was hit harder than growth. But during other market downturns, such as the dot-com disaster of 2000 to 2002, value stocks proved much more buoyant than growth stocks. Others say that value stocks outperform growth stocks because of the greater dividends paid by value companies. Growth companies tend to plow their cash into acquisitions and new product development rather than issuing dividends to those pesky shareholders.

Here's the best explanation for the value premium, if you ask this humble author: Value stocks simply tend to be ignored by the market — or have been in the past — and therefore come relatively cheap. When value stocks do receive attention, it's usually negative. And studies show that investors tend to overreact to bad news. Such overreactions end up being reflected in a discounted price.

Taking the index route

Famous value investors like Warren Buffett make their money finding stocks that come at an especially discounted price. They recognize that companies making lackluster profits, and even sometimes companies bleeding money, can turn around (especially when Mr. Buffett sends in his team of whip-cracking consultants). When a lackluster company turns around, the stock that was formerly seen as a financial turd (that's a technical term) can suddenly turn into 14-karat gold. It's a formula that has worked well for the Oracle of Omaha.

Good luck making it work for you.

REMEMBER

Unlike Warren Buffett, many or most value-stock pickers repeatedly take gambles on failing companies that continue to fail. I say the best way to invest in large value is to buy the index. There is no better way of doing that than through ETFs.

Making an ETF selection

The world of pure, indexed, large-cap, domestic value-stock ETFs includes at least 30 options from which to choose. The following four offer good large-value indexes at reasonable prices: the Vanguard Value ETF (VTV), Vanguard Mega Cap Value Index ETF (MGV), Schwab U.S. Large-Cap Value ETF (SCHV), and Nuveen ESG Large-Cap Value ETF (NULV).

I suggest that you read through the following descriptions and make the choice that you think is best for you. Whatever your allocation to domestic large-cap stocks (see Chapter 20 if you aren't sure), your allocation to value should be somewhere in the ballpark of 50 to 60 percent of that amount. In other words, I suggest that you tilt toward value, but don't go overboard.

REMEMBER

The criteria you use in picking the best large-cap value ETF should include expense ratios, appropriateness of the index, and tax efficiency (if you're investing in a taxable account). Note that the expense ratios, average cap sizes, price/earning ratios, and top five holdings are all subject to change; you should definitely check for updated figures before investing.

REMEMBER

You'll note that in choosing which funds I use and recommend, I don't often go out of my way to note past performance. Why is that? Isn't past performance important? Of course it is, but I'm recommending index funds, so keep in mind that managerial prowess (or bumbling) doesn't play into the game like it would if you were choosing an actively managed fund. Index funds attempt to track the performance of an index, and that index represents an asset class — in the case of this chapter, large-cap U.S. value stocks. What matters to me most is the long-term performance — and volatility — of the asset class.

TILTING TOWARD VALUE

Given the long-term outperformance of value over growth stocks, it is reasonable to tilt a portfolio toward value. Earlier in this chapter, I suggest a recipe of perhaps four to five parts growth to five to six parts value, but are there times when you might want to tilt more than others? In Chapter 23, I talk about *strategic asset allocation* — a fancy phrase for tilting a portfolio more or less, given certain market conditions.

As I'm writing this book, in 2021, growth stocks have had a freakishly good run, solidly outperforming value stocks for the past decade. The Russell 1000 Value Index, between 2010 and 2020, returned an annual 10.9 percent. The Russell 1000 Growth Index during the same decade has returned an annual 17.2 percent.

What that means is that growth stocks are now, *vis-à-vis* value stocks, about as expensive as they've ever been. For that reason, most professionals right now, including me, are thinking that value stocks are pretty likely to outperform growth over the next decade.

In other words, if ever there was a time to tilt, now may be it. But again, don't go wild, please. Perhaps 60 percent of your large-cap exposure might be to value. The value premium tends to be greatest among small caps, and there, I might lean more heavily toward value. . .perhaps as much as 70 percent. I wouldn't go higher than that, simply because the majority of financial professionals, including me, could be wrong. As Yogi Berra would say, "It's tough to make predictions, especially about the future."

What does it mean that one index fund outperforms another over the last three, five, or even ten years? Usually it's tied to the expense ratio: The higher the expenses, the lower the return. And where the differential isn't due to expenses, it's often due to the make-up of the index, which may offer either more valuey stocks or larger- or smaller-cap stocks. A value fund that did especially well over the past decade — a decade where growth uncharacteristically clobbered value — may simply offer less valuey stocks. Should value stocks clobber growth in the next decade, these star index-fund performers will quickly lose their luster.

Vanguard Value Index ETF (VTV)

Indexed to: CRSP U.S. Large Cap Value Index (340 or so of the nation's largest value stocks)

Expense ratio: 0.04 percent

Average market cap: $103.1 billion

P/E ratio: 21.9

Top five holdings: Berkshire Hathaway, JPMorgan Chase & Co., Johnson & Johnson, UnitedHealth Group, Procter & Gamble

Russell's review: The price is right. The index makes sense. There's good diversification. The companies represented are certainly large. The ETF has been around since 2002. No one has more experience with indexing than Vanguard. This ETF is a very good option, although I'd like it even more if it were a tad more valuey. (On the other hand, making it more valuey could increase turnover, which might increase costs and taxation.) All told, I like the VTV. I like it a lot. If you already own the Vanguard Value Index mutual fund and you're considering moving to ETFs, this fund would clearly be your choice (see "The Vanguard edge" sidebar in Chapter 3).

Vanguard Mega Cap 300 Value Index ETF (MGV)

Indexed to: CRSP U.S. Mega Cap Value Index (140 or so of the very largest U.S. stocks with value characteristics)

Expense ratio: 0.07 percent

Average market cap: $151.6 billion

P/E ratio: 21.9

Top five holdings: Berkshire Hathaway, JPMorgan Chase & Co., Johnson & Johnson, UnitedHealth Group, Procter & Gamble

Russell's review: This fund offers exposure to larger companies than does the more popular VTV featured earlier. Is bigger better? Could be. If you have small caps in your portfolio (which you should!), this mega cap fund will give you slightly less correlation than you'll get with VTV. As a stand-alone investment, however, I would expect that the very long-term returns on this fund will lag VTV, given that giant caps historically have lagged large caps. Given Vanguard's low expenses and reasonable indexes, either fund would make a fine holding.

iShares Morningstar Value ETF (ILCV)

Indexed to: Morningstar US Large-Mid Cap Broad Value Index (about 480 companies that qualify as value picks)

Expense ratio: 0.04 percent

Average market cap: $115.2 billion

P/E ratio: 25.9

Top five holdings: Apple, JPMorgan Chase & Co., Johnson & Johnson, Berkshire Hathaway, The Walt Disney Company

Russell's review: I love the low price. It could be more valuey, and it would be if not for the inclusion of Apple stock. I'm not sure what it's doing in a value index, but there it is. Morningstar indexers are clearly defining value a bit differently than the other indexers. As I mention earlier in this chapter, "value" can be identified using at least six different criteria.

Schwab U.S. Large-Cap Value ETF (SCHV)

Indexed to: Dow Jones U.S. Large-Cap Value Total Stock Market Index (made up of the more valuey half of the 1,000 or so stocks that comprise the Dow Jones U.S. Large Cap Stock Market Index)

Expense ratio: 0.04 percent

Average cap size: $80.8 billion

P/E ratio: 24.3

Top five holdings: Berkshire Hathaway, JPMorgan Chase & Co., Johnson & Johnson, The Walt Disney Company, Proctor & Gamble

Russell's review: For the sake of economy alone, this fund, like all Schwab ETFs, is a good option. The management fee is one of the lowest in the industry. Most importantly, the index is a good one, and you can expect Schwab to do a reasonable or better job of tracking the index.

Nuveen ESG Large-Cap Value ETF (NULV)

Indexed to: Provides passive exposure to the 140 or so companies that make up MSCI's TIAA ESG USA Large-Cap Value Index. (If you don't know what ESG is, it stands for environmental, social, and governance, and you should turn to Chapter 17 to read more.)

Expense ratio: 0.35 percent

Average market cap: $74.9 billion

P/E ratio: 34.2

Top five holdings: Proctor & Gamble, The Coca-Cola Company, PepsiCo, Intel Corporation, Home Depot

Russell's review: The average market cap is smaller than the other large-cap growth ETFs, and the expense ratio is higher — significantly higher. To date, however, Nuveen offers you the only option to invest in ETFs with style (value, growth, large, small) and to have a portfolio constructed with ESG considerations. Given that the portfolio holdings of this ETF differ appreciably from the other large-growth ETFs, you could see a significant difference in performance. Higher or lower? Probably, in the long run, higher. But that's due largely to the smaller average market cap, which brings with it greater volatility.

Large-Cap Value ETFs that I wouldn't go out of my way to own. . .

These ETFs aren't the worst things you could own. But given the strengths of some of the other offerings, I don't trade in these particular funds:

- **Direxion Russell 1000 Value Over Growth ETF (RWVG):** Expense ratio of 0.64 percent. Ugh. And this fund uses derivatives. And short stocks. UGH.
- **First Trust Large Cap Value AlphaDEX Fund (FTA):** Expense ratio of 0.60 percent, which is only "cheap" compared to the aforementioned Direxion ETF! It doesn't use derivatives, but it does use a "tiered" indexing strategy that just sounds too much like a health insurance prescription plan.
- **KFA Value Line Dynamic Core Equity Index ETF (KVLE):** This fund has expenses of 0.58 percent annually and an unusual way of triaging value stocks from growth stocks. It was just born in 2020, so I'd give it quite a few years before investing. However, given the expenses, I doubt it will shine over the long haul. Expensive funds rarely do.

IN THIS CHAPTER

» Factoring small company stocks into your investment pie

» Tempering your enthusiasm for expansion

» Recognizing ETFs that tap into this asset class

» Choosing the best options for your portfolio

» Knowing how much to allocate

» Introducing micro caps

Chapter 7

Small Growth: Sweet Sounding Start-ups

Once upon a time in the kingdom of Redmond, there was a young company called Microsoft. It was a very small company with very big ideas, and it grew and grew and grew. Its founder and its original investors became very, very rich; bought very, very big houses; and lived happily ever after.

Oh, you've heard that story? Then you understand the appeal of small growth companies. These are companies that typically have *market capitalization* (the market value of total outstanding stock) of about $300 million to $2 billion. They frequently boast a hot product or patent, often fall into the high-tech or biotech arena, and always seem to be on their way to stardom. Some of them make it, and along with them, their investors take a joy ride all the way to early retirement.

Unfortunately, for every Microsoft, there are a dozen, or two or three dozen, small companies that go belly up long before their prime. For every investor who gambles on a small company stock and takes early retirement, 100 others still drive their cars to work every Monday morning.

Beep beep.

In this chapter, I ask you to take a ride with me through the world of small-cap growth stocks. I explain what role, if any, they should play in your ETF portfolio. First stop along the ride: Figure 7-1, where you can see how small growth fits into the investment style grid I introduce in Chapter 4. Second stop: Figure 7-2, which shows that small growth stocks, at least over the past nine decades, haven't exactly lit the world on fire.

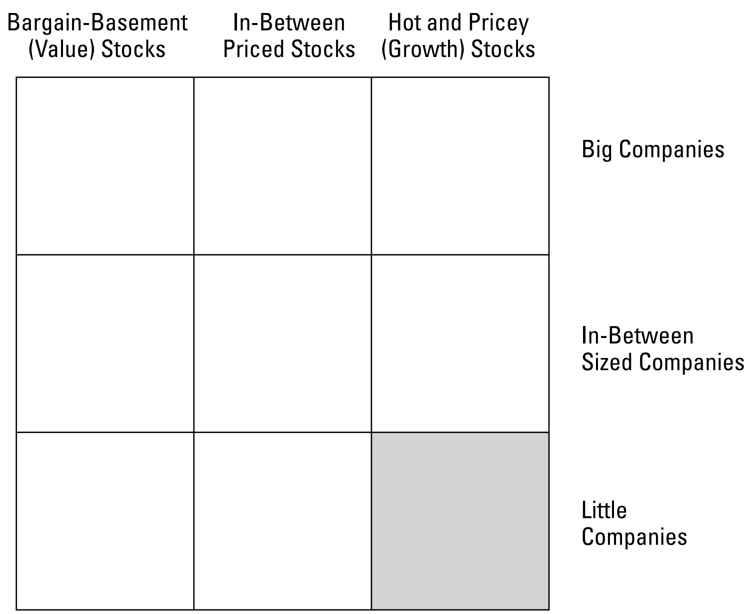


FIGURE 7-1: The shaded area is the portion of the investment grid represented by small growth stocks.

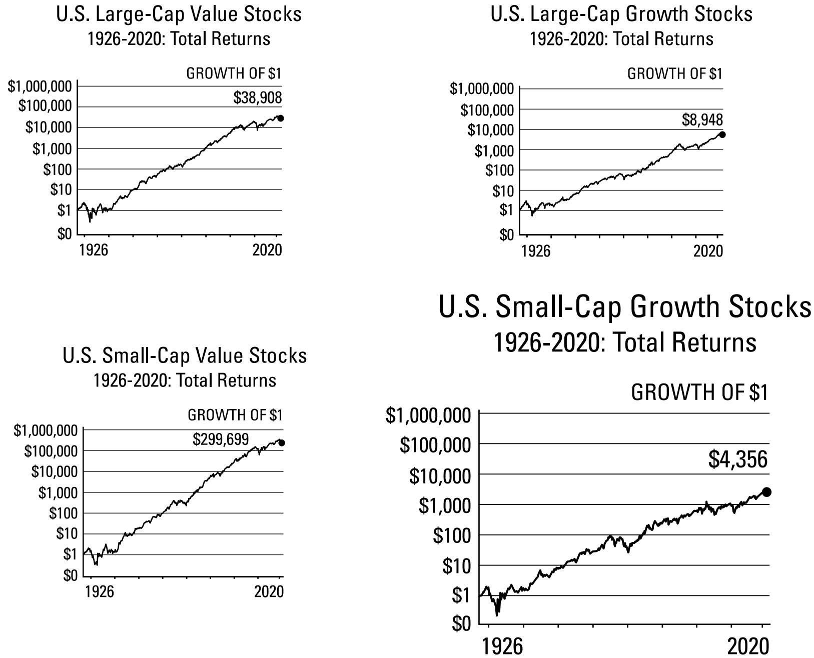


FIGURE 7-2: Historically, the growth of a basket of small growth stocks hasn't been anything to write home about.

Source: Colby Davis, RHS Financial, based on data provided by Ken French's Data Library.

Getting Real about Small-Cap Investments

In the past century, small-cap stocks have outperformed large-cap stocks just as assuredly as bread has outsold sauerkraut. The volatility of small-cap stocks has also been greater, granted, but in terms of return per unit of risk (risk-adjusted rate of return), small caps are clearly winners. And so it would seem that investing in small caps is a pretty smart thing to do. . .and you should. But please know that not all small caps are created equal.

As it happens, the true stars of the small-cap world have been small-cap *value* stocks rather than small-cap *growth* stocks. (Take a look at Chapters 5 and 6 if you aren't sure what I mean by these terms.) How slow-growing, often ailing companies have beat out their hot-to-trot cousins remains one of the great, unresolved mysteries of the investing world. But the numbers don't lie.

In fact, if you look at the numbers, such as those in Figure 7-2, you may be inclined to treat small growth stocks as a pariah. Please don't. They belong in a well-diversified portfolio. Some years are clearly small growth years. The best example is rather recent: As I'm writing this chapter, about midway through 2021, small-cap growth stocks have seen a three-year return of 19.4 percent annually, beating both small value and large value by a very wide margin (although trailing large growth). Who is to say that the long-term past wasn't a fluke and that small growth may actually go on to kick butt in the next three years?

In the two previous chapters on investing in large-cap stocks, I recommend that you might want to tilt your portfolio toward value. I suggest that given value's outperformance of growth over the very long run, you might want to put 50 percent — or even as much as 60 percent — of your large-cap portfolio into value stocks. In the small-cap arena, given the enormous historical outperformance of value over growth stocks, I would allow for an even greater tilt — without tipping over. You might consider plunking as much as 70 or even 75 percent of your small-cap exposure into small value stocks.

Your Choices for Small Growth

So what's the best way to get your proper allotment of small growth stocks? It depends. Suppose you want to keep your portfolio really, really simple. You buy an all-market fund, or perhaps a target-date fund. You are going to get some exposure to small growth companies. And perhaps — depending on what fund you choose, you'll have enough. You might want to complement your total-market fund with a modest purchase into a small value fund. I give examples in Chapter 21 of how you might construct such a super-simple portfolio.

TIP

For most investors, however, at least those with more than a couple of thousand to invest, it will make sense to have a small-cap growth fund tucked into the portfolio.

You won't be surprised that I'm going to recommend index funds, just as I do for large-cap stocks and small value stocks. The academic research (lots of it) says you'll wind up ahead.

Strictly small-cap growth funds

If you have enough assets to warrant splitting up small value and small growth, go for it, by all means. Following are what I consider to be the best small growth options. In the next chapter, I present small value options to complement the funds presented here.

iShares Morningstar Small-Cap Growth ETF (ISCG)

Indexed to: Approximately 1,290 companies from the Morningstar Small-Cap Growth Index

Expense ratio: 0.06 percent

Average market cap: $4.2 billion

P/E ratio: 31.2

Top five holdings: Rexford Industrial Realty, Inc., Crocs, Inc., Lattice Semiconductor Corporation, STAAR Surgical, First Financial Bankshares, Inc.

Russell's review: This is a low-cost and very well-diversified ETF. How diversified? The largest holding, Rexford Industrial Realty, Inc., represents just 0.42 percent of the portfolio. I like that Morningstar promises no crossover between growth and value. If you own this ETF along with the iShares Morningstar Small-Cap Value Index, you should get pleasantly limited correlation.

Vanguard Small-Cap Growth ETF (VBK)

Indexed to: The CRSP U.S. Small Cap Growth Index, approximately 640 small-cap growth companies in the United States

Expense ratio: 0.07 percent

Average cap size: $6.5 billion

P/E ratio: 38.4

Top five holdings: Teledyne Technologies Incorporated, Entegris, Inc., Bio-Techne Corporation, PTC, Inc., Charles River Laboratories International, Inc.

Russell's review: Vanguard is charging about one-fifth what you'd spend for most small growth ETFs. Add to that economy the wide diversification, tax efficiency beyond compare, and a very definite growth exposure, and I really have no complaints. The Vanguard Small-Cap Growth ETF offers a very good way to tap into this asset class. If the average market cap were just a bit smaller, I think I'd be in love.

SPDR S&P 600 Small Cap Growth ETF (SLYG)

Indexed to: Those stocks (about 330) that exhibit the strongest growth characteristics among the stocks represented by the S&P Small Cap 600 Index.

Expense ratio: 0.15 percent

Average market cap: $2.7 billion

P/E ratio: 21.9

Top five holdings: Omnicell, Inc., GameStop Corp. (Class A), Saia, Inc., NeoGenomics, Chart Industries, Inc.

Russell's review: S&P indexes are a bit too subjective for me to really love them, and the price of this fund, although low, is higher than some of the competitors' offerings. Still, there's no reason to hate this State Street Global Advisors offering. It is not a bad fund, just not my favorite for the asset class.

iShares S&P Small-Cap 600 Growth ETF (IJT)

Indexed to: Tracks the growthier stocks (about 350 or so) out of the S&P Small Cap 600 Growth Index

Expense ratio: 0.18 percent

Average cap size: $2.8 billion

P/E ratio: 24.1

Top five holdings: Omnicell, Inc., GameStop Corp. (Class A), Saia, Inc., NeoGenomics, Chart Industries, Inc.

Russell's review: This is essentially the very same fund as the preceding SLYG, although it costs 0.18 percent rather than 0.15 percent. The iShares literature claims a slightly higher P/E ratio (which would be good thing for a growth fund), but I wonder whether the different numbers are just a fluke. The information I'm sharing about all of these ETFs comes from the ETF purveyors' disclosure statements, with the exception of the average cap sizes, which come from Morningstar Direct.

Smaller than Small: Meet the Micro Caps

If you want to invest your money in companies that are smaller than small, you're going to be investing in micro caps. These companies are larger than the corner delicatessen, but sometimes not by much. In general, micro caps are publicly held companies with less than $300 million in outstanding stock. Micro caps, as you can imagine, are volatile little suckers, but as a group they offer impressive long-term performance. In terms of diversification, micro caps — in conservative quantity — could be a nice addition to your portfolio, although I wouldn't call them a necessity. Take note that micro cap funds, even index ETFs, tend to charge considerably more in management fees than you'll pay for most funds.

Micros move at a modestly different pace from other equity asset classes. The theory is that because micro caps are heavy borrowers, their performance is more tied to interest rates than the performance of larger-cap stocks is. (Lower interest rates would be good for these stocks; higher interest rates would not.) In fact, in the past year, with interest rates having dropped to all-time historical lows, micros have done very well. The largest of the funds, the iShares Micro-Cap ETF, has returned nearly 83 percent in the year prior to May 31, 2021, versus 56.3 percent for the iShares Core S&P 500 ETF.

Micro caps also tend to be more tied to the vicissitudes of the U.S. economy and less to the world economy than, say, the fortunes of Apple or McDonald's.

Given the high risk of owning any individual micro cap stock, it makes sense to work micro caps into your portfolio in fund form, despite the management fees, rather than trying to pick individual companies. To date, a handful of micro cap ETFs have been introduced. They differ from one another to a much greater extent than do the larger-cap ETFs. Notice that the top five holdings of each ETF are completely different; you don't find Microsoft and Apple in every list, as you do with large-cap growth funds.

TIP

Despite the differences, all three funds that I discuss next have seen rather lackluster performance since their inception. The iShares Micro-Cap ETF (IWC) had a blockbuster year, but in the 10 years prior to May 31, 2021, the fund saw average annual returns of 12.1 percent versus the far less volatile iShares Core S&P 500 ETF, which returned 14.3 percent.

It may be possible that micro caps are a particular kind of asset class (commodities would be another) where indexed ETFs may be less than the ideal vehicle. The performance may have something to do with the illiquidity of micro caps (it's not always easy to buy and sell shares on the open market). Time will tell. In the meantime, proceed with caution, and if you want to invest in any of these funds, do so with only a modest percentage of your portfolio.

iShares Micro-Cap ETF (IWC)

Indexed to: 1,300 of the smallest publicly traded companies, culled from the Russell 3000 (small-cap) Index, plus the next 1,000 smallest issuers on the stock market, as determined by Russell

Expense ratio: 0.60 percent

Average cap size: $825 million

P/E ratio: 17.2

Top five holdings: GameStop Corp. (Class A), Digital Turbine, Intellia Therapeutics Inc., Overstock.com, Magnite Inc.

Russell's review: There aren't a lot of choices in this field, so I'm glad this is one of them. I'm not crazy about paying 0.60 percent, which is high for an ETF, but there seems to be price collusion in the micro cap area, so what are you going to do? (Personal note to ETF firms' attorneys: Hey, I'm only kidding about the price collusion, guys! It just *seems* that way.) ***Caveat:*** More than one-quarter of the stocks held in this fund are healthcare company stocks.

First Trust Dow Jones Select MicroCap Index Fund (FDM)

Indexed to: Dow Jones Select Micro-Cap Index, which contains about 150 of the smallest stocks listed on the New York Stock Exchange and the NASDAQ

Expense ratio: 0.60

Average market cap: $664 million

P/E ratio: 12.9

Top five holdings: Silvergate Capital Corp. (Class A), Clean Energy Fuels Corp., Enova International, Inc., U.S. Concrete, Inc., Dime Community Bancshares, Inc.

Russell's review: The expense ratio is the same as the competitors, and the average cap size is not much different. All in all, everything else looks okay, but this fund offers less diversification. In fact, there's a lot of industry concentration — at last glance, nearly one-third of the stocks are financials; financials and industrials together make up more than half. For that reason, I'd go with the iShares Micro-Cap ETF before I'd go with this one.

AdvisorShares Dorsey Wright Micro-Cap ETF (DWMC)

Indexed to: This is *not* an index fund, but an actively managed fund. The managers choose the micro cap stocks they believe are going to perform the best. Usually, active management fails to outperform the indexes. In micro caps, however, active management *may* make sense.

Expense ratio: 1.32 (This expense ratio is much on par with the expense ratios of the handful of actively managed micro cap mutual funds that pre-existed DWMC.)

Average market cap: $637 million

P/E ratio: 9.9

Top five holdings: XPEL, Inc., Calix, Inc., Danaos Corporation, Kornit Digital Ltd., Surgery Partners, Inc.

Russell's review: It's hard for me, an indexing proponent, to even think about recommending a fund that charges 1.32 percent in annual fees and invests wherever the managers want, but micro caps may be a different kind of beast. So far, this fund, despite the high expenses, has outperformed the index. Since the inception of the fund, on July 10, 2018, until May 31, 2021, the fund returned 15.27 percent, versus the Russell Microcap Index, which returned 13.12 percent. A fluke? It could take years to tell. If the expense ratio were lowered, it would up the odds of this fund's continued outperformance.

IN THIS CHAPTER

» Recognizing a small value stock

» Praising the return king of all stock styles

» Earmarking ETFs that track small value indexes

» Knowing how much to allocate

» Factoring in mid caps

Chapter 8

Small Value: Diminutive Dazzlers

Look at the list of some of the top companies represented in the Vanguard Small-Cap Value ETF: Devon Energy Corp., Index Corp., VICI Properties, Inc., L Brands, Inc., Nuance Communications. These are not household names. Nor are they especially fast-growing companies. Nor are they industry leaders. Nor is there much excitement to be seen in companies such as Index Corp. — a corporation that designs, produces, and distributes positive displacement pumps and flow meters, compressors, and injectors. As you go farther down the list of holdings, you'll likely find some companies in financial distress. Others may be facing serious lawsuits, expiration of patents, or labor unrest. If you wanted to pick one of these companies to sink a wad of cash into, I would tell you that you're crazy.

But if you want to sink that cash into the entire small value index, well, that's another matter altogether. Assuming you could handle some risk, I'd tell you to go for it. By all means. Your odds of making money are pretty darned good — at least if history is your guide.

Don't take my word for it; see Figure 8-2, which shows the enormous growth of value stocks over the past nine decades. On the way there, see Figure 8-1, which shows where small value fits into the investment style grid I introduce in Chapter 4. And then, follow me as I explain the importance of small value stocks in a poised-for-performance ETF portfolio.

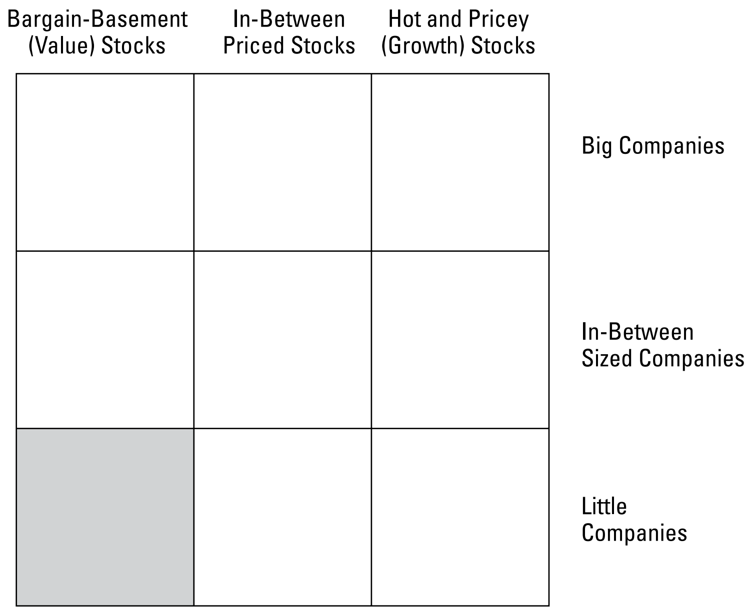
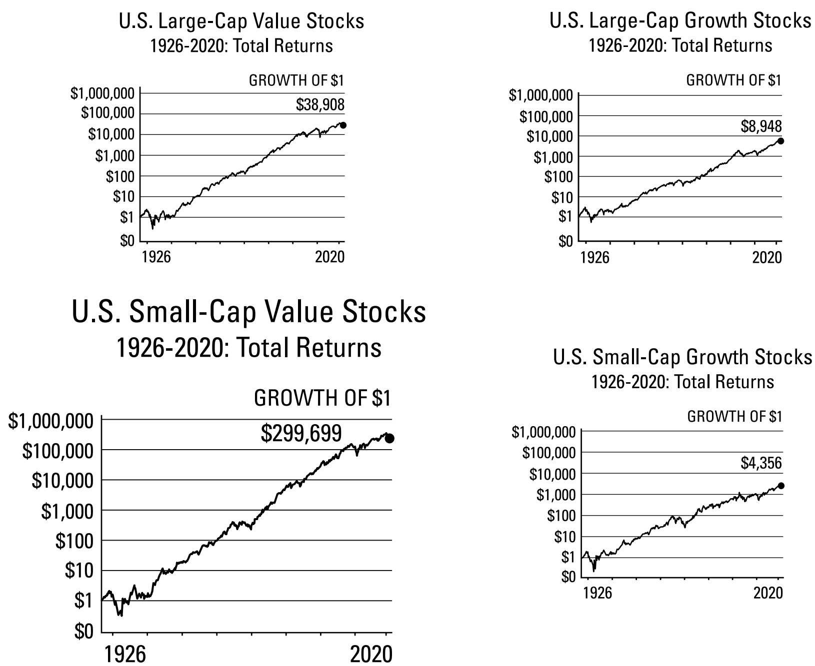


FIGURE 8-1: Small value stocks occupy the southwest corner of the investment style grid.



Source: Colby Davis, RHS Financial, based on data provided by Ken French's Data Library.

FIGURE 8-2: As you can see, small value has truly shined in the past nine decades.

It's Been Quite a Ride

Small value stocks collectively have returned more to investors than have large value stocks or any kind of growth stocks. In fact, the difference in returns has been somewhat staggering: I'm talking about an annualized return of about 14 percent over the past 94 years for small value, versus 12 percent for large value, 10 for large growth, and 9 for small growth. Compounded over time, the outperformance of small value stocks has been HUGE.

Latching on for fun and profit

To be sure, small value stocks are risky little suckers. Even the entire index (available to you in neat ETF form) is more volatile than any conservative investor may feel comfortable with. But as part — a very handsome part — of a diversified portfolio, a small value ETF can be a beautiful thing indeed.

If you knew the past was going to repeat, such as it did in the movie *Groundhog Day,* there'd be no reason to have anything but small value in your portfolio. But, of course, you don't know that the past will repeat. Bill Murray's radio alarm clock may not go off at sunrise. And the small value premium, like Bill Murray's hairline, may start to seriously recede. Still, the outperformance of small value has historically been so much greater than that of small growth that I favor a good tilt in the direction of value.

But keeping your balance

Whatever your total allocation to domestic small-cap stocks (see Chapter 21 for advice), I recommend that anywhere from 60 to 75 percent of that amount be allocated to small value. But no more than that, please. If the value premium disappears or becomes a value discount, I don't want you left holding the bag. And even if small value continues to outperform, having both small value and small growth (along with their bigger cousins, all of which tend to rise and fall in different cycles) will help smooth out some of the inevitable volatility of holding stocks.

There aren't nearly the number of small-cap value ETFs as there are large-cap funds, but still, you have choices. The best choices among small value ETFs include offerings from iShares and Vanguard. I also review an option from Invesco, which isn't terrible.

iShares Morningstar Small-Cap Value Index (ISCV)

Indexed to: Morningstar's Small-Cap Value Index (about 1,300 companies of modest size and modest stock price)

Expense ratio: 0.06 percent

Average cap size: $4.0 billion

P/E ratio: 16.4

Top five holdings: AMC Entertainment Holdings, Inc., Ovintiv, Inc., Apartment Income REIT Corp., Tenet Healthcare Corp., Cimarex Energy Co.

Russell's review: My only complaint with the Morningstar indexes is that they tend to be a bit too concentrated, at least in the large-cap arena where a company like Microsoft can hold too much sway. (It presently comprises almost 10 percent of the large-growth index.) In the Morningstar small-cap indexes, that isn't a problem. The largest holding here, AMC Entertainment, gets only a 1.5 percent allocation, which is fine and dandy. The expense ratio is the lowest in this category. And I like that Morningstar promises no crossover between growth and value. If you own this ETF along with the iShares Morningstar Small-Cap Growth Index, you should get pleasantly modest correlation. (In lay terms, if one fund gets slammed, the other may not.)

Vanguard Small Cap Value ETF (VBR)

Indexed to: The CRSP U.S. Small Cap Value Index (about 930 small value domestic companies)

Expense ratio: 0.07 percent

Average cap size: $5.7 billion

P/E ratio: 20.2

Top five holdings: Index Corp., VICI Properties, Inc., Devon Energy Corp., L Brands Inc., Williams-Sonoma, Inc.

Russell's review: This ETF has low cost, wide diversification, tax efficiency beyond compare, and a very definite value bias — what's not to like? Um. . .the average market cap is larger than I would find ideal. For that reason, I'd say the Vanguard Small-Cap Value ETF offers a very good way to tap into this asset class, but I can't call it great.

iShares S&P Small-Cap 600 Value Index (IJS)

Indexed to: 550 of the S&P Small Cap 600 Value Index companies

Expense ratio: 0.18 percent

Average cap size: $2.0 billion

P/E ratio: 20.1

Top five holdings: GameStop Corp. (Class A), Macy's, Inc., PDC Energy, Inc., Resideo Technologies, Inc., Signet Jewelers Ltd.

Russell's review: S&P indexes are a bit too subjective for me to want to marry them. Case in point is that the largest holding in this portfolio is GameStop. Yup, that's the same GameStop that appears as a major holding in the iShares S&P Small Cap 600 Growth Index ETF (see Chapter 7). I find that confusing, and, as a rule, I don't go out of my way to own investments that confuse.

Invesco S&P 600 SmallCap Pure Value (RZV)

Indexed to: S&P SmallCap 600 Pure Value Index (approximately 150 of the smallest and most valuey S&P 600 companies)

Expense ratio: 0.35

Average cap size: $1.2 billion

P/E ratio: 20.2

Top five holdings: Genworth Financial, Inc., Customers Bancorp, Inc., EZCORP, Inc., Boston Private Financial Holdings, Inc., Hanmi Financial Corporation.

Russell's review: The price is higher than others in this category, and the promise of "purity" is a bit murky, especially if that quest for purity leads to high turnover, which can bleed profitability. The average market cap is quite small. When cap size gets too small (and small caps start looking like micro caps), liquidity becomes an issue, and index funds can sometimes get hurt.

What About the Mid Caps?

In a word, my take on mid-cap ETFs is. . .*why*? Yes, there are years when mid-cap stocks — investments in companies with roughly $2 to $10 billion in outstanding stock — have performed especially well. There are years where mid caps have done better than either large- or small-cap stocks. But there aren't many such years. It's a rarity.

If you look at the risk/return profile of mid caps over many years, you find that it generally falls right where you would expect it to fall: smack dab in between large and small cap. Owning both a large-cap and small-cap ETF, therefore, will give you an average return very similar to mid caps but with considerably less volatility because large- and small-cap stocks tend to move up and down at different times.

Other investment pros may disagree, but I really don't see the point of shopping for mid-cap ETFs, even though there are many mid-cap offerings. Keep in mind, too, that most large-cap and small-cap funds are rather fluid: You will get some mid-cap exposure from both. Many sector funds — including real estate, materials, and utilities — are also chock-full of mid caps (see Chapter 10).

IN THIS CHAPTER

» **Understanding how global diversification lowers risk**

» **Calculating how much of your ETF portfolio to allocate overseas**

» **Deciding upon your investment destinations**

» **Choosing your best ETF options**

» **Knowing what to avoid and when to stay home**

Chapter 9

Going Global: ETFs without Borders

If you were standing on a ship in the middle of the ocean (doesn't matter whether it's the Atlantic or Pacific), and you looked up and squinted real hard, you might see investment dollars sailing overhead. In the past 20 years, Americans have invested many billions overseas, and many 'oversea-ers' (the best part of being an author is getting to make up words) have invested in the United States. According to figures from the Investment Company Institute, the average U.S. investor in 2001 had but 13 percent of their equity portfolio allocated to non-U.S. stocks; today, that figure is 24 percent.

Many investors, alas, began to up their exposure to foreign stocks for the same reason that they move, moth-into-light style, into any other kind of investment: They were lured by high returns, especially the returns of emerging-market nation stocks, in the first decade of the new millennium.

As of mid-2011, the 10-year annualized return of the U.S. stock market stood at about 4 percent. In sharp contrast, stocks of the world's emerging-market nations clocked in with a rather astounding 16 percent per year for the previous decade.

Developed nations in the Pacific Rim (Japan, Australia, Singapore) more or less matched the United States for the decade. European stocks (including the United Kingdom), despite some sharp losses due largely to a debt mess in Greece and Portugal, showed an average return of about 6 percent.

Americans couldn't get enough foreign stock, and their equity portfolios got up to about 30 percent foreign.

But, as is nearly always the case, once all the money poured into this hot sector, the sector cooled. Since 2011, the U.S. stock market has way outperformed foreign markets. In the past decade — mid-2011 to mid-2021 — the U.S. stock market has seen annual growth of nearly 14 percent, whereas developed overseas markets have grown only about 6 percent, and emerging-market nations have grown just a bit more than 3 percent.

Sure enough, American investors' love affair with foreign stocks has started to wane. And the percent of Americans' portfolios devoted to non-U.S. stock has shrunk again.

I'm going to suggest that you take careful note that U.S. investments sometimes do better than foreign investments, and sometimes not, and no one can say what the next decade will bring. Regardless, you *do* want to have your portfolio both at home and away. Not to chase returns — there really is no good reason to think that in the very long run, U.S. stocks will outperform foreign stocks, or the other way around — but to diversify your portfolio and smooth out your returns over time.

Fortunately, global diversification is easy with ETFs. In this chapter, I explain the whys and the hows of investing abroad.

The Ups and Downs of Different Markets around the World

For what it is worth, I do think you can expect that foreign stocks overall may do better than U.S. stocks in the coming decade. (If you want the nitty-gritty of my reasoning, you'll find it later in this chapter.) But I certainly wouldn't bet the farm on international stocks outperforming U.S. stocks — or underperforming them either, for that matter. If there is one thing I know for sure, it is that markets are unpredictable.

In all likelihood, international stocks as a whole will have their day. U.S. stocks will then come up from behind. Then international stocks will have their day again. And then U.S. stocks will get the jump. This type of horse race has been going on since, oh, long before *Mr. Ed* was on the air. Take a look at Figure 9-1. Note (as depicted by the peaks and valleys in the chart) that over a 45.5-year period, outperformance by U.S. stocks versus non-U.S. stocks has been followed quite regularly by years of underperformance.

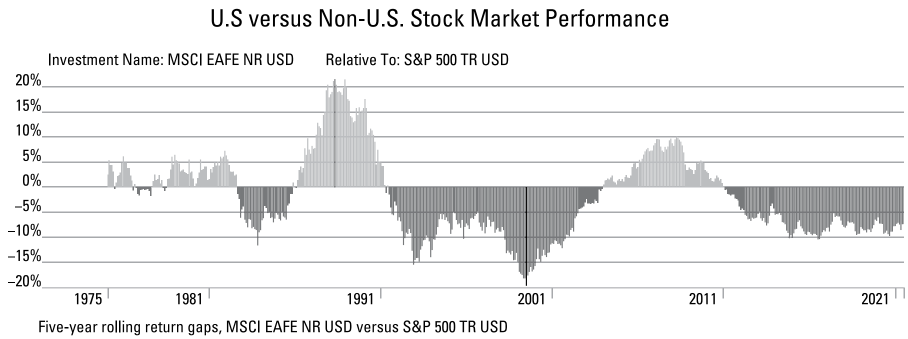


FIGURE 9-1: U.S. versus non-U.S. stock-market performance, 1975–2021.

Note that the green "mountains" represent years that foreign stocks outperformed U.S. stocks, and the pink "valleys" represent years that foreign stocks *underperformed* U.S. stocks. (Foreign stocks and U.S. stocks are being measured by the popular indexes, the MSCI EAFE USD and the S&P 500 USD.) What will next year bring? No one can say.

REMEMBER

The reason to invest abroad isn't primarily to try to outperform the Joneses. . .or the LeBlancs, or the Yamashitas. Rather, the purpose is to diversify your portfolio so as to capture overall stock-market gains while tempering risk. You reduce risk whenever you own two or more asset classes that move up and down at different times. Stocks of different geographic regions tend to do exactly that.

Oh, by the way, the terms *foreign* and *international* are used interchangeably to refer to stocks of companies outside of the United States. The word *global* refers to stocks of companies based anywhere in the world, including the United States.

Low correlation is the name of the game

Why, you may ask, do you need European and Japanese stocks when you already have all the lovely diversification discussed in previous chapters: large, small, value, and growth stocks, and a good mix of industries? (See Chapter 5 if you need a reminder of what these terms mean.) The answer, *mon ami, mi amigo*, 我朋友, is quite simple: You get better diversification when you diversify across borders.

I'll use several iShares ETFs to illustrate my point. Suppose you have a wad of money invested in the iShares S&P 500 Growth Index fund (IVW), and you want to diversify:

- If you combine IVW with its large value counterpart, the iShares S&P 500 Value Index Fund (IVE), you find that your two investments have a three-year correlation of 0.87. In other words, over the past three years, the funds have had a tendency to move in the same direction 87 percent of the time. Only 13 percent of the time have they tended to move in opposite directions.
- If you mix IVW into the same portfolio with the iShares S&P Small Cap 600 Growth Index Fund (IJT), you find that your two investments have tended to move up and down together by the same degree as IVW and IVE — 87 percent of the time.
- If you combine IVW with the iShares S&P Small Cap 600 Value Index Fund (IJS), your investments tend to move north or south at the same time 80 percent of time. Not bad. But not great.

Now consider adding some Japanese stock to your original portfolio of large growth stocks. The iShares MSCI Japan Index Fund (EWJ) has tended to move in synch with large U.S. growth stocks only about 76 percent of the time. And the ETF that tracks the FTSE China 25 Index (FXI) has moved in the same direction as large-cap U.S. growth stocks only 65 percent of the time. There's clearly more zig and zag when you cross oceans to invest, and that's what makes international investing a must for a well-balanced portfolio.

The increasing interdependence of the world's markets wrought by globalization may cause these correlation numbers to rise over time. Indeed, investors saw in 2008 that in a global financial crisis, and again in 2020 with a global health crisis, stock markets around the world will suffer. The trend toward rising correlations has led some pundits to make the claim that diversification is dead. Sorry, those pundits are wrong. In down times, yes, stocks of different colors, here and abroad, tend to turn a depressing shade of gray together. When investors are nervous in New York, they are often nervous in Berlin. And Sydney. And Cape Town. That's been true for years. The great apple-cart-turnovers of 2008 and 2020 were particular cases in point. But in both cases, it still paid to be diversified, as U.S. and foreign stocks recovered at very different rates.

REMEMBER

Diversification lowers, but does not eliminate, stock-market risk. Never did. Never will. Your portfolio, in addition to being well diversified, should also have some components, such as cash and bonds, that are less volatile than stocks.

Remember what happened to Japan

To just "stay home" on the stock side of your portfolio would be to exhibit the very same conceit seen among Japanese investors in 1990. If you recall, that's when the dynamic and seemingly all-powerful rising sun slipped and then sank. Japanese investors, holding domestically stuffed portfolios, bid *sayonara* to two-thirds of their wealth, which, more than two decades later, they had yet to fully recapture. By year-end 2010, a basket of large-company Japanese stocks purchased in 1989 would have returned a very sad –1.3 percent a year over two full decades. In the following decade (2011–2021), Japanese stocks inched forward.

If you had bought the iShares MSCI Japan ETF at its inception in March 1996, your average annual return as of mid-2021 would have been a very disappointing 1.7 percent.

Ouch. It could also happen here. Or worse.

Finding Your Best Mix of Domestic and International

TIP

The United States stock market is by far the largest in the world. Still, even after a decade of solidly outperforming foreign markets, the total capitalization of the U.S. market is but 55 percent of the world stock market. Huge, yes, but far from everything. A market-weighted global portfolio would have you owning 45 percent foreign. Should you invest that much of your stock portfolio in foreign ETFs? My answer is *yes*, absolutely. I would say the same at any point in time, but especially as I'm writing this paragraph: With valuations (such as P/E ratios) much more attractive abroad than at home, I want a big heaping of foreign stock exposure — without going overboard. Everything in moderation.

Why putting three-quarters of your portfolio in foreign stocks is too much

I see five distinct reasons to avoid overloading your portfolio with foreign stocks.

WARNING

- **Currency volatility:** When you invest abroad, you are usually investing in stocks that are denominated in other currencies. Because your foreign ETFs are denominated in euros, yen, or pounds, they tend to be more volatile than the markets they represent. In other words, if European stock markets fall and the dollar rises (*vis-à-vis* the euro) on the same day, your European ETF will fall doubly hard. If, however, the dollar falls on a day when the sun is shining on European stocks, your European ETF will soar.

Over the long run, individual currencies tend to go up and down. Although it could happen, it is unlikely that the dollar (or euro) would permanently rise or fall to such a degree that it would seriously affect your nest egg. In the short term, however, such currency fluctuations can be a bit nauseating. See more on currencies in the sidebar, "Pure (and purely silly) currency plays." Note: There are currency hedged stock ETFs that can mitigate currency risk, but hedging adds to a fund's expenses.

- **Inflation issues:** Another risk with going whole hog for foreign stock ETFs is that to a certain extent, your fortunes are tied to those of your home economy. Stocks tend to do best in a heated economy. But in a heated economy, you also tend to see inflation. Because of that correlation between general price inflation and stock inflation, stock investors are generally able to stay ahead of the inflation game. If you were to invest all your money in, say, England, and should the economy here take off while the economy there sits idly on the launch pad, you could potentially be rocketed into a Dickensian kind of poverty.
- **Higher fees for foreign ETFs:** There was once a huge difference in costs between foreign and domestic stock funds. This is far less true today. Still, domestic stock funds tend to cost a wee bit less than foreign. The Vanguard Total Stock Market ETF (VTI), for example, comes with an expense ratio of 0.03 percent. The iShares Core S&P Total U.S. Stock Market ETF (ITOT) has the same low, low cost ratio as Vanguard's ETF. Schwab's U.S. Broad Market ETF (SCHB) — yet again the same. All can be had for a measly 0.03 percent. Compare this to the Vanguard Total International Stock ETF (VXUS) and iShares' and Schwab's similar all-international ETFs (IXUS and SCHF): 0.08 percent, 0.09 percent, and 0.06 percent, respectively.
- **Lower correlation with homegrown options:** Certain kinds of stock funds in the United States offer similar low correlation to the rest of the U.S. market as do international stock funds, and I suggest leaving room in your portfolio for some of those funds. I discuss some of these industry-sector funds in Chapter 10. You may also want to make room for *market-neutral* funds, which I discuss in Chapter 25. And, of course, you want to leave plenty of room for the king of stock diversifiers: bonds (see Part 3).
- **A double tax hit:** Foreign governments almost always hit you up for taxes on any dividends paid by stocks of companies in their countries. You don't pay this tax directly, but it is taken from your fund holdings. If your funds are held in certain accounts, Uncle Sam may want your money, too, and you wind up taking a double tax hit. This is a relatively minor reason not to go overboard when sailing overseas. (Specifics on this tax, and how to avoid getting double-whammied, are at the very end of this chapter.)

PURE (AND PURELY SILLY) CURRENCY PLAYS

If you would like to bet that the U.S. dollar is going to fall and the Australian dollar is going to rise, you can purchase shares of the Invesco CurrencyShares Australian Dollar ETF (FXA). You may turn out to be right, in which case you'll make money. But I wouldn't call that successful investing; you made a lucky bet, not an investment. Currencies can move like a trash-can top in a hurricane, and you never know what direction they'll follow. This fund (and dozens of other currency ETFs and exchange-traded notes) may indeed serve a purpose in the world of commerce (such as a manufacturer's need to hedge against currency losses), but for the average investor's portfolio, FXA deserves no allocation. Nor do the other funds that allow you to speculate on the exchange rate of the Swiss franc, the Chinese yuan, or the Indian rupee. If you follow my advice and invest in international stocks (and perhaps bonds, too, as I discuss in Chapter 15), you will get plenty of exposure to euros (and yen and pounds) already — perhaps too much. You don't need any more.

Why putting one-quarter of your portfolio in foreign stocks is insufficient

Some well-publicized research indicates that an 80-percent-or-so domestic stock/20-percent-or-so foreign stock portfolio is optimal for maximizing return and minimizing risk. But almost all that research defines *domestic stock* as the S&P 500 and *foreign stock* as the MSCI EAFE. The MSCI EAFE is an index of mostly large companies in the developed world. (*MSCI* stands for Morgan Stanley Capital International, and *EAFE* stands for Europe, Australasia, and Far East.) This analysis takes little account of the fact that you are not limiting yourself to the S&P 500 or to the MSCI EAFE. In the real world, you have the option of adding many asset classes to your portfolio of U.S. stocks. And among your international holdings, you can include developed-world stocks in Europe, Australia, and Japan; emerging-market stocks in China, India, and elsewhere; and foreign stocks in any and all flavors of large, small, value, and growth.

REMEMBER

Many investment pros know well — and several have even told me — that they favor a much larger international position than they publicly advocate. Some may be afraid of seeming unpatriotic. Much more prevalent is a certain lemming-over-the-cliff-cover-my-ass mentality. If I, as your financial advisor, suggest a portfolio that resembles the S&P 500 and your portfolio tanks, you'll feel a bit peeved but you won't hate me. That's because all your friends' and neighbors' portfolios will have sunk as well. Should I give you a portfolio that's 50 percent foreign, and should foreign stocks have a bad year, you'll compare your portfolio to your friends' and neighbors' portfolios, and you may hate me. You may even sue me.

I wouldn't want that. Neither would most investment professionals. So most err on the side of caution and give you a portfolio that's more S&P 500 and less foreign — for their own protection, and not in the pursuit of your best interests.

With that said, I've seen some huge players in the investment world, such as Vanguard, slowly raise the allocation of foreign stocks in their recommended portfolios, about doubling it over the past 20 years. If you buy shares today of the all-in-one Vanguard Institutional Target Retirement 2040 Fund, 40 percent of your stock allocation will be non-U.S.

Why ETFs are a great tool for international investing

By mixing and matching your domestic stock funds with 40 to 50 percent international, you will find your investment sweet spot. In Chapter 21, I pull together sample portfolios that use this methodology. Time and time again, I've run the numbers through the most sophisticated professional portfolio analysis software available, and time and time again, 40-to-50-percent foreign is where I find the highest returns per unit of risk. And yes, this range has worked very well in the real world, too.

Although I try not to make forecasts because the markets are so incredibly unpredictable, I will say that if you had to err on the side of either U.S. or foreign stock investment, I would err on the side of too much foreign. The world economic and political climate is telling me that the U.S. stock market may be on relatively shakier ground. I could give you a long list of reasons that includes an aging population, the healthcare crisis, and the extent to which the United States is becoming a nation of haves and have-nots (historically great inequality leads to great dissension and upheaval), but the biggest reason is, as I alluded to earlier, valuations.

As of mid-2021, the U.S. stock market is expensive by almost any measure. Foreign markets are much less pricey. How strong a predictor are such valuations? One study by Vanguard found that about 40 percent of the stock market's return in any given decade may be attributable to valuations at the start of the decade. So valuations are not foolproof as a predictor, but they are too good a predictor to be ignored. ***Note:*** Valuations have little to no predictive value in the shorter run. *Anything* can happen to stock prices over the next year, regardless of valuations.

As for me, I eat my own international cooking: I have fully half of my own stock portfolio in foreign stocks — the vast majority of it held in ETFs.

Not All Foreign Nations — or Stocks — Are Created Equal

At present, you have more than 300 global and international stock ETFs from which to choose. (Once again, *global* ETFs hold U.S. as well as international stocks; *international* or *foreign* ETFs hold purely non-U.S. stocks.) I'd like you to consider the following half dozen factors when deciding which ones to invest in:

TIP

- **What's the correlation?** Certain economies are more closely linked to the U.S. economy than others, and the behavior of their stock markets reflects that. Canada, for example, offers limited diversification. Western Europe offers a bit more. For the least amount of correlation among developed nations, you want Japan (the world's second-largest stock market) or emerging-market nations like Russia, Brazil, India, and China.
- **How large is the home market?** Although you can invest in individual countries, I generally wouldn't recommend it. Oh, I suppose you could slice and dice your portfolio to include 50 or so ETFs that represent individual countries (from Belgium to Austria, and Singapore to Spain, and, more recently, Vietnam to Poland), but that is going to be an awfully hard portfolio to manage. So why do it? Choose large regions in which to invest. (The only exceptions might be Japan and the United Kingdom, which have such large stock markets that they each qualify, in my mind, as a region.)
- **Think style.** Consider giving your international holdings a value lean, and endeavor to get small-cap exposure as well as large, just as you do with your domestic holdings. You can also divvy up your foreign portfolio into industry groupings. I discuss this strategy in Chapter 10. I generally prefer style diversification to sector diversification, but using both together is warranted. You'll note that I take the combined approach in my sample portfolios in Part 4 of this book.
- **Consider your risk tolerance.** Developed countries (United Kingdom, France, Japan) tend to have less volatile stock markets than do emerging-market nations (such as those of Latin America, the Middle East, China, Russia, or India). You want both types of investments in your portfolio, but if you are inclined to invest in one much more than the other, know what you're getting into.

TECHNICAL STUFF

A BOOM ECONOMY DOESN'T NECESSARILY MEAN A ROBUST STOCK MARKET

You would think that a fast-growing economy would be the best of places to invest. And yet there is more to stock returns than the growth of a national economy. In fact, the mind-blowing conclusion of a handful of recent studies is that the reverse is true: If you look at the stock returns of various national markets over the past 100 years, you actually find an *inverse* relationship. *Slower-growing* economies often see the most robust stock-market returns. If you're looking for a real-life example, just compare the stock-market returns over the last decade of China versus the United States. Return on the iShares China Large-Cap ETF (FXI), 10 years prior to May 31, 2021, was 2.78 percent. Return on the iShares Core S&P 500 ETF (IVV) in the same period: 14.33 percent. Looking at recent growth of respective economies, China wins by a long shot. In 2020, the Chinese economy is thought to have grown by 2.3 percent, whereas the U.S. economy shrank by 2.3 percent.

There are several possible explanations for this anomaly. Some say that rapid economic growth is attributable more to small, entrepreneurial businesses rather than to larger, publicly held corporations. Others have suggested that the fruits of economic growth often don't go to shareholders. Instead, those fruits may go to labor or consumers or (with the United States being a prime example) top executives and option-holders. Another possible explanation is that the prices of stocks in fast-growing economies (just like domestic growth stocks) often start off overpriced due to higher-than-reasonable expectations. Stocks of slow-growing economies (just like value stocks) may tend to be underpriced.

The moral of the story is to spread your investment dollars around the world. Don't think you can pick countries that will outperform by using projected growth rates as your crystal ball.

- **What's the bounce factor?** As with any other kind of investment, you can pretty safely assume that risk and return will have a close relationship over many years. Emerging-market ETFs will likely be more volatile but, over the long run, more rewarding than ETFs that track the stock markets of developed nations. ***One caveat:*** Don't assume that countries with fast-growing economies will necessarily be the most profitable investments; see the sidebar, "A boom economy doesn't necessarily mean a robust stock market."
- **Look to P/E ratios.** How expensive is the stock compared to the earnings you're buying? You may ask yourself this question when buying a company stock, and it's just as valid a question when buying a nation's or a region's stocks. In general, a lower P/E ratio is more indicative of promising returns than is a high P/E ratio. (See Chapter 5 for a reminder of how to calculate a P/E

ratio.) CAPE (also known as the Shiller P/E or PE 10 Ratio), stands for *cyclically adjusted price-to-earnings-ratio*, and looks at the P/E over 10 years, adjusted for inflation. Think of it as P/E 2.0. It has proven to be an even better (although far from fool-proof) indicator of future stock-market returns than P/E 1.0.

According to Bloomberg Indices, the current CAPE Ratio for the U.S. stock market is about 38, versus 23 for Europe, 24 for Japan, 19 for Korea, 17 for Spain, and 11 for Russia.

You want your portfolio to include U.S., European, Pacific, and emerging-market stocks, but if you are going to overweight any particular area, you may want to consider the relative P/E ratios, among other factors. Do keep in mind that certain countries, like Russia, have had lower multiples for a very long time, given political instability, lack of proper corporate governance, and so on. You might look at a country's current ratios, not only as they compare to those of other nations, but also how they compare to that nation's own historical averages.

Choosing the Best International ETFs for Your Portfolio

Although I'm (obviously) a huge fan of international investing and also a big fan of ETFs, I must admit that forming an optimal international portfolio is not the easiest thing in the world to do. For one thing, there's too much to choose from! You clearly don't want a portfolio of large growth, large value, small growth, and small value stocks in four separate ETFs (as I recommend for the U.S. holding) for every country in the world. That would make for one very cumbersome and unwieldly portfolio!

So you need to create a well-diversified, low-cost, tax-efficient foreign portfolio with some kind of lean toward value and small cap. How to do that?

TIP

The recipe that makes most sense to me is to split up your wisely chosen international ETFs into two large categories: developed markets and emerging markets. For most portfolios, a reasonable split of foreign stock holdings would be something in the neighborhood of 75/25, with 75 percent going to developed nations (England, France, Germany, Japan, Canada) and 25 percent going to emerging-market nations (Brazil, Russia, Turkey, South Africa, Mexico, and a host of countries where the entire value of all outstanding stock may be less than that of any S&P 500 company). Keep in mind that I'm talking about 75 percent and 25 percent of roughly half your stock portfolio, with the other half invested in the good old USA.

Next, I suggest some of the ETFs you might consider first and foremost.

A number of brands to choose from

By and large, the ETFs I discuss here belong to a handful of ETF families: Vanguard, BlackRock (iShares), Schwab, Dimensional, and Cambria. Yes, there are other global and international ETFs from which to choose, and I discuss some of your other options in the next chapter, where I turn to global stocks divvied up by industry sector. As for global stocks that fit into a regional- or style-based portfolio, those mentioned in this section are among your best bets.

For more information on any of the international ETFs I discuss next, keep the following contact information handy:

- **Vanguard:** `www.vanguard.com`; 1-800-662-7447
- **BlackRock iShares:** `www.ishares.com`; 1-877-275-1225
- **Schwab:** `www.schwab.com`; 1-800-435-4000
- **Dimensional:** `https://us.dimensional.com/individuals`
- **Cambria:** `www.cambriafunds.com`; 1-855-383-4636

All the world's your apple: ETFs that cover the planet

If you have a small portfolio and a strong desire to keep your investment management simple, you may be best off mixing and matching a total-market U.S. fund (see Chapter 5) with a total international fund. Be forewarned that a good number of ETFs that may seem "total international" are not. The Schwab International Equity ETF, for example, is a fine fund, but only if you want to limit your international exposure to developed nations. To get both developed and emerging-market stocks, you are better off with the Vanguard Total International Stock ETF (VXUS) or the iShares Core MSCI Total International Stock ETF (IXUS). Both of these funds give you instant exposure to everything in the world of stocks, minus U.S. investments. Both ETFs are ultra low-cost (0.08 for Vanguard; 0.09 for iShares), well diversified, and tax-efficient. The two funds are, in fact, VERY similar.

If you *really* want to keep things simple, you can buy a single ETF that tracks an index of all stocks everywhere, U.S. and foreign. That one fund would be either the Vanguard Total World Stock ETF (VT), with an expense ratio of 0.08 percent, or the SPDR Portfolio MSCI Global Stock Market ETF (SPGM), with an expense ratio of 0.09 percent. Both are perfectly fine options. These indexed ETFs, like practically all others, are self-adjusting. That is, if your goal is to own a single global fund that reflects each country's percentage of the global economy, as that percentage grows or shrinks, so will its representation in these ETFs. Easy!

And if you *really, really* want simplicity — stocks and bonds and the kitchen sink, all in one package — see the end of Chapter 20 for suggestions.

If you have a portfolio larger than a few hundred dollars, and you're paying nothing in commissions to trade, and you are okay with adjusting its alignment (via rebalancing) once a year or so, I suggest that you keep your stocks and bonds in separate funds and that you furthermore break down your stock holdings into U.S. and non-U.S. Then, just as I have advised for your domestic stocks, assign your foreign holdings to at least two categories, developed-nation and emerging-market stocks.

If you've read the preceding Part 2 chapters, you know that my preferred way to split your U.S. stock holdings is by style: large growth, large value, small growth, and small value. On the international side, you could do the same, but I don't think you need to. Dividing both developing national and emerging markets into four categories each can be done, but it's a bit cumbersome at rebalancing time to deal with so many funds. And, especially where emerging markets are concerned, small-cap and value options tend to be expensive.

Instead, I suggest a broad developed-markets fund, a broad emerging-markets fund, and two other foreign funds to give the portfolio a value lean and an extra heaping of small cap. Remember that most "total market" funds are market weighted, so you will be getting mostly large-cap exposure, which is why you'll want to add some small cap as a separate dish.

Oh, you could also slice the overseas pie into regions: European, Pacific, and emerging markets. This option would be fine, although you'd be lacking in Canadian stocks. Or you could buy an international value, an international growth, and an international small-cap ETF. This would be fine, as well, although your expense ratio would be higher than with the strategy I'm recommending.

Let's take a closer look at that strategy, and some of the ETFs you might employ.

Developed-market ETFs: From the North Sea to the Land of the Rising Sun

By *developed markets*, we investment people generally mean Western Europe, the Pacific Rim (Japan, Australia, New Zealand), and Canada — in other words, the richer countries of the world. Sometimes, depending on the indexer, you might also encounter South Korea, Taiwan, South Africa, and Israel.

Europe boasts the oldest, most established stock markets in the world: the Netherlands, 1611; Germany, 1685; and the United Kingdom, 1698. Relative to the stocks of most other nations, European stocks, as a whole, are seemingly low-priced (going by their P/E ratios, anyway).

Europe's strengths include political stability (well, Brexit aside. . .), an educated workforce, and a confederation of national economies making for the world's largest single market. Germany, the largest economy in Europe, has been growing its export industry faster than any other nation on the planet.

Europe's great weaknesses include a persistently high rate of unemployment (outside of Germany); a rapidly aging population; and a few member nations, most notably Portugal, Italy, Greece, and Spain, whose governments have racked up some very serious debt. (Collectively, these high-debt nations have been referred to in investment circles as the PIGS, although the acronym may need to change because Belgium has recently surpassed Spain in terms of its debt-to-GDP ratio.)

Still, even with its weaknesses on full display, the European market definitely deserves a piece of your portfolio.

The stock markets of the Pacific Rim combined represent capitalization fairly close in size to Europe's stock markets. With the rapid growth of China as the world's apparent soon-to-be largest consumer, surrounding nations may bask in its economic glory. Australia, in particular, has benefited greatly from China's thirst for natural resources. And Japan leads the world in labor productivity. Alas, Japan also leads the world in government debt, and over the entire region, the threat posed by North Korea, and the tensions between China and Taiwan, loom like black clouds.

But black clouds and all, the Pacific region, like the Eurozone, merits a chunk of any balanced portfolio.

Want to tap into the developed-nations market in one fell swoop? Consider the following ETFs.

SPDR Portfolio Developed World ex-US ETF (SPDW)

Indexed to: S&P Developed Ex-U.S. BMI Index. BMI stands for Broad Market Index. Broad? Enough. This fund has 2,320 holdings.

Expense ratio: 0.04 percent

Top five country holdings: Japan, United Kingdom, France, Canada, Germany

Russell's review: With the lowest expense ratio in the category, heck yeah, I like it. The diversification isn't quite that of Vanguard's equivalent (the next one), but there is enough breadth that you needn't worry about overconcentration. The single largest holding is Samsung Electronics, taking up just 1.59 percent of the portfolio.

Vanguard FTSE Developed Markets ETF (VEA)

Indexed to: FTSE Developed All Cap ex-US Index of 4,035 stocks

Expense ratio: 0.05 percent

Top five country holdings: Japan, United Kingdom, France, Canada, Germany

Russell's review: As with all Vanguard funds, you get solid basics here at a very reasonable cost. And few funds are as well diversified as this one. The single largest holding is Nestlé S.A., with but 1.41 percent of the portfolio. Samsung Electronics is second, with 1.35 percent of the portfolio.

Dimensional Core Equity Market ETF (DFAI)

Indexed to: Dimensional's own recipe, which qualifies this fund as "actively managed," even though you likely won't see more turnover with this fund than with a typical index fund. The expense ratio is also more like an index fund than an actively managed fund.

Expense ratio: 0.18 percent

Top five country holdings: Japan, United Kingdom, Canada, France, Germany

Russell's review: Dimensional launched a handful of ETFs, including this one, in 2020. Dimensional has been in the mutual fund business for many years, and their claim to fame is that they incorporate a value lean and provide greater exposure to small cap than the establishment indexes. This makes beautiful sense. And if you go with this fund (despite the higher expense ratio), you may not need the value and small-cap ETFs I recommend later — provided you pair this fund with Dimensional's Core Emerging Market ETF (DFAU). But know that DFAU has an expense ratio of 0.36 percent, significantly more than some other good emerging-market funds.

MAKE WHEAT, NOT WAR

In the stock-market Olympics of the last century, the overall winners in terms of real stock-market return (return *after* inflation — the kind of return that really counts) were. . .drum roll. . .Australia, Canada, New Zealand, South Africa, and the United States. I put these markets in alphabetical order because they all come in close, and they've been swapping places for the past decade, but these five markets clock in with significantly higher returns than the rest of the world. At the bottom? Italy, Belgium, France, Germany, and Spain.

A group of distinguished professors from the London Business School pull these figures together every year. Here is their conclusion: "Generally speaking, the worst performing equity markets were associated with countries which either lost major wars, or were most ravaged by international or civil wars." The best performers, point out professors Elroy Dimson, Paul Marsh, and Mike Staunton, were "resource rich countries."

A listing of the long-term stock-market winners appears in the *Credit Suisse Global Investment Returns Yearbook 2020*, using return data from 1900 through 2019. South Africa has now taken the lead with 7 percent real return, Australia is in second place with 6.8 percent, and the United States and New Zealand now tie for third place with a 6.5 percent real stock-market return over the past 120 years. These figures are all measured in local currency.

Emerging-market stock ETFs — Well, we hope that they're emerging

When economists feel optimistic, they call them "emerging-market" nations. But these same countries are also sometimes referred to as the Third World or, even more to the point, "poor countries." I'm talking about China, Taiwan, Mexico, Russia, India, Brazil, and South Africa, among others. In 2013, Greece, given a huge drop in average income, had the dubious honor of being the first developed nation to be downgraded to emerging-market status by a major indexer (MSCI).

All together, the emerging-market nations make up 6 billion people, or about 85 percent of the world's population, but only about 41 percent of global GDP, and 13 percent of global equity market capitalization.

Much of the fortunes of emerging-market nations, especially those of sub-Saharan Africa and South America, are tied to commodity production. But commodity prices fluctuate greatly. And political unrest (often due to the fact that commodity production is controlled by very few), corruption, and overpopulation, as well as serious environmental challenges, plague many of these countries.

On the other hand, emerging-market stock prices — *vis-à-vis* U.S. stock prices, and even those of developed nations — seem underpriced at the moment. Many emerging economies seem especially strong. And — perhaps most importantly — these countries have young populations. Children tend to grow up to be workers, consumers, and perhaps even investors. Future growth of the economies seems almost assured. This should pan out to mean some profitability to shareholders in emerging-market stocks and ETFs.

Here are some excellent ETF options for capturing the performance of emerging markets.

Vanguard MSCI Emerging Market ETF (VWO)

Indexed to: The FTSE Emerging Markets All Cap China A Inclusion Index. You're looking at 5,200 stocks.

Expense ratio: 0.10 percent

Top five country holdings: China, Taiwan, India, Brazil, South Africa

Russell's review: A good way to capture the potential growth of emerging-market stocks is through VWO. The cost is the lowest in the pack, and the diversity of investments is more than adequate. My only problem is that China represents nearly 41 percent of the portfolio. That is in line with the market-weighting of Chinese-company stocks compared to the rest of the nations. Still, I wouldn't mind at all if Vanguard were to limit any one country's representation to, oh, maybe 30 percent of the total portfolio.

iShares Core MSCI Emerging Markets (IEMG)

Indexed to: MSCI Emerging Markets Investable Market Index. This features 2,515 holdings.

Expense ratio: 0.11 percent

Top five country holdings: China, Taiwan, South Korea, India, Brazil

Russell's review: Good fund. Good company. Good index. In fact, because China makes up less than 35 percent of the total portfolio, versus Vanguard's 41 percent, I might give the edge to this ETF, despite the slightly higher (very slightly higher) expense ratio, and more limited company diversification. But it would be a close call.

Dimensional Emerging Core Equity Market ETF (DFAE)

Indexed to: Dimensional's own propriety index. They've thrown in 4,100 holdings, and they've given the portfolio a value and a small-cap lean.

Expense ratio: 0.35 percent

Top five country holdings: China, Taiwan, South Korea, India, Brazil

FRONTIER MARKETS: NATIONS THAT MAY EMERGE TO BECOME EMERGING MARKETS

A number of ETFs have attempted to represent so-called *frontier markets.* These markets feature economies even smaller, stock markets even newer and potentially less regulated, and governments perhaps even shakier than in emerging-market nations.

Do you really want to invest in Bangladesh, Oman, Kuwait, Sri Lanka, and Trinidad and Tobago? Well, maybe. . .the payoff could be big. And the lack of correlation to other markets could be quite sweet. Alas, most of the frontier-market ETFs that were created in the past decade or two have since shut their doors. I can think of three off the bat.

There are still a handful left. The Global X MSCI Next Emerging & Frontier ETF (EMFM) has a high expense ratio of 0.70 percent and offers exposure to (in order of percent of assets of the portfolio) Saudi Arabia, Thailand, Indonesia, South Africa, Vietnam, and Malaysia. The iShares MSCI Frontier and Select EM ETF (FM) has an even higher expense ratio: 0.79 percent. And as the name implies, you're getting not only frontier markets but also "select" emerging-market nations. The countries represented include, in order of top exposure, Vietnam, Kuwait, Morocco, Kenya, Nigeria, and Romania.

If you do want to throw a few dollars into a frontier-market ETF, go for it. FM and EMFM are your best options. But realize that you're taking a lot of risk. I suggest you use money that you otherwise would have allocated to emerging-market stocks. But I wouldn't consider frontier markets a necessary part of a diversified portfolio.

By the way, some frontier-market ETFs offer exposure to but one frontier market. The Global X lineup of ETFs gives you the opportunity to invest in Argentina (ARGT), Nigeria (NGE), or Pakistan (PAK). I would advise against that. These three countries seem somewhat random. And I can see no reason why Nigerian stocks would outperform the rest of the world's. The total capitalization of the entire MSCI Nigerian Index, in case you're wondering, is about $4.5 billion. A typical mid-cap American corporation, such as Chipotle Mexican Grill, has a market cap of $45 billion — about 10 times larger.

Russell's review: It's significantly more expensive than some other emerging-market options, but this fund does offer advantages. One is the value and small-cap lean, making this fund perhaps the best-in-class if you are only going to have one developed-market and one emerging-market ETF and not supplement them with separate international value and small-cap ETFs. In the very long run, those leans would give this fund a distinct advantage in terms of performance. Also, this fund gives Chinese stocks 34 percent of the total capitalization, which is high, but not as high as the other emerging-market ETFs.

Adding value to your international portfolio

Studies show that the same *value premium* — the tendency for value stocks to outperform growth stocks — that seemingly exists here in the United States can be found around the world. (See the full value premium discussion in Chapters 6 and 8.) Therefore, I suggest a mild tilt toward value in your international stock portfolio, just as I recommend for your domestic portfolio.

TIP

You can easily accomplish this tilt by adding the iShares MSCI International Value Factor ETF (IVLU) to your core international fund. I might, for example, create an international portfolio by mixing IVLU with the core Vanguard Total International Stock ETF (VXUS). I might suggest 85 percent VXUS (which offers both value and growth, developed and emerging nations) with 15 percent IVLU.

Or, if you've already decided to split your international stocks by regions — Europe, Pacific, emerging markets — then adding a bit of IVLU can give you the value lean you seek.

iShares MSCI International Value Factor ETF (IVLU)

Indexed to: MSCI World ex USA Enhanced Value Index

Expense ratio: 0.30 percent

Top five country holdings: Japan, United Kingdom, France, Germany, Switzerland

Russell's review: There aren't a lot of ETF offerings in international value, so I'm grateful this fund exists. The cost is reasonable. The index is good and value-y (that's where the "enhanced" comes in). You're only getting developed-world stocks, no emerging markets, but that's okay as long as your total international exposure is balanced. If you want to add value on both the developed-market and emerging-market sides of your international portfolio, you'll have to go for now with a mutual fund, rather than an ETF. Vanguard's International Value Fund (VTRIX) is a good option. More on this, and other mutual funds to consider adding to your ETF portfolio, in Chapter 25.

Cambria Global Value ETF (GVAL)

Indexed to: This is not an index fund but an actively managed fund with a strategy that attempts to concentrate and thicken the value premium by selecting the most undervalued companies in those countries that themselves seem undervalued.

Expense ratio: 0.59 percent

Top five country holdings: Poland, Austria, Italy, Columbia, Greece

Russell's review: I know, I know. . .I say I don't like actively managed funds, and I don't like high expense ratios, but this fund's strategy is just too compelling to ignore. As I'm writing these words in mid-2021, this fund has returned 6.5 percent annually for the past five years. That's not very good. But these past five years have been awfully crappy years for both international and value stocks. When international and value come back into vogue, this fund could really shine. If Cambria were to lower the expense ratio, I could get really enthusiastic.

Small-cap international: Yes, you want it

Small-cap international stocks have even less correlation to the U.S. stock market than larger foreign stocks. The reason is simple: If the U.S. economy takes a swan dive, it will seriously hurt conglomerates — Nestlé, Toyota, and Samsung Electronics, for example — that serve the U.S. market, regardless of where their corporate headquarters are located. A fall in the U.S. economy and U.S. stock market is less likely to affect smaller foreign corporations that sell mostly within their national borders. A mid-sized bank in Tokyo that makes its profits selling mortgages may be entirely immune to any goings-on on Wall Street.

Regardless of the investment vehicle you choose, I suggest that a good chunk of your international stock holdings — perhaps as much as 50 percent, if you can stomach the volatility — go to small-cap holdings. The two ETFs I'd like you to consider are from Vanguard and iShares. Note that there are considerable differences between the two.

Vanguard FTSE All-World ex-US Small Cap Index (VSS)

Indexed to: The FTSE All-World Small Cap Ex-US Index, which tracks more than 4,100 small-cap company stocks in both developed nations (77 percent of the stocks) and emerging markets (23 percent)

Expense ratio: 0.11 percent

Top five country holdings: Canada, Japan, United Kingdom, Taiwan, China

Russell's review: For exposure to small-cap international stocks, you aren't going to find a less expensive or more diversified fund.

iShares International Developed Small Cap Value Factor ETF (ISVL)

Indexed to: FTSE Developed ex US ex Korea Small Cap Focused Value Index

Expense ratio: 0.30 percent

Top five country holdings: Canada, Japan, United Kingdom, Sweden, Australia

Russell's review: I've long lamented, and have been quite surprised, that it took the ETF industry until 2021 to provide investors with a small-cap, truly international (both developed-world and emerging-market) value fund. And finally, here it is! If you've taken my advice, and you build your international portfolio with one core developed-market fund and one core emerging-market fund, then adding ISVL can, in and of itself, give you the added exposure to both small cap *and* value that academic research says is likely to sharply increase your returns over the long haul. Downside: The expense ratio, while certainly reasonable, is higher than the Vanguard small-cap offering.

TIP

A WORD ON FOREIGN TAXES

If you are buying both a foreign and a domestic ETF, with one going into a taxable account and the other into your IRA, Roth IRA, or other tax-deferred retirement plan, choose the foreign fund for the taxable account and plug the domestic fund into your tax-deferred account. That's because many foreign countries will slap you with a withholding tax on your dividends, which you can write off only in a taxable account. Typically, such a tax may be 15 percent. (If you invest, say, $30,000 in a foreign fund with a dividend yield of 3 percent, you'll be losing $135 a year to foreign taxes.) If the foreign ETF is in a non-retirement account, your brokerage house will likely supply you with a year-end statement noting the foreign tax paid. You can then write that amount off in full against your U.S. taxes. (See line 43 of your friendly IRS Form 1040.) If the foreign fund is held in your retirement account, however, you get no year-end statement or write-off — you eat the loss.

IN THIS CHAPTER

» Getting acquainted with major industry sectors

» Weighing the pros and cons of sector and style investing

» Listing the ETFs that work best for sector investing

» Choosing the best options for your portfolio

» Knowing which sector funds to avoid

Chapter 10
Sector Investing: ETFs According to Industry

Any *Star Trek* fan (yeah, beam me up) knows that matter and antimatter, should they ever meet, would result in an explosion so violent as to possibly destroy the entire universe or, at the very least, mess up Don Draper's hair. Despite the firm convictions of zealots on both sides, style investing (large/small/growth/value) and sector investing (technology/utilities/healthcare/energy) are not matter and antimatter. They can, and sometimes do, exist very peacefully side-by-side.

In this chapter, I present the nuts and bolts of sector investing: how it can function alone, or in conjunction with style investing, to provide diversity both on the domestic and international sides of your portfolio (or overlapping the two). However you decide to slice the pie (whether by style or sector, or both), using ETFs as building blocks makes for an excellent strategy.

Selecting Stocks by Sector, not Style

As of this writing, there are 471 industry-sector ETFs, per Morningstar Direct. You can find a fund to mirror each of the major industry sectors of both the U.S. and foreign economies: energy, basic materials, financial services, consumer goods, and so on. See Figure 10-1 for a bird's-eye view of the U.S. economy split into its major industry sectors, each accorded its proper allotment.

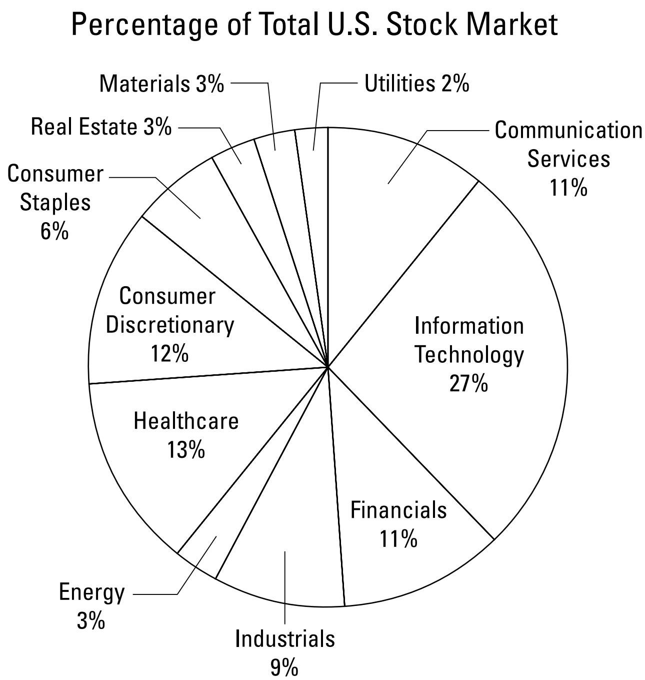


FIGURE 10-1: The industry sector map for the United States.

Based on the breakdown of the MSCI U.S. Broad Market Index, this chart reveals the size of 11 major industry sectors of the U.S. economy. What you're seeing is the total *capitalization* (value of stock) of all public companies within each industry group. ***Note:*** No standard methodology exists for breaking up the U.S. industry into sectors; MSCI does it one way, and FTSE Russell does it a slightly different way.

Some ETFs mirror subsections of the economy, such as semiconductors (a subset of information technology) and biotechnology (a subset of healthcare). In some cases, subsectors of the economy you may not even know exist — such as nanotech, cloud computing, and water resources — are represented with ETFs. And in other instances, you can find ETFs that represent sub-sub- and sub-sub-subsections of the economy, such as cybersecurity, telemedicine, video games, and, of course, the latest darling of Johnny-come-lately ETFs, cannabis. Many cannabis ETFs have sprung up lately. I know of at least a dozen, such as Cambria's Cannabis ETF, with the ticker TOKE. Cute, eh?

A good number of newer ETFs allow you to invest in industry sectors in foreign countries (which are not represented in Figure 10-1) or in *global* industries (which is to say U.S. and foreign countries together; see Figure 10-2).

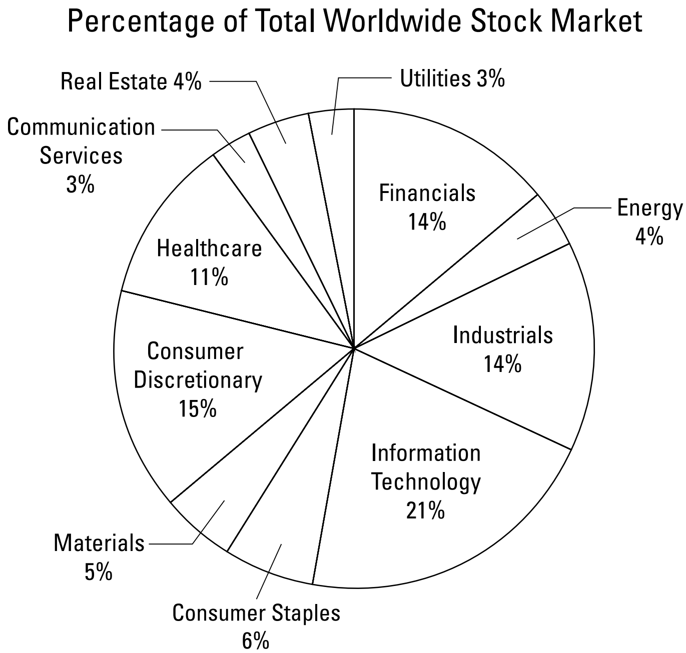


FIGURE 10-2: The industry sector map for the entire world.

TIP

Looking at Figures 10-1 and 10-2, you can see that information technology is number one on the global chart, as it is on the U.S. chart. But healthcare moves from the number two spot on the U.S. chart down to number five on the global chart. (Only in the United States does a trip to the dermatologist boost the national economy!)

WARNING

Here is living proof that you can, if you so wish, slice and dice a portfolio to ultimate death: You can actually find some ETFs that allow you to buy into a particular industry within a particular country, such as the KraneShares CSI China Internet ETF (KWEB). These are similar to the sub-sub-subsector ETFs I discuss earlier. Betting on slivers of the economy is almost as risky as betting on individual stocks. And day traders these days are just as likely to use ETFs (often the sub-sub-sub sectors) as they are individual stocks. Sadly, most day traders, whether they favor ETFs or stocks, are going broke, even as I'm typing these words. Please, invest broadly and trade infrequently. You'll be glad you did.

Speculating on the Next Hot Industry

Is there a God? Does he have a long, white beard? Is "he" possibly a "she"? Why do sector investors tend to be speculators, while style investors tend to be buy-and-hold kinds of people? These are questions that sometimes keep me awake at night. I won't attempt to address the first three here. As for the fourth. . .heck, I have no idea. But there's little question that people who divide their portfolios into large/small/value/growth are much more likely to be long-term investors with long-term strategies than are people who buy into sectors (often through ETFs). That's just the way it is.

Sizzling and sinking

Sector funds are often purchased by investors who think they know which sectors (or sectors within specific countries, such as financials in Brazil) are going to shine, and gosh darnit, they're going to profit by it. Unfortunately, they are often wrong.

I'm old enough to recall a time when environmental service companies, by dint of the realization that pollution was becoming a serious problem, were going to be a sure bet. But then, lo and behold, environmental service companies seriously lagged behind the overall market for years. Then it was information technology that couldn't possibly fail, yet for three brutal years (2000–2002), the technology sector fell like hail. At the time of this writing, tech is hot once again (especially hydrogen/clean energy/electric vehicles), but not as hot as cryptocurrencies or marijuana. By the time this book comes out, who knows what everyone will be panting after?

Momentum riders and bottom feeders

Interestingly, while most investors are *momentum investors* — they tend to buy what's hot — other investors look for what's not, on the theory that everything reverts to the mean. The two camps are forever trading sector funds back and forth. Right now, the momentum investors are buying tech; the bottom feeders (who prefer to see themselves as value investors) are buying energy. Fortunately (or unfortunately), there is no dearth of ETFs to please both crowds.

(Note: I'm not saying that neither momentum investing nor buying up down-and-out industries has value. Both strategies have been known to make money. But such strategies can't be done helter-skelter. Like any other kind of investing, they require careful thought and study. Many rapid sector traders are not such deep thinkers.)

You can tell from my tone, no doubt, that I'm no big fan of sector speculation — or speculation of any sort. But what about using sector ETFs as buy-and-hold instruments? Even though few people do it, can a buy-and-hold portfolio be just as easily and effectively divided up by industry sector as it can by investment style? Keep reading.

Doing Sector Investing Right

An in-depth study on industry-sector investing, done by Chicago-based Ibbotson Associates (now part of Morningstar), came to the very favorable conclusion that sector investing — because times have apparently changed — is potentially a superior diversifier to grid (style) investing. (I discuss the style grid in Chapters 4 and 5.) Globalization has led to a rise in correlation between domestic and international stocks; large-, mid-, and small-cap stocks have a high correlation to each other. A company's performance is tied more to its industry than to the country where it's based or its market capitalization, concluded Ibbotson.

The Ibbotson report didn't end there. It also ballyhooed sector investing as a superior instrument for fine-tuning a portfolio to match an individual investor's risk tolerance. A conservative investor might overweight utilities (a less volatile sector); a more aggressive investor might tilt toward technology (whooeee).

That sounds like a good plan, although the lead author of that study once confided to me that he still has the bulk of his personal portfolio broken up into value, growth, large cap, and small cap — as do I. However, we both have some industry-sector ETFs (for fine-tuning), as well.

Calculating your optimal sector mix

If you are going to go the sector route and build your entire stock portfolio, or a good part of it, out of industry-sector ETFs, I suggest that before you do anything, you take a look at Figures 10-1 and 10-2. Make sure you are able to have allocations to all or most major sectors of the economy.

Some advisors would tell you to keep your allocations roughly proportionate to each sector's share of the broad market. I think that's decent advice, with just a bit of caution: Had you taken that approach in 1999, your portfolio would have been chocked to the top with technology, given the gross overpricing of the sector at that point. (And you would have taken a bath the following year.) I'd suggest that no matter what sectors are hot at the moment, no single sector should ever make up more than 20 percent of your stock portfolio.

(If you've read Chapter 9, you may recall that I noted that single-country and especially small single-country ETFs are not something I go out of my way to own. One reason is that a smaller country's economy can be dominated by one or two industries, making its markets especially volatile.)

TIP

Perhaps start by roughly allocating your sector-based portfolio according to the market cap of each sector and then tweak from there — based not on crystal-ball predictions of the future but on the unique characteristics of each sector. What do I mean? Read on.

Seeking risk adjustment with high- and low-volatility sectors

Some industry sectors have historically evidenced greater return and greater risk. (Return and risk tend to go hand in hand, as I discuss in Chapter 4.) The same rules that apply to style investing apply to sector investing. Know how much volatility you can stomach, and then — and only then — build your portfolio in tune with your risk tolerance.

As for historical risk and return, Figure 10-3 shows an approximation of how the major sectors rank. Keep in mind that *any* single sector — even utilities, the least volatile of all — will tend to be more volatile than the entire market because there is little diversification. Don't overindulge!

Finally, keep in mind that your allocation between bonds and stocks will almost certainly have much more bearing on your overall level of risk and return than will your mix of stocks. In Part 3 of this book, I introduce bonds and discuss how an ETF investor should hold them.

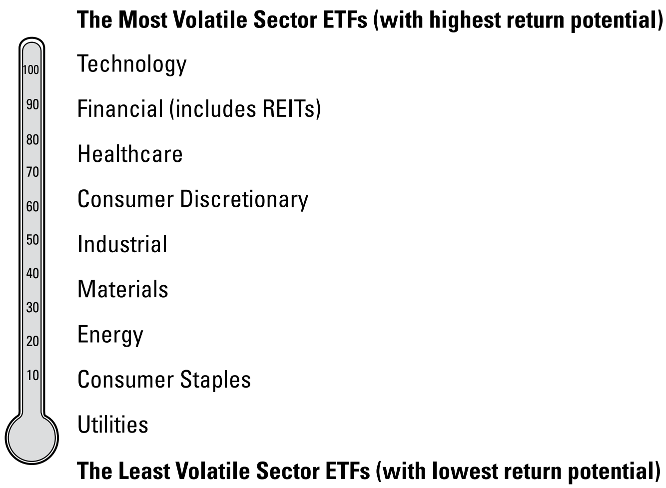


FIGURE 10-3: Industry sectors, from most to least volatile.

Knowing where the style grid comes through

REMEMBER

There is nothing wrong with dividing a stock portfolio into industry sectors, but please don't be hasty in scrapping style investing. I really believe that if you're going to pick one strategy over the other, the edge goes to style investing. For one thing, I know that it works. Style investing helps to diffuse (but certainly not eliminate) risk. Scads of data show that.

In addition, style investing allows you to take advantage of years of other data that indicate you can goose returns without raising your risk, or raising it by much, by leaning your portfolio toward value and small cap (see Chapters 5, 6, 7, and 8). When you invest in industry sectors through ETFs, you are most often investing the vast majority of your funds in large caps, and you're usually splitting growth and value evenly. That approach may limit your investment success.

Another reason ETF investors shouldn't scrap style investing: Style ETFs are the cheaper choice. For whatever reason — yes, another one of those eternal mysteries that keeps me awake at night — style ETFs tend to cost much less than industry-sector ETFs. According to Morningstar Direct, the average sector equity fund will cost you 0.52 percent in management fees. Style funds are generally much less.

REMEMBER

And one final reason to prefer style to sector for the core of your portfolio: You will require fewer funds. With large growth, large value, small growth, and small value, you can pretty much capture the entire stock market. With sector funds, you need nearly a dozen funds to achieve the same effect. Each sector fund offers minimal diversification because the price movements of companies in the same industry sector tend to be closely correlated.

Combining strategies to optimize your portfolio

There's no point to having dozens of ETFs in your portfolio if they are only going to duplicate each other's holdings. So if you already own the entire market through diversified ETFs in all corner quadrants of the style grid — large, small, value, and growth — then why add any industry sectors that are obviously already represented?

It would make sense to add a peppering of semiconductor stocks or utility stocks if you knew that semiconductors or utilities were going to blast off. (Of course, a rational investor would never say they knew anything about the future, other than that the sun will probably rise tomorrow.) And yet, taking on an added dose of semiconductors or utilities may still make sense if that added dose of either industry sector somehow were to raise your performance potential without raising risk. That could happen only if you chose an industry sector that is not closely correlated to the broader market.

Seeking low correlations for added diversification

Some sectors, or industry subsectors, even though they are part of the stock market, tend to move out of lockstep with the rest of the market. By way of example, consider REITs: real estate investment trusts. (If you look for REITs in Figure 10-1, you will find them buried under "Financials.") I devote Chapter 11 almost entirely to REITs, and especially REIT ETFs.

Another sector that fits the bill is energy. For example, consider that in 2002, when the total U.S. stock market tanked by almost 11 percent, REITs were up 31 percent. The year 2005 was pretty lackluster for the total stock market, yet energy stocks were up 31 percent. In the past three years, *all* U.S. sectors have done very well, except for energy, with a return of –28 percent annually.

TIP

If you decide to build your portfolio around industry-sector funds, I urge you at the very least to dip into the style funds to give yourself the value- or small-cap tilt that I discuss in Chapters 5, 6, 7, and 8. That's especially true if you use SPDRs to build your sector portfolio. This fund group is especially weighted toward large cap. In Chapter 21, I offer a few sample portfolios to illustrate workable allocations.

WARNING

NEWNESS IS A RED FLAG

At about 471 and counting (more than a quarter of all ETFs), you can find an ETF to mirror just about any sector or subsector of the U.S. or global economy. The latest arrivals include a host of alternative-energy funds, marijuana, and space exploration. And new ones are sure to arrive shortly. Proceed with caution. New sector offerings occur most often after recent run-ups in price. The sector is hot. The public is buying. The financial industry is accommodating. Everyone is happy, for the moment. But maybe a bubble is about to burst.

Remember how in 2020 Cathie Wood's brand-new subsector ETFs, including the ARK Autonomous Technology & Robotics ETF (ARKQ) and the ARK Genomic Revolution ETF (ARKG), were on everyone's buy list, and how in early 2021, just as soon as everyone and their brother-in-law bought in, they tanked?

Sector Choices by the Dozen

After you decide which industry sectors you want to invest in, you need to choose among ETFs. BlackRock's iShares, Vanguard, Fidelity, State Street Global Advisors SPDRs, and other fund managers all offer good-sized menus of sector funds, both domestic and international.

Begin your sector selection here:

- **Do you want representation in large industry sectors (healthcare, technology, utilities)?** Your options include Vanguard ETFs, BlackRock's iShares, State Street Global Advisors SPDRs, and Fidelity, as well as some slightly innovative funds from Invesco.
- **Do you want to zero in on narrower industry niches (insurance, oil service, nanotech, autonomous technology, and robotics)?** Consider Invesco, iShares, VanEck, ARK Invest, and Global X. You can also choose State Street Global Advisors (non-Select Sector) SPDRs.
- **Are you looking for sometimes ridiculously narrow industry niches (aluminum) or sectors within sectors within individual foreign countries?** You should look at Global X, KraneShares, and Direxion ETFs. Ark Invest has one, too. . .if Israeli tech is your thing.
- **Do you want to keep your expense ratios to a minimum?** Fidelity and Vanguard are the cheapest.

In the following sections, I give you a more in-depth view of the sector offerings available to you.

Vanguard ETFs

The Vanguard industry sector offerings include the following:

U.S. Sector Fund Name	Ticker
Vanguard Consumer Discretionary ETF	VCR
Vanguard Consumer Staples ETF	VDC
Vanguard Energy ETF	VDE
Vanguard Financials ETF	VFH
Vanguard Health Care ETF	VHT
Vanguard Industrials ETF	VIS

U.S. Sector Fund Name	Ticker
Vanguard Information Technology ETF	VGT
Vanguard Materials ETF	VAW
Vanguard Real Estate ETF	VNQ
Vanguard Telecommunications Services ETF	VOX
Vanguard Utilities ETF	VPU

Vanguard's International sector fund is the Global ex-U.S. Real Estate ETF (VNQI).

Fill your domestic stock portfolio with Vanguard's 11 U.S. industry-sector ETFs, and presto! You've captured just about the entire universe of Yankee stocks. Granted, that universe will be weighted in such a manner that you'll have only token representation of mid and small caps (although you'll have more small-cap exposure than you would with SPDRs).

The one exception is the Vanguard REIT Index ETF (VNQ). Principally a mid-cap fund, VNQ is a prince among ETFs. It is well diversified within its own real estate universe, and if you're going to own a U.S. REIT ETF, Vanguard's selection is an excellent choice. (See Chapter 11 for more on REITs.) This fund carries an expense ratio of 0.12 percent, as does Vanguard's international counterpart VNQI. The other Vanguard U.S. sector ETFs carry an expense ratio of 0.10 percent — a real bargain among sector funds.

TIP

In general, Vanguard ETFs (based on MSCI indexes) and the Select Sector SPDRs (based on S&P indexes) are your best building blocks for a U.S. stock portfolio that is sliced and diced by industry sectors. They are also excellent options for peppering a style grid–based portfolio with sector funds.

If you want a more globally based sector approach, then the more expensive iShares options may be your best bet. In Part 4, where I build sample portfolios, you see how some of these funds can be incorporated into an optimally diversified investment strategy.

Select Sector SPDRs: State Street Global Advisors (Part 1)

In this section, I focus on *Select* Sector SPDRs. In the next section, I introduce just plain old SPDRs representing industry sectors. What's the difference? Keep reading because I explain in the next section. First, let me acquaint you with some fund names.

Select Sector SPDR offerings include the following.

U.S. Sector Fund Name	Ticker
Communication Services Select Sector SPDR	XLC
Consumer Discretionary Select Sector SPDR	XLY
Consumer Staples Select Sector SPDR	XLP
Energy Select Sector SPDR	XLE
Financial Select Sector SPDR	XLF
Health Care Select Sector SPDR	XLV
Industrial Select Sector SPDR	XLI
Materials Select Sector SPDR	XLB
Technology Select Sector SPDR	XLK
Utilities Select Sector SPDR	XLU
Real Estate Select Sector SPDR	XLRE

Overall, I put the Select Sector SPDRs on a par with the Vanguard sector ETFs. Like the Vanguard funds, they represent large U.S. industry groupings. They follow reasonable indexes, and they will cost you only a tad more than the Vanguard and Fidelity ETFs — 0.12 percent for Select Sector compared to 0.10 and 0.084 percent a year in management fees for Vanguard and Fidelity, respectively. (The exception is real estate funds; both SPDRs and Vanguard charge 0.12 percent, whereas Fidelity charges 0.085 percent.)

TIP

Because the S&P indexes upon which the Select Sector SPDRs are built tend to represent mostly large-cap companies, I urge anyone building a Select Sector SPDR portfolio to tap into small caps through some other means, such as buying into one of the small-cap ETFs discussed in Chapters 7 and 8.

SPDRs: State Street Global Advisors (Part 2)

Regular SPDRs industry-sector offerings include the following.

U.S. Sector Fund Name	Ticker
SPDR S&P Bank ETF	KBE
SPDR S&P Regional Banking ETF	KRE
SPDR S&P Insurance	KIE

U.S. Sector Fund Name	Ticker
SPDR S&P Oil & Gas Exploration & Production ETF	XOP
SPDR S&P Oil & Gas Equipment & Services	XES
SPDR S&P Health Care Equipment	XHE

International Sector Fund Name	Ticker
SPDR Dow Jones International Real Estate ETF	RWX

Global Sector Fund Name	Ticker
SPDR Dow Jones Global Real Estate ETF	RWO
SDPR S&P Global Natural Resources ETF	GNR

Ready to find out what distinguishes a Select Sector SPDR from a plain old industry-sector SPDR? Both are industry-sector funds. Both are owned and run by megabank State Street Global Advisors. But the two ETF lineups are somewhat different. Retailers and car manufacturers call the differentiation *product-line extension.* So just as Honda has its Acura line of cars as well as plain old Hondas, and Toyota has its Lexus line in addition to the plain old Toyotas, State Street has both SPDRs and Select Sector SPDRs.

A big difference between the two lineups (just as with Hondas and Acuras, and Toyotas and Lexuses) is price, but if you assume that the "Select" names will cost you more, surprise! Whereas the Select Sector SPDRs charge 0.10 percent in management fees, the non-Select Sector SPDRs charge 0.35 percent for the domestic options, 0.59 percent for the one international, and 0.50 (RWO) and 0.40 percent (GNR) for the two global ETFs.

Another difference is the exposure. Select Sector SPDRs track large sectors of the economy, such as healthcare and energy. The plain old SPDRs, which happen to be darlings among day traders, track narrower segments of the market. Instead of energy, you're looking at Oil & Gas Exploration & Production or Oil & Gas Equipment & Services, for example. Instead of healthcare, you're looking at just healthcare equipment. Because I prefer larger segments of the market, and I certainly prefer lower prices, I tend to prefer the Select Sector SPDRs over the SPDRs for any kind of domestic stock exposure.

As for the international side of things, State Street had a bunch of international sector ETFs, which they've retired. All that's left is the International Real Estate ETF (RWX), which at 0.59 percent, is way, way more than Vanguard's Global ex-U.S. Real Estate ETF. Vanguard charges 0.12 percent, making it a far preferable option.

However, State Street has a handful of (non-select) global sector funds, and in this handful are two funds that I like quite a bit: The SPDR Dow Jones Global Real Estate ETF (RWO) and, even more impressive, the SDPR S&P Global Natural Resources ETF (GNR). These global selections offer reasonable management fees of 0.50 and 0.40, respectively.

TIP

The SPDRs website — `www.sectorspdr.com` — is full of fabulous tools. Check out especially the Correlation Tracker, SPDR Map of the Market, and Sector Tracker. (You don't have to be a SPDRs investor to use these tools.)

BlackRock's iShares

The iShares industry-sector offerings include the following.

U.S. Sector Fund Name	Ticker
iShares U.S. Basic Materials Index	IYM
iShares U.S. Consumer Goods Index	IYK
iShares U.S. Consumer Services	IYC
iShares U.S. Energy Index	IYE
iShares U.S. Financial Sector Index	IYF
iShares U.S. Financial Services	IYG
iShares U.S. Healthcare	IYH
iShares U.S. Industrials	IYJ
iShares U.S. Real Estate	IYR
iShares U.S. Technology	IYW
iShares U.S. Telecommunications	IYZ
iShares Transportation Average	IYT
iShares U.S. Utilities	IDU

International Sector Fund Name	Ticker
iShares MSCI Europe Financials	EUFN
iShares Emerging Markets Infrastructure	EMIF

Global Sector Fund Name	Ticker
iShares Global Energy	IXC
iShares Global Materials	MXI
iShares Global Consumer Staples	KXI
iShares Global Timber & Forestry	WOOD
iShares Global Utilities	JXI

As you may be aware by now, I like iShares just fine. I like their style funds, and, as I discuss in Chapter 9, I like many of their international funds. As for domestic industry-sector funds, however, BlackRock, Inc. (sponsor of iShares) simply charges too much. Most of their sector ETFs charge 0.42 to 0.43 percent. A few, mysteriously, charge as little as 0.18. In the aggregate, the Vanguard ETFs or Select Sector SPDRs are a much more economical way to get domestic sector exposure.

On the international and global front, however, the iShares ETFs are competitive with SPDRs: Most charge 0.46 percent in management fees. And the iShares lineup offers more global sector funds than any other ETF provider. (The ones I list here are just a representative sampling.) If you want to divide your portfolio into global sectors, iShares is the place to go.

Invesco

Invesco industry-sector offerings include the following.

U.S. Sector Fund Name	Ticker
Invesco Dynamic Building & Construction	PKB
Invesco Dynamic Energy & Exploration	PXE
Invesco Dynamic Food & Beverage	PBJ
Invesco Dynamic Leisure & Entertainment	PEJ
Invesco Dynamic Media	PBS

U.S. Sector Fund Name	Ticker
Invesco Dynamic Networking	PXQ
Invesco Dynamic Pharmaceuticals	PJP
Invesco Dynamic Software	PSJ
Invesco Solar	TAN
Invesco Aerospace & Defense	PPA
Invesco WilderHill Clean Energy	PBW
Invesco Water Resources	PHO

Global Sector Fund Name	Ticker
Invesco Global Water Index	CGW
Invesco Global Clean Energy ETF	PBD

On the down side, Invesco charges about 0.60 percent for its domestic offerings (each differs slightly) and 0.75 percent for its global funds: That's a whole lot more than most of the competition is charging or would dare charge. The funds are also "dynamic," which means that the indexes they track are actively managed (in a sense, the index is tooled in a way that allows the creators to stock pick, indirectly). Many investors would see that as a plus; I don't. It means added expense (both up front and behind the scenes) and a possible loss of tax efficiency. On the upside, however, Invesco's selection of industry groupings, in both their U.S. and global offerings, has been innovative, to say the least.

TIP

Although I wouldn't suggest building an entire portfolio of Invesco sector ETFs, if you're looking to sprinkle some noncorrelating holdings into an otherwise well-diversified portfolio, Invesco may have something to offer. I'm especially intrigued with the Invesco Global Clean Energy ETF and the Invesco Global Water Index ETF. Investing in companies that provide alternative fuels and the filtration and delivery of drinking water respectively, these two ETFs, so far, seem to have sweetly low correlations to the broad market. I'm keeping an eye on them. If Invesco were to lower the expense ratios, I might keep two eyes on them.

Before I leave Invesco, I want to introduce some of the company's innovative equal-weight sector funds.

Equal-Weight Sector Fund Name	Ticker
Invesco S&P 500 Equal Weight Consumer Staples ETF	RHS
Invesco S&P 500 Equal Weight Health Care ETF	RYH
Invesco S&P 500 Equal Weight Energy ETF	RYF
Invesco S&P 500 Equal Weight Technology ETF	RYT
Invesco S&P 500 Equal Weight Utilities ETF	RYU
Invesco S&P 500 Equal Weight Real Estate ETF	EWRE

Equal weight means that the ETFs are not "market weighted," as are the vast majority of ETFs (and mutual funds). So if you look at, for example, the S&P 500 Equal Weight Technology ETF (RYT), you find a portfolio of about 70 company stocks, and very much unlike the typical technology fund, Apple and Microsoft do not dominate the portfolio. Those two tech giants are each given approximately 1.45 percent of the entire portfolio, so that Apple has no greater a position than say, Adobe, Inc., Paycom software, or Skyworks Solutions.

Invesco's equal weight ETFs charge 0.40 percent — less than most of its other sector funds. Unlike almost all other sector funds, you are going to get exposure to portfolios that are not dominated by large caps, but have roughly equal exposure to large, mid, and small caps. Over the long haul, small caps should outperform large caps, but with some added volatility. I would say that if you are going to build an entire portfolio with sector funds, you might want to consider this Invesco lineup. Or, if you are a style investor but want to overweight one particular sector, then an equal-weighted Invesco ETF wouldn't be a bad choice.

Fidelity

Brokerage giant Fidelity got into the ETF business a little later than most, and so they figure that they must cut costs to get market share. They offer 11 sector funds, and the cost for most is 0.084 percent. (In case you're wondering, 0.084 percent versus Vanguard's 0.10 percent would mean that you'd be saving $1.60 a year on a $10,000 investment.)

UNHEALTHY INVESTMENTS

WARNING

Just as I was writing the first edition of this book, the first truly loony ETFs were hitting the market. At that time, I alerted readers to the advent of a dozen ETFs that invested in companies involved in treating specific diseases. You could have invested in the Ferghana-Wellspring (FW) Derma and Wound Care Index Fund, or the FW Metabolic-Endocrine Disorders Index Fund, or the FW Respiratory/Pulmonary Index Fund. As I stated at the time, "I can think of no good reason to take a gamble on such small market niches. Should a cure to cancer be found, the company that nails it will see its stock sky-rocket, for sure. The other however-many companies? Their stocks may well plummet. If you're holding the entire basket, it's a flip of the coin to say which way your investment may head. If you like flipping coins, fine, but please don't bet your retirement money on such foolishness." Well, the market saw through the craziness of these funds, few people bought them, and the funds have since folded. But I'm sorry to say that many more crazy ETFs have taken their place. . .and many of them, if not most, track industry sectors.

Because commodities have been hot lately (and investors just love what's hot), I've seen the arrival of funds that allow you to invest in every conceivable individual commodity, from aluminum and potash to uranium and jelly beans. (I'm kidding about the jelly beans; alas, serious about the rest.) Subsectors that are hot are sprouting ETFs like sprigs of marijuana. Yes, cannabis funds, cloud-computing funds, and blockchain funds are selling like hotcakes.

Many sector funds are leveraged, promising to generate — for better or worse — some multiple of their underlying index's returns; they bear names like the Direxion Daily Natural Gas Related Bull 3X Shares (GASL). Or they are inverse funds, moving opposite to their index, such as the ProShares Short Basic Materials ETF (SBM). Or they are inverse *and* leveraged, such as the Direxion Daily Junior Gold Miners Bear 2x Shares ETF (JDST). Other exotic sector funds represent sectors within small stock markets, such as the Global X Nifty India Financials ETF (INDF).

Most of these inverse/leveraged/sliver-of-some-small-market funds are not only crazy to begin with (unless perhaps you are a very seasoned trader with vastly superior information. . .and if you're reading this book, chances are you're not one), but they charge ongoing fees that are three, four, or five times what most ETFs charge. Keep your portfolio healthy, and avoid these gimmicky funds. Please.

Here is a sampling of Fidelity's sector offerings:

Fidelity Sector Fund Name	Ticker
Fidelity MSCI Information Technology Index ETF	FTEC
Fidelity MSCI Health Care Index ETF	FHLC
Fidelity MSCI Financials Index ETF	FNCL
Fidelity MSCI Consumer Discretionary Index ETF	FDIS
Fidelity MSCI Utilities Index ETF	FUTY
Fidelity MSCI Energy Index ETF	FENY

There's nothing not to like about the Fidelity sector funds. They use solid, plain-vanilla MSCI indexes, and the price is more than competitive.

IN THIS CHAPTER

» Understanding what makes a REIT a REIT

» Knowing how much to invest

» Recognizing your home as a real estate holding

» Focusing on the best REIT fund options

Chapter 11

Real Estate Investment Trusts: Becoming a Virtual Landlord

Why, land is the only thing in the world worth workin' for, worth fightin' for, worth dyin' for, because it's the only thing that lasts.

— SPOKEN BY THE CHARACTER GERALD O'HARA IN *GONE WITH THE WIND*

Scarlett's father said those words long before the U.S. real estate crash at the onset of the 21st century. Unless you happen to have bought into real estate just prior to that crash, you've probably done quite well with any investments you've made in land.

The value of commercial real estate — just about anywhere in the nation — softened right along with the housing market. But again, unless you bought just prior to the decline that began its serious fall in 2006, any investment in commercial property — or residential, for that matter — has probably done well. In fact, if you happen to own some commercial property, perhaps through a real estate investment trust (REIT), you likely made out very well in recent years.

In a nutshell, *real estate investment trusts*, popularly known as *REITs* (rhymes with "beets"), are companies that hold portfolios of properties, such as shopping malls, office buildings, hotels, amusement parks, cellphone towers, or timberland. Or they may hold certain real estate–related assets, such as commercial mortgages. More than 160 REITs in the United States are publicly held, and their stocks trade on the open market just like most other stocks.

Via dozens of mutual funds, you can buy into a collection of REITs at one time. Through about 30 or so ETFs, you can similarly buy a bevy of REITs. And that may not be a bad idea. For the 42 years that ended in December 2020, the Dow Jones U.S. Select REIT Index enjoyed an average annual return of 11.4 percent. That isn't quite the 12.0 percent that the S&P 500 has returned during the same time span, but it is still a healthy return by anyone's measure. And more recently, REITs have clobbered the S&P 500, returning about 20 percent during the first half of 2021 versus less than 14 percent for the S&P 500.

At the same time, REITS over the years have displayed a significant degree of noncorrelation. That is to say, REITS sometimes go up when the general market goes down, and vice versa. The end result, if you have both REIT and non-REIT stocks, is a portfolio with smoother returns.

Some holders of REITs and REIT funds believe (and fervently hope) that the excellent performance and the portfolio-smoothing noncorrelation of REITS will continue. Others (a minority, to be sure) argue that the glory of REITs may already be gone with the wind. In this chapter, I provide you with several reasons (in addition to those offered by Scarlett's dad) why REITs deserve an allocation in most portfolios.

Considering Five Distinguishing Characteristics of REITs

You may wonder why an entire chapter of this book is devoted to REIT ETFs. Why, you may ask, didn't I merely include them in Chapter 10 with the other industry sector ETFs? Good question!

I have *five* reasons. Any one alone probably wouldn't justify giving REITs a chapter of their very own. All five together do, however. The first three reasons explain why REITs deserve some special status in the world of investments. The last two reasons are perhaps less compelling than the first three, but I include them in the interest of completeness.

Limited correlation to the broad markets

An index of U.S. REITs (such as the Dow Jones U.S. Select REIT Index) has evidenced a correlation of about 0.60 with the S&P 500 over the past 20 years. That means the price of an S&P 500 index fund and the share price of a REIT index fund have tended to move in opposite directions roughly 40 percent of the time. The REIT index has practically no correlation to bonds.

Will REITs continue to work their magic? Their correlation with the broad market has been increasing; undoubtedly REITs are becoming somewhat the victims of their own success. As they have become more mainstream investments, they have come to act more like other equities. Years ago, practically no one held REITS in their portfolios. Nowadays, according to one poll, fully two-thirds of professional money managers are using them.

But as I write these words, and for the next few years, I believe you can expect continued positive returns and limited correlation — albeit on a lesser scale on both fronts. Therefore, REITs will still help to diversify a portfolio.

Unusually high dividends

REITs typically deliver annual dividend yields significantly higher than even the highest dividend-paying non-REIT stocks, and almost three times that of the average stock. (Many stocks, of course, pay no dividends.) At the time of this writing, the Schwab U.S. REIT ETF (SCHH) is offering a dividend yield of 2.86 percent versus the Schwab U.S. Mid-Cap ETF (SCHM), which offers a dividend yield of 1.05 percent. I use the mid-cap fund because it makes for the best apples-to-apples comparison — most REITs are mid-cap stocks.

So the cash usually keeps flowing regardless of whether a particular REIT's share price rises or falls, just as long as the REIT is pulling in some money. That's because REITs, which get special tax status, are required by law to pay out 90 percent of their income as dividends to shareholders. Cool, huh?

Still, REITs, like other stocks, can also be expected to see growth (and sometimes shrinkage) in share prices. Historically, about one-third of the total return of REIT stocks has come from capital appreciation.

WARNING

You may have noted that I compared the dividend yield of REITs to the dividend yield of non-REIT mid-cap stocks, and that I did not compare the dividend yield of REITs to the interest on bonds (nor would I ever!). REITs and non-REIT stocks are similar in that they both represent equity, and as such, you can reasonably expect high long-term return with lots of volatility. Bonds are *not* similar in any way. With bonds, you can expect lower long-term return but with much less volatility.

I'll talk much more about bonds in Part 3. For now, suffice it to say that bonds are a different animal and should not be measured against any kind of equity investment. Do *not* sell your bonds to buy REITs because the yield on REITs is higher. I emphasize this because now with bond yields so pathetically low, I've been seeing articles, some in respectable publications, that ballyhoo REITs as a substitute for bonds. This is like suggesting that people bored with their docile housecat can trade it in for a mountain lion. Bad move.

Different taxation of dividends

REMEMBER

Because REITs are blessed in that they don't have to pay income taxes, their dividends are usually fully taxable to shareholders as ordinary income. In other words, whatever dividends you get will be taxed at year-end according to your income tax bracket. Few, if any, REIT dividends will be considered "qualified dividends" by the IRS, and so you will not pay the special 15 percent dividend tax rate that most people pay on their stock dividends. For that reason, your accountant will undoubtedly urge you to handle your REITs a bit carefully. I also urge you to do so. REITs, unless you are in a very low tax bracket, should be kept in tax-advantaged accounts, such as your IRA.

Special status among financial pros

The vast majority of wealth advisors — whether they primarily use style investing, sector investing, or astrology charts and tea leaves — recognize REITs as a separate asset class and tend to include them in most people's portfolios. Is that distinction logical and just? Yes, but. . .I've asked myself this question: If REITs deserve that distinction of honor, what about some other industry sectors, such as energy? After all, energy has lately shown less correlation to the S&P 500 than have REITs. Doesn't energy deserve its own slice of the portfolio pie?

Well, one possible reason why REITS, and not energy stocks, are seen as a separate asset class (in addition to the reasons I explain in the previous sections) may be that the REIT marketers are savvier than the marketers of energy stocks. That's possibly the case. But I believe there is more to it than that.

Connection to tangible property

Some people argue that REITs are different than other stocks because they represent tangible property. Well, yeah, REITs do represent shopping malls filled with useless junk and condos filled with single people desperately looking for dates, and hospitals charging $10 for a Kleenex, and I suppose that makes them different from, say, stock in Anheuser-Busch or Procter & Gamble. But the reality is that

REITs are stocks. And to a great degree, they behave like stocks. If REITs are different than other stocks, unusually high dividends and lack of market correlation are the likely distinctions — not their tangibility. After all, aren't beer and toothpaste "tangible"?

Calculating a Proper REIT Allocation

You don't really need REITs for the income they provide. Some people have this notion that withdrawing dividends from savings is somehow okay but withdrawing principal is not. Don't make that mistake. The reality is that if you withdraw $100 from your $1,000 account, it doesn't matter whether it came from cash dividends or the sale of stock. You're left with $900 either way.

REMEMBER

If you need cash, you can always create your own "artificial dividend" by selling any security you like (preferably one that has appreciated). Not that I have anything against dividends — they're fine — but they shouldn't be your primary reason for purchasing REITs. (Much more on dividends, their pros and cons, in the next chapter.)

Your primary motivations for buying REITs should be diversification and potential growth. In the past, the diversification afforded by REITs has been significant, as has the growth. In this section, I help you consider how much of your portfolio you may want to allot to REITs.

Judging from the past

If you could go back 20 years in a time machine, I'd have you put, heck, *everything* in Apple. But REITs would not have been a bad option, either. Looking forward, of course, the picture's a bit less clear. However, I think you can presume, regardless of future performance, that REITs will continue to move in somewhat different cycles than other stocks.

I think you can also presume fairly safely that REITs will continue to produce healthy gains, over the long run. As with all stocks, anything can happen in the short run. Anything.

TIP

Putting all the factors together, I suggest that most investors devote perhaps 15 to 22 percent of the equity side of their portfolios to REITs. If your portfolio is "60/40" (60 percent stocks and 40 percent bonds), that would translate to a REIT position of 9 to 13 percent of your *entire* portfolio.

What if, like many people, you're a homeowner whose home represents most of your net worth? You may want to play it a little light on the REITs, but don't let the value of your home affect your portfolio decisions to any great degree. (See the sidebar, "Your residence, your portfolio.")

Splitting the baby: Domestic and international REIT funds

International REITs are worth breaking out of your international stock holdings for all the same reasons that U.S. REITs are worth having tucked into a larger portfolio of U.S. stocks. The REIT allotment you give to your portfolio might be evenly split between U.S. and international REITs, in keeping with the 50/50 split between U.S. and non-U.S. stocks that I suggest for your overall portfolio.

TIP

As I discuss in Chapter 9, about 45 percent of the world's stocks are non-U.S.; in my mind, it stands to reason that an optimally diversified portfolio will have good exposure to foreign stocks. If you follow my advice, you might (assuming you have a "60/40" portfolio) have two REIT funds, and each might be given a 3 to 5 percent allocation in your portfolio. Alternatively, you might have just one global REIT fund making up 6 to 10 percent of your portfolio, which will give you both your U.S. and foreign-REIT exposure in one shot. You'll find specific funds to meet these roles in just a few paragraphs.

YOUR RESIDENCE, YOUR PORTFOLIO

If you bought your home for, say, $130,000 some 26 years ago, and that home is now worth $1.3 million, I say, "Congratulations!" But don't let that bounty affect your portfolio decisions very much. After all, you'll always need a place to live. Sell the house today, and you'll presumably need to buy another (made of a similarly overpriced bundle of plywood and drywall).

Of course, someday you may downsize, and at that time you will be able to allot part of the value of your home to your portfolio. For primarily that reason, you may want to consider that the value of domestic real estate and the value of commercial real estate, while two different animals, are related. If your home represents a big chunk of your net worth, and especially if you are approaching a stage in life when you may consider downsizing, you may want to invest less in REITs than would, say, a renter of similar means. Or you may forget about U.S. REITs altogether and invest only in foreign REITs.

Oh, for you mathletes who think I've just made a mistake: Yes, yes, I know that I just said 6 to 10 percent of your (60/40) ETF portfolio might be made up of REIT funds, while several paragraphs earlier, I suggested that as much as 9 to 13 percent of your portfolio might be devoted to REITs. The reason for the discrepancy: You're also going to get some REIT exposure, above and beyond what you get from your REIT funds, in your broad stock-market ETFs. If, for example, you were to buy an S&P 500 index fund, about 3 percent of that fund would be made up of stock from REITs.

Picking REIT ETFs for Your Portfolio

If you want REITs in your portfolio, you won't get a whole lot of them unless you purchase a REIT fund. Despite the fact that there are roughly 160 of them, publicly traded REITs simply don't make up that large a segment of the economy.

So if you want the diversification power of this special asset class, you need to go out of your way to get it. But thanks to ETFs, doing so shouldn't be much of a hassle, and you get many of ETFs' other benefits in the bargain, including rock-bottom expenses.

TIP

The tax efficiency of ETFs can help limit the amount you're taxed on any capital gains you enjoy on your REIT fund, but it can't do anything to diminish the taxes you'll owe on the (nonqualified) dividends. For that reason, all REIT funds — ETFs or otherwise — are best kept in tax-advantaged retirement accounts, such as your Traditional IRA, Roth IRA, or 401k plan.

Although about 50 REIT ETFs are currently available to U.S. investors, a handful really stand out for their low costs and reasonable indexes. In fact, making the selection shouldn't be all that hard.

If you want to see nearly the whole buffet of REIT ETFs available, visit `www.reit.com`; click Investing in REITS, then List of REIT Funds, and finally Exchange-Traded Funds. You'll notice that some are leveraged (such as the ProShares Ultra Real Estate ETF [URE]), and I'd rather you stay away from the leveraged ETFs for reasons I discuss in Chapter 18. Others are focused on slivers of the REIT market (such as the Janus Henderson Long-Term Care ETF [OLD], which invests primarily in REITs that own and run senior living facilities). I'd rather you steer clear of those, too. (You can slice and dice a portfolio to death, but why do so?) Of what's left, several are quite good. Here, I outline the best of the best.

U.S. domestic REIT ETFs

The three funds I recommend are strikingly similar, and any one would fit the bill nicely when it comes to investing in the U.S. REIT market.

Schwab U.S. REIT ETF (SCHH)

Indexed to: Dow Jones Equity ALL REIT Capped Index

Expense ratio: 0.07 percent

Number of holdings: 140

Top five holdings: American Tower Corporation, Prologis, Inc., Crown Castle International Corp., Equinix, Inc., Digital Realty Trust, Inc.

Russell's review: The word "Capped" as it appears in the name of the index means that the indexers limit the representation of any one security in the index. In the case of this Dow Jones Index, no one REIT corporation can be given more than 10 percent representation in the fund. That kind of capping is a good thing in terms of diversification and controlling risk. It can, however, temper performance as the fund is limited in how much it can invest in one super-fast-growing REIT that suddenly dominates the market.

Fidelity MSCI Real Estate Index ETF (FREL)

Indexed to: MSCI USA IMI Real Estate 25/25 Index

Expense ratio: 0.09 percent

Number of holdings: 168

Top five holdings: American Tower Corporation, Prologis, Inc., Crown Castle International Corp., Equinix, Inc., Public Storage

Russell's review: The designation "25/25" in the name of the index refers to the stipulation that no one REIT company can have more than a 25 percent share of the market cap of the fund, and no group of entities with weights above 5 percent can exceed 25 percent of the fund. In other words, this is a "capped" index, just like the index on which the Schwab REIT is built, although the Fidelity fund, and even more so the Vanguard fund I describe next, have looser rules where it comes to capping.

Vanguard REIT Index ETF (VNQ)

Indexed to: MSCI US Investable Market Real Estate 25/50 Index

Expense ratio: 0.12 percent

Number of holdings: 178

Top five holdings: American Tower Corporation, Prologis, Inc., Crown Castle International Corp., Equinix, Inc., Public Storage

Russell's review: This is a broadly based ETF with a low expense ratio, even if slightly higher than Schwab's and Fidelity's. Be aware, however, that even with all the advantages of an ETF and the considerable tax-minimizing prowess of Vanguard, this ETF will represent something of a tax burden. For that reason, I recommend that you consider purchasing this ETF (as would be the case with Schwab's or Fidelity's REIT offerings) as a long-term investment and keeping it in a tax-advantaged retirement account.

International and Global REIT funds

If you follow my advice and split your REIT allocation between U.S. and international funds, the next three ETFs will definitely come in handy. The first two funds, Vanguard's VNQI and Xtrackers HAUZ, invest only in markets outside the United States and pair quite nicely with any of the domestic REITs I discuss earlier. The next fund, REET, is divided between U.S. and non-U.S. REITs, so it provides one-stop shopping for REIT investments (although at a higher cost than you'd pay for the Vanguard and Xtrackers options).

Vanguard Global ex-U.S. Real Estate ETF (VNQI)

Indexed to: S&P Global ex-U.S. Property Index, which tracks the performance of REITs in both developed and emerging markets outside of the United States

Expense ratio: 0.12 percent

Number of holdings: 680

Top five holdings: Vonovia, SE, Mitsubishi Estate Co., Ltd., Goodman Group, Sun Hung Kai Properties, Ltd., Mitsui Fudosan Co., Ltd.

Top five countries: Japan, China, Hong Kong, Australia, Germany

Russell's review: This ETF is an excellent way to tap into foreign REITs. Do take note that foreign REITs, like all foreign stocks, are going to be subject to currency flux as well as market volatility. In other words, expect a bit more of a roller-coaster ride with this and all foreign ETFs than you would expect of domestic ETFs. Given the high dividend yield, you are best off having foreign-REIT funds in a tax-advantaged account, if you have the room. But in a tax-advantaged account, you won't be able to recover the foreign tax withholding via the foreign tax credit. So if you only have room for one fund in your IRA, make it the U.S. REIT fund.

Xtrackers International Real Estate ETF (HAUZ)

Indexed to: ISTOXX Developed and Emerging Markets ex USA PK VN Real Estate Index

Expense ratio: 0.10 percent

Number of holdings: 570

Top five holdings: Vonovia, SE, Goodman Group, Mitsui Fudosan Co., Ltd., Sun Hung Kai Properties, Ltd., Mitsubishi Estate Co., Ltd.

Top five countries: Japan, Hong Kong, Australia, Germany, Great Britain

Russell's review: This has a somewhat similar mix to the Vanguard foreign-REIT fund, but it's not identical. In fact, the five-year return of HAUZ far exceeds VNQI (8.3 percent versus 5.9 percent). However, the returns for the first three quarters of 2021 are very similar. The "PK" and "VN" in the index title mean Pakistan and Vietnam, two countries the index chooses to ignore. I'm not sure why, but given that these two countries make up a tiny, tiny percentage of the world REIT market, I don't think it is worth lamenting.

iShares Global REIT ETF (REET)

Indexed to: FTSE EPRA/NAREIT Global REIT Index

Expense ratio: 0.14 percent

Number of holdings: 320

Top five holdings: Prologis Inc., Public Storage, Digital Realty Trust Inc., Simon Property Group Inc., Equinix Inc.

Top five countries: United States, Japan, United Kingdom, Australia, Canada

Russell's review: If you have a smaller portfolio, or if you long for simplicity, go with this perfectly fine ETF. But in most cases, I suggest that you instead combine a domestic REIT ETF (such as VNQ or FREL) with an international REIT fund (such as HAUZ or VNQI). You'll wind up with pretty much the same mix of REITs, but you'll be spending less on management expenses. Also, if you only have so much room in your IRA, it's best to have the U.S. REITs in there, and the foreign REITs in your taxable brokerage account.

IN THIS CHAPTER

» Examining the role of dividends in your portfolio

» Determining the potential payoff of dividend funds

» Understanding how to best employ dividends

Chapter 12

Dividend Funds: The Search for Steady Money

The check is in the mail. When you know it's true (it isn't always), there are perhaps no sweeter words in the English language. To many investors, the thought of regular cash payments is a definite turn-on. Always willing to oblige, the financial industry of late has been churning out "high-dividend" funds — both mutual funds and ETFs — like there's no tomorrow.

The idea behind these funds is simple enough: They attempt to cobble together the stocks of companies that are issuing high dividends, have high-dividend growth rates, or promise future high dividends. In this section, I spell out some of the high-dividend ETF options and then debate the value of investing in them.

But before I get to that, let me say to the one poster on the Bogleheads online forum who read an earlier edition of this book, that Russell Wild does *not* hate dividends. I don't hate dividend ETFs. Not at all. I love dividends. I just don't think that they are the answer to everything. And I don't think that they should be your sole criterion, nor the most important criterion when building an investment portfolio.

Your High-Dividend ETF Options

The oldest (launched March 11, 2003) and still one of the largest ETF dividends is the iShares Dow Jones Select Dividend Index Fund (DVY). If you really want a fund that pays high dividends, neither that fund nor any of the funds listed here would be bad options:

- Schwab U.S. Dividend Equity ETF (SCHD)
- Vanguard Dividend Appreciation ETF (VIG)
- Vanguard High Dividend Yield ETF (VYM)
- SPDR S&P Dividend ETF (SDY)
- First Trust Morningstar Dividend Leaders Index Fund (FDL)
- iShares Core Dividend Growth ETF

And if you really want to invest in high-dividend-paying international stocks, the following ETFs wouldn't be so bad, either:

- Schwab International Dividend Equity ETF (SCHY)
- Vanguard International High Dividend Yield (VYMI)
- First Trust S&P International Dividend Aristocrats ETF (FID)
- SPDR S&P International Dividend Equity ETF (DWX)

If you want to fine-tune your dividends and have them come from, say, small-cap stocks, mid-caps, or even emerging-markets small caps, you can find these and much more among the ETF high-dividend-paying offerings from WisdomTree. They offer not only the U.S. SmallCap Dividend Fund (DEM), the U.S. MidCap Dividend Fund (DON), and the Emerging Markets SmallCap Dividend Fund (DGS), but also a Europe SmallCap Dividend Fund (DFE), a Japan SmallCap Dividend Fund (DFJ), and even an International Dividend ex-Financials Fund (DOO).

And if you want even more fine-tuning of where your dividends come from, try Invesco. They have the plain-vanilla-ish Invesco Dividend Achievers ETF (PFM), the Invesco International Dividend Achievers ETF (PID), the Invesco Dow Jones Industrial Average ETF (DJD), and the Invesco S&P 500 High Dividend Low Volatility ETF (SPHD).

There are also high-dividend ETFs of various shapes and sizes offered by ProShares, VanEck, and FlexShares. These tend to be narrower and more exotic.

In a way, seeking dividends makes sense. After all, what's wrong with getting a monthly check? In another, larger way, though, the logic is a bit loopy, just as the marketing of high-dividend ETFs (sort of like toilet paper and breakfast cereal marketing) can be a bit intense and sometimes silly, and too often, slightly deceptive. Let me explain.

Promise of Riches or Smoke and Mirrors?

Dividends! Dividends! On the face of it, they look like free money. But nothing in life is quite so simple. Here are the typical arguments for buying a high-dividend fund, along with my retort to each.

- **Argument for dividends #1: Steady money is just like honey.** Huh? Are you crazy, Russell? Who in his right mind wouldn't want dividends? A stock that pays dividends is *obviously* more valuable than a stock that doesn't pay dividends. If I buy a high-dividend ETF, my account balance will grow every month.

  REMEMBER

  Retort: Suppose you own an individual share of stock in the McDummy Corporation (ticker MCDM), and MCDM issues a dividend of $10. The market price of your one share of MCDM, as a rule, will fall by $10 as soon as the McDummy Corporation issues the dividend. That's because the dividend comes from the company's cash reserves, and as those cash reserves diminish, the value of the McDummy Corporation diminishes (just as it would if it gave away, say, 101 plastic pink flamingoes from the front lawn of its corporate headquarters, or any other asset for that matter). As the value of the company diminishes, so too does the value of its shares. And the very same holds true for every stock held in an ETF. Thus, when a dividend-paying ETF issues a dividend, the price of the shares drops, and you are left no richer, no poorer.

- **Argument for dividends #2: They lower my tax hit.** But. . .but. . .suppose I need a steady stream of income. Isn't it better that I rely on dividends, which are generally taxed at 15 percent, instead of interest from bonds or CDs, which is taxed at my higher income tax rate?

  First retort: First, if you need a steady stream of income, nothing is stopping you from creating *artificial dividends* by selling off any security you like. You may pay capital gains tax, but that will be no higher than the tax on dividends. In the end, whether you pull $1,000 from your account in the form of recently issued dividends or $1,000 from the sale of a security, you are withdrawing the same amount. And what if one month you find you don't need the income? You can sell nothing and pay no tax, whereas with a high-dividend ETF, you'll pay the tax regardless.

Second retort: If you're really concerned about taxes, maybe you should be investing in tax-free municipal bonds.

Third retort: You should be comparing dividend-paying stocks to bonds anyway. Dividend-paying stocks are way, way riskier than almost any kind of bond.

- **Argument for dividends #3: Taxes, what taxes?** Russell, what gives? If I invest in an ETF, I won't have to worry about taxes because, as you've told us all along, ETFs are incredibly tax efficient.

  REMEMBER

  Retort: ETFs are above most mutual funds when it comes to tax efficiency, but that tax efficiency is aimed at reducing taxable capital gains, not dividends. An ETF can't do a whole lot to lessen the tax hit from dividends. ETF or mutual fund, you'll pay.

- **Argument for dividends #4: It's a new world!** Russell, you sound like a stick in the mud. This is an exciting new development in the world of investments.

  Retort: New development? Really? Equity income funds have been around for years and years, and they haven't exactly set the world on fire. And consider the age-old *Dogs of the Dow* strategy. Many people have believed that if every year you purchase the ten highest-paying dividend stocks in the Dow (the so-called *Dogs*), you can rack up serious returns. The strategy has been well studied, and it clearly isn't as powerful as the hype. The Dogs do seem to have some bark, but no more so than any other similarly sized and similarly volatile stocks. In other words, put a value lean on your portfolio, as I suggest in numerous places throughout this book (see especially Chapters 6 and 8), and you'll be getting plenty of dividends and much of the edge that high-dividend investors seek.

- **Argument for dividends #5: Don't you read history?** Over the course of history, Russell, much of the stock market's returns have come from dividends. You should know that.

  First retort: Yeah, so? During the longest bull market in history — the 1990s — stock market returns were running double digits a year, and very little was being shelled out in dividends. A company that isn't paying dividends is either investing its cash in operations or buying back its own stock. Either way, shareholders stand to gain. Just because much of the stock market's past returns have come from dividends doesn't mean that future returns must or will come from the same source.

  Second retort: If you look at high-dividend-paying sectors of the economy, you don't necessarily find that those sectors beat the broader market over long periods of time. The utilities sector is a perfect example. If the power of dividends were as great as the dividend hawks say they are, wouldn't the historical returns of the utilities industry and financial stocks and especially REITs clobber the S&P 500? That isn't the case.

- **Argument for dividends #6:** Back to history. . . Over the course of history, the total return on high-dividend stocks has been greater than the total return on nondividend-paying stocks.

  Retort: Maybe. Depends on the time period. But over the long haul, a high-dividend strategy would in no way have beaten a solid value strategy (focused on stocks that are inexpensive in relation to the company's earnings). And in more recent years, high-dividend-paying stocks haven't come close to the total returns of even the broad market. Remember at the beginning of this chapter, I talked about the iShares Select Dividend ETF (DVY) being the first of its kind? If you look at the total performance of DVY over the past 10 years, you find a very impressive return of 12 percent annually. But that isn't nearly as impressive as returns of the iShares Core S&P 500 ETF (IVV), with its 10-year annual return of 14.8 percent.

- **Argument for dividends #7: Dividends offer protection.** Stocks that pay high dividends are going to be less risky than stocks that don't. Those dividends create a floor, even if only psychologically. High-dividend-paying stocks cannot become worthless.

  Retort: You would think that high-dividend-paying stock ETFs would be less likely to fall precipitously should there be a major downturn in the stock market. On the face of it, the argument seems logical. In the real world, however, some studies of high-dividend-paying stocks indicate that they actually may be somewhat *more* volatile than the broad market. Go figure. Besides, if your main goal is to temper risk, you have other, more effective, ways of doing that. (See Part 3 on bonds.)

- **Argument for dividends #8: But still, it can't hurt.** All right, I concede, maybe these funds aren't the greatest thing since sliced bread. Still, can it hurt to buy one?

  Retort: Look, I don't *despise* these funds. Far from it. If you want to buy one, buy one. Put it into your retirement account, if there's room in there, and you won't even have to worry about any tax on the dividends. But don't assume that you're going to beat the broad market over the long haul. And know that you are buying a fund that is mostly large value stocks, typically within just a handful of industries (notably pharmaceuticals, utilities, and consumer staples). Your risk may be greater than you think. And if dividend-paying stocks are incredibly hot at the moment, be aware that their prices may be inflated.

- **Final argument for dividends #9: Waaaaaah! I want my dividends!** I don't care what you say. I'm going to buy a high-dividend ETF.

  Final retort: Fine. Consider the Vanguard options (VIG or VYM) or Schwab's US Dividend Equity ETF (SCHD). All three charge a very reasonable 0.06 percent — far less than the competition. (The difference between VIG and

VYM is that VIG focuses on companies that historically have increased their dividends; VYM couldn't care less about history and is more concerned with current yields.)

On the international front, I'd also recommend the Schwab (SCHY) or Vanguard (VYMI) options, which charge 0.14 percent and 0.28 percent, respectively.

By the way, for income, consider real estate investment trusts (REITs); dozens of ETF REIT options exist, and they tend to yield *double* the dividends paid by so-called "high-dividend" stock ETFs. (For information on REITs, see Chapter 11.)

TIP

Last but not least, if you're not going to be using that dividend money right away, make sure your ETF is held in an account at a brokerage house that will reinvest your dividends automatically without charging you a commission. The vast majority will do so, but not all.

3 Adding Bonds (Fixed Income) to Your Portfolio

IN THIS PART . . .

Take a quick course in how to mine for interest.

Discover why bonds and bond ETFs are your best friends in times of trouble.

Become versed in how to invest in U.S. Treasuries, agency bonds, and corporate bonds. . .via ETFs.

Learn about the world of tax-free municipal bonds, and bonds of foreign entities.

IN THIS CHAPTER

» Examining the rationale behind bond investing

» Recognizing different kinds of bonds

» Appreciating the risks that bond investing entails

» Knowing how much to allocate to your bond portfolio

Chapter 13

For Your Interest: The World of Bond ETFs

I love inline skating. Sometimes, I admit, I have taken to the Pennsylvania hills a bit too fast. There's just something about the trees racing by and the wind in my face that I can't resist. Whoosh!

On occasion, I've hit a bump, or some tiny driver in a monster SUV who can barely see over the steering wheel has cut me off, causing me to crash to the pavement. But thanks to the heavy, black plastic armor that covers my knees, elbows, wrists, and head (think of me as the Black Knight of Wealth Management), I've never been seriously injured.

Bonds are your portfolio's knee and elbow pads. When the going gets rough, and you hit the big bump (by any chance, do you remember 2008?), you'll be very, very glad to have bonds in your portfolio.

Plain and simple, there is no time-honored diversification tool for your portfolio that even comes close to bonds. They are as good as gold. . .even better than gold when you look at the long-term returns. Bonds are what may have saved your grandparents from selling pencils on the street following the stock market crash of 1929.

Bond Investing in the Modern Era

The one thing that grandpa and grandma never had — but you do — is the ability to invest in bond ETFs. Like stock ETFs, most bond ETFs (at least the ones I'm going to suggest) are inexpensive, transparent (you know exactly what you're investing in), and highly liquid (you can sell them in a flash). Like individual bonds or bond mutual funds, bond ETFs can also be used to produce a reliable flow of cash in the form of interest payments, making them especially popular among grandparent types of any generation.

Yes, I know those interest payments of late haven't been so great. Nominal bond interest rates are now (mid-2021) at rock-bottom lows. That makes bonds less attractive than they have been at other times in history, but it in no way renders them obsolete. And let me add that given relatively low inflation, the *real* rate on bonds is not all that horribly pathetic, historically speaking.

On January 1, 2020, 10-year Treasuries were paying 1.7 percent in interest. Back on January 1, 1979, they were paying 9.1 percent. Oh, those were the days! Um. . .not really. You would've fared much better in 2020 than in 1979, given that the inflation rate was but 1.4 percent in 2020 versus 13.3 percent in 1979. Remember, *real* return — return after inflation — is what matters.

Throughout this chapter, I discuss a few things about bond investing in general. Then, without knowing the intimate particulars of your individual economics, I try my best to help you decide if bond ETFs belong in your portfolio, and, if so, which ones. I also address that all-important and highly controversial question of how to achieve an optimal mix of stocks and bonds.

REMEMBER

The single most important investment decision you will ever make may occur when you determine the split between stocks and bonds in your portfolio. No pressure.

Tracing the Track Record of Bonds

Bonds, more or less in their present form, have been used as financial instruments since the Middle Ages. A bond, you see, is really nothing more than an I.O.U. Jane lends money to Joe. Joe agrees to pay Jane back at a certain date. Joe also agrees to add a bit of money on top of the principal that he returns to Jane. That's a bond. The money thrown in on top of the principal is called interest. It's that simple. Then, as now, bonds of varying risk existed. (See the sidebar, "The three risks of bond investing.") Then, as now, risks and returns were highly correlated.

In other words, Jane won't lend Joe money unless Joe is trustworthy. If Jane suspects that there is any chance that Joe can't or won't repay, she either won't lend him the money, or she'll demand higher compensation (more interest).

For the most part, bonds in the aggregate have been, and continue to be, less volatile than stocks, and their returns over time tend to be less. From 1926 to 2020, the average annualized nominal return of the S&P 500 (a broad index of U.S. stocks) has been around 10.7 percent, whereas the return of long-term U.S. government bonds has been approximately 5.6 percent.

A recent study from Deutsche Bank attempted to calculate the *real* returns of stocks versus bonds (the return *after* inflation, which happens to be the return that really counts) over the past 100, and even 200 years. Here's what they found: Stocks in the past 100 years have seen a real return of 7.65 percent, and 10-year Treasury bonds, 2.68 percent. (This compares to a 100-year real return of 3.78 percent for corporate bonds, 1.01 percent for housing, and –1.06 percent for commodities.)

Over the past 200 years, the Deutsche Bank researchers reckon stocks have returned, in real dollars, 6.66 percent, and bonds, 3.06 percent.

To look at it a different way, if you got in a time machine and went back to 1820 (James Monroe was president, and all the cool people were listening to the music of a wild-haired German dude named Ludwig), and invested $1 in the stock market (ignoring all taxes, investment fees, and so on), that $1 today would be worth very close to $400,000. That same dollar invested in bonds would be worth slightly more than $400.

These numbers may lead you to look at bonds and say to yourself, "Why bother?" Well, in fact, there's good reason to bother. Please read on before you decide to forsake this all-important asset class.

Portfolio protection when you need it most

When determining the attractiveness of bonds, you need to look not only at historical return, but also at volatility: Long-term U.S. government bonds (which tend, like all long-term bonds, to be rather volatile) in their worst year *ever* (2009) returned –14.9 percent. In their second-worst year ever (1967), they returned –9.2 percent. Those are big moves but still a walk in the park compared to the worst stock market years of 1931 (–43.3 percent), 1937 (–35 percent), 1974 (–26.5 percent), and 2008 (–37.0 percent).

THE THREE RISKS OF BOND INVESTING

When you buy a stock, your risks are plenty: The company you're investing in may go belly up; the public may simply lose interest in the stock, sending its price tumbling; or the entire economy may falter, in which case, your stock, like most others, may start to freefall. In the world of bonds, the risks aren't quite so high, and they tend to differ. Here are the three major risks of investing in bonds or a bond ETF.

- **Risk of default:** A bond is a promissory note. The note is only as good as the individual (Joe in the previous example), government, agency, or company that makes the promise to repay. If you buy a bond from ABC Corporation, and ABC Corporation can't pay, you lose. This risk of default is mostly an issue with high-yield ("junk") bonds. Don't invest in high-yield corporate bonds unless you're willing to shoulder some serious risk. Keep in mind when buying a high-yield bond ETF that if the economy tanks and shaky companies start to sink, you'll possibly lose both the income from the bonds and the principal. And that could hurt. High-yield bonds, for example, were little comfort to those who lost money in the stock market in 2008. The SPDR Barclays Capital High Yield Bond ETF (JNK), for example, saw returns in 2008 of –24.7 percent.
- **Interest-rate risk:** Suppose you are holding a bond with a 5 percent coupon rate, bought at a time when interest rates in general were 5 percent. Now suppose that the prevailing interest rate jumps to 10 percent. Are you going to be happy that you're holding a bond that is paying 5 percent? Of course not. If you hold the bond to maturity, there's a great opportunity cost. If you try to sell the bond before maturity, no one will give you full price; you'll need to sell it at a deep discount and take a loss. The longer the maturity of the bond, the greater the interest-rate risk. For that reason, the iShares Barclays 20+ Year Treasury Bond Fund (TLT) carries substantial interest-rate risk, whereas the iShares Barclays 1–3 Year Treasury Bond Fund (SHY) carries very little risk. Most of the other funds are somewhere in between. (There's a flip side to interest-rate risk: If you are holding a bond with a 5 percent coupon rate, and the prevailing interest rate drops to 3 percent, your bond will suddenly become a very hot ticket, selling at a juicy premium.)
- **Inflation risk:** Plain and simple, if you are holding a bond that pays 5 percent, and the inflation rate is 8 percent, you are in trouble. This is perhaps the biggest risk with bonds, especially low-yielding bonds, such as short-term and intermediate-term Treasuries. Since 1900, bonds have not seen a single decade in which they've lost value in nominal terms. But in real terms — after inflation eats away at the value — 6 of the 12 decades since 1900 have seen negative returns. The only bonds immune to this risk are inflation-protected bonds, which is why part of your bond portfolio should be invested in a fund such as the Schwab U.S. TIPS ETF (SCHP). Such bonds do, however, carry interest-rate risk, and another risk that's unique to them: *deflation* risk. If consumer prices start to drop, your inflation adjustment will be worth zero, and you'll be left holding the lowest-yielding bond in the land.

As I note in the introduction to this chapter, during the Great Depression years, bonds may have saved your grandma and grandpa from destitution. The annualized real return of the S&P 500 from 1930–1932 was –20 percent. The annualized real return of long-term U.S. government bonds during the same three years was 14.9 percent.

There are two reasons that U.S. government bonds (and other high-quality bonds) often do well in the roughest economic times:

- People flock to them for safety, raising demand.
- Interest rates often (not always, but often) drop during tough economic times. Interest rates and bond prices have an inverse relationship. When interest rates fall, already-issued bonds (carrying older, relatively high coupon rates) shoot up in price.

REMEMBER

As in the past, bonds may similarly spare your hide should the upcoming years prove disastrous for Wall Street. (You never know.) Whereas international stocks and certain industry sectors, like energy and real estate, have limited correlation to the broad U.S. stock market, bonds (not U.S. junk bonds, but most others) actually have a slight *negative* correlation to stocks. In other words, when the bear market is at its growliest, the complicated labyrinth of economic factors that typically coincide with that situation — lower inflation (possible deflation), lower interest rates — can bode quite well for fixed income. They certainly have done so in the past.

The way in which bonds tend to zig when stocks zag (and vice versa) is beautifully illustrated in Figure 13-1, provided by Vanguard Investments.

And also consider Figure 13-2, which shows how stocks and bonds have fared in some of the most exciting (read: volatile) investment years in the past eight decades.

History may or may not repeat

Of course, as investment experts say again and again (although few people listen), historical returns are only mildly indicative of what will happen in the future; they are merely reference points. Despite all the crystal balls, tea leaves, and CNBC commentators in the world, the experts simply don't know what the future will bring.

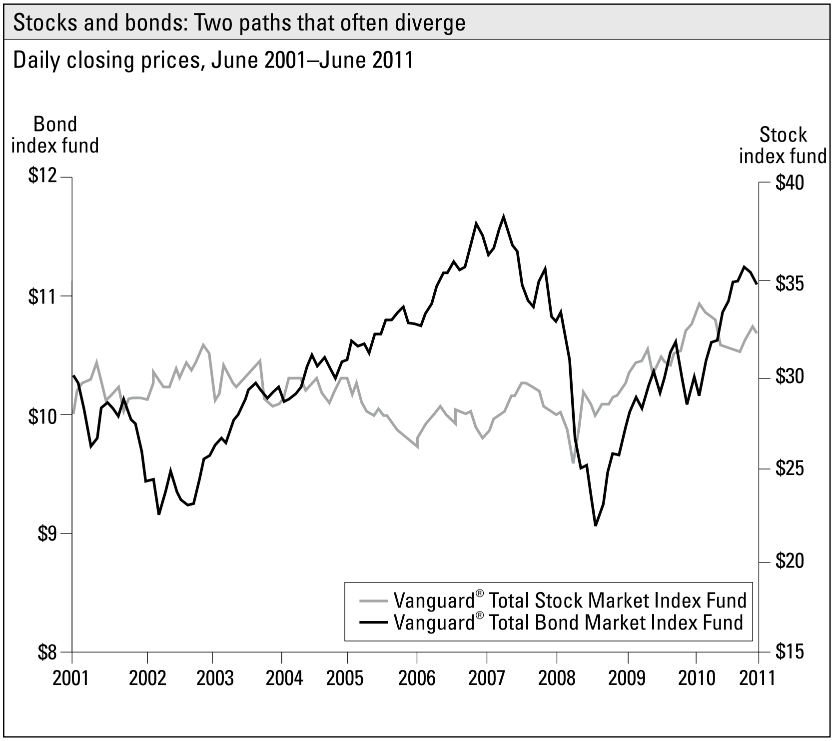


FIGURE 13-1: An illustration of how bonds protected investors during the very turbulent stock market of the first decade of the millennium.

Source: Vanguard, with permission.

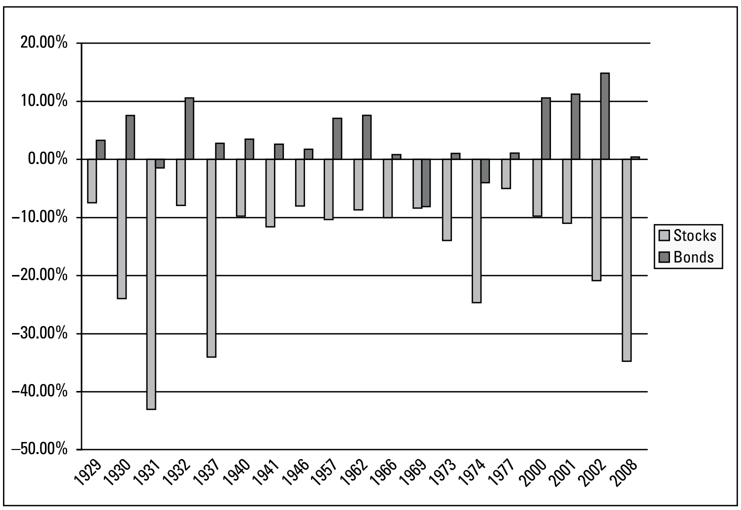


FIGURE 13-2: When stocks slide, bonds often do very well.

Source: Vanguard, with permission.

Although the vast majority of financial professionals use the past century as pretty much their sole reference point, some point out that in the 19th century, stocks and bonds actually had more similar — nearly equal, in fact — rates of return. And perhaps that may be true for the 21st century as well. Time will tell. In the meantime, given all this uncertainty, it would be most prudent to have both stocks and bonds represented in your portfolio.

Tapping into Bonds in Various Ways

Like stocks, bonds can be bought individually, or you can invest in any of hundreds of bond mutual funds or about 250 bond ETFs. The primary reason for picking a bond fund over individual bonds is the same reason you might pick a stock fund over individual stocks: diversification.

Sure, you have to pay to get your bonds in fund form, but the management fees on bond ETFs tend to be very low, as you'll see later in this chapter. Heck, there is even one broad market bond ETF that can be had at *no* expense. Conversely, the cost to trade individual bonds can be quite high. That's especially true of municipal bonds.

I'm not saying that you should not consider ever buying individual bonds. Doing so may make sense, provided that you know how to get a good price on an individual bond (if not, please read my book on that topic, *Bond Investing For Dummies*, published by Wiley) and provided that you are buying a bond with little default risk (such as a Treasury bond). But for the most part, investors do better with low-cost, indexed bond funds.

BOND FUND BONUS

One advantage of bond funds over individual bonds — very often overlooked by fans of individual bonds — is that you have the option of automatically reinvesting your interest payments. You can't do so with individual bonds, where your interest payments (if you don't spend the money right away) wind up going into your cash position (typically a money market fund paying zilch). I've encountered numerous investors who buy individual bonds and allow their interest payments to accumulate into humongous piles of very low-interest-paying cash. These people would likely have done considerably better in bond funds.

Like stocks, bonds can (and should, if your portfolio is large enough) be broken up into different categories. Instead of U.S. and international, large, small, value, and growth (the way stocks are often broken up), bond categories may include U.S. government (both conventional and inflation-adjusted), corporate, international, and municipal bonds — all of varying maturity dates and credit ratings. Unless you've got many millions to invest, you simply can't effectively own enough individual bonds to tap into each and every fixed-income class.

Finding strength in numbers

To be honest, diversification in bonds, while important, isn't quite as crucial as diversification in stocks. If you own high-quality U.S. government bonds (as long as they aren't terribly long-term) and you own a bevy of bonds from the most financially secure corporations, you are very unlikely to lose a whole lot of your principal, as you can with any stock. But diversification offers more benefits than just protecting principal. There's also much to be said for smoothing out returns and moderating risk.

Bond returns from one category of bonds to another can vary greatly, especially in the short run. In 2008, for example, high-yield corporate bonds, as represented by the SPDR Barclays Capital High Yield Bond ETF (JNK), saw a return of −24.7 percent. That same year, U.S. Treasury bonds, as represented by the iShares Barclays 7–10 Year Treasury Bond ETF (IEF), returned 17.9 percent. But the very next year, 2009, was a terrible year for Treasuries; IEF sagged −6.56 percent and JNK shot up 37.65 percent.

By owning a handful of bond funds, you can effectively diversify across the map. You can have Treasuries of varying maturities, corporate bonds of varying creditworthiness, international bonds of varying continents and currencies, and municipal bonds from across the nation. As you'll see throughout the rest of this chapter, I urge investors primarily to seek safety in bonds. If you're looking for high returns, go to stocks. The purpose of bonds, as far as I'm concerned, is to provide ballast to a portfolio.

The purposes served by bond funds are to make your bond investing easy, help you to diversify, and keep your costs low. Just as in the world of stock funds, all bond funds are not created equal. Some Treasury funds are better than others. Some corporate bond funds are better than others. Ditto for funds holding municipal bonds and foreign bonds.

Considering bond investment costs

Low costs are even more essential when investing in bonds than they are when investing in stocks. That's always been the case, but especially when interest rates are as low as they are now, and you must keep your costs low. When (historically, at least over the past century) you're looking at maybe earning 2.7 percent above inflation, paying 1.3 percent a year for some bond broker or fund company to manage your bond portfolio is going to cut your profits nearly in half. . .very likely more than half if you are paying taxes on the interest. Do you really care to do that?

As I write these words, interest rates are very low, which means that real interest rates (factoring in inflation, however low) for most bonds are considerably less than 2.7 percent. That fact means paying attention to the cost of your bond funds is more essential than ever.

The most economical bond funds are index funds, and you have a number of excellent index bond ETFs to choose from. Those I highlight in this section include some of the cheapest funds on the planet, which is a reason to like them. You'll see passing mention of a few funds in this chapter, but the actual list of my faves appears in the next two chapters.

TIP

Although I'm a big proponent of ETFs, I must tell you that the ETF tax edge in the fixed-income arena isn't nearly as sharp as it is in stocks. The tax efficiency of a bond index mutual fund and a bond ETF are just about the same. The wonderful structure of ETFs that I discuss in Chapter 2 simply doesn't matter all that much when it comes to bonds. Bonds pay interest — that's how you make money with bonds — and they rarely see any substantial capital gains. To the extent that they do have capital gains, however, ETFs may have an edge over mutual funds. But that's generally not going to be any big deal.

Determining the Optimal Fixed-Income Allocation

Okay, now that I've given you a few reasons to want to invest in bonds, it's time to tackle the really tough question: How much of your portfolio should you allocate to bonds? The common thinking on the subject — and I'm not above common thinking, especially when it is right on the mark — is that a portfolio becomes more conservative as its percentage allocation to bonds increases, and as its percentage allocation to stocks decreases.

Of course, that doesn't answer the $64,000 question (or however much that question would now be worth with inflation factored in): Just how conservative do you want your portfolio to be? Different financial planners use different approaches to arrive at an answer to this question. I feel confident that my approach is best (otherwise, I wouldn't use it); in the interest of brevity, let me present it in the simplest terms.

Here's my take: I reckon that stocks are very likely — but by no means certain — to outperform bonds over the next decade or two or three. But as in the past, you will see up years and down years in both markets. The down years in the stock market are the far more dangerous. Bear stock markets, historically, don't usually last for more than a few years, although some have been particularly brutal and have lasted a decade or more. (Think about the 1930s, the late 1960s to mid-1970s, and 2000 to 2009.)

Yet for most investors over the past 100 years, stocks have paid off handsomely. So it's a balancing act. Too much in the way of stocks and, should the markets go sour, you risk quick poverty. Too much in the way of bonds and, should consumer prices rise too much, you risk slow poverty as the interest you collect just barely stays ahead of inflation, or not even that, and you are forced to eat into your capital to pay the bills. In this section, I show you how to begin thinking about your own balancing act.

60/40? 50/50? Finding a split that makes sense

The balance between stocks and bonds is usually expressed as "[% stocks]/[% bonds]," so a 60/40 portfolio means 60 percent stocks and 40 percent bonds. The optimal balance for any given person depends on many factors: age, size of portfolio, income stream, financial responsibilities, economic safety net, and emotional tolerance for risk.

In general, I like to see working investors hold three to six months of living expenses in cash (money markets or Internet savings accounts) or near-cash (very short-term bond funds or short-term CDs). Non-working investors living largely off their portfolios should set aside much more, perhaps one to two years of living expenses. Beyond that, most people's portfolios, whether they're working or not, should be allocated to stocks (including REITs, which I discuss in Chapter 11), intermediate-term bonds, and perhaps a few alternative investments, such as market-neutral funds and perhaps a sprinkling of commodities (including precious metals).

TIP

In determining an optimal split, I would first ask you to pick a date when you think you may need to start withdrawing money from your nest egg. How much do you anticipate needing to withdraw? Maybe $30,000 a year? Or $40,000? If you haven't given this question much thought, please do! Start with your current job income. Subtract what you believe you'll be getting in Social Security payments or other pension income. The difference is what you would need to pull from your portfolio to replicate your current income. But most retirees find they need perhaps 80 to 90 percent of their working-days income to live comfortably. (You likely put less in the gas tank, buy fewer lunches out, have lower wardrobe expenses, and pay lower taxes, and hopefully, your house is paid for.)

Take a minute, please. Come up with a rough number of how much you're going to need to take from your nest egg each year.

Got it?

Whatever the number, multiply it by 10. That amount, ideally, is what I'd like to see you have in your bond portfolio, at a minimum, on the day you retire. In other words, if you think you'll need to pull $30,000 a year from your portfolio, I'd like to see you have at least $30,000 in cash and about $300,000 ($30,000 × 10) in bonds. That's regardless of how much you have in stocks — and, with the assumptions outlined previously, you should have at least an equal amount in stocks. (See more on building an adequate nest egg in Chapter 24.)

So here's the rough rule I'm suggesting (keeping in mind, please, that all rough rules can get you into trouble sometimes): If you are still in your 20s or 30s and want to keep the vast lion's share of your portfolio in stocks, fine. But as you get older and start to think about quitting your day job, begin to increase your bond allocation with the aim of getting to your retirement date with at least ten times your anticipated post-retirement withdrawals in bonds. Most people (who aren't rich) should have roughly one year's income in cash and the rest in a 50/50 (stock/bond) portfolio, more or less, on retirement day.

With at least one year's living expenses in cash and ten years of living expenses in bonds, you can live off the non-stock side of your portfolio for a good amount of time if the stock market goes into a swoon. (You then hope that the stock market recovers.)

If my rule seems too complex, you can always go with an even rougher rule that has appeared in countless articles. It says you should subtract your age from 110, and that's what you should have, more or less, in stocks, with the rest in bonds. So a 50-year-old should have 60 percent (110 – 50) in stocks and 40 percent in bonds. A 60-year-old would want a portfolio of about 50 percent (110 – 60) stocks and 50 percent bonds. And so on and so on. This rough rule — even rougher than mine! — may not be bad, assuming that you are of average wealth, are going to retire at the average age, will live the average life expectancy, and expect that the markets will see roughly average performance!

Meet Joe, age 67, with $840,000 in the bank

So let's consider Joe. He's a single guy with no kids who figures he's going to retire in one year. His salary is $65,000 a year ($55,000 after taxes). He has $800,000 in investments. He also has about $40,000 in cash and short-term CDs. He estimates that after Social Security and his government pension, he needs to pull another $24,000 a year out of savings to pay all the bills. It seems to me that Joe can do that and have a very good chance that his money will last as long as he lives. (Chapter 24 explains why.) How much should Joe invest in bonds and how much in stocks?

As a ballpark figure, without knowing much more about Joe (and ignoring for the moment such sticky things as present value and future taxes and Joe's expected longevity), I'd start by urging Joe to keep the amount he has in cash and short-term CDs ("near cash") exactly where it is. Then I'd take about $240,000 ($24,000 × 10) of the $840,000 and plunk it into a handful of fixed-income funds that would almost certainly include an intermediate conventional Treasury fund, an inflation-protected bond fund, and a high-quality corporate bond fund, such as, for example, VGIT, along with SCHP and VCIT, all discussed in the remainder of Part 3.

Depending on Joe's home state and his tax bracket (I didn't specify how much he'll be collecting in Social Security and pension benefits), I might also include some municipal bonds. The rest of Joe's money I would invest in a widely diversified portfolio made up mostly of stock ETFs.

Thus, Joe might be looking at an allocation of $560,000 stocks/$280,000 fixed-income (bonds, cash, CDs), or a 67/33 allocation. Joe also might be a good candidate for an immediate fixed annuity that would guarantee him the $24,000 a year he needs, or a good portion of it. (***Important note:*** Many annuities are financial dogs, and even the best annuities aren't for everyone. Please see my discussion in Chapter 25.)

REMEMBER

A 66/33 allocation might be considered too risky for a 67-year-old. Many retirement models would allocate more to the tune of 50/50 or even be less aggressive than that. I would opt for a more conservative route, too, if Joe didn't have his secure government pension, which, combined with Social Security, will cover all of his basic needs. Note, too, that I would use 66/33 only as my starting point. After taking all aspects of Joe's personal circumstances into consideration, including his guaranteed income stream, expected longevity, risk tolerance, and legacy desires (would he be okay with the idea of dying broke?), I might end up suggesting a 60/40 portfolio or perhaps even 50/50. If he were a very conservative fellow, I'd even be okay with 40/60.

Meet Betsy and Mike, age 36, with $30,000 in the bank

Betsy and Mike are happily married. (Yes, happy is important, both from a financial and nonfinancial point of view.) They both work and make decent incomes — enough so that if they needed to, they could live on one income. Betsy works in academia. Mike is a self-employed landscaper and a piano teacher. They have no children. They have no debt. They would like to retire by age 62 and do a lot of traveling.

Betsy and Mike obviously need to accumulate a lot more than $30,000 if they want to retire by their early 60s and travel to anyplace other than nearby Cincinnati. Their situation, I feel, warrants taking about as much risk as any investor should take. I might suggest a 75/25 portfolio or even (if Betsy and Mike were the type of people who could emotionally handle the volatility) an 80/20 portfolio. The 25 or 20 percent in bonds — $7,500 or $6,000 — I might allocate to a total-bond ETF, such as BKAG (discussed in Chapter 14), provided they had room in their retirement plans. If they didn't have the room in their retirement accounts, I'd look into tax-free muni ETFs, such as VTEB (discussed in Chapter 15).

REMEMBER

I can hardly imagine any investor for whom I would want to see any portfolio more aggressive than 80/20 (80 percent stock, 20 percent bonds) or more sedate than 20/80. Here's why:

- Studies show that 20 percent in bonds doesn't really lessen a portfolio's long-term performance all that much. Reason: When the market crashes, as it does every once in a while, you want some "dry powder" (such as bonds) that you can use to take advantage of the opportunity to purchase stock at fire-sale prices.
- Conversely, 20 percent in stocks doesn't really raise a portfolio's volatility all that much (and it may even lessen the volatility). Reason: Bond prices tend to drop the most when interest rates rise sharply. Interest rates tend to rise sharply when the economy is humming and stocks are doing well. Zig and zag. When you have no zig, you are more susceptible to heavy zag. And you can quote me on that!

IN THIS CHAPTER

» Exploring the bond offerings of Uncle Sam

» Learning how to beat inflation

» Entering the world of agency bonds

» Understanding bond ratings and what they mean

Chapter 14

Your Basic Bonds: Treasuries, Agency Bonds, and Corporates

At the time of this writing, there are about 250 bond ETFs. (This number does not include leveraged and inverse bond ETFs, which in Chapter 18, I both describe and attempt [not too subtly] to steer you away from.) The bond ETFs worth considering are issued largely by iShares, State Street SPDRs, Vanguard, JPMorgan, Schwab, Fidelity, Invesco, and BNY Mellon Bank.

In this chapter, I present some of my favorites, among the Treasury, U.S. agency, and corporate-bond offerings. In Chapter 15, I introduce you to some faves in the municipal and foreign-bond categories.

Please note that with the discussion of each bond ETF in this and the next chapter, I include the *current yield:* how much each share is paying as a percentage of your investment on the day I'm writing this chapter. I do so only to give you a flavor of how the yields differ among the funds. Current yields on a bond or bond fund, especially a long-term bond or bond fund, can change dramatically from week to week. So, too, can the difference in yields between short- and long-term bonds (known as the yield *curve*). You can check the current yield of any bond fund, as well as the yield curve, on the sites of the ETF providers themselves (see Appendix A) or on general investing sites such as Bloomberg.com (click Rates & Bonds), Treasury.gov, or (for the best compilation of aggregate yields on all kinds of bonds) Fidelity.com. With Fidelity, you don't need to have an account; just click Investment Products, then Bonds, and then Research Fixed Income.

TECHNICAL STUFF

Note that several different kinds of bond yield exist. (For detailed information, I once again refer you to my book, *Bond Investing For Dummies.*) For the sake of consistency, the bond yield I refer to throughout the rest of this chapter is the "SEC 30-Day Yield." Here's the formula for you techno-heads: 2[{(a–b)/cd+1}^6–1]!

For you non-techno-heads, here's what this yield essentially means: If you (or the fund manager) were to hold to maturity each and every one of the bonds in a fund's portfolio, as it stood over the past 30 days, and reinvest all interest payments (that is, you plowed those interest payments right back into your bond portfolio), your SEC yield is what you'd get over the course of a year. It takes into account all fund fees and expenses. The formula was created, and the methodology is enforced, by the U.S. Securities and Exchange Commission, which is where the "SEC" in the formula's name comes from.

JUST WHAT THE HECK IS *DURATION*?

Under the description of each bond ETF I outline in this book, you'll see the word *duration* with a number next to it: 2 or 3.5 or 7.3 and so on. Knowing the duration of a bond is almost as important as knowing the bond's credit rating. Whereas the credit rating attempts to measure the risk you are taking that the issuer of the bond could go bankrupt, the duration measures the risk you take on the bond should interest rates move in the wrong direction.

Picture that you have a bond that pays 3 percent. All other bonds of similar credit quality are also paying 3 percent. The next week, interest rates rise, and now similar bonds are being issued that pay 4 percent. Your bond is going to lose value. After all, who wants a $1,000 bond that's paying $30 a year when they can buy other $1,000 bonds paying $40 a year?

Duration measures interest-rate sensitivity. In other words, how much is your bond price (or the price of your bond ETF shares) going to lose if interest rates climb? Duration takes into consideration a number of things, including the bond's maturity. In the preceding example, a bond with a maturity of one year away isn't going to lose as much as a bond with a maturity 15 years away. With the shorter-term bond, you are going to earn $30 versus $40 — eating crow — for just one year. In the case of a longer-term bond, should interest rates rise 1 percent, you can expect to earn $30 versus $40 for many years to come. . .much more crow to eat. Thus, the longer-term bond will have a higher duration, indicating greater interest-rate sensitivity.

In concrete terms, a duration of, say, 5 means that if ambient interest rates rise 1 percent (from, say, 3 percent to 4 percent), then the price of your bond or bond fund will drop 5 percent. The price of a bond with a duration of, say, 10 would see a price drop of 10 percent under similar circumstances. Of course, this knife cuts both ways. Should interest rates fall, then those bonds with greater duration would see a greater rise in their market price.

So why take the risk of a high-duration bond when you could buy just low-duration bonds (or ETFs)? Simple. You don't know where interest rates are going. And, usually, the longer-duration bonds will have higher yields. So you to tend to do better with the shorter-duration bonds only if interest rates rise. You should do better with the longer-duration bonds if interest rates rise, or if they stay about the same.

Tapping the Treasuries: Uncle Sam's IOUs

If the creator/issuer of a bond is a national government, the issue is called a *sovereign* bond. The vast majority of sovereign bonds sold in the United States are Uncle Sam's own Treasuries. (By the way, "Treasuries" are sometimes spelled "Treasurys." I don't know why.) Treasury bonds' claim to fame is the allegedly absolute assuredness that you'll get your principal back if you hold a bond to maturity. The United States government guarantees it. For that reason, Treasuries are sometimes called "risk-free."

Treasury bond ETFs come in short-term, intermediate-term, and long-term varieties, depending on the average maturity date of the bonds in the ETF's portfolio. In general, the longer the term, the higher the interest rate but the greater the volatility. Note that interest paid on Treasuries — including Treasury ETFs — is federally taxable but not taxed by the states. As it happens, bonds issued by state and local governments in the United States, known as *municipal bonds,* are not taxed by the federal government. This reciprocal deal was orchestrated by the Supremes (those judges in Washington, not the singing group) back in 1895.

Treasuries, regardless of whether they are short- or long-term, also come in two broad groupings: conventional and inflation-adjusted. I introduce conventional Treasuries first, and then inflation-adjusted Treasuries. Conventional bonds pay a higher interest rate than inflation-adjusted bonds. But inflation-adjusted bonds get to see their principal bumped up twice a year to match the Consumer Price Index (CPI).

Following are detailed descriptions of some of your best choices for conventional Treasury ETFs. Note that if you don't see the word *inflation* or *TIPS* (Treasury Inflation-Protected Securities) in the name of the fund, you can assume that the fund is holding conventional Treasuries.

Schwab Short-Term U.S. Treasury ETF (SCHO)

Indexed to: The Bloomberg Barclays U.S. Treasury 1–3 Year Bond Index

Expense ratio: 0.05 percent

Current yield: 0.18 percent

Average weighted duration: 2.0 years

Russell's review: This ETF and others of its ilk (such as the Vanguard Short-Term Government Bond ETF [VGSH]) should be considered "near-cash." You'll see very little volatility, and you'll see very little interest. I would consider this a good place to park any money you need to keep liquid, but you should compare the yield on SCHO to what you can get with an online, FDIC-insured savings bank, such as Ally Bank or Marcus, or short-term CDs. As I'm writing these words, Marcus Bank is offering 0.50 percent on an FDIC-insured savings account. That beats SCHO, and I would suggest you opt for the savings account, unless you plan on using the money in the next few weeks, in which case taking it from your brokerage account would be easier than opening an online savings account. A good way to shop savings account interest rates, by the way, is to go to the website, Bankrate.com.

Vanguard Short-Term Treasury ETF (VGSH)

Indexed to: The Bloomberg Barclays U.S. Treasury 1–3 Year Bond Index

Expense ratio: 0.05 percent

Current yield: 0.21 percent

Average duration: 2.0 years

Russell's review: This fund is nearly identical to SCHO (the preceding fund). They track the same index, and they have the same low volatility, little interest, and low expense ratio. And in this category, with yields so low, the expense ratio *must* be low or you're going to lose money in real-dollar terms. I'm offering you two good options for tapping short-term Treasuries, in part not to show favoritism, but also to make a point about expense ratios. Expense ratios for ETFs have dropped precipitously over the past several years. At the same time, trading commissions charged by brokerage houses have also dropped precipitously, and in the last year or two, there's been a revolution of sorts, with most large brokerages now charging zero to place all ETF trades. The two trends are closely related. When one can easily and cheaply swap from one ETF to another (say, Vanguard's VGSH to Schwab's SCHO, or the other way around), it makes for much greater competitiveness among the fund companies. So keep an eye on the expense ratios of VGSH and SCHO. My guess is that one or the other brokerage will soon reduce the expense ratio from the current low, low 0.05 percent to something even lower. Caution: Even when there are no trading commissions, you may still lose a few pennies on every trade due to "spreads" — the difference between asking price and selling price (a.k.a., the cut of the middlemen), so you don't want to trade ETFs every day, even with no commissions. In a non-retirement account, buying and selling may also be a taxable event.

Vanguard Intermediate-Term Treasury Index ETF (VGIT)/Schwab Intermediate-Term U.S. Treasury (SCHR)

Indexed to: The Bloomberg Barclays U.S. Treasury 3–10 Year Index, an index tracking the intermediate-term sector of the U.S. Treasury market

Expense ratio: 0.05 percent

Current yield: 0.9 percent

Average duration: 5.4 years

Russell's review: Expect modest returns and modest volatility. Of the three kinds of Treasuries — short, intermediate, and long — the intermediate-term bonds make the most sense for most people's portfolios, and the virtually identical VGIT and SCHR ETFs are excellent ways to invest in them. Whatever your total allocation to fixed income, Treasuries deserve a certain allotment of that fixed income. You can see how I work these ETFs into several model portfolios in Chapter 21.

Schwab Long-Term U.S. Treasury ETF (SCHQ)/Vanguard Long-Term Treasury ETF (VGLT)

Indexed to: The Barclays Capital U.S. Long Treasury Index, an index tracking the long-term sector of the U.S. Treasury market

Expense ratio: 0.05 percent

Current yield: 2.25 percent

Average duration: 17.7 years

Russell's review: These two funds are, for all intents and purposes, identical. They are both very low cost, and they provide access to the very same bonds. But do you want long-term bonds in your portfolio? Given the potentially high volatility of long-term bonds, especially the degree to which prices could tumble if interest rates rise too quickly, I think your allocation to long-term bonds should be limited. And long-term Treasuries? Hmmm. I believe that Treasuries are perhaps the safest investment in the land, but not *entirely* risk-free. I don't mean to sound unpatriotic. I don't mean to sound alarmist. But the size of our nation's debt and deficit makes the Appalachians look flat by comparison. I may consider a short-term Treasury bill to be risk-free, but a 20+ year Treasury? Wave your flag all you like, but you take on *some* risk of principal loss here. I'm not alone in my thinking. In 2011, Standard & Poors downgraded its credit ratings of U.S. Treasuries from AAA (outstanding) to AA+ (excellent). The other two big credit rating firms, Moody's and Fitch, did not follow S&P in downgrading Uncle Sam's creditworthiness, but in July 2021, Fitch announced that it is considering a downgrade, not only because of high government debt, but also because of "a decline in the coherence and credibility of U.S. policymaking," which I think is an indirect way of saying that lawmakers of the two major parties can't sit at the same table without vomiting, so little gets done.

TECHNICAL STUFF

Understand the risk here: The U.S. government doesn't need to go "bankrupt" before Treasury bonds take a hit. Interest rates are set by the marketplace and, in part, reflect creditworthiness. The more indebted our nation becomes, the more worries that arise about a "decline in the coherence of policymaking," the more closely it begins to resemble a potential deadbeat. Deadbeats pay higher interest rates than others. If the market starts to demand deadbeat rates of interest on U.S. sovereign debt, interest rates will shoot up and the value of long-term Treasuries will tumble. Long-term Treasuries may deserve a modest allocation in your portfolio, and VGLT or SCHQ represent a fine way to get it. Either way, make sure that any money allocated to this fund is money that you aren't going to need to touch for a number of years.

Bread at $15 a Loaf? Getting Inflation Protection in a Flash

Technically, U.S. Treasury Inflation-Protected Securities are Treasuries, but few investment pros ever refer to them as Treasuries. Most refer to them simply as TIPS. I discuss them separately from the other Treasury obligations here because they play a distinctly different role in your portfolio.

The gig with TIPS is this: They pay you only a nominal amount of interest (currently even long-term TIPS are paying about one-third of 1 percent), but they also kick in an adjustment for inflation. So, for example, if inflation is running at 3 percent, all things being equal, your long-term TIPS will return 3 percent, plus whatever nominal interest is on top of that.

TECHNICAL STUFF

If you want to know what the rate of inflation is going to be over the next few years, I can't tell you, but I can tell you what rate of inflation the bond market expects. That would be the difference between conventional Treasury bonds and TIPS. If, for example, a 10-year conventional Treasury bond were paying 3 percent and the 10-year TIPS were paying 0.5 percent, the difference (2.5 percent) would be the rate of inflation that bond buyers collectively expect to see.

Either the Schwab U.S. TIPS ETF (SCHP) or the similar but shorter-term Vanguard Short-Term Inflation-Protected Index Fund (VTIP) are excellent ways to tap into this almost essential ingredient in a well-balanced bond portfolio.

Schwab U.S. TIPS ETF (SCHP)

Indexed to: The Bloomberg Barclays Capital U.S. Treasury Inflation-Linked Bond Index

Expense ratio: 0.05 percent

Current yield: Puny, *but* you get an inflation adjustment on top of the puny interest. The best way to estimate the return you're going to get on TIPS is to assume that it will be very similar to conventional Treasuries of similar maturity and duration. If inflation runs higher than expected, you'll do better with TIPS; if slower than expected, you'll do better with conventional Treasuries. Best, therefore, to have both.

Average duration: 7.4 years

Russell's review: TIPS belong in your portfolio, and this fund may be the best way to hold them. You won't get rich off the earnings, and the volatility may be more than you like. But if inflation goes on a tear, you are protected. Not so with other bonds. Of course, if inflation doesn't go on a tear, your money will earn sub-par returns. But that's okay — you can think of any lost interest as the premium on an insurance policy that you know you should have.

TIP

Note that TIPS are notoriously tax inefficient, even when held in an ETF. Ideally, you would hold your TIPS shares in a tax-advantaged retirement account. In general, whatever your overall allocation is to fixed income (excluding short-term cash needs), perhaps one-quarter to one-third of that amount could be put into a fund such as SCHP or VTIP. Err more toward one-quarter if you have a fairly aggressive portfolio. Err more toward one-third if you have a more conservative portfolio. Rationale: Your stocks are also, historically speaking at least, a good hedge against inflation. The more stocks you own, the less important the role of TIPS.

Vanguard Short-Term Inflation-Protected Securities Index Fund (VTIP)

Indexed to: The Bloomberg Barclays U.S. Treasury Inflation-Protected Securities 0–5 Year Index

Expense ratio: 0.05 percent

Current yield: Puny — even punier than you'd get on the longer-term TIPS, *but* you get an inflation adjustment on top of the punier-than-puny interest. You're never ever going to retire rich off this fund.

Average duration: 2.6 years

Russell's review: Given that you can expect to earn next to nothing on top of the inflation rate, this fund belongs in your portfolio merely as a stabilizer, or as a form of "near-cash." If you told me that you wanted to make sure you had $50,000 in a year with which to buy a house, I might have you put that $50,000 into this fund. . .or perhaps $25,000 into this fund and $25,000 into short-term conventional Treasuries. As with any fund that pays little, keeping your costs low is crucial. And this Vanguard fund charges less than any competitor for short-term TIPS.

Treasuries' Cousins: U.S. Agency Bonds (Mortgage-Backed Securities)

The better part of mortgage-backed bonds are issued by the likes of the Government National Mortgage Association (Ginnie Mae or GNMA) and the Federal National Mortgage Association (Fannie Mae or FNMA), collectively known as government agencies. Even though not all of Washington's agencies are technically part of the government, most of them — and the bonds they issue — have not only mortgages to buoy them but also the full faith and backing of the U.S. government.

And so these bonds, and the ETFs that offer these bonds, are generally considered very safe — almost as safe as Treasuries. Because of the nature of the bonds, they are not as interest-rate sensitive as Treasuries. And because they are both considered a tad less safe and also not as liquid (not a concern for buy-and-hold investors), they tend to pay slightly more over time than Treasuries. As I'm writing these words, the yield on agency bonds is about 1 percent, versus 0.9 percent for intermediate-term Treasuries. They are often that close.

So, why bother with agency bonds? Well, they also serve as a good diversifier within a bond portfolio. They sometimes see their prices rise or remain stable when other bond prices are falling, and vice versa. I do not consider them a necessity, although I certainly have used them with clients who have conservative portfolios, and therefore a lot of bonds. Lately, with the threat of rising interest rates being higher than usual, I've upped the allocation of agency bonds in many client portfolios, as well as in my own, because they do tend to be less interest-rate sensitive than Treasuries.

If you want agency bonds in your portfolio, I recommend without reservation the Vanguard Mortgage-Backed Securities ETF (VMBS):

Indexed to: The Bloomberg Barclays Capital U.S. MBS Float Adjusted Index

Expense ratio: 0.05 percent

Current yield: 1.03 percent

Average duration: 4.9 years

Russell's review: You can find a dozen ETFs just like this one issued by other providers. But given the great similarity between all of these funds, I say go with the least expensive, and that, at least for now, is the Vanguard fund. *Float adjusted*, by the way, simply means that the index only counts shares available to investors and excludes closely held shares that don't trade on the open market. In terms of the risk and return of an ETF, I'd say it is of minimal importance.

Banking on Business: Corporate-Bond ETFs

Logically enough, corporations issue bonds called *corporate* bonds, and you can buy a dizzying array of them with varying maturities, yields, and ratings, either individually or in fund form. There are many dozens of corporate-bond ETFs. And with corporate bonds — even more than government bonds because diversifying to curtail risk is crucial — it makes a whole lot of sense to buy them in fund form. With fees lately dropping like hail, ETFs provide a very potent way to access this important asset class.

Corporate bonds typically pay higher rates than government bonds. Historically, going way back, the "spread" has been about 1 percent a year higher, but in the last decade or two, the return on corporate bonds overall has been much higher than on government bonds — more than 2 percent higher, although the spread has diminished recently. Vanguard's Intermediate-Term Corporate Bond ETF (VCIT) was established on November 19, 2009, the very same day that Vanguard gave birth to its Intermediate-Term Treasury ETF (VGIT). The average annual returns to date (mid-2021) are 3.10 percent for VGIT versus 5.71 percent for VCIT; the current yield is 0.92 percent for VGIT versus 1.92 percent VCIT.

TIP

In the area of corporate bonds, credit ratings are very important. Know that the average bond rating of, say, Vanguard's VCIT, is between Baa and A, which means, more or less, that the bonds are issued by companies that are fairly solvent. But you are "earning" the higher return over VGIT by taking a risk that, in the case of a recession, some of the issuers might go belly up, and your ETF shares could see a price drop. See the sidebar, "Understanding bond ratings," for more information.

Do the bond raters sometimes get it wrong? Do they sometimes mistake a solid company for a losing venture and vice versa? Sometimes, they do. But that certainly doesn't render them useless. They do have a pretty good track record overall, just as *Consumer Reports* does for helping you choose reliable cars over lemons.

Oh. . .if you don't know how the ratings agencies rank a certain bond or bond fund, just look at the bond's or fund's yield: generally, the higher the yield, the lower the credit quality. The highest-yielding bonds are called, appropriately enough, *high-yield bonds*, which is more or less synonymous with *junk bonds*. I generally avoid junk bonds for the simple reason that they, unlike "investment-grade" bonds, do not offer a safe harbor should your stocks tumble. When stocks go south, junk bonds almost always do, as well (although the stocks may go as far south as Costa Rica, while the junk bonds may descend only to Mexico). So what's the point? You might as well invest in stocks, where the long-term returns are going to be higher than with any bonds, including the highest-yielding bonds.

UNDERSTANDING BOND RATINGS

In August 2011, the credit rating agency Standard & Poors (S&P) downgraded U.S. Treasury bonds from the highest rating (AAA) to a smidgeon below (AA+). Other bond raters did not follow suit (although some have been debating doing so of late). Despite S&P's dramatic announcement, U.S. Treasury bonds are still considered by nearly all to be the safest bonds in the land because they are backed by the full faith and credit of the U.S. government. And even though that government has a huge debt, it does have the ability to raise taxes. Bonds issued by federal government agencies (such as the Government National Mortgage Association, commonly known as Ginnie Mae) are typically seen as one tiny step below Treasury bonds in terms of safety.

Bonds issued by corporations and municipalities (cities, counties, and their agencies) can vary in safety from quite high to very low, depending on the financial strength of the issuer. (Corporations tend to default more often than do municipalities, and when they do, there are often fewer residual funds for bondholders to grab.) The financial strength of the issuer is judged by credit rating agencies such as S&P and Moody's. Following are the most common ratings.

S&P Rating	Moody's Rating	Quality	What It Means
AAA	Aaa	Outstanding	Your money is safe; there's no risk of default.
AA	Aa	Excellent	Your money is safe; there's almost no risk of default.
A	A	Medium grade	Your money is likely safe.
BBB	Baa	A little shaky	Your money is probably safe, maybe.
BB	Ba	Speculative	With luck, you'll get your money back.
B	B	Very speculative	With a lotta luck, you'll get your money back.
CCC	Caa	Possibly in default	Pray!
CC	Ca	Toilet paper	Pray harder!

Generally, those bonds that are rated by S&P as BBB or above are referred to as "investment grade," whereas those with a rating of BB or below are called "high-yield" or "junk." Of course, it's all a spectrum, and any two ETFs holding "investment-grade" bonds can still differ significantly in their overall credit quality.

(continued)

(continued)

By the way, a bond that was investment grade, and then —– due to financial problems with the issuer — gets demoted to junk, is called a "fallen angel." Yes, you can find an ETF that invests in fallen angels: the iShares Fallen Angels USD Bond ETF (FALN). It has an average quality rating of BB, and I'm not convinced that the fallen angels are going to perform any better in the long run than any other collection of BB bonds.

Vanguard Intermediate-Term Corporate Bond ETF (VCIT)

Indexed to: The Bloomberg Barclays U.S. 5–10 Year Corporate Bond Index

Expense ratio: 0.05 percent

Current yield: 1.9 percent

Average credit quality: Somewhere between A and Baa, on the Moody's scale

Average duration: 6.5 years

Russell's review: Investment-grade corporate bonds have done a pretty good job of holding their own in bad times. You get more return than you do with Treasuries of equal maturity, although unlike Treasuries, with corporate bonds you pay state taxes on the dividends. If your portfolio is large enough, you want something like VCIT, as well as government bonds. In fact, with interest on government bonds now riding lower than the expected rate of inflation, you'll need some corporate bonds just to keep your bond portfolio above water. (***Reminder:*** Bonds are for ballast and getting a good night's sleep, not for high return. That's what stocks are for. Breaking even on your bonds after inflation should not be considered any great failure.)

Vanguard ESG U.S. Corporate Bond ETF (VCEB)

Indexed to: The Bloomberg Barclays MSCI U.S. Corporate SRI Select Index (*SRI* stands for Socially Responsible Index; *ESG* stands for Environment, Social, and Governance.)

Expense ratio: 0.12 percent

Current yield: 1.78 percent

Average credit quality: Somewhere between A and Baa, on the Moody's scale

Average duration: 8.1 years

Russell's review: If you'd rather not invest in companies that profit off porn, booze, gambling, nukes, automatic rifles, and fossil fuels, then you might want to spend a little more for VCEB, which, other than screening out certain companies, is a heck of a lot like VCIT. I would expect the long-term returns of VCEB (which has only been in existence since late 2020) to be a smidgeon less than VCIT, but perhaps with slightly less risk. See more on ESG investing in Chapter 17.

Vanguard Short-Term Corporate Bond Index (VCSH)

Indexed to: The Bloomberg Barclays U.S. 1–5 Year Corporate Bond Index, a pot of about 2,340 bonds from corporations that the raters think have little chance of going belly up

Expense ratio: 0.05 percent

Current yield: 0.84 percent

Average credit quality: Between A and BBB, on the S&P scale

Average duration: 2.8 years

Russell's review: In normal times, I would encourage most investors to stick with intermediate-term bonds and forget about short-term bonds that typically yield considerably less. However, when interest rates are as low as they have been in decades (as they are while I'm writing this chapter), I tend to lean my client portfolios more to the short term. Reason: When interest rates rise, as they eventually will, longer-term bonds are going to get hit. For more conservative investors especially, VCSH, during times of very low interest rates, may warrant half your allocation to corporate bonds. When interest rates start to climb back up to more normal historical levels, you may want to move some or all of the money in VCSH to VCIT or VCEB.

iShares ESG Aware 1–5 Year USD Corporate Bond ETF (SUSB)

Indexed to: The Bloomberg Barclays MSCI US Corporate 1–5 Year ESG Focus Index

Expense ratio: 0.12 percent

Current yield: 0.73 percent

Average credit quality: Between A and BBB, on the S&P scale

Average duration: 2.82 years

Russell's review: If you'll sleep better at night knowing that you're not supporting the manufacture of weaponry, tobacco, coal, and other goods that collectively are of dubious value to humans and polar bears, and you also want the lesser volatility but can accept the lower returns of short-term bonds, then this fund is a good choice for you.

The Whole Shebang: Investing in the entire U.S. Bond Market

The broadest fixed-income ETFs are all-around good bets, especially for more modest-sized portfolios. Note that these bonds use a total bond market approach, which means about two-thirds government bonds and one-third corporate. These funds also make the most sense for investors with lots of room in their tax-advantaged retirement accounts. If you have to stick your bonds in a taxable account, you're probably better off separating your Treasury bonds and your corporate bonds. Reason: You get a small tax break on Treasury bond interest, in that you do not have to pay state income tax. If, however, your Treasury bonds are buried in an aggregate fund, such as these, you have to pay state income tax on the interest. Dem's da rules.

Note that the terms *aggregate bond*, *total bond*, and *core bond* can be a bit misleading in that they represent bonds issued by the federal government (Treasury and agencies) and by corporations, but as a rule, they do not include tax-free municipal bonds, which make up a good chunk of the true total bond market but are considered an entirely separate genus from taxable bonds. They also do not include Treasury Inflation-Protected Securities, also known as TIPS. That, too, is considered a different beast, kept aside from other "conventional" bonds.

BNY Mellon Core Bond ETF (BKAG)

Indexed to: The Bloomberg Barclays US Aggregate Total Return Index

Expense ratio: 0 percent (No, this is not a typo.)

Current yield: 1.1 percent

Average credit quality: 38 percent of the bonds are Treasuries, 27 percent are agency bonds, and the rest are mostly A to Baa corporate bonds, using Moody's ratings.

Average duration: 6.54 years

Russell's review: In April of 2020, BNY Mellon Bank, one of the largest banks in the world, finally jumped into the ETF game with eight very reasonably priced, broad index funds. Two of them — BKAG, and the BNY Mellon US Large Cap Core Equity ETF (BKLC) — charge *no* fees. A few mutual-fund companies, such as Fidelity, have offered a handful of broad, indexed no-charge mutual funds for several years now. That's understandable. Fidelity hopes to bring in clients to use its brokerage services by luring them with these freebies. But in the case of ETFs, well, I was shocked to see this. Because you can buy ETFs at *any* brokerage, BNY Mellon stands to gain little. I asked a BNY Mellon executive why they were doing this, and he said it was to introduce investors to the bank's lineup of ETFs, hoping that they will buy others. In a sense, this is just like a "loss leader," such as cheap eggs or milk, used to bring customers into a grocery store. I say take advantage! If you are going to own a "total bond" fund, why not get it for free? I really like this ETF. But know that there are other very similar total bond funds that charge *almost* nothing.

Vanguard Total Bond Market (BND)

Indexed to: The Bloomberg Barclays U.S. Aggregate Float Adjusted Index, which is made up of about 10,000 bonds, two-thirds of which are U.S. government bonds and one-third of which are higher-quality corporate bonds. The average credit quality indicates that there is little chance any of the bonds in the index will default, and even if a few did, with about 10,000 holdings, the entire apple cart wouldn't turn over.

Expense ratio: 0.035 percent

Current yield: 1.34 percent

Average credit quality: 65 percent are U.S. government bonds, and the majority of the rest are corporate bonds rated BBB or higher.

Average duration: 6.8 years

Russell's review: How can you go wrong with the world's largest provider of index funds tracking the entire bond market for you and charging you only 0.035 percent (that's 3.5 percent of 1 percent)? At present, this is the most economical total bond ETF, with the exception of BNY Mellon Bank's free ETF. BND makes an excellent building block in smaller portfolios or for any investor seeking the ultimate in simplicity, especially where there's lots of room in tax-advantaged accounts. For larger portfolios, however, where you can afford to mix and match other bond funds of different flavors, the need for BND becomes less clear. This fund is very similar to the BNY Mellon Bank ETF (BKAG), with a slightly longer duration (meaning a tad more interest-rate risk), a pinch fewer government and agency bonds, more corporate bonds, and a wee bit higher yield as a result.

Vanguard Short-Term Bond (BSV)

Indexed to: The Bloomberg Barclays U.S. 1–5 Year Government/Credit Float Adjusted Index, which is about 2,600 bonds, two-thirds of which are short-term U.S. government and one-third of which are higher-quality corporate bonds, also of short-term maturity

Expense ratio: 0.05 percent

Current yield: 0.51 percent

Average credit quality: 67 percent U.S. government, with the rest being corporate bonds with ratings of BBB or higher.

Average duration: 2.8 years

THE ULTIMATE IN INVESTMENT SIMPLICITY

Want *real* simple investing? Combine the Vanguard Total Bond Market ETF (BND) with the Vanguard Total International Bond ETF (BNDX), and the Vanguard Total Stock Market ETF (VTI) with the Vanguard Total International Stock ETF (VXUS). Presto! These four ETFs give you the whole enchilada — filled with a pretty good representative sample of all of the world's stocks and bonds — at a very reasonable price. Could you do better? Yes, I believe so, and I discuss how throughout this book. But the "Vanguard 4 Portfolio" is a good, solid portfolio that will likely beat the pants off most other investments over the coming decades.

Russell's review: In normal times, I encourage most investors to stick with intermediate-term bonds and forget about short-term bonds that typically yield considerably less. Recently, however, with interest rates so low, low, low, I've been leaning my client portfolios more to the short term. Reason: When interest rates rise, as they eventually will, longer-term bonds are going to suffer. For more conservative investors especially, BSV may warrant half of your allocation to U.S. bonds. When interest rates start to climb back up to historical norms, you may then want to move some or all of your BSV assets to BKAG or BND. Because this fund is relatively nonvolatile, I sometimes recommend it as "near-cash," for someone who wants their principal kept safe and doesn't require much in return.

IN THIS CHAPTER

- » Finding tax-free interest in your bond portfolio
- » Exploring bonds beyond U.S. borders
- » Understanding how currency hedging works
- » Choosing ETFs that resemble individual bonds

Chapter 15

Moving Beyond Basics into Municipal and Foreign Bonds

Every investor needs bonds. Not every investor needs municipal bonds or foreign bonds. But for higher-income investors who find themselves in the northern tax zones, municipal bonds, which pay interest exempt from federal income tax (and possibly state and local income tax as well), can make enormous sense. For those with larger bond portfolios, the added diversification of foreign bonds is something to consider very seriously.

Municipals for Mostly Tax-free Income

Historically, municipal bonds have yielded about 80 percent of what Treasury bonds of similar maturity yield. As I write these words, the two kinds of bonds have yielded about the same recently — mostly due to Treasuries paying less and less. But that's on a before-tax basis. After taxes, you will likely do better with munis, even if you're not in the highest tax bracket. If you are in the highest tax bracket, you will likely do *much* better with munis. . .assuming the munis you buy don't default.

In fact, munis rarely do default. And the broad diversification offered by certain municipal ETFs makes any serious loss of principal due to defaults even less likely (but not impossible, by any means). Still, muni ETFs are riskier than Treasuries, and riskier than agency bonds. You don't want your entire portfolio in munis.

To figure out the tax-equivalent yield on a muni or muni fund, you may want to visit one of the gazillion tax-equivalent yield calculators on the Internet. One of my faves is on `www.dinkytown.net`. Click Investment Calculators in the column on the far left of your screen. Then click Municipal Bond Tax Equivalent Yield. You'll figure it out from there.

You can also figure out the tax-equivalent yield with pencil and paper. You start with the reciprocal of your tax rate, which is nothing more than your tax rate subtracted from 100. If you pay 30 percent in taxes, then the reciprocal of your tax rate is 70 (100 – 30). Next, you multiply the interest rate that the muni bond (or ETF) is offering, and you divide it by the reciprocal. Thus, if you had a muni bond paying 2.5 percent, you would divide 2.5 percent by 70. This would give you 3.57. That's what you'd have to earn on a taxable bond to get the same after-tax return as you would with the 2.5 percent muni.

Take a tour of 50 states

In this section, I highlight a few *national* muni ETFs — that is, funds that offer munis from across the land. You'll find national muni ETFs issued by iShares, Invesco, Vanguard, SPDRs, PIMCO, VanEck, First Trust, and others.

If you live in a state with high income taxes, such as New York or California, and you're in a high tax bracket, you may want to investigate state-specific muni funds. When you buy muni funds that are specific to your home state, you exempt yourself from having to pay not only federal income tax on the interest, but often state income tax, and potentially local income tax, as well.

At present, you'll only find a handful of state-specific muni ETFs, all designed for wealthier-than-average New Yorkers or Californians. (Both these states have high taxes, and they offer the largest potential number of investors.) I expect that over time, more state-specific munis will hit the stage, but for now, if you live in a state such as Pennsylvania, New Jersey, Colorado, Georgia, or Connecticut, you may have to go with a mutual fund if you want these tax-free darlings. (See Chapter 25 for more information.)

Vanguard Tax-Exempt Bond ETF (VTEB)

Indexed to: The S&P National AMT-Free Municipal Bond Index, featuring 5,900 individual bonds issued by municipalities across the nation. (California and New York bonds make up 35 percent of the total.)

Expense ratio: 0.06 percent

Current yield: 0.82 percent

Average credit quality: AA

Average duration: 4.6 years

Russell's review: If you are going to own one national muni fund, this is a darned good choice. The intermediate-term duration is where you want your muni portfolio to be. High-credit quality, which this fund delivers, is a must. With interest rates so low these days, the top performers moving forward are going to be those with the lowest cost, and Vanguard, as is typical, offers the lowest-cost option in the land. Importantly, all of the bonds in this portfolio are AMT-free. *AMT* stands for alternative minimum tax, and if you are rich enough to know what that is, you are likely aware that the AMT can cost you.

iShares National Muni Bond ETF (MUB)

Indexed to: The ICE AMT-Free U.S. National Municipal Index, which includes investment-grade municipal bonds from almost all 50 states (California and New York bonds make up 42 percent of the total), as well as allowing for investments in U.S. territories. There are 6,850 constituent bonds in the index.

Expense ratio: 0.07 percent

Current yield: 0.77 percent

Average credit quality: AA

Average duration: 6.2 years

Russell's review: This fund was the first muni ETF on the U.S. market, and it still remains extremely popular. It is free of the AMT (alternative minimum tax), which is a decidedly good thing if you derive a lot of income from tax-free sources. Its long-term return is lower than that of the Vanguard ETF (a five-year return of MUB is 2.85 percent versus VTEB's 3.08 percent), but that's most likely because the iShares fund was significantly more expensive in previous years. Now that iShares has dropped the expense ratio to within an angel hair of Vanguard's, I expect that the returns moving forward will be very close. (By the way, "ICE" in the fund's name does not stand for *Immigration and Customs Enforcement* or *In Case of Emergency*! It stands for Intercontinental Exchange, Inc., a relative newcomer to the indexing business.)

Foreign Bonds for Fixed-Income Diversification

Over the long haul, U.S. and foreign bonds of similar default risk and maturity will likely yield about the same returns. But in the short run, substantial differences can exist in the yields and total returns of U.S. versus foreign bonds.

TIP

Note that as is the case with U.S. bonds, international bonds can be of the conventional type or inflation-adjusted. Whereas I believe strongly that U.S. inflation-protected bonds deserve an allotment in most portfolios, foreign inflation-protected bonds just don't make as much sense (unless you plan to retire abroad or take a lot of senior world cruises). Nevertheless, for the sake of added diversification, if you want to add a small dose of inflation-adjusted foreign bonds to your portfolio, I won't object.

Foreign bonds, just like U.S. bonds, can also be issued by governments or corporations. Unless you choose to have an exceptionally large allocation to foreign bonds, I feel the best foreign-bond funds for most American investors would include a mix: corporation bonds for higher yield, and government bonds (provided the government is solid, like that of Germany or Sweden versus, say, Venezuela) for security.

And finally, foreign bonds, unlike U.S. bonds, can come either currency hedged or currency unhedged. I prefer hedged, and I explain why in the sidebar, "Currency hedged or unhedged?"

Vanguard Total International Bond (BNDX)

Indexed to: The Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Index (USD hedged), government and corporate bonds — about 6,300 of them — from all corners of the globe, although 95 percent of the bonds are from developed nations

Expense ratio: 0.08 percent

Current yield: 0.44 percent

Average credit quality: AA

Average duration: 8.4 years

Top five countries: Japan, France, Germany, Italy, United Kingdom

Russell's review: This is the complete package, offering high-quality bonds, great diversification, dollar hedging, and a very reasonable expense ratio. You'll note that the current yield is only 0.44, much lower than the Vanguard Total (U.S.) Bond Market ETF (BND), which has a current yield of 1.34 percent. But current yields can be like tropical storms, changing dramatically from moment to moment. The five-year returns of BND and BNDX are almost identical.

iShares International Treasury Bond ETF (IGOV)

Indexed to: FTSE World Government Bond Index — Developed Markets Capped

Expense ratio: 0.35 percent

Current yield: 0.05 percent

Average credit quality: AA

Average duration: 9.22 years

Top five countries: Japan, France, Italy, Germany, Spain

Russell's review: Yes, this foreign government bond fund has a similar credit quality to Vanguard's (foreign government and corporate) BNDX. But I would say that this fund's average credit quality is more at the high end of the AA spectrum, and BNDX may be at the lower end. Both are unlikely to lose your principal; however, both will be fairly volatile (by bond standards) because of the interest-rate risk that factors into all longer term–duration bonds. The five-year return on this fund is 1.22, quite a bit less than BNDX's 2.83.

SPDR FTSE International Government Inflation-Protected Bond ETF (WIP)

Indexed to: The FTSE International Inflation-Linked Securities Select Index — inflation-linked bonds of both developed and emerging-market nations, similar in nature to U.S. TIPS

Expense ratio: 0.50 percent

Current yield: 0.30 percent + inflation bump

Average credit quality: From A to Aa

Average weighted maturity: 11.7 years

Top five countries: United Kingdom, France, Brazil, Italy, Mexico

Russell's review: Not for everyone. In fact, unless you are planning to retire outside of the United States, or you drink a heck of a lot of coffee, you really don't need to be very concerned with the inflation rate in Central or South America. If you *are* planning to retire abroad, then okay, you might consider this fund. But do be aware that the expense ratio is pretty high. And the credit quality is lower than either of the other two foreign-bond funds (BNDX and IGOV) introduced earlier. This is because the fund does invest in countries in South America, where the governments are not as stable as those of, say, Scandinavia.

CURRENCY HEDGED OR UNHEDGED?

The vast majority of foreign-stock ETFs — including those I generally recommend and use in my portfolios — are unhedged, meaning that the price and the performance of the fund are going to be influenced by the exchange rate of the U.S. dollar to the local currency. In other words, if you invest in an ETF such as the iShares Japan ETF (EWJ) and the U.S. dollar goes up *vis-à-vis* the yen, that's going to temper your returns. If the dollar goes down, that will boost your returns. Why? Because the profits you may make off Toyota's growth are measured in yen. And when you translate those yen into dollars, you may get more or less, depending on the exchange rate.

Hedging reduces volatility, but that costs you, both in terms of the expenses of the fund and in the taxation of the fund. Hedged funds require more turnover, and that means greater taxes. If a hedge works in your favor, that can result in more taxes. A hedged fund must pay hedgers to neutralize the currency swings, and that takes money from the fund that otherwise might have been yours.

Because stocks tend to be volatile and grow nicely over time, the currency flux gets lost in the shuffle. Over the long run, the yen will go down *vis-à-vis* the dollar, and then it will go up. There's no great need to dampen the flux if you are a buy-and-hold investor.

With bonds, however, the returns are much lower, and the volatility is much less. That's why you hold bonds. . .for their stability. In the case of bonds, currency flux can overwhelm the meager returns and add volatility where you really don't want volatility. Therefore, most bond funds are hedged. And that's a good thing.

Do I ever recommend unhedged bond holdings? Not often — only if the client has a very, very conservative portfolio, with few stocks, or the client is for some reason hesitant to hold foreign stocks. In those cases, there is little foreign currency exposure in the first place, so adding a bit to the bond portfolio might make good sense from a diversification standpoint. But those cases are rare.

Invesco International Corporate Bond ETF (PICB)

Indexed to: The S&P International Corporate Bond Index, which tracks the ups and downs of 685 corporate bonds issued by non-U.S. investment-grade issuers

Expense ratio: 0.50 percent

Current yield: 0.45 percent

Average credit quality: From A to BBB

Average duration: 7.0 years

Top five countries: United Kingdom, France, Canada, Germany, Spain

Russell's review: Yes, these are "investment-grade" (versus junk) bonds, but a good number of them barely make the grade. You're taking considerably more credit risk with this fund than you are with any of the other funds I introduce in this section, so you'd expect a high return. In the past five years, this fund has returned an average 3.82 percent a year. That's higher than most other international bond funds, but is it worth the added risk? I'd be more tempted to say yes if this fund had a lower expense ratio. But even then, my belief is that bonds are for ballast, for safety, and that high returns should come from the stock side of your portfolio. Nonetheless, if you really want a sliced and diced portfolio with many moving parts, you might consider foreign corporate bonds.

Emerging-Market Bonds: High Risk, High Return

I don't like U.S. high-yield ("junk") bonds. They tend to be highly volatile, and they tend to move up and down with the stock market. In other words, they don't provide much of the diversification power or soft cushion that bonds are famous for. Foreign junk bonds are a little different. These bonds, issued by the governments of countries that may not be entirely stable, may be just as volatile as bonds issued by unstable U.S. corporations, but they do not necessarily go up and down with the U.S. stock market (although they certainly may at times — and did so in 2008).

For reasons of diversification, investors with fairly good-sized portfolios may want to consider allocating a modest part of their portfolios to emerging-market debt. In my personal portfolio, I have allocated 4 percent of the total to this asset class. Note that I'm not referring to "my bond portfolio" but to my "portfolio." I actually think of my holdings in emerging-market debt as more of a stock-like investment than a true bond investment. After all, you're likely to see stock-like volatility and long-term stock-like returns with these investments.

The first emerging-market ETF, the iShares J.P. Morgan USD Emerging Markets Bond ETF (EMB), came into existence in December of 2007, and has seen a total return since inception of almost 6 percent. The T. Rowe Price Emerging Markets Bond (mutual) Fund (PREMX) has been around since December of 1994, and has a return since inception of 9.3 percent. But there has been volatility, for sure: In 2008, while stocks were tanking (nearly 50 percent over the course of the year) and sedate U.S. Treasuries were more than holding their own, emerging-market bonds were foundering — at one point, losing about 30 percent of their value.

Vanguard Emerging Markets Government Bond (VWOB)

Indexed to: The Bloomberg Barclays USD Emerging Markets Government RIC Capped Index. Vanguard includes a representative sampling of 730 of the Index's 959 bonds.

Expense ratio: 0.25 percent

Current yield: 3.7 percent

Average credit quality: About half of the bonds are below Baa and half are above Baa on the Moody's scale. In other words, half are junk bonds.

Average duration: 8.4 years

Top five countries: Mexico, Saudi Arabia, Indonesia, Turkey, United Arab Emirates

Russell's review: This is yet another Vanguard "best in class" with a low expense ratio and excellent diversification. If you come to Vanguard for exposure to emerging-market bonds, you won't be disappointed (unless emerging-market bonds, as a whole, take a nosedive).

SPDR Bloomberg Barclays Emerging Markets USD Bond ETF (EMHC)

Indexed to: The Bloomberg Barclays USD Emerging Markets Government RIC Capped Index. State Street Global Advisors includes a representative sampling of 386 of the Index's 959 bonds.

Expense ratio: 0.23 percent

Current yield: 3.7 percent

Average credit quality: About half of the bonds are below Baa, and half are above Baa, on the Moody's scale. Yes, you are taking some credit risk.

Average duration: 8.4 years

Top five countries: Mexico, Saudi Arabia, Indonesia, Turkey, United Arab Emirates

Russell's review: This fund is very similar to Vanguard's VWOB. It has a slightly lower expense ratio, but you get less diversification with a far smaller representative sampling of the same index. I'd go with Vanguard, but choosing EMHC would be perfectly reasonable.

iShares J.P. Morgan USD Emerging Markets Bond Fund (EMB)

Indexed to: The JPMorgan EMBI Global Core Index. EMB uses 547 bonds in the index, all U.S. dollar–denominated, from more than 30 emerging-market nations.

Expense ratio: 0.39 percent

Current yield: 3.7 percent

Average credit quality: From BB to BBB, right on the cusp of "investment-grade" and "junk"

Average duration: 8.6 years

Top five countries: Mexico, Indonesia, Saudi Arabia, Qatar, United Arab Emirates

Russell's review: The expense ratio is a bit high for my liking, but certainly not ridiculous. The iShares fund, the first ETF to tap this asset class, is okay but not the best way to tap into emerging-market bonds. That would be either with Vanguard or State Street SPDRs.

ETFs WITH MATURITY DATES, JUST LIKE INDIVIDUAL BONDS

Bond funds — both mutual funds and ETFs — allow you to own baskets of bonds from various issuers, with various maturity dates, from various cities and states and possibly countries, and all of that is wonderful. Diversification is key to good investing. Bond funds, ETFs in particular, have lowered their management fees to the point that you are getting this wonderful diversification for a song. But there can be one drawback to bond funds in that they typically don't have maturity dates as individual bonds do. That has been rectified with a series of about 80 ETFs, issued by both iShares and Invesco, that *do* offer diversification with maturity dates.

The funds, which I'll call *maturity-date* ETFs, are trademarked by iShares as *iBonds* and by Invesco as *BulletShares.* Both the iBonds and the BulletShares come with maturities that range from several months to 10 years down the road. The iBonds offer corporate bonds, munis, high-yield bonds, and Treasuries. The BulletShares also offer corporate bonds, munis, and high-yield bonds, as well as emerging-market bonds.

The iBonds follow Bloomberg Barclays indexes, whereas the BulletShares are based on NASDAQ/BulletShares proprietary indexes. The management fees are identical for the corporate bonds (0.10 percent) and the munis (0.18 percent). For the high-yield bonds, the iBonds are cheaper: 0.35 percent versus 0.45 percent for the BulletShares. The iBonds Treasury funds charge 0.07 percent. The BulletShares emerging-market bonds cost 0.29 percent.

What's the advantage of maturity-date bond ETFs over other bond ETFs? With most bond ETFs, if there's a swift hike in interest rates, your fund price could drop overnight. It will then likely rise back up over time, but not if you have to withdraw the money to buy, say, a new car, or pay for your kid's tuition. In that case, you're out of luck (and you may not have enough to buy the car you want). With individual bonds, and with maturity-date bond ETFs, don't take that risk. If you know that you need X dollars in two years, then with iBonds or BulletShares, you can buy into the fund, and in two years, your fund, which has a bunch of bonds that mature around the same time, will automatically dissolve, turning into cash. And you will have your X dollars, plus whatever interest you've accrued since buying the fund. It's like the best of both worlds: You get the diversity of a fund with the predictability of an individual bond.

I do use maturity-date bond funds — both iShares and BulletShares — when clients need a fixed amount of money on a certain date. To see the complete lineup of these funds, go to `www.iShares.com` or `www.Invesco.com`.

4 Specialized ETFs

IN THIS PART . . .

Determine if investing in gold and silver and other commodities is for you.

Discover how to invest for a cleaner planet and a happier, healthier humankind.

Find out if actively managed ETFs are as hot as their purveyors claim they are.

Learn how simple portfolio building can be with all-in-one ETFs.

Tread (lightly) into a universe of complex uniqueness, ambiguity, and complexity.

IN THIS CHAPTER

» Weighing commodities as investments

» Digging for gold and silver

» Drilling for oil (or not)

» Taking a broader approach to commodity investing

» Investing in commodity-related stocks instead of pure commodity plays

Chapter 16

All That Glitters: Gold, Silver, and Other Commodities

One of my childhood passions was collecting coins from around the world. Sometime during the Johnson administration, on my meager allowance of $1 a week, I saved up for three months or so to buy myself a gold coin: an uncirculated 1923 50-kurush piece from Turkey. Maybe you can remember getting a shiny new bicycle for Christmas when you were 5 or 6. Maybe, like Citizen Kane, you remember getting your first sled. My most prized possession from childhood was that gold coin, smaller than a dime but absolutely gorgeous.

I still have it.

I never thought of my piece of gold as an investment. But for many people, gold is just that. Historically, the soft and shiny metal has been seen as the ultimate hedge against both inflation and market turmoil. Most people through the ages have bought gold just as I did: as coins, or sometimes in bricks. Alternatively, in more recent decades, they may have invested in shares of gold-mining companies.

Whether people invested in the physical metal or the stock of companies that mined it, the traditional ways of investing in gold have always been a pain in the neck. With shares of gold-mining companies, factors other than the price of gold come into play. For example, political turbulence in South Africa, or a fall in the value of the Rand, might send your stock down the mines. Buying gold coins entails hefty commissions. Likewise for gold bricks, with possible added expenses for assaying. And both bricks and coins have to be stored and should be insured.

All these hassles became optional for gold investors with the introduction of the first gold ETF in November 2004. Suddenly it became possible to buy gold at its spot price — in an instant — with very little commission and no need to fret about storage or insurance. Thanks to ETFs, you can now also buy silver in the same way. Or platinum.

In fact, you can invest in just about any commodity you please. You can invest in just about any precious or industrial metal: tin, nickel, you name it. Even natural gas, or crude oil, if that's your cup of Texas tea, can be purchased (sort of) with an ETF, as can coffee futures and contracts on wheat, sugar, or corn. Indeed, it seems the only commodity that's not available for purchase by the retail investor is weapons-grade plutonium.

In this chapter, I discuss the whys and wherefores of investing in commodity ETFs, as well as certain commodity pools and exchange-traded notes (products that differ from ETFs). I also explain why investing in ETFs that feature stocks of commodity-producing companies and countries may be a somewhat better long-term play than investing in the commodities themselves.

Oh, by the way, I recently saw that a 50-kurush gold coin just like mine sold online for $219. *But I'm not selling mine!*

Gold, Gold, Gold!

Stocks and bonds rise and fall. Currencies ebb and flow. Economies go boom and then bust. Inflation tears nest eggs apart. And through it all, gold retains its value. Or so we're told.

The primary reason for buying gold, according to the World Gold Council (`www.gold.org`), is that

> *Market cycles come and go, but gold has maintained its long term value. Jastram [1977] demonstrated that in inflationary and deflationary times, in the very long term, gold kept its purchasing power. The value of gold, in terms of real goods and services that it can buy, has remained remarkably stable.*

Hmm. I'm not sure who Jastram was, and I don't know exactly what is meant by "very long term," but I've done a bit of research on this subject. Although I don't claim that my research is exhaustive or in any way conclusive regarding the investment merits of gold, it does cast *some* doubt on the veracity of the World Gold Council's claim.

Table 16-1 shows the price of gold in a sampling of years between 1980 and 2010; the average price of a basic Hershey chocolate bar in those years (which I found on a website called `www.foodtimeline.org`); and how many Hershey bars you could buy with an ounce of gold. Note that one ounce of gold in 1980 bought 2,460 Hershey bars, while 20 years later, in 2000, it bought a mere 558 bars. At 2010 prices — about $1,500 for an ounce of gold and about 80 cents for a Hershey bar — you'd get 1,875 chocolate bars for the same nugget.

TABLE 16-1 **Trading Gold for Hershey Bars**

Year	Average price of a Hershey bar	Average price of an ounce of gold	Hershey bars per ounce of gold
1980	$0.25	$615	2,460
2000	$0.50	$279	558
2010	$0.80	$1,500	1,875

Midas touch or fool's gold?

Okay, let's give the World Gold Council the benefit of the doubt and assume that gold, in the very long term, does maintain its purchasing power. Maybe Hershey bars are an anomaly. Maybe the years 2000 and 2010 were anomalies. Still, you would hope that your investments would do better than merely keep their purchasing power. If that is all gold can do, why hold it as an investment? (After all, it is an unproductive lump of metal, so what should you really expect?)

GREED ALERT

Well, if you type "gold" into your favorite search engine, you'll find 10,000 vendors selling it and 10,000 reasons, according to those vendors, why *now* is the time to buy. (Um, excuse me, sirs, but if the price of gold "can only go up," why are you trying so hard to sell it?) Every day I hear one explanation or another as to why gold "must" go up from here on (India's demand for gold . . . dentists' demand for gold . . . the mines are drying up . . . gold demand in the tech industry . . . and so on and so on). These are the very same arguments I've been hearing for years. Only now there's one more: All these ETF investors are demanding gold!

I believe that the best you can expect from gold over the very long term, as the World Gold Council puts it, is that it will maintain its purchasing power. But, hey, that's not a bad thing when every other investment is tanking. Gold, as it happens, does show little long-term correlation to other assets. And when the going gets really tough — or even seems that way — when people run from most investments, they often turn to gold. Then, as a self-fulfilling prophecy, the price rises. Indeed, that seems like a plausible explanation for gold's run-up in the years following 9/11, when we've seen wars in Iraq and Afghanistan, mounting federal deficits and debt, a financial crisis, and growing doubts about the true value of paper currencies.

In the final analysis, it probably wouldn't hurt you to hold gold in your portfolio. But please don't buy the nonsense that gold "must go up." It will go up. It will go down. It will go up again. Have a ball. Just don't bank your retirement on it, okay? (Personally, I don't own shares in a gold ETF, but I haven't ruled it out.)

If you allot a small percentage of your portfolio to gold — no more than, say, 5 percent please (actually make that 5 percent *total* precious metals) — and keep that percentage constant, you'll likely eek out a few dollars over time. Every year, if the price of gold falls, you might buy a bit; if the price rises, perhaps you sell. That strategy is called *rebalancing,* and I recommend it for all your portfolio allocations. (See my discussion of yearly portfolio rebalancing in Chapter 23.)

And if all goes to hell in a hand basket, your gold may offer you some protection.

A vastly improved way to buy the precious metal

When, in November 2004, State Street Global Advisors introduced the first gold ETF, it was a truly revolutionary moment. You buy a share just as you would buy a share of any other security, and each share gives you an ownership interest in one-tenth of an ounce of gold held by the fund. Yes, the gold is actually held in various bank vaults. You can even see pictures of one such vault filled to near capacity (very cool!) on `www.spdrgoldshares.com`.

If you are going to buy gold, this is far and away the easiest and most sensible way to do it.

You currently have several ETF options for buying gold. Two that would work just fine include the original from State Street — the *SPDR Gold Shares (GLD)* — and a second from iShares introduced months later — the *iShares Gold Trust (IAU)*. Both funds are essentially the same. Flip a coin (gold or other), but then go with the iShares fund, simply because it costs less: 0.25 percent versus 0.40 percent.

The tax man cometh

Strange as it seems, the Internal Revenue Service considers gold to be a collectible for tax purposes. A share of a gold ETF is considered the same as, say, a gold Turkish coin from 1923 (don't ask). So what, you ask? As it happens, the long-term capital gains tax rate on collectibles is 28 percent and not the more favorable 15 percent afforded to capital gains on stocks.

TIP

Holding the ETF should be no problem from a tax standpoint (gold certainly won't pay dividends), but when you sell, you could get hit hard on any gains. Gold ETFs, therefore, are best kept in tax-advantaged accounts, such as your IRA. (Note that this advice won't serve you well if gold prices tumble and you sell. In that event, you'd rather have held the ETF in a taxable account so that you could write off the capital loss. Life is complicated, isn't it?)

Silver: The Second Metal

Talk about a silver bullet. In early 2006, after years of lackluster performance, the price of silver suddenly, within three short months, shot up 67 percent. Why? Largely, the move served as testimony to the growing power of ETFs!

The price jump anticipated the introduction of the *iShares Silver Trust (SLV)* ETF in April 2006. SLV operates much the same as the iShares COMEX Gold Trust (IAU). When you buy a share of SLV, you obtain virtual ownership of 10 ounces of silver.

To be able to convey that ownership interest, iShares had to buy many ounces of silver (initially 1.5 million), and that pending demand caused the silver market to bubble and fizz. Within several weeks after the introduction of the ETF, the price of silver continued to rise, reaching a 23-year high in May 2006 ($14.69 an ounce) before tumbling in the following weeks. The volatility has continued to this day as the price has darted above and below $40 an ounce.

Quick silver on the move

To say that silver is volatile is a gross understatement. In 1979, the price of an ounce of silver was about $5. It then rose tenfold in less than a year — to as high as $54 an ounce in 1980 — after the infamous Hunt brothers had cornered the silver market (until they were caught, because, y'know, it's illegal to corner the market in just about anything). The price then fell again. Hard.

Fast forward to April 2011. The price of silver, having risen steadily and sharply since the introduction of the first silver ETF, had topped $48 an ounce and seemed headed back to the highs of 1980. And then . . . pop! Within a mere several days, the price fell about 30 percent to slightly under $34. Then it rose back up in the following months to $42, and then, in September 2011 . . . pop! In a mere two days, it fell back down to $30.

If there is any reason to stomach such volatility, it stems from the fact that silver has a very low correlation to other investments. For the three years prior to my writing these words, the price of silver has had very, very little correlation to stocks (except for some modest correlation to the stocks of silver-producing countries, such as Chile); almost no correlation to bonds; and even a decidedly limited correlation (0.75) to the price of gold.

If you must . . .

If you're going to take a position in silver, the iShares ETF is the way to go. The expense ratio of 0.50 percent will eat into your profits or magnify your losses, but it will still likely be cheaper than paying a commission to buy silver bars or coins and then paying for a good-sized lockbox.

TIP

In the very long run, I don't think you're likely to do as well with silver as you would with either stocks or bonds. Note, however, that unlike gold, silver has many industrial uses. Demand for silver can come from diverse sources — not just jewelers and collectors — which can cause the metal's price to fluctuate with changing expectations for industrial production. Because the uses for silver effectively "consume" the metal, the laws of supply and demand may influence the future prospects of silver prices in a way that doesn't apply to gold. In the end, silver may prove useful as a hedge, maybe even better than gold. But I would urge you to invest very modestly; no more than 5 percent of your portfolio should be allocated to precious metals. Keep in mind that the same strange tax law pertains to silver as to gold. Any capital gains will be taxed at the "collectibles" rate of 28 percent. You may want to keep your silver shares in a tax-advantaged account.

ALL-IN-ONE ETF FOR PRECIOUS METALS

One simple approach to precious-metals investing is worth considering: the ETFS Physical Precious Metals Basket Shares (GLTR), an ETF that was introduced in October 2010. In one fund, you get a basket of four precious metals: gold, silver, platinum, and palladium, each in proportion to its economic footprint. Shares are backed up by the physical metals held in vaults. The fund's cost is 0.60 percent a year.

Oil and Gas: Truly Volatile Commodities

The United States Oil Fund (USO) opened on the American Stock Exchange on April 10, 2006. Even though the fund is technically not an ETF but a very close cousin called a *commodity pool,* in my mind that date marks a sort of end to the Age of Innocence for ETFs. The United States Oil Fund, as official as that sounds, is run by a group called Victoria Bay Asset Management, which I will turn to in just a moment.

Don't mistake this fund for something like the Vanguard Energy ETF (VDE) or the Energy Select Sector SPDR (XLE) funds (see Chapter 10), both of which invest in oil companies like ExxonMobil Corp. and Chevron. Don't mistake this fund for something like the precious metal commodity funds discussed in the preceding sections. Victoria Bay, wherever that is, is not filled with oil. Whereas Barclays and State Street maintain vaults filled with gold and silver, Victoria Bay deals in paper: futures contracts, to be exact.

In other words, this company uses your money to speculate on tomorrow's price of oil. If the price of oil rises in the next several weeks, you should, theoretically, earn a profit commensurate with that rise, minus the fund's costs of trading and its expense ratio of 0.75 percent. When the price of oil and gas go on a tear, this fund promises to give you a piece of that action, perhaps offering warm comfort every time you pull up to the pump and have to yank out your credit card. So should you pump your money into USO? Keep reading for my opinion about this slick investment.

Oily business

If you buy into USO and the price of oil escalates, you stand to make money. But is there reason to believe that the price of oil will always (or even usually) escalate? It has certainly gone up and down over the years, as have oil futures.

The famed economist John Maynard Keynes in 1930 theorized that commodity futures, over time, will offer compensation above and beyond any rise in the price of a commodity. He speculated that speculators will somehow be rewarded for taking the risk of future price uncertainty. Keynes's theory was very controversial for very many years, and in the past few years it has come to look as if Keynes was wrong. Of course, he didn't know that so many investors, largely thanks to ETFs such as USO, were going to pile into the commodity-futures arena. Such piling on has resulted in some ugly discrepancies between commodity-future prices and the price of the actual commodity.

But even if Keynes were right, and even if the futures market more accurately tracked the price of the actual commodity (AKA the "spot price"), why pick a single commodity to invest in? Why not diversify your risks with a variety of commodities? A good number of ETFs attempt to do that, and more are on the way. (I discuss these options next in this chapter.) I equate the arrival of USO with the end of ETFs' Age of Innocence because as I see things, USO is clearly pandering to people's disgust over high oil and gas prices.

No experience necessary

WARNING

The issuer of the USO fund is not a major investment bank. Victoria Bay Asset Management, LLC is "a wholly-owned subsidiary of Wainwright Holdings, Inc., a Delaware Corporation . . . that also owns an insurance company organized under Bermuda law." The fund's prospectus, especially the part about the management of Victoria Bay, makes for *very* interesting reading.

Two of the top people running the fund also manage a mutual fund called Ameristock, and a third, Malcolm R. Fobes III (no relation to Malcolm Forbes), is the founder of the Berkshire Focus Fund (no relation to the fabulously successful Berkshire Hathaway.) Both Ameristock and Berkshire Focus (both with Morningstar one-star ratings) have track records that would make most people cringe.

But the part of the prospectus that really raises an eyebrow is where it explains that "the managing and directing of day-to-day activities and affairs [of the fund] relies heavily on . . . Mr. John Love," who, we later learn, is not only employed by Ameristock but also "holds a BFA in cinema-television from the University of Southern California. Mr. Love does not have any experience running a commodity pool." His experience: "from December 2000 to February 2001, Mr. Love was employed by Digital Boardwalk, Inc."

Even if John Maynard Keynes were right, no one running this fund seems nearly as smart as J.M. Keynes — or Jed Clampett. I would not invest in this fund, and neither should you.

The sad saga of contango

As fate would have it, the promise of the United States Oil Fund has turned out to be nothing like the reality. Consider this: The price of an actual barrel of oil rose from about $40 in January 2009 to nearly $100 in June 2011. In the same time period, USO's share price went from about $35 to $38 — not much of an increase.

That meager return, however, might be considered pure gravy compared to the return suffered by investors in Victoria Bay's United States Natural Gas Fund (UNG) introduced on April 18, 2007. Through mid-2011, this fund's share price, which started at about $90 a share, had fallen to — are you ready? — roughly $11 a share. Investors in UNG have had anything but a gas.

The explanation for USO's stagnant share price and UNG's sink-like-a-rock share price can be found not only in the lackluster résumés of their managers and the dynamics of supply and demand for natural gas but also in something called *contango.* That's a word that nearly all investors in commodity ETFs, at least those that rely on futures contracts, wish to heck they never heard.

Contango refers to a situation where distant futures prices for a particular commodity start to run well ahead of near futures prices. In other words, if you want to maintain a futures position that looks one month out, you buy futures contracts for the next month that expire in 30 days. Then one month later you replace them with contracts that contango has made more expensive. The effect is sort of like holding a fistful of sand and watching the sand sift through your fingers until you are left with nothing but an empty hand.

TECHNICAL STUFF

The actual price of natural gas, for example, dropped precipitously in the several years prior to this writing because new gas drilling technologies and the discovery of new reserves have increased supply beyond demand. But buyers of UNG were not tapping into these falling prices each month. Instead, they were buying future contracts each month that were more expensive than the futures contracts they replaced. Why? The explanation is complicated, but the buying pressure coming from investors themselves helped to fuel the inflated futures' prices. On top of that, speculators, knowing that funds such as UNG had to buy additional futures contracts as the old ones expired, started to front-run the purchases and drove prices higher yet.

As a result of contango, many commodity investors have lost money, and some have lost lots of money, in recent years — even in cases where, as with oil, the price of the commodity itself rose. The illustrious managers at Victoria Bay led their investors to slaughter. But more experienced managers were also caught with their trousers down.

For you, the ETF investor, I would advise much caution before investing in commodities, especially in funds that use futures and other derivatives.

Taxing your tax advisor

ETFs that use futures typically generate special tax forms called *K-1 forms.* If you ask anyone who has ever filed a tax return and needed to account for earnings from K-1 investments, he'll tell you that these forms are a pain in the butt. Not only have investors in UNG been stung by falling share prices, but also they often have found that they were paying their tax advisors considerably more than in previous years, simply to file the dastardly K-1s.

As if that weren't bad enough, any gains on the sale of funds that use futures are taxed largely at short-term capital gains rates, even if the funds were held for more than a year — just another one of those IRS quirks. (Granted, not many people have had this problem recently because gains are hard to come by with these funds.)

(Somewhat) Safer Commodity Plays

Just as diversification works to dampen the risks of stock investing, it can similarly smooth out — to a degree — the ups and downs of investing in commodities. If you're willing to accept contango, the K-1 forms, and the natural volatility of most commodities (other than perhaps clay or granite), I urge you at least to diversify. In this section, I show you how to do so.

TIP

If you can handle the volatility but are put off by contango and K-1 forms, consider one of the alternative commodity plays I discuss in the final section of this chapter.

General commodity index funds

In this section, I tell you about three funds that allow you to tap into a broad spectrum of commodities. I begin with a commodity pool offered by PowerShares and then discuss two exchange-traded notes issued by Barclays.

PowerShares DB Commodity Index Tracking Fund (DBC)

Make no mistake, the DBC fund, issued in February 2006, is one volatile investment. (It lost about 32 percent in 2008; is that volatile enough for you?) Not a true ETF, this fund (like USO) is a *commodity pool* that deals in commodities futures.

Unlike USO, or the gold and silver ETFs, the PowerShares offering has a bit of diversity to protect you if one commodity suddenly heads south. That diversity, alas, is limited. The fund entails 14 commodity classes, but the top five are all energy-related: light oil (12.4 percent); heating oil (12.4 percent); Brent crude (12.4 percent); gasoline (12.4 percent); and natural gas (5.5 percent). That adds up to about 55 percent. The remaining 45 percent is allocated to various metals and agricultural products.

TIP

DBC's expense ratio — 0.85 percent — is close to outrageous by ETF standards (and mine), but cheap is hard to find in this category. I like the idea of a general commodity fund, but I'm not wild about DBC.

iPath commodity ETNs

In June 2006, Barclays issued two funds that may offer better options for investing directly in commodities . . . or, more specifically, investing in a diversified mix of commodities using futures. They are the *iPath S&P GSCI Total Return Index ETN (GSP)* and the *iPath Dow Jones-USB Commodity Index Total Return ETN (DJP).*

These offerings are *exchange-traded notes* (ETNs) and are very different from iShares ETFs. (Note that the iShares ETFs were originally a product of Barclays and were then purchased by BlackRock, Inc. Barclays held onto its lineup of ETNs.) ETNs are actually debt instruments, more like bonds than anything else. By buying them, you are lending Barclays your money, and you are counting on Barclays to give it back. (If Barclays were to go under, you lose.) That's not the case with iShares or any other ETF, where the ETF provider is acting more as a custodian of your funds than anything else. ETNs are becoming more popular, and I talk more about them in Chapter 16.

Barclays is rated a stable company (AA- by S&P; AA3 by Moody's), so I wouldn't worry too much about its going under (although anything is possible, of course). Your bigger worry is the future direction of commodity prices. Barclays promises to use "any tool necessary" to use your money to track commodity prices. Presumably, it works something like the PowerShares fund in that it uses primarily futures contracts. But Barclays won't say. ETNs are not transparent like ETFs, so you don't know exactly what you're holding.

Why do I like these funds more than the PowerShares fund? It's not because of the expense ratio. At 0.75 percent, the Barclays funds are only a tad less expensive. Here are the three reasons I prefer the Barclays funds:

- I have faith in the company, which is huge, well-managed, and profitable.
- The Barclays funds, by promising to curtail capital gains and dividends, are likely much more tax efficient than the PowerShares fund.
- The Barclays ETNs offer somewhat better diversification. Both ETNs invest in a number of commodities, from oil and natural gas to gold and silver to cocoa and coffee.

Of the two Barclays funds, I prefer the DJP for its well-established index and the balanced weightings of its holdings: energy (34 percent), livestock (6 percent), precious metals (15 percent), industrial metals (17 percent), and agriculture (28 percent). Still, even when diversified, commodities are volatile, and their long-term returns are not as well-established as the long-term returns on stocks and bonds.

REMEMBER

If you buy into a Barclays ETN, you should do so for the right reason: lack of correlation to your other investments. Both of the iPath funds have shown almost no correlation to either stocks or bonds. For more information on these funds, Barclays has a special website: `www.ipathetn.com`.

As with precious-metals funds, devoting 5 percent of your portfolio to either of the iPath funds would be plenty. No more than that, please. Oh, one little caveat: The IRS not long ago changed its ruling on certain ETNs, making them much less tax efficient. I talk about this situation in Chapter 16. At the moment, the ruling does not pertain to commodity ETNs, but someday it may. If you're not going to stash them in a tax-advantaged retirement account, you could be in for an unpleasant surprise . . . you just never know.

Actively managed, or quasi-actively managed, commodity funds

In Chapter 25, I discuss actively managed funds and whether and how to work non-ETFs into your portfolio. Given all the challenges with investing in commodities by using exchange-traded vehicles, as discussed so far in this chapter, I'm inclined to believe that active management may be just the place to go if you want to invest in commodities. (And, by the way, you don't need to do so; you can invest indirectly in commodities in ways that may make more sense. More on that topic in just a moment.)

If you want direct commodity exposure, consider that a number of the newest ETFs and ETNs are promising to deal with some of the problems of the first-generation commodity funds. The leader in this brigade is iPath, which in April 2011 introduced a new lineup of ETNs called *Pure Beta* indexes. I wouldn't quite call these funds actively managed, but they aren't quite passively run, either. The Pure Beta ETNs promise to "mitigate the effects of certain distortions in the commodity markets" (this language refers to contango) by rolling over futures contracts in an allegedly more intelligent manner (less mechanically) than the older commodity funds that used futures.

It's too soon to say whether Barclays' strategy will prove successful, but I'm keeping my eye on the *iPath Pure Beta Broad Commodity ETN (BCM)*, which uses this newfangled strategy to track a basket of commodities consisting of energy (37 percent), agricultural products (24 percent), precious metals (20 percent), industrial metals (16 percent), and livestock (2.5 percent). The management fee is 0.75 percent. I'm ignoring the rest of the Barclays' Beta lineup that allows you to speculate on individual commodities, such as lead, nickel, and aluminum. (The ticker for that last fund is FOIL — cute, eh?)

Another ETN worth considering for commodity exposure is the *ELEMENTS S&P CTI ETN (LSC).* This fund tracks the S&P Commodity Trends Indicator–Total Return index. The fund tracks 16 different commodities, using futures contracts. Unlike Barclays' funds, LSC uses a momentum strategy, buying "long" those commodities rising in price and selling "short" those commodities falling in price.

Backtesting of the index showed that this strategy, known as a managed futures strategy, has been successful for investing in commodities. (Of course, backtested strategies are notorious for performing less well in real time than their hypothetical numbers suggest.) The fund was born in October 2008, and although I feel that the strategy shows promise, it is far from proven. And just like any other kind of futures investing, but even more so, a managed futures strategy will not necessarily reflect ups and downs in the spot prices of commodities.

Because LSC is an ETN and not an ETF, remember that you get your money back only if the issuer remains solvent. This fund is issued and backed by HSBC Bank USA, which has the very same high credit ratings as Barclays.

Awaiting new developments

Given all the confusion about how best to invest in commodities, I'm certain that other ETF and ETN providers will soon introduce all sorts of new strategies to tap into this asset class. Some will likely be crazy; others may turn out to be golden.

Keep in mind also that many commodity mutual funds exist. If you want to try an actively managed approach, don't want to have to file pesky K-1 forms, and don't want the credit risk that comes with ETNs, some of the available funds may be reasonable options. Because this book is not about mutual funds, I won't go into much depth here, but one mutual fund worth considering is the *PIMCO Commodity Real Return Strategy Fund (PCRDX).* It's been around since 2002 and has a rather positive history thus far — better than many of the commodity ETFs. See `www.pimco-funds.com`.

Playing the Commodity Market Indirectly

In a recent interview with the *Journal of Indexes,* famed investment guru Burton G. Malkiel, professor of economics at Princeton and author of *A Random Walk Down Wall Street,* had this to say about commodity investing: "I think [commodities] should be in every portfolio, but for individuals, my sense is that the way they should get them is through ensuring that they have in their portfolios companies that mine or manufacture the commodities."

He is not alone. Frustrated with the problems of commodity investing I've outlined in this chapter, and doubtful that commodity investing in the very long run will provide returns commensurate with the risk, many investment advisors of late have turned to Malkiel's solution. The drawback is that stocks in commodity-producing companies are not going to show the same lack of correlation, or offer the same diversification power, as pure commodities do. Investing in commodities this way is a trade-off.

Lately, I have been splitting the difference: Putting perhaps 3 to 4 percent of a portfolio in pure commodities (using one of the funds I identify earlier in the chapter) and perhaps another 3 to 4 percent in one of the funds I outline next.

Tapping into commodity companies

In this section, I introduce you to ETFs that let you invest in the stocks of companies in the oil and gas sector, in mining, and in the broader category of "natural resources" or "materials."

Oil and gas ETFs

More than a dozen ETFs allow you to invest in the stocks of oil and gas companies. Among them are these options:

- Vanguard Energy ETF (VDE)
- Energy Select Sector SPDR (XLE)
- iShares Dow Jones U.S. Energy Index (IYE)
- PowerShares Dynamic Energy Exploration & Production (PXE)
- iShares Dow Jones U.S. Oil Equipment & Services Index Fund (IEZ)
- iShares S&P Global Energy Index Fund (IXC)
- Global X Oil Equities ETF (XOIL)

The funds all sound different from each other, but when you look at each of their rosters, they are actually quite similar, and I feel equally lukewarm about all of them.

REMEMBER

Keep in mind that the energy sector represents a large segment of the U.S. economy. Energy companies make up about 10 percent of the capitalization of the U.S. stock market. So just being invested in the market gives you decent exposure to energy.

Mining ETFs

Several ETFs allow you to invest in mining companies. These include:

- Global X Pure Gold Miners ETF (GGGG)
- Market Vectors Gold Miners ETF (GDX)
- SPDR S&P Metals and Mining ETF (XME)
- Global X Silver Miners ETF (SIL)

To me, these funds may make more sense in a portfolio than the energy ETFs, but they aren't my preferred way of tapping into commodity-producing companies. For my preference, keep reading.

Materials or natural resources ETFs

To give me extra exposure to companies that mine for gold and silver, produce oil and gas, and either produce or distribute other commodities, I prefer broader natural resource funds. (I say "extra" because I already get exposure in my other stock funds.) If commodity prices pop, the broader natural resource funds generally do well, and I'm not taking on too much risk by banking on any one commodity or commodity group. A natural resources fund may also be called a *materials* fund.

Options in this category include these ETFs:

- Materials Select Sector SPDR (XLB)
- iShares Dow Jones U.S. Basic Materials (IYM)
- Vanguard Materials ETF (VAW)
- iShares S&P North American Natural Resources (IGE)

TIP

One of my favorites in this category is the *SPDR S&P Global Natural Resources ETF (GNR)*. This fund has an expense ratio of 0.50 percent. About 45 percent of its holdings are in the United States or Canada, and the remaining 55 percent are spread out through both the developed world and emerging markets. It offers exposure to a good variety of commodity firms: oil and gas, 32 percent; fertilizers and agricultural chemicals, 19 percent; diversified metals and mining, 16 percent; and so on.

Tapping into commodity-rich countries

As commodity prices go, so (often) go the stock markets of countries that supply the world with much of its commodities. By and large, these are the emerging market nations. (Yes, developed nations, such as Canada, Australia, and the United States, also bring the world many commodities. But because their economies are larger and more diverse, commodity prices have a much lesser effect on their stock markets.)

Although country funds can be just as volatile as commodities themselves, you can invest, through Barclays iShares, in the stock markets of nations. For example, you can invest in:

- Gold-rich South Africa via *iShares MSCI South Africa (EZA)*
- Timber giant Brazil through *iShares MSCI Brazil (EWZ)*
- Multi-mineral-laden Malaysia with *iShares MSCI Malaysia (EWM)*
- Top silver producers Chile and Peru through iShares MSCI Chile Investable Market (ECH) and iShares MSCI All Peru Capped (EPU)

TIP

I would suggest that, instead of needlessly taking on the risks associated with any single country, you diversify any investment in emerging markets through one of several ETFs that allow you to invest in a broad array of emerging market nations. These funds include the iShares MSCI Emerging Markets Index (EEM), the BLDRS Emerging Markets 50 ADR (ADRE), and the Vanguard Emerging Market ETF (VWO). I discuss these funds in some depth in Chapter 9.

IN THIS CHAPTER

» Unearthing some facts about sustainable investing

» Delving into the history of "do-good-do-well" funds

» Defining what "ESG" is, and what it isn't

» Choosing your best options for responsible investing through ETFs

Chapter 17
Investing for a Better World

How's the temperature where you are? A bit extreme? Global climate disruption is but one of the world's problems that has helped jostle millions of investors worldwide to move their money into investments that promise to provide more than just financial returns. These investments offer a chance to help combat climate change, end child labor, improve corporate-board diversity, and make the planet a cleaner, kinder, safer, more equitable place in myriad ways.

How many millions have been so jostled? Millions of millions. More than $35 trillion so far has been plunked into investments whose managers employ some kind of moral compass, according to the Global Sustainable Investment Alliance. Those trillions represent about 36 percent of all investment assets, and this figure has been rising fast. That grand sum represents money invested through endowments, trusts, institutional portfolios, mutual funds. . . .and, growing perhaps fastest of all, ETFs.

There are now about 150 ETFs that focus specifically on sustainable investing, with combined assets of just about $100 billion. That's up from 91 ETFs that together held a mere $54 billion just one year earlier, according to Morningstar Direct.

What Are "Sustainable Investing" and "ESG"?

Once upon a time, today's sustainable or ESG funds were generally referred to as SRI or socially responsible funds. But times change, and with them, the terminology investors use. SRI is barely used today. Instead, you'll hear about a fund that invests sustainably — with an eye toward creating a better planet and a healthier society — or you'll hear about ESG funds. ESG, among those savvy in the field, actually describes an approach to measuring sustainability. Within the ESG framework, issuers of stocks and bonds are rated according to three criteria:

- **E** stands for *Environment*. Companies get points for complying with governmental environmental regulations, and operating in a manner that doesn't contribute to climate change, deforestation, and pollution of air, water, and soil.
- **S** stands for *Social*. Better companies promote fair labor practices, employee diversity, safe working conditions, and the health and well-being of the public. Better companies' workers are paid living wages and given decent health benefits.
- **G** stands for *Governance*. The best corporations don't employ heavy-handed lobbying or bribe government officials. They diversify their boards and use transparent accounting methods. Those in charge work in the best interests of shareholders, employees, and customers.

Sustainable investing is sometimes filled with ambiguity

Is everyone in agreement as to the criteria that cause one company to have a high ESG rating and another company a low ESG rating? No. The world is still looking for objective measures, and in the meantime, corporate leadership and investment-fund managers have a lot of — perhaps too much — latitude in defining sustainability. And there is all too often a difference in what the managers of sustainable funds are doing and what their investors think they are doing.

Detractors of sustainable investing and ESG methodology (more accurately, methodologies) say that this lack of uniformity and the occasional profiteer ("greenwasher") are reasons to avoid sustainable investing. That is just silly. Just because *Car and Driver* and *Consumer Reports* don't necessarily agree on whether Toyota or Subaru produce the better sedan doesn't mean that you shun Toyota and Subaru or that you don't seek guidance from experts on the best car to purchase.

Sustainable investing is a great concept. And if you wonder if you can do well financially by doing good, I'm here to say, "*Yes*, *yes*, you can."

Are companies with better ESG ratings more profitable?

Keeping in mind that ESG ratings and definitions differ, can the argument nonetheless be made that companies that really care about the world around them do indeed have more robust bottom lines? It would make sense that companies that think sustainably have greater long-term vision, aren't making stupid decisions for short-term profits, and display sensibilities to others and the planet that could build long-term loyalty among workers and customers, with an end result of greater profitability. And studies show this is the case.

Researchers at the NYU Stern Center for Sustainable Business, in cooperation with Rockefeller Asset Management, recently compiled 1,000 studies on the subject. They found that 58 percent of the studies showed a positive relationship between ESG and corporate financial performance, whereas only a handful (8 percent) showed an inverse relationship. (The remainder of the studies were either neutral or mixed.) The longer the time frame, the more likely that companies with a focus on ESG tended to be profitable.

Is ESG investing creating a better world?

ESG is a methodology or methodologies by which fund managers rank companies from great to good to mediocre to poor to horrible world citizens. Such ranking is often the first task of the manager of an ETF that promises you can do good by doing well. But ETFs that call themselves sustainable or ESG use differing methods to promote ethical and ecological goals.

Just as artists use different tools and different materials to create paintings and sculptures, fund managers use different strategies to invest so as to create financial return and return for the planet. These tools and materials are often integrated (you'll hear the term "ESG integration") but may also be used solo. They include the following.

- **Exclusions:** Let's use ESG ratings to identify companies that do the world more harm than good and then avoid investing in them.
- **Positive screening:** Let's again use ESG ratings, but this time, to invest only or primarily in companies doing right, or at least that are "best in class" among companies in the same industry.

THE (GLORIOUS) END OF APARTHEID

Perhaps the ethical investment movement's earliest victory was its role in ending apartheid. As you may recall, it was the late 1980s, and numerous institutions, including many colleges and state and local governments, refused to invest with or to purchase from any companies doing business in South Africa. That was before the advent of ETFs. Had sustainable ETFs been around. . .who knows? Apartheid might've ended sooner.

- **Active ownership:** Let's arm-bend company leadership to become better world citizens, perhaps by raising a ruckus at shareholder meetings.
- **Thematic investing:** Let's invest in industries like solar and wind power, recycling, and public transportation.
- **Impact investing:** Let's find specific ventures or projects to promote. Impact investing is often used by ETFs that invest in "green bonds" — bonds used to raise money for ecologically minded projects.

To date, sustainable ETFs have used exclusions more than any other strategy, but that seems to be changing, as more fund managers and investors realize that that strategy alone is suboptimal, and to have the most positive effects on the world and investment returns, it may pay to use several strategies. I feel confident in saying that in the aggregate, these strategies have succeeded in making positive world change.

The ESG movement has undoubtedly had an impact on corporate America, notably by pushing certain auto, oil, chemical, and utility companies to reduce pollutants. Other victories include a nationwide ban on mercury thermometers and commitments from various corporations to start reducing greenhouse gas emissions, start recycling programs, and end discrimination against employees based on their sexual orientation.

And with $100 billion invested in ETFs that focus on sustainability — and growing fast — the pressure exerted by ETFs to create a better world will certainly grow.

Will investing in ESG funds make you rich?

The oldest ESG ETF is the iShares MSCI USA ESG Select ETF (SUSA), which was started on January 24, 2005. Since inception, the fund has returned a healthy 10.2 percent a year. In the past 5 years, the fund has returned 19.3 percent, while the total U.S. stock market has returned 18.0 percent. And moving along the spectrum, SUSA thoroughly trounces the USA Mutuals' VICE mutual fund (VICEX), which actually seeks to invest in socially *irresponsible* companies! (No, you will not find VICEX included in any of my sample portfolios presented later in this book. Invest in sin on your own!) That fund has returned a meager 4.6 percent over the past 5 years. Do these comparative returns mean you're always going to do better with ESG funds?

No.

Lately, almost *all* ESG funds have clobbered *all* non-ESG funds, never mind this one ridiculous anti-ESG fund. It isn't because the ESG funds are ESG funds *per se*. It is largely because ESG funds, as a rule, underweight energy companies (which have tanked in past years) and overweight tech (which has soared in past years).

REMEMBER

ESG is *not* an asset class. ESG funds may have stock portfolios, bond portfolios, domestic portfolios, and foreign portfolios. All of these are asset classes, and will generally play a much bigger role in the risk and return of a fund than whether it is an ESG fund or just a plain-vanilla ETF.

In the very long run, ESG funds of a certain asset class will probably not do much better or worse than non-ESG funds of the same asset class. That's because markets tend to be efficient. In other words, if highly rated ESG companies were to consistently outperform non-ESG companies (as studies indicate may well happen), then investors' money would steadily pour into the ESG companies, and their stock prices would rise. Hence, paying more for the stocks would temper stock performance. This is why stocks in growth companies, which are overall healthier and more profitable than value companies, don't outperform in the long haul.

Fence-sitters, make a decision

So should you go out of your way to invest in ESG funds? For years, this was a tough question for me. Many ESG funds in years past simply charged too much. Or I didn't feel that they were necessarily managed in a way as to maximum return while minimizing risk. One especially annoying feature of broad ESG bond funds in the past was their tendency to charge investors a hefty fee for screening the corporations, while the fund actually carried mostly Treasury bonds.

But that has all changed in the past several years. Most ESG funds today cost roughly the same as their non-ESG counterparts. Some are even cheaper! And they are managed (passively or actively) by the best in the business.

According to a Morgan Stanley report from 2019, "[r]esearch conducted on the performance of nearly 11,000 mutual funds from 2004 to 2018 show[ed] that there is no financial trade-off in the returns of sustainable funds compared to traditional funds." (They used mutual funds and not ETFs because back in 2004, there were so few ETFs.) The Morgan Stanley report not only found comparable performance between ESG and non-ESG funds, but they also concluded that the ESG funds were slightly less volatile, and less likely to tank when markets turned south. Other studies have noted the same slight advantage in stability.

So if you can invest in a way that could make the world a better place, and your portfolio isn't going to suffer for it, and may actually benefit by slightly reducing risk, why not do so? And that is why, throughout this book, where I recommend ETFs, you often find ESG ETFs. In the rest of this chapter, I recap some of those recommendations, along with a few funds I haven't yet showcased.

Which Sustainable ETFs Are Best for Your Portfolio?

Keep in mind, once again, that sustainability and ESG criteria are *not* asset classes. All ETFs, regardless of whether they have a focus on ESG, are nothing but baskets of securities, usually stocks or bonds. So the first question for you, if you want to "ESG-ize" your portfolio, is, "What kind of investment do I want?" Stocks? Bonds? Domestic? Foreign? Large cap? Small cap? I address these questions in Parts 2 and 3 of this book.

Once you've decided what asset class or classes you want to invest in, you can shop for an ESG fund that offers that asset class. Of course, you'll want a fund that is likely to earn you a good return. Start by looking for low costs. And, of course, you want to know that your money is making a difference. Here is where ESG funds, and the strategies they use, can vary enormously.

The most popular strategy used by ESG funds to date, as I mentioned before, has been exclusions — avoiding investments in companies, and sometimes industries, such as tobacco and pornography, where the benefits to society are dubious, to say the least. Some of these funds have done a better job than others. Some, quite honestly, have been awfully lax in their screenings. Companies have been given gold stars not for having taken any positive actions, but merely for having made vague promises to do so. Some ESG strategies used by some ETF managers exclude only 10 percent of the U.S. stock-issuing corporations.

Even more troubling, some of the ETF purveyors promoting ESG funds actually have pretty terrible records where it comes to using their voting power to promote ESG initiatives, and these include the two largest providers of ETFs: iShares (BlackRock) and Vanguard. "These companies are powerful, and could make a huge difference, but they haven't been," says Jon Hale, director of ESG strategies for Morningstar.

Research done by Hale, along with Morningstar's Jackie Cook, based on 2020 proxy voting, found that both of these ETF giants voted against ESG proxies far more than they voted for them. "It isn't that fund managers love polluters," says Hale, "it's just that they vote most often in favor of whatever the board suggests." And it has long been known that executives of U.S. companies, in part because of how they are compensated, focus too much on short-term profits and not on bigger or more long-term issues.

But that, says, Hale, is destined to change. "BlackRock especially has heeded the criticism [that came from Hale's study], and they are starting to do better," says Hale. In fact, as I'm writing this chapter, I opened up the *Wall Street Journal* (August 13, 2021) while drinking my morning coffee, and read that BlackRock, in the first half of 2021, backed 64 percent of environmental proposals, up from 11 percent in 2020.

"And Vanguard?" I asked Hale. Nothing but silence on the other end of the phone line. As a lifelong fan of Vanguard, I must say that this deeply disappointed me.

ETF purveyors that already had good track records in 2020, as reported in Hale's study, include Nuveen and Xtrackers (Deutsche Bank).

Hale says it can be difficult to uncover a fund manager's proxy voting record, but it isn't impossible. Funds have to file how they voted with the SEC, and they generally post these documents somewhere on their websites. Morningstar Direct, a pay service, can also provide this information. As for other measures that an ETF is taking to promote a better world, you'll want to read up on them carefully. Every ESG fund's sponsor has a website with loads of information, including the holdings of the fund and specific strategies the managers are using to promote a better world.

In the following sections, I cover a few funds that I feel fit both categories: good investments and good for the world. Note that there are about 150 ETFs that focus on sustainable investing. Many are discussed throughout this book. (Even when choosing an ETF that doesn't focus specifically on sustainable investing, you can often find an ESG rating online [from various ratings groups] to help guide you in your choices.)

Engine No. 1 Transform 500 ETF (VOTE)

Inception date: June 22, 2021

Management fee: 0.05 percent

Investment focus: This is an index fund tracking the Morningstar US Large Cap Select TR USD Index, a market-weighted index of 500 of America's largest public corporations (quite similar to the S&P 500).

ESG strategy: "You can't solve a problem by running from it. . . . Too many sustainable funds exclude companies that need to change rather than changing them," say the fund managers of Engine No. 1. In other words, they willingly buy up polluting companies with the aim of changing them for the better using proxy voting and other strong-arm methods of influencing the boards. These are the folks who run a San Francisco-based hedge fund and in June 2021 were able to nominate three director positions to the (12-member) board of ExxonMobil. And then, by exerting influence on other shareholders, they got their three directors elected. The directors are not out to dismantle the oil giant, but rather to get it to grasp the reality of climate change, and by doing so, to help protect both the planet and itself.

Russell's review: Given that this index fund tracks an index much like the S&P 500, you can expect long-term performance in line with the S&P 500. And at only 0.05 percent in management fees — you can't do much better than that — I can only give this fund two thumbs up.

Xtrackers (Deutsche Bank) S&P SmallCap 600 ESG ETF (SMLE)

Inception date: February 24, 2021

Management fee: 0.15 percent

Investment focus: This is a passively managed fund tracking the S&P SmallCap ESG Index.

ESG strategy: The fund excludes companies it deems nasty in terms of ESG, using criteria set up by the United Nations. Companies are ranked within their industry groups, with the aim of investing primarily in those companies acting most sustainably.

Russell's review: There are many, many more large-cap stock offerings among ESG funds than there are small-cap funds. At last count, only seven percent of U.S. equity funds with a sustainability focus were invested primarily in small-cap stocks. This is something of a head-scratcher to me, but in the end, you just don't have all that many choices. Yet every portfolio deserves some small cap. This fund, with its reasonable expense ratio, is certainly a good option.

Nuveen ESG International Developed Markets Equity (NUDM) and Nuveen ESG Emerging Markets Equity (NUEM)

Inception date: June 5, 2017

Management fee: 0.40 percent for NUDM; 0.45 percent for NUEM

Investment focus: These are both passively managed funds tracking the TIAA ESG International Developed Markets Equity Index and the TIAA ESG Emerging Markets Equity Index, respectively. The top five countries in the Developed Markets ETF are Japan, the United Kingdom, France, Switzerland, and Germany. The top five in the Emerging Markets ETF are China, Taiwan, the Republic of Korea, India, and Brazil.

ESG strategy: The managers screen out the bad and overweight the good using the indexer's ESG valuations that select the best companies in each industry sector.

Russell's review: These are a bit pricey for index funds, if you ask me, but not crazy expensive. The indexes are solid, although I'd be a bit concerned that the emerging-markets fund features nearly 40 percent China. The ESG screening is reasonable, and the company does a good job of voting yay on environmental proxy measures.

Humankind U.S. Stock ETF (HKND)

Inception date: February 24, 2021

Management fee: 0.11 percent

Investment focus: This fund is run to track Humankind's own index, which they call the Humankind U.S. Equity Index. It scans the U.S. stock market and pulls out those companies doing good for the world, then applies some market weighting. The fund has 998 companies in its portfolio, the largest holdings being Alphabet, Verizon, Corteva (seeds, and crop protection products with an eye toward sustainability), Microsoft, and Apple. The portfolio is a total market fund, but because of the cap weighting, you'll get more exposure to large-cap stocks than anything else. With a P/E ratio of 20.5, HKND is quite value-y.

ESG strategy: This firm, which issues only one ETF, is all about ESG. Management is very critical of its competition's tendency to use a "best in class" rating system to choose securities. "If the investing philosophy of choosing the least-bad corporate actor per industry were around in the 1700s, it could have supported the 'best' slave trading company," says Humankind on their webpage. The fund (obviously) does not screen within industries, but looks to the market as a whole to invest in the companies making the biggest positive impact on the world. They then try to get actively involved to make good world citizens great world citizens.

Russell's review: I have little doubt as to Humankind's devotion to ESG. And the fees they are charging investors are very reasonable. (Less, in fact, than many other total-stock-market ETFs.) The fund has a short track record, but given the size of the portfolio — 1,000 firms — it seems unlikely to me that the long-term performance of this fund will differ all that much from the market at large, and if it does, it will probably outperform, simply given its value tilt. My main concern would be with the viability of the young company itself and whether this fund may potentially close. But keep in mind that when ETFs close, investors get back whatever the firm's holdings are worth at the time of the ETF's demise. So the main cost would be the hassle of paperwork, and possibly a capital gains hit at an importune moment.

ONE OF A KIND

A number of companies across the land are registered within their home states as *benefit corporations*. These are not nonprofits. These are companies that work hard to find profits, but profits aren't their only goal. Examples of benefit corporations past and present include Ben & Jerry's, King Arthur Flour, Numi Organic Tea, Patagonia, Public News Service, Seventh Generation, Vermont Creamery, the New Belgium Brewing Company, and the ETF provider Humankind Investments.

Humankind is the first fund company ever to file with the Securities and Exchange Commission as a benefit company. "I believe that this novel corporate structure is ideal for socially responsible investment products as it allows for the investment vehicle to take into account not only profits for investors (as traditional corporations are forced to do), but also the value created or destroyed for employees, customers, and society at large. So, the mission of a benefit corporation investment company should therefore be well-aligned with the goals of a socially responsible investor," says James Katz, CEO of Humankind.

VanEck Vectors Green Bond (GRNB)

Inception date: March 3, 2017

Management fee: 0.20 percent

Investment focus: Intermediate-term bonds issued by global institutions and various nations from every continent (well, except Antarctica). The top five countries are the U.S., China, India, South Korea, and Germany. The vast majority are investment-grade bonds with an average credit quality of A. This fund is passively run, with a current yield of 1.8 percent.

ESG strategy: The fund tracks the S&P Green Bond U.S. Dollar Select Index, comprised of U.S. dollar-denominated "green bonds." They are so called not because they are denominated in greenbacks but because they were issued to finance environmentally friendly projects.

Russell's review: It has been argued that ESG investing can have more impact when the investing is done in bonds rather than stocks. Why? Because a fund manager will usually buy bonds directly from the issuers, rather than, like stocks, on the open market from a third party. Some ESG bond funds, like ESG stock funds, go through a screening process and try to eliminate companies that put profits above people. But green bond funds are different in that they invest specifically in bonds used to raise money for worthwhile projects, to build solar panels, create geothermal energy, recycle waste, make buildings more energy efficient, preserve wetlands, distribute water to areas of drought. . .you get the idea. There are several green bond ETFs. I like VanEck's because of the low cost ratio and the broad diversification.

KraneShares Global Carbon ETF

Inception date: July 30, 2020

Management fee: 0.79 percent

Investment focus: With this unique ETF, you'd be entering the global cap-and-trade carbon allowance market, buying up futures contracts on carbon offsets (kind of like get-out-of-jail-free cards for polluters). You'd think, logically, that with the worsening of global warming, prices of these carbon offsets would increase as governments tighten regulations. In addition to this price growth potential, carbon offset valuations seem unrelated to the price of stocks or bonds, making this investment a potentially potent hedge.

ESG strategy: The higher the demand for these carbon allowances, the more the price will be jacked up. The more the price is jacked up, the more companies will need to pay to emit greenhouse gases, and the more incentive they will have not to.

Russell's review: You could stand to profit, and those profits could do the world some good. But there's plenty of risk here. A revolution in manufacturing technology, for example, could do away with the need for the carbon offsets. Future administrations that take an unsympathetic view of regulations could also drive a spike into the heart of carbon cap and trade. If you don't mind the risk, go for the return. But I wouldn't suggest a portfolio position of more than five percent.

IN THIS CHAPTER

» Appreciating the difference between passive and active investing

» Weighing the pros and the cons of actively managed ETFs

» Reckoning how active investing might play into your life

» Choosing from a smorgasbord of fund options

Chapter 18

Going Active with ETFs

The first ETF in the U.S. was launched in 1993. It was the S&P 500 fund SPY. It was an index fund. And for the next 15 years, all ETFs were index funds. But then, in 2008, years of wheedling the SEC paid off, and Wall Street was finally allowed to issue its first actively managed ETF.

It was foreshadowing, and ironic, that the very first actively managed ETF was issued by Bear Stearns. Within several months, the financial collapse of the investment banking industry, led by Bear Stearns, was well on its way to creating the worst bear market (more irony) of our lifetimes. That first ETF died, folding (with money returned to investors) in October 2008, as Bear Stearns, after 85 years in business, collapsed and itself folded.

Since that time, I've seen the opening (and the closing) of dozens upon dozens of actively managed ETFs. At present, there are about 650 actively managed ETFs. That's nearly one-quarter of the ETF universe. But those active funds have failed to accumulate a whole lot in assets. According to Morningstar Direct, those 650 or so funds hold less than four percent of all investors' money stored in ETFs.

Not Exactly Setting the World on Fire

Why have active ETFs in the aggregate been such duds? I have a few hypotheses:

- **Most ETF buyers are indexers by nature.** They know that index funds, as a group, do much better over time than actively managed funds. I'll throw out a few numbers later in this chapter. (You can also read more about this topic in Chapter 1, or for more detailed information, see my book, *Index Investing for Dummies,* also published by Wiley.) The bottom line, if I may steal a line from Obi-Wan Kenobi, is that most ETF buyers know that if they stick with index funds, The Force will be with them and not with those who choose active management.
- **Most ETF buyers want transparency.** Active managers, reluctant to reveal their "secret sauce," have not been too keen to comply with the transparency rules of ETFs, and they've been lobbying government officials to change those rules. Finally, in 2019, the SEC caved. . .a bit. Active ETFs can now have their secret sauce, and they can change the recipe day to day, but they must reveal it to shareholders either monthly or quarterly with a lag of up to 60 days. Note that this is in contrast to the passive ETFs that must disclose their complete holdings every morning before Wall Street's opening bell. Ding.
- **Many of the active funds are just plain goofy.** Many actively managed funds are highly speculative and not the kinds of investments into which smarter investors (as most ETF investors tend to be) are going to plunk their money. In 2019 and 2020, there were more ETF closings than openings, and many of them were actively managed. And goofy. Among the dead: Sit Rising Rate ETF (SIT), EventShares U.S. Legislative Opportunities ETF (PLCY), James Purpose Based Investment ETF (JPBI), and ProSports Sponsors ETF (FANZ). Among the brand-spanking new: Simplify Volt Pop Culture Disruption ETF (VPOP) and Merlyn.AI SectorSurfer Momentum ETF (DUDE).
- **A number of the active funds have been issued by relatively unknown and not terribly well-funded companies.** Just look at some of the names you see in the preceding bullet. Add to the list the now-defunct Dent Tactical ETF (DENT), based on the strategies of best-selling author and crystal-ball gazer Harry S. Dent, which entered the market in the summer of 2010, provided investors with three years of dismal performance, and then shut its doors.

GREED ALERT

Oh, and did I mention that the DENT ETF charged 1.5 percent a year in management expenses, which, among ETFs, is sort of the equivalent of a $480 pair of jeans? The other actively managed ETFs aren't cheap, either. And that's part of their problem. A big part. By the way, Harry Dent is still a regular on financial news shows — always happy to pull out his crystal ball. Happy Harry.

Do You Want to Get Active?

You may have already surmised that I'm not a big fan of active investing, but I don't want to give you the wrong impression. Not all active funds are silly or overly expensive. Some may very well make sense in your portfolio.

But remember that The Force is not with you. Sure, every active manager has a great story. But when you look at all the actively managed fund managers who've told great stories for years, very few of them do better picking stocks (or bonds) than a monkey throwing darts at a dartboard could do. Care to guess how many actively managed U.S. large-cap growth funds have outperformed the indexes in the past 10 years? Only about 9 percent of them, according to Morningstar Direct. Small-cap value stock funds? About 29 percent have beaten the indexes. Foreign large-blend funds? About 20 percent. Intermediate core bond funds? About 28 percent have beaten the indexes over the past 10 years, but that drops to less than 10 percent outperforming over the past 20 years.

As I said, not good odds. But if you are going to go with active management, active ETFs can be less expensive and more tax efficient than their corresponding mutual funds. That offers reason for hope. On the flip side, active ETFs have a big disadvantage in that they can't, like a mutual fund, close the fund to new investors. As a result, actively managed ETFs can get bloated. The manager may be forced to take on new holdings or increase positions they don't really want to increase.

On balance, you must keep in mind that historically, actively managed funds as a group have not done nearly as well as index funds. (Trust me, the Morningstar research I cited earlier is from a very large body of research done by any number of firms or academic institutions.) That being said, active management may sometimes have an edge, especially in some areas of the investment world, such as micro caps, a universe too small to have been well studied, or commodities. And much of the advantage of index investing has been in its ultra-low costs — something that actively managed ETFs could possibly emulate. Investors will see over time if active management improves its track record.

Let's Get Practical

If you want to go with an actively managed fund, I ask you to at least keep in mind the lessons learned from indexing and what has made indexing so effective over time. Basically, you want certain index-like qualities in any actively managed fund you pick:

- **Choose a fund with low costs.** With so many ETFs allowing you to tap into stocks or bonds for a fraction of a percentage point a year, you do not need or want any fund that charges much more. Any stock fund that charges more than, oh, 0.60 percent, or any bond fund that charges more than about 0.30 percent, is asking too much, and the odds that such a fund will outperform in the long run are very slim. You should probably go elsewhere.
- **Watch your style.** Make sure that any fund you choose fits into your overall portfolio. Studies show that index funds tend to do better than active funds in both large caps and small caps, but in small caps, you have a better chance that your active fund will beat the indexes. That's because large caps are more thoroughly scrutinized by investors, so finding a company with hidden strengths would be like finding a $50 bill on the sidewalk at 42nd and Broadway.
- **Check the manager's track record — carefully.** Make sure that the track record you're buying is long term. (Any fool can beat the S&P 500 in a year. Doing so for ten years is immensely more difficult.) I'd look at performance in both bull and bear markets, but your emphasis should be on average annual returns over time compared with the performance of the fund's most representative market index over the same period. And remember that a fund's returns will be determined largely by its asset class. In other words, a small-cap value fund should outperform the S&P 500 over time because it is riskier, and risk equals return, generally. The more important question is whether that small-value fund has beaten the small-value indexes over time.
- **Don't go overboard with active management.** Studies show *so* conclusively that index investing kicks butt, that I would be very hesitant to build anything but a largely indexed portfolio, using the low-cost indexed ETFs that I suggest throughout this book.

A Look at Some of the Most Popular Actively Managed ETFs

Not all active ETFs have struggled for assets. Some have done very well in terms of getting new investors on board. Let's take a glance at some of these apparently better mousetraps — why they are popular and what may make them special.

As I'm something of a skeptic when it comes to active management, I'm not going to be outright advocating that you buy any of these funds. Nor am I going to trash any of them. The following funds are probably among the active funds that I would advocate, if I were to advocate any. The active funds that I would trash, if I were to trash any, are presented in Chapter 20.

ARK Innovation ETF (ARKK)

By far, the most popular active ETF, ARKK is managed by Cathie Wood, who has arguably become the most well-known fund-manager superstar since Fidelity Magellan Fund's Peter Lynch. Founded in 2014, ARKK invests in what Wood calls "disruptive technology" — technology that "changes the way the world works." The fund is currently invested in Tesla (12 percent of the portfolio); Teladoc Health; Roku, Inc.; Square, Inc.; Zoom Video Communications; and other high (and "disruptive") technology, and it has seen phenomenal returns: 34.3 percent a year since inception. And, by the way, if imitation is the best form of flattery, I'm noticing that practically all new ETFs on the market are claiming to be "disruptive." The word is quickly becoming as hackneyed as the word *literally* is among millennials.

Wood, interestingly enough, is almost the opposite of Peter Lynch. Lynch was well known to be wary of new technology. In fact, when he retired in 1990, after 13 years commanding the Magellan Fund, it was just at the dawn of the dot-com revolution that led to one of history's greatest bull markets (1991 to 2002). Lynch, had he not retired, undoubtedly would have missed out, and his legacy would've turned to mud. Will the same happen to Cathie Wood? The companies she's selected have been enormously successful, but their stocks' valuations are now in nosebleed territory. And the fund, now with more than $25.5 billion invested, is not going to be as nimble moving forward. In order for this fund to continue over-performing (and to overcome the 0.75 percent management fee that creates considerable drag for investors), its holdings will have to grow like wildfire. That may occur. It may not.

At least one company, called Tuttle Capital Management, LLC, has filed with the SEC to issue an ETF that would trade under the ticker SARK, and it would *short* (bet against) Cathie Woods' ARKK. (Perhaps SNARK would be a better ticker?!) Interestingly, SARK is planning to charge the same as Wood: 0.75 percent a year. In other words, whether Wood's future picks are winners or losers, whether investors win or lose, the house — or more accurately, two houses — will be making good money.

JPMorgan Ultra-Short Income ETF (JPST)

With interest rates on bonds so low, and with the general sentiment being that interest rates are likely to climb, ultra-short bonds have been extremely popular, even though they've been paying squat. This fund, with 773 very short-duration bonds, mostly investment-grade corporate bonds, has managed to eke out a return of about 1 percent over the past year. Most ultra-short bonds have earned far less. Is it because JPMorgan is taking some credit risk that other funds aren't? Or do the company managers really provide return above and beyond? Time will tell. In the meantime, the expense ratio of 0.18 percent is reasonable, and given this reasonable expense ratio, and JPMorgan's experience, you haven't all that much to lose if you want to employ this fund, rather than an index fund, for tapping this asset class.

PIMCO Enhanced Short Maturity Active ETF (MINT)

PIMCO has been in the active-management-of-bonds business for many years, and the company was among the first to issue actively managed bond funds. Like JPST, MINT offers ultra-short bonds — largely corporate, but with some government bonds, as well — and a healthy serving of international bonds. The return has been less than JPST's (0.71 percent versus 0.97 percent). However, the lower return is in part due to the safer bond mix. But also, the expense ratio is higher — 0.35 percent — and that will eat into any returns you get. I'd be more inclined to buy this fund — or any other bond fund that charges more than the cheapest index funds — if interest rates were to climb.

Quadratic Interest Rate Volatility and Inflation Hedge ETF (IVOL)

A unique fund, IVOL bills itself as a hedge fund, in the original sense of the word. (The term *hedge fund* is now often used to describe any private investment partnership; originally, it meant a fund that offered investments with little to no correlation to the broad market.) IVOL, in fact, has shown very little correlation to either the stock or the bond market since its birth in May 2019. And it has done this while providing an impressive return of 8.5 percent annually. It does this with a portfolio that is 85 percent U.S. inflation-protected Treasuries and the rest in options that seek to increase in value when volatility of other asset classes rises. Quadratic Capital, which runs this fund, is owned by Krane Fund Advisors, LLC, which is in turn majority-owned by China International Capital Corporation, one of the largest investment banking firms in China. The fund charges 0.99 percent, which is awfully expensive. But there aren't many investments out there that can serve as effective hedges to both stocks and bonds.

First Trust Long/Short Equity ETF (FTLS)

Going "long/short" is an ages-old hedging technique of active managers, whereby the fund holds both *long* positions (stocks you expect to go up) and *short* positions (stocks you expect to go down). So, yes, it is all about stock picking. Why go both long and short? Because your other stock funds, passive or active, will tend to go up when the stock market as a whole is going up, and they will tend to go down when the whole stock market is going down. Long/short funds take bets in both directions to temper volatility. In the case of FTLS, 80 to 100 percent of the positions are long. Zero to 50 percent are short. So the fund will tend to go up in good times, and down in bad times, but probably not as much (in either direction) as your other stock funds. The fund charges 0.95 percent in management fees, but there are additional fees incurred in shorting, bringing the total annual expenses to 1.55 percent. This is high, but actually not outrageous for this kind of fund. So far, the fund, founded in 2014, has done well, with a return since inception of 8.1 percent versus the S&P 500's 14.1 percent.

KraneShares Global Carbon ETF (KRBN)

This fund might be considered an actively managed commodity fund, but it is, in one sense, very different than other commodity funds: The commodity is not gold or silver or copper or corn. It is something entirely intangible. The fund buys up futures on cap-and-trade carbon allowances, which governments in Europe and North America require industries to have in hand before emitting greenhouse gases into the environment. The thinking is that as global climate change worsens, governments will tighten carbon emissions, and the prices of these allowances will rise. Meanwhile, the more investors there are clamoring to own the allowances, the more the forces of supply and demand may force the prices up on their own, which, incidentally, would be good for the planet as it would serve as an incentive for industry to pollute less. (Silver prices shot up when investors started to pour money into silver ETFs; carbon allowances could follow in silver's path.) The fund was formed in July 2020, charges 0.79 percent, and in its first year, returned 76.4 percent.

Author's disclosure: I bought a modest position in this fund for my own account, and I've started to discuss it with clients who have a high tolerance for risk. What's the risk? As I see it, a major breakthrough in manufacturing technology could, in one fell swoop, end the global climate crisis and kill the market for carbon allowances. If that happens, I would be *thrilled* to have lost money!

Time to Swap Out Your Active Mutual Funds?

If you happen to be invested in a popular, actively run mutual fund, such as the T. Rowe Price Blue Chip Growth Fund (TRBCX), and you like and trust the fund's management and want to stick with them, you now have the option of moving your money. In the case of T. Rowe Price Group, Inc., you can move it from TRBCX to the T. Rowe Price Blue Chip Growth ETF (TCHP), introduced in August 2020. Should you? After all, the fund manager is the same, and the fund's strategy is the same. The only significant difference is the wrapper, and the mutual-fund wrapper is more expensive than the ETF wrapper, as is typically the case. TRBCX charges 0.68 percent, whereas TCHP charges 0.57 percent.

In addition, the ETF wrapper will almost always offer great tax efficiency. And, as opposed to the mutual fund, it will never have a minimum investment. You want one share? You got it.

Yes, you should consider switching. Be aware, however, that if you hold your mutual fund in a non-retirement account, this may result in a capital gains tax hit. Find out before you make any moves. Vanguard mutual funds can be transferred to their ETF equivalents without tax ramifications, but that isn't the case with other fund companies. Vanguard is currently the only firm offering ETFs that are a distinct share class of their mutual funds.

Note: Other fund companies, however, may decide to turn a mutual fund you hold into an ETF. If that is the case — rather than your deciding to switch — there will likely be no tax ramifications to you.

Transferring from mutual fund to ETF is actually a win-win for both investors and the fund companies, as ETFs are far easier for fund companies to administer than mutual funds.

T. Rowe Price is but one of many primarily active mutual-fund companies that are now issuing ETFs, often at a significantly lower price than their similar mutual funds. PIMCO is another. Fidelity is a third. Franklin Templeton is a fourth. There's also American Century, Putnam, Dimensional, Goldman Sachs, Legg Mason, John Hancock, and JPMorgan. If you have mutual funds with any of these companies, I suggest you go to their websites or talk to a rep to find out if ETF alternatives exist or are in the pipeline.

ACTIVE-PASSIVE MIDDLE GROUND

Some ETFs are hard to categorize as "active" or "passive." Most of these hard-to-categorize ETFs, I would call "smart-beta" or "strategic-beta" ETFs. These ETFs are usually run as passive (a.k.a. "index") funds, but the index they are based on was created for the fund itself, rather than the fund tracking an established index, such as the S&P 500. The newfangled indexes are designed to beat the established indexes, which, after all, were designed to track investments, not to serve as investments.

Smart-beta funds have been around for a very long time, although only fairly recently have they been called smart-beta funds. Perhaps the granddaddy of smart beta is Dimensional (DFA), founded in 1981, which has become a huge player in mutual funds and only recently introduced a lineup of ETFs. Dimensional's own indexes make enormous sense. The originators looked at years and years of historical data and came to the conclusion that portfolios should have a value lean and more small-cap funds than you are going to get with most traditional indexes. And that's what you get when you buy DFA funds. I recommend several of them throughout this book. Yes, you can create your own lean-toward-value-and-small-cap portfolio, but DFA funds can make it a lot easier.

Because DFA gives itself the option of tweaking its indexes, its ETFs have been designated as "active ETFs." But the funds' light turnover makes them, in my mind, more like classic index funds than most actively managed funds. So you may think of them as smart beta, or, if you prefer, think of them as index-like funds. Many Vanguard funds — both mutual funds and ETFs, particularly the bond fund — also fall into this index-like category.

DFA's funds technically don't track indexes (with the exception of a few proprietary funds and the ETFs they subadvise for John Hancock). Rather, they employ a quantitatively driven, light touch, paint-by-numbers variety of active management—much like many AQR funds and Vanguard's actively-managed factor ETFs. (BJ)

(continued)

(continued)

Another leader in smart beta is Invesco, which has a lineup of "equal-weight" ETFs, such as the Invesco S&P 500 Equal Weight Consumer Staples ETF (RHS) and the Invesco Equal Weight Technology ETF (RYT). Why equal weight? Because almost all other sector funds are based on "cap-weighted indexes" in which the big players totally dominate the portfolio. In RYT, for example, you get exposure to Apple and Microsoft, and each company gets an allocation of roughly 1.5 percent of the total portfolio, the same allocation given to much smaller tech companies. In more traditional, cap-weighted sector funds, such as Vanguard's Information Technology ETF (VGT), Apple and Microsoft make up 36 percent of the portfolio. To avoid this concentration, the Invesco lineup of ETFs can make sense. Just be aware that small caps tend to be more volatile than large-cap stocks, so RYT will be more volatile (and potentially higher returning in the long run) than VGT.

Actively managed ETFs, in contrast to smart-beta ETFs, are not based on indexes of any sort. The manager actively swaps securities in an attempt to beat the traditional indexes. Yeah, the smart-beta funds are also trying to beat the traditional indexes, but there's little swapping. For that reason, the smart-beta funds can be more tax efficient and low-cost than actively managed funds. And I'm totally in favor of the idea of smart beta, although whether I applaud an individual smart-beta ETF will depend on who is designing the index and whether that index makes sense.

IN THIS CHAPTER

» **Realizing that investing need not be complex**

» **Building a portfolio with few moving parts**

» **Teaming up with the best ETF providers for your needs**

Chapter 19

All-In-One ETFs: For the Ultimate Lazy Portfolio

There's a lot of academic research, shared throughout this book, that provides reasons for you to construct a portfolio with stocks and bonds from around the world, allocated to your portfolio in a way that makes sense for you personally. This means building your portfolio with the right amount of aggressiveness (stocks) and the right amount of protectiveness (bonds and cash). It also means constructing your portfolio in such a way as to maximize return while minimizing risk. Decades of good data allow you to do that.

The optimal mix for you is unlikely to be the same optimal mix as it might be for, say, your parents, or for Joe on your Twitter feed, or for your dermatologist. Nor may the optimal mix for you necessarily be an exact replica of a market-weighted, total-world portfolio.

But for those who love simplicity, and who are willing to accept what may be less than optimal, ETFs offer a way to build a portfolio with very, very few moving parts.

In this chapter, I present several of the simplest portfolio construction options — all-world stock funds and all-world bond funds. As is the case for most stock funds sold in America that include international stocks, there will be some currency fluctuations with these two types of all-world stock funds. And, as with most bond funds sold in America that include international bonds, the currency flux is hedged or (theoretically) eliminated with the all-world bond funds. (I explain why hedging is more appropriate for bonds than stocks in Chapter 15.)

And then — for those who *really*, *really* want simplicity — I present a few all-world-stock-*and*-bond-combined funds. Heck, most wealth managers wouldn't want you to know this, but you can build a fairly well-diversified portfolio with only *one* holding. Buy it. Go play tennis. Let the markets work for you.

There are two kinds of all-asset funds: static versions where the percentages of, say, stocks and bonds remain stable, and funds where the percentages change over time, known as "lifecycle" or "target-date" funds.

Now, I present you with a short menu of some of your options.

Buying into the World's Stock Markets in a Flash

If you want instant exposure to the largest possible number of stocks, including U.S. and all sorts of foreign stocks (from both developed and emerging-market countries), your best options come from Vanguard and State Street SPDRs. Either of the following two ETFs will give you an excellent representation of the world's stocks at a very reasonable cost.

Both ETFs are based on market-weighted indexes, which means that you'll be getting a lot more large-cap than you will small-cap. It also means, given the run-up in capitalization of tech in the past several years, that your portfolio may have a lean toward growth. (If you'll recall from Part 2, value stocks actually outperform growth in the long haul.) And given the recent outperformance and rise in capitalization of large U.S. companies — more like a handful of large U.S. companies (Apple, Microsoft, Amazon, Alphabet, and Facebook) — these all-world portfolios are now about 58 to 59 percent concentrated in but one country. Sure, it's a great country — with the Grand Canyon, Walt Disney World, and Bruce Springsteen — but it is still just one country. And as I know from years of tracking stock-market performance, U.S. stocks outperform foreign, then foreign stocks outperform U.S, then. . .*ad infinitum.*

Vanguard Total World Stock ETF (VT)

Indexed to: The FTSE Global All Cap Index

Number of stocks: 9,074

Expense ratio: 0.08 percent

Geographic breakdown: U.S. 58 percent/Non-U.S. 42 percent

Top 5 holdings: Apple, Microsoft, Amazon, Alphabet, Facebook. (These five giants make up 9.5 percent of the total portfolio.)

Hedged against currency flux: No

SPDR Portfolio MSCI Global Stock Market ETF (SPGM)

Indexed to: The MSCI ACWI IMI Index. (*ACWI* stands for All Country World Index; *IMI* stands for Investable Market Index.)

Number of stocks: 2,307

Expense ratio: 0.09 percent

Geographic breakdown: U.S. 59 percent/Non-U.S. 41 percent

Top 5 holdings: Apple, Microsoft, Amazon, Alphabet, Facebook. (These five make up 11.9 percent of the total portfolio.)

Hedged against currency flux: No

Putting the World's Bond Markets at Your Fingertips

If you buy into an all-world stock ETF, such as one of the two introduced in the previous section, you'll want, if you're smart, to marry it to an all-world bond ETF. As I think I've made clear throughout this book, and others I've written, a portfolio with only stocks or only bonds is like a bicycle with but one wheel — you may move forward, but the going won't be easy, and you can easily topple over.

I present two good bond options here. One, the Vanguard option, is super low-cost, with incredible diversification, with more bonds than there are words in the Declaration of Independence and the Constitution combined. Nothing not to like.

The second, the iShares Global Green Bond ETF, costs a bit more, but you get to promote a cleaner world. It is one of my favorite ESG funds. (See more about ESG funds in Chapter 17.) Both of these funds, like nearly all aggregate bond funds, offer a mix of federal government, agency, and private bonds. But these are all taxable bonds — no tax-free munis — so these babies are best kept nestled in tax-advantaged accounts, such as an IRA.

Vanguard Total World Bond ETF (BNDW)

Indexed to: The Bloomberg Barclays Aggregate Float Adjusted Composite Index. This is a fund of funds, combining Vanguard's Total International Bond ETF (BNDX) with Vanguard's Total Bond Market Index Fund (BND).

Number of bonds: 16,430

Average credit quality: A

Average duration: 7.6 years

Expense ratio: 0.06 percent

Geographic breakdown: U.S. 47 percent/Non-U.S. 53 percent

Hedged against currency flux? Yes

iShares Global Green Bond ETF (BGRN)

Indexed to: The Bloomberg Barclays MSCI Global Green Bond Select (USD Hedged) Index, which is composed of global bonds that are issued specifically to help fund environmental projects.

Number of bonds: 590

Average credit quality: Between A and AA

Average duration: 8.4 years

Expense ratio: 0.20 percent

Geographic breakdown: U.S. 10 percent/Foreign 81 percent. Top countries are France with 20 percent and Germany with 14 percent. The remaining 9 percent are "supranational" bonds, issued by institutions such as the International Bank for Reconstruction, the European Investment Bank, and the International Finance Corporation.

Hedged against currency flux? Yes

Buying Stocks and Bonds in One Shot

Don't want to hold even two funds, but rather just one? Here are ETFs that will give you exposure not only to the entire world of stocks but to bonds as well. They are called *asset allocation funds*, and they come in two distinct varieties.

Some asset allocation funds are *static*, meaning there's a division between global stocks and bonds that stays more or less the same for the life of the fund (for example, 60 percent stocks and 40 percent bonds). These static funds may sometimes be referred to as *target-risk funds*. The folks from iShares offer eight of these allocation funds, State Street Global Advisors SPDRs offer three, and Invesco offers a handful of actively managed options, if you want to go that route.

iShares asset allocation funds

The largest ETF provider offers the largest number of asset allocation funds — stocks and bonds galore, all in a single ETF. You just need to choose the one with the right amount of aggressiveness — the higher the percentage of stocks, the more aggressive — and whether you want a twist of ESG.

Plain-vanilla funds

- iShares Core Aggressive Allocation ETF (AOA): 80 percent stocks/20 percent bonds
- iShares Core Growth Allocation ETF (AOR): 60 percent stocks/40 percent bonds
- iShares S&P Moderate Allocation ETF (AOM): 40 percent stocks/60 percent bonds
- iShares Core Conservative Allocation ETF (AOK): 30 percent stocks/70 percent bonds

Funds with a twist of ESG

- iShares ESG Aware Aggressive Allocation ETF (EAOA): 80 percent stocks/ 20 percent bonds
- iShares ESG Aware Growth Allocation ETF (EAOR): 60 percent stocks/ 40 percent bonds
- iShares ESG Aware Moderate Allocation ETF (EAOM): 40 percent stocks/ 60 percent bonds
- iShares ESG Aware Conservative Allocation ETF (EAOK): 30 percent stocks/ 70 percent bonds

The first four funds, all introduced in 2008, carry net expense ratios of about 0.25 percent and offer varying exposure to global stocks and bonds, depending on how aggressive or conservative a portfolio you want. The next four funds offer similar mixes, using ESG criteria, and were introduced in 2020. They carry net expense ratios of 0.18 percent. Yep, the "do good" options, somewhat paradoxically (because you'd think they would require more managerial effort and brainpower) cost less and are guaranteed to remain less until November 2025. At that point, they may cost the same as the non-ESG options.

Given the price difference, I can see no reason not to go with the ESG versions, unless you have a strong reason to believe that companies that emit lots of soot into the air are going to see higher stock performance. (Okay, I'm simplifying ESG criteria. For a more in-depth explanation, go to Chapter 17.) There's also a smallish (3 percent) position in international bonds provided by the non-ESG lineup, but not the ESG lineup. My guess is that this oversight will be corrected over time.

All eight of these asset allocation funds are actually funds-of-funds, made up of other iShares ETFs. There's nothing wrong with that. For the specifics, go to iShares.com. The expenses you see include the fees for both the component funds and the all-in-one fund wrapper.

In the case of the iShares ESG Aware Growth Allocation ETF (EAOR), for example, you would be getting a mix and match of five other iShares ETFs (iShares ESG Aware MSCI USA ETF [ESGU], iShares ESG Aware US Agg Bond ETF [EAGG], iShares ESG Aware MSCI EAFE ETF [ESGD], iShares ESG Aware MSCI EM ETF [ESGE], iShares ESG Aware MSCI USA Small-Cap ETF [ESML]), along with a BlackRock (the parent company of iShares) cash fund.

State Street Global Advisors SPDRs: Three asset allocation options

It may not pop out at you right away how the three State Street Global Advisors options differ in terms of aggressiveness (just like the iShares options). The first option on the list is fairly aggressive. The second is decidedly middle-of-the-road aggressive. The third is a strange bird, but certainly aggressive. In fact, all three are a bit strange. Not necessarily bad, but worthy of discussion.

- SPDR SSGA Global Allocation ETF (GAL): 76 percent stock/24 percent bonds*
- SPDR SSGA Income Allocation ETF (INKM): 50 percent stock/50 percent bonds*
- SPDR SSGA Multi-Asset Real Return ETF (RLY): 88 percent stock/12 percent bonds*

So why all the asterisks after the percentages? Starting with the SPDR SSGA Global Allocation ETF (GAL), the fund actually has about 67 percent stock. But it also holds about 5 percent commodities, 5 percent high-yield (junk) bonds, and 1 percent emerging-market debt. Commodities can be as volatile as stocks, and high-yield and emerging-market bonds can be almost as volatile. So when I say, "76 percent stock," that is my ballpark estimate of just how aggressive this fund is. To my reckoning, it would have roughly the same volatility as a typical 76/24 (stock/bond) portfolio. The management fee is 0.35 percent.

The second ETF on the list, the SPDR SSGA Income Allocation ETF (INKM), also has an asterisk because while it technically holds only about 36 percent stock, it also has some exposure to high-yield bonds (U.S. and emerging market) and leveraged loans. I'd say it has roughly the risk attributes of a 50/50 (stock/bond) portfolio. The management fee is, unfortunately, on the high side: 0.50 percent.

The third ETF on the list, the SPDR SSGA Multi-Asset Real Return ETF (RLY), offers a bevy of investments geared toward protection if inflation rages. The bonds are Treasury inflation-linked securities, the portfolio includes a large basket of commodities (about 25 percent of the total), and the stocks are in "natural resources," "global infrastructure," and "real estate." The management fee is a fairly hefty 0.50 percent. Unless you go to bed at night tossing and turning over the fear of inflation, I can't recommend this fund, even though I expect it will do a good job of keeping ahead of inflation. The commodities and the natural resources stocks will tend to move in the same direction, and that makes this fund awfully risky, whereas if inflation doesn't rage, the returns are likely to be quite tepid.

Invesco's actively managed "target-risk" ETFs

Chapter 18 is all about actively managed ETFs, and why I generally avoid them, in good part because they tend to cost you more than any benefit derived from the active management. But in the topsy-turvy world of fund pricing, sometimes you find actively managed funds that are cheaper than passively managed (index) funds. Invesco's actively managed asset allocation funds, or "target-risk" ETFs, are less expensive than the passively run SPDRs, although more expensive than iShares' asset allocation funds.

Unfortunately, these funds feature another sad characteristic of active funds: They are active! In other words, they are always changing per the manager's discretion. Note that even the general risk level of these funds can change dramatically from day to day. One day, you might find your fund holds 50 percent stock, and the next day, 60. I don't especially like going to bed at night not knowing.

The Invesco asset allocation funds are funds-of-funds, made up of varying percentages of other Invesco funds, such as the Invesco RAFI Strategic US ETF (IUS), the Invesco Variable Rate Investment Grade ETF (VRIG), and the Invesco Preferred ETF (PGX). There are more asset classes in these funds than in either the SPDRs or the iShares multi-asset funds.

The funds have been in existence since 2017, not nearly long enough to see if the active management will pay off in the very long run. In the short run? The most aggressive *growth* portfolio (PSMG) has returned 12.3 percent over the past three years, and the least aggressive *conservative* portfolio (PSMC) has returned 7.6 percent. This compares, sort of, to the iShares growth portfolio (AOR), which has a three-year return of 10.6 percent, and the iShares conservative portfolio (AOK), which has a three-year return of 8.0 percent. I say "sort of" because you simply don't know with actively managed funds how much risk you've taken in order to get your return.

Here are the funds, from most to least aggressive.

- Invesco Growth Multi-Asset Allocation ETF (PSMG): 65 to 95 percent in equity (stock) ETFs.
- Invesco Balanced Multi-Asset Allocation ETF (PSMB): 45 to 75 percent in equity (stock) ETFs.
- Invesco Moderately Conservative Multi-Asset Allocation ETF (PSMM): 25 to 55 percent in equity (stock) ETFs.
- Invesco Conservative Multi-Asset Allocation ETF (PSMC): 5 to 35 percent in equity (stock) ETFs.

The expense ratios on these funds differ a bit: PSMG is 0.30 percent; PSMB is 0.32 percent; PSMM is 0.33 percent; and PSMC is 0.36 percent. Because the funds have the same component ETFs, except in different-size helpings, it appears that the more conservative component ETFs are somewhat more expensive than the more aggressive component ETFs.

Multi-asset funds that change as you age

If a fund seeks to change its asset allocation over time, growing more conservative as you get older and less able or willing to handle market risk, it may be called a *lifecycle* or *target-date* fund (rather than a *target-risk* fund). A few of these babies were designed and issued as ETFs by both iShares and Deutsche Bank. They have been discontinued, undoubtedly for lack of demand. And with what I have to say, I'm not going to raise the demand back up! But do know that if you really want a lifecycle fund, there are *plenty* to be found in the mutual-fund universe. I talk of how to incorporate mutual funds and other investment vehicles into your portfolio in Chapter 25.

Why wasn't there enough demand to keep the lifecycle ETFs up and running? One Morningstar official told me that it was likely because these funds are typically used in tax-advantaged employer-sponsored retirement programs, where tax efficiency (one of the strengths of ETFs) is moot, and everything is computed in dollars (more compatible with mutual funds), rather than shares. Also, wealth managers may be loath to suggest lifecycle funds to their clients. "Sending clients a quarterly statement with a single line item doesn't appeal to many advisors," said the man from Morningstar. A very good point.

Russell's average review for the average reader on an average day

"For every complex problem," said H. L. Mencken, "there is an answer that is clear, simple — and wrong." Certainly, finding the optimal portfolio is a complex problem. The all-in-one ETFs and mutual funds that I discuss in this chapter provide an answer that is clear, simple — and usually wrong. Oh, I suppose if you were the average 50-year-old, with the average amount of money, looking to work an average number of years, expecting to die at the average age, and you were willing to take on an average amount of risk. . .well, if you were all those things and planned on remaining forever average, an all-in-one fund might make sense for you.

But if you are anything other than perfectly average, I urge you to move on to Part 5 of this book whenever you feel ready. Take a look at my model portfolios and craft an ETF portfolio that makes sense for *you.*

IN THIS CHAPTER

» Learning about the pitfalls of leveraging

» Understanding the mechanics of bull and bear funds

» Recognizing the limits of buffer ETFs

» Avoiding very narrow markets

Chapter 20
Proceed-with-Caution ETFs

Assuming you are reading the chapters of this book in order, you are undoubtedly by now marveling at the enormous variety of ETFs you have to choose from. Perhaps you are feeling like you have too many choices. In Part 5, I'll give you some sample portfolios, using good, solid ETFs. Maybe that will help you winnow down your options. But this chapter should also help you, by suggesting entire categories that you don't need to incorporate into your portfolio, and in fact, you may be better off if you don't.

I'm going to start with a huge category, with at least 85 ETFs, according to ETF.com. These are the so-called *inverse* ETFs that promise you can make money when the market loses money. And they do do that. . .sort of.

Funds That (Supposedly) Thrive When the Market Takes a Dive

In June 2006, an outfit called ProShares introduced the first ETFs designed to *short* the market. That means these *inverse* ETFs are designed to go up as their market benchmark goes down, and vice versa. The four original ProShares inverse ETFs are the Short QQQ fund (PSQ), which is betting against the NASDAQ-100; the Short S&P500 (SH); the Short MidCap400 (MYY); and the Short Dow30 (DOG).

DOG, indeed. If I were to devise a ticker for the entire lot, it would be "HUH?"

As it happens, this HUH? category of ETFs has proliferated like no other. The original four are still around. And on top of those, you can now find many dozens of ETFs, largely from ProShares and Direxion, that will allow you to short anything and everything, including the kitchen sink (see the ProShares UltraShort Consumer Goods ETF [SZK]). From the U.S. stock market, to various industry sectors, to the stock markets of other countries, to Treasury bonds, to gold and oil, it is now easy to bet that prices are heading south.

And for the truly pessimistic investor, many of these short ETFs now allow you to bet in *multiples.* In other words, if the market falls, these funds promise to rise on a leveraged basis. For example, the Direxion Daily Natural Gas Related Bear 2X Shares (FCGS) is designed to rise 10 percent if the market in natural gas falls 5 percent. And the Direxion Daily Semiconductor Bear 3X Shares (SOXS) is designed to rise 30 percent if the market for semiconductor stocks falls 10 percent.

From where I sit, these funds look an awful lot like legalized gambling. If you're considering putting your bag of nickels in any of these slots, keep reading for my two cents.

Entering an upside-down world

In other parts of this book, I talk about correlation and how wonderful it is when you can find two asset classes that go up and down at different times. Heck, it would seem that funds that short the stock-and-bond markets would be ideal additions to a portfolio. Talk about diversification! Ah, but there are hitches. For example, when you diversify, you want to find various asset classes that move out of sync but that are all expected to move upward over time, making money for you. Funds that short the stock-and-bond markets fail to meet the long-term test.

WARNING

Sure, sometimes stocks decline. But over the long run, they rise. If they didn't, you wouldn't have a stock market. Who would invest? So over the long run, expect the short funds to lose money. Just about the only way to make money with these funds is to time the market just right: to jump in just as the market is about to dive and then pull out before the market goes up. Good luck! Market timing, I'm not the first to say, is a fool's game.

Here's another hitch: These short ETFs are designed to move against the market on a *daily* basis. That means if the market goes down 5 percent on Wednesday, your fund should go up 5 percent (or, if your fund is leveraged, 10 percent or 15 percent) on Wednesday. But the mathematics of this, as I show you in the upcoming section, "Funds That Double the Thrill of Investing (for Better or Worse)," is very tricky. This tricky math means that if you invest in these funds for more than a very brief spell, you are practically destined to lose money, regardless of which way the market moves!

Boasting a track record like none other

Don't take my word for anything I stated in the previous section. Just check the long-term performance records of these beasts. All of the original ProShares inverse ETFs introduced in 2006 have been proudly torturing investors ever since. The ProShares Short QQQ (PSQ), for example, has lost 17.9 percent annually since inception. The ProShares Short S&P500 fund (SH) has lost 12.3 percent a year since inception. The Short Dow30 (DOG) has lost 11.9 percent since inception. Bow-wow. That's −17.9, −12.3, and −11.9 percent *per year.* In other words, investors from the start have but pennies in place of their original dollars.

And those pennies would seem like manna from heaven if you had invested in Direxion's Daily S&P 500 High Beta Bull 3X Shares (HIBS), one of Direxion's many, many "Bear 3X" funds that promise you $3 on any day that the S&P 500 loses $1. (Of course, on days the S&P 500 gains $1, you would lose $3.) HIBS began in November of 2019. By August of 2021, a little more than a year and a half later, it had lost 88.2 percent of its value.

Sure, the stock market could tumble at any time, and you could profit by buying inverse or short funds. But you will need to time that stock market tumble just right, and the odds of doing so are very slim. Moreover, to play this stacked game will cost you: None of the short ETFs charge less than 0.75 percent, and most carry expense ratios of about 1 percent, making them among the most expensive ETFs on the market.

Before leaving this section, I just want to state that I do not by any means want to demonize either ProShares or Direxion for their inverse funds. These funds do exactly what the companies say they will do. You will indeed get the inverse of the daily return for whatever index the ETF is tracking, and if you wish, you can double- or triple-leverage your investment. I'm not saying these funds serve no purpose or are in any way evil. They work. And they undoubtedly serve a purpose for certain investors, perhaps professional traders and institutions that need short-term hedges. All I'm saying is that they do not make good long-term holdings for the average investor — for you or me.

Funds That Double the Thrill of Investing (for Better or Worse)

ProShares introduced four other ETFs in 2006 along with its inverse funds. These other funds targeted investors at the other end of the sentiment spectrum: extreme optimists. These were leveraged funds that included the Ultra QQQ (QLD), which sought "daily investment results, before fees and expenses, that correspond to twice (200%) the daily performance of the NASDAQ-100 Index," and the similarly designed Ultra S&P500 (SSO), Ultra MidCap400 (MVV), and Ultra Dow30 (DDM).

Since that time, ProShares, Direxion, and a handful of other ETF providers have introduced many dozens of leveraged ETFs. You can currently find 125 leveraged ETFs listed on ETF.com. These ETFs allow you to hypothetically double or triple your daily return (or loss) on just about any segment of the market you choose. Just like the inverse ETFs, these ones do exactly what they are supposed to do. And because markets tend to go up over time, these leveraged funds do make more sense than the inverse funds. I must, however, recommend caution.

You think the market at large is going to rock? These funds, which use futures and other derivatives to magnify market returns, promise to make you twice or triple the money you would make by simply investing in the NASDAQ-100, the S&P 500, the S&P MidCap 400, the Dow, or any number of other indexes tracking anything from consumer staple stocks to real estate to Treasury bonds to the price of oil. Of course, you'll have to accept twice the volatility. It seems like it might be a fair bet. But it really isn't.

Crazy math: Comparing leveraged funds to traditional ETFs

Suppose you invest in the Ultra S&P500 (SSO), as opposed to, say, the SPDR S&P 500 (SPY). On a daily basis, if the underlying index goes up, your investment will go up twice as much. If the underlying index goes down, your investment will go down twice as much. Clearly the volatility is double. But let's look at the potential returns, as well.

REMEMBER

The SPY is going to cost you 0.09 percent in operating expenses. The SSO is going to cost you 0.91 percent. That's a difference of 0.82 percent a year, or $410 on a $50,000 investment. You can expect about 1.4 percent in annualized dividends on SPY. Because SSO invests largely in derivatives, you aren't going to get much in dividends — expect a yield of about 0.16 percent. On a $50,000 investment, that's a difference of an additional $650. Already, you've lost $1,060 ($410 + $650), regardless of which way the market goes.

But it isn't actually the loss of dividends or the high operating expenses that will hurt you the most with leveraged funds. It's more the added volatility — daily volatility — that will eat up your principal regardless of which way the market goes.

Follow closely:

Suppose you invest $1,000 in SOO, which seeks a return of 200 percent of the return of the S&P 500 Index. Now suppose that the index goes up 10 percent tomorrow but then drops 10 percent the day after tomorrow. You think you're back to $1,000? Guess again. The math of compounding is such that, even if you had invested in the index itself — unleveraged — you'd be in the hole after Day Two. Run the numbers: Your 10 percent gain on Day One would take you up to $1,100, but your loss of 10 percent of $1,100 the next day equals $110. Subtract that amount from $1,100, and you're left with $990 on Day Two, or an overall loss of 1 percent.

With SSO, you're going to get double socked. On Day One, you'll happily be up 20 percent to $1,200. But on Day Two, you'll lose 20 percent of that amount and find yourself with $960. You didn't lose the promised *double* (2 percent); you just lost *quadruple* (4 percent). Pull out your calculator if you don't believe me.

In a classic illustration of the principle that life is not fair, you are not helped if the market goes down and then up, instead of the other way around. Lose 10 percent of $1,000, and you've got $900. Gain 10 percent the next day, and what do you have? $990 ($900 + $90). The situation is magnified with SSO: You would lose 20 percent on Day One for a balance of $800 and gain 20 percent on Day Two to bring you right back to the same $960 you were left with in the first example.

And *that*, dear reader, is how these funds can nibble at your hard-earned savings, and why I suggest that you do not use them. . . .Even though, in periods of low volatility and a strong market, leveraged bull funds can make you good money.

The continuing sad saga of DIG and DUG

In the end, how have leveraged funds done? Again using the ProShares Ultra S&P500 ETF (SSO) as a case study, it has returned 15.0 percent annually since inception through June 30, 2021. That compares to 10.7 percent for the S&P 500 during the same period. In other words, with SSO, you got 140 percent of the return with 200 percent of the risk of the S&P 500. That's no great shakes.

Had the stock market gone the other way. . . . Wait! It actually did go the other way for energy stocks, which have had a very rough several years now. Lo and behold, the ProShares Ultra Oil & Gas ETF (DIG), which doubles your daily return of the index, has had a miserable five years, with an average annual return of −15.3 percent. Maybe you should've invested five years ago in the ProShares Ultrashort Oil & Gas (DUG), which doubles your money in the other direction — going up when the stocks go down? Um, no. . . . That fund would have returned −24.5 percent a year over the past five years.

Think hard before investing in leveraged ETFs, please.

"Buffer" or "Defined-Outcome" ETFs

In 2018, a company called Innovator came up with an idea to introduce an entirely new class of ETF. This kind of ETF would be everything that most ETFs are not: actively managed, expensive, and extremely complicated. Despite all this, they sold like hotcakes, and there are now, according to ETF.com, about 130 of them. Innovation is still the leader, but they've been joined by First Trust, TrueShares, Nationwide, and a handful of others. What explains their popularity? They offer what variable annuities have long offered: a chance to make money in the markets with limited risk.

The "defined-outcome" or "buffer" ETFs work in any number of ways. But basically, the issuing company promises to protect you from loss — to provide a floor in case the markets go south. To compensate the company for giving you this protection, you agree to share your gains when the market heads north. That's it in a nutshell. But there are holes in the floor, and the gains you'll be sharing aren't insignificant. Oh, and then there are the high fees on top of it all.

Let's take a look at just one of these defined-outcome ETFs. I'm choosing Innovator's S&P 500 Buffer ETF (BJUL), which was one of the first. It opened its doors to investors on August 29, 2018. The fee is 0.79 percent. It doesn't hold any actual stocks, but uses derivatives to track the S&P 500 Index. The fund returns more or less what the index returns, minus the expense ratio. But unlike an investment in a typical S&P 500 fund, you are protected if the S&P 500 drops as much as 9 percent over the course of a year. If the S&P 500 drops 1 percent, or 5 percent, or 9 percent, you will lose nothing. If, however, the S&P drops more than 9 percent, you will lose. If the S&P drops 10 percent, you will still lose 1 percent. If the S&P 500 drops 29 percent, you will lose 20 percent. And on the flip side, you will earn whatever the S&P earns over the course of the year, up to 12 percent. If the S&P returns, say, 10 percent, you will get 10 percent. If it rises by 12 percent, you will get 12 percent. But if the S&P rises by 32 percent, you will still only get 12 percent. You won't see the other 20 percent.

And that's pretty much how *all* buffer funds work. They track different indexes, and they have different floors and ceilings, but they all offer some buffer and cap.

BJUL, since inception, has returned 7.5 percent to investors. Had they invested in an S&P 500 fund, they would've earned about 14.9 percent over the same period. But, of course, investors in BJUL took less risk, so it would be unfair to put BJUL head to head with the S&P 500. What it more deservedly should be compared to is a diversified stock-and-bond portfolio. Don't want the risk of the S&P 500? You're willing to give up some return? Then invest half your money in stocks and half in bonds. Instead of 0.79 percent in management fees, pay 0.05 percent. In the long run, you are almost certainly going to do better.

That being said, these buffer ETFs are a *great* improvement over the variable annuities that people bought before to buffer their portfolios! The expense ratio of 0.79 percent is peanuts compared to what some variable-annuity contracts cost, and there are no noxious surrender-fee periods that lock you into your investment, even long after you've discovered how bad it is.

Alphabet Soup: MLPs, SPACs, and IPOs

There are so many ways to slice and dice a portfolio these days. There are domestic stocks and foreign stocks, large caps and small caps, value and growth, Treasuries and corporate and municipal bonds, long-term bonds and short-term bonds, and the list goes on and on. At some point, it is easy to find yourself with an unwieldy portfolio. There's nothing wrong *per se* with investing in oddball asset classes, but you really don't need them. And please, realize that these oddball asset classes tend to be very faddish. You'll hear people *swear* that you can't lose money with MLP, SPAC, or IPO ETFs, depending on the given day.

MLP ETFs invest in companies structured as master limited partnerships. These are firms that usually derive their income from exploration for and extraction and refinement of oil and gas. Examples include the First Trust North American Energy Infrastructure Fund (EMLP), the Global X MLP & Energy Infrastructure ETF (MLPX), and the Tortoise North American Pipeline Fund (TPYP). They have cost ratios of 0.96 percent, 0.45 percent, and 0.40 percent, respectively. They have all seen very lackluster performances over the past several years. As we look ahead, no one can say what will happen. Invest if you like, but you don't need this in your portfolio. Most broad stock indexes offer you plenty of energy stocks.

Want to take a real joyride? Try initial public offerings. In April 2006, First Trust Advisors introduced the First Trust IPOX-100 Index Fund (FPX). You can invest in an ETF that, according to the prospectus, tracks the 100 "largest, typically best performing, and most liquid initial public offerings" in the United States. The fund changed its name and is now called the First Trust US Equity Opportunities ETF. It charges 0.57 percent, is passively run, and has a performance record of

13.8 percent a year since inception, versus the S&P 500, which has returned 10.5 percent during the same period. But FPX is a heck of a lot more volatile. So, too, is the First Trust International Equity Opportunities ETF (FPXI), with an expense ratio of 0.70 percent, and a performance record of 14.35 percent annual return since inception in July 2014, versus 6.5 percent for the MSCI World ex USA Index. A firm called Renaissance has both a domestic and a foreign IPO ETF to compete with First Trust. The tickers for the Renaissance funds are IPO (for the domestic) and IPOX (for the foreign). Invest if you will, but keep your exposure light. If there's a recession, these IPOs will get crushed.

FORGET THE ALAMO, BUT REMEMBER 2008!

In this chapter, I've covered certain investments that have solidly outperformed the market at large. One example is the First Trust IPOX-100 Index Fund (FPX), which invests in initial public offerings. Again, that fund has returned 13.8 percent since inception in April 2006, handily beating the S&P 500, which has returned 10.5 percent during the same period. Before you jump in to buy this fund, however, you need to realize that you are investing in something more volatile than the (already very volatile) S&P 500.

It's so easy to forget about volatility in 2021. Heck, we haven't had a real bear market since 2008. Many of today's investors were still sneaking cigarettes in the high school locker room in 2008. But bear markets are real. And they happen regularly. The 13-year period we've gone without one is fairly long by historical standards. So you need to go back quite a few years to remember the growly bear market of 2008, but it is a trip in time worth taking.

If, on January 1, 2008, you had $10,000 invested in the S&P 500, your portfolio would've been reduced to $6,300 by December 31. That same $10,000 invested in FPX on January 1, 2008, would've been worth $5,620 at year's end. During the next bear market? Who knows?

This is a good spot in the book to quickly remind you of something called the Sharpe ratio, which I introduce in Chapter 4. The *Sharpe ratio* is a measure of the return you get on a certain investment per unit of risk. The higher the ratio, the more punch you're getting for your money. Sharp ratios above 1.0 are generally considered good. From First Trust's own website, FPX is given a Sharpe ratio of 0.89. Immediately underneath that figure is the Sharpe ratio for the Russell 3000 (an index that attempts to measure the total U.S. stock market): 0.91.

This is not to say that FPX would be a bad investment. I bring up the Sharpe ratio only to point out that much volatility should be expected with high returns. And volatility is something you want to limit because the 2009 to 2021 bull market is not going to last forever.

SPAC ETFs invest in special acquisition companies, companies that are formed not to produce anything, but to find deals, such as other companies to buy or merge with. SPACs are a special kind of IPO. The SPAC and New Issue ETF (SPCX) charges 0.95 percent but promises to offer you exposure to "one of the most exciting and disruptive capital markets themes over the past several years." (*Everything* is "disruptive" these days!) The Indxx [sic] SPAC & NextGen IPO Index (SPAK) charges 0.45 percent and also promises "disruption"! Then there's the Morgan Creek-Exos SPAC Originated ETF, which charges 1.0 percent. None of these funds have been around long enough to have much of a track record.

Investing in one-horse towns

There is almost no limit to how many moving pieces you can have in a portfolio. Let's see. . .you can purchase an ETF such as the Vanguard Total World Stock ETF (VT) and — voilà — with but one moving piece, you own shares in 9,105 stocks from nearly every country. Or, if that's too broad, you can split your holdings into the Vanguard Total (U.S.) Stock Market Index Fund (VTI) and the Vanguard Total International Stock Index Fund (VXUS) — two pieces. If that's still too broad, you can find ETFs to break these up by style (large, small, value, growth) or industry groupings (energy, REITs, health care, technology, consumer staples, utilities, and so on). If that's too broad, you can break up your international holdings into Pacific and Europe, or developed markets and emerging markets. All of this is sane and rational.

But you can also take it too far. You can divide your industry-sector ETFs into subsectors. Instead of buying "technology," you can buy a Cloud computing ETF, along with an artificial intelligence ETF, along with a robotics ETF, and a lithium and battery ETF. Instead of buying "real estate" or "REITs," you can buy ETFs filled with mortgage REITs, residential REITs, high-dividend-paying REITs, industrial REITs, and corporate real estate. Instead of buying a broad commodity fund, you can buy ETFs that give you exposure to a single commodity, be it oil, platinum, palladium, uranium, wheat, soybeans, corn, sugar, or livestock.

Instead of buying an emerging-markets ETF, or a frontier markets ETF, you can buy ETFs that track the stock markets of individual countries. There's one for Nigeria, another for Columbia, and one for Pakistan. And before you know it, you have 100 moving parts in your portfolio, and you're getting monthly statements from your broker that are way longer than CVS receipts.

You may think that, say, Nigerian stocks will outperform other emerging-and-frontier-market stocks. But do you really want to put a sizeable portion of your portfolio into a group of stocks that altogether have a capitalization of $49 billion?

That's less than you'd find in Jeff Bezos's right pocket on a Saturday afternoon. You may think that residential REITs will do better than industrial. You may think that wheat futures will do better than corn. But how many holdings are you going to have? And at some point, you do realize that you'll own everything anyway, right? Why not just buy a total-market fund?

Sure, you say, but still, it might be worth a flyer to invest just 2 percent of your portfolio in whatever asset class. You can do that. But, really, if Nigerian stocks fly next year, if wheat flies, or palladium, will it make much difference in your portfolio if only 2 cents of every dollar is invested in each of these market slivers? I'd say, as a general rule, you might have 6 to as many as 25 ETFs, *maybe* 30 in a very large portfolio. Tops. Anything beyond that is just kind of crazy. . .and it will drag your portfolio down, because ETFs that track small slivers of the market are never cheap. Here are some example costs:

- Vanguard's Total World Stock ETF (VT) will cost you *0.08 percent*, whereas the Global X MSCI Nigeria ETF (NGE) will cost you 11x as much: *0.89 percent*.
- The Vanguard Information Technology ETF will cost you *0.10 percent*, whereas the Global X Cloud Computing ETF (CLOU) will cost you *0.68 percent*.
- The Schwab U.S. REIT ETF (SCHH) will cost you *0.07 percent*, whereas the VanEck Vectors Mortgage REIT Income ETF will cost you *0.40 percent*.

I'd also say that most people who buy very narrow ETFs tend to trade them frequently. ETF day trading has taken the place of stock day trading. And day traders of all kinds tend to eventually lose their shirts. They forget that every time they buy or sell, there's a professional on the other end of the deal, and they're selling when you're buying for a good reason.

Get Rich (or Not) in Crypto- or Other Currencies!

One group of "sliver" ETFs worth special mention is just now seeing the light of day. I'm talking about the cryptocurrency ETFs. Dozens of firms have put in applications with the SEC to release Bitcoin and other cryptocurrency funds. Just as this book was going to press, on October 19, 2021, ProShares, with SEC approval, introduced the ProShares Bitcoin Strategy ETF (BITO).

Like putting money into Bitcoin itself, this is more speculation than investment. Cryptocurrencies do not pay dividends or earn profits. In fact, they cost quite a bit to store (in both financial and environmental terms). You might get lucky, and make a fortune. You might lose everything. There are plenty of people already in both camps.

Investing in *non*-cryptocurrencies is also more like gambling than investing. Through Invesco CurrencyShares, you can buy ETFs that will give you exposure to the Australian dollar, the euro, or the Canadian dollar. Through WisdomTree or ProShares, you can not only invest in foreign currencies, but also leverage them with bull or bear funds, such as the ProShares UltraShort Yen ETF (YCS). For 0.95 percent a year, you can buy a contract that'll earn you two times the inverse (–2x) of the daily performance of the Japanese yen versus the U.S. dollar. Since inception in November 2008, this fund has returned 0.10 percent per year. Had you bet that the Japanese yen was going to go up *vis-à-vis* the U.S. dollar, you could've plunked your money into the ProShares Ultra Yen ETF (YCL), which would've earned you two times (2x) the daily performance of the price of the Japanese yen versus the U.S. dollar. This fund also charges 0.95 percent. Since inception in November 2008, YCL has lost an average of –5.2 percent a year. Either way, betting on the yen or against it, on a $10,000 investment, you would've paid ProShares (13 x $95) about $1,235 in fees since 2008.

Currencies, whether real or crypto, are generally not good investments. They fall more under the umbrella of speculation.

GREED ALERT

By the way, according to my fancy financial calculator, starting off with the $10,000 investment, and losing an average of –5.2 percent a year for 13 years should leave you with $4,995, for a cumulative return of –50 percent. But that's just a rough figure. For the exact cumulative return, you'd have to go to the ProShares website. But wait! It isn't there. At least, I can't find it. (Not to pick on ProShares, because many, if not most, fund companies pull this little trick.) If a fund has done very well, you'll find the cumulative return right next to the average annual return. If a fund has done poorly, you'll have to search through the site to find the cumulative return, and often you won't. Yeah, I find it annoying.

Take a Whiff of These Cannabis ETFs

I had the good fortune several years ago of spending time in the beautiful city of Amsterdam. I was staying with a friend who had a 19-year-old son, and one day the son had a large group of friends over to the house. Mind you, this is the Netherlands, a country where marijuana has been legal and easy to obtain for many, many years. I asked the young Dutch people assembled if they smoked pot. Not only did none of them respond in the affirmative, but only one out of half a dozen had even tried pot! They saw my surprise. "When your parents do it, it isn't cool," one young woman volunteered.

As various states (and all of Canada) have legalized pot, and more states are following suit, American investors have been assuming that pot consumption will soar and that there's lots of money to be made. And me? I keep thinking of that day in Amsterdam.

Recreational pot consumption may take off, or it may not. Medical marijuana use is almost certain to grow, but it remains to be seen just how profitable this new industry will be. Meanwhile, there are no fewer than eight marijuana ETFs. The Cambria Cannabis ETF (TOKE) is the least expensive with a net management fee of 0.42 percent. Most of the others are 0.75 percent or more. TOKE is actively managed and holds 27 stocks from the U.S., Canada, and overseas. It was founded in July 2019, and in its first two years, has lost 21 percent of its value. The second-least expensive is the Global X Cannabis ETF (POTX), with an expense ratio of 0.51 percent. It was founded in September 2019, and in not quite two years, it's lost 24.5 percent of its initial value.

Reflecting back to my college days, if I really thought that marijuana was going to take off, I think I'd try to invest in chocolate chip cookies.

Copycat ETFs

ETFs are unlike snowflakes. You can indeed find two, or three, or more that are exactly alike. If you are looking at two passively run funds that track the same index, then you are looking at identical investments, for all intents and purposes. In this section, I mention four such funds, all of which track the S&P 500 Index. I'm using these ETFs to illustrate that you'll usually just want to pick the one with the lowest expense ratio. Consider the higher-priced ETFs mere copycats, best to be left alone. You don't need to toss money to the wind.

But there are a few exceptions to that rule, times when choosing the least expensive option may not be the best bet. I've come up with four such exceptions, which I'll cover at the end.

- **SPDR S&P 500 ETF Trust (SPY)**

  Inception date: January 22, 1993

  Management fee: 0.0945 percent

  Performance: 10-year return of 14.68

- **SPDR Portfolio S&P 500 ETF (SPLG)**

  Inception date: November 8, 2005

Management fee: 0.03 percent

Performance: 10-year return of 14.68

- **iShares Core S&P 500 ETF (IVV)**

  Inception date: May 15, 2000

  Management fee: 0.03 percent

  Performance: 10-year return of 14.78

- **Vanguard S&P 500 ETF (VOO)**

  Inception date: September 7, 2010

  Management fee: 0.03

  Performance: 10-year return of 14.80

Which one would you choose if you wanted an S&P 500 ETF? That's easy: Any of the three with the 0.03 percent expense ratio. Why not Vanguard's ETF, with its slightly higher return? That's only because Vanguard was the original cost-cutter, so the slight difference in return is due to lower expenses over the past 10 years. Moving forward, that advantage is gone (unless Vanguard cuts its costs even more).

Why would anyone not choose the less expensive funds and instead go with SPY?

Some people are just lazy, and don't shop around enough. But there are also some logical reasons to sometimes go with a more expensive fund. I can think of five such reasons.

- **Liquidity:** If you are a day trader, you need a fund with super liquidity. Even a fraction of a second's delay in making a trade, or an extra penny going to the middlemen for a $1 million trade, will add up over time. In this case, you might choose SPY, even though the management fee is more than three times that of the others. For the buy-and-hold investor, the extra penny here and there lost on a trade won't matter a whit.
- **Avoidance of capital gains:** If you already have SPY in your portfolio, and you've had it for many years, there may be a huge capital gains tax to pay if you cash out. Although capital gains must be paid to Uncle Sam sooner or later, sometimes it just makes sense to wait.
- **Avoiding commissions:** Not long ago, you could trade Vanguard ETFs free if you had a Vanguard account. Trading other ETFs would cost you some money. But these days, at most brokerage houses, trading ETFs costs nothing. And it doesn't matter what brand of ETF you are using. Still, I'm throwing this out here in case you are with a brokerage that still charges.

- **Shunning rookies:** If there's a new ETF on the market, issued by a small provider, and the fund has collected less than, oh, $20 million or so, you risk having the ETF fold. Yes, you'll get your money back if that happens, but it's a hassle you should avoid.
- **Sustainable considerations:** One fund I didn't mention here is the Engine No. 1 Transform 500 ETF (VOTE). I introduce this fund in Chapter 17 on sustainable investments. The fund charges 0.05 percent. The portfolio isn't exactly the S&P 500, but pretty darned close. In this case, paying the extra 0.02 more than you'd pay for the Vanguard or iShares S&P ETF isn't illogical at all. You are paying that extra (20 cents per $1,000 invested) so that the managers of the fund will use their muscle to try to convince companies to act in a kinder and gentler manner where people and planet are concerned. Neither the 20 cents per $1,000 nor the slight differences in portfolio composition are going to much affect your bottom line.

5

Putting It All Together

IN THIS PART . . .

Study the art of portfolio building and peruse sample ETF portfolios.

Learn why patience is an investor's most powerful tool.

Perfect the art of portfolio care and maintenance.

Appreciate the crucial role that ETFs can play in your retirement.

Learn how to work non-ETFs and perhaps active ETFs into your portfolio.

IN THIS CHAPTER

» Revisiting risk and return

» Employing Modern Portfolio Theory

» Assessing what diversification means to you

» Recognizing that there are no simple formulas

» Visualizing what your new portfolio will look like

Chapter 21

Sample ETF Portfolio Menus

If there is such a thing as a personal hell, and if, for whatever reason, I cheese off the Big Guy before I die, I'm fairly certain that I will spend eternity in either a Home Depot or a Lowe's. The only real question I have is whether His wrath will place me in plumbing supplies, home décor, or flooring.

I'm not the handyman type. Even the words "home renovation" are enough to send shivers up my spine. The last thing I built out of metal or wood — a car-shaped napkin holder — was in shop class at Lincoln Orens Junior High School. I brought the thing home to my mother, and she said, "Oh, Russell, um, what a lovely birdhouse."

And yet, despite my failed relationship with power tools, there is one kind of construction that I absolutely love: portfolio construction.

I enjoy crafting portfolios not only because it involves multicolored pie charts (I've always had a soft spot for multicolored pie charts) but also because the process involves so much more than running a piece of wood through a jigsaw and hoping not to lose any fingers. Portfolio construction is — or should be — a highly individualized, creative exercise that takes into consideration many factors: economics, history, statistics, and psychology among them.

The ideal portfolio (if such a thing exists) for a 30-year-old who makes $75,000 a year is very different from the portfolio for a 75-year-old whose income is $30,000 a year. The optimal portfolio for a 40-year-old worrywart differs from the optimal portfolio for a 40-year-old devil-may-care type. The portfolio of dreams following a long bull market when interest rates are low may look a wee bit different from a prime portfolio following a bear market with high interest rates.

Every financial professional I know goes about portfolio construction in a somewhat different way. In this chapter, I walk you through the steps that I take and that have worked well for me. I don't mean to present my way as the only way, so I also mention an alternative strategy (see the sidebar, "Dividing up the pie either conservatively or aggressively by industry sector," toward the end of the chapter).

Needless to say (because this is, after all, a book about exchange-traded funds), my primary construction materials are ETFs, as I believe they should be for most investors. My portfolio-building tools involve some sophisticated Morningstar software, my HP 12C financial calculator, a premise called *Modern Portfolio Theory (MPT)*, a statistical phenomenon called *reversion to the mean*, and various measures of risk and return. But rest assured that this isn't brain surgery, or even elbow surgery. You can be a pretty good portfolio builder yourself by the time you finish this chapter.

So please follow along. I promise you that nothing you are about to see will resemble either a napkin holder or a birdhouse!

So, How Much Risk Can You Handle and Still Sleep at Night?

The first questions I ask myself — and the first questions anyone building a portfolio should ask — are these:

- How much return does the portfolio-holder need to see?
- How much volatility can the portfolio-holder stomach?

Very few things in the world of investments are sure bets, but this one is: The amount of risk you take or don't take will have a great bearing on your long-term return. You simply are not going to get rich investing in bank CDs. On the other hand, you aren't going to lose your nest egg in a single week, either. The same cannot be said of a tech stock — or even a bevy of tech stocks wrapped up in an ETF.

A well-built ETF portfolio can help to mitigate risks but not eliminate them. Before you build your portfolio, ask yourself how much risk you need to take to get your desired return. . .and take no more risk than that.

REMEMBER

Please forget the dumb old rules about portfolio building and risk. How much risk you can or should take on depends on your wealth, your age, your income, your health, your financial responsibilities, your potential inheritances, and whether you're the kind of person who tosses and turns over life's upsets. If anyone gives you a pat formula — "Take your age, subtract it from 110, and that, dear friend, is how much you should have in stocks" — please take it with a grain of salt. Things aren't nearly that simple. (Although if you're going to go with *any* formula, the one I just provided is far better than most!)

A few things that just don't matter

Before I lay out what matters most in determining appropriate risk and appropriate allocations to stocks, bonds, and cash (or stock ETFs and bond ETFs), I want to throw out just a few things that really *shouldn't* enter into your thinking, even though they play into many people's portfolio decisions:

- The portfolio of your best friend, which has done great guns.
- Your personal feelings on the current administration, where the Fed stands on the prime interest rate, and which way hemlines on women's dresses are moving this fall.
- The article you clipped out of *Lotsa Dough* magazine that tells you that you can earn 50 percent a year by investing in. . .whatever.

Listen: Your best friend may be in a completely different economic place than you are. Their well-polished ETF portfolio, laid out by a first-rate financial planner, may be just perfect for them and all wrong for you.

As far as the state of the nation and where the Dow is headed, you simply don't know. Neither do I. (It was once argued that the stock market moves up and down with the hemlines on women's dresses. . .or whether an NFC or AFC team wins the Super Bowl this year.) The talking heads on TV pretend to know, but they don't know squat. Nor does the author of that article in the glossy magazine (filled with ads from fund companies) that tells you how you can get rich quickly in the markets. The secrets to financial success cannot be had by forking over $4.95 for a magazine.

(Whenever I read about some prognosticator suggesting a handful of stocks or mutual funds for the coming year, I Google them to see what projections they made a year prior. Then I check to see how their picks have done. You should do the same! Invariably, my dog Zoey, the killer poodle, could do a better job picking stocks.)

REMEMBER

The stock market over the course of the past century has returned an average of about 10 percent annually (7 percent or so after inflation). Bonds have returned about half as much. A well-diversified portfolio, by historical standards, has returned something in between stocks and bonds — maybe 7 to 8 percent (4 to 5 percent after inflation). With some of the advice in this book, even though market performance in the future may fall a bit shy of the past, you could see personal returns roughly approximating these numbers. But don't take inordinate risk with any sizeable chunk of your portfolio in the hope that you are going to earn 50 percent a year after inflation — or even before inflation. It won't happen.

On the other hand, don't pooh-pooh a 7 to 8 percent return. Compound interest is a truly miraculous thing. Invest $20,000 today, add $2,000 each year, and within 20 years, with "only" a 7.5 percent return, you'll have $171,566. (If inflation is running in the 3 percent ballpark, that $171,566 will be worth about $110,000 in today's dollars.)

The irony of risk and return

In a few pages, I provide you with some sample portfolios appropriate for someone who should be taking minimal risk as opposed to someone who should be taking more risk. At this point, I want to digress for a moment to say that in a perfect world, those who need to take the most risk would be the most able to take it on. In the real world, sadly ironic though it is, those who need to take the most risk really can't afford to.

Specifically, a poor person needs whatever financial cushion they have. They can't afford to risk the farm (not that they have a farm) on a portfolio of mostly stocks. A rich person, in contrast, can easily invest a chunk of discretionary money in the stock market, but they really don't need to because they're living comfortably without the potential high return. It just isn't fair. Yet no one is to blame, and nothing can be done about it. It is what it is.

Let's move on.

The 25x rule

Whatever your age, whatever your station in life, you probably wouldn't mind if your investments could support you. But how much do you need in order for your investments to support you? That's actually not very complicated and has been very well studied: You need about 25 times whatever amount you expect to withdraw each year from your portfolio, assuming you want that portfolio to have a good chance of surviving at least 20 to 25 years.

That is, if you need $40,000 a year — in addition to Social Security and any other income — to live on, you should have $1 million in your portfolio when you retire, assuming you retire in your mid-60s. You can have less, but you may wind up eating too far into the principal if the market tumbles — in which case you should be prepared to live on less, or get a part-time job.

(Factor in the value or partial value of your home only if it is paid up and if you foresee a day when you can downsize.)

The rationale behind the 25x Rule is this: It allows you to withdraw 4 percent from your portfolio the first year, and then adjust that amount upward each year to keep up with inflation. The studies show that a well-diversified portfolio from which you take such withdrawals has a good chance of lasting at least 20 years, which is how long you may need the cash flow if you retire in your 60s and live to your mid-80s.

If you think you might live beyond your mid-80s — and especially if you're part of a couple, there's a good chance that one of you will live beyond your mid-80s — then you might want more than 25 times. If you want to retire prior to your mid-60s, then having more than 25 times your anticipated annual withdrawals would be an excellent idea. It would also be an excellent idea to limit your initial withdrawal, if you can, to 3.5 percent a year, just in case you live a long life. If you want to play it really safe, limit your withdrawal to 3 percent.

In truth, I'd much rather see you have 30 times your anticipated yearly withdrawals in your portfolio before you retire. But for many Americans who haven't seen a real pay increase in years, this is indeed a lofty goal. For that reason, I say go with 25 times, but be prepared to tighten your belt if you need to.

TIP

If you are still far away from that 25 times mark, and you are not in debt, and your income is secure, and you are not burning out at work, and you have enough cash to live on for six months if you had to, then with the rest of your loot, you might tilt toward a riskier ETF portfolio (mostly stock ETFs). You need the return.

If you have your 25 times (or better yet, 30 times) annual cash needs already locked up or close to it, and you're thinking of giving up your day job soon, you should probably tilt toward a less risky ETF portfolio (more bond ETFs). After all, you have more to lose than you have to gain. (See the upcoming sidebar, "Russell's 'today and tomorrow' portfolio modeling technique," for more on my suggestion that you should have not one but two model portfolios: one for right now, and one for the future.) You do need to be careful, however, that your investments keep up with inflation. Savings accounts are unlikely to do that.

If you have way more than 30 times annual expenses, congratulations! You have many options, and how much risk you take will be a decision that's unrelated to your material needs. You may, for example, want to leave behind a grand legacy, in which case you might shoot for higher returns. Or you may not care what you leave behind, in which case leaving your money in a tired savings account, or "investing" in a high-performance but low-yielding Ferrari, wouldn't make much difference.

Other risk/return considerations

I doubt I can list everything you should consider when determining the proper amount of risk to take with your investments, but here are a few additional things to keep in mind:

- **What is your safety net?** If worse came to worst, do you have family or friends who would help you if you got in a real financial bind? If the answer is yes, you can add a tablespoon of risk.
- **What is your family health history? Do you lead a healthy lifestyle?** These are the two greatest predictors of your longevity. If Mom and Dad lived to 100, and you don't smoke and you do eat your vegetables, you may be looking at a long retirement. Add a dollop of risk — you'll need the return.
- **How secure is your job?** The less secure your employment, the more you should keep in nonvolatile investments (like short-term bonds or bond funds); you may need to draw from them if you get the pink slip next Friday afternoon.
- **Can you downsize?** Say you are close to retirement, and you live in a McMansion. If you think that sooner or later you will sell it and buy a smaller place, you have some financial cushion. You can afford to take a bit more risk.

The limitations of risk questionnaires

Yes, I give my clients a risk questionnaire. And then I go through it with them to help them interpret their answers. Lots of websites offer investment risk questionnaires, but instead of having anyone interpret the answers, a computer just spits out a few numbers: You should invest *x* in stocks and *y* in bonds. Yikes!

WARNING

Please, please, don't allow a computer-generated questionnaire to determine your financial future! I've tried many of them, and the answers can be wacky.

For example, here's one question that I saw on a web questionnaire: *Please rate your previous investment experience and level of satisfaction with the following six asset classes.* And then they listed money market funds, bonds, stocks, and so on.

I had a client named Jason who was a 38-year-old with a solid job and no kids. After taking an online questionnaire, he was told he should be invested almost entirely in money market funds and bonds based on his previous "very low" satisfaction with stocks and stock mutual funds. This young man definitely should not invest in any stocks or stock funds, the computer-generated program told him, because of his "very low" satisfaction with the funds he had invested in previously.

Oh, jeesh. The reason Jason had "very low" satisfaction with stocks and stock funds is that he got snookered by some stock broker (posing as a "financial planner") into buying a handful of full-load, high-expense-ratio, actively managed mutual funds that (predictably) lost him money. That experience should have *no* bearing on the development of this young man's portfolio, which should have the lion's share invested in stock ETFs or mutual funds.

What I'm saying is that after reading this book, if you aren't too certain where you belong on the risk/return continuum, perhaps you should hire an experienced and impartial financial advisor — if only for a couple of hours — to review your portfolio with you. I write more about seeking professional help in Chapter 26.

ROBO-ADVISORS

Betterment, Wealthfront, Ellevest, SoFi Invest, Charles Schwab Intelligent Portfolios. . .all charge fairly modest monthly fees or a percent of assets under management, typically 0.25 to 0.5 percent, and they will fashion a portfolio for you. Keep your money with the robo-advisor, and your portfolio can also be automatically rebalanced. The robo-advisor may even do tax-loss harvesting.

Maybe someday, computer technology will advance to the point that robo-advisors are as good as human advisors, but we're not there yet. I've seen the portfolios created by a number of robo-advisors, and they seem to be hit or miss. And even if the portfolios are fantastic, many investors will still benefit from a human touch.

I don't think you can or should allow a computer to make big financial decisions in your life any more than you would rely on a computer to make your career, parenting, or relationship decisions. That being said, using one of these sites to give you a draft portfolio that you then amend based on the information in this book might be a workable endeavor. Unfortunately, the robo-advisors generally don't allow you much discretion.

Keys to Optimal Investing

When you have a rough idea of where you should be riskwise, your attention should turn next to fun matters such as Modern Portfolio Theory, reversion to the mean, cost minimization, and tax efficiency. Please allow me to explain.

Incorporating Modern Portfolio Theory into your investment decisions

The subject I'm about to discuss is a theory much in the same way that evolution is a theory: The people who don't believe it — and, yes, there are some — are those who decide to disregard all the science. Modern Portfolio Theory (MPT) says that if you diversify your portfolio — putting all kinds of eggs into all kinds of baskets — you reduce risk and optimize return.

REMEMBER

You get the most bang for your buck, according to MPT, when you mix and match investments that have little *correlation.* In other words, if you build your portfolio with different ETFs that tend to do well (and not so well) in different kinds of markets, you'll have a lean and mean portfolio.

MPT has been challenged. At times, there are stretches of days, even weeks and months, when different asset classes — U.S. stocks, foreign stocks, bonds, commodities, and real estate — may all move up and down nearly in lockstep. This was the case, unfortunately, in the last serious bear market — 2008. Like a flock of geese, just about every investment you could imagine headed south at the same time.

While correlations can change over time — and lately, the major asset classes have shown alarmingly high rates of correlation — you shouldn't simply scrap the idea that diversification and the quest for noncorrelation are crucial. However, you may want to be cautious of too much reliance on diversification. Yes, you can diversify away a lot of risk. But you should also have certain low-risk investments in your portfolio, investments that hold their own in any kind of market. Low-risk investments include FDIC-insured savings accounts; money market funds; short-term, high-credit-quality bonds; and bank CDs.

Minimizing your costs

Most ETFs are cheap, which is one of the things I love about them. The difference between a mutual fund that charges 1 percent and an ETF that charges 0.1 percent adds up to a *lot* of money over time. One of my favorite financial websites, `www.moneychimp.com`, offers a fund-cost calculator. Invest $100,000 for 20 years at 8 percent and deduct 0.1 percent for expenses; you're left with $457,540. Deduct 1 percent, and you're left with $386,968. That's a difference of $70,571. The after-tax difference, given that most ETFs (or at least the ones I tend to recommend) are highly tax-efficient index funds, would likely be much greater.

Because the vast majority of ETFs I'm recommending fall into the super-cheap to cheap range (generally 0.03 to 0.20 percent), the differences among ETFs won't be quite so huge. Still, in picking and choosing ETFs, cost should always be a factor. And that is especially true with bond funds during these days of pathetically low interest rates. Pay more than 0.20 percent for a short-term Treasury fund and you are likely to see *no* return for the coming months!

Striving for tax efficiency

Keeping your investment dollars in your pocket and not lining Uncle Sam's is one big reason to choose ETFs over mutual funds. ETFs are, by and large, much more tax efficient than active mutual funds. But some ETFs are going to be more tax efficient than others. I provide in-depth coverage of this issue in Chapter 24 where I talk about tax-advantaged retirement accounts, such as Roth IRAs.

For now, let me say that you must choose wisely which ETFs get put into which baskets. In general, high-dividend and interest-paying ETFs (REIT ETFs, taxable bond ETFs) are best kept in tax-advantaged accounts.

Timing your investments (just a touch)

If you've read much of this book already, by now, you realize that I'm largely an *efficient market* kind of guy. I believe that the ups and downs of the stock and bond market — and of any individual security — are, in the absence of true inside information, unpredictable. (And trading on true inside information is illegal.) For that reason, among others, I prefer indexed ETFs and mutual funds over actively managed funds.

However, that being said, I also believe in something called *reversion to the mean.* This is a statistical phenomenon that colloquially translates to the following: What goes up must come down; what goes waaaay up, you need to be careful about investing too much money in.

At the time I'm writing this, for example, large-cap growth stocks, especially tech stocks like Microsoft, Alphabet (Google), and Tesla, have been flying high for several years. Real estate has also been doing very, very well. These are good reasons why you may want to be just a wee bit cautious about overstocking your portfolio in these particular asset classes.

I'm *not* suggesting that you go out and buy any ETF that has underperformed the market for years, or sell any ETF that has outperformed. But to a small degree, you should factor in reversion to the mean when constructing a portfolio.

TIP

For example, say you decide that your $100,000 portfolio should include a 15 percent allocation in the Vanguard Mega Cap 300 ETF (MGC) and an equal allocation in the Vanguard Small Cap ETF (VB), and you happen to be entering the market after an incredible several-year bull market in large-cap stocks, with small caps falling far behind. If anything, I'd be inclined to slightly overweight small-cap stocks, putting perhaps 16 or 17 percent in VB and maybe 13 to 14 percent in MGC.

Please don't go overboard. I'm suggesting that you use reversion to the mean to tweak your portfolio percentages very gently — not ignore them! This "going-against-the-crowd" investment style is popularly known as *contrarian investing.*

Finding the Perfect Portfolio Fit

Time now to peek into my private world, as I reveal some of the ETF-based portfolios I've worked out for clients over the years (and updated, of course, as some newer ETFs proved to be superior to the old). You should look for the client that you most resemble, and that example will give you some *rough* idea of the kind of advice I would give you if you were my client. All names, of course, have been changed to protect privacy. For the sake of brevity, I provide you with only a thumbnail sketch of each client's financial situation.

Considering the simplest of the simple

TIP

Before I get into anything complicated or present any actual client portfolios, I want to introduce an easier-than-easy ETF portfolio. What I've constructed is a perfectly fine, workable investment model with decent (although not great) diversification. It may be enough for anyone without a great amount in savings (say, less than $50,000), or someone who has more but wants to keep things as simple as simple can be.

I include (in order of appearance) large-cap stocks, small-cap stocks, international stocks (large and small), and bonds (both conventional and inflation-adjusted).

This portfolio can be tailored to suit the aggressive investor who can deal with some serious ups and downs in the hopes of achieving high long-term returns; the conservative investor who can't stand to lose too much money; or the middle-of-the-road investor. Keep in mind that you should always have three to six months in living expenses sitting in cash or near-cash (money markets, short-term CDs, Internet checking account, or very short-term high-quality bond fund). You should also have all your credit card and other high-interest debt paid up. The rest of your money is what you may invest.

	Aggressive	Middle-of-the-Road	Conservative
Dimensional U.S. Core Equity Market (DFAU)	24 percent	16 percent	12 percent
Vanguard Small Cap ETF (VB)	16 percent	14 percent	8 percent
Vanguard Total International Stock Index Fund ETF (VXUS)	24 percent	16 percent	12 percent
Vanguard FTSE All-World ex-US Small Cap Index ETF (VSS)	16 percent	14 percent	8 percent
BNY Mellon Core Bond ETF (BKAG)	14 percent	28 percent	40 percent
iShares ESG Aware 1–5 Year USD Corporate Bond (SUSB)	6 percent	12 percent	20 percent

Racing toward riches: A portfolio that may require a crash helmet

High-risk/high-return ETF portfolios are made up mostly of stock ETFs. After all, stocks have a very long history of clobbering most other investments — *if* you give them enough time. Any portfolio that is mostly stocks should have both U.S. and international stocks, large cap and small cap, and value and growth, for starters. If the portfolio is diversified into industry sectors (an acceptable strategy, as I discuss in Chapter 10), a high-risk/high-return strategy would emphasize fast-growing sectors such as technology.

Let's consider the case of Jason, a single, 38-year-old pharmaceuticals salesman. You met him earlier in the chapter. Jason came to me after getting burned badly by several high-cost mutual funds that performed miserably over the years. Still, given his steady income of $120,000 and his minimal living expenses (he rents a one-bedroom apartment in Allentown, Pennsylvania), Jason has managed to sock away $220,000. His job is secure. He has good disability insurance. He anticipates saving $20,000 to $30,000 a year over the next several years. He enjoys his work and intends to work till normal retirement age. He plans to buy a new car (ballpark $40,000) in the next few months, but otherwise has no major expenditures earmarked.

Jason can clearly take some risk. Following is the ETF-based portfolio that I designed for him, which is represented in Figure 21-1. Note that I had Jason put four to six months of emergency money, plus the $40,000 for the car, into a money market account, and that amount is not factored into this portfolio.

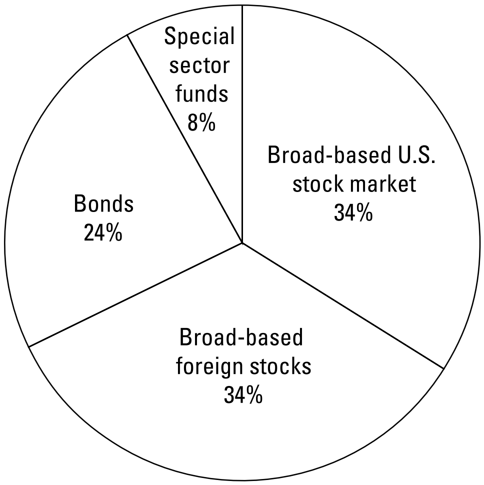


FIGURE 21-1: A portfolio that assumes some risk.

Also note that although this portfolio is made up almost entirely of ETFs, I do include one Pennsylvania municipal bond mutual fund to gain access to this asset class that's not yet represented by ETFs. Municipal bonds issued in Jason's home state are exempt from both federal and state taxes, which makes particular sense for Jason because he earns a high income and has no appreciable write-offs. See more about the role of municipal bonds in a portfolio in Chapter 15.

Finally, although this portfolio is technically 76 percent stocks and 24 percent bonds, I include a 4 percent position in emerging-market bonds, which can be considerably more volatile than your everyday bond. As such, I don't really think of this as a "76/24" portfolio, but more like an "80/20" portfolio, which is just about as volatile a portfolio as I like to see.

Broad-based U.S. stock market: 34 percent

Dimensional U.S. Core Equity Market (DFAU) — 18 percent

Vanguard Small Cap Value ETF (VBR) — 8 percent

Vanguard Small Cap ETF (VB) — 8 percent

Broad-based foreign stocks: 34 percent

Vanguard Total International Stock Index Fund ETF (VXUS) — 14 percent

iShares MSCI EAFE Value ETF (EFV) — 5 percent

Vanguard FTSE All-World ex-US Small Cap Index ETF (VSS) — 15 percent

Special sector funds: 8 percent

Vanguard REIT ETF (VNQ) — 4 percent

Vanguard International Real Estate ETF (VNQI) — 4 percent

Bonds: 24 percent

BNY Mellon Core Bond ETF (BKAG) — 10 percent

iShares ESG Aware 1–5 Year USD Corporate Bond (SUSB) — 5 percent

Vanguard PA Long-Term Tax-Exempt Admiral Fund (VPALX) — 5 percent

Vanguard Emerging Markets Government Bond ETF (VWOB) — 4 percent

Sticking to the middle of the road

Next, I present Jay and Racquel, who are ages 64 and 63, married, and have successful careers. Even though they are old enough to be Jason's parents, their economic situation actually warrants a quite similar high-risk/high-return portfolio. Both husband and wife, however, are risk-averse.

Jay is an independent businessman with several retail properties (valued at roughly $1.6 million); Racquel is a vice president at a major publishing house. Their portfolio: $1.1 million and growing. Within several years, the couple will qualify for combined Social Security benefits of roughly $93,500 — the highest a couple can collect if they start collecting at age 70. Racquel also will receive a fixed pension annuity of about $35,000. The couple's goal is to retire within two to three years, and they have no dreams of living too lavishly; they will have more than enough money. The fruits of their investments, by and large, should pass to their three grown children and any charities named in their wills.

RUSSELL'S "TODAY AND TOMORROW" PORTFOLIO MODELING TECHNIQUE

TIP

Career coaches constantly tout the importance of having a career plan; I'm going to tout the importance of having a portfolio plan. Times change; circumstances change. Your portfolio needs to keep up with the times. Suppose you are 45 years old and saving for retirement. Using the 25x rule I discuss in this chapter, you decide that your goal is someday to have a portfolio worth $1.0 million. Your current portfolio has $300,000, so you have a good ways to go. To get where you want, you realize you need to take some risk, but when you start to approach your goal, you want to lower your risk. After all, at that point, you'll have more to lose than gain with any market swings. You should model your portfolio today but also have a picture of what your portfolio may look like when you reach, say, $700,000. . .whenever that is.

Your picture may look something like this:

Today's $300,000 portfolio

Engine No. 1 Transform 500 ETF (VOTE) — 25 percent

Vanguard Small Cap Value ETF (VBR) — 10 percent

Vanguard Total International Stock Index Fund ETF (VXUS) — 35 percent

BNY Mellon Core Bond ETF (BKAG) — 20 percent

Schwab US TIPS ETF (SCHP) — 10 percent

Tomorrow's $700,000 portfolio

Engine No. 1 Transform 500 ETF (VOTE) — 20 percent

Vanguard Small Cap Value ETF (VBR) — 5 percent

Vanguard Total International Stock Index Fund ETF (VXUS) — 25 percent

BNY Mellon Core Bond ETF (BKAG) — 30 percent

Schwab US TIPS ETF (SCHP) — 15 percent

iShares ESG Aware 1–5 Year USD Corporate Bond (SUSB) — 5 percent

By having your portfolio model for today and your picture of what it may look like tomorrow, you'll always know where you're heading. Trust me, it makes sense. Or trust Yogi Berra, who said, "If you don't know where you're going, you may wind up someplace else."

Being risk-averse, Jay and Racquel keep 30 percent of their portfolio in high-quality municipal bonds. They handed me the other 70 percent ($560,000) and told me to invest it as I saw fit. My feeling was that 30 percent high-quality bonds was quite enough ballast, so I didn't need to add to their bond position by very much. I therefore constructed a portfolio of largely domestic and foreign stock ETFs. The size of their portfolio (versus Jason's) warranted the addition of a few more asset classes, including a foreign-bond fund and a market-neutral fund.

I did not include any U.S. REITs, given that so much of the couple's wealth is already tied up in commercial real estate. Figure 21-2 presents the portfolio breakdown.

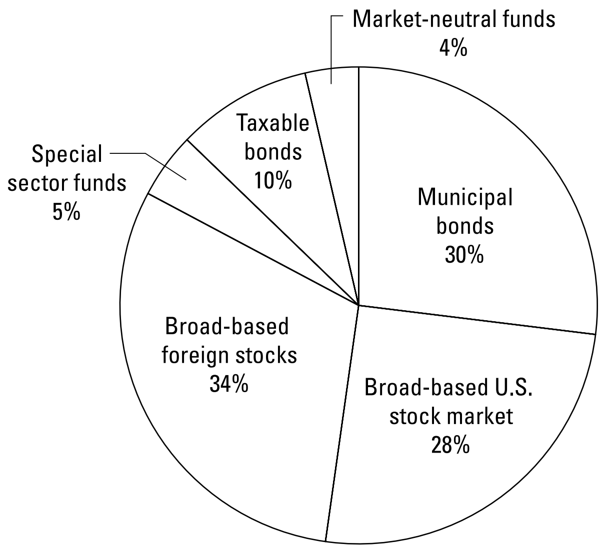


FIGURE 21-2: A middle-of-the-road portfolio.

Municipal bonds: 30 percent

Broad-based U.S. stock market: 28 percent

Dimensional U.S. Core Equity Market (DFAU) — 16 percent

Vanguard Small Cap Value ETF (VBR) — 6 percent

Vanguard Small Cap ETF (VB) — 6 percent

Broad-based foreign stocks: 34 percent

Vanguard Total International Stock Index Fund ETF (VXUS) — 10 percent

iShares MSCI EAFE Value ETF (EFV) — 5 percent

Vanguard FTSE All-World ex-US Small Cap Index ETF (VSS) — 9 percent

Special sector fund: 5 percent

Vanguard International Real Estate ETF (VNQI) — 5 percent

Taxable bonds: 10 percent

BNY Mellon Core Bond ETF (BKAG) — 5 percent

Vanguard Total International Bond Index ETF (BNDX) — 5 percent

Market-neutral fund: 4 percent

Merger Fund (MERFX) — 4 percent

Taking the safer road: Less oomph, less swing

We financial professional types hate to admit it, but no matter how much we tinker with our investment strategies, no matter how fancy our portfolio software, we can't entirely remove the luck factor. When you invest in anything, there's always a bit of a gamble involved. (Even when you decide *not* to invest, by, say, keeping all your money in cash, stuffed under the proverbial mattress, you're gambling that inflation won't eat it away or a house fire won't consume it.) Thus, the best investment advice ever given probably comes from Kenny Rogers: *You got to know when to hold 'em, know when to fold 'em.*

The time to hold 'em is when you have just enough — when you've pretty much met, or have come close to meeting, your financial goals.

I now present Richard and Maria, who are just about the same age as Jay and Racquel. They are 64 and 59, married, and nearing retirement. Richard, who sank in his chair when I asked about his employment, told me that he was in a job he detests in the ever-changing (and not necessarily changing for the better) newspaper business. Maria was doing part-time public relations work. I added up Richard's Social Security, a small pension from the newspaper, Maria's part-time income, and income from their investments, and I told Richard that he didn't have to stay at a job he hates. There was enough money for him to retire, provided the couple agreed to live somewhat frugally, and provided the investments — $700,000 — could keep up with inflation and not sag too badly in the next bear market.

I should add that the couple owned a home, completely paid for, worth approximately $400,000. They both agreed that they could downsize, if necessary.

For a couple like Richard and Maria, portfolio construction is a tricky matter. Go too conservative, and the couple may run out of money before they die. Go too aggressive, and the couple may run out of money tomorrow. It's a delicate balancing act. In this case, I took Richard and Maria's $700,000 and allocated 25 percent — $175,500 — to a Vanguard immediate fixed annuity. (The annuity was put in Richard's name, with 50 percent survivorship benefit for Maria. It was agreed that should Richard die before Maria, she would sell the home, and buy or rent something more economical.) The rest of the money — $525,000 — I allocated to a broadly diversified portfolio largely constructed using ETFs. Figure 21-3 shows the portfolio breakdown.

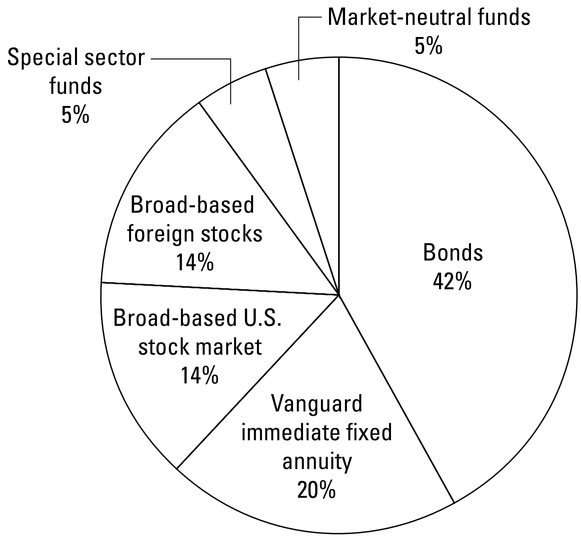


FIGURE 21-3: A portfolio aimed at safety.

Broad-based U.S. stock market: 14 percent

Engine No. 1 Transform 500 ETF (VOTE) — 10 percent

Vanguard Small Cap Value ETF (VBR) — 4 percent

Broad-based foreign stocks: 14 percent

Vanguard Developed Markets Index ETF (VEA) — 10 percent

Vanguard Emerging Markets Index ETF (VWO) — 4 percent

Special sector fund: 5 percent

iShares Global Consumer Staples ETF (KXI) — 5 percent

Bonds: 42 percent

BNY Mellon Core Bond ETF (BKAG) — 12 percent

iShares Global Green Bonds ETF (BGRN) — 10 percent

Schwab US TIPS ETF (SCHP) — 10 percent

Vanguard Mortgage-Backed Securities ETF (VMBS) — 5 percent

iShares ESG Aware 1–5 Year USD Corporate Bond (SUSB) — 5 percent

Market-neutral fund: 5 percent

Merger Fund (MERFX) — 5 percent

Vanguard immediate fixed annuity: 20 percent

With 50 percent survivorship benefit

DIVIDING UP THE PIE EITHER CONSERVATIVELY OR AGGRESSIVELY BY INDUSTRY SECTOR

In Chapter 10, I talk about *sector* investing (investing by industry sector), as opposed to *style* or *grid* investing (splitting your equity into large/small/value/growth). If you want to use sector investing (I have no major problem with that), know that various sectors fall in different places along the risk/return continuum.

But before I get into that, take note, once again, of how the total capitalization of the world's stock market is divided into industry sectors:

Information technology	21%
Consumer discretionary	15%
Financials	14%
Industrials	14%
Healthcare	11%
Consumer staples	6%
Energy	4%
Materials	5%
Real estate	4%
Communication services	3%
Utilities	3%

It is a good idea not to veer off too far from these percentages. But if, as a conservative investor, you want to overweight the less volatile sectors and underweight the most aggressive, I say that within reason, that's fine. You might want to give, for example, your consumer staples ETF a weighting of 10 percent of your portfolio rather than 6 percent. And you might want to avoid energy altogether.

If you're an aggressive investor, you might want to give energy, financials, and consumer discretionary ETFs weightings that are somewhat higher than their world capitalization percentages, and you might want to eliminate consumer staples and utilities.

(continued)

(continued)

The *most* volatile and aggressive sectors (in order of aggressiveness) are the following:*

Energy	42.6
Financials	25.2
Consumer discretionary	25.2
Industrials	24.2
Materials	23.1
Information technology	21.7

And the *least* volatile and aggressive sectors are (in order of calmness) the following:

Consumer staples	13.9
Utilities	14.0
Healthcare	16.6
Real estate	18.5
Communication services	20.0

* Note that I am using Vanguard's sector funds' three-year standard deviation to measure volatility. There are other ways of measuring volatility, and other sector funds, but I believe that what you see here is a pretty good general measure.

But remember that all stocks — even, yes, consumer staples and utility stocks — are going to be way more volatile than bonds. So whereas you, as a conservative investor, might want to overweight these sectors in your stock portfolio, it is more important that your portfolio be constructed with mostly bonds, and fewer stocks. And as an aggressive investor, you'll want more stocks than bonds.

IN THIS CHAPTER

» Understanding the charts

» Peeking into the world of day trading

» Examining "investment pornography"

» Treating time as your friend, not your enemy

» The tortoise and the hare

Chapter 22
Exercising Patience: The Key to Any Investment Success

Now, dear reader, I get to the part of this book you've been waiting for: how to get rich quick using ETFs! The trick is understanding charting patterns.

Let me explain what I mean.

The chart in Figure 22-1 captures a hypothetical daily pricing pattern for a hypothetical ETF that I will give the hypothetical ticker symbol UGH. What you see at point A is a major reversal pattern known to technical analysts as the "Head-and-Shoulders." Notice that as the price dips below the "Neckline" and then rises with simultaneous "Increased Volume" that the "Reversal" of the "Trend" begins to manifest. Buy! Buy!! Within a short time, however, as you can clearly see at point B, a "Minor Top" forms, indicating an "Upward Trend" reinforced by the classic "Inverted Triangle." Sell! Sell!! Two minutes later, at point C, where volume increases yet again and the price again rises a point, you see a "Breakaway Gap." Buy! Buy! Buy!

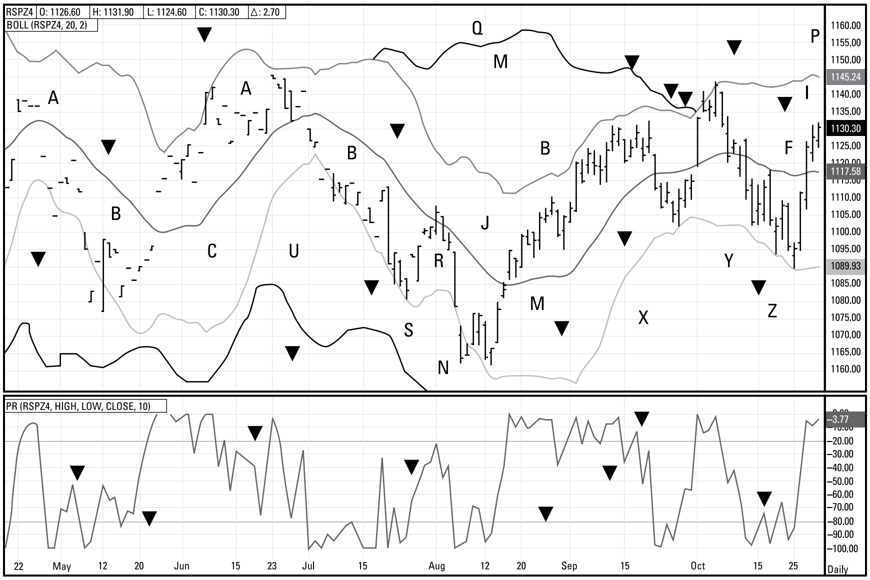


FIGURE 22-1: The daily pricing pattern for UGH.

In the next chart (see Figure 22-2), I examine the daily pricing patterns of a hypothetical ETF that I will hypothetically call DUM. You can make millions overnight if you truly understand this charting pattern!

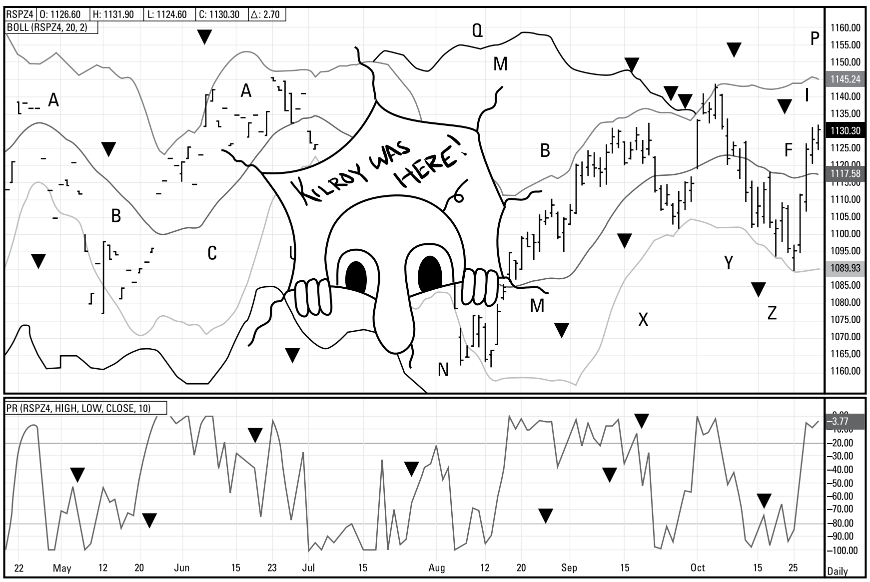


FIGURE 22-2: The daily pricing pattern for DUM.

Unless you are totally humor challenged, by now you see that I'm not being entirely serious. Many, if not most, day traders (who just *love* ETFs, especially the really kooky ones) believe in something called *technical analysis*: the use of charts and graphs to predict movements in securities. Much of the language I used to explain Figure 22-1, as well as the basic idea behind the charts, comes from a bestselling book on technical analysis.

GREED ALERT

I once had the honor of interviewing one of the biggest names in technical analysis. This guy writes books, gives seminars, and tells everyone that he makes oodles and oodles of money by following charting patterns and buying and selling securities accordingly. At the time I interviewed him, I had been a journalist for 20 years, writing for many of the top U.S. magazines, covering many topics. If you develop one thing being a journalist for two decades, it is a very well-honed BS radar. I can tell you after spending an hour on the phone with this "expert" that he is perhaps making oodles and oodles of money with his books and seminars, but he is *not* making oodles and oodles of money with his charts.

And neither will you.

REMEMBER

The key to success in investing isn't to do a lot of trading based on secret formulas that are every bit as fruitless as alchemy. The key is to keep your investment costs low (ETFs will do that for you), diversify your portfolio (ETFs can do that, too), lose as little as possible to taxes (ETFs can help there, too), and exercise patience (that part's up to you).

In this chapter, I present the evidence to back up my contention that buying and holding, more or less, with regular rebalancing, is the thing to do. Yes, that's true even in today's uber-turbulent markets. You will see that the true champions of the investing world are those with the most patience. Here's a great quote that you may want to post next to your computer to look at the next time you contemplate swapping one ETF for another. It's from someone I admire — someone who, I've heard, knows a little bit about investing.

The stock market is a device for transferring money from the impatient to the patient.

—WARREN BUFFETT

In this chapter, you also discover the difference between hypothetical investing (the kind of investing where you allegedly get rich overnight) and investing in the real world in which Warren Buffett invests. The difference is huge.

The Tale of the Average Investor (A Tragicomedy in One Act)

I talk a bit in this book about *correlation,* the tendency for two things (such as two ETFs or other investments) to move in the same direction. A correlation of 1.0 indicates a *perfect* correlation: think of a kitten swiping at itself in the mirror. Another perfect correlation is the correlation between stock prices and the public's willingness to purchase those stocks.

For some strange reason, the market for stocks (and stock funds, such as ETFs) does not work the same way as, say, the market for cars, shoes, or pineapples. With most products, if the seller drops the price, the public is likely to increase consumption. With stocks and stock funds, when the price *rises,* the public increases consumption.

For example, after tech stocks had their fabulous run in the 1990s, only then — in the latter part of the decade — did money start pouring into tech stocks. After the bubble had burst and tech stocks were selling cheaper than tarnished dirt, people were selling right and left, and no one was buying. As I write these words, I'm seeing the price and valuations of a handful of companies —– Microsoft, Alphabet (Google), Facebook, Amazon, and Tesla — reach levels not seen since 1999. (Valuations refer to stock prices as they compare to companies' earnings.) As soon as the bubble bursts on these, well, it'll be red-tag-sale day once again.

Returns that fall way short of the indexes

Every year, the investment research group Dalbar compares the returns of indexes to the returns that mutual fund investors see in the real world. In their 2020 study, the Dalbar research crew found that the average stock mutual fund investor for the 30 years prior to December 31, 2019 earned 5.04 percent a year. This compares to the more than 9.96 percent that someone would have earned just plunking their money in an S&P 500 index fund for those two decades and leaving it put. Bond fund investors did worse in relation to the bond indexes: 0.38 percent versus 5.91 percent.

There's recently been some controversy from Morningstar and some other research groups over Dalbar's methodology, but those researchers still come to the conclusion that the average fund investor falls far behind the indexes.

How to explain such lackluster investor returns? In part, the culprit is the average investor's inclination to invest in pricey and poor-performing mutual funds. An even larger problem is that the average investor jumps ship too often, constantly buying when the market is hot, selling when it chills, and hopping back on board when the market heats up again. They are forever buying high and selling low — not a winning strategy, by any means.

ETFs can solve the first part of the problem. They are, as long as you pick the right ones, not pricey. In fact, they cost very little. Most ETFs are also guaranteed not to underperform the major indexes because they mirror those indexes. As for the jumping-ship problem, however, I fear that ETFs can actually *exacerbate* the problem.

ETFs can make failure even easier!

ETFs were brought into being by marketing people from the Toronto Stock Exchange who saw a way to beef up trading volume. Unlike mutual funds, which can be bought and sold only at day's end, ETFs trade throughout the day. In a flash, you can plunk a million in the stock market. A few seconds later, you can sell it all.

Yippee!

In other words, Dalbar's future studies looking at 30-year returns — now that ETFs have really caught on with the average investor — may be even more dismal. Keep in mind that just because ETFs can be traded throughout the day doesn't mean you *have* to or that you *should* trade them!

REMEMBER

The vast majority of ETF trades are made by institutional investors: managers of mutual funds or hedge funds, multibillion-dollar endowments, pension funds, and investment banks. These are highly trained, incredibly well-paid professionals who do nothing all day but study the markets.

When you go to buy, say, the Financial Select Sector SPDR ETF (XLF), which represents stocks in the financial sector, you are betting that the price is going to go up. If you are day trading, you are betting that the price will go up that very same day. If you are selling, you are betting that the price will fall that day. Someone, most likely a highly educated financial professional with an army of researchers and computers more powerful than the FBI's — someone who does nothing but study financial stocks 80 hours a week (for which reason their spouse is about to walk out the door) — is on the other end of your transaction. As you sell, he — I'll call him Chad — is buying. Or, as you buy, he is selling. Obviously, Chad's vision of the next few hours and days is different from yours. Chad may not know that his spouse is about to leave him for a professional hockey player, but if either of you has any idea which way financial stocks are headed, well. . .do you really think that you know something Chad doesn't? Do you really think that you're going to get the better end of this deal?

Obviously, lots of ETF traders think they are pretty smart because ETFs are among the most frequently traded of all securities — see the sidebar, "The 10 ETFs that day traders love the most." Also see the sidebar, "The author's confession (and a few rules if you are going to day trade)," later in the chapter for an inside view of a repentant day trader's mind.

The lure of quick riches

GREED ALERT

If you jump onto the Internet, as I just did, and type in the words "day trading secrets," you will see all kinds of websites and newsletters offering you all kinds of advice (much of it having to do with reading charts) that's sure to make you rich. Add the initials "ETF" to your search, and you'll quickly see that an entire cottage industry has formed to sell advice to wannabe ETF day traders.

According to these websites and newsletters, following their advice has yielded phenomenal returns in the past (and they'll give you specific *big* numbers proving it). And following their advice in the future (after you've paid your hefty subscription fee) will likewise yield phenomenal returns.

Here is just one of many examples:

GREED ALERT

> **StockMarketTiming.com, LLC** (`www.stockmarkettiming.com`)
>
> **Cost:** $295/year for the Gold Plan or $995 for the lifetime Diamond Plan
>
> **Direct from the website:** *StockMarketTiming.com, LLC is a financial service for investors and traders who want to increase their portfolios in the most non-stressful and effective way possible in both bullish and bearish markets! We have developed a market timing system that uses technical analysis for trading the popular Exchange Traded Funds (ETFs) — DIA, SPY, and QQQ, which has produced outstanding gains!*
>
> **Russell says:** Outstanding gains for whom?
>
> *We are the home of the most honest, concise, credible (unbiased and zero-hype), low-risk, and one of the most effective financial websites on the Internet today!*
>
> **Russell says:** I'm glad that the hype is unbiased. I hate biased hype.

If you're wondering, by the way, who regulates investment websites and newsletters and the performance figures they publish, wonder no more. No one does. The U.S. Supreme Court decided in 1985 that, just as long as a newsletter is providing general and not personal advice, the publisher is protected by the free-speech provisions of the First Amendment.

THE 10 ETFs THAT DAY TRADERS LOVE THE MOST

They are volatile. They are *liquid* (meaning that they trade easily). And the following 10 ETFs are flipped more often than all other ETFs:

- SPDR S&P 500 (SPY)
- ProShares UltraPro Short QQQ (SQQQ)
- Financial Select Sector SPDR Fund (XLF)
- Invesco QQQ (QQQ)
- iShares MSCI Emerging Markets ETF (EEM)
- ProShares UltraPro QQQ (TQQQ)
- Energy Select Sector SPDR (XLE)
- iShares MSCI Brazil ETF (EWZ)
- iShares Russell 2000 (IWM)
- iShares Silver Trust (SLV)

John Rekenthaler, a VP at Morningstar, once told me (and I love how he put it): "Investment newsletter publishers have the same rights as tabloid publishers. There's nothing illegal about a headline that reads 'Martian Baby Born with Three Heads!' and there's nothing illegal about a headline that reads 'We Beat the Market Year In and Year Out!'" Both should be read with equal skepticism.

The Value Line Paradox

Throughout the years, one of the most popular purveyors of market-timing and stock-picking advice — though not the worst offender, by far — has been Value Line. It's not as popular as it was years ago, but it is still a household name. Not only are the Value Line people now offering advice on picking ETFs as well as stocks, but they also launched their own ETF in 2005 — the Value Line Timeliness Selection ETF — that actually mirrored the advice given by the famed Value Line newsletter. The fund was administered by PowerShares, which pulled the plug on it after four years of lackluster returns.

Paper versus practice

Although the Value Line website isn't nearly as loud and obnoxious as it once was (I think the company was humbled by its fund's demise), it's still promising you that it can beat the indexes.

And yet. . .and yet, it pretty much fails to do so.

Although its initial ETF folded, Value Line still operates a number of mutual funds, and by and large, they struggle to keep up with the indexes — just as nearly all actively managed funds do. The Value Line Mid Cap Focused Fund (VLIFX), for example, has a 10-year return of 14.83 percent compared to the S&P 500's 15.35 percent. Yet VLIFX has a lot more volatility.

WARNING

Robert E. Lee's march into Pennsylvania and the *Titanic's maiden voyage* looked fabulous on paper, but, when translated into reality, they revealed some rather tremendous flaws.

The lesson to be learned

Who can say for sure why Value Line's ETF failed and why its mutual funds just get by? When the ETF underperformed the markets, and way, way underperformed Value Line's advertising claims about its ability to beat markets, those advertising claims came under attack. Some independent research came up with far, far lower return figures than were advertised. Or perhaps the managers of the fund were unable to follow the advice given in their own newsletter. Perhaps trading costs ate up all profits — and then some. Whatever the explanation, investors in the ETF lost money. Investors in the mutual funds are a long way from buying yachts.

But my point in sharing the Value Line paradox isn't so much to steer you away from any single mutual fund or ETF. My point is to steer you away from thinking that you — or anyone else — can trade in and out of ETFs, stocks, bonds, or anything else successfully. It's not nearly as easy as many people (such as the Value Line editors) make it seem.

"Investment Pornography" Everywhere

GREED ALERT

Investment websites and newsletters are part of a phenomenon that financial journalist Jane Bryant Quinn once called "investment pornography." Many newsletters, magazines, newspaper columns, books, and television shows exist to titillate and tease you with the promise of riches. Achieving those riches with ETFs is only the latest gimmick.

One glossy consumer finance magazine that arrived in my mailbox caught my attention. A very attractive woman is walking along the beach. She holds a purse in her hand. (Why is she carrying a purse on the beach?) I am told by the caption under her left foot that the attractive woman earned a 40 percent return in one year.

I turn to page 65 of the magazine, and there she is: She earned her 40 percent by investing ("on the advice of a friend") in the Hodges mid-cap mutual fund. Mid caps happened to have kicked serious butt in the 12 months prior to this issue's release. What the article doesn't tell you is that the Hodges fund had a fairly hefty expense ratio and — no big surprise here — a 15-year return that trailed the S&P MidCap 400 index by 3.54 percent annually. That's part of the reason why the fund folded.

No wonder that poor woman carries her purse on the beach. She has determined that someone is out to steal her money.

Welcome to the wild, wacky world of investment advice

In 1999, a very popular book entitled *Dow 36,000: The New Strategy for Profiting from the Coming Rise in the Stock Market* gave readers 300 pages of in-depth explanation for why the Dow Jones Industrial Average, at that time riding around 10,000, was destined to more than triple in value. "The case is compelling that 36,000 is a fair value for the Dow today. And stocks should rise to such heights very quickly," wrote James K. Glassman and co-author Kevin A. Hassett. Of course, as soon as the book came out, advising people to pour money into stocks, the Dow proceeded to tumble to less than 8,000 in a three-year bear market. Here it is, 2021, and the Dow Jones has *still* not reached 36,000.

Where do you suppose James K. Glassman is today? Why, he's writing an investment advice column, of course. And he's making more predictions. And when the Dow finally hits 36,000, Glassman will say, "See? I told you so!"

Before Glassman, there were the Beardstown Ladies. In 1983, 16 women in Beardstown, Illinois, started an investment club. In 1994, claiming a 23.4 percent annualized ten-year return, they wrote a book called *The Beardstown Ladies' Common-Sense Investment Guide*. It became a huge bestseller. Oops. It turns out, upon further inspection, that the Beardstown Ladies overstated their returns. Their actual returns were 9.1 percent a year, considerably less than the stock market.

What happened to the good Ladies of Beardstown? Why, they went on to write five more investment books, of course.

Don't even get me started on Jim "Mad Money" Cramer. If you haven't taken his screaming advice and lost money on your own, simply search his name on the Internet, along with the words "actual performance" or "flip of the coin," and you will be very disinclined ever to buy based on one of Mr. Mad Money's tips. My fellow *For Dummies* author Eric Tyson (see `http://EricTyson.com`) has made something of a sport of tracking Cramer's actual performance, and it isn't pretty.

With the advent of the Internet and YouTube, Cramers and Glassmans have become a dime a dozen. Yesterday's stock pickers have become today's ETF pickers, and they are in your face 24/7.

I share these investment horror stories so that you won't wind up as a victim in any future ones. One way to make sure you don't is to be on the lookout for ridiculous claims. Market-timing services are all over the Internet. And why not? ETFs are hot. They are in the news. They sound so impressive. And there is a sucker born every minute.

WARNING

Please, please, don't fork over your money assuming that you're going to get the secrets to instant wealth by trading ETFs. It won't happen.

YouTube: Where teenagers in baseball caps explain the "secrets" of ETF trading

Just go to YouTube and type in the search terms, "ETFs trading tricks," and behold. . .baseball caps! There are young men, ETF day traders, sitting in front of four or five monitors, wearing baseball caps, all over YouTube!

They have rags-to-riches stories to tell, secrets to share, and little whimsical asides about driving in their BMWs. If they're making $1,500 per day trading online, why are they spending countless hours making online videos?

Why, indeed.

Some are trying to get you to subscribe to their ETF-picking services. Others are building followings to sell subscriptions and services down the road. Most, I believe, are just showing off their alleged prowess at picking ETFs, and I believe many of them are doing it in earnest.

Here's the thing: Stocks have had an amazingly good run lately. In the past five years, the U.S. stock market has returned an average of almost 15 percent a year. Under such conditions, it has been hard *not* to make money in stocks — even for day traders. So many of them, I'm sure, *have* made money. But they've been spending hours and hours at their computers and taking enormous risks. And when the market goes south in a serious way, they'll be cleaned out.

It happens every bear market. Just about every stock picker in the nation saw their clock cleaned in 2000, and again in 2008. I'm sure that many went down in the brief COVID-19 collapse of March 2020. Like software programs that clean up the cache on your computer, bear markets clean out most day traders.

But then they return. In baseball caps.

Patience Pays, Literally

The flip side of flipping ETFs is buying and holding them, which is almost certain, in the long run, to bring results far superior to market timing. It's the corollary to choosing ETFs over stocks. Study after study shows that the markets are, by and large, *efficient.* What does that mean? So many smart players are constantly buying and selling securities, always on the lookout for any good deals, that your chances of beating the indexes, whether by market timing or stock picking, are very slim.

One of many studies on the subject, "The Difficulty of Selecting Superior Mutual Fund Performance," by Thomas P. McGuigan, appeared in the *Journal of Financial Planning.* McGuigan found that only 10 to 11 percent of actively managed mutual funds outperform index funds over a 20-year period. (*Active managers* are professionals who try to pick stocks and time the market.)

REMEMBER

You can probably safely assume that the professionals do better than the amateurs, and even the professionals fail to beat the market 90 percent of the time.

Talk about unpredictability

Timing doesn't work because markets are largely random. The unpredictability of the stock market (and the bond market, for that matter) never ceases to amaze me. Just when things seem certain to take off, they sink. Just when they seem certain to sink, they fly.

I had one client, a 52-year-old allergist in Allentown, Pennsylvania, who several years ago read up on avian flu and became so concerned about what a pandemic might do to the stock market that he urged me to take his $500,000 portfolio and put everything in cash. We set up a meeting in his office, and I was able to temper his desire to cash out. (However, we did move his portfolio to a somewhat more conservative position.)

Prior to our meeting, I sent the client the following email, which I would like to share with you:

> *Dear Tom,*
>
> *Since your initial e-mail on this topic, I've done a fair amount of reading, and you have reason to be concerned, for sure. I am, too.* [Author's note: I was being truthful here, although my concern was more a health concern than a financial one.]
>
> *Holding some cash and gold wouldn't be a bad idea. (If we had a real economic crisis, you would want small gold coins. . .1/10 ounce.)*
>
> *But don't assume that pandemics, or any other crisis, necessarily result in stock market crashes.*
>
> *Keep in mind that 1918, the year of the worst pandemic in world history, was a good year for stocks:* `http://www.econ.yale.edu/~shiller/data/chapt26.html`.
>
> *1942 (Japan attacked Pearl Harbor; Hitler marched across Europe) wasn't too bad, either. 1962 (Cuban Missile Crisis) was a very good year.*
>
> *In contrast, let's look at the worst years for the stock market. In 1929, nothing catastrophic was going on. Ditto for 1987. Ditto for 2000.*
>
> *I can't explain the incredible unpredictability of the markets. I can only share these historical truths.*
>
> *Yours,*
>
> *Russell*

Since I wrote that note, we've been through yet another of history's worst years for the stock market. That was 2008. While there was something of a banking crisis going on, I'm not sure that the demise of Lehman Brothers compares to Hitler's blitzkrieg of Europe. But more on 2008 in just a moment. More on 2020 and the COVID-19 pandemic as well. I'm happy to say that the COVID-19 pandemic, scary as it is, brought not a peep from Tom!

A short history of the market's resiliency

As I write this chapter, in August 2021, the world has been locked in a struggle against COVID-19 that first hit the U.S. in February 2020. The first month or two were brutal to the stock market. Portfolios fell dramatically as sector by sector succumbed, first to panic and then to a sharp reduction in consumption and production. Airlines, hotels, retail, and financials were hit the hardest, but every industry suffered. From mid-February to mid-March 2020, over the course of a mere 33 days, the broad U.S. stock market fell 34 percent. And then. . .the market came raging back.

The market reached break-even just a few months later, in mid-August, and then continued to rise. By the end of December 2020, the S&P 500 had risen more than 18 percent from the start of the year. And then it continued to rise more. From January 2021 to the end of July 2021, the market rose yet *another* 18 percent. As I'm writing this paragraph, the market is very close to its all-time high. And did I mention that the world is still locked in a struggle against COVID-19?

This is not atypical. Stocks react, and often overreact to bad news. And then, after a time, stocks come back.

Remember September 11, 2001? Following the destruction of the World Trade Center towers, the Dow immediately dropped more than 7 percent. Six months later, the Dow was up by 10.5 percent. On September 24, 1955, President Eisenhower's heart attack led to a one-day drop of 6.5 percent. Six months later, the Dow was up 12.5 percent. I could give example after example.

In 2008, the market had its worst dip since the Great Depression; the S&P 500 tumbled nearly 37 percent for the year. But it came back, gaining 26 percent in 2009 and about 15 percent in 2010. Had you rebalanced in 2008, shaving off bonds and buying up stocks at rock-bottom prices, your portfolio (provided it was well diversified) would likely have fully recovered within two years.

That's not to say that the market will *always* come back. One of these days. . .well, even Rome eventually fell. But history shows that the stock market is a mighty resilient beast. I suggest that you build a portfolio of ETFs — including stock and bond ETFs — and hang tight. Sooner or later (barring some truly major economic upheaval), you will very likely be rewarded.

THE AUTHOR'S CONFESSION (AND A FEW RULES IF YOU ARE GOING TO DAY TRADE)

Um. . .er. . .I don't know quite how to say this, but, despite all of my talk in this chapter and throughout this book about buying and holding, and the futility of day trading, yes — *Yes! Yes!* — I've done it. I admit it! I've bought and sold ETFs within the same day in the hope of making a quick gain! I've done it with the QQQ (an ETF that tracks the NASDAQ) and with the EEM (an emerging-markets ETF).

What can I say? Gambling (and that is what such short-term forays into the market are) can be fun. Not only that, but the odds of making money by gambling on an ETF are much greater than they are by, say, playing the horses, shooting craps, or standing in line at 7-Eleven on a Friday afternoon to buy lottery tickets. After all, the "house" takes only a small cut when you play the markets. And time is on your side.

Have I made any short-terms gains? Sure. I've also lost some money. On balance, over the years, I've probably just about broken even. . .or maybe earned ten cents an hour for all my efforts. But it has been fun!

I am sharing this with you because I know that some of you are going to occasionally have that feeling in your gut that you "know" some security is going to go up (or down, if you're into short selling), and you may take a stab.

Okay, go ahead if you must; I'll just ask you to play by a few rules.

Rule #1

Separate gambling from investing; have a (small) fixed amount of money to gamble with. Take it from cash. Don't sell your buy-and-hold investments to finance your gambling.

Rule #2

If you find that you are getting fixated on your wins and losses, quit. If it isn't fun, don't do it. If you find that you are spending an inordinate amount of time playing the markets, quit. There is more to life.

Rule #3

Don't buy on margin. If you are borrowing money from the brokerage house to trade, that could spell big trouble. Margin money usually costs much more than you think. I hold Fidelity Investments in high regard, but I really don't like some of the full-page magazine advertisements they've run offering low rates for margin borrowing. If you read the very small print at the bottom of the page, it explains that the advertised rate pertains only to margin loans over $500,000. Small players — like you and me — pay much more.

Rule #4

Ask yourself what you're going to do if you get stuck. Have an exit plan. What if you buy EEM on an exceptionally volatile day, and you expect it to rise 3 percent, but instead it falls 4 percent? Are you going to hold it until it climbs back up? Are you going to cash out and take the hit? Have a plan in place before you make the trade, and stick to it. Consider placing a stop-loss order going in, at a price that reflects how much you're willing to lose. That way, if the trade goes against you, your plan will be implemented automatically without requiring you to make a gut-wrenching decision in the heat of the moment.

Rule #5

If you think that you have a superhuman ability to time the markets, ask yourself if that is really what you want to do for a living. Day trading isn't exactly a career that benefits the community or grows your consciousness. I've known a good number of day traders; they tend not to be the happiest or most enlightened people on the planet.

IN THIS CHAPTER

» Rebalancing your ETF portfolio once a year

» Practicing tactical asset allocation

» Harvesting tax losses

» Revamping your portfolio as life changes

» Playing (or not playing) the ETF options game

Chapter 23

Exceptions to the Rule (Ain't There Always)

When I was a kid, long before there was such a thing as online banking, I would often pedal my metallic-blue, three-speed Schwinn bicycle to one of the local savings banks on Long Island to deposit my allowance money. In those days, if you opened a new account, you were often given a free gift: a toaster, clock radio, leather wallet, crystal candlesticks, or such. This was a great incentive to switch banks, and I did so with regularity and gusto.

Today, I still ride my bicycle to the bank, but neighborhood banks no longer give away toasters or clock radios. Times change! Yet sometimes it still makes sense to switch your investments around.

In the previous chapter, I discuss the virtues of a buy-and-hold approach to ETF investing. But that doesn't mean that you should purchase a bunch of ETFs and *never* touch them. Switching from one ETF to another won't get you a clock radio or a leather wallet, but there can be other benefits to making some occasional moves, for sure.

In this chapter, I discuss certain circumstances where it makes sense to trade ETFs rather than buy and hold. For example, you need to rebalance your portfolio, typically on an annual basis, to keep risk in check, and on occasion you may want to swap ETFs to harvest taxes at year end. I also discuss the ways in which life changes may warrant tweaking a portfolio. And finally, I introduce you to the world of ETF options, where frequent trading is a way of life.

Rebalancing to Keep Your Portfolio Fit

Few investors walked away from 2008 smelling like a rose. But those who were slammed, truly slammed, were those who had more on the stock side of their portfolios than they should have. It happens, and it happens especially after bull markets, as investors saw in the several years prior to 2008 — and as they are seeing today.

Let's take the case of Joan. In 2011, when she was 54 years old, she sat down and looked at her financial situation and goals. She determined that she warranted a 60/40 (60 percent stock/40 percent bond) portfolio and duly crafted a darned good one. But then she got lazy. She held that portfolio without touching it through the stock market boom years that followed, and as a result, her portfolio morphed from a 60/40 mix to an 80/20 mix by the start of 2021.

Now Joan is at the cusp of retirement, sitting on a portfolio that is way too risky.

If the market were to tumble today as it did in, say, 2008, she might lose 40 percent of her worth. Starting retirement with a portfolio that is down 40 percent would not be an enviable position to be in. If the market falls and doesn't come back anytime soon, she may have to sell her stock ETFs at very depressed prices, locking in her losses. And she will have absolutely no "dry powder" (cash) with which to reload her stock portfolio for potential future gains.

It is in large part to prevent such big falls, and lack of "dry powder," that you need to rebalance. That is, on a regular basis, you need to do exactly the opposite of what most investors do: You need to sell off some of your winners and buy up the losers.

By doing so, not only do you cap your risk, but studies show that you may also juice your returns. By systematically buying low and selling high, you may, over the long run, increase your average annual returns by as much as 1.5 percent. That's not a bad return at all for an exercise that shouldn't take you more than a couple hours! (***Note:*** I say "as much as 1.5 percent" because the profitability of rebalancing will depend on how many asset classes you own and the correlations they have to each other.)

How rebalancing works

What Joan should've done once a year or so was to rebalance her portfolio so that the initial "60/40" (stock/bond) mix was reset. She should never have allowed any one slice of her portfolio to overtake the rest. She should've periodically pulled her portfolio back into balance.

To illustrate how this should be done, I'll use the simple middle-of-the-road ETF portfolio that I introduce in Chapter 21. At the start of the year, the portfolio is just where you want it to be: 60 percent diversified stocks, 40 percent bonds. But it turns out to be a banner year for stocks, and especially for small-cap U.S. stocks. At the end of the year, as you can see in Table 23-1, the portfolio looks quite different.

TABLE 23-1 A Shifting Portfolio Balance

Beginning of Year One (In Balance)	
ETF	Percent of Portfolio
Municipal bonds	**30 percent**
Broad-based U.S. stock market	**28 percent**
Dimensional U.S. Core Equity Market (DFAU)	16 percent
Vanguard Small Cap Value ETF (VBR)	6 percent
Vanguard Small Cap ETF (VB)	6 percent
Broad-based foreign stocks	**23 percent**
Vanguard Total International Stock Index Fund ETF (VXUS)	10 percent
iShares MSCI EAFE Value ETF (EFV)	4 percent
Vanguard FTSE All-World ex-US Small Cap Index ETF (VSS)	9 percent
Special sector fund	**5 percent**
Vanguard International Real Estate ETF (VNQI)	5 percent
Taxable bonds	**10 percent**
BNY Mellon Core Bond ETF (BKAG)	5 percent
Vanguard Total International Bond Index ETF (BNDX)	5 percent
Market-neutral fund	**4 percent**
Merger Fund (MERFX)	4 percent

(continued)

TABLE 23-1 ***(continued)***

Beginning of Year One (In Balance)	
ETF	Percent of Portfolio
End of Year One (Out of Balance)	
Municipal bonds	**24 percent**
Broad-based U.S. stock market	**33 percent**
Dimensional U.S. Core Equity Market (DFAU)	17 percent
Vanguard Small Cap Value ETF (VBR)	8 percent
Vanguard Small Cap ETF (VB)	8 percent
Broad-based foreign stocks	**26 percent**
Vanguard Total International Stock Index Fund ETF (VXUS)	11 percent
iShares MSCI EAFE Value ETF (EFV)	5 percent
Vanguard FTSE All-World ex-US Small Cap Index ETF (VSS)	10 percent
Special sector fund	**6 percent**
Vanguard International Real Estate ETF (VNQI)	6 percent
Taxable bonds	**8 percent**
BNY Mellon Core Bond ETF (BKAG)	4 percent
Vanguard Total International Bond Index ETF (BNDX)	4 percent
Market-neutral fund	**3 percent**
Merger Fund (MERFX)	3 percent

TIP

What to do? Bring things back into balance, starting with the bond position. That's because the split between stocks and bonds has the greatest impact on portfolio risk. In this example, you need to increase the bond allocation from 32 percent back up to 40 percent. If you have a year-end portfolio of $100,000, that means you'll buy $6,000 in municipal bonds to bring that allocation up to $30,000 or 30 percent of your portfolio. You'll also buy $1,000 of the BNY Mellon Core Bond ETF and $1,000 of the Vanguard Total International Bond Index ETF, so that your taxable bonds will be back to $10,000 total, or 10 percent of the portfolio.

Where will the $8,000 come from? That depends. You could sell off part of your stock position, which may be necessary given that things are pretty seriously out of balance. But do keep in mind that selling off winning positions in a taxable account will require you to pay capital gains — and possibly a small commission on the ETF trades. So to the extent possible, try to rebalance by shoring up your losing positions with fresh deposits or with dividends and interest earned on your portfolio.

How often to rebalance

The question of how often to rebalance has been studied and restudied, and most financial professionals agree that once a year is a good timeframe, at least for those still in the accumulation phase of their investing careers. Anything less frequent than that increases your risk as positions get more and more out of whack. Anything more frequent than annually, and you may lower your returns by interrupting rallies too often and increasing your "friction" costs (spreads, possible commissions, and taxes).

Keep these costs in mind as you rebalance. Tweaking a portfolio by a few dollars here and there to achieve "perfect" balance may not make sense.

Another way to approach rebalancing is to seek to address any allocations that are off by more than 10 percent, and don't sweat anything that's off by less. In other words, if your muni-bond position is given an allocation in the portfolio of 30 percent, I wouldn't worry too much about rebalancing unless that percentage falls to 27 percent or rises to 33 percent.

Rebalancing for retirees

If you are in the *decumulation* phase of your investing career (that's a fancy way of saying that you are living off of your savings), you may want to rebalance every 6 months instead of 12. The reason: Rebalancing has a third purpose for you, in addition to risk-reduction and performance-juicing. For you, rebalancing is a good time to raise whatever cash you anticipate needing in the upcoming months. In times of super-low interest rates on money market and savings accounts, such as we've seen in recent years, it can be profitable to rebalance more often so that you don't need to keep as much cash sitting around earning squat. I provide more information on raising cash for living expenses in retirement in Chapter 24.

Contemplating Tactical Asset Allocation

Astute readers — such as you — may now be wondering this: If you can juice your returns by rebalancing (systematically buying low and selling high), can you perhaps juice your returns even more by *over*-rebalancing? In other words, suppose you design a 60/40 portfolio, and suddenly stocks tank. Now you have a 50/50 portfolio. Might you consider not only buying enough stock to get yourself back to a 60/40 portfolio, but also (because stocks are so apparently cheap) buying even *more* stocks than you need for simple rebalancing purposes?

Investment professionals call this kind of maneuver "tactical asset allocation." It is the art of tilting a portfolio given certain economic conditions. Tactical asset allocation is different than market timing only in the degree to which action is required. With tactical asset allocation, you make a gentle and unhurried shift in one direction or another, whereas market timing entails a more radical and swift shifting of assets. While tactical asset allocation, done right, may add to your bottom line, market timing will almost always cost you. The division between the two can be a fine line, so proceed with caution.

Understanding the all-important P/E ratio

I talk about reversion to the mean in Chapter 22. If a certain asset class has been seeing returns much, much lower than its historical average, you may want to very slightly overweight that asset class. If, for example, you are considering overweighting U.S. stocks, it makes more sense to do it when U.S. stocks are selling relatively cheaply. Typically, but not always, an asset class may be "selling cheap" after several years of underperforming its historical returns.

But is there any way to find a more objective measure of "selling cheap"? Investment legend Benjamin Graham liked to use something called the P/E ratio. The P stands for price. The E stands for earnings. When the market price of a stock (or all stocks) is high, and the earnings (or profits for a company or companies) are low, you have a high P/E ratio; conversely, when the market price is down but earnings are up, you have a low P/E ratio. Graham, as well as his student Warren Buffett, preferred to buy when the P/E ratio was low.

Throughout Part 1 of this book, I urge you to consider tilting your entire stock portfolio, on a permanent basis, toward lower P/E stocks, otherwise known as *value stocks.* Here, I'm talking not about a permanent tilt but a mild, temporary one. It stands to reason that if value stocks outperform other stocks — and historically, they have done just that — and if the entire stock market appears to be a value market, then that market may outperform in the foreseeable future.

Work by Yale University economist Robert J. Shiller has lent credence to the notion that buying when the P/E ratio is low raises your expected returns. In fact, Shiller has tinkered with the way the P/E ratio is defined so that the earnings part of the equation looks back over a decade (rather than the typical one year) and then factors in inflation. Shiller's research, based on tracking market returns with varying P/E ratios over the decades, indicates that when his adjusted P/E ratio is low, the stock market is more likely to produce gains over the following decade. When the P/E ratio is high (it reached an all-time high in 1999, for example), you may be looking forward to a decade of very low (or no) returns. Sure enough, the first decade of the millennium produced a rather flat market.

Applying the ratio to your portfolio

Although Shiller's theories have been debated, it stands to reason that, if they are applied carefully, you may just do yourself a favor to slightly overweight all stocks when the P/E ratio is low and to underweight all stocks when the P/E ratio is high. But against the probability that Shiller's formula holds, you need to weigh the very real transaction costs involved in shifting your portfolio. On balance, I wouldn't suggest engaging in tactical asset allocation very often. . .and then only if the numbers seem to be shouting at you to act.

One very quick way to check the P/E ratio for the entire stock market would be to look up an ETF that tracks the entire market, such as the Vanguard Total Stock Market ETF (VTI), on Vanguard's website (`www.vanguard.com`) or on just about any financial website (such as `www.morningstar.com`). Or, to see both the traditional and the potentially more powerful "Shiller PE Ratio," go to `www.multpl.com`. (The P/E ratio is sometimes called the "multiple.")

The historical average for the S&P 500 P/E Ratio is about 16. It is now roughly 34. The historical average for Shiller's adjusted P/E is about 17. It is now 38. So, unless those numbers have changed by the time you're reading this chapter, you don't want to overweight stocks right now. However, if stock prices should fall and earnings should rise, and you start to see the P/E fall back to historical norms or below, you may want to gently — very gently — tweak your portfolio toward the more aggressive side.

Did I remember to say 'gently'?

TIP

If, all things being equal, you determine that you should have a portfolio of 60 percent stocks, and if the adjusted P/E falls to the low teens, then consider adding 2 to 3 percentage points to your stock allocation, and that's all. If the market P/E falls to 14 or less, then maybe, provided you can stomach the volatility, consider adding yet another percentage point or two, or even three, to your "neutral" allocation. If the adjusted P/E rises back up to where it was in 1999 — about 44 — then you may want to lighten up on stocks by a few points. Please, keep to these parameters. Tilting more than a few percentage points — particularly on the up side (more stocks than before) — increases your risks beyond the value of any potential gains.

Buying unloved assets

Ever notice how weeds grow so much faster than the plants that you *want* to see grow? For years, since 1994 in fact, Morningstar has advocated, and continues to advocate, something called "Buy the Unloved." It calls not for overweighting asset classes that sport low P/E ratios, but for overweighting asset classes that investors (being the lemmings that they are) have abandoned in droves. In other words, you are encouraged to buy "weeds."

Morningstar's "weed-buying" strategy has been very successful. (I'm not providing specific performance numbers because they are clouded by Morningstar's use of actively managed funds to amass the weeds.) Morningstar also cautions that weed-gathering should not be used as a stand-alone strategy. And I agree.

But before you decide to underweight or overweight any part of your portfolio, I would advise quickly checking fund flows. I just typed the words "fund flows 2021" into my search engine, and a number of sources popped up. I found data from Morningstar, BlackRock, Fidelity. . .

I can see that in the first half of 2021, a whole lot of people (including me) started to buy value stocks and abandon growth. They (like me) have been looking at the nosebleed P/E ratios of growth stocks, and how value stocks look so good in comparison, and they've been acting accordingly.

What this information tells me is that I'm not so brilliant or unique as I thought! Yes, I still want to be overweighted in value, but given the fund flows into value over these past months, I'm going to temper my enthusiasm and keep my value tilt a bit lighter than I otherwise might have.

Harvesting Tax Losses, and the IRS's Oh-So-Tricky "Wash Rule"

So you had a bad year on a particular investment? You had a bad year on *many* of your investments? Allow Uncle Sam to share your pain. You only need to sell these investments by December 31, and you can use the loss to offset any capital gains. Or, if you've had no capital gains, you can deduct the loss from your taxable ordinary income for the year, up to $3,000.

But there's a problem. Because of the IRS's "wash rule," you can't sell an investment on December 31 and claim a loss if you buy back that same investment or any "substantially identical" investment within 30 days of the sale. You may simply want to leave the sale proceeds in cash. That way, you save on any transaction costs and avoid the hassle of trading.

On the other hand, January is historically a very good time for stocks. You may not want to be out of the market that month. What to do?

ETFs to the rescue!

What the heck is "substantially identical" anyway?

The IRS rules are a bit hazy when it comes to identifying "substantially identical" investments. Clearly, you can't sell and then buy back the same stock. But if you sell $10,000 of Exxon Mobil Corp. (XOM) stock, you *can* buy $10,000 of an ETF that covers the energy industry, such as the Energy Select Sector SPDR (XLE) or the Vanguard Energy ETF (VDE). They're not the same thing, for sure, but either one can be expected to perform relatively in line with XOM (and its competitors as well) for the 30 days that you must live without your stock. And rest assured, no ETF could reasonably be deemed to be "substantially identical" to any individual stock.

I, of course, would prefer that you keep most of your portfolio in ETFs in the first place. Even then, if you follow my advice, and one year turns out to be especially bad for, say, large-cap value stocks, no problem. If you are holding the iShares S&P 500 Value Fund (IVE) and you sell it at a loss, you can buy the Vanguard Value ETF (VTV), hold it for a month, and then switch back if you want.

REMEMBER

Two ETFs that track similar indexes (IVE tracks the S&P 500 Value Index; VTV tracks the CRSP US Large Cap Value Index) are going to be very, very similar but not "substantially identical." At least the IRS *so far* has not deemed them substantially identical. But the IRS changes its rules often, and what constitutes "substantially identical" could change tomorrow or the next day. It's usually a good idea to consult with a tax professional (which I am not) before proceeding with any tax harvesting plans.

Revamping Your Portfolio with Life Changes: Marriage, Divorce, and Babies

Rebalancing to bring your portfolio back to its original allocations, making tactical adjustments, and harvesting losses for tax purposes aren't the only times it may make sense to trade ETFs. Just as you may need a new suit if you lose or gain weight, sometimes you need to tailor your portfolio in response to changes in your life.

As I discuss in Chapter 21, the prime consideration in portfolio construction is whether you can and should take risks in the hope of garnering high returns or whether you must limit your risk with the understanding that your returns will likely be modest. (Diversification can certainly help to reduce investment risk, but it can't eliminate it.) Certain events may occur in your life that warrant a reassessment of where you belong on the risk/return continuum.

If a single person of marrying age walks into my office and asks me to help build a portfolio, I will want to know if wedding bells will be ringing in the near future. A married couple walks into my office, and one of the first things I take note of is how close they sit together. And if the woman has a swollen belly, I really take notice.

No, I'm not being nosy. Marriage, divorce, and the arrival of babies are major life changes and need to be weighed heavily in any investment decisions. So, too, are the death of a spouse or parent (especially if that parent has left a hefty portfolio to the adult child); a child's decision to attend college; any major career changes; or the imminent purchase of a new house, new car, or Fabergé egg.

Betsy and Mark: A fairly typical couple

Betsy and Mark are just married. They don't have a lot of money. But both are young (early 30s), in good health, gainfully employed, and without debt. They plan to merge their combined savings of roughly $41,500 and asked me to help them invest it for the long haul.

The first thing we do is to decide how much money to take out to cover emergencies. Given their monthly expenses of roughly $3,500, we decide to earmark five months' of living expenses — $17,500 — and plunk that into an online savings account. That leaves us with $24,000 to invest.

This $24,000 is money they tell me they shouldn't need to touch until retirement. I urge them both to open a Roth IRA. (Any money you put into a Roth IRA grows tax-free for as long as you want, and withdrawals are likewise tax-free; more on retirement accounts in the next chapter.) I ask them to divide the $24,000 between the two accounts. Because each of them can contribute $6,000 per year, I have them both make double contributions — one immediate contribution of $6,000 each for the current year (they can make their 2021 contributions until April 15, 2022), and one contribution each for 2022. (They'll have to hold the second $6,000 each in cash until the morning of January 1, 2022.)

To keep things simple for now, because the couple has no investment experience, I limit the number of investments. The only difference: Mark tells me he wants to be as aggressive as can be, whereas Betsy is more ambivalent about taking a lot of risk. With this in mind, I give Mark greater exposure to stock, and less to bonds. I also give Betsy more stock than bonds, but less than I give Mark.

Betsy's Roth IRA	
Vanguard Total World Stock ETF (VT)	$8,400
BNY Mellon Core Bond ETF (BKAG)	$3,600
Mark's Roth IRA	
Vanguard Total World Stock ETF (VT)	$9,600
BNY Mellon Core Bond ETF (BKAG)	$2,400

As Betsy and Mark's portfolio grows, I would plan to add other asset classes (real estate investment trusts, inflation-protected securities, and so on) and other accounts.

One year later

Betsy is pregnant with twins! The couple is saving up for their first home, with a goal of making that purchase within 18 months. Although IRAs are normally not to be touched before age 59½, an exception is made for first-time home purchases. Betsy and Mark could take out as much as $10,000 from each Roth IRA without having to pay either a penalty or tax on the gains.

I'd rather that they leave their Roth IRA money untouched, but the couple informs me that they think the money may need to be tapped. At this point, the money in each of the two Roth IRAs has grown from $12,000 to $14,000 each (for illustration purposes, I'm pretending that each investment grew by an equal amount), and Betsy and Mark can each contribute another $6,000 in fresh money, bringing the total of each account to $20,000. Because there is a possibility that $10,000 from each account may need to be yanked in one year, I decide to earmark most of the fresh money to a fairly nonvolatile short-term bond ETF.

Betsy's Roth IRA	
Vanguard Total World Stock ETF (VT)	$7,000
BNY Mellon Core Bond ETF (BKAG)	$3,000
Vanguard Short-Term Bond ETF (BSV)	$10,000

Mark's Roth IRA	
Vanguard Total World Stock ETF (VT)	$8,000
BNY Mellon Core Bond ETF (BKAG)	$2,000
Vanguard Short-Term Bond ETF (BSV)	$10,000

Yet one year later

The twins (Aiden and Ella) have arrived! Much to their surprise, Betsy's parents have gifted the couple $10,000 for the purchase of their home. The Roth IRA money needn't be touched. At this point, I would sell the short-term bond fund and add to their other positions. Also, provided the couple had another $6,000 each to contribute, I'd begin adding asset classes to the mix, perhaps introducing a Treasury Inflation-Protected Securities (TIPS) ETF, and a REIT ETF. If there's money left over to invest in a taxable brokerage account, I might add a tax-free muni ETF.

Hopefully, Betsy and Mark (and Aiden and Ella) will have many happy years together. And with each major life event, I would urge them to adjust their portfolio appropriately.

Are Options an Option for You?

Aside from the universe of exchange-traded funds, there's a parallel universe filled with things called *exchange-traded derivatives.* A *derivative* is a financial instrument that has no real value in and of itself; rather, its value is directly tied to some underlying item of value, be it a commodity, a stock, a currency, or an ETF.

The most popular derivative is called an *option.* Think of an option as sort of a movie ticket. You give the cashier $8.50 to see the movie, not to hold some dumb little piece of cardboard. Certainly the ticket itself has no intrinsic value. But the ticket gives access (the option) to see the movie.

REMEMBER

Most options in the investment world give you the right either to buy or sell a security at a certain price (the *strike price*) up to a certain specified date (the *expiration date*). Options are a prime example of a *leveraged* investment. In other words, if you buy an option, you're leveraging the little bit of money that you pay for the option — the *premium* — in hopes of winning big money. If you're an option seller, you stand to make the amount of the small premium, but you risk losing big money. For the system to work, the sellers have to win much more often than the buyers. . .and they do.

Options on certain ETFs, most notably the SPY (which represents the S&P 500) and the QQQ (which represents the 100 largest company stocks traded on the NASDAQ), typically trade just as many shares on an average day as the ETFs themselves. (See the sidebar, "SPY, QQQ, and EEM are the options champs.") On most days, options on ETFs like the QQQ and SPY trade more shares than any other kind of options, including options on individual stocks, commodities, and currencies.

You see, ETFs provide traders with the opportunity to trade the entire stock market, or large pieces of it, rather than merely individual securities. In the past, this was doable but difficult. You cannot trade a mutual fund on the options market as you can an ETF.

Much of this often frenetic trading in ETF options, at least on the buying side, is being done by speculators, not investors. If you have an itch to gamble in the hopes of hitting it big, then options may be for you. I warn you, however, that successful option trading takes an iron gut, a lot of capital, and a lot of expertise. And even if you have all that, you may still end up getting hurt.

SPY, QQQ, AND EEM ARE THE OPTIONS CHAMPS

ETFs are a *huge* part of the options market. The most commonly traded options on U.S. exchanges include many individual stocks, but the most active of the active tend to be ETFs. The five most frequently traded ETFs, of late, are these:

ETF	Ticker Symbol
SPDR S&P 500	SPY
Nasdaq QQQ Invesco ETF	QQQ
Emerging Markets iShares MSCI ETF	EEM
Brazil iShares MSCI ETF	EWZ
Russell 2000 iShares ETF	IWM

Understanding puts and calls

All kinds of options exist, including options on options (sort of). The derivatives market almost seems infinite — as does the number of ways you can play it. But the two most basic kinds of options, and the two most popular by far, are *put options* and *call options,* otherwise known simply as *puts* and *calls.* I'm going to take just a moment to describe how these babies work.

Calls: Options to buy

With a call option in hand, you may, for example, have bought yourself the right to buy 100 shares of the PowerShares QQQ Trust (currently trading at $367) at $380 (the strike price) a share at any point between now and, say, December 16 (the expiration date). If QQQ rises above $380, you will, of course, take the option and buy the 100 shares at $380 each. After all, you can then turn around and sell them immediately on the open market for a nifty profit. If, however, the price of QQQ does not rise to $380 or above, then you are not going to exercise your option. Why in the world would you? You can buy the stock cheaper on the market. In that case, your option expires worthless.

Puts: Options to sell

With a put option in hand, you may, for example, have bought yourself the right to *sell* 100 shares of QQQ (currently trading at $367) at $340 (the strike price) a share at any point between now and December 16 (the expiration date). By December 16, if QQQ has fallen to any price under $340, then you will likely choose to sell. If QQQ is trading above $340, then you'd be a fool to sell. In the latter case, your option will simply expire, unused.

Using options to make gains without risk

Those people who use calls as an investment (as opposed to gambling) strategy are assuming (as do most investors) that the market is going to continue its historical upward trajectory. But instead of banking perhaps 60 or 70 percent of their portfolio on stocks, as many of us do, they take a much smaller percentage of their money and buy calls. If the stock market goes up, then they may collect many times what they invested. If the stock market doesn't go up, then they lose it all — but only a modest amount. Meanwhile, the bulk of their money can be invested in something much less volatile than the stock market, such as bonds.

Zvi Bodie, Professor of Finance and Economics at Boston University School of Management, wrote a book with Michael J. Clowes entitled *Worry-Free Investing: A Safe Approach to Achieving Your Lifetime Financial Goals* (Prentice Hall) in which he suggests an investment strategy using long-term stock options and Treasury

Inflation-Protected Securities (TIPS). If you have $100,000 to invest, says Bodie, then you might consider putting roughly 90 percent of it into TIPS. (A very convenient way to do that would be to purchase the iShares Barclays TIPS Bond Fund ETF.) That way, he asserts, your principal is protected.

To shoot for growth, says Bodie, take the other 10 percent or so and invest it in long-term call options (otherwise known as *Long-Term Anticipation Securities* or *LEAPS*), going about three years out. If the market soars, you take home the bacon. If, however, the market sinks, your call options merely expire, and you still have your TIPS, which by this point, three years later, have grown to match your original $100,000.

It's an intriguing strategy that just may make sense, especially for older investors tapping into their savings who can't wait for the stock market to come back after a serious bear market.

Interestingly, a similar kind of "worry-free investing" may be achieved by owning *all* stocks (or close to it) but using put options to protect yourself from the downside. Certain "inverse" ETFs exist that should, in theory, allow you to achieve the same end. However, as I discuss in Chapter 20, these funds haven't worked so well in the real world.

Insuring yourself against big, bad bears

The put option is an option to sell. This investment strategy allows you to have money in the stock market (all of it, if you so desire), but you carry insurance in the form of puts. If the market tumbles, you're covered.

Suppose you want to invest everything in the NASDAQ index through the QQQ. Normally, an investor would have to be insane to bet everything on such a volatile asset. But with the right put options in place, you can actually enjoy explosive growth but limit your losses to whatever you want: 5 percent, 10 percent, 15 percent.

With a pocketful of puts, you can laugh a bear market in the face. If the QQQ drops by, say, 50 percent in the next week, you will have checked out long before, smiling as you hold your cash.

Seeming almost too good to be true

So options allow you to capture the gains of the stock market with very limited risk. They allow you to invest in the market and not have to worry about downturns. What's not to love about options?

Whoa — not so fast! You need to know a couple little things about options:

WARNING

- **They are expensive.** Every time you buy either a put or a call, you pay. The price can vary enormously depending on the strike price, the expiration date you choose, and the volatility of the ETF the option is based on. But in no case are options cheap. And the *vast majority* of options reach their expiration date and simply expire.

  So, yes, options can save you in a bear market, and they can help you to capture a bull market, but either way, you're going to pay. Free lunches are very hard to come by!
- **If you happen to make a gain on an option, the income will usually be considered a short-term gain by the IRS.** As such, you may pay twice the tax on it that you would on the long-term appreciation of a stock.

Weighing options strategies against the diversified ETF portfolio

Don't misunderstand me. I'm not saying that the price you pay for options isn't worth it — even after taxes are considered. Options do provide investors with a variety of viable strategies. The real question, though, is whether using puts and calls makes any more sense than investing in a well-diversified portfolio of low-cost ETFs. Most financial professionals I know are skeptical. And that includes several who have traded heavily in options only to learn the hard way that it is a very tricky business.

To be sure, if I knew a bear market were coming, I would definitely buy myself a slew of put options. If I knew a bull market were in the offing, I would certainly buy a fistful of call options. But here's the problem: I don't know which way the market is going, and neither do you. And if I buy both puts and calls on a regular basis, I'm going to be forever bleeding cash.

Not only that, but if the market stagnates, then both my puts and calls will expire worthless. In that case, I'm really going to be one unhappy camper.

So here's the way I look at it: The chances of success with a steady call strategy are one in three: I win if there's a bull market; I lose if there's a bear market; I lose if the market stagnates. Ditto for a put option strategy: I win if there's a bear market; I lose if there's a bull market; I lose if the market stagnates. It's hard to like those odds.

REMEMBER

With a well-diversified portfolio of low-cost ETFs — stock, bond, REIT ETFs — I reckon my chances of success are more like two in three: I lose if there's a bear market; I win if there's a bull market; in the case of a stagnant stock market, *something* in my portfolio will likely continue to make money for me anyway.

You may recall my saying earlier in the chapter that the derivatives market almost seems infinite, as does the number of ways you can play it. If you want, ETF options strategies exist that allow you to make money in a stagnant market, too. The most common such strategy is called a *buy-write strategy* or *selling a covered call.* I explain how that strategy works (but don't necessarily advocate it) in the sidebar, "How to profit with ETF options in a stagnant market."

Factoring in time and hassle

One final (but fairly major) consideration: Options trading generally requires much more time and effort than does buy-and-hold investing in a diversified portfolio. Let me ask you this: Would you rather spend your spare time at your computer tinkering with your investments, or would you rather do just about anything *but* that?

HOW TO PROFIT WITH ETF OPTIONS IN A STAGNANT MARKET

Selling covered calls is a traditional way that many people get started in the world of options, says Jim Bittman, an instructor with the Chicago Board Options Exchange's Options Institute. "You can take a non-dividend-paying ETF and turn it into an income-generating asset," he says. Here is how selling a covered call, otherwise known as a *buy-write strategy,* works:

You buy, say, 100 shares of the Nasdaq QQQ Invesco ETF (QQQ). Let's assume that the current price is $370 a share. You've just invested $37,000.

Now you sell a covered call. This means that, through a brokerage house, you offer someone else the right to purchase your shares at a certain price in the future. You may, for example, offer the right to purchase your 100 shares at $385 (the strike price) within 90 days (the expiration date). You get paid for selling this right. In this scenario, you may be paid something in the ballpark of $7.40 a share for a total of $740 (roughly 2 percent of your original investment).

If, in the next 90 days, the QQQ stays between $370 and $385 (the market is relatively flat), then your covered call expires worthless. You walk away with your $740, and life is good. (However, you will have to pay the IRS a short-term capital gains tax on that money. The short-term capital gains tax is usually the same as your marginal income tax rate. In many cases, that will be about twice as high as the tax you would pay after cashing out a long-term investment.)

(continued)

(continued)

But now suppose that the market tanks: You are left holding 100 shares of the QQQ that may be worth much less than $37,000, the only offset being the $740 (before taxes) that you received.

And suppose the market soars: You just lost out, too. The QQQ may be selling at $400 a share, but the guy who bought your contract can buy your shares from you (and certainly *will* buy them from you, or will sell the option to someone else who will buy them from you) at the agreed-upon price of $385 a share. In the end, you will lose the difference between the actual value of your QQQ shares and their value at the strike price, again offset only by the soon-to-be-reduced-by-taxes $740 that you received when you sold the option.

And there's the catch. I've known a good number of investors who *rave* about their experiences with covered calls. . .as long as the markets are relatively stagnant. As soon as there is major movement either up or down — which has been known to happen — they stop raving and start ranting.

In the past few years, investors have seen the introduction of several exchange-traded products that allow you to buy a basket of covered calls. These include the following.

- Invesco S&P 500 BuyWrite ETF (PBP): around since December 2007; return since inception: 4.9 percent.
- Global X S&P 500 Covered Calls ETF (XYLD): around since June 2013; return since inception: 8.5 percent.
- Global X Nasdaq 100 Covered Call ETF (QYLD): around since December 2013; return since inception: 9.0 percent.
- Global X Russell 2000 Covered Call ETF (RYLD): around since April 2019; return since inception: 12.7 percent.

These return figures are all significantly less than the indexes they track. In the case of the Invesco S&P 500 BuyWrite ETF (PBP), for example, the 10-year return has been 7.1 percent versus 14.7 percent for the SPDR S&P 500 ETF Trust (SPY). But PBP has been significantly less volatile. In 2008, PBP lost 29.7 percent, versus SPY's 37.0 percent.

Will the covered-call ETFs produce good risk-adjusted returns moving forward? Yes, if the markets are relatively flat, but no, if investors see rollercoaster markets in the years to come.

IN THIS CHAPTER

» Differentiating various retirement account options

» Knowing which ETFs to sock into which accounts

» Figuring out what to do if your employer's 401(k) plan stinks

» Calculating how much money you need to retire

» Planning your cash flow needs after the paycheck stops

Chapter 24

Using ETFs to Fund Your Fun (Retirement) Years

I have this imaginary script that often runs in my head when clients ask me to look at their 401(k) plan. In this make-believe play, the benefits manager at my client's place of employment is speaking with a representative of an investment company that runs retirement plans.

> *Benefits manager:* Our employees work hard, and we really don't ever want to lose them.
>
> *Investment company rep:* No problemo! We offer a retirement plan so incredibly bad that your employees will *never* be able to retire! Just take a look at this array of some of the most expensive and poorly performing mutual funds available on the market today!
>
> *Benefits manager:* Good. And what about portfolio diversification?
>
> *Investment company rep:* None. Four of the nine mutual funds under our umbrella are large U.S. growth funds. We offer no small cap. No international anything. Just large U.S. growth, a few ridiculously expensive and volatile bond funds.
>
> *Benefits manager:* Excellent! Will the fees wipe out any potential gains?

> *Investment company rep:* Absolutely! Each mutual fund in the plan charges a very hefty management fee, and a good chunk of cash each year beyond that goes to general operating fees. And did I mention that several of the mutual fund companies we use have recently been involved in legal scandals?
>
> *Benefits manager:* You're hired!

Okay, maybe this is a paranoid fantasy on my part, but sometimes I wonder. Many of the 401(k) plans I see — and I see many — are so manifestly terrible, so ridiculously designed and priced, and so poorly managed that you can't help but imagine that someone set out to make them that way.

And that makes me sad. The traditional company pension — grandpa's retirement plan that provided him with a steady paycheck from the day he retired till the day he died — is disappearing from the land. Social Security typically provides a modest income, and no more, and even that is at risk. That leaves the omnipresent 401(k) plan (and the lottery ticket) as many working people's last hope for a comfortable retirement.

My advice: Read this chapter. It's about the use of ETFs in retirement plans — potential financial knights in shining armor.

ETFs alone are not going to allow everyone to retire to the golf course. But they could take you a very long way in that direction. In this chapter, I discuss how you should be using your ETFs in tax-advantaged retirement accounts to get the most bang for your investment buck, and I offer advice for those who are stuck with crappy 401(k) plans at work. (***Hint:*** Corner that benefits manager by the water cooler and hand them this book.) And I escort you into your retirement years to see how an ETF portfolio may provide you with the income you need to replace your current paycheck.

Aiming for Economic Self-Sufficiency

I've got all the money I'll ever need — if I die by four o'clock this afternoon.

HENNY YOUNGMAN

How much you need in your portfolio to call yourself economically self-sufficient ("retired," if you prefer) starts off with a very simple formula: $A \times B =$ \$\$\$\$. A is the amount of money you need to live on for one year. B is the number of years you plan to live without a paycheck. \$\$\$\$ is the amount you should have before bidding the boss *adieu*. There you have it.

Of course, that formula is waaay oversimplified. You also need to factor in such things as return on your future portfolio, inflation, Social Security, taxes, and potential inheritances. For a more detailed reckoning of how much money you should be looking to save, I'll refer you to some fairly decent online retirement calculators; see the sidebar, "How much is enough?"

Taking the basic steps

Whatever amount you set as your goal, you need to do three basic things to achieve it:

REMEMBER

» Perhaps obvious, although most people prefer to ignore it: You have to *save.* A retirement portfolio doesn't just pop up from out of nowhere and grow like Jack's beanstalk. You need to feed it. Regularly.

» You need to invest your money wisely. That's where a well-diversified portfolio of ETFs comes in.

» It behooves you to take maximum advantage of retirement plans such as your company 401(k) plan — even if it's sub-par — IRAs, and (my favorite) Roth IRAs. If your 401(k) plan offers only pitiful options, you still need to do the best you can with what you've got. I provide some specific advice on that situation later in this chapter.

Choosing the right vessels

If you will, try to think of your retirement plans — your 401(k), your IRA — as separate vessels of money. How much your nest egg grows depends not just on how much you put into it and which investments you choose, but also on which vessels you have. Three basic kinds of vessels exist. (I'm big into threes all of a sudden.)

» First are your basic, vanilla retirement plans, such as the company 401(k), the traditional IRA, or, for the self-employed, the SEP-IRA or Individual 401(k). These are all *tax-deferred* vessels: You don't pay taxes on the money in the year you earn it; rather, you pay taxes at whatever point you withdraw money from your account, typically only after you retire.

» Second are the Roth IRA, the 529 college plans, and health savings accounts (HSAs). Those are *tax-free* vessels: As long as you play by certain rules (discuss them with your accountant), anything you plunk into these two vessels (money on which you've generally already paid taxes) can double, triple, or (oh please!) quadruple, and you'll never owe the IRS a cent.

» Third is your non-retirement brokerage or savings bank account. Except for certain select investments, such as municipal bonds ("munis"), all dividends or interest earned in these vessels will be taxable. And if your investments grow over time — yes, this includes munis — you may owe capital gains tax when you sell.

HOW MUCH IS ENOUGH?

TIP

A reasonable accumulation goal for most couples is 25 times the amount you spend in a year. To reach that goal, you may have to set aside a minimum of 15 percent of your salaries for a minimum of two to three decades. For more accurate (but still ballpark) numbers, I can refer you to a number of online retirement calculators. Note that none of these is perfect; I recommend that you use several. Take note that you'll get different — in some cases, very different — numbers. Consider each a ballpark figure. Average them for another ballpark-of-ballparks figure.

- Good (and quick!): Employee Benefit Research Institute's American Savings Education Council at `https://www.asec.org/tools`.
- Better: AARP at `www.aarp.org/work/retirement-planning/retirement_calculator`.
- Best (but still not perfect): FIRECalc at `www.firecalc.com`.

Note: If you use the first calculator, be realistic about your expected rate of return. (The AARP calculator and FIRECalc will help figure out a realistic return for you.)

If you use FIRECalc (*FIRE* stands for "financial independence/retire early"), please contribute a few dollars, as I have. But take note: Although I love this guy's free website, I disagree with his assertion that you will need less to live on after retiring than you needed before. That may hold true for Canadians and Brits (and citizens of every other wealthy nation on the planet), but most people in the United States are likely going to be shelling out small fortunes on healthcare in their older years. (According to a recent study from Fidelity Investments, a 65-year-old couple retiring today should have at least $300,000 saved just to cover out-of-pocket medical expenses during their retirement years. For younger people planning to leave the workforce at 65, the number jumps higher.) Even as baseline inflation has remained in the low single digits, premiums for health insurance, as well as the costs of healthcare services, just keep rising and rising.

One more bit of advice for getting the most out of FIRECalc: When the program asks you for your total annual investment expenses (as a percentage of total value), type in *0.63* percent or so if you currently have most of your money in active mutual funds. If you intend to follow my advice in this book and move to a portfolio of indexed ETFs, you can lower that to, oh, let's say 0.17 percent (the average fee for a passive ETF, per Morningstar Direct), or even lower. Note how much of a difference that one change can make in your retirement projections!

Why your choice of vessels matters — a whole lot

How much can your choice of vessels affect the ultimate condition of your nest egg? *Lots.* Even in a portfolio of all ETFs.

True, ETFs are marvelously tax-efficient instruments. Often, in the case of stock ETFs, they eliminate the need to pay any capital gains tax (as you would with most mutual funds) for as long as you hold the ETF. Still, there may be taxes to pay at the end of the game when you finally cash out. And in the case of certain ETFs (such as any of the taxable-bond ETFs) that pay either interest or high dividends, you will certainly pay taxes along the way.

Suppose you're an average, middle-class guy or gal with a marginal income tax rate of 30 percent (federal + state + local). Next, suppose that you have $50,000 on which you've already paid taxes, and you're ready to squirrel it away for the future. You invest this money in the Vanguard Intermediate-Term Corporate Bond ETF (VCIT), which yields (hypothetically) 6 percent over the life of the investment, and you keep it for the next 15 years. Now, if that ETF were held in your regular brokerage account, and you had to pay taxes on the interest every year, at the end of 15 years you'd have a pot worth $92,680. Not too shabby. But if you held that very same $50,000 bond ETF in your Roth IRA and let it compound tax-free, after 15 years you'd have $119,828 — an extra *$27,148. And* you would pay no income tax on this cash hoard when you eventually drew from it.

Unfortunately, the amount of money that you can put into retirement accounts is limited, although the law has allowed the sum to grow in recent years. For example, as I write this book, the maximum annual contribution to the most commonly used retirement accounts, the IRA and the Roth IRA, is $6,000 if you're younger than 50 and $7,000 if you're 50 or older. (The amount is subject to change each year.) Other retirement plans, such as the 401(k), 403(b), or SEP-IRA, have higher limits, but there is always a cap. (Ask your accountant about these plan limits; the formulas can get complicated.)

What should go where?

Given these limitations, which ETFs (and other investments) should get dibs on filling up your retirement accounts, and which are best deployed elsewhere? Follow these four primary principles (I've given up on threes), and you can't go too wrong:

TIP

- **Any investment that generates a lot of (otherwise taxable) income belongs in your retirement account.** Any of the taxable-bond ETFs, REIT ETFs, and high-dividend-stock ETFs are probably best held in your retirement account. ***Note:*** Value stocks generally yield more in dividends than growth stocks. Also include any actively managed funds with a high turnover.

- **Keep your emergency funds out of your IRA.** Any money that you think you may need to withdraw in a hurry should be kept out of your retirement accounts. Withdrawing money from a retirement account can often be tricky, possibly involving penalties if done before age 59½, and usually triggering taxation. You don't want to have to worry about such things when you need money by noon tomorrow because your teenage son just totaled the family car.
- **House investments with the greatest potential for growth in your tax-free Roth IRA.** This may include your small-cap value ETF, your technology stock fund, or your emerging-markets ETF. Roth IRA money won't ever be taxed (assuming no change in the law), so why not try to get the most bang for your ETF buck?
- **Foreign-stock ETFs are perhaps best kept in your taxable account.** That's because the U.S. government will reimburse you for any taxes your fund paid out to foreign governments, but only if you have that fund in a taxable account. Over the long run, this "rebate" can add about half a percentage point a year to the returns you get on these funds; it doesn't sound like a lot, but it can add up over time.

Before you decide where to plunk your investments, refer to the following caveat: Tax laws change all the time. Because of the constant changes in tax laws, I advise you to review your portfolio every year or two to make sure that you have your assets in the right "vessels." Of course, there are other good reasons to review your portfolio, as well.

RETIREMENT ACCOUNTS

Here are ETFs and other investments that are generally best kept in a retirement account:

- **Taxable-bond ETFs.** Examples include
  - Vanguard Intermediate-Term Corporate Bond ETF (VCIT)
  - BNY Mellon Core Bond ETF (BKAG)
  - Vanguard
- **ETFs that invest in real estate investment trusts (REITs).** Examples include
  - Vanguard REIT Index ETF (VNQ)
  - Schwab US REIT ETF (SCHH)
  - iShares Global REIT (REET)

- **High-dividend ETFs.** Examples include
  - Vanguard High Dividend Appreciation ETF (VIG)
  - SPDR S&P Dividend ETF (SDY)
  - iShares Dow Jones Select Dividend Index Fund (DVY)
- **Actively managed funds, especially actively managed mutual funds.**

TAXABLE ACCOUNTS

Here are ETFs and other investments that are generally best kept in a taxable account:

- **Cash reserve for emergencies.**
- **Municipal-bond ETFs.** Examples include
  - iShares S&P National Municipal Bond Fund (MUB)
  - SPDR Nuveen Barclays Capital Municipal Bond (TFI)
  - PowerShares Insured National Municipal Bond Portfolio (PZA)
- **Foreign-stock ETFs.** Examples include
  - Vanguard FTSE Developed Markets ETF (VEA)
  - iShares Core MSCI Emerging Markets ETF (IEMG)
  - Cambria Global Value ETF (GVAL)

COULD GO INTO EITHER KIND OF ACCOUNT

Here are ETFs that can go into your retirement accounts if you have the room, but the priority should be given to other, less tax-efficient funds.

- **Stock ETFs, except for the highest-dividend-paying funds.** Examples include
  - Vanguard Mega Cap 300 Growth ETF (MGK)
  - Nuveen ESG Large-Cap Growth ETF (NULG)
  - Vanguard Small Cap Growth ETF (VBK)

- **U.S. Treasury-bond funds.** (Remember that you pay federal tax on the interest, but not state or local tax.) Examples include
  - Vanguard Intermediate-Term Treasury Index ETF (VGIT)
  - Schwab Intermediate-Term U.S. Treasury ETF (SCHR)
  - Schwab Long-Term U.S. Treasury ETF (SCHQ)
- **Very short-term taxable-bond funds ("near cash").** Examples include
  - Schwab Short-Term U.S. Treasury ETF (SCHO)
  - Vanguard Short-Term Corporate Bond Index Fund (VCSH)
  - iShares ESG Aware 1–5 Year USD Corporate Bond ETF (SUSB)

Curing the 401(k) Blues

Got one of those plans at work that I describe in the intro to this chapter, certain to eat you up alive in fees, about as well diversified as a lunar landscape? Don't despair. All is not lost. Here's what I suggest:

- **Take the boss's money with a smile.** Make a big effort to shovel in at least the minimum required to get your full company match (which will differ from company to company). If you do not contribute enough to receive your employer's full matching contribution, you are, in essence, leaving free money on the table. Even if the investment options are horrible, you'll still end up well ahead of the game if your employer is kicking in an extra 25 or 50 percent.
- **Invest to the best of your ability, however poor the menu.** Among the horrible choices, pick the least horrible. Choose those that will give you exposure to different asset classes. Choose index funds if available. Strongly favor whichever funds are least expensive.

  If you need help understanding the different offerings in your 401(k) plan, ask someone in the human resources department, or the plan administrator, to help you. If you can't get a clear answer (you very well may not), perhaps hire a financial planner for at least a short consult.
- **Argue for better options.** Tell the human resources people (diplomatically, of course) if their plan is a dog. They should look for another plan that includes either ETFs or (sometimes just as good) low-cost index mutual funds. Not sure what to say or where to send them? Specific advice is coming in the next section.

- **Check your statements.** It doesn't happen often, thank goodness, but yes, sometimes employers steal from their employees' retirement funds. Or give your employer the benefit of the doubt: Maybe they're just incompetent (and it's just a coincidence that mistakes seem always to reduce your account balance and never go in your favor). Check your statements with some regularity, and make certain that the money you are contributing is actually being credited to your account.
- **Plan your rollover.** If you leave your job, you may have the option of keeping your 401(k) plan right where it is. But 90 percent of the time, you will do much better by rolling your 401(k) into a self-directed IRA and then building yourself a well-diversified ETF portfolio.

  One important caveat: You can't withdraw IRA money without penalty until you are 59½, whereas some (but not all) 401(k) plans allow you to withdraw your money penalty-free at age 55 if you decide to retire at that point. Don't be too quick to initiate a rollover if you think you may need to tap your funds in the years between 55 and 59½.

  TIP

  If you do initiate a rollover, and you have your own company's stock in your 401(k), you may want to leave just that part behind. You'll get a nice tax break at retirement.

Lobbying the benefits manager

Okay, you have a 401(k) plan. The plan is so bad you want to cry. Your first job is to educate the benefits manager at your office as to why. Don't assume that the people in HR have any more knowledge of personal finance than you do. If you have a lousy 401(k) plan, chances are they don't have a clue. They were likely bamboozled into accepting a high-priced, poorly constructed plan by a fast-talking sales rep from a financial institution (often a large financial institution with a well-known name) that specializes in milking — and/or bilking — the public. An even more sinister explanation is that palms were greased. Rattle some cages, and you never know what may fall out.

I started this chapter with a hypothetical dialogue between the benefits manager of your company and a representative from a financial institution looking to sell its crappy retirement plan. Here I present a hypothetical dialogue between *you* and your benefits manager:

> *You:* Hey, Joe!
>
> *Benefits manager:* Hey, You! What's that black and yellow thing in your hand, a copy of *Goldbricking For Dummies*? [Har har har.]

You: Actually, Joe, this is a book called *Exchange-Traded Funds For Dummies,* and I've been meaning to share it with you.

Benefits manager: Whoa! Exchange-traded whaa?

You: Exchange-Traded Funds For Dummies. It's all about exchange-traded funds. I believe, Joe, that with ETFs, we could slash the expenses on our company's 401(k) plan by as much as three-quarters, while giving participants an opportunity to build much better portfolios than they can under the present plan.

Benefits manager: [Mouth open wide, bit of coffee dribbling down the side of his chin.]

You: Here, take this, Joe. [You pass him this book.] I especially want you to read Chapter 24, and particularly the sidebar, "Lean and mean 401(k) plans."

The Roth 401(k)

On January 1, 2006, a new kid on the retirement block came into being: the Roth 401(k). While you're chatting with your benefits manager, you may want to bring up this subject, too.

By now, many companies have started to offer Roth 401(k) plans to employees. This type of plan is similar to the existing Roth IRA in that the money you put in is *after-tax* money. In other words, you won't get a tax deduction up front, as you do with your existing 401(k).

LEAN AND MEAN 401(K) PLANS

More and more 401(k) retirement plans are offering ETFs, but the thing you really want is low-cost index funds in your 401(k). Don't be overly concerned whether the low-cost index funds come in the form of an ETF or mutual fund. *Do* be concerned if the 401(k) administrator is adding ridiculous fees onto your account.

Far too many 401(k) plan sponsors that do offer ETFs are packing their ETFs into nonsensical allocations and slapping on charges (as high as 2 percentage points!) that pretty much negate most of the benefits of ETFs. Why do they do that? Because ETFs are hot, and they make for a good sales presentation, but the plan sponsor may care more about its bottom line than yours.

Plan sponsors that tend to care about your bottom line (in addition to their own, of course) include Vanguard, Schwab, and Fidelity.

So why do it? There are two main reasons:

- First, you aren't going to have to pay any income tax when you withdraw the money in retirement, as you will with your existing 401(k).
- Second, you aren't going to have to sweat about taking minimum required distributions starting at age 72½ like you do now with a 401(k). (Technically, you'll need to take your first MRD by April 1 of the year after you turn 72.) You can keep the money in the Roth for as long as you want. Indeed, you can opt never to touch it, leaving it instead as an inheritance, tax-free to your heirs.

I'd say the Roth 401(k) will prove to be the better long-term option, maybe in most cases, but especially if you are currently in a low tax bracket. With federal debt and deficits that are huge and growing, sooner or later the government is likely to raise tax rates, and maybe by a lot. At that point, even if you are retired and living on a fixed income, you may well be paying taxes at a (much) higher rate than you are today. If so, tax-free income later will be worth a lot more than it is now.

TIP

On the other hand, if you are currently in a high tax bracket and expect to be in a lower tax bracket in the future, the Roth may not make sense. If you are single and make over $86,000 a year, or if you and your spouse together make over $172,000, I suggest that you ask your financial planner or accountant which plan is best for you.

Unfortunately, as with many 401(k) plans, your investment options may not be the best. If you leave the company, I suggest that you roll over your 401(k) Roth into a self-directed Roth IRA.

Strategies for the Self-Employed

Although the self-employed have several retirement plan options, the two most popular, by far, are the traditional IRA and the Roth IRA. (Company employees can also contribute to these plans, but few do, and the deductibility of an IRA becomes a complicated matter if you have a retirement plan at work, and you make over a certain sum.) Let me compare the two different IRA options.

The traditional IRA versus the Roth IRA

The traditional IRA currently allows you to sock away $6,000 a year if you're younger than 50 and $7,000 if you're 50 or older. The money you contribute to a traditional IRA is generally tax-deductible. Until you turn 59½, you can't touch that money without paying a penalty. At that point, you can start to withdraw it, but you'll pay income tax on both the principal and any growth in the account.

The Roth IRA is available to couples with a modified adjusted gross income (MAGI) of less than $208,000 a year. It allows you to sock away the very same amount as the traditional IRA, but the Roth allows your money to grow *tax-free.* You will never have to pay taxes on any of the money you put into your Roth or on any of the gains. You don't, however, get any tax deductions on the money you contribute to the Roth.

TIP

A couple that makes a modest income may qualify for an earned income tax credit of up to $543 (more if they have children), regardless of which type of IRA they choose. See your tax advisor, or visit `www.irs.gov` for details.

Taxes now or taxes later?

So. . .do you want to pay taxes now and not have to worry about them when you retire? (You want a Roth.) Or do you want to hold off on paying the taxes until after you retire? (You want a traditional IRA.)

Which is the better option depends on a few things, but first and foremost is your current level of income versus your income expectations for whenever you plan to withdraw the funds. If you expect that your income will be less — and/or your tax rate will be lower — in retirement, then you are likely better off with the traditional IRA; take the deduction now. If you are currently in a low tax bracket, and you think (or pray) that you will be in a higher one in years to come, then go with the Roth.

TIP

If it seems like a toss-up, choose the Roth because it offers certain non-tax advantages. With a traditional IRA, for example, you need to start withdrawing money after age 72. But with a Roth, you'll be able to keep your money growing tax-free for as long as you are still breathing, and then your heirs can continue that tradition once you stop — breathing, that is.

Ushering Your Portfolio into Retirement Readiness

A fellow fee-only financial planner and member of NAPFA, William P. Bengen, CFP, wrote a book for financial planners called *Conserving Client Portfolios During Retirement* (FPA Press). Bengen did an enormous amount of number crunching, reviewing historical return figures going back to 1926. He and his computer played out scenario after scenario: If you retired in year X, and you took out $Y for Z years. . .that sort of fun analysis. His conclusion: The conventional wisdom is both right and wrong. Right, stocks drive a portfolio. Wrong, once you retire, you should live off bonds.

15+ years and counting

If you have 15 years or longer until retirement, the money in your retirement account — if history is your guide — should be pretty close to fully invested in stocks. If it is, and you look back over many years, your odds of coming out ahead in any 15-year period seem to be pretty close to a certainty. Forget the bonds. But, but, but. . .the future may *not* be like the past, which is why I never advocate a portfolio that isn't invested at least 20 percent in bonds or cash or some other kind of hedge against a potential stock market tumble.

Less than 15 years to retirement

TIP

Every year, starting 15 years from retirement, says Bengen, you may want to tilt your asset mix a bit more conservatively. Once you retire, assuming you're looking at a life expectancy of 30 or so years at that point, you should be thinking not about the conventional mostly bonds retirement portfolio but, rather, something closer to 60 percent stocks and 40 percent bonds. With that mix, your portfolio has the best chance of being around as long as you are.

Throughout his book (as I do throughout *this* book), Bengen urges investors not to be "wooden" and not to adhere to any strict formulas. The percentages suggested here can, and should, vary with your individual circumstances.

Given the incredible rise in stocks and stock valuations of late, and some rather serious issues facing the world, I've been leaning my portfolios a bit toward the more conservative side. For a retired or soon-to-be-retired client who may have warranted a 60/40 (stocks/bonds) portfolio several years ago, I might now suggest a 60/40 portfolio only if that portfolio is very, very well diversified with different kinds of stocks and bonds, and the client has at least two years of living expenses in cash and near-cash (short-term CDs, high-quality and very short-term bonds). But in most cases, I'd prefer to see a 50/50 portfolio.

I also urge you to think of *stocks* and *bonds* in the broadest sense of "growth investments" and "security investments." Growth investments may include real estate, as well as stocks. Security investments may include a fixed annuity or a market-neutral mutual fund (with a proven track record), as well as government and corporate bonds. Of course, both your stock and bond positions can — and likely should — be held in ETFs.

Withdrawing Funds to Replace Your Paycheck

How much can you withdraw from your retirement funds each year and have a good chance of not running out of money? That, of course, is one of the biggest financial questions retirees have. Based largely on Bengen's work, many financial planners say that, at least for people in their 60s, somewhere around 4 percent of your initial retirement portfolio, adjusted upward each year for inflation, gives you a good chance of never running out of money. Of course, that 4 percent may be tweaked depending on your health, your investment choices, market conditions, the rate of inflation, how much you'll pay in taxes, and how much you want to leave behind for those rotten children of yours who never come to visit anymore.

I say, go with Bengen's rough estimate of 4 percent and use some of the retirement calculators I mention in the sidebar, "How much is enough?" to smooth out the estimate a bit, but do plan to sit down with a financial planner at least once to get some better idea of where you stand. You don't want to run out of money!

Know that Bengen's work has been hotly, hotly disputed in financial-planning circles, with some researchers claiming that 4 percent is too high (and you risk running out of money by withdrawing so much), whereas others claim it is too low (and you risk not enjoying your money as much as you could). But as someone who loves irony, I think the fact that both camps feel so strongly about the issue means that 4 percent is probably about right. . .although I highly recommend regular monitoring and some flexibility in your spending. Did the market boom last year? Take that vacation to Maui. Did it bust? Sorry — no new car for you this year (sigh).

As far as withdrawing funds from your ETF portfolio is concerned, in the following sections I offer a few special words of advice that could make your life easier.

Don't obsess over maintaining principal or drawing from dividends

I'm not quite sure where this absurd division of the nest egg into *principal* and *interest* got started. It's seemingly some form of mass hysteria that began many years ago and continues to delude the populace.

Listen: If you have an account with, say, $100,000, and you withdraw $5,000, how much do you have left? The answer is **$95,000.** Got it? The answer will *always* be $95,000. It doesn't matter in the slightest whether that $5,000 came from principal or you took it out of recently received dividends or interest. (There may be a tax difference in a nonretirement brokerage account, but in a retirement account, there is absolutely no difference.)

So what does this mean in terms of withdrawing funds to live on in retirement?

TIP

The best way to achieve that end is to rebalance your portfolio with some regularity (perhaps every six months), tapping into whichever funds have performed the best and effectively creating your own "artificial dividend." For example, say that you have an IRA with a balance of $100,000. The money is invested (for simplicity's sake) in three ETFs thusly.

- Vanguard Total Stock Market ETF (VTI): $25,000 (25 percent)
- Vanguard Total International Stock ETF (VXUS): $25,000 (25 percent)
- iShares Barclays Aggregate Bond Fund (AGG): $50,000 (50 percent)

You determine that you need to withdraw $17,000. Your portfolio master plan calls for only 40 percent bonds, but after a horrible year for stocks and a good one for bonds, your bond allocation is now 50 percent. The source of your $17,000 withdrawal is clear: Take it out of the bond ETF. Doing so will not only generate the cash you need but will also bring your portfolio into alignment with your target allocations.

(Because your new portfolio balance after withdrawing the $17,000 will be $83,000, your bond fund, now with $33,000, will represent roughly 40 percent of the portfolio, right where it should be.)

Fast-forward six months. . .

Stocks have been on a recent tear, and the "principal" you now have invested in stocks has grown considerably relative to your bonds. Your AGG bond fund has also grown (from its starting position of $33,000), due to earned interest, which has been reinvested in the ETF. Your bond fund is now worth $34,000.

Your portfolio, even though you withdrew $17,000 in cash earlier in the year, is now worth $102,000. It now looks like this:

- Vanguard Total Stock Market ETF (VTI): $34,000 (33.3 percent)
- Vanguard Total International Stock ETF (VXUS): $34,000 (33.3 percent)
- iShares Barclays Aggregate Bond Fund (AGG): $34,000 (33.3 percent)

Nothing has really changed in your life (except that you are now a bit older and grayer), so you determine that you don't need to shake up your original target portfolio allocation: 40 percent AGG, 30 percent VTI, and 30 percent VXUS. You now figure that you are going to need yet another $10,000. Do you take it out of the bond fund because its growth was due to interest, and not the stock funds because their growth was in principal? Many people would say yes. Mass hysteria, I say! That makes no sense.

In this case, I would have you take $5,000 each from your two stock ETFs to use for cash. That leaves you with a portfolio of $92,000. In order to get that $92,000 portfolio correctly allocated, I'm going to take another $1,400 from each stock fund on top of the $5,000, and move that to AGG. In the end, your portfolio will look like this:

- Vanguard Total Stock Market ETF (VTI): $27,600 (30 percent)
- Vanguard FTSE All World ex-US ETF (VEU): $27,600 (30 percent)
- iShares Barclays Aggregate Bond Fund (AGG): $36,800 (40 percent)

You have provided yourself with the extra $10,000 you need, *and* you've brought your portfolio back into perfect balance.

Take your minimum required distributions

After you turn age 59½, you can start taking money out of your 401(k) or traditional IRA. (You can do so before that age, but you usually pay a stiff penalty, or at least you have to convince the IRS why you shouldn't. That's always fun.) When you turn 72, you *must* start taking money out of your 401(k) or traditional IRA (but not your Roth IRA). If you don't take out at least the minimum required distribution (MRD), then you will pay a very nasty penalty. The MRD is based on your portfolio total and your age. There are MRD calculators all over the web; simply Google the words "minimum required distribution calculator," and you'll have many to choose from. Unlike some other calculators, these are all essentially the same.

IRA, 401(k), or regular (taxable) brokerage account: Which to tap first?

For those of you over 72, your cash needs will come first from Social Security, any pension you may have, and the minimum required distribution on your traditional IRA or 401(k). After that, you can draw additional cash from any available source.

For those of you between 59½ and 72, the choices are all yours. You decide when to begin receiving Social Security benefits; whether and when to take distributions from your retirement account(s); and whether or when to start tapping your taxable account(s). Most money managers suggest pulling money from your taxable accounts first and holding off on drawing down your tax-advantaged accounts. I'm not so sure.

Sure, leaving a tax-deferred account untouched will keep this year's taxes to a minimum. But those taxes will be paid eventually, if not by you, then by your heirs. If you care about what you'll be leaving behind, then you should know that a large taxable inheritance can create real headaches with the IRS. In the end, for many families it may make the most sense to take needed cash from both types of accounts — taxable and tax-deferred — more or less equally. But there are many factors involved. It would be worth your while to discuss the matter with your financial planner, accountant, and, if you have a sizeable estate, an estate attorney.

Caveat: From my experience, accountants sometimes tend to focus a wee bit too much on your present taxes, while estate attorneys can focus a tad too much on your legacy. Let their counsel, as well as mine, guide you. But ultimately, you need to be the judge.

IN THIS CHAPTER

» Incorporating ETFs into an existing portfolio of mutual funds or individual securities

» Spotting potential holes in an ETF portfolio

» Choosing investments that best complement your ETFs

» Determining if an annuity makes sense

Chapter 25

Marrying ETFs and Non-ETFs to Make an Optimal Portfolio

This chapter gets shorter with every edition of this book. When I wrote the first edition of this book in 2006, building an entire, optimally diversified portfolio out of ETFs was just about impossible — sort of like trying to paint a landscape with no blues or yellows. There were holes — many of them. You could not, for example, buy an ETF that gave you exposure to tax-free municipal bonds. Not one. Nor was there a single ETF that offered exposure to international bonds. There was but one ETF at that time that allowed you to tap into international small-cap stocks.

Back then, when there were only 300 ETFs from which to choose, and many of those tracked the same kinds of investments (such as large-cap U.S. stocks), you had to look elsewhere if you wanted to invest in certain asset classes. Today, the landscape is very different. Among the 2,300 or so available ETFs, you have blues, yellows, greens. . .an entire palette from which to compose a very well-diversified portfolio. In fact, you have way more than enough. Now, not only can you track just about any conceivable stock, bond, or commodity index with passive ETFs, but you also have actively managed ETFs, and leveraged ETFs, and inverse ETFs. What could be missing?!

In this (short) chapter, I share with you a few (very few) non-ETFs that remain in my personal and in some of my clients' portfolios. Yes, by the time *Exchange-Traded Funds For Dummies*, 4th edition is in the works, this chapter may disappear entirely. But for now, there are times when you might choose investments outside of the ETF world.

TIP

This chapter also serves as a reference if you already have a non-ETF portfolio in place and, for whatever reason, want to or must keep it more or less intact. Perhaps you have huge unrealized tax gains and don't care to donate to the IRS just yet. Or the investment options in your employer's 401(k) plan may not include ETFs. Or you may simply be happy with your indexed or active mutual funds, which (depending on which ones you own) may be fine.

For some of you — ah, yes, I know you're out there — no amount of cajoling will ever convince you to index or diversify your investments. You fervently believe that by picking a few individual stocks and buying and selling at the right times, you can clobber the market. So be it. I fear you are going to lose your shirt, but you and I will simply have to agree to disagree. I can still perhaps convince you to invest in an ETF here and there. I will try!

So, without further ado, I now give you my take on how ETFs and non-ETFs can get along in peace, harmony, tax-efficiency, and profitability.

Tinkering with an Existing Stock or Mutual Fund Portfolio

Maybe you're intent on staying put with your existing portfolio. I understand that. But even you can benefit from an occasional ETF holding. (And I'm sure you know that, or else you wouldn't be reading this page right now.)

Improving your diversification

I'll start by assuming that you are invested in individual stocks and bonds, saving mutual funds for the next section.

REMEMBER

Unless you are really rich, like several millions rich, you simply cannot have a truly well-diversified portfolio of individual securities — not nearly as well-diversified as even the simplest ETF or mutual fund portfolio. Where would you even start? To have a portfolio as well diversified as even a simple ETF portfolio, you'd have to hold a bevy of large company stocks (both growth and value), small company stocks (again, both growth and value), foreign stocks (Asia and Europe and emerging markets, growth and value, large and small), and real estate investment trust (REIT) stocks. And that's just on the equity side!

On the fixed-income side of your portfolio, you would ideally have a mix of short-term and long-term bonds, government and corporate issues, and perhaps (especially if you are several millions rich and find yourself in the northern tax brackets) some tax-free municipal bonds.

Get real. Examine your portfolio. If you, like so many U.S. investors, have the large majority of your equity holdings in large company U.S. stocks, then you can diversify in a flash by adding a small-cap ETF or two (see Chapters 7 and 8) and a couple of international ETFs (see Chapter 9). If you are simply too heavily invested in stocks, then you may want to tap into some of the more sedate bond ETFs (see Part 3).

Minimizing your investment costs

Now, let's assume you're basically a mutual fund kind of guy or gal. You've been reading *Money* magazine and *Kiplinger's* for years. You believe that you have winnowed down the universe of mutual funds to a handful of winners, and goshdarnit, you're going to keep them in your portfolio.

You may or may not have heard the terms *core* and *satellite*. They refer to an investment strategy that has been very much in vogue lately. *Core* refers to a portfolio's foundation, which is basically invested in the entire market, or close to it. Then, you have your *satellites:* smaller investments designed to outdo the market. It isn't such a bad strategy.

Suppose you have four mutual funds that you love: one tech fund, one healthcare fund, one energy fund, and one international growth fund. Each, we'll say, charges you a yearly fee of 0.63 percent (the active mutual fund average right now, according to Morningstar). And suppose you have $250,000 invested in all four. You are paying ($250,000 × 0.63 percent) a total of $1,575 a year in management fees, and that's to say nothing of any taxes you're paying on dividends and capital gains.

TIP

Consider trimming those investments down and moving half the money into an ETF or two or three. Turn your present core into satellites, and create a new core using broad-market funds, such as the Vanguard Total Stock Market ETF (VTI). It carries an expense ratio of 0.03 percent. Your total management fees are now (\$125,000 × 0.63 percent) + (\$125,000 × 0.03 percent), or \$787.50 + \$37.50, which totals \$825. You've just saved yourself a very nifty \$750 a year, and you'll likely save a considerable amount on taxes, too.

Using ETFs to tax harvest

Regardless of whether you hold individual stocks or mutual funds, you should hope for nothing but good times ahead but be prepared for something less. Historically, the stock market takes something of a dip in one out of every three years. In the dip years, ETFs can help ease the pain.

Say it's a particularly bad year for tech stocks, and you happen to own a few of the most beaten down of the dogs. Come late December, you can sell your losing tech stocks or mutual funds. As long as you don't buy them back for 31 days, you can claim a tax loss for the year, and Uncle Sam, in a sense, helps foot the bill for your losses. Ah, but do you really want to be out of the market for the entire month of January (typically one of the best months for stocks)? You don't need to be.

TIP

Buy yourself a technology ETF, such as the Technology Select Sector SPDR Fund (XLK), and you're covered should the market suddenly take a jump. Although I'd much rather you simply hold onto your ETF as a permanent investment, if you want, at the end of 31 days, you can always sell your ETF and buy back your beloved individual stocks or active mutual funds.

Please discuss the strategy with your tax adviser before proceeding next year, okay? Especially today, with the tax rate on capital gains expected to go up (perhaps depending on your income bracket), this whole business is trickier than ever.

Looking Beyond the Well-Rounded ETF Portfolio

In this section, I address those of you who are convinced that ETFs are the best thing since the abolition of pay toilets. You're ready to build a portfolio of ETFs, or you already have your ETF portfolio in place, but are wondering if other investments may fit into the mix and, if so, what investments those might be. Let me provide you with a list of possibilities.

Adding mutual funds: The most popular of all investment vehicles

Despite the phenomenal growth in ETFs in past years, there are still many more mutual funds out there. If you want to invest in one, I can certainly understand. Many people who hold mutual funds and not ETFs have no choice in the matter. . . . That's what their company 401(k) plans offer. Others who hold mutual funds may prefer active management, and there are many more actively managed mutual funds than there are actively managed ETFs. For now. (I discuss actively managed funds in Chapter 18.) But then there are still a few small holes in the ETF universe. For now. By "holes," I mean asset classes that can't yet be tapped with ETFs.

The most salient one is state-specific tax-free municipal bonds. You might want to invest in a muni bond fund in your own state in order to side-step not only federal tax, but state and local tax, as well.

There are a handful of state-specific muni funds for New York and California — for example, the Invesco New York AMT-Free Municipal Bond ETF (PZT) and the Invesco California AMT-Free Municipal Bond ETF (PWZ). There's also the iShares California Muni Bond ETF (CMF) and the iShares New York Muni ETF (NYF). And there is, as it happens, one such fund for Minnesota: the Mairs & Power Minnesota Municipal Bond ETF (MINN).

But if you live in a state like Pennsylvania (as I do), Ohio, Maryland, Missouri, Arizona, Delaware, Colorado, Michigan, Connecticut, Virginia, Georgia, or a handful of other states that have state income tax, then you are going to have to go with a non-ETF. For now.

I own shares in Vanguard Pennsylvania Long-Term Tax-Exempt Admiral Shares (VPALX), a mutual fund, and the Nuveen Pennsylvania Quality Municipal Income Fund (NQP), which is not a mutual fund or an ETF but a closed-end fund (see the sidebar, "A few odd ducks," later in this chapter).

Other than that, I own several mutual funds issued by Dimensional, but I won't get into these in any depth because Dimensional is currently turning their mutual funds (one by one, it seems) into ETFs, as are several other mutual fund companies. These mutual funds will, before long, become part of my ETF portfolio.

I also own one market-neutral mutual fund, the Merger Fund (MERFX). Yes, there are now market-neutral ETFs, but I like the Merger Fund. It has a longer track record than any of the comparable ETFs, it has a reasonable expense ratio, and it uses a strategy that I understand and that makes sense. (Long track records don't matter so much when you're investing in index funds; with actively managed funds, they certainly do.) If the Merger Fund, like Dimensional, were to move into an ETF shell, I'd like it even more!

Are there other asset classes missing from, or otherwise underrepresented in, the ETF universe? If there are, there won't be for very long, I'm sure.

SEVEN DIFFERENCES BETWEEN MUTUAL FUNDS AND ETFs

When all is said and done, the differences between mutual funds and ETFs are significant, but not as big as, say, the differences between stocks and bonds. Here is what separates the two most popular kinds of investment vehicles:

- ETFs, much more often than not, are passively run. Mutual funds are more often actively run. But there are plenty of exceptions.
- ETFs tend to come with lower management fees than mutual funds. The average mutual fund charges 0.49 percent, and the average ETF charges 0.18 percent, according to Morningstar Direct.
- ETFs tend to be more tax-efficient than mutual funds. This is truer of stock funds than bond funds.
- ETFs allow you to trade throughout the day, which can be a good thing or a bad thing, depending on whether you use or abuse that privilege. (Vanguard founder John Bogle has on numerous occasions expressed dismay that ETFs encourage investors to trade frequently.)
- ETF trade commissions have largely fallen by the wayside, but there are still small spreads whenever you trade. And ETFs may be subject to some small tracking error (they differentiate a bit from the index they are tracking). Neither of these is anything to worry about unless you are trading frequently.
- ETFs are generally available at any brokerage house. Not all mutual funds are. (Although some brokerage houses, like Fidelity, might make you sign a waiver of sorts if you want to buy some especially volatile ETFs.)
- Many mutual funds require a minimum purchase amount. ETFs do not. You can buy a share — at some brokerages, even a fraction of a share.

Adding I Bonds: An Uncle Sam bond with a twist

Like TIPS (see Chapter 14), I Bonds are inflation indexed. Unlike TIPS, they are available as individual bonds in very small denominations — as small as $25.

On the upside: The interest earned can be greater than TIPS (and that has very much been the case lately). The correlation to inflation is also more closely matched, as I Bonds change their yield to adjust for inflation every six months. Also, you don't pay tax on the interest on I Bonds until you cash them in, making them often a better option for taxable accounts.

And — a potentially very sweet bonus if you have young ones — if you use the I Bonds for higher-education expenses, that interest, along with any inflation adjustments, may be yours to keep and spend tax-free.

On the downside: You must hold I Bonds for at least one year, and you forfeit three months' interest if you redeem them before they mature in five years. Also, Uncle Sam lets you buy only as much as $10,000 a year in I Bonds.

You can buy I Bonds direct from the government, with no transaction fees, by visiting `www.treasurydirect.gov`. I just went on a few days ago to buy my allotment for 2021. I Bonds are not essential, but are a welcome part of just about anyone's fixed-income portfolio.

Do Consider Annuities, Preferably Fixed

For older people especially, and almost definitely for those with no heirs, an annuity can make enormous sense. With an annuity, you give up your principal, and in return, you enjoy a yield typically far greater than you would likely get with any other fixed-income option.

WARNING

There are many horrible annuities out there. I can't tell you how often a new client has walked into my office, thrown their annuity papers on the table, and said, "*Why* did I ever buy this stupid thing?" Most of the really bad ones are variable annuities, not the fixed kind that I prefer. Fixed annuities are very simple. Variable annuities are very complex.

TIP

If you are interested in an annuity, you might start with Fidelity or Vanguard. In general, brokerage houses offer better deals than you would get going directly to an insurance company. (Actually, the insurance company usually comes to you, with a heavy sales pitch filled with mind-numbing charts that could confuse even Albert Einstein.) The brokerage house annuity products can be cheaper, less complicated, and easier to back out of should you change your mind. Check out the following brokerage houses for more information.

- **Vanguard:** `www.vanguard.com`
- **Fidelity:** `www.fidelity.com`

I also like the website `www.immediateannuities.com`. You can shop many companies at the same time, and if you want to talk to someone from immediateannuities.com, you'll get straightforward advice without a hard sales pitch.

Note that there are two different kinds of fixed annuities: immediate and deferred. If you don't need cash flow today, then consider a deferred annuity that only starts paying out when you do anticipate needing cash flow. The longer you defer, the higher payout you'll get.

A FEW ODD DUCKS

In this chapter, I discuss mutual funds, individual securities (stocks or bonds), and annuities as possible alternatives, or complements, to ETFs. But the investment world offers other options as well. Here are a few less commonly known investments, some of which may be worth considering for your portfolio.

- **Closed-end mutual funds:** Just as the word *burger* without any qualifiers is usually understood to mean *ham*burger — not veggie burger or turkey burger — so are the words *mutual fund* usually understood to mean *open-end* mutual fund. The vast majority of mutual funds are open-ended. That means that the fund has no set limit of shares, which are purchased from the fund sponsor. As more investors buy into the fund, the fund grows, acquiring more securities and issuing more shares.

  Closed-end funds, on the other hand, are created with a certain number of shares, and that number typically doesn't change. If any new investors want to buy in, they must buy shares from existing investors. For that reason, closed-end mutual funds, unlike open-end mutual funds, may sell shares at a premium or a discount. (ETFs may also trade at a premium or discount, but it tends to be negligible. Closed-end funds, in contrast, may sometimes be bought or sold for 50 percent more or less than the value of the underlying securities.) Closed-end mutual funds tend to be more volatile than open-end mutual funds, and the management fees tend to be higher.

- **Unit investment trusts:** Some ETFs — especially the older ones such as the Invesco QQQ ETF (QQQ), SPDR S&P 500 (SPY), and SPDR S&P Mid Cap 400 (MDY) — are actually unit investment trusts (UITs). However, not all UITs are ETFs.

  A *UIT* is a fixed portfolio of stocks or bonds that is generally sold to investors by brokers. The UIT is usually sold through a one-time public offering. It has a termination date, which could be anywhere from several months to 50 years down the road. Upon termination, the UIT dissolves.

  In the case of ETF/UITs, however, it's a slightly different story. When the first ETFs were created, there was an original termination date of 25 years hence. But as the ETFs grew in popularity, ETF providers petitioned the U.S. Securities and Exchange Commission (SEC) to make an exception, which the SEC did.

- **Hedge funds/Limited partnerships:** *Hedge funds* — funds that promise insurance against bad markets — come in many different flavors and use any number of strategies to achieve (or try to achieve) their objective. Most hedge funds are neither mutual funds nor ETFs; rather, they are organized as limited partnerships. Limited partnerships are largely unregulated, fees tend to be high, and *liquidity* (the ability to get your money out if you want or need to) can be very limited. Proceed with great caution. And don't believe that hedge funds make everyone rich. They do not.

- **Exchange-traded notes:** Exchange-traded notes (ETNs) sure sound like exchange-traded funds, and the two do have some things in common. But they also have one or two big differences. The commonalities include not only their names but also that both ETFs and ETNs trade throughout the day, they both tend to track indexes, and they both can be tax-efficient — especially the ETNs. Given these commonalities, the term *exchange-traded products* or ETPs has been used to describe both ETFs and ETNs, as well as closed-end funds. The big, big, *big* difference (are you listening?) between ETFs and ETNs is this: An ETN is a debt instrument. In other words, a firm like Barclays, the big player in ETNs, promises to pay holders of its ETNs a rate of return commensurate with some index, such as, for example, the Bloomberg Cocoa Subindex Total Return. Whether Barclays actually invests your money in cocoa, or in whatever the heck it wants, is up to Barclays. The company simply made a promise to pay you, just as if you held one of its bonds. An ETN is more like a bond, really, than an ETF. Instead of a fixed rate of interest, however, you get paid according to some other measure, often the change in price of a commodity or in a foreign currency relative to the dollar. I'm not a huge fan, largely because you are taking credit risk above and beyond market risk. Who needs that?!

6

The Part of Tens

IN THIS PART . . .

Find the answers to Ten FAQs about ETFs.

Learn to avoid these Ten errors that can drain your wealth.

Share in the author's Ten predictions about the future of investing.

IN THIS CHAPTER

» Assessing risk

» Considering professional help

» Figuring out which ETFs make sense for you

Chapter 26

Ten FAQs about ETFs

Oh, it's been fun writing a book about exchange-traded funds! When someone asks me what I'm working on, and I say, "The third edition of *Exchange-Traded Funds For Dummies*," sometimes their eyes glaze over, and then, if the topic isn't immediately steered in a new direction, I'm inevitably asked what the heck an exchange-traded fund is. And so I explain (essentially quoting, from memory, a few lines from this book's Introduction). The *next* question I'm asked is invariably one of the following.

Are ETFs Appropriate for Individual Investors?

You bet they are. Although the name *exchange-traded funds* sounds highly technical and maybe a little bit scary, ETFs — at least the ones I tend to recommend in this book — are essentially friendly index mutual funds with a few spicy perks. They are *more* than appropriate for individual investors. In fact, given the low expense ratios and high tax efficiency of most ETFs, as well as the ease with which you can use them to construct a diversified portfolio, these babies can be the perfect building blocks for just about any individual investor's portfolio.

Are ETFs Risky?

That all depends.

Some ETFs are way riskier than others. It's a question of what kind of ETF we're talking about. Many ETFs track stock indexes, and some of those stock indexes can be extremely volatile, such as individual sectors of the U.S. economy (technology, energy, defense and aerospace, and so on) or the stock markets of emerging-market nations. Other ETFs track broader segments of the U.S. stock market, such as the S&P 500. Those can be volatile, too, but less so.

But other ETFs track bond indexes. Those tend to be considerably less volatile (and less potentially rewarding) than stock ETFs. One ETF (ticker symbol SHY) tracks short-term Treasury bonds, and as such is only a little bit more volatile than a money market fund.

Many of the newer-generation ETFs are *leveraged*, using borrowed money or financial derivatives to increase volatility (and potential performance). Those leveraged ETFs can be so wildly volatile that you are taking on risk of Las Vegas proportions.

REMEMBER

When putting together a portfolio, a diversity of investments can temper risk. Although it seems freakily paradoxical, you can sometimes add a risky ETF to a portfolio (such as an ETF that tracks the stocks of foreign small companies) and lower your overall risk! How so? If the value of your newly added ETF tends to rise as your other investments fall, that addition will lower the volatility of your entire portfolio. (Financial professionals refer to this strange but sweet phenomenon as *Modern Portfolio Theory.*)

Do I Need a Financial Professional to Set Up and Monitor an ETF Portfolio?

Do you need an auto mechanic to service your car? I don't know. It depends on both your particular skills and your inclination to spend a Sunday afternoon getting greasy under the hood. Setting up a decent ETF portfolio, with the aid of this book, is very doable. You can certainly monitor such a portfolio, as well. A professional, however, has special education, tools, and (I hope) objectivity to help you understand investment risk and construct a portfolio that fits you like a glove, or at least a sock. A financial planner can also help you properly estimate your retirement needs and plan your savings accordingly.

Do be aware that many investment "advisors" out there are nothing more than salespeople in disguise. Don't be at all surprised if you bump into a few who express their disgust of ETFs! ETFs make no money for those salespeople, who make their living hawking expensive (often inferior) investment products. Your best bet for good advice is to find a *fee-only* (takes no commissions) financial planner. If you are more or less a do-it-yourselfer but simply want a little guidance, try to find a fee-only planner who will work with you on an hourly basis.

If you hire a fee-only advisor who takes your assets under management, know that the standard 1-percent-of-assets-under-management fee has gone largely by the wayside. You shouldn't have to pay that much if you are only getting portfolio management. If your advisor also helps you with other financial matters, that's a different story. But do consider an hourly advisor first.

How Much Money Do I Need to Invest in ETFs?

You can buy as little as one share of any ETF, and many ETF shares sell for under $30. Heck, some brokerage houses now allow for the purchase of fractional shares on the more common ETFs, so you could theoretically start an ETF portfolio with pennies.

You will need a brokerage house to purchase ETFs, and some brokerage houses do have minimums. But there are plenty of brokerage houses that do not have minimums, including Schwab and Fidelity. Vanguard has no minimum, but you will pay an annual service fee of $20 for any account that holds less than $10,000, although you can waive the service fee if you agree to get all your documents electronically.

With Hundreds of ETFs to Choose From, Where Do I Start?

The answer depends on your objective. If you are looking to round out an existing portfolio of stocks or mutual funds, your ETF should complement that. Your goal is always to have a well-diversified collection of investments. If you are starting to build a portfolio, you want to make sure to include stocks and bonds and to diversify within those two broad asset classes.

There is not much in the world of stocks and bonds that can't be satisfied with ETFs. Try to have both U.S. and international stock ETFs. And within the U.S. stock arena, aim to have large-cap and small-cap, value and growth stocks. (I explain these terms in Chapters 5 through 8.) You can also diversify your stock ETFs by industry sector: consumer staples, energy, financials, and so on. (See Chapter 10 for a discussion of sector diversification.)

On the bond side of your portfolio, you want both government-issued bonds and corporate bonds, and if you're in a higher tax bracket, you may want municipal bonds as well. For more conservative portfolios in which bonds play a major role, foreign bonds may offer added diversification. There are many ETFs that will give you exposure to all of these kinds of bonds. (For a full discussion, see Part 3.)

Although most ETFs are somewhat reasonably priced, some are more reasonably priced than others. If you are going to pay 0.40 percent a year in operating expenses for a certain ETF, you should have a good reason for doing so. Many ETFs are available for under 0.20 percent, and some for even less than 0.05 percent. A handful are *free!*

Where Is the Best Place for Me to Buy ETFs?

I suggest setting up an account with a financial supermarket such as Fidelity, Vanguard, Charles Schwab, or TD Ameritrade. Each of these allows you to hold ETFs, along with other investments — such as mutual funds or individual stocks and bonds — in one account. (You probably don't need or want individual securities. I'm just saying. . .)

Different financial supermarkets offer different services and charge different prices depending on how much you have to invest, how often you trade, and whether you do everything online or by phone. You need to do some shopping around to find the brokerage house that works best for you. I provide more suggestions for shopping financial supermarkets in Chapter 3, where you'll also find contact information. Their websites are listed in Appendix A.

Is There an Especially Good or Bad Time to Buy ETFs?

Well, the stock market is open for business between 9:30 a.m. and 4:00 p.m., Monday through Friday. That's NYC time. It's generally best to trade your ETFs between 9:45 a.m. and 3:45 p.m. Avoid the opening and closing bells; there is often added volatility at those times.

Other than that, nope, there really is no particular good or bad time. It isn't like airline tickets (which many people say you should shop for on Tuesdays, and never on Fridays).

And how about a day after the market is up as opposed to down? Studies show rather conclusively that the stock and bond markets (or any segment of the stock or bond markets) are just about as likely to go up after a good day as they are after a bad day (or week, month, year, or any other piece of the calendar). Trying to time the market tends to be a fool's game — or, just as often, a game that some like to play with other people's money.

Do ETFs Have Any Disadvantages?

Because most ETFs follow an index, you probably won't see your ETF (or any of your index mutual funds) winding up number one on *Wise Money* magazine's list of Top Funds for the Year. (But you probably won't find any of your ETFs at the bottom of such a list, either.)

But perhaps the biggest disadvantage of ETFs is something that many consider an advantage. ETFs, unlike mutual funds, trade in a flash. If at, say, 2:34 on a Wednesday afternoon, you want to sell your entire portfolio, then you can have it done by 2:35. This is not a technical disadvantage — unless you have a trigger finger and are apt to make rash financial decisions. Yes, there are some people who sell out their stock ETFs after every downward blip in the market. If this is you, you'd be better off with mutual funds. . .or perhaps cash under your mattress!

Does It Matter Which Exchange My ETF Is Traded On?

No. Most ETFs are traded on the NYSE Arca (Archipelago) exchange, but plenty of others are traded on the NASDAQ. It doesn't matter in the slightest to you, the individual investor. The cost of your trade is determined by the brokerage house you use, and most brokerage houses are now charging zero for ETFs. The *spread* (the difference between the price a buyer pays and the price the seller receives) is determined in large part by the share volume of the ETF being traded. Regardless of the exchange, if the volume is small (such as would be the case for, say, the Global X Nigeria ETF), you may want to place a *limit order* rather than a *market order.* I explain the different kinds of orders in a sidebar in Chapter 2.

Which ETFs Are Best in My IRA, and Which Are Best in My Taxable Account?

Generally, investments that generate income — whether interest, dividends, or capital gains — are best kept in a tax-advantaged retirement account, such as your IRA or 401(k) plan. That would include any bond, REIT, or high-dividend-paying ETF. You'll eventually need to pay income tax on any money you withdraw from those accounts, but it is generally better to pay later than sooner. In the case of a Roth IRA, which is often the best case of all, you will never have to pay taxes on the earnings, the principal, what is in the account, or what you withdraw. Try to put your ETFs that have the greatest potential for growth — REIT ETFs are great candidates — into your Roth IRA.

Because retirement accounts generally penalize you if you take money out before age 59½, anyone younger than that would want to keep all emergency money in a non-retirement account.

IN THIS CHAPTER

» Paying and risking too much

» Trading too frequently

» Saving too little and expecting too much from the market

» Ignoring inflation and IRS rules

Chapter 27
Ten Mistakes Most Investors (Even Smart Ones) Make

Remember that personal investing course you took in high school? Of course, you don't! If you're a middle-ager like me, then your high school probably didn't offer such a course (although people who've graduated very recently may have had the opportunity). And that lack of education — combined with a surfeit of cheesy and oft-advertised investment industry products, plus an irresponsible and lazy financial press — leads many investors to make some very costly mistakes, such as the ones I share in this chapter.

Paying Too Much for an Investment

Most investors pay way, way too much to middlemen who suck the lifeblood out of portfolios, leaving too many folks with too little to show for their investments. By investing primarily in indexed ETFs, you can spare yourself and your family this tragic fate. The most economical ETFs cost a fraction of what you would typically pay in yearly management fees to a mutual fund company selling "active management." You never pay any *loads* (high commissions). And trading fees, which never were very much, have all but disappeared in the past year or two.

Failing to Properly Diversify

Thou shalt not put all thine eggs in one basket is perhaps the first commandment of investing, but it is astonishing how many sinners there are among us. ETFs allow for easy and effective diversification. By investing in ETFs rather than individual securities, you have already taken a step in the right direction. Don't blow it by pouring all your money into one narrow ETF representing a single hot sector! You want to invest in both stock and bond ETFs, and both U.S. and international securities. You want diversification on all sides. Invest, to the extent possible, mostly in *broad* markets: value, growth, small cap, large cap. On the international side of your portfolio, aim to invest more in regions than in individual countries (see Chapter 9). ETFs make such diversification easy.

Taking on Inappropriate Risks

Some people take on way too much risk, investing perhaps everything in highly volatile technology or biotech stocks. But many people don't take enough risk, leaving their money to sit in secure but low-yielding money market funds or in the vault of their local savings and loan. If you want your money to grow, you may have to stomach some volatility.

In general, the longer you can tie your money up, and the less likely you are to need to tap into your portfolio anytime soon, the more volatile your portfolio can be. A portfolio of ETFs can be amazingly fine-tuned to achieve the levels of risk and return that are appropriate for you.

Selling Out When the Going Gets Tough

It can be a scary thing, for sure, when your portfolio's value drops 10 or 20 percent. . .never mind the 40 percent that an all-stock portfolio would have lost in 2008 (demonstrating graphically why you shouldn't have an all-stock portfolio). Keep in mind that if you invest in stock ETFs, that scenario is going to happen. It has happened many times in the past; it will happen many times in the future. That's just the nature of the beast. If you sell when the going gets tough (as many investors do), you lose the game. The stock market is resilient. Hang tough. Bears are followed by bulls (right now we are in one of history's longest bull markets). Your portfolio — as long as you are well diversified — will almost surely bounce back, given enough time.

Paying Too Much Attention to Recent Performance

Many investors make a habit of bailing out of whatever market segment has recently taken a dive. Conversely, they often look for whatever market segment has recently shot through the roof, and that's the one they buy. Then, when *that* market segment tanks, they sell once again. By forever buying high and selling low, they see their portfolios dwindle over time to nothing.

When you build your portfolio, don't overload it with last year's ETF superstars. You don't know what will happen next year. Stay cool. You may notice that in this book, I do not include performance figures for any of the ETFs discussed (except in just a few circumstances to make a specific point). That omission was intentional. Many of the ETFs I discuss are only a few years old, and a few years' returns tell you *nothing.* On the other hand, the indexes tracked by certain ETFs go back decades. In those cases, I often do provide performance figures.

Not Saving Enough for Retirement

Compared to spending, saving doesn't offer a whole lot of joy. But you can't build a portfolio out of thin air. If your goal is one day to be financially independent, to retire with dignity, you probably need to build a nest egg equal to about 25 times your yearly budget (more on that subject in Chapter 24). Doing so won't be easy. It may mean saving 15 percent of your paycheck for several decades. The earlier you start, the easier it will be.

Savings come from the difference between what you earn and what you spend. Remember that both are adjustable figures. One great way to save is to contribute at least enough to your 401(k) plan at work to get your employer's full match, if any. Do it! Another is to remember that material goodies, above and beyond what it takes to be comfortable, do not buy happiness and fulfillment. Honest. Psychologists have studied the matter, and their findings are rather conclusive.

Having Unrealistic Expectations of Market Returns

One reason many people don't save enough is that they have unrealistic expectations; they believe fervently that they are going to win the lottery or (next best thing) earn 25 percent a year on their investments. The truth: The stock market, over the past 100 years, has returned roughly 10 percent a year before inflation and 7 percent a year after inflation. Bonds have returned about 5 percent before inflation and 2 to 3 percent after inflation. A well-balanced portfolio, therefore, may have returned 7 or 8 percent before inflation and maybe 5 percent or so after inflation.

Five percent growth after inflation — with interest compounded every year — isn't too shabby. In 20 years time, an investment of $10,000 growing at 5 percent will turn into $26,530 in constant dollars. Most of us in the investment field expect future returns to be more modest. But with a very well-diversified, ultra-low-cost portfolio, leaning toward higher-yielding asset classes (see Part 2), you may be able to do just as well as Mom and Dad did. If you want to earn 25 percent a year, however, you are going to have to take on inordinate risk. And even then, I wouldn't bank on it.

Discounting the Damaging Effect of Inflation

No, a dollar certainly doesn't buy what it used to. Think of what a candy bar cost when you were a kid. Think of what you earned on your first job. Are you old enough to remember when gas was 32 cents a gallon? Now look into the future, and realize that your nest egg, unless it's wisely invested, will shrivel and shrink. Historically, certain investments do a better job of keeping up with inflation than others. Those investments, which include stocks, tend to be somewhat volatile. It's a price you need to pay, however, to keep the inflation monster at bay.

The world of ETFs includes many ways to invest in stocks, but if you find the volatility hard to take, you might temper it with a position in Treasury Inflation-Protected Securities (TIPS). You can buy a number of ETFs that allow for very easy investing in TIPS. Read about them in Chapter 14.

Not Following the IRS's Rules

When they leave their jobs, many employees cash out their 401(k) accounts, thereupon paying the IRS a stiff penalty and immediately losing the great benefit of tax deferral. The government allows certain tax breaks for special kinds of accounts, and you really need to play by the rules or you can wind up worse off than if you had never invested in the first place.

People beyond 72 must be especially careful to take the Minimum Required Distributions (MRDs) from their traditional IRAs or 401(k) plans. Calculators are available online; simply type "MRD calculator" into your favorite search engine. Unlike a retirement calculator, based on all kinds of assumptions, the MRD is a straightforward equation. Any online calculator can take you there, or ask your accountant or the institution where you have your retirement plan.

Failing to Incorporate Investments into a Broader Financial Plan

Have you paid off all your high-interest credit card debt? Do you have proper disability insurance? Do you have enough life insurance so that, if necessary, your co-parent and children could survive without you? A finely manicured investment portfolio is only part of a larger picture that includes issues such as debt management, insurance, and estate planning. Don't spend too much time tinkering with your ETF portfolio and ignoring these other very important financial issues.

IN THIS CHAPTER

» Expecting slower growth of the ETF market

» Anticipating more ETF products

» Considering the economy

Chapter 28

Ten Forecasts about the Future of ETFs and Personal Investing

I try not to watch any of the investment shows on television. Stock "Expert" Number One gives their prediction of the future. Then "Expert" Number Two gives their (often contradictory) opinion. Viewers may be amused by the heated debate but never know what to do in the end.

I also usually try not to make predictions about the future, but I'll ask you to please indulge me now. I can't resist. It just seems like sooo much fun!

Here are my predictions, for whatever they are worth, about the world of ETFs.

ETF Assets Will Continue to Grow. . . for Better or Worse

Most people should be investing most of their money in index mutual funds or ETFs, and that has been happening. The initial popularity of ETFs was due largely to the interest of educated institutional investors and savvy individual investors, like you, who loved ETFs for their low-cost indexing and diversification power.

In the past few years, educated and savvy investors have continued to invest in ETFs, but there has also been a huge inflow of money from investors who have little if any idea of what they're getting into. Much of this recent inflow is going into the leveraged and inverse leveraged and other pricey and complex and largely pointless, if not outright dangerous, ETFs. I warn you about these products throughout this book.

The vast majority of investors will *never, never* give up their belief that they can garner huge returns without huge risk. They'll try any which way they can. They will attend expensive workshops that promise to teach them how to double their money overnight. They will subscribe to websites and newsletters and YouTube channels that tell them which stocks or mutual funds to buy this week for sure-fire rapid appreciation. They will buy high-priced mutual funds and will actually pay a fat commission for the honor of doing so. They will hire Bernie Madoff types who make promises that they can't hope to fulfill. And they will buy these new-fangled ETFs that they don't understand and that will only wind up hurting them.

That's their problem, not yours. For the intelligent investor like you, there will always be sensible, low-cost, well-diversified ETFs from which you can construct a sensible portfolio.

More Players May Enter the Field, but Only a Few

BlackRock (iShares), State Street, and Vanguard got the jump on ETFs, with others, like Invesco and Schwab, riding close behind. Other investment houses, large and small, have joined in the fun in the past few years. Unlike the world of mutual funds, however, the profit margin on ETFs is fairly thin, and has recently gotten even thinner, so I don't think you'll see hundreds of issuers of ETFs, as you do mutual funds.

The latest entrants, such as BNY Mellon Bank, have only been able to muscle in with extremely low prices. Mellon is, in fact, offering two ETFs for *free*.

This kind of competition has been great for investors! But it doesn't give the little guy much of an opportunity to enter the field.

Investors Will Get Suckered into Buying Packaged Products

Alas, even good ETFs can be turned into bad financial products. It's happening with some of the ETF offerings in 401(k) plans. In that case, perfectly good ETFs are packaged in such a way that the investor (trapped like a fly in a bowl of milk in their company's plan) is paying as much as 2 percent in management fees. Good ETFs have similarly popped up in awful annuity plans, 529 college plans, and other investments where someone somewhere stands to make a big buck off the small investor. Several years back, PowerShares (now part of Invesco) tried to slap loads on ETFs. It didn't work. Someone may try again. Remember Dr. Malcolm's line in *Jurassic Park*? "If there is one thing the history of evolution has taught us, it's that life will not be contained. Life breaks free, expands to new territory, and crashes through barriers, painfully, maybe even dangerously." The same can be said of greed.

One of the latest fads in ETFs is the rise of so-called "buffer" or "defined outcome" ETFs. They are among the most complex and priciest of ETFs, similar to (but not nearly as bad as) old-fashioned variable annuities. Read about them in Chapter 20.

ETF Investors Will Have No Need for Anything but ETFs

Despite all the questionable recent offerings in the ETF world, some of the newer ETFs have been quite pleasant surprises, and I discuss those in every chapter of this book. I'm looking forward to seeing more offerings in the tax-free municipal bond area, where currently, only New Yorkers, Californians, and Minnesotans can buy state-specific muni ETFs.

And I'm very happy that Dimensional, which has long offered a really smart approach to index investing with its "smart beta" funds, has been converting its mutual funds into ETFs. Other mutual-fund providers are following suit.

In Chapter 25, I talk about non-ETFs that you might want to use to round out an ETF portfolio and to plug a few "holes" that might appear if you're building a portfolio out of ETFs. I suspect that the next edition of this book will have no Chapter 25!

The Markets Will (Unfortunately) See Greater Correlation than in the Past

As the world continues to become a smaller place, and the economies of nations become yet more interdependent, so too will stock and bond markets around the world tend to move up and down in unison. This is not a good thing for investors because it lessens the power of diversification to moderate risk.

I want to emphasize, however, that diversification is not dead! Although world markets in 2008 (and very briefly in 2020) were distressingly correlated (in other words, they took a collective swan dive), some markets recovered much faster than others. And the next market swoon may not see such correlation; we simply don't know. But I think it is fairly safe to say that investors will find a growing need to tap into new ways to diversify a portfolio. An expanded menu of ETFs will make it that much easier for anyone to implement such a strategy.

Asset Class Returns Will Revert toward Their Historic Means

Astronomical rises in the valuations of a handful of companies such as Amazon and Tesla may continue for a while, but not forever. You can also expect an end to the astonishing rise in the price of U.S. housing. And although U.S. stocks have outperformed foreign stocks for the past several years, that will reverse at some point. Asset class returns tend to revert to their historical norms.

One study from Duke University found evidence to suggest that with an ounce of gold in ancient Rome, you might've been able to purchase a basket of goods roughly similar to what you could buy in today's Rome for an ounce of gold. In other words, gold may have just kept up with inflation for the past 2000 years — no better, no worse. You may occasionally see double-digit returns, but that's an anomaly. Anomalies are, by definition, temporary.

In terms of an ETF portfolio, this may be a good time to slightly underweight U.S. large-cap growth, which has far exceeded its historical returns over the past several years. (Tilt your portfolio oh-so-slightly because these are only one man's predictions! Moreover, by the time this book appears in print, new information may have caused me to revise these predictions.)

Taxes Will Rise

Let's see. . .the United States has a raging federal deficit; public and private debt that's arguably out of control; an aging population; a medical "system" (if you can even call it that) that has left millions unable to pay their doctor, dentist, and hospital bills; a challenged Social Security system; and a seriously troubled public school system. After huge tax cuts (mostly for the very wealthy), these problems persist and worsen. Sooner or later, *something* has to give.

I'm hearing the same platitudes that I've heard for decades: "We'll cut waste and government will become more efficient." Yeah, right.

I believe that future administrations will have no option but to raise taxes. I would hope that they will start with the super wealthy, who have saved a bundle in tax breaks over the past years. But who knows? Tax rates may be raised across the board. I advocate squirreling away as much of your ETF portfolio as you can into a tax-free Roth IRA.

Inflation Will Remain Tame

Although I'm certainly concerned about inflation and recognize that it can devastate a paycheck or a portfolio, I'm not too worried about a return to the double-digit inflation of the 1980s. There is a good reason that we saw double-digit inflation back then: The United States decided to abandon the gold standard in the 1970s, and the new monetary system was walking on its baby legs.

Today, we have forces at play that argue for greater inflation (such as the national debt), and we also have forces at play working in the other direction (such as fairly stagnant wages for most workers). But the monetary system isn't walking on baby legs. I anticipate that inflation in the next decade or two will be higher than it has been in the past decade, but similar to what it was prior to that: somewhere in the ballpark of 3 percent.

Whether I'm right about the 3 percent, or whether inflation runs higher, you can protect yourself with a good helping of stock ETFs (stocks have a very good track record of keeping up with inflation) and a position in an ETF that tracks an index of U.S. Treasury Inflation-Protected Securities (see Chapter 14).

Private Pensions (of Sorts) May Emerge from the Rubble

There's one kind of risk against which all the good saving and wise investing in the world can only go so far to protect you. That is "longevity risk." In order to live a life of comfort post-retirement, you need to save and invest as if you could live to be 105. . .because you just may. But, in point of fact, you probably won't live nearly that long. Wouldn't it be nice if we could all save just enough to get us through to the average life expectancy (mid 80s), and the money from those who die sooner could help support those who live longer? That's the basic idea behind Social Security, which I'd like to see strengthened, not weakened. Alas, politics being politics, that seems unlikely.

But I have hope that even if the government doesn't come through, private industry may offer us even better "old age insurance" in the form of reasonably priced annuities instead of the horribly overpriced, confusing, restrictive, inflexible, locked-in, complicated, and tricky annuities that have come to dominate the insurance market. Certain companies, such as Vanguard and Fidelity, have taken positive strides in this direction. But I'd like to see the day — and we may get there yet — when annuities, just like most ETFs, become simple, transparent, inexpensive, and sensible. Perhaps ETFs themselves may evolve into such instruments.

Hype Will Prevail!

Of all my predictions, this is the one I'd put money on.

You'll be seeing more websites, blogs, television clips, and advertisements with headings and leads such as "Build Instant Wealth and Retire Early with ETFs!"

And there will be books with titles such as *Beat the Market with ETFs!* and *You Can Make a Killing in ETFs!* One of them may become a bestseller, which means that it will make a lot of money for someone — but not for the people who read it.

Bull markets are followed by bear markets, which are followed by bull markets. Trading floors are replaced by electronic trading platforms. Mutual funds are challenged by ETFs. The world of investing keeps changing, morphing into something hardly recognizable from the days when just about all investors were men who wore funny hats, smoked cigars, and spent hours reading tickertapes.

But one thing remains constant: The financial industry will continue to produce hype in the hope that you will buy their new products, and sell, and buy, and sell, and buy, regardless of how ridiculously complex and expensive whatever products they are pushing happen to be.

Having read this book, you now know better. Put your knowledge to good use. Build a diversified portfolio of low-cost, transparent, tax-efficient ETFs. Keep an eye on your nest egg, but don't make changes very often. Just be sure to rebalance at regular intervals. Sit back and relax. Let the hype pass over you like a summer breeze.

7

Appendixes

IN THIS PART . . .

Discover excellent web resources to continue your ETF schooling.

Look up in the glossary any terms in this book that you didn't fully understand.

Appendix A

Great Web Resources to Help You Invest in ETFs

You can find anything online: gobs and gobs of information — and misinformation. And in the world of finance, there is more misinformation than information. If you pressed me, I'd put the ratio at about 7:2. Following are some websites you can trust to keep you informed about ETFs and other investment issues.

Independent, ETF-Specific Websites

`www.etfdb.com`: Boasts daily ETF news, educational articles, analysis, and an ETF screener. Find out which ETFs represent what asset classes for the lowest fees. Do double-check information, such as management fees for individual ETFs, as the website sometimes falls behind.

`www.etftrends.com`: A gossip column of sorts for ETF enthusiasts. There's chitchat about new ETFs on the market, ETFs pending approval by the SEC, behind-the-scenes industry workings, and rumors.

`www.etf.com`: ETF news, commentary, and a very helpful screener. The website allows you to set up a watchlist and includes links to many other sources of information.

www.etfchannel.com: Includes an ETF finder, some interesting articles, lots of info on fund flows, and enough pop-up ads to make you want to scream.

www.morningstar.com (Click the ETF icon at the top of the screen): Thorough information on individual funds, along with industry news and Morningstar's trademarked rating system. (One star is bad; five stars is grand.) See also http://etf.morningstar.com, which is the link to Morningstar's ETFInvestor newsletter. It's a paid publication, but there's a fair amount of information that's free.

Websites of ETF Providers

About 90 percent of all ETF money is invested with the seven following firms. The remaining 10 or so percent of the market is split among a number of players, all of which have a market share of less than 1 percent.

The seven biggies

www.ftportfolios.com: First Trust offers a full spectrum of options.

www.ishares.com/us: BlackRock's iShares ETFs make BlackRock the number-one provider.

www.invesco.com: With a host of unusual indexes (for better or worse), Invesco is America's number-four ETF provider.

https://am.jpmorgan.com/us/en/asset-management/adv/investment-strategies/etf-investing/: The largest U.S. bank, J.P. Morgan is trying to muscle in on the leaders, and having some success.

www.schwab.com: Offering a solid, plain-vanilla, reasonably priced lineup of ETFs, Schwab is number five in ETF assets.

www.ssga.com: The issuer of SPDRs, including the SPDR S&P 500 ETF Trust (SPY), State Street Global Advisors is the https://investor.ganguard.com/home number-three ETF provider in the U.S.

https://investor.vanguard.com/home: The King of Indexing, producing some of the lowest-cost ETFs, Vanguard is still number two in ETFs, but moving in on iShares.

Some of the lesser players

`www.alpsfunds.com`: Lots of "smart beta," for beta or worse.

`www.ark-funds.com`: Specializing in "disruptive" technologies.

`www.bnymellon.com`: The first provider with zero-cost ETFs.

`www.cambriafunds.com`: Some odd offerings, but not insane.

`www.dfafunds.com`: DFA is converting their fine mutual funds to ETFs.

`www.direxioninvestments.com`: Leveraging is their game.

`www.etf.engine1.com`: Using their muscle to make companies greener.

`www.fidelity.com`: A mutual fund giant, and a late arrival in the ETF game.

`www.franklintempleton.com`: Bring your passport; lots of international offerings.

`www.globalxfunds.com`: They seem to be issuing a new ETF every day.

`www.gsam.com`: Goldman Sachs offers basic asset classes, but always with a twist.

`www.graniteshares.com`: You can't invest in granite, but there are other commodities.

`www.humankindfunds.com`: Focused on humanity.

`www.pimcoetfs.com`: Bond people. Purely bond people.

`www.kraneshares.com`: Unique offerings from this China-based firm.

`www.proshares.com`: ETFs for a wild ride.

`www.wisdomtree.com`: You say you like dividends?

`www.vaneck.com`: Initially specializing in metals and other hard assets, but now branching out.

`www.etf.dws.com`: Xtrackers ETFs, from the German group DWS, which specializes in currency-hedged foreign-stock ETFs.

Financial Supermarkets

Otherwise known as large brokerage houses, here are some places where you can buy, sell, and house your ETFs — as well as other investments, such as mutual funds and individual stocks and bonds.

`www.etrade.com`: Or call E*Trade at 1-800-387-2331.

`www.fidelity.com`: Or call Fidelity at 1-800-343-3548.

`www.interactivebrokers.com`: Or call Interactive Brokers at 1-877-442-2757.

`www.schwab.com`: Or call Charles Schwab at 1-866-855-9102.

`www.tdameritrade.com`: Or call TD Ameritrade at 1-800-454-9272.

`www.troweprice.com`: Or call T. Rowe Price at 1-888-285-2609.

`www.vanguard.com`: Or call Vanguard at 1-877-662-7447.

Stock Exchanges

`www.nasdaq.com`: Despite the fact that not many ETFs are listed on the NASDAQ, the website has some very cool ETF-related features. Try clicking Market Activity on the top banner, and then clicking Funds and ETFs.

`www.nyse.com`: Most ETFs are traded on the NYSE platforms. Surprisingly, there isn't a lot of specific ETF information on the website, but there is a wealth of general information about the world of finance.

Specialty Websites

`www.bogleheads.org`: The forum where index investors go to debate (respectfully, for the most part) other index investors.

`www.cboe.com`: The Chicago Board Options Exchange — if options trading is your kind of thing, or you think it might be.

www.multpl.com: Robert Shiller's modified P/E index for tactical asset allocators (see Chapter 23).

www.reit.com: Everything you could want to know about real estate investment trusts (REITs), including REIT ETFs. This website is brought to you by the National Association of REITs. Very rah-rah.

www.ussif.org. A wealth of information on investing for social good, from The Forum for Sustainable and Responsible Investment.

Regulatory Agencies

www.finra.org: The Financial Industry Regulatory Authority website. If you click the For Investors tab, it has all sorts of helpful information for do-it-yourselfers. The Fund Analyzer is a great way to assess any ETF (or mutual fund) quickly.

www.sec.gov: The U.S. Securities and Exchange Commission. Under the Education tab, you'll find all sorts of helpful information. Click Check Your Investment Professional to make sure a financial planner is fully licensed. You'll also find out if your candidate has any disciplinary history for unethical conduct.

The People Who Create the Indexes

Dow Jones, Russell, Standard & Poors, and others create the indexes that ETFs track. Just in case you're interested:

- www.bloomberg.com/professional/product/indices/bloomberg-fixed-income-indices
- www.spglobal.com/en/
- www.ftserussell.com
- www.indexes.morningstar.com
- www.msci.com
- www.wilshire.com

Good Places to Go for General Financial News, Advice, and Education

`www.businessinsider.com/`: Hard news and thoughtful essays.

`http://finance.yahoo.com`: Extensive information and analysis, all for free.

`www.bloomberg.com`: Hardcore financial data and general business news.

`www.cnn.com/business`: Get your daily fix of everything money-related.

`www.moneychimp.com`: Silly name, but serious site. It contains some good investing basics and helpful calculators.

`www.morningstar.com`: Anything and everything about stocks, mutual funds, and ETFs.

`www.wsj.com`: Could this list not include *The Wall Street Journal*?

Yours Truly

`www.globalportfolios.net` or `www.russellwild.com`: Both URLs will take you to the same place — the author's own website. Feel free to visit me anytime.

Appendix B

Glossary

If you're going to be an ETF investor, you need to know the lingo. If you're not going to be an ETF investor, you can still use the following phrases to impress at dinners at the country club. Please note that any word in *italic* (except for the word *italic*) appears as its own entry elsewhere in the glossary.

Active investing. Ah, to beat the market. Isn't it every investor's dream? Through stock picking, ETF picking, market timing, or all three strategies, active investing offers hope of market-beating returns. Alas, it sounds a lot easier than it really is. Compare to *passive investing.*

Alpha. Given a certain level of risk, you should expect a certain rate of return. If your stock/fund/portfolio return exceeds that expectation, congratulations! You've just achieved what people in the finance world call "positive alpha." Pass the caviar. If your stock/fund/portfolio return falls shy of that expectation, you are in the dark and depressing land of "negative alpha." Pass the herring.

Ask price. The rock-bottom price that any stock or ETF seller is willing to accept. If any buyer is willing to fork over that amount, a sale is made. If no buyers are willing to match the ask price, gravity will eventually start to drag down the price of the stock. Compare to *bid price* and *spread.*

Asset class. To build a diversified portfolio (meaning not having all your eggs in one flimsy straw basket), you want to have your investments spread out among different asset classes. An asset class is any group of similar investments. Examples may include small value stocks, utility stocks, high-yield bonds, Japanese small-company stocks, or Rembrandts (paintings, not the toothpaste).

Beta. A common measurement of the volatility of an investment. If your ETF has a beta of 1.5, it tends to move up 15 percent whenever the market as a whole (usually represented, somewhat clumsily, by the S&P 500 Index) goes up 10 percent. If the market as a whole goes down 10 percent, your ETF will fall 15 percent. Note that beta is a relative measure of risk, while *standard deviation* (a generally more useful tool) is an absolute measure of risk.

Bid price. The highest price that any buyer is willing to spend to purchase shares of a stock or ETF. Compare to *ask price* and *spread.*

Buffer (or defined-outcome) ETF. An ETF that gives you limited exposure to a certain index, such as the S&P 500. You agree to earn less when the market's up in exchange for the ETF provider offering you some protection when the market's down. And you pay the ETF provider a handsome fee, whether the market's up or down.

Cap size. A less fancy way of saying "market capitalization." It refers to the size of a company as measured by the total number of stock shares outstanding times the market price of each share. In general, stocks are classified as either large cap (over $10 billion), small cap (under $2 billion), or mid cap (anything in between).

Closed-end fund. Like a mutual fund or an exchange-traded fund, a closed-end fund pools securities, but it differs from its open-ended cousins in that it rarely creates or redeems new shares. Because of the fixed supply of shares, eager investors who want into the fund may wind up paying a significant premium over the market value of the pooled securities. On the other hand, if investor demand lags, the shares of a closed-end fund could sell for a hefty discount.

Closet index fund. A mutual fund may call itself actively managed and may charge you a boatload of money, but it may be, in essence, an index fund. Shhhhhh. The manager doesn't want to come out of the closet, lest they lose their excuse for charging you what they charge you, and be forced to surrender the keys to the Mercedes.

Correlation. The degree to which two investments — such as two ETFs — move up and down at the same time. A correlation of 1 means that the two investments move up and down together, like the Rockettes. A correlation of –1 means that when one goes up, the other goes down, like two pistons. A correlation of 0 means that there is no correlation between the two, like the price of bananas and whether the Philadelphia Eagles will make the playoffs this year.

Diversification. The division of your investments into different *asset classes* with limited *correlation.* Diversification is good. Very good. ETFs make it easy. Did I already mention that diversification is good?

EAFE index. EAFE stands for Europe, Australia, and the Far East. This index is often used (incorrectly) to represent foreign stocks. What it really tracks are large-cap stocks of developed foreign nations.

Emerging markets. This is a common euphemism for countries where most people live on a subsistence level. People who invest in emerging markets hope that these nations (mostly in Africa, South America, and Asia) are, in fact, emerging. No one knows. The fortunes of emerging-market stocks are closely tied to the markets for natural resources. Emerging-market ETFs tend to be rather volatile but offer excellent return possibilities.

Expense ratio. Sometimes referred to as the "management fee," this is a yearly bill that you pay to a mutual fund or ETF. The money is taken directly out of your account. The expense ratio for ETFs is usually a lot less than that of mutual funds. If the expense ratio for your entire portfolio is more than 1 percent, you're paying too much.

Fundamental analysis. If you're going to be picking stocks, it makes sense, I suppose, to do some fundamental analysis: an analysis of the company's profitability both present and future. Just know that fundamental analysis is an awfully fuzzy science. And, ironically, the strongest, fastest-growing companies don't always make for the most profitable stocks. See *value premium.*

Growth fund. A fund that invests in stocks of companies that have been fast-growing and are expected (by fundamental analysts) to continue to be fast-growing. In its day, ExxonMobil was a growth stock. You never know. . .

Hedging. If you expect that Asset A may zig, and you purchase Asset B in the hope that it will simultaneously zag, you've just hedged your position. A common hedging strategy is to use a *short* position (selling stock shares you don't own, but borrow) to offset any potential loss you may suffer by holding a *long* position (where you buy and hold stock). Hedging reduces risk, but it also tends to mute returns. The term "inflation-hedge" refers to any asset or type of asset, such as commodities, that is expected to appreciate in value in a climate of rising prices.

Indexing. This term is synonymous with *passive investing.* Index investing has been around for a good while; ETFs simply make it easier, less expensive, and more *tax efficient.*

iShares. The brand name for ETFs issued by BlackRock, the largest purveyor of ETFs in the world. A little more than 35 percent of all money invested in ETFs is invested in iShares. (Vanguard is the second largest, with a 28 percent market share; State Street Global Advisors is third with 14 percent.)

Leverage. An investment made with borrowed funds is said to be leveraged. A common type of leveraged investment, although usually not thought of as such, is a home purchased with little money down and a big mortgage. Leveraged investments offer great potential for profit or — as many homeowners have found out the hard way in recent years — risk of loss.

Liquidity. A liquid asset can readily be turned into cash. Examples include money market funds and very short-term bond funds. Illiquid assets are more difficult to turn into cash. The classic example of an illiquid asset is the family home.

Load. A wad of cash that you need to fork over in order to purchase certain mutual funds. Study after study shows that load funds perform no better than no-load funds, yet people are willing to pay rather huge loads. Go figure. ETFs never charge loads. Gotta love that about them.

Long position. Securities you buy with the intention of holding them for an extended period of time. See *short position*.

Modern Portfolio Theory. A theory stating that a portfolio doesn't have to be excessively risky, even if its separate components are riskier than skydiving without a parachute. The trick is to fill your portfolio with investments that have low *correlation* to one another. When one crashes, another soars — or at least hovers.

Passive investing. You buy an index of stocks (preferably through an ETF), and you hold them. And you hold them. And you hold them. It's as boring as a game of bingo in which none of the letters called are the ones you need. And yet passive investors beat the pants off most active investors, year in and year out.

Price/earnings (P/E) ratio. Take a company's total earnings over the past 12 months and divide that by the number of shares of stock outstanding. The resulting number represents earnings, the lower number in the equation. Price — the upper number — refers to the market price of the stock. The P/E is the most common way in which stocks are identified as either value stocks or growth stocks. High P/E = growth. Low P/E = value.

Qubes. A nickname for the QQQ, an index that tracks the top 100 companies listed on the NASDAQ stock exchange. QQQ is the *ticker* for the most popular ETF that tracks the QQQ. For years, the ticker was QQQQ and not QQQ. Why? I don't knowww.

R squared. This measurement shows how tightly an investment hugs a certain index. An R squared of .90 means that 90 percent of a fund's movement is attributable to movement in the index to which it is most similar. For an index fund or ETF, an R squared of 1.00 is usually the goal. For an allegedly actively managed fund, an R squared of 1.00 (or anything higher than .85 or so) means that you have a *closet index fund,* and you are being ripped off.

REIT (Real Estate Investment Trust) stock/fund. A stock or fund that invests in a company or companies that make their money in real estate — most often commercial real estate, such as office buildings and shopping malls. REIT funds tend to be interest-rate sensitive and often have limited *correlation* to other funds.

Risk. When we investment types talk of risk, we generally mean but one thing: *volatility,* or the unpredictability of an investment. The higher the risk, the greater the potential return.

Sector investing. If you break up your stock portfolio into different industry sectors — energy, consumer staples, financials — then you are a sector investor. Another option is *style investing.*

Sharpe ratio. A risk-adjusted measure of fund performance. In other words, it measures a fund's average historical return per unit of risk. The higher the number, the happier you should be.

Short position. Securities you don't own, but borrow from a brokerage with the intention of disinvesting (and hopefully making a quick profit), usually within days, perhaps weeks.

Sophisticated investor. Often mistaken for someone who trades every day and is constantly checking their account balance, or someone who uses charts and graphs and tries to time the markets. In the real world, such "sophisticated" investors rarely do as well as the "dummy" who builds a well-diversified portfolio of low-cost index funds (such as ETFs) and lets it sit undisturbed.

SPDRs. The name of the brand line for ETFs issued by State Street Global Advisors (SSgA), the third-largest purveyor of ETFs after BlackRock.

Spread. The difference between the *ask price* and *bid price* for a stock or ETF.

Standard deviation. The most used measure of volatility in the world of investments. The formula is long and complicated with lots of Greek symbols. Suffice to say this: A standard deviation of 5 means that roughly two-thirds of the time, your investment returns will fall within 5 percentage points of the mean. So if your ETF has an historical mean return of 10 percent, two-thirds of the time you can expect to see your returns fall somewhere between 5 percent and 15 percent. If your ETF has an historical mean return of 5 percent, two-thirds of the time you can expect your return to be somewhere between 0 percent and 10 percent.

Style investing. If you divvy up your stock investments into large, small, value, and growth, you are a style investor, as opposed to a sector investor. Which is better? Hard to say.

Style drift. It's 11 p.m. Do you know where your investments are? A manager of an active mutual fund tells you that their fund is, say, a large growth fund. And perhaps it once was. But lately, the manager has been loading up on large value companies. Is the manager a growth investor or a value investor? Only they know for sure. Meanwhile, you get stuck with their style drift and you aren't sure exactly what you are holding. See *transparency.*

Tax efficiency. ETFs are often praised for their tax efficiency. That means the funds generate little in the way of capital gains, so you pay taxes only on dividends until such time as you actually cash out. With many mutual funds, you can wind up paying taxes at the most inopportune moments.

Tax-loss harvesting. Late in the year (most often), you can sell off a losing investment in order to claim a loss on your taxes. You can usually use tax losses to wipe out capital gains of the same amount. If your losses exceed your gains, you can generally take the loss to wipe out ordinary income, up to $3,000. In effect, Uncle Sam is helping to share the burden of your woes.

Technical analysis. The use of charts and graphs to try to predict the stock market. Some people take it very, very seriously — despite a lack of any evidence that it works (except for some very small and odd studies from very small and odd places, and even those are equivocal).

Ticker. The two- to five-letter symbol used for a stock, mutual fund, or ETF. Examples include SPY, QQQ, and EWJ. Some ETF tickers are quite cute. There's one, for example, called DOG (but none yet with the ticker GOD), which allows you to bet that DOW is going down. There's another called MOO, which invests in agribusiness.

Transparency. ETFs are beautifully transparent, which means that you know exactly what stocks or bonds your ETF holds. The same is not always true with mutual funds, hedge funds, or your spouse's safe deposit box.

Turnover. The degree to which a fund changes its investments over the course of a year. A turnover rate of 100 means that the fund starts and ends the year with a completely different set of stocks. Turnover generally creates unpleasant tax liabilities for investors. Turnover almost always involves hidden trading costs as well.

Value fund. A mutual fund or ETF that invests in companies whose recent growth may be less than eye-popping but whose stock prices are believed to be cheap in comparison to the prices of stocks of other like companies.

Value premium. Over the past century or so, ever since the birth of organized stock markets, value stocks have performed much better than growth stocks, with relatively the same degree of *risk.* Theories abound, but to date, economists can't seem to agree on why this apparent value premium exists or whether it is likely to continue.

Volatility. Whoooeee. What goes up fast often comes down just as fast. A stock or ETF that gained 40 percent last year can lose 40 percent this year. It is volatile. It is risky. It can bring you great joy or great misery. Hope for the former, but be prepared for the latter.

Yield. A term often used to mean the income derived from an investment over the past 12 months, as a percentage of the total investment. Income may come from dividends (most often the case with stocks or stock ETFs) or interest (from a bond or bond ETF). If you sink $10,000 into an ETF and it generates $500 in yearly income, your yield is 5 percent. If it generates $600, your yield is 6 percent, and so on.

YTD. Year-to-date return, or the total return (dividends plus any rise in the price of the stock or ETF) from January 1 of the present year until today.

Index

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

About the Author

Russell Wild has been a fee-only (takes no commissions) financial advisor for the past 20 years. He heads Global Portfolios, LLC, an investment advisory firm based in Philadelphia, Pennsylvania. The firm name reflects Wild's strong belief in international diversification — using exchange-traded funds to build well-diversified, low-expense, tax-efficient, global portfolios.

In addition to the fun he has with his financial calculator, Wild is also an accomplished writer, having written hundreds of articles for national magazines, including *AARP The Magazine*, *Consumer Reports*, *Men's Health*, *Men's Journal*, *Parade*, *Reader's Digest*, and *The Saturday Evening Post*. He has also contributed to numerous financial professional journals, such as *Financial Planning* and *Financial Advisor*.

The author or co-author of two dozen nonfiction books, he also wrote two other Dummies titles in addition to this one: *Bond Investing For Dummies* and *Index Investing For Dummies*. No stranger to mass media, Wild has shared his wit and wisdom on such shows as *Oprah*, *The View*, *CBS Morning News*, and *Good Day, New York*, as well as in hundreds of radio and blog interviews.

Wild holds a Master in Business Administration (MBA) degree with a concentration in finance from Arizona State's Thunderbird School of Global Management, in Glendale, Arizona; a Bachelor of Science (BS) degree in business/economics *magna cum laude* from American University in Washington, D.C.; and a graduate certificate in personal financial planning from Moravian College in Bethlehem, Pennsylvania. A member of the National Association of Personal Financial Advisors (NAPFA) since 2002, Wild is also a long-time member and past president of the American Society of Journalists and Authors.

Dedication

To the small investor, who has been bamboozled, bullied, and beaten up long enough. And to Lenore Wild of Boca Raton, who taught me early on that wordsmithery (such as using the word *wordsmithery,* rhymes with *rotisserie*, sort of. . .) can be lots of fun.

Author’s Acknowledgments

I’d like a big round of applause for the editorial staff at John Wiley & Sons, Inc., for running such a well-oiled machine. We’ve worked on quite a few projects together now, and each one has been dust-and-drama free. As any author knows, that’s not always the case in today’s publishing world. Special thanks to Charlotte Kughen, project editor; always pleasant, always respectful, she made this project a joy.

Thanks, too, to Marylouise Wiack, copyeditor with Superwoman vision. And to Ben Johnson, editor of Morningstar’s *ETFInvestor* newsletter, who knows ETFs like Mozart knew classical music. I’m grateful that Ben served as technical editor on this book, making certain that it remained strictly a work of nonfiction. I’d also like to thank Ben’s research colleagues at Morningstar, who provided valuable fund data and analysis.

Thanks, too, to the Investment Company Institute, Cerulli Associates, and the helpful staff of many of the fund companies, indexers, and brokerage houses discussed throughout this book. Thanks, too, to Tensie Whelan, head of the Center for Sustainable Business at NYU Stern School of Business, for helping make this a better world, and for helping me to better understand the mechanics behind socially responsible investing.

And special thanks to Marilyn Allen of Allen O’Shea Literary Agency, my agent of many years and quite a few books.

Publisher’s Acknowledgments

Acquisitions Editor: Elizabeth Stillwell
Project Editor: Charlotte Kughen
Copy Editor: Marylouise Wiack
Technical Editor: Ben Johnson

Sr. Editorial Assistant: Cherie Case
Production Editor: Tamilmani Varadharaj
Cover Image: © jijomathaidesigners/shutterstock