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Diversification Means Always Having to Say You're Sorry—and Why You Should Do It Anyway

In his award-winning book, *The Laws of Wealth*, behavioral psychologist Daniel Crosby explains the psychological pitfalls facing investors, plus he offers practical advice for avoiding those pitfalls and improving returns. In this excerpt, Dr. Crosby documents the poor history of market forecasters who rely on forward-looking models, and explains why relying on them generally leads to poor results. The solution? Diversify and stay the course.

by Daniel Crosby

Our track record in figuring out significant rare events in politics and economics is not close to zero; it is zero. — Nassim Taleb, author of *The Black Swan: The Impact of the Highly Improbable.*

Perhaps we have had little collective success in forecasting the "rare events" studied by Taleb, but what about the track record of more mundane types of financial forecasting? This is important knowledge because, as James Montier asserts, between 80% and 90% of active investment managers *make their decisions on a forecast-based model*.

Famed investor James O'Shaughnessy describes the process as so: "Most common is for a person to run through a variety of possible outcomes in his or her head, essentially relying on personal knowledge, experience, and common sense to reach a decision. This is known as a clinical or intuitive approach, and it is how most traditional active money managers make choices... This type of judgment relies on the perceptiveness of the forecaster." It all sounds sensible enough, until you realize that we are relying on the perceptiveness of forecasters that, as a whole, are not at all perceptive.

Contrarian investor David Dreman found that most (59%) Wall Street "consensus" forecasts miss their targets by gaps so large as to make the results unusable—either under or overshooting the actual number by more than 15%. Further analysis by Dreman found that from 1973 to 1993, the nearly 80,000 estimates he looked at had a mere 1 in 170 chance of being within 5% of the actual number.

James Montier sheds some light on the difficulty of forecasting in his *Little Book of Behavioral Investing*. In 2000, the average target price of stocks was 37% above market price, and they ended up only 16%. In 2008, the average forecast was a 28% increase, and the market *fell* 40%. Between 2000 and 2008, analysts failed to even get the direction right in four out of the nine years.

Finally, Michael Sandretto of Harvard and Sudhir Milkrishnamurthi of MIT looked at the one-year forecasts of the 1000 companies covered most widely by analysts. They found that the analysts were consistently inconsistent, missing the mark by an annual rate of more than 30% on average. The research is unequivocal—forecasts don't work. As a corollary, neither does investing based on these forecasts. *(continued on page 51)*

IN THIS ISSUE

"FOR GOD HAS NOT GIVEN US THE SPIRIT OF FEAR BUT OF POWER, AND OF LOVE, AND OF A SOUND MIND."

EDITORIAL

Easter Meditation: "That's My King!"

Many years ago, before there was the Internet, email, and mp3 downloads, a small package arrived one day from my friend Ted DeMoss. It was a cassette with a brief six-minute message, one that had thrilled my friend's heart. Ted had heard many accomplished speakers during the course of his long ministry, and was an accomplished speaker himself, so I was curious as to what could be said in only six minutes that would touch him so. It was the following message (slightly abbreviated here due to space constraints) by Dr. S.M. Lockridge, pastor of Calvary Baptist Church in San Diego.

The words are stirring, but you won't get the full effect until you hear the powerful presentation from the original sermon by Dr. Lockridge, which you can do on YouTube at tinyurl.com/qa774ok. — AP

The Bible says He's the King of the Jews. He's the King of Israel. He's the King of righteousness. He's the King of the ages. He's the King of heaven. He's the King of glory. He's the King of kings and He is the Lord of lords. Now that's my King!

David says the heavens declare the glory of God, and the firmament showeth His handiwork. No means of measure can define His limitless love. No far-seeing telescope can bring into visibility the coastline of His shoreless supply. No barriers can hinder Him from pouring out His blessing.

Well, well. He's enduringly strong. He's entirely sincere. He's eternally steadfast. He's immortally graceful. He's imperially powerful. He's impartially merciful. That's my King!

He's God's Son. He's the sinner's Savior. He's the centerpiece of civilization. He stands alone in Himself. He's august. He's unique. He's unparalleled. He's unprecedented. He's supreme. He's pre-eminent.

He's the loftiest idea in literature. He's the highest personality in philosophy. He's the supreme problem in higher criticism. He's the fundamental doctrine of true theology. He's the cardinal necessity of spiritual religion. That's my King!

He's the miracle of the age. He's the superlative of everything good that you choose to call Him. He's the only one able to supply all of our needs simultaneously. He supplies strength for the weak. He's available for the tempted and the tried.

He sympathizes and He saves. He guards and He guides. He heals the sick. He cleanses the lepers. He forgives sinners. He discharges debtors. He delivers the captives. He defends the feeble. He blesses the young. He serves the unfortunate. He regards the aged. He rewards the diligent and He beautifies the meek. Do you know Him?

Well, my King is the key of knowledge. He's the wellspring of wisdom. He's the doorway of deliverance. He's the pathway of peace. He's the roadway of righteousness. He's the highway of holiness. He's the gateway of glory. He's the master of the mighty. He's the captain of the conquerors. He's the head of the heroes. He's the leader of the legislators. He's the overseer of the overcomers. He's the governor of governors. He's the prince of princes. He's the King of kings and He's the Lord of lords. That's my King. Yeah. That's my King!

His office is manifold. His promise is sure. His life is matchless. His goodness is limitless. His mercy is everlasting. His love never changes. His Word is enough. His grace is sufficient. His reign is righteous. His yoke is easy and His burden is light. Well…I wish I could describe Him to you, but He's indescribable. He's indescribable. Yes.

He's incomprehensible. He's invincible. He's irresistible. I'm trying to tell you, the heavens of heavens cannot contain Him, let alone a man explain Him. You can't get Him out of your mind. You can't get Him off of your hands. You can't outlive Him and you can't live without Him. Well!

Pharisees couldn't stand Him, but they found out they couldn't stop Him. Pilate couldn't find any fault in Him. The witnesses couldn't get their testimonies to agree, and Herod couldn't kill Him. Death couldn't handle Him and the grave couldn't hold Him. That's my King!

He always has been and He always will be. I'm talking about He had no predecessor and He'll have no successor. There was nobody before Him and there'll be nobody after Him. You can't impeach Him and He's not going to resign. That's my King! Praise the Lord! That's my King!

Thine is the kingdom and the power and the glory. The glory is all His. Thine is the kingdom and the power and the glory, forever ... and ever ... and ever ... and when you get through with all of the forevers, then, Amen. ◆

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Diversification Means Always Having to Say You're Sorry—and Why You Should Do It Anyway

(continued from front page)

Confidently incompetent

You might think that the bad news about forecasting couldn't get any worse, but you'd be wrong. Not only are forecasters bad in aggregate, but the worst forecasters of all are the ones we are most likely to tune in to.

Philip Tetlock of UCLA performed the most exhaustive study of expert forecasts to date, examining 82,000 predictions over 25 years by 300 experts. The overarching conclusion of the study is what you might now expect—"expert" forecasts barely edge out flipping a coin. More damning still were Tetlock's other findings, that the more confidence an expert had, the worse his predictions tended to be and that the more famous an expert was, the worse her predictions were on average.

Let's take a moment to consider the mechanics of how confidence and fame get turned on their heads in the world of financial forecasting. Consider the pedigree of a rock star forecaster: she has a PhD in Financial Engineering from Harvard, holds the hard-won distinction of being a Chartered Financial Analyst (CFA), and has scratched and clawed her way to the top of the heap at Goldman Sachs.

To put it mildly, most financial experts are smart, wealthy, successful and used to getting their way. In the face of such widespread prowess, it becomes easy to see how a sort of boldness emerges. As Dr. Brian Portnoy says, "...precisely because they know so much about a particular subject—they are comfortable offering bold predictions." But this boldness leads to hubris that begets poor results for those heeding their advice.

When Tetlock's "experts" were asked to rate their confidence, those who asserted having over 80% confidence in their opinion were still right *less than half of the time*. Worst of all, when informed of their inaccuracy, forecasters had a predictable set of excuses (e.g., "It just hasn't happened yet!") that kept them from improving the quality of their prognostications going forward.

Confidence appears to be a hindrance to effective forecasting, but what are we to make of Tetlock's finding that the most famous experts tended to have the least accurate forecasts? Given the sheer number of market forecasters and the limited range of possibilities from which to choose, there are bound to be winners each year that correctly forecast even three standard-deviation type outcomes. Typically, these improbable calls are made by either perma-bears or perma-bulls whose constant and typically unchanging thesis happens to align periodically with the facts of the day. Many of those who "called" the 2008 financial crisis had been calling for just such a crisis for years, making them more like the proverbial broken clock that is right twice a day than any sort of financial prophet.

Nevertheless, the financial press is always looking for a seer and exposure tends to follow those who make dramatic calls. Having built a career on the strength of a dramatic call, the newly crowned market prophets tend to—you guessed it—keep making bold predictions, typically similar to the one that made them famous to begin with. The problem with this approach is twofold; markets tend to be fairly boring on average, and the causes of the last crisis tend to have little in common with the seeds of the next crisis. By always fighting the last war and making dramatic calls in undramatic times, the world's most famous experts tend to underperform their less prominent colleagues.

Perverse incentives

We now know that financial forecasting is an exercise in futility that is only made worse by fame and overconfidence. But if we are to come up with an alternative to relying on forecast-based investing advice, we must first examine some of the structural impediments that make forecasting so difficult. Chief among these is that Wall Street analysts are not paid for the accuracy of their forecasts and often have perverse incentives to mislead investors.

Dartmouth professor Kent L. Womack found that analysts in the early 1990s were making about six "buy" recommendations for every one "sell" call on the stocks they covered. But by the turn of the century, that ratio had ballooned to nearly 50 "buys" for every sell rating. Instead of warning investors against the rising tide of euphoria that created the Tech Wreck, the analysts even helped to further that mania by acting in their own self-interests.

Researchers have found that nearly a third of all firms have negative long-term earnings, meaning that accurate forecasts would require analysts to issue "sell" calls on around one-third of all stocks at any given time. In reality, the number of firms projected by analyst calls to have negative earnings is 17/100 of 1%.

If this systematic bias toward optimism were just part of our frail psychology it might be forgiven. Sadly though, the reasons for this buy tilt are baked into the very way in which the game is played. If forecasting is hard for reasons all its own, it is made impossible in practice by the way that Wall Street analysts are rewarded.

To recap: analysts are supposed to issue dispassionate buy and sell recommendations in appropriate measure, but work for companies who profit from a "buy" call and make no money on a "sell." What's more, the companies themselves may withhold the very information needed to make an honest appraisal if the analyst does not pre-commit to cooperate. Imagine a weatherman paid on sales of umbrellas or a baseball umpire allowed to bet on games and you will have an excellent analogy to the murky incentives of a financial analyst.

Nearly 100 years ago, Alfred Cowles conducted one of the first studies on the efficacy of financial forecasting, intuitively titled, 'Can Stock Market Forecasters Forecast?' In his results, Cowles found that only one-third of forecasters could do their job: namely, pick market-beating stocks over the course of a five-year period. As Charles Ellis says, "forecasting the future of any variable is difficult, forecasting the interacting futures of many changing variables is more difficult, and estimating how other expert investors interpret such complex changes is extraordinarily difficult."

Ellis's comments are true in a vacuum and are made increasingly so by the fact that egos have gotten bigger and incentives more convoluted in the time since Cowles did his work. In my estimation, the entire Wall Street forecasting-industrial-complex could be done away with today with zero harm, and indeed much good, accruing to the individual investor.

It is unrealistically nihilistic to assume that there is nothing that can be known about stocks that can give you a probabilistic edge in making financial decisions. Conversely, it is unrealistically optimistic to assume that anyone, no matter how worldly or educated, is able to predict the future with any useful degree of certainty.

The middle ground between these two approaches must (1) scrupulously *avoid conjecture about the future*, (2) *rely on systems* rather than biased human judgment, and (3) *be diversified* enough to show appropriate humility.

How to get rich…or poor

If you're ever desirous to feel as though you are impossibly poor, take a look at the Forbes 400 list of the richest people in America. Once the jealousy has subsided, view the list with an eye to what its members have in common.

At first glance nothing may stand out. Some, like Oprah Winfrey, come from humble beginnings, whereas others, like Donald Trump, inherited a small fortune at a young age. They are black and white, male and female, young and old, but keep looking and you'll notice one thing—most of them became extravagantly rich from a concentrated position, typically in a single company. Whether it's Bill Gates and Microsoft, Warren Buffett and Berkshire Hathaway, or Mark Zuckerberg and Facebook, they are not very well diversified.

If concentration is the *sine qua non* of ridiculous wealth, how then can I (and every financial professional you have ever met) possibly tout the merits of diversification? It's because while concentration is the fastest way to impossibly high levels of wealth, it is also the fast train to low levels of wealth. Get rich fast and get poor fast are opposing sides of the same coin.

Harry Markowitz gets most of the credit in financial circles for popularizing diversification across asset classes, but the understanding of diversification as a behavioral tool is ancient. The Bible mentions the benefits of diversification as a risk management technique in *Ecclesiastes*, a book estimated to have been written around 935 BC. It reads: "But divide your investments among many places, for you do not know what risks might lie ahead" (11:2 NLT). The Talmud too references an early form of diversification, the prescription there being to split one's assets into three parts—one-third in business, another third in currency and the final third in real estate.

It is interesting to note how these early mentions of diversification focus as much on psychology as they do on the financial benefits of diversification, for investing broadly is as much about managing fear and uncertainty as it is concerned with making money. At its essence, diversification is applied humility in the face of an uncertain future. I think of diversification much the same way that insurers think of providing coverage. Just as some insured folks will have accidents that trigger a payout every year, many more will not. Insurance companies make money because their risk is diversified across the corpus of those paying premiums. Similarly, when you are diversified between and within asset classes, the failure of one single type of investment does not dramatically diminish your odds of long-term success.

If my insurance analogy leaves you cold, Ben Carlson suggests thinking of diversification as a form of regret minimization. As he says in *A Wealth of Common Sense*, "Some investors will regret missing out on huge gains while others will regret participating in huge losses. Which regret will wear worse on your emotions?"

Now, before you answer, let me say that the research suggests fairly unequivocally that you will regret participating in losses more than you will regret missing out on huge gains. Daniel Kahneman and Amos Tversky found when examining the utility curve for gains and losses that we hate losing far more than we love winning. Tennis star Andre Agassi put this into words well when he said, "Now that I've won a slam, I know something very few people on earth are permitted to know. A win doesn't feel as good as a loss feels bad, and the good feeling doesn't last as long as the bad. Not even close."

Perhaps you are the rare breed of human that feels the pain of missed gains more than the pain of realized losses. In that case, get uber-concentrated and prepare for a wild ride. But if you're like the rest of us, diversification goes a long way toward decreasing volatility en route to meeting our long-term financial goals.

Humility in practice

Take, for example, the "Lost Decade" of the early aughts, thusly named because investors in large capitalization US stocks (e.g., the S&P 500) would have realized losses of 1% per annum over that ten-year stretch. Ouch. Those who were evenly diversified across five asset classes (US stocks, foreign stocks, commodities, real estate, and bonds), however, didn't experience a lost decade at all, realizing a respectable annualized gain of +7.2% per year. Other years, the shoe is on the other foot. Over the seven years following the Great Recession, stocks exploded upward while a diversified basket of assets had more tepid growth. In fact, you can take it to the bank that some of your assets will underperform every single year, a reality acknowledged in Dr. Brian Portnoy's phrase, "Diversification means always having to say you're sorry."

The simple fact is that no one knows which asset classes will do well at any given time and diversification is the only logical response to such uncertainty. For instance, stocks and bonds have only been down in the same year three times since 1928 (1931,1941 and 1969), meaning that their mutual presence serves as a buffer in tough times. Just as an airbag is a useless expense until you get in a wreck, bonds are a drag on performance—until they aren't.

But conceding to uncertainty does not have to mean compromising returns. In fact, broad diversification and rebalancing have been shown to add half a percentage point of performance per year, a number that can seem small until you realize how it is compounded over an investment lifetime. Take, for example, the case of European, Pacific and U.S. stocks cited in *A Wealth of Common Sense*. From 1970 to 2014, the annualized returns were as follows:

European stocks +10.5%
Pacific stocks +9.5%
U.S. stocks +10.4%

Similar returns, but let's examine what happens when all three markets are combined, equally weighted and rebalanced each year-end to maintain consistent portfolio composition. In what can only be described as a diversification miracle, the average return of the portfolio over this time is +10.8% annualized—greater than any of its individual parts! Each market had good years and bad years and the automatic rebalancing has the effect of selling winners and buying losers. *Buying low and selling high*—sound familiar? By entering when stocks were cheap and exiting when they became more expensive, the synergistic effects of diversification are realized.

In addition to the benefits of diversification already mentioned, owning a number of asset classes tends to tamp down volatility, which in turn reduces "variance drain." Variance drain sounds heady, but in a nutshell it refers to the detrimental effects of compounding wealth off of lower lows when investing in a highly volatile manner. Even when arithmetic means are the same, the impact on accumulated wealth can be dramatic.

OK, so it's still heady! Let's take an example to show how this works. Say you invest $100,000 each in two products that both average +10% returns per year, one with great volatility and the other with managed volatility. The managed volatility money rises +10% for each of two years, yielding a final result of $121,000. The more volatile investment returns -20% in year one and a whopping +40% in year two, also resulting in a similar +10% average yearly gain.

The good news is that you can brag to your golf buddies about having achieved a +40% return—you are an investment wizard! The bad news, however, is that your investment will sit at a mere $112,000, fully $9,000 less than your investment in the less volatile investment since your gains compounded off of lower lows. Very few investors understand that it takes a 100% gain to recoup from a 50% loss. The value of diversification is largely that it smoothes the ride, resulting in greater compounded wealth and an experience less susceptible to bad investor behavior.

I said earlier that the common thread uniting the ultra-wealthy of all stripes was an extremely concentrated portfolio, one stock in many cases. Perhaps you would like to pick just one stock as you have visions of driving a Maserati, indefinitely forgoing water for champagne and hiring a manservant named Clarence. Well, before you pop that Cristal, let me encourage you to read the study recently conducted by Longboard Asset Management. Longboard found that nearly 40% of stocks lose money over their lifetime, 64% underperform a broad market index and *one-quarter of stocks account for basically all of the gains in the market over time*.

It is seductive to think of how your wealth would have exploded had you bet it all on (insert favorite story stock here), but history tells us that the odds are twice as great that you'll go broke on a single stock as you will hit it big. For now, it's probably best to drink water, do your own dishes, drive that Camry and, above all, diversify.

It's a small world after all

Having hopefully now convinced you of the importance of diversification, let me deliver a bit of bad news—it's getting harder to do. Like anything, globalization has had its pros (blending of cultural traditions, increased empathy) and cons (nationalism, destruction of indigenous cultures), but its impact on our best efforts at diversification is undeniable.

In a world that is increasingly connected, it is getting more and more difficult to invest in assets that are truly uncorrelated (that is, finding investments that respond differently to economic and market forces).

From 1971 to 1999, the 12-month correlation between the S&P 500 and the MSCI EAFE (the index of world shares, excluding the U.S.) was 0.42. (A correlation of 1.0 means two investments respond exactly the same, so you get zero diversification benefit.) From the turn of the century on it has averaged 0.83!

Commodities have suffered a similar loss of uniqueness. Throughout the 1990s and early 2000s, the average one-year correlation among indexed commodities remained at about 0.10. By 2009 it had quintupled in value to 0.50! Worse still, the correlation between commodities and equities rocketed to 0.80 during the financial crisis of 2008, losing their power to diversify just as it was most needed.

As the world continues to shrink and our interdependence grows, it seems intuitive to suggest that asset classes of all sorts will look more and more like one another. The basic tenets of diversification within and among asset classes are timeless and will continue to serve investors well, but within this larger framework, investors will need to seek out new sources of uncorrelated returns.

Studies of ethnically and psychologically diverse (i.e., having varied personality types) corporate teams have yielded some fascinating results. Diverse teams take longer to make decisions, argue more, and generally have a more circuitous path to performance than less diverse teams. However, they also make better decisions, evaluate a wider range of possibilities and, most importantly, tend to create more profitable businesses.

Likewise, owning a diverse basket of assets or stocks is a certain recipe for disappointment if you take too narrow a view. There will always be laggards and your mind will generate an endless stream of "if only" scenarios that would have been superior to humble diversification. But considered as a whole portfolio over long-periods of time, the power of diversification is so profound that hedge fund titan Cliff Asness calls it "the only free lunch in investing." Diversification may mean always having to say you're sorry, but it's far better than what you'll be saying if you don't diversify. ◆

This is an excerpt from *The Laws of Wealth* by Dr Daniel Crosby, published by Harriman House in 2016. You can buy the book directly from the publisher at harriman-house.com/the-laws-of-wealth or from Amazon at amzn.to/2lJ4EEZ.

LEVEL 1 ONE

Strengthening Your Foundation

Wise money management begins with a strong financial foundation. In this column, we cover topics such as how to manage cash flow, apply strategies for getting debt-free, make wise purchasing decisions, build savings, choose appropriate insurance protection, navigate marital financial issues, and many more.

"By wisdom a house is built, and through understanding it is established." Proverbs 24:3

WHAT IF YOU CAN'T PAY UNCLE SAM?

No one likes unexpected expenses, especially *large* unexpected expenses. This time of year, one such expense can be income taxes. You're probably aware of this year's April 18 filing deadline, but maybe you weren't prepared to owe additional tax. Even worse, perhaps you weren't prepared for *how much* you have to pay.

Self-employed people are common candidates for income-tax bill shock, especially if you had a really good year in 2016 but didn't make sufficient quarterly payments. Or maybe you had a tough year, including a time of unemployment, which has left you short on funds to pay this year's bill.

Before we get to some options for squaring things up with the IRS, it's important to note that even if you can't pay the full amount you owe, you still have to *file* your income-tax return (or request a filing extension) on time. Not filing will typically cost you a penalty of 5% of the amount you owe for each month you're late, plus interest. Even if you can't *pay* on time, *filing* on time will mean a much lower penalty—0.5% to 1% of what you owe, plus interest, per month. So be sure to file your return on time and pay as much as you can.

Next, you'll have to figure out how to pay what you owe. Don't let this slide. Uncle Sam can be a patient creditor if you're in touch with him and work things out. He's even made it easier to qualify for the programs described below. However, if you give him the silent treatment, he may play hardball—garnishing your wages, taking money from your bank accounts, or slapping a lien on your property.

Don't let things get to that point. Instead, explore the following options:

• **Short-term agreement.** If you think you can pay all of what you owe within 120 days of April 18, apply for a short-term agreement online[1] (you'll find out if you're approved right after entering the required information) or call the IRS at 1-800-829-1040. There is no fee for a short-term agreement, but penalties and interest will be charged. Still, they should amount to less than what you'd have to pay with a longer-term payment agreement.

• **Installment agreement.** If you can pay what you owe but you're not going to be able to do so within 120 days, apply for an installment agreement,[2] which may allow you to make monthly installments over the course of up to 72 months. If you owe $50,000 or less, you should be able to set up an installment agreement online. If you owe more than $50,000, you may need to supply the IRS with a Collection Information Statement (Form 433-A or 433-F, available at www.irs.gov). There is a fee of $225 to establish an installment agreement, or $107 if you agree to have your payments automatically deducted from your bank account.

• **Temporary delay.** If your circumstances are such that you're not sure when you'll be able to pay, call the number above. The IRS may temporarily delay collection[3] until your financial condition improves. However, your debt will grow because penalties and interest will be charged until you come up with the full amount. During the temporary delay, the IRS will continue to review your ability to pay.

• **Offer in compromise.** If it isn't realistic for you to *ever* pay what you owe, or if paying would create a financial hardship for you, an offer in compromise[4] may enable you to settle your tax debt for less than you owe. Whether you'll qualify depends, in part, on your income (you must earn less than $100,000), expenses, asset equity, and the IRS' assessment of your ability to pay. Historically, relatively few offers in compromise have been accepted, although the rules have loosened in recent years.

There is a non-refundable $186 application fee and most applicants have to make an upfront, non-refundable partial payment when they apply. If you're offering to settle with a lump sum payment, you'll have to submit 20% of that amount when you apply. If you are offering to settle by making monthly payments, you'll have to submit the initial payment with your application and keep making those payments as you wait to hear whether your offer has been accepted.

• **Avoid outside "assistance."** You may be tempted to turn to a private company for help in settling your tax debt for less than you owe through an offer in compromise, but beware. Such companies often charge steep upfront fees, and there are some unscrupulous players in this field. In fact, what was once the nation's largest tax-resolution company went bankrupt after being sued in numerous states over allegations that it misled consumers and failed to produce results. The Federal Trade Commission offers tips and warnings related to working with private tax-settlement companies.[5]

• **Consider *inside* assistance.** If you are having a difficult time resolving an IRS tax dispute, contact the IRS Taxpayer Advocate Service. This is an independent organization within the IRS designed to provide free help to taxpayers experiencing significant hardships. To get in touch or to learn more about your options if you can't pay your tax bill, visit their web site[6] or call 1-877-777-4778.

Take action

If you're struggling to pay your bills, you may be tempted to ignore the problem. But creditors are more likely to work with people who contact them, explain the situation, and express a commitment to pay. As the options described above demonstrate, that's true even of the IRS. For more guidance on what to do if you can't pay your tax bill, read, "The 'What-Ifs' for Struggling Taxpayers"[7] on the IRS web site. ◆

[1]bit.ly/2m6kPh7 [2]bit.ly/2nJL0qb [3]bit.ly/2nwzWO2 [4]bit.ly/2mzdqD9
[5]tinyurl.com/mgfect3 [6]bit.ly/2nww4g0 [7]bit.ly/2m6rR5B

Developing Your Investing Plan

Investing decisions are best made as part of a comprehensive personalized plan. In this column, we focus on topics that will help you implement an investment strategy that takes into account your personal goals, attitude toward risk-taking, and current season of life. We explain investing essentials, discuss SMI's core investing strategies, and help you decide which is best for your situation.

"The plans of the diligent lead to profit as surely as haste leads to poverty." Proverbs 21:5

THE TRUTH ABOUT P/E RATIOS

Noted economist and fund manager John Hussman warns we've recently arrived at "the most broadly overvalued moment in market history." Nobel prize-winner Robert Shiller warns "the market is way overpriced." Yet plenty of other famous investors disagree. Warren Buffett recently went on record saying "We are not in bubble territory or anything of the sort. Measured against interest rates, stocks are actually on the cheap side."

Legendary investor Benjamin Graham famously said, "In the short run, the market is a voting maching, but in the long run it is a weighing machine." His point was that investors "vote" with their dollars for various stocks based on many factors, including popularity. This greatly influences prices in the near term. But ultimately, the stock market rewards investors who appropriately size up the true *long-term* value of specific companies or markets as a whole and act accordingly. But as the earlier quotes make plain, that's easier said than done.

Trailing P/E

One of the most widely-used statistics that attempts to determine if stocks are fairly priced (as opposed to being bargains or too expensive) is the price/earnings ratio (P/E). The P/E is calculated by taking the price of an index (or stock) and dividing it by the reported earnings that index (or stock) generates in one year.

Using the S&P 500 index as an example, one would take the price of the index, which was 2,385 in mid-March, and divide that by the earnings per share reported by the S&P 500 companies over the past four quarters. At the end of 2016, those earnings were $94.54, resulting in a P/E for the S&P 500 of 25.2 (2,385 / 94.54). This formula generates what is referred to as a "trailing" P/E because it uses actual earnings that have already been reported.

Forward P/E

The problem with a trailing P/E is that investors generally care more about what they think stocks will do in the *future* than what they've done in the *past*. As a result, many prefer to measure valuations based on what earnings are expected to be in the coming year. This "forward" P/E calculation differs in that it uses estimates of what earnings will be over the next four quarters (which are unknown) rather than using past earnings (which are known).

Applying this forward P/E approach to the S&P 500 index, we again take its current price (2,385), but divide that by S&P's estimate of reported earnings for the next 12 months, which are $118.83.[1] This gives us a "forward" P/E of 20.1.

Unfortunately, history has proven that forward-looking earnings estimates are almost always too optimistic. How likely is it that the S&P 500 companies will earn $118.83 per share in 2017? Considering that earnings peaked in the third quarter of 2014 at just $105.96, and are currently stuck at the same level they first reached in the third quarter of 2013, an honest observer would have to conclude the chances of hitting that lofty estimate this year are slim.

S&P 500: 1926-2016
AVERAGE ANNUAL RETURNS

CAPE Ratio	3 Yrs	5 Yrs	10 Yrs
5 to 10	19.8%	18.3%	15.5%
10 to 15	15.6%	13.4%	13.9%
15 to 20	6.9%	8.0%	9.7%
20 to 25	8.9%	8.6%	5.7%
25 & Higher	0.4%	0.7%	3.9%

Source: Robert Shiller

CAPE Ratio

As you can see, relying on short-term data—either past or future—can lead to significant differences in this valuation measure. This becomes particularly acute when the economy is expanding or contracting quickly.

In an effort to filter out some of this short-term "noise" in calculating P/E ratios, Robert Shiller has popularized an alternate P/E calculation that is based on the earnings of the index *over the past 10 years*. This "Cyclically Adjusted PE," or CAPE ratio, smooths out the impact of recessions, bull/bear market excesses, and other short-term fluctuations.

While traditional P/E ratios have generally failed to show predictive power in terms of the stock-market's performance, CAPE has a better track record, *particularly when the CAPE ratio reaches historically extreme readings*. When the CAPE has reached extreme highs in the past, the market has tended to perform poorly over the next several years. On the flip side, when CAPE has been at historically low extremes, stocks have produced outstanding returns.

That said, it's critical to understand that CAPE tells us very little about how the stock market will perform *in the near-term*. Its predictive power has only been meaningful over longer time periods.

Looking at the nearby table, this relationship between current market valuation, as measured by CAPE, and future performance becomes clear. When the market's CAPE ratio is high (i.e, the market is relatively expensive), future returns have been low. That general pattern begins to emerge in periods as short as three years, but becomes iron-clad as the period measured extends to the coming 10 years. The higher the market's current CAPE valuation, the lower the longer-term rate of return has been.

Unfortunately, those low future returns rarely come about because the stock market merely drifts sideways for an extended period of time. History is quite clear that periods during which CAPE ratios increase to extreme levels are typically followed by crushing bear markets. Afterwards, the subsequent bull market raises prices, but only enough to generate the poor average returns shown in the bottom line of the table.

Current analysis

As of mid-March 2017, the market's CAPE ratio stood at 29.3. *(continued on page 61)*

[1] us.spindices.com/documents/additional-material/sp-500-eps-est.xlsx

Broadening Your Portfolio

This column goes beyond the investing essentials taught in Level 2, introducing you to a wider range of investment securities and markets. By further diversifying your holdings, you can create a more efficient, less volatile portfolio. We also comment quarterly on the performance of the various markets, and on how SMI's fund recommendations and strategies have fared.

"Divide your portion to seven, or even to eight, for you do not know what misfortune may occur on the earth." Ecclesiastes 11:2

NO SUCH THING AS "NORMAL"

By all accounts, 2008 was a most unusual year. The economy and financial system were rocked with abnormal events, and the prices of most financial assets fell sharply. Ever since, many have been eagerly anticipating a time when the markets return to normal. Some may even have sold all their stock holdings at that time, and are still waiting until normality returns so they can get off the sidelines and invest again.

There's only one problem: when it comes to the investment markets, "normal" conditions don't exist. A generation of investors has been taught that "the stock market averages gains of +10% per year." Never mind the fact that this statistic applies to only one portion of the stock market—the largest companies that make up the popular S&P 500 index. More importantly, investors have failed to learn *how* those returns are experienced in real time. We suspect that even among SMI readers, what follows will be something of a surprise.

One by-product of repeatedly hearing that the market earns roughly +10% annually on average is that many investors assume that's what a normal year looks like. But as the nearby chart shows, expecting the market to gain somewhere around +10% most years doesn't match the historical record at all.

The chart assigns each year since 1926 (when the data series first began) to the column reflecting the stock market's return for that year. The returns are based on a portfolio composed of *one-half large company stocks* and *one-half small company stocks*. Because smaller companies have historically turned in better long-term performance than large ones, you'll see that the long-term average annualized return of this portfolio is +11.5% (as opposed to the +10% earned by the S&P 500 index). This "small-company advantage" is the reason SMI allocates half of the U.S. stock component to smaller companies in our Just-the-Basics and Stock Upgrading basic strategies.

If stock market returns were "normally distributed" around the market's long-term average gain, the chart below would form the familiar looking bell-curve shape that most investors intuitively expect. Most of the years would be clustered around the middle "8%-12%" column, with increasingly larger gains and losses becoming less frequent as you moved further away from the average. But that's not what the chart shows! Rather, it shows a relatively even distribution across a surprisingly wide spectrum of annual performance.

Last month, we used this same data (from Ibbotson Associates) to demonstrate how staying invested in stocks over extended periods of time increases the likelihood of achieving normal returns.[1] But those returns approach normal only when annualized over periods of many years. The individual *year-to-year* returns within those longer periods are quite volatile.

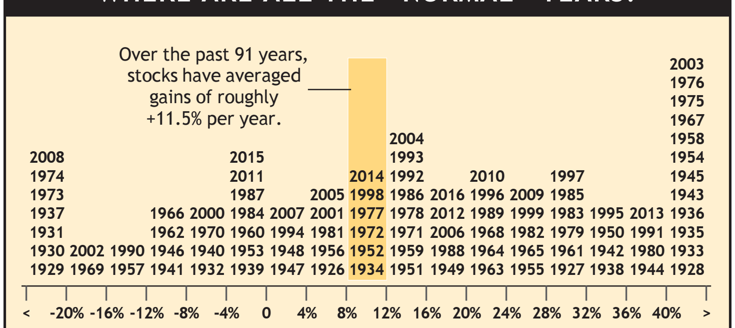
The point is this: longer investment time horizons do help accomplish the goal of realizing "normal" long-term returns. But they do so by accumulating a wide variety of annual returns, whose unpredictability is the only "normal" characteristic they have in common. One implication of this is that it is nearly impossible to achieve the type of *long-term* results most stock investors desire without having to deal with the type of *short-term* volatility the chart portrays.

How long is the "long-term" required to achieve the roughly +11% average return of the past several decades? That depends on how you look at it. In last month's Level 3 article, we saw that average annualized returns begin to gravitate toward the 10%+ range once holding periods reach 5-10 years. This is why we've frequently used those holding periods as cutoffs for defining if money should or should not be invested in stocks.

Again, what most investors fail to understand about investing in stocks is that years with +8 to +12% type returns are few and far between. Look at the chart—it's happened only six times in the past 91 years! Instead, what most investors think of as extreme years happen much more frequently than most expect. These rather extreme returns generated during long bull periods (1982-2000, 2009-2016) and sharp bear markets (2000-2002, 2007-2009) combine to produce the long-term average that investors have come to depend on.

So, while it's reasonable to assume a diversified stock portfolio will produce rates of return in the +8% to +12% range, just don't plan on those returns arriving "normally." ◆

WHERE ARE ALL THE "NORMAL" YEARS?



[1] March2017:p40

Looking Toward Retirement

As you move through your 50s, 60s, and beyond, you face a new set of financial decisions related to reducing your investment risk and generating income from your portfolio. In this column, we address such topics, as well as those pertaining to Social Security, long-term health care, advanced giving strategies, estate planning, and other matters of importance to those nearing and in retirement.

"There is precious treasure and oil in the dwelling of the wise." Proverbs 21:20a

GIVING TO THE GRANDKIDS

by Russ Crosson[1]

I'm always amazed at grandparents who are unwilling to leave large sums of money to their own children because they weren't trained to manage it well, but they will leave significant sums to grandchildren who can't even talk or walk yet. These grandchildren haven't been trained in spiritual and social capital, let alone financial stewardship.

For the most part, I recommend that grandparents not give large cash gifts or assets to their grandchildren either outright or in trust. Instead, this money should go to their adult children (the grandchildren's parents). Even though this recommendation may be inconsistent with sophisticated estate-tax planning techniques, such as income shifting and generation skipping, a trust can do more harm than good to grandchildren. Since their parents don't have control over the trust's ultimate distribution, the grandchildren could develop a slothful attitude throughout their lives as they wait for the trust funds to be distributed.

Outright gifts, or gifts in custodial accounts, can also be harmful. These funds are immediately available to the child or, in the case of custodial accounts, will be available at the age of majority (18 or 21, depending on the state). In most cases, a young child is better off having too little money than too much. Also, if the parents are teaching the child how to be a good money manager, the grandparents' gift of a significant sum can undermine the parents' efforts.

I feel *any* cash gift should be made to a grandchild only after discussing with the parents the impact this money can have on the grandchild, and agreeing on the expected use of this money (a discussion which could involve the grandchild). This doesn't mean grandparents can't give their grandchildren small cash gifts, as they would toys and clothes on birthdays and Christmas. However, grandparents and parents should determine what constitutes a "small gift." For some, the allowable limit may be $20; for others, it may be $100. Also, the amount may increase with the age of the grandchild. Obviously the timing of the gifts is important. To give a grandchild $100 on a birthday should not pose a big problem, but to give a grandchild $100 every time the grandparents see the grandchild could be too much.

Is there ever a time to leave significant cash or assets to grandchildren? Yes. Cash and/or assets can be left to grandchildren in trust, outright, or in a custodial account for a predetermined purpose—if agreed upon by the parents and grandparents. For example, the grandparents could fund the grandchild's private school and college education, as long as the grandchild's parents agree. College education and private school are two areas typically outside the traditional guidelines of parental obligation of support (food, shelter, clothing, public schooling, medical care). I've found that help in these areas is appreciated and typically doesn't impact the parents' feelings of provision.

A few guidelines about large gifts. First, the grandparents shouldn't constantly remind the parents, grandkids, or others of what they've given. In some cases, grandparents have used the gifts as leverage to get the parents or grandkids to behave certain ways. Real gifts don't have strings attached or create implied obligations.

Second, the grandparents' motivation to do something for the grandchildren should never be used as some form of punishment to their own children (the grandchildren's parents), which is why giving the money to the parents is better. Don't skip a generation just because you're upset with your children.

Third, if you want to fund your grandchildren's college education, the amount should be such that, with standard assumptions on earnings and education costs, the majority of the funds will be used up by the time the child finishes college. You don't want him or her to receive a significant amount of money after college that might instill complacency or encourage a poor work ethic.

Finally, trusts or custodial accounts for grandchildren usually should be funded only if the parent (your child) has no personal need for the funds. It can be very frustrating to a parent to watch significant sums of money accumulate in a child's "education account" while the parent's needs go unmet.

In some situations, the grandparents don't trust the parents and feel they must take care of the grandchildren. This thinking usually creates more problems between the parents and grandparents. Although some tax benefits can be derived from giving gifts to grandchildren, these benefits are secondary. The most important considerations for grandparents when giving a gift are the potential impact on the grandchildren and the impact on their relationship with their own children (the parents).

Creative ways to use your money

Rather than showering grandchildren with money, let me offer some suggestions that are consistent with the concept of "buying time" to develop a godly posterity—that is, godly descendants.

- **Take the parents and grandchildren on a vacation.** Most young couples don't have discretionary funds to take the nicer vacations. If the grandparents offer to pay for the trip and include everybody, they are investing in a family memory. Not only will a trip together create memories, but the grandparents can spend time with the grandchildren and reinforce the values and qualities the parents are teaching them. It could be as *(continued on page 61)*

[1]Russ Crosson is President and Chief Executive Officer of Ronald Blue & Co. (www.ronblue.com), a national wealth-management firm headquartered in Atlanta, GA. He and his wife, Julie, are the parents of three children. This article was excerpted from his excellent book, Your Life...Well Spent.

SOUND MIND PORTFOLIOS

Basic Strategies

The fund recommendations shown for Upgrading accountholders are based primarily on their most recent "momentum" scores at mid-month (not the earlier end-of-month scores shown on this page), but consistency of performance and the portfolio manager's philosophy and number of years at the helm are also important. Three recommendations are made in each risk category so that you can select the one(s) most in accord with your preferences and broker availability.

"Plans fail for lack of counsel, but with many advisers they succeed." Proverbs 15:22

RECOMMENDED FUNDS FOR SMI'S JUST-THE-BASICS STRATEGY

Data through 2/28/2017	Portfolio Invested In	MOM	Performance YTD	1Mo	3Mo	6Mo	12Mo	3Yr Avg	Rel Risk	Expense Ratio	Stock/Bond Mix 100/0	80/20	60/40	40/60	Ticker Symbol
Total International Stock ETF	Foreign stocks	32.5	5.5%	1.3%	7.5%	5.1%	19.9%	0.3%	1.13	0.11%	20%	16%	12%	8%	VXUS
Extended Market Index ETF	Small company stocks	50.8	4.6%	2.4%	6.5%	11.6%	32.7%	6.9%	1.29	0.09%	40%	32%	24%	16%	VXF
S&P 500 Index ETF	Large company stocks	42.9	5.7%	3.9%	7.9%	10.0%	25.0%	10.6%	1.00	0.05%	40%	32%	24%	16%	VOO
Total Bond Mkt Index ETF	Medium-term bonds	0.1	0.8%	0.6%	1.1%	-2.3%	1.3%	2.5%	1.02	0.06%	None	20%	40%	60%	BND

VANGUARD JUST-THE-BASICS FOOTNOTES: Just-the-Basics is an indexing strategy that requires just minutes a year to assure that your returns are in line with those of the overall market. You won't "beat the market" using this simple strategy, but neither will you fall badly behind. Your JtB portfolio should be allocated among as many as four Vanguard funds (as shown above) depending on your stock/bond mix. For more on Just-the-Basics, see June2012:p89.

RECOMMENDED FUNDS FOR SMI'S FUND UPGRADING STRATEGY

Risk	Data through 2/28/2017[1]	Date Added	Scottrade Avail[2]	Fidelity Avail[2]	Schwab Avail[2]	MOM[3]	Performance YTD	1Mo	3Mo	6Mo	12Mo	3Yr Avg	Relative Risk[4]	Exp Ratio	Number Holdings	Redemp Fee?[5]	Ticker Symbol
Category 5 Foreign	1. Oakmark International	12/16	NTF	NTF	NTF	48.3	4.9%	0.8%	8.5%	13.0%	26.8%	0.5%	1.45	1.00	70	None	OAKIX
	2. Longleaf Partners Intl	09/16	Yes	Yes	Yes	44.1	6.3%	2.3%	5.5%	7.3%	31.3%	-3.1%	1.64	1.28	20	None	LLINX
	3. Third Ave International Value	01/17	NTF	NTF	NTF	63.7	6.4%	1.1%	9.2%	14.5%	40.0%	-2.3%	1.65	1.65	40	2%60days	TVIVX
Category 4 Small/Growth	1. ☎ Baron Discovery	04/17	NTF	NTF	NTF	66.1	7.2%	4.1%	6.9%	12.1%	47.0%	4.8%	1.78	1.35	63	None	BDFFX
	2. Oberweis Micro Cap	11/15	NTF	NTF	NTF	65.7	5.2%	3.2%	7.1%	16.2%	42.4%	7.2%	1.49	1.72	86	1%90days	OBMCX
	3. Champlain Mid Cap	05/16	NTF	NTF	NTF	54.0	6.5%	3.6%	8.3%	11.8%	33.9%	10.9%	1.09	1.20	61	None	CIPMX
Category 3 Small/Value	1. AMG Fairpointe Mid Cap	03/17	NTF	NTF	NTF	63.6	5.4%	2.3%	7.4%	20.4%	35.9%	7.4%	1.51	1.12	46	None	CHTTX
	2. Towle Deep Value	06/16	Closed	Closed	Closed	102.3	3.5%	1.6%	6.0%	25.9%	70.4%	11.8%	2.29	1.20	35	2%90days	TDVFX
	3. iShares Russell 2000 Value	12/16	ETF	ETF	ETF	61.6	0.6%	1.4%	4.8%	15.7%	41.2%	8.3%	1.47	0.25	1364	None	IWN
Category 2 Large/Growth	1. ☎ Guggenheim S&P 500 Tech	04/17	ETF	ETF	ETF	62.9	9.2%	4.5%	9.8%	15.4%	37.7%	15.3%	1.38	0.40	68	None	RYT
	2. Oakmark Fund	01/17	NTF	NTF	NTF	54.2	4.1%	2.8%	5.8%	14.3%	34.2%	9.5%	1.20	0.89	54	None	OAKMX
	3. Parnassus Endeavor	01/17	NTF	NTF	NTF	52.4	4.3%	3.3%	6.4%	13.3%	32.7%	15.0%	1.12	0.95	27	None	PARWX
Category 1 Large/Value	1. Dodge & Cox Stock	12/16	Yes	Yes	Yes	62.8	5.3%	3.0%	6.7%	18.0%	38.1%	10.1%	1.24	0.52	69	None	DODGX
	2. JPMorgan Large Cap Value	03/17	No	NTF	NTF	63.0	5.1%	3.4%	8.0%	19.7%	35.4%	12.8%	1.20	0.93	105	None	OLVAX
	3. Artisan Value	06/16	NTF	NTF	NTF	55.7	4.1%	1.8%	5.0%	12.4%	38.3%	8.4%	1.38	0.97	42	None	ARTLX
Bond Categories	Scout Unconstrained Bond [6]	09/16	NTF	NTF	NTF	7.4	0.4%	0.3%	0.6%	0.3%	6.5%	0.5%	1.14	0.80	1.7[7]	None	SUBYX
	Vanguard I-T Bond Index	01/15	ETF	ETF	ETF	-0.5	1.1%	0.7%	1.3%	-2.9%	1.1%	3.1%	1.31	0.09	6.5[7]	None	BIV[8]
	Vanguard S-T Bond Index	07/12	ETF	ETF	ETF	0.7	0.5%	0.2%	0.6%	-0.5%	0.7%	1.1%	0.44	0.09	2.8[7]	None	BSV[9]

Upgrading Footnotes: [1] The funds in each risk category are selected (and ranked 1 through 3) primarily based on their momentum scores in late-March, not those shown on this report. The fund ranked third is the one that currently appears most likely to be replaced next. A telephone symbol (☎) next to a fund's name indicates that fund is a new recommendation. See the fund writeups in "MoneyTalk" for more information. **[2]** Fund Availability: NTF means the fund can be bought and sold free of transaction fees as long as you stay within the trading limitations imposed by Scottrade (800-619-7283), Fidelity (800-343-3548), and Schwab (800-435-4000). Policies change frequently, so be sure to verify their accuracy. ETFs trade like stocks and are typically available at all brokers for a modest commission. **[3]** Momentum is a measure of a fund's performance over the past year and is our primary performance evaluation tool. For more, see July2014:p103. **[4]** A 1.0 relative risk score indicates the fund has had the same volatility as the market in general over the past three years. For example, a fund with a score of 1.4 would mean the fund was 1.4 times (40%) more volatile than the market. See June2015:p88. **[5]** Depending on how long you hold this fund, a redemption fee may be applicable when selling (for example, a fee of 1% if you sell within 60 days of purchase). Fees change often and vary from broker to broker, so be sure to check with your broker for the most current information. **[6] Rotating Fund:** This bond recommendation changes periodically based on SMI's Upgrading methodology. The Short-Term and Intermediate-Term Index recommendations shown below that fund are fixed and don't change from month to month. See January2015:p7 for more information. **[7] Duration:** For bond funds, this column shows the average duration of the bonds in the portfolio in years. Typically, the longer the duration, the greater the risk/reward. See Jun2012:p88. **[8]** Those preferring a traditional mutual-fund option can buy VBILX where available, otherwise VBIIX. **[9]** Those preferring a traditional mutual-fund option can buy VBIRX where available, otherwise VBISX.

☎ Changes in our fund recommendations are explained in the MoneyTalk column.

Upgrading: Easy as 1-2-3

Fund Upgrading has long been SMI's most popular Basic Strategy. Whether used in isolation or in combination with SMI's Premium Strategies, Upgrading forms a solid foundation for an investing plan. Upgrading has proven itself over time with market-beating returns over the long haul, and it is easy to implement. This page explains exactly how to set up your own Upgrading portfolio.

"The plans of the diligent lead to profit as surely as haste leads to poverty." Proverbs 21:5

WHY UPGRADE?

SMI offers two primary investing strategies for "basic" members. They are different in philosophy, the amount of attention they require, and the rate of return expected from each. Our preferred investing strategy is called Fund Upgrading, and is based on the idea that if you are willing to regularly monitor your mutual-fund holdings and replace laggards periodically, you can improve your returns. While Upgrading is relatively low-maintenance, it does require you to check your fund holdings each month and replace funds occasionally. If you don't wish to do this yourself, a professionally-managed version of Upgrading is also available (visit bit.ly/smifx).

SMI also offers an investing strategy based on index funds called Just-the-Basics (JtB). JtB requires attention only once per year. The returns expected from JtB are lower over time than what we expect (and have received) from Upgrading. JtB makes the most sense for those in 401(k) plans that lack a sufficient number of quality fund options to make successful Upgrading within the plan possible. See the top section of the Basic Strategies page at left for the funds and percentage allocations we recommend for our Just-the-Basics indexing strategy.

WHERE TO OPEN YOUR ACCOUNT

Opening an account with a discount broker that offers a large selection of no-load funds greatly simplifies the Upgrading process. This allows you to quickly and easily buy/sell no-load mutual fund shares without having to open separate accounts at all the various fund organizations. There are several good brokerage choices available. We recommend reading our latest Broker Review (August 2015:Cover article, also available online at bit.ly/smibroker) for details regarding the pros and cons of each broker, as your specific investing needs will largely dictate which broker is best suited to your situation.

401(K) INVESTORS

For a detailed explanation of how to Upgrade within your 401(k) plan, see bit.ly/smi401ktracker. That article also contains ideas on Upgrading in any type of account where your available fund choices are limited.

HOW TO BEGIN STOCK UPGRADING

❶ First determine your stock/bond target allocation by working through the investment temperament quiz online in the "Start Here" section (see the link near the top of the home page on the main navigation bar). For example, Table 1 below provides guidelines for those with an "Explorer" temperament. For more on asset allocations, see Jan2017:p8.

❷ Find the column that matches your stock/bond allocation in Table 2. (If your target falls between two listed columns, split the difference.) Multiply each percentage by the value of your total portfolio amount to calculate the dollar amount to invest in each risk category.

❸ Buying your funds is easy. Look at the recommended funds on the opposite page. In each category, start with the #1 listed recommendation. If it's available at your brokerage (indicated by Yes, NTF, or ETF), buy it. If it's not, continue down the list to the next available fund. Then contact your broker—online or via phone—to buy the fund you've picked.

Let's see how a new subscriber 12 years from retirement with $50,000 to invest and an account at Fidelity would proceed. First, he or she selects the proper stock/bond mix for their situation (let's assume 80/20). Then, from Table 2, finds the percentages for each risk category. Multiplying $50,000 by each percentage yields the dollar amount for each category as shown in Table 3.[1] Looking at the Fidelity column on the Recommended Funds page, the highest-rated Cat. 5 fund available at Fidelity is Oakmark International, the highest-rated Cat. 4 fund available is Baron Discovery, and so on. After doing this for each category, the orders are placed and the stock portion of the Upgrading portfolio is complete!

From then on, it's just a matter of checking the Basic Strategies page each month. When an owned fund is *removed* from this page (not when it merely shifts out of the #1 ranking), you should immediately sell that fund and invest the proceeds in the highest-ranked fund in the same risk category that is available at your broker.

❶ PICK YOUR ALLOCATION

Seasons of Life	Stocks	Bonds
15+ years until retirement	100%	0%
10-15 years until retirement	80%	20%
5-10 years until retirement	70%	30%
5 years or less until retirement	60%	40%
Early retirement years	50%	50%
Later retirement years	30%	70%

Note: These are SMI's recommendations for those with an "Explorer" temperament. See Step ❶ in the text for information on our investment temperament quiz. You may want to fine-tune the above percentages to suit your personal approach to risk-taking.

❷ FIND YOUR PORTFOLIO MIX

Portion of Portfolio Allocated to Stocks:	**100%**	**80%**	**60%**	**40%**
Portion of Portfolio Allocated to Bonds:	**None**	**20%**	**40%**	**60%**
Stock Cat. 5: Foreign Stocks	20%	16%	12%	8%
Stock Cat. 4: Small Companies /Growth	20%	16%	12%	8%
Stock Cat. 3: Small Companies /Value Strategy	20%	16%	12%	8%
Stock Cat. 2: Large Companies /Growth	20%	16%	12%	8%
Stock Cat. 1: Large Companies /Value Strategy	20%	16%	12%	8%
Bond Cat. 3: "Rotating" Bond Fund	None	10%	20%	30%
Bond Cat. 2: Intermediate-Term Bond Fund	None	5%	10%	15%
Bond Cat. 1: Short-Term Bond Fund	None	5%	10%	15%

❸ BUY YOUR FUNDS

Example uses an 80/20 mix between stocks and bonds		Dollars	Invest In Funds
Stock Cat. 5: Foreign	16%	$8,000	Oakmark International
Stock Cat. 4: Small/Growth	16%	$8,000	Baron Discovery
Stock Cat. 3: Small/Value	16%	$8,000	AMG Fairpointe Mid Cap
Stock Cat. 2: Large/Growth	16%	$8,000	Guggenheim S&P 500 Tech
Stock Cat. 1: Large/Value	16%	$8,000	Dodge & Cox Stock
"Rotating" Bond Fund	10%	$5,000	Scout Unconstrained Bond
Intermediate-Term Bond Fund	5%	$2,500	Vanguard I.T Bond Index
Short-Term Bond Fund	5%	$2,500	Vanguard S.T. Bond Index
Total	100%	$50,000	

BOND UPGRADING

Your bond allocation is divided among three funds as seen in Table 2. One-half of that is invested in the rotating Upgrading selection, which is reviewed monthly and changes from time to time. The other half is divided evenly between short-term and intermediate-term index bond funds, which are permanent holdings. For more on why SMI approaches bond investing in this way, see "Introducing an Upgrading Approach to Bond Investing that Outperforms the Bond Market" (bit.ly/smibondupgrading).

[1] Rounding off to the nearest hundred is fine. As time goes by, your portfolio will gradually move away from these starting percentages as some funds perform better than others. This will be fixed once a year when you "rebalance" back to your desired portfolio mix (see Jan2017:p8).

MONEYTALK

STOCK UPGRADING — NEW FUND RECOMMENDATIONS

[When more than one fund *in the same risk category* is replaced, you should evaluate which of the newly recommended funds is the best fit for your portfolio. The simplest method for picking new funds is to refer to our 1-3 rankings on the "Basic Strategies" page and invest in the highest-ranked fund in each risk category that is available through your broker. • We choose our recommended funds with the hope they will be held for at least 12 months and therefore qualify for long-term capital gains tax treatment. Nevertheless, we suggest a fund change when a recommended fund's performance falls below the threshold of our mechanical guidelines. Our guidelines provide objective criteria for making the decision as to when to "upgrade" to a better-performing fund. When a fund no longer meets our performance guidelines, we suggest you sell it even if the 12-month holding period hasn't been met. However, a "$" symbol following the name of the fund being sold lets you know that we still think well of the fund and its management and you might elect to continue holding the fund for a month or two to achieve a tax benefit or to save on transaction or redemption fees. Be aware, however, that from 2006-2010, the average performance "cost" of retaining such funds has been roughly 0.5% per month. For more details, see Oct2011:p153.]

◆ **In the Small/Growth group, Hodges (HDPMX, 9/2016) is being replaced.** Recommended last September just as the stock market was beginning its surprising march higher, Hodges has done a great job for us. Through the end of February it had gained +14.3% in the six months we had owned it, well ahead of the +7.8% gain of its average small/growth peer. However, its heavier-than-average allocations to the energy and basic-materials sectors have weighed on its performance in recent months, leading it to fall below the quartile and needing to be replaced.

• **Baron Discovery (BDFFX) is being added.**[1] This is a newer fund offering from Baron, a name that has long been synonymous with growth investing. The fund is only three years old and this is the first time we've recommended it, though we've recommended other Baron funds in the past.

This particular Baron fund focuses on very small stocks, with over half the portfolio classified as "micro-cap"—the smallest of the small. Baron notes that the fund "invests in a select number of high-growth businesses that tend to be in an early phase of their lifecycles." In plain English, that means these companies are young, risky and have some boom/bust potential to them. The fund's "origin story" is that in the process of researching small/growth companies for other Baron funds, the co-managers of this fund would frequently discover promising companies at earlier stages of development and/or in industries that the other Baron managers were less comfortable investing in. Rather than pass on these potential stars, Baron decided to launch this fund to give those stocks a home.

With such a young fund, it's difficult to draw many conclusions from its performance history. But it's worth noting the fund has ranked in the top half of Morningstar's small/growth group for the entirety of its short life, and has been at the very top of the category over the past year—which is the interval Upgrading cares about. The fund has had higher-than-average allocations to technology and healthcare stocks this year, which has helped performance as tech has been the best performing sector so far in 2017.

◆ **In the Large/Growth group, Kinetics Paradigm (WWNPX, 11/2016) is being replaced.** One of Upgrading's virtues is the ability to pivot quickly to respond to changes in the market. That's been the case with this Kinetics fund, which we haven't owned very long. Performance over the first four months we owned it was strong in an absolute sense, as it gained +8.6%. But that's not so great compared with other large/growth funds, which were up +10.3% on average during that same span.

A closer look at the fund's holdings makes the reasons for that underperformance pretty clear. At year-end, Kinetics Paradigm held nearly 20% of its assets in cash, a much higher level than the average large/growth fund's 2.5%. That cash allocation has been an anchor on returns during the early-2017 rally. Paradigm's significant allocations to medium- and small-sized stocks have also held it back, given the stronger returns of larger companies so far this year. To cap it off, Paradigm has allocated less to the market's top performer—technology stocks—than most of its peers. Given those factors, it's surprising the fund has performed as well as it has!

All of those details fall into the "interesting but unnecessary" category, as Upgrading distills all of that size/style/sector interplay information into the performance momentum rankings that we use to make buy/sell decisions. So, with the fund having fallen out of the top 25% of its peer group, we're honoring Upgrading's selling discipline and replacing it.

• **Guggenheim S&P 500 Equal Weight Technology ETF (RYT) is being added.**[1] This fund is a more concentrated sector play than we usually recommend in Upgrading, so carefully consider this write-up before purchasing. RYT is an ETF that owns 68 stocks, all of them connected to the technology sector. The "equal weight" in the ETF name refers to the fact that all of these positions are of roughly similar size, unlike most funds which overweight their top positions.

There are two primary reasons we're buying this ETF despite it being less diversified than our typical Upgrading recommendation. Beyond the obvious answer—that its performance has been top-notch and lands it near the very top of the large/growth group—we like the idea of buying an ETF here. In mid-March, the stock market's direction suddenly started weakening for the first time since the election, and owning an ETF rather than a conventional fund gives us a little more flexibility to cut and run to a less aggressive holding should the need arise.

Second, while the tech concentration of this fund is higher than our typical fare, it's not extreme when compared to the other top-performing large/growth funds right now. Looking at another of the top contenders this month, that supposedly "diversified" fund had 40% of the fund's assets invested in only eight stocks, all of which we would classify as technology stocks (technically a couple of them, such as Amazon and Tesla, are classified as Consumer Cyclicals, but in our book they're tech stocks.) Overall, RYT has greater *concentration risk relative to the technology sector* than that fund does. But

[1]For more on this fund, visit www.morningstar.com.

RYT actually has less *company-specific risk* at the top-end of its portfolio, given that only about 13% of its assets are invested in its top eight stocks.

While we're comfortable recommending RYT for Upgraders, don't misunderstand—this is still a concentrated, higher-risk option. If you'd prefer not to put so many eggs in the technology basket, our Oakmark and Parnassus large/growth fund recommendations continue to be attractive options. ◆

LEVEL 2 / CONTINUED FROM PAGE 55:

THE TRUTH ABOUT P/E RATIOS

Since 1871, the only times CAPE has been higher were the three months prior to the crash of 1929 and the three years leading up to the end of the dot-com bubble in 2000.

There's no way to spin that into a positive. Everything we know about CAPE says that from the current lofty price levels, returns are likely to be sub-par over the next decade. However, this tells us very little about what the market will do this year or next.

• **Why the bull may almost be over.** It's worth noting that, in the past 40 years, there have been four lengthy periods during which P/E ratios increased (i.e., "expanded") significantly. The three prior ones ended in the crash of 1987, the 2000-2002 bear market, and the 2008 financial crisis. Those three prior periods of P/E ratio expansion lasted 32, 47, and 31 months, respectively. The current period has lasted 57 months and continues on today. While far from a definitive indicator, it's hard to look at that and not feel like this expansion is long in the tooth.

• **Why the bull may have longer to run.** If there's a silver lining, it's that CAPE has certainly been early in sounding alarm bells before. It reached roughly the same level as today at the beginning of 1997, yet that bull market still had more than three years left during which the S&P doubled in price. This is partly what makes valuation metrics like CAPE (and P/E ratios generally) such poor timing tools. They give us little certainty as to what the next year or two are likely to hold for stocks.

Why the Fed's current monetary policy matters

Three and a half years ago, SMI published an article titled "The Problem With P/Es" that covered some of this same ground. At the time, CAPE was reaching the 25 level. One of the main takeaways then was, "valuation doesn't offer an immediate guide as to when bull markets will end—for that, monetary policy is a much more effective signal." In that article, we were attempting to counter what seemed like premature calls that the bull was endangered due to valuation signals like the CAPE was providing. Our counsel turned out to be timely, as the market has continued higher.

But there is a key distinction between then and now: the monetary situation has changed drastically. And that's the signal we've been watching for since this bull market got underway. With three rate hikes under its belt already, the Fed has clearly broadcast its intent for two more in 2017. The market's reaction to this news is 180 degrees the opposite of 16 months ago when the Fed's first rate hike (in December 2015) sent the market into a -12% nosedive. In contrast, when interest rates were raised last month, markets soared because the Fed reaffirmed it was planning "only" two more hikes this year.

Now in year eight of what has turned out to be an unusually long and resilient bull market, it shouldn't be a surprise to anyone that a bear market is likely sometime in the next couple years. As always, we encourage SMI readers to *be aware* of trends like these, but to *invest* based on their own specific long-term plan.

Planning with CAPE in mind

For a 45-year old with a 20+ year investing horizon, a bear market—even a bruising one—isn't particularly bad news, as it offers the prospect of making future retirement-plan contributions at lower stock prices. But the impact of a bear market would be quite different for someone who just retired at the end of 2016. They would need to have a significantly more defensive-oriented investing plan in place, likely one that includes having cash reserves available to tide them through the downturn.[1]

Historically, Dynamic Asset Allocation has navigated past bear markets flawlessly, while still allowing investors to stay invested in late bull market conditions such as we observe today. We continue to recommend that investors make DAA a significant part of their bear-market investing preparations.

There's also a significant application of this information for those utilizing the MoneyGuidePro® financial-planning software discussed in the February and March cover articles. For those planning as if stocks will provide their normal historical rate of return over the next decade or so, this CAPE information suggests that's unlikely to happen. We strongly suggest running what-if scenarios based on significantly lower returns over the coming 10 years. Better to plan for lower returns and potentially be pleasantly surprised, than to assume returns will be normal and be blindsided by the type of future returns over the next decade that CAPE currently suggests. ◆

LEVEL 4 / CONTINUED FROM PAGE 59:

GIVING TO THE GRANDKIDS

simple as paying for the parents and grandchildren to come for a visit if they live in another state.

• **Offer to fund private elementary and secondary school.** The first 10 years of a child's life are the most critical. This is also the time when money may be tightest for the parents. Grandparents may make a strategic investment for the grandchild to attend a private Christian school that could help develop godly spiritual and social capital in the grandchild.

• **Invest in the grandchildren and their parents by giving of your time.** Although it costs the least, perhaps the most important gift grandparents can make is to invest time in the grandchildren and their parents. Ways to do this are numerous. Babysit the grandchildren for an afternoon or for a weekend so

[1] bit.ly/smiretirementcash

the parents can get away for a date, planning session, marriage seminar, or retreat. All of these are investments in posterity.

In a society where the extended family is fractured, the investment of time may require grandparents to use some resources to rent an apartment close to their children and grandchildren to spend time with them. It may require some funds for airplane tickets to visit more frequently. Or you may drive many hours to spend short amounts of time with them.

Conclusion

Undoubtedly, grandparents can think of countless other ways to invest their time and money to enhance the posterity of the two generations that come after them. But remember, spiritual maturity is what's important, not large trust funds that may leave a legacy of children and grandchildren dependent on the patriarch's wealth.

If you have already set up trusts, immediately go to work developing values and character in your grandchildren. At the same time, don't complicate matters by leaving even more to them. Also, if you have skipped a generation, maybe your children should leave less to their own children from their estate.

Finally, maximize the time you have left to counsel your children and grandchildren on what it means to be truly successful. A gray head is a wise head, as Proverbs says, and no greater input can be left to the next generations than how to wisely earn and steward money. ◆

MARKET NOTES, QUOTES, AND ANECDOTES

What P/E ratios tell us … or don't

• "The market is way over-priced.'' – Yale Economics Professor and Nobel Laureate Robert Shiller, who developed the cyclically adjusted price-to-earnings ratio (CAPE), a widely used stock-market valuation metric (see page 55 for more on CAPE). Shiller was quoted on *Bloomberg.com* on 3/14/17, pointing out that the CAPE, while still about 30 percent below its high in 2000, shows stocks are almost as expensive now as they were on the eve of the 1929 crash. Read more at bloom.bg/2mJjr4t.

• "Using a simple average treats radically different periods equally, which is simplistic, naïve and wrong." - Charles Lieberman, Chief Investment Officer at Advisors Capital Management, writing in the *Bloomberg View* blog on 3/2/17. Instead of looking at today's market in light of long-term average P/E ratios (as CAPE does), he argued it is more appropriate to compare it to other periods when inflation and interest rates were low. Viewed through that filter, he said stocks today "seem to be reasonably close to fair value." Read more here bloom.bg/2nt53fe.

• "Just like the children in Lake Wobegon, if this was easy, everybody would be an above-average investor." – Barry Ritholtz, writing in his *The Big Picture* blog on 3/3/17 that it is a mistake to place too much importance on P/E ratios. He said many other variables need to be considered when determining whether stocks are cheap or expensive. Read more at bit.ly/2mJfMU0.

An under-appreciated benefit of saving money

• "…trying to increase savings actually has a dual positive effect on reaching retirement: not only does it mean there's more in the account to grow, but saving more reduces your retirement-savings need. The reason, simply put, is that…if you don't spend as much to maintain your lifestyle, you don't need as much saved up to replace it!" – Michael Kitces, writing on his *Nerd's Eye View* blog on 2/15/17. Read more at bit.ly/2n9Fw7w.

If only we made it a priority to save money sooner

• "If we spend money today, we can't spend it tomorrow, let alone in 30 years. If we're rational, we would care more about the future when we're younger, because there's potentially so many years ahead of us. But ironically, it seems our concern for our future self grows as we get older." – Jonathan Clements, writing on his *Humble Dollar* blog on 3/25/17 about what it takes to be a saver. Read more here bit.ly/2ntaIID.

Investing essentials

• "Long-term returns are the only ones that really matter, but you have to figure out how to survive the bad times long enough to ensure a good process can see you through to make it to the long-term." – Ben Carlson, writing on his *A Wealth of Common Sense* blog on 3/12/17 about how an investment process built around hitting singles and doubles can be more effective than one geared toward hitting home runs. Read more at bit.ly/2najvX8.

• "While five years might be enough time to decide whether or not to terminate a basketball-coach's contract, you should not judge an investment plan or an asset class based on five years of returns." – Patrick Lach, Associate Professor of Finance, Eastern Illinois University, writing in *MarketWatch.com* on 2/22/17. Read more about his reasoning at on.mktw.net/2narHXh.

• "At its essence, diversification is applied humility in the face of an uncertain future." – Dr. Daniel Crosby, from his book, *The Laws of Wealth*, an excerpt of which is featured as this month's cover article.

• "…bad news smashes your face against an amplifier, while good news just plays quietly in the background." Michael Batnick, writing on his *The Irrelevant Investor* blog on 3/20/17. He said, "Doing nothing should be the default setting for most investors," but the long history of ingenuity among businesses represented in the stock market gets too easily overshadowed by the negative headline of the day. Read more at bit.ly/2nFb09o. ◆

PREMIUM STRATEGIES

The strategies on this page are available to those with an SMI Premium web membership. They can be used in combination with —or in place of—our Just-the Basics and Upgrading portfolios. These strategies have special characteristics that could make them desirable depending upon your individual goals, risk tolerance, and tax bracket. You can learn more about each strategy in the Premium section of the SMI website.

DYNAMIC ASSET ALLOCATION

Overview

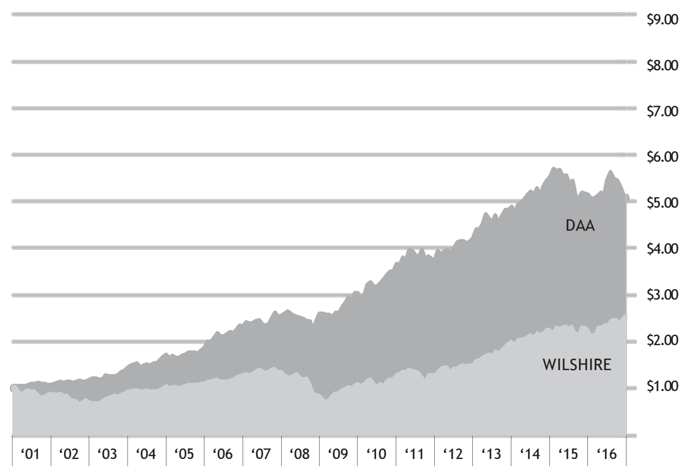
This is a stand-alone strategy that can be used in combination with (or in place of) SMI's basic strategies. DAA is designed to help you share in some of a bull market's gains, while minimizing or even preventing losses during bear markets. It's a low-volatility strategy that nonetheless has generated impressive back-tested results over the long term. DAA involves rotating among six assets classes—U.S. stocks, foreign stocks, gold, real estate, bonds, and cash. Only three are held at any one time.

Who Should Consider This Strategy

Anyone, but especially investors who are more concerned with avoiding major losses during bear markets than they are with capital growth during bull markets. **Pros:** Excellent downside protection during bear markets, reflected in a very low worst-case result and relative-risk score. Great long-term track record. **Cons:** Subject to short-term whipsaws. Lags the market in up years. Making trades promptly and concentrating entire portfolio in only three asset classes can be emotionally challenging.

Dynamic Asset Allocation vs Wilshire 5000

Growth of $1 Jan 2001 - Dec 2016



Strategy	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Avg[1]	Worst12[1]	Rel Risk[1]
Dynamic Asset Allocation	4.0%	10.4%	22.4%	19.3%	8.6%	25.7%	10.1%	1.3%	17.6%	20.3%	1.4%	13.9%	16.2%	13.0%	-6.8%	-0.5%	10.7%	-13.7%	0.64
Wilshire 5000	-11.0%	-20.9%	31.6%	12.5%	6.4%	15.8%	5.6%	-37.2%	28.3%	17.2%	1.0%	16.1%	33.1%	12.7%	0.7%	13.4%	6.1%	-43.3%	1.00

SECTOR ROTATION

Overview

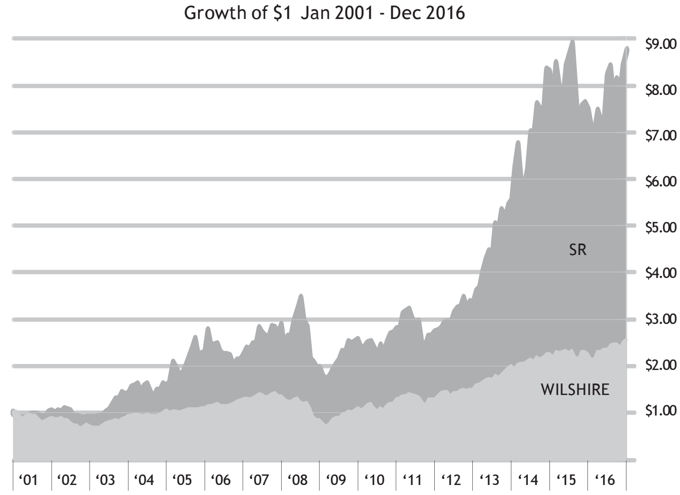
This high-risk strategy involves investing in a single special-purpose fund that focuses on a specific sector (such as biotech, energy, or financial services). Because these stock funds invest in a narrow slice of the economy, they carry a higher degree of risk. Only one fund, selected based on having superior momentum relative to other sector options, is held at a time. The sector-fund recommendations in this strategy are designed to be used in combination with Just-the-Basics, Fund Upgrading, or DAA (or a combination of these) up to a maximum of 20% of the stock allocation. While the performance peaks and valleys of Sector Rotation have been higher and lower than all other SMI strategies, it's a strategy that has generated especially impressive long-term returns.

Who Should Consider This Strategy

Experienced investors willing to concentrate an investment in a single sector of the economy. **Pros:** Very attractive long-term returns. **Cons:** Much greater month-to-month volatility and relative risk with dramatic short-term loss potential.

Sector Rotation vs Wilshire 5000

Growth of $1 Jan 2001 - Dec 2016



Strategy	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Avg[1]	Worst12[1]	Rel Risk[1]
Sector Rotation	3.7%	-13.1%	54.4%	12.6%	46.1%	-1.9%	28.1%	-31.5%	30.5%	9.1%	-3.2%	23.3%	65.7%	49.9%	-9.7%	16.8%	14.5%	-38.6%	1.66
Wilshire 5000	-11.0%	-20.9%	31.6%	12.5%	6.4%	15.8%	5.6%	-37.2%	28.3%	17.2%	1.0%	16.1%	33.1%	12.7%	0.7%	13.4%	6.1%	-43.3%	1.00

[1] The three data points on the far right in each of the two tables are for the Jan2001-Dec2016 period. "Avg" represents the average annualized return from 2001-2016. "Worst12" represents the worst investor experience over 169 rolling 12-month periods from 2001-2016.

PERIODICALS POSTAGE
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Dated Investment Material
Please Do Not Delay!

PERFORMANCE DATA

SOUND MIND INVESTING MODEL PORTFOLIOS • DATA THROUGH FEBRUARY 28, 2017

BASIC STRATEGIES

	Year to Date	1 Month	3 Months	12 Months	3 Yrs Annual	5 Yrs Annual	10 Yrs Annual	15 Yrs Annual
U.S. Stock Market[1]	5.6%	3.7%	7.7%	26.7%	10.3%	13.9%	7.7%	7.9%
Just-the-Basics[2]	5.2%	2.8%	7.3%	27.0%	7.1%	11.7%	6.8%	8.2%
Stock Upgrading[3]	3.7%	1.6%	5.1%	21.6%	5.5%	11.3%	6.7%	9.3%
U.S. Bond Market[4]	1.0%	0.7%	1.2%	1.4%	2.5%	2.1%	4.1%	4.3%
Bond Upgrading[5]	0.6%	0.4%	0.8%	2.1%	2.8%	3.1%	6.6%	6.9%

PREMIUM STRATEGIES

	Year to Date	1 Month	3 Months	12 Months	3 Yrs Annual	5 Yrs Annual	10 Yrs Annual	15 Yrs Annual
DAA[6]	4.5%	2.9%	4.7%	5.5%	2.8%	6.8%	8.5%	11.2%
Sector Rotation[7]	6.2%	3.3%	10.2%	32.1%	11.3%	27.3%	14.8%	15.8%
50-40-10 Blend[8]	4.4%	2.4%	5.4%	14.4%	4.9%	10.8%	8.9%	11.4%

Notes: Transaction costs and redemption fees—which vary by broker and fund—are not included. • [1] Based on the float-adjusted Wilshire 5000 Total Return index, the broadest measure of the U.S. stock market. • [2] Calculated assuming account rebalancing at the beginning of each year with 40% of the stock allocation invested in the Vanguard S&P 500 (VOO), 40% in Extended Market (VXF), and 20% in Total International Stock (VXUS). • [3] For a 100% stock portfolio, assuming the portfolio allocation for each risk category was divided evenly among all the recommended funds. • 4 Based on Barclay's U.S. Aggregate Bond Index, the broadest measure of the U.S. bond market. • [5] For a 100% bond portfolio, assuming 25% of the portfolio was invested in Vanguard I-T Bond Index (BIV), 25% in Vanguard S-T Bond Index (BSV), and 50% in the rotating recommended bond fund. The results prior to January 2015 are hypothetical, calculated from backtesting the strategy following a mechanical rules-based system. • [6] The results prior to January 2013 are hypothetical, calculated from backtesting the strategy following a mechanical rules-based system. • [7] The results prior to November 2003 are hypothetical, calculated from backtesting the strategy following a mechanical rules-based system. • [8] For a portfolio allocated 50% to DAA, 40% to Stock Upgrading, and 10% to Sector Rotation. See the May 2014 cover article for details. The results prior to January 2013 are hypothetical, calculated from backtesting the strategy following a mechanical rules-based system.

THE SOUND MIND INVESTING MUTUAL FUND (SMIFX)

Current Returns as of 2/28/2017	Year to Date	1 Month	3 Months	12 Months	3 Year Annual	5 Year Annual	10 Year Annual
SMIFX	2.75%	1.26%	4.28%	18.50%	2.52%	9.19%	5.46%
Wilshire 5000	5.57%	3.72%	7.74%	26.64%	10.25%	13.90%	7.72%
S&P 500	5.94%	3.97%	8.04%	24.98%	10.63%	14.01%	7.62%

Quarterly Returns as of 12/31/2016	Year to Date	1 Month	3 Months	12 Months	3 Year Annual	5 Year Annual	10 Year Annual
SMIFX	7.59%	1.49%	2.92%	7.59%	2.80%	10.22%	5.35%
Wilshire 5000	13.37%	2.06%	4.54%	13.37%	8.75%	14.71%	7.17%
S&P 500	11.96%	1.98%	3.82%	11.96%	8.87%	14.66%	6.95%

Total/Gross expense ratio: 1.97% as of 2/28/17 (includes expenses of underlying funds)
Adjusted expense ratio: 1.15% as of 2/28/17 (excludes expenses of underlying funds)

Notes: *The performance data quoted represent past performance, and past performance is not a guarantee of future results. Investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance information quoted.* • ***You should carefully consider the investment objectives, risks, fees, charges and expenses of the Funds before investing. The prospectus contains this and other information about the Funds. To obtain a prospectus or performance information current to the nearest month end, call 1-877-764-3863 or visit www.smifund.com. Read the prospectus carefully before investing.*** • Because the SMI Funds invest in other mutual funds, they will bear their share of the fees and expenses of the underlying funds in addition to the fees and expenses payable directly to the SMI Funds. As a result, you'll pay higher total expenses than you would investing in the underlying funds directly. • Returns shown include reinvestment of dividends and capital gains. The Wilshire 5000 index represents the broadest index for the U.S. equity market. The S&P 500 Index is an unmanaged index commonly used to measure the performance of U.S. stocks. You cannot invest directly in an index. • The Sound Mind Investing Funds are distributed by Unified Financial Securities (member FINRA).

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