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Sound Mind Investing®

Financial Wisdom for Living Well

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How We Misthink Money

According to behavioral economics, many of your ideas about saving, spending, and investing are wrong—and they cost you more than you know. Economist Dan Ariely explains how our irrational behavior interferes with our best intentions when it comes to managing our finances. Partnering with writer and humorist Jeff Kreisler, Ariely takes us inside our minds to expose the hidden motivations that drive the decisions we make about money and investing.

by Dan Ariely and Jeff Kreisler

Tom and Rachel Bradley are a fictional couple living in Midsized City, USA. They have three kids, two cars, and one dog, and they survive on a diet of wisecracks, sitcoms, and sugary drinks. Rachel is a freelance copywriter and Tom is a senior account manager at Widge Co, the nation's preeminent producer, distributor, and marketer of high-quality widgets. He's been there 15 years.

Tom and Rachel's twins, Robert and Roberta, are off to college, so the Bradleys are downsizing their house. They don't want to leave the area, as their third child, Emily, is just starting high school. However, they don't need four bedrooms and they could use the extra money.

They start the process of selling their home by listing it themselves, figuring they could save a commission. They ask for $1.3 million. Not only do they fail to get any offers, but they also get annoyed. At open houses, potential buyers get distracted by little imperfections. Like some chipped paint, a rusty water heater, "weird" design touches. Tom and Rachel talk about all the great things their kids did in the kitchen and living room, highlight all the renovations they've done and the way they designed the layout to maximize space. No one seems impressed. No one seems to see just how great the house is, nor how much of a bargain it is.

The Bradleys finally enlist the help of a real-estate agent. Mrs. Heather Buttonedup, the broker, suggests they list it at $1.1 million. They disagree. They both remember their friends selling a similar house down the street for $1.4 million three years ago. They even had a couple of unsolicited offers to buy their place back then, one at $1.3 million and the other at $1.5 million. That was three years ago and now their place must be worth at least that much, if not more, especially considering inflation.

"But that was during a real-estate boom," Heather says.

"And it's three years later now, so surely it's increased in value," pleads Rachel. "And our house is much nicer than theirs."

"Maybe to you, but look at all the work that needs to be done. People want an open floor plan these days. The buyer will have to make some real changes."

"What?!" cries Tom. "Do you know how much time and money we put into making these renovations? It's awesome."

She rolls her eyes. "Well, it's up to you, but my advice is, if you want to sell this place, list it at $1.1 million and be happy if you get close to that."

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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

Beating the Behavioral Blues With Biblical Wisdom

The study of finance and economics has undergone a radical shift in recent decades. Until recently, the foundation of economic theory was that individuals are "perfectly rational actors" (that is, we always made rational financial decisions, based on all the knowledge available to us, that were in our economic self-interest). But newer economic research increasingly shows that our decisions are guided by our emotions and our choices often lead to counterproductive results.

Spearheading this shift in thought has been the field of "behavioral economics," whose champions have gone from initially being scorned to winning Nobel prizes.[1] Recognizing the biblical truth that underlies this secular research (more on that shortly), SMI has a history of featuring articles by noted behavioral economists.

This month's cover article is the latest example of our belief that SMI members can become better investors by understanding their behavioral tendencies.

Understanding these principles is important, but *applying* that knowledge is even more so. That's why we continue to weave these principles into our strategies and investment counsel. Here are a few examples of how SMI addresses the specific behavioral issues discussed in this month's cover article.

• **Strict non-emotional selling guidelines**. These are a key defense against the *endowment effect* (valuing something more highly than you should simply because you own it) and *sunk costs* (the difficulty humans have parting with something they've invested in). Without the strong, mechanical selling disciplines built into each of our strategies (such as demanding top-quartile performance in Stock Upgrading and Sector Rotation), we'd be as prone as other investors to "falling in love" with certain investments after a run of success, or wanting to hold on a little longer until losing positions "get back to breakeven."

• **Exercising restraint in our strategy allocations.** As this month's Level 2 column on Sector Rotation demonstrates (page 23), SMI suggests limiting your allocations to high-return strategies in order to keep risk exposure below certain levels. Why do that, when we have reason to believe those strategies will outperform over the long-term? Because of the powerful behavioral trait of *loss aversion*, which researchers have shown causes investors to feel the pain of losses roughly *twice as much* as they enjoy the pleasure of gains.

• **Practicing strategy diversification.** Investing in a combination of strategies, as we discuss in the Level 3 year-in-review report this month (page 24), is another way we combat loss aversion. Diversifying among strategies that excel in different market environments can greatly aid an investor in managing their emotions through the bull/bear-market cycle.

The conclusions reached by the behavioral economics crowd in recent decades may be a surprise to the rest of the economics field, but they shouldn't be surprising to us as Christians. After all, as we point out in the *Sound Mind Investing Handbook*, the Bible speaks clearly about numerous specific weaknesses that affect us as investors:

• **Our wisdom is flawed**: *"Do not deceive yourselves. If any of you think you are wise by the standards of this age, you should become 'fools' so that you may become wise. For the wisdom of this world is foolishness in God's sight"* (1 Cor. 3:18-19).

• **Our motivations are impure**: *"The heart is deceitful above all things and beyond cure. Who can understand it?"* (Jer. 17:9).

• **Our emotions can overpower us**: *"For I know that good itself does not dwell in me, that is, in my sinful nature. For I have the desire to do what is good, but I cannot carry it out"* (Rom. 7:18).

• **Our vision is limited**: *"Now listen, you who say, 'Today or tomorrow we will go to this or that city, spend a year there, carry on business and make money.' Why, you do not even know what will happen tomorrow. What is your life? You are a mist that appears for a little while and then vanishes"* (James 4:13-14).

SMI tries to combat the problems these weaknesses pose for investors (along with their manifestations such as the endowment effect, sunk-cost fallacy, and loss aversion) by offering counsel grounded in scriptural principles and emphasizing a stewardship mindset focused on growing wealthy slowly but steadily. Investing, even when applying these principles, is never going to be easy. But we can approach it with confidence knowing we're applying God's wisdom to the subject.

MARK BILLER
EXECUTIVE EDITOR

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[1] University of Chicago professor Richard Thaler won the 2017 Nobel prize in economics for his lifelong pursuit of behavioral causes to economic issues.

FEATURE ARTICLE

How We Misthink Money

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They'd bought the place 14 years ago for $400,000, so they'd be making a lot of money no matter what. Still they wonder just how crazy Heather and the potential buyers are if they can't see how special their house is. After some long nights of deliberations, the Bradleys list their house, through Buttonedup, at $1.15 million. They get an offer for $1.09 million.

Eventually, they sell it for $1,085,000. Meanwhile, they're looking for a new place themselves. They don't like any of the homes they've seen. They've all had weird redesigns that make no sense and have pictures of kids everywhere. As for the prices, neither Tom nor Rachel can believe the delusion some of these sellers are under, asking way more than their places could possibly be worth. "Do they think it's three years ago when the market was hot? Times have changed."

They finally find a nice house. It's listed at $650,000; they offer $635,000. The seller waits for more. The agent tells them they'd "better hurry and decide quickly because new buyers have emerged." They don't believe her. They end up buying it for $640,00. They're happy enough.

What's going on here?

The Bradleys' real-estate experience may be fictional, but it is based on many true stories. More important, it shows how we overvalue the things that we own.

In an ideal, rational market, both sellers and buyers should come to the same valuation of an item. That value is a function of the utility and opportunity costs. In most real transactions, however, the owner of an item believes it to be worth more than the buyer. The Bradleys thought that their house was worth more than it was, simply because it was theirs for a while and because they made all these "wonderful" changes to the house. Investing in anything causes us to increase our sense of ownership, and ownership causes us to value things in ways that have little to do with actual value. Ownership of an item, no matter how that ownership came to be, makes us overvalue it. Why? Because of something called the *endowment effect*.

The idea that we value what we have more *simply because we own* it was first demonstrated by Harvard psychologist Ellen Langer and later expanded by Dick Thaler. The basic idea of the endowment effect is that the current owner of an item overvalues it, and because of that will want to sell it at a price higher than the future owner will be willing to pay for it. After all, the item's potential buyer is not affected by the same love what-you-have endowment effect. Typically, in experiments testing the endowment effect, selling prices are found to be about twice as high as buying prices.

The price at which the Bradleys wanted to sell—how they valued it—was higher than the price buyers were willing to pay. When the roles were reversed and the Bradleys became buyers instead of sellers, the price mismatch also reversed: As buyers, the Bradleys valued the homes they were viewing at lower prices than the owners of those homes valued them.

On its surface, this shouldn't be a surprise. The desire to maximize a selling price and minimize a purchase price is perfectly rational. Basic economic strategy teaches us to try to buy low and sell high. This is not a negotiating technique. What careful experiments show is that the higher prices are what owners *actually think their possessions are worth* and that lower prices are what potential buyers actually think these same things are worth.

One reason for this overevaluation effect is that ownership gets us to focus more on the positive aspects of what we own. When the Bradleys were selling their home, they dwelled on good memories—of the spots where Emily first learned to walk, of sliding down stairs and surprise parties. Unintentionally they added those experiences into the joy that the house represented for them and to the value of the home. They simply didn't notice the old boiler or the rickety stairs as much as potential homebuyers did. They focused on the positives, the good times.

Even though the Bradleys' reasons for extra value were deeply personal, they were trapped in their own perspective. As a consequence, they expected strangers, without the history of their own experiences, to somehow view the home the same way. Their emotions and memories became part of the unconscious way they valued their home, which of course had nothing to do with the actual value to anyone who did not share in those memories. But when we evaluate our possessions, we are blind to the fact that the emotional boost we get from them is ours and ours alone.

How do we own it?

We can come to "own" things arbitrarily, without effort. Ziv Carmon and Dan [Ariely] ran an experiment through which they found that Duke University students who'd won basketball tickets in a lottery would only sell them for a price much higher than that which other students (those who did not have a ticket) were willing to pay for one. That was true even though the ticket was for the same game, the same time, offering the same experience and the same real value. The lottery winners had no reason to value the tickets more highly than anyone else, except that they owned them. Therefore, they over-valued them.

Tangible items are often subject to the endowment effect: People value items more because they have them in their hands. Researchers from Ohio State and Illinois State used coffee mugs to prove the importance of direct contact. They found that people who held a coffee mug in their hands for more than 30 seconds were willing to pay more to buy that mug than were those who held it for fewer than 10 seconds or not at all. Think about that: 30 seconds is all it takes to establish a sense of higher ownership, strong enough to distort our valuation of an item. That's impressive!

We can also experience something known as *virtual ownership*, which is when we achieve that ownership feeling, enough taste or touch or sense of a product, without buying it completely. Virtual ownership is different than trial offers because we never really own the product. Imagine we bid on a Mickey Mouse watch on eBay. It's near the end of the auction and we're the highest bidder. We're not the owner yet because the auction isn't over. Nonetheless, we feel like we've won. We start imagining owning and using the product—and are often quite upset if someone swoops in at the last second to outbid us. That's virtual ownership. We never owned it, but it feels like we did, and in the process we increase how much we value that Mickey Mouse watch.

Dan once spoke to a real-estate broker who was involved in a sale of a luxury property, an estate worth tens of millions of dollars. There was a bidding process; negotiations carried on for more than six months. When negotiations began, the bidders had decided what they'd be willing to pay for the property. But, as negotiations dragged on, they found themselves willing to pay more and more. Nothing had changed about the property; there was no new information. Time had simply passed. What had changed? During that time, they began to see themselves as the owners of the property. They thought about how they would use it, how they would live there, and so on. They owned it only in their imaginations—there was no final agreed sale price—but the phenomenon of "virtual ownership" made them not want to give up the possibility of actually owning it. As the process lingered, their virtual ownership increased and so they valued the estate more and more.

Successful advertising copywriters are, in a way, magicians: They make us feel like we already own their clients' products. We feel like we already drive that car or are on that vacation with our family. It's not real ownership; it's virtual ownership. The fantasies inspired by commercials get us to connect to their product. That connection—the mental touching of the product for 30 seconds—creates a feeling of ownership, which, as we now know, leads to a higher willingness to pay for those products.

It's in the way that you lose it

The endowment effect is deeply connected to *loss aversion*. The principle of loss aversion, first proposed by Daniel Kahneman and Amos Tversky, holds that we value gains and losses differently. We feel the pain of losses more strongly than we do the same magnitude of pleasure. And it's not just a small difference—it's about twice as much. In other words, we feel the pain of losing $10 about twice as strongly as we do the pleasure of winning $10. Or, if we tried to make the emotional impact the same, it would take winning $20 to counteract the feeling of losing $10.

Loss aversion works hand in hand with the endowment effect. We don't want to give up what we own partly because we overvalue it, and we overvalue it party because we don't want to give it up.

Owners of an item, like the Bradleys with their home, value the potential loss of ownership much more than non owners value the potential gain of the same item. This gap—fueled by loss aversion—gets us into all kinds of financial mistakes.

We saw loss aversion at work when the Bradleys referenced the rising and falling real-estate market. They thought about the price of their home in terms of its highest point, years ago, before the market slowed down. They thought about what they could have sold it for back then. They focused on the loss relative to the price during that previous historical moment.

Psychological pitfalls when saving for retirement

Retirement savings and investments are other areas where loss aversion and endowment effect can wreak havoc on our ability to see the world in an objective way. If loss aversion seems like something we would never fall prey to, consider your initial reactions to these two questions:

1. Could we live on 80 percent of our current income?
2. Could we give up 20 percent of our current income?

The answers to these two questions should be exactly the same. They are mathematically the same question. We are, however, much more likely to say yes to question 1 than to question 2. Why? Because question 2 highlights the loss aspect of the situation—losing 20 percent. As we know, losses weigh heavily, so in question 2 we focus on that pain. And what about question 1? That's easier to answer affirmatively, since this question doesn't mention losses at all.

Loss aversion and the endowment effect can also work together to induce us to turn down free retirement money. Our company might match our retirement contributions, provided we contribute a certain amount ourselves. For instance, if we put aside $1,000, they'll contribute another $1,000, meaning we're getting $1,000 for free. But if we put aside nothing, they contribute nothing. Many people put aside nothing at all; others don't contribute the full amount the company would match. In both cases, they're passing up free money.

Why would we do something as foolish as forgoing free money? There are three reasons. First, contributing to our retirement feels like a loss: We're giving up spending money. We use our salary for many things, like groceries, date nights, wine-of-the-month club memberships. Giving up salary now feels like giving up those things. The second reason is that participating in the stock market creates the possibility of losing money. Voila: loss aversion. Third, skipping the company match doesn't feel like a loss. It feels like passing up on a gain. And, despite how logical we all might feel when calmly reasoning that there's little difference between a "loss" and an "unrealized gain," that's not how we act or how we feel.

In one experiment, people were asked to imagine that their annual salary was $60,000 and that their employer would match their retirement contributions, up to 10 percent of that salary. Participants were given expenses like food, entertainment, and education. They had to make choices, as we all do, because the $60,000 was not enough for everything in this experiment—living the lifestyle they wanted. Few people maxed out their retirement contributions and most people put little away at all. Thus they didn't get the full matching funds.

In a slight variation of that experiment, researchers told another group of participants that their employer had put $500 monthly into their retirement account at the start of each month. Employees could keep as much as they wanted, but to do so they would have to match that amount by making their own contributions. For instance, if they also contributed $500 a month into their account, they'd keep the entire pot. But if they only saved $100, they'd keep only $100 of their employer's contribution and the other $400 would disappear from their account. Every month, participants who didn't fully fund their retirement accounts received reminders that they had lost the unmatched free money. They were told how much the company prefunded in the account, how much the employee contributed, and how much money the company took back. The statement might say, "We prefunded the account with $500, you contributed $100, and the company took back $400." That made the loss very clear. It also triggered loss aversion in participants, who quickly began maximizing their 401 (k) contributions.

Once we understand loss aversion and that many things can be framed as either gains or losses—and that the loss framework is more motivating—maybe we can reframe choices, such as how much to contribute to retirement savings, in a way that will persuade us to act in ways that are more consistent with our long-term well-being.

Speaking of long-term well-being, loss aversion also clouds our ability to gauge long-term risks. This problem specifically impacts investment planning. When risk is involved and the amount of our investment fluctuates up and down, we have a hard time seeing beyond our potential immediate losses to imagine future gains. Over the long term, stocks outperform bonds by a large margin. But, when we just look at the short term, there will be many short periods with painful losses.

Let's imagine stock prices go up 55 percent of the time and down 45 percent of the time. That's pretty good. But it's also over the long term, not just a few weeks, months, or even a year. The trouble is that we experience the up-and-down periods quite differently. During the ups, we are a little bit happy, but during the downs, we are miserable. By weighting more heavily the down market's impact on us, we don't feel the overall trend as 55 percent up and happy, but as 90 percent down and unhappy (45 percent times two).

Because of loss aversion, when we look at investing in the stock market in the short term, we suffer. In contrast, if we could view the stock market with a long-term view it would feel much better to take more risks. In fact, Shlomo Benartzi and Dick Thaler found that employees are willing to invest more of their retirement savings in stocks if they are shown long-term rates of return rather than short-term ones, because when we see the long-term view, loss aversion isn't in play.

Loss aversion can create a myriad of other investment problems. In general, it gets us to sell winning stocks too quickly—we don't want to lose those gains!—and keep losing ones too long—because we don't want to realize the loss on those stocks.

One solution people use to avoid the pain of short-term loss is to avoid stocks and invest in bonds, or sometimes in saving accounts that give us a certain, but close to zero, interest rate. Bonds don't have the same downs—or ups—as stocks. We don't suffer the loss aversion and we're not as miserable. Of course, we can become miserable in other ways since we reduce our potential for long-term growth. But we don't feel that loss in the moment. We only feel it at retirement, when, sadly, it's too late to change our mind and our investment decisions.

Another approach that we—Dan and Jeff—prefer is to simply not look at our investments. If we're very sensitive to small fluctuations over time, one solution is to make a long-term decision and stick to it. Then we don't let loss aversion influence us to act rashly. We (try to) look at our portfolios only once a year. In short, we recognize our irrationality, and we know we are not going to win in a direct fight against it, so we try to avoid the battle altogether. We recommend this approach to you as well.

You sunk my ownership

Our tendency to emphasize losses over gains and to overvalue what we have plays out very powerfully with *sunk costs*.

Sunk cost is the finding that once we've invested in something, we have a hard time giving up on that investment. We don't want to experience a loss in that investment, so often we throw good money after bad, adding a dash of wishful thinking. We shouldn't think about how much we have already invested in a job, a career, a relationship, a home, or a stock; we should focus on *how likely it is to be valuable in the future*. But we're not that rational and it's not that easy. The trick is to learn quickly when things are not going our way and cut our losses.

Hal Arkes and Catherine Blumer showed another way in which we don't think clearly about sunk costs. They asked people to assume they had spent $500 on a ski trip. Then they presented a new ski trip that was better in every way but cost only $300, and they asked the participants to imagine they bought that one, too. Next, Arkes and Blumer told the participants that the two trips overlapped, but there were no refunds available. Which trip did they choose, the $500 okay vacation, or the much better one that was only $300? More than half the participants chose to go on the more expensive trip, even though 1) it was inferior in terms of the pleasure it would provide and 2) they'd spent $800 total either way.

The point is that the existence of a past investment doesn't mean we should continue on the same path; in fact, in a rational world, the prior investment is irrelevant. (And if the prior investment has failed, that's a "sunk cost"—we've spent it no matter whether it's failed or succeeded. It's gone.) What is more relevant is our prediction of value in the future. Sometimes looking only at the future is the right thing to do.

Own the future

Ownership changes our perspective. We adjust to our level of ownership and it becomes the baseline by which we judge gains and losses.

One way to overcome the traps of ownership is to try to separate ourselves psychologically from the things that we own, in order to more accurately assess their value. We should think about where we are now and what will happen going forward, not where we came from. This is, of course, much easier said than done, especially when we tend to put so much emotion, time, and money into our lives and into our possessions—our homes, our investments, and our relationships.

Ownership made the Bradleys focus on what they were losing—their beautiful, personalized house—rather than on what they were gaining for the future—money to buy another house, have some nice dinners, and pay for Robert's and Roberta's tuitions at a good college that is close, but not too close. About 90 minutes is the right travel time to enable Tom and Rachel to visit regularly, but it's not so close that they'll end up doing their kids' laundry every week. They'll miss their kids, but not that much. ◆

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

NEW YEAR, WHOLE NEW TAX CODE

At the end of 2017, President Trump signed into law the most comprehensive change to U.S. tax law in more than 30 years. While it should mean a lower tax bill for most taxpayers, exactly how the new rules will affect you depends on your income, family size, where you live, whether you own a home, and more.

What follows is a summary of the changes most likely to impact the greatest number of people. Unless otherwise noted, they are in effect beginning with the 2018 tax year and will expire after 2025, unless extended by Congress. As you'll see, a couple of the changes already have created confusion and will require clarification from the IRS.

• Tax brackets. There are still seven tax brackets,[1] but with lower tax rates in five of the seven (the highest tax rate is now 37%—down from 39.6%). In addition, the income levels the rates apply to have been increased. Net effect? Most people will have more of their "taxable income" taxed at a lower rate.

For trusts and estates, the number of brackets has been reduced from five to four, and the top tax rate has come down from 39.6% to 37%.

• **Personal exemptions.** Exemptions ($4,050 per person in 2017) have been eliminated. Especially for larger families, the negative impact of this may be offset by significant increases in the standard deduction and child tax credit.

• **Standard deductions.** The standard deductions have almost doubled—from $6,350 to $12,000 for singles, and $12,700 to $24,000 for couples. Plus, married people age 65 or older and blind people can deduct an additional $1,300 per person, singles $1,600 more. This should greatly reduce the number of taxpayers who itemize their deductions.

Some charitable organizations are concerned that increasing the standard deduction will remove a key donor incentive, i.e, a tax deduction for a donation. Our hope is that the impact on Christian ministries will be minimal. Biblical teaching about generosity is not *Give-to-get* (a tax refund). It is: *Give as an expression of worship and gratitude*.

• **Child tax credit.** The previous child tax credit of $1,000 per qualifying child under age 17 has doubled to $2,000. In addition, the income levels at which the credit begins to phase out have increased from $75,000 to $200,000 for singles and from $110,000 to $400,000 for couples.

Also, whereas this credit used to be "non-refundable," it is now "refundable" up to $1,400 per qualifying child. That means if the amount of the credit exceeds your tax liability, you may receive a check from Uncle Sam. There are limitations, though. For example, the refundable portion is equal to 15% of your earned income above $2,500, up to the max of $1,400 per child. (If you have three or more qualifying children, there's an alternative formula.)

There's also a new $500 credit for any other dependents you support, such as an aging parent or a child older than 17. This credit, too, phases out at the new higher income levels.

• **Dividends and capital gains.** Short-term capital gains (gains on investments held less than a year) and non-qualified dividends will continue to be taxed as ordinary income. Long-term capital gains and qualified dividends will continue to be subject to one of three tax rates based on income. However, the income ranges have been adjusted upward.[2]

Homeowners can still sell their primary residence and not owe capital gains taxes on gains of up to $250,000 for singles or $500,000 for couples, as long they lived in the house at least two years.

• **Investment income surcharge.** A 3.8% surcharge on net investment income enacted under the Obama administration is still in effect, affecting single taxpayers with modified adjusted gross income (MAGI) over $200,000, or $250,000 for married taxpayers.

• **Itemized deductions.** Below are some of the changes that affect those who itemize deductions on Schedule A.

Medical and dental expenses. More people should now qualify for this deduction as such expenses may now be deducted to the extent that they exceed 7.5% of your adjusted gross income (AGI)—down from 10%. (This change also applies to your 2017 taxes, but it expires at the end of 2018.)

Taxes you paid. The deduction for a combination of real-estate taxes plus state and local sales or income taxes is now capped at $10,000. This will be especially painful for itemizers in states with high state income taxes and/or high real-estate taxes.

Interest you paid. Home mortgage interest is deductible on mortgages up to $750,000—down from $1,000,000. This applies to mortgages on primary and secondary residences with mortgages taken out after December 15, 2017.

The deductibility of interest on home-equity loans and lines of credit has created much confusion, with many news organizations apparently misreporting that such interest is no longer deductible. But financial advisor Michael Kitces[3] points out that the bill draws a distinction between *acquisition indebtedness* and *home equity indebtedness*. According to tax-code definitions, *acquisition indebtedness* includes debt secured by a qualified residence that is incurred in "acquiring, constructing, or *substantially improving*" the residence. Home equity indebtedness is a loan secured by a qualified residence that is used for any other purpose. That would seem to indicate that interest on a home-equity loan or line of credit *used for home improvement* would still be deductible. Further IRS guidance on this likely will be needed.

Regardless, it's clear that the interest on home equity loans used for any purpose other than home *(continued on page 29)*

[1]See the new brackets and more on the Resources page of the SMI website at soundmindinvesting.com/resources/taxes/2018. [2]Details available at the previously mentioned Resources page. [3]bit.ly/2CAtgVQ

LEVEL 2 TWO

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 strategy is best for your situation.

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

SECTOR ROTATION IN LIGHT OF "UPGRADING 2.0"

Sector Rotation is SMI's most aggressive strategy, and historically has also been its most profitable. Since launching SR as a live strategy in November 2003, it has earned an annualized rate of return of +17.3%. SR's recent results have been even more dramatic, with a stunning +32.6% annualized return over the past five years (thru 12/31/17).

That's pretty rarified air for an investment strategy, especially over such a prolonged time period. Not surprisingly, with returns like that, many SMI members wonder how much of their portfolio can be safely allocated to this impressive strategy. And following the introduction of the protective "Upgrading 2.0" protocols last month,[1] two natural questions regarding SR have arisen:

1. Can similar protective protocols be put in place to limit SR's downside risk?

2. If a member uses multiple SMI strategies, does the fact that Upgrading is now significantly less risky allow for an increase in allocation to the riskier SR strategy?

Applying "2.0" protocols to SR

To answer the first question, it's worth noting that we've spent the past 15 years researching and looking closely at SR. We've tested quite a few ideas, many of which have been aimed at trying to tame SR's volatility extremes. Might the new 2.0 protocols finally accomplish this elusive goal?

Unfortunately, the answer is no. Granted, there were only four periods in our nearly 30-year SR testing window when the market dropped enough to trigger these defensive protocols. But surprisingly, whereas those defensive measures were strongly positive when applied to Upgrading, they were beneficial to SR in only *one* of the four cases.

After trying this new approach from several different angles, we're left with the same conclusion we've drawn from other past attempts to "tame" SR: its performance is too frequently strong to warrant ever exiting. Yes, this means we have to live through gut-wrenching volatility at times. But when we try to either dilute SR's holdings or sidestep potential downturns, we miss out on too many strong upside moves.

If we're not willing to concede the performance tradeoff that comes with modifying the strategy itself in an effort to control risk, this means that risk management as it pertains to SR has to be undertaken at the *strategy allocation* level. In other words, members need to limit their SR allocation to a percentage of the portfolio where they can stand the level of volatility SR produces.

In the past, we've recommended limiting the SR allocation to a maximum of 20% of a person's stock allocation. But does the fact that Upgrading's risk profile has declined with the implementation of the new 2.0 protocols perhaps justify an increase to a person's SR allocation?

Boosting SR's portfolio allocation

Let's unpack this idea a bit first. Some readers are wondering why in the world someone would want to boost the SR allocation in light of the recent Upgrading enhancements, while to others it makes all the sense in the world.

To understand these vastly different viewpoints, recognize that most members who currently invest in multiple SMI strategies likely responded to the new Upgrading 2.0 research in one of two ways last month:

1. Great! The overall *risk level* of my portfolio will *decrease* if I keep my strategy allocations the same, given the lower risk that Upgrading 2.0 represents.

2. Great! The overall *risk level* of my portfolio can *stay the same as before* while allowing me to boost the riskier strategies (and/or decrease the safer strategies), given the lower risk that Upgrading 2.0 represents.

Some investors see the world primarily through the lens of avoiding risk, while others view it through the lens of maximizing gain. The research that follows is targeted at those in the second camp who are inclined to respond to the lower risk of Upgrading 2.0 by boosting their SR allocation. This idea makes sense in theory, but our testing indicates that caution is warranted.

Deviating from 50/40/10

A couple of quick disclaimers before diving into the data. First, what follows is not an exhaustive look at the impact of Upgrading 2.0 on the inter-relationships of all the SMI strategies. We'll do a deeper dive on that in the future, likely something similar to the May 2014 cover article that introduced the 50/40/10 concept. (That is, a portfolio allocated 50% to Dynamic Asset Allocation, 40% to Fund Upgrading, and 10% to Sector Rotation.) The intent of this article is to isolate the *specific impact of SR*. Second, there's nothing magical about 50/40/10, but it's the default starting point for most SMI members looking to use multiple strategies, so it's the most natural starting point for illustrative purposes.

To establish a baseline for comparison, it's helpful to quantify how much of an impact the new Upgrading 2.0 defensive protocols would have had on a 50/40/10 portfolio in the past. To establish this, Table 1 shows the results from 50/40/10 portfolios using "old Upgrading" vs. "2.0 Upgrading" during the two most recent bear markets. It also shows the overall annualized rate of return for the two versions for the past 20 years. To be clear, the *only* difference between these two

TABLE 1

50-40-10 Portfolio Using >	Old Upgrading	2.0 Upgrading
9/2000-9/2002	–6.8%	–0.5%
11/2007-2/2009	–26.1%	–11.8%
20 Year Annualized	+12.3%	+14.0%
$10,000 Grows To	$101,138	$136,665

(continued on page 30)

[1]See the January 2018 cover article for details.

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

2017 YEAR IN REVIEW: STRONG STOCK MARKET LIFTS ALL BOATS

The parallels between the current stock market and that of the late-1990s dot-com era grew stronger as 2017 unfolded. In both cases, the gains from an aged bull market continued to be strong as global economic growth accelerated. In both cases, stock valuations were pushed to historical extremes as all-time market highs occurred on a seemingly weekly basis (roughly one-fourth of 2017's trading days ended at a new all-time high!). In both cases, the stock market was led higher by a relatively narrow group of tech superstars (Apple, Amazon, and Facebook each gained more than 50% in 2017). And in both cases, things started getting a little nutty as normal businesses would see their stock prices soar higher on news of them simply being connected to the investing mania of the day: adding a "dot-com" to the company name in the 1990s, vs. expressing any interest in blockchain and cryptocurrency technology today.[1]

The million-dollar question as we start 2018 is whether the current market more closely resembles 1998 (with a couple of more years of big gains still ahead) or 2000 (with a bear market soon to come). Strong cases can be made for both. SMI's approach is to largely ignore the predictions and continue riding our momentum-based models higher until the trend changes. At that point, we'll be reliant on the safety mechanisms *already built into the SMI strategies* to help us avoid some of the downside pain.[2]

As notable as 2017 was for the outstanding gains it produced for equity investors, it was also noteworthy for an unusual lack of volatility. On a total-return basis, the S&P 500 index was positive every month in 2017, running its streak to 14 months (a record). As of this writing in mid-January, the index was within days of setting a new record for the longest stretch without experiencing a 5% decline. It truly has been a one-way trip higher for equity investors lately.

2017 PERFORMANCE OF SMI'S RECOMMENDED STOCK UPGRADING FUNDS BY RISK CATEGORY

Risk Category		SMI[1] Funds	All[2] Funds
Cat 5:	Foreign Stock Funds	27.9%	28.9%
Cat 4:	Small Company/Growth	22.1%	21.5%
Cat 3:	Small Company/Value	4.5%	8.5%
Cat 2:	Large Company/Growth	19.2%	27.7%
Cat 1:	Large Company/Value	17.0%	15.9%

FOOTNOTES: [1] Average of the three recommended funds for each risk category (page 26), assuming any suggested changes were made on the last trading day of each month. [2] An average of all the mutual funds in the SMI risk category shown, including both load and no-load funds.

While caution is warranted, those with the discipline to stay invested in this (seemingly) late-stage bull market have been richly rewarded. All of SMI's equity-focused model portfolios ended 2017 at or near new all-time highs, reinforcing SMI's standard advice to tune out the noise and stick with your long-term plan.

Just-the-Basics (JtB) & Stock Upgrading

Both JtB and Stock Upgrading enjoyed strong gains in 2017, with JtB gaining +21.4% and Stock Upgrading +18.1%. Foreign stocks contributed to the success of both strategies, as global (continued on page 31)

A HISTORICAL LOOK AT THE PERFORMANCE OF SMI MODEL PORTFOLIOS

	U.S. Stocks	SMI Basic Strategies			SMI Premium Strategies		
	Wilshire 5000	Just-the Basics[1]	Stock Fund Upgrading[2]	Bond Fund Upgrading[3]	DAA	Sector Rotation	50-40-10 Portfolio[4]
2017	21.0%	21.4%	18.1%	2.3%	16.0%	56.7%	20.9%
2016	13.4%	12.3%	10.4%	3.6%	–0.5%	16.8%	5.6%
2015	0.7%	–1.6%	0.6%	–1.7%	–6.8%	–9.7%	–4.1%
2014	12.7%	7.5%	5.1%	8.4%[H]	13.0%	49.9%	13.6%
2013	33.1%	31.2%	34.5%	1.1%[H]	16.2%	65.7%	28.4%
2012	16.1%	17.6%	14.1%	4.6%[H]	13.9%[H]	23.3%	14.9%[H]
2011	1.0%	–3.4%	–5.4%	6.5%[H]	1.4%[H]	–3.2%	–1.8%[H]
2010	17.2%	20.0%	17.8%	17.9%[H]	20.3%[H]	9.1%	18.2%[H]
2009	28.3%	33.9%	33.6%	13.5%[H]	17.6%[H]	30.5%	25.3%[H]
2008	–37.2%	–39.3%	–38.8%	6.6%[H]	1.3%[H]	–31.5%	–18.0%[H]
2007	5.6%	7.1%	14.3%	8.4%[H]	10.1%[H]	28.1%	13.5%[H]
2006	15.8%	17.2%	17.4%	7.6%[H]	25.7%[H]	–1.9%	19.6%[H]
2005	6.4%	9.0%	12.0%	2.0%[H]	8.6%[H]	46.1%	13.7%[H]
2004	12.5%	15.6%	17.3%	6.3%[H]	19.3%[H]	12.6%	17.9%[H]
2003	31.6%	35.7%	46.7%	10.6%[H]	22.4%[H]	54.4%[H]	35.3%[H]
Past 15 Years (Total Gain)	341.1%	349.5%	398.6%	153.6%	413.5%	1423.6%	502.7%
Dollar Profits on $100,000[5]	$341,052	$349,514	$398,573	$153,556	$413,471	$1,423,605	$502,695
Annualized Rate of Return	10.4%	10.5%	11.3%	6.4%	11.5%	19.9%	12.7%

Footnotes

Results for all SMI strategies assume all transactions were made on the last trading day of the month. Transaction costs are not included because they vary from broker to broker. **[1]** Results assume the account was rebalanced at the beginning of each year with 40% of the stock allocation invested in the S&P 500 (VOO), 40% in Extended Market (VXF), and 20% in Total International Stock (VXUS). **[2]** For a 100% stock portfolio. **[3]** For a 100% bond portfolio. **[4]** For a portfolio allocated 50% to DAA, 40% to Stock Fund Upgrading, and 10% to Sector Rotation. See the May 2014 cover article for details. **[5]** The dollar results show the amount of profits in an account with a $100,000 balance at the beginning of 2003. **[H]** Results are hypothetical from backtesting a strategy following a mechanical rules-based system. Results for 15 years are shown rather than the typical 10 years to provide better insight into the return comparisons of various strategies in the years leading up to the last bear market. These seem particularly relevant in view of the present market action.

[1]See Sept:p136 for a primer on Bitcoin and cryptocurrencies. [2]See the January 2018 cover article for an explanation of how "Upgrading 2.0" aims to reduce downside risk.

LEVEL 4 FOUR

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

RECONNECTING WITH THE "LABS" IN MONEYGUIDEPRO®

It's been one year since MoneyGuidePro®, the top-rated financial-planning software, became available to SMI premium members (by arrangement with SMI Advisory Services—an affiliated, but separate, company from the SMI newsletter and website).

The response from our premium-level members has been strong! About one-fourth of you are now using MoneyGuidePro® to improve your retirement planning and create a clear path for reaching your financial goals. We're pleased that your feedback has been positive.

Still, there was one aspect of the introductory process for MoneyGuide-Pro® that SMI Advisory wanted to change but couldn't—until now. Originally, new users had only 30 days in which to access the instructional step-by-step videos called "labs" (see the order of the lab process at left).

The Lab Process
Personal Information
Retirement Expectations
Retirement Concerns
Create Your Goals
Social Security
Other Retirement Income
Investment Assets
Willingness to Save
Other Assets
Insurance Policies
Liabilities
Net Worth Chart
Risk Score
Current Scenario
Recommended Scenario • Social Security • Choices • Play Zone
Summary of Changes
What Are You Afraid Of?
Next Step

After 30 days, users were transitioned from the introductory software (known as myMoneyGuide®) to the primary MoneyGuidePro® tool. Once that transition took place, a user couldn't go back and watch any of the video tutorials.

In our March 2017 newsletter, we described the 30-day expiration as an unfortunate "line in the sand." Once crossed, there was no going back. But we have good news! You now can regain access to the videos just by sending an email to mgp@smiprivateclient.com (SMI Private Client is part of SMI Advisory Services). Simply say you're using MoneyGuidePro® and would like to "re-enable the labs." You'll get a return email letting you know when the lab videos have been reactivated.

Be advised that because the video tutorials remain part of the limited introductory version of the software (i.e., myMoneyGuide®, rather than the full version of MoneyGuidePro®) you'll *temporarily* lose access to a few of the more expansive features, such as some report functions and the "What If" worksheets. Don't worry. When you're finished with the labs, email mgp@smiprivateclient.com again and you'll be restored to the full version. Any information you previously entered will not be lost.

Haven't tried MGP?

Yes, we know that several financial firms offer free online tools for retirement planning, and some of those tools are quite good. But none has the comprehensive features of MoneyGuidePro®.

For detailed write-ups about MGP, see our February and March 2017 cover articles. Here's a quick recap: The MGP process starts with your Needs, Wants, and Wishes. In other words, this is not a one-size-fits-all approach. The software prompts you to think through what you want *your* retirement years to look like. Travel? Relocation? Volunteer work? Generous giving? (Or perhaps some combination of those things.)

MoneyGuidePro® then helps you visualize (with charts and graphs) how well your money is likely to hold up under literally hundreds of possible scenarios related to market performance, inflation, and other factors. You'll be able to see if you're on track toward reaching the goals that are important to you. You'll also discover if you're taking too much risk (or perhaps too little risk) with your retirement savings.

According to a December 2017 report in *Financial Planning* magazine, MoneyGuidePro® has been the most-used planning software by financial-planning professionals every year for the past decade. Financial planners pay $1,295 per year to use it, but SMI premium-level members can gain access to MGP for a *one-time* fee of only $50!

Your ability to use the software will continue (at no additional charge) for as long as you're an SMI premium member. You can return to MoneyGuidePro® as often as you like, year-after-year, to update your goals, make adjustments to your income and family situation, and visualize the impact of market events on your probability of long-term success.

If you have been putting off signing up for MoneyGuidePro®, we hope you won't wait any longer. The sign-up process is simple. Just go to SMIAdvisory.com and click the "Learn More" button under the "SMI Plan" option. Next, click "Special Promotions." In the "Promo Code" box enter your SMI username—i.e., the identifier you use to log-in to the SMI newsletter site. (If you're a newer SMI member, this will be your email address. If you've been with us for a long while, this will be whatever username you selected.)

Signing up for MoneyGuidePro® does not make you a client of SMI Advisory Services. If you'd like to enlist SMIAS to help with directly managing your investments, they'll be happy to work with you. But signing up for MoneyGuidePro® creates no obligation on your part.

An unparalleled tool

Whether you've already started with MoneyGuidePro® and believe that reviewing the introductory videos would be helpful to keep you moving forward, or you're ready to sign up now and get going for the first time, we think you'll find using this powerful planning software will bring clarity to your current financial situation—and empower you to make better decisions for your long-term well-being. ◆

Basic Strategies

The fund recommendations shown for Upgrading accountholders are based primarily on "momentum" scores calculated just before this issue was published (not the earlier end-of-month scores shown on this page). Consistency of performance is also considered, along with the portfolio manager's philosophy and number of years at the helm. Three recommendations are made in each risk category. 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 12/31/2017	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	43.2	27.5%	2.1%	4.8%	11.0%	27.5%	8.6%	1.13	0.11%	20%	16%	12%	8%	VXUS
Extended Market Index ETF	Small company stocks	32.9	18.1%	0.3%	4.8%	10.1%	18.1%	9.9%	1.22	0.08%	40%	32%	24%	16%	VXF
S&P 500 Index ETF	Large company stocks	40.1	21.8%	1.3%	6.8%	11.6%	21.8%	11.4%	1.00	0.04%	40%	32%	24%	16%	VOO
Total Bond Mkt Index ETF	Medium-term bonds	5.0	3.5%	0.5%	0.4%	1.2%	3.5%	2.2%	1.02	0.05%	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 12/31/2017[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. Calamos Intl Growth	12/17	No	NTF	NTF	63.9	39.2%	1.8%	6.9%	17.8%	39.2%	10.3%	1.21	1.38	87	None	CIGRX
	2. Vanguard Intl Growth	09/17	Yes	Yes	Yes	62.2	43.0%	1.0%	4.1%	15.1%	43.0%	13.0%	1.37	0.45	133	None	VWIGX
	3. Selected International S	06/17	NTF	NTF	NTF	57.4	38.2%	3.3%	5.2%	14.0%	38.2%	11.0%	1.43	1.30	39	2%30days	SLSSX
Category 4 Small/Growth	1. ☎ Kinetics Small Cap Oppor	02/18	NTF	NTF	NTF	54.3	26.2%	5.4%	6.8%	21.3%	26.2%	11.3%	1.35	1.66	36	2%30days	KSCOX
	2. ☎ Delaware Smid Cap Gro	02/18	No	No	NTF	74.7	35.1%	4.8%	17.9%	21.7%	35.1%	11.4%	1.31	1.21	47	None	DFCIX
	3. Baron Discovery	04/17	NTF	NTF	NTF	47.7	35.5%	-0.2%	3.3%	8.8%	35.5%	12.0%	1.58	1.35	64	None	BDFFX
Category 3 Small/Value	1. ☎ ValueShares US Quant Val	02/18	ETF	ETF	ETF	60.2	25.6%	3.3%	13.5%	21.1%	25.6%	7.1%	1.51	0.79	40	None	QVAL
	2. Royce Opportunity	06/17	NTF	NTF	NTF	37.3	21.5%	0.8%	3.4%	12.5%	21.5%	10.6%	1.64	1.49	246	1%30days	RYOFX
	3. AllianzGI NFJ Mid-Cap Val	06/17	No	NTF	NTF	40.8	26.6%	0.7%	4.9%	9.3%	26.6%	12.6%	1.12	0.99	102	None	PQNAX
Category 2 Large/Growth	1. iShares Edge USA Momentum	12/17	ETF	ETF	ETF	62.3	37.5%	0.1%	8.1%	16.7%	37.5%	16.3%	0.97	0.15	127	None	MTUM
	2. Fidelity OTC	06/17	Yes	NTF	Yes	56.8	38.6%	0.6%	6.0%	12.2%	38.6%	16.6%	1.49	0.81	279	None	FOCPX
	3. Guggenheim S&P 500 Tech	04/17	ETF	ETF	ETF	54.3	33.0%	-0.4%	6.2%	15.1%	33.0%	17.7%	1.41	0.40	69	None	RYT
Category 1 Large/Value	1. SPDR Dow Jones Industrial	12/17	ETF	ETF	ETF	56.5	28.1%	2.1%	11.1%	17.3%	28.1%	14.3%	1.10	0.17	31	None	DIA
	2. Toreador Core	05/17	NTF	NTF	NTF	49.4	25.3%	1.2%	7.1%	16.9%	25.3%	10.9%	1.22	1.20	102	2%60days	TORLX
	3. Miller Opportunity	06/17	Yes[10]	Yes[10]	NTF	36.4	26.0%	1.4%	5.4%	5.0%	26.0%	8.1%	2.12	1.36	37	None	LGOAX[10]
Bond Categories	☎ Vanguard Inflation Protect [6]	02/18	Yes[11]	Yes[11]	Yes[11]	5.9	2.8%	0.9%	1.2%	1.9%	2.8%	1.8%	1.20	0.20	8.0[7]	None	VIPSX[11]
	Vanguard I-T Bond Index	01/15	ETF	ETF	ETF	4.4	3.7%	0.2%	0.0%	0.8%	3.7%	2.6%	1.31	0.07	6.5[7]	None	BIV[8]
	Vanguard S-T Bond Index	07/12	ETF	ETF	ETF	0.9	1.2%	0.0%	-0.3%	0.0%	1.2%	1.2%	0.45	0.07	2.7[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-January, 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. **[10]** At some brokers, the load-waived share class is LMNOX. Read the fund writeup (June2017:p93) before purchasing. **[11]** If available, those investing at least $50,000 should buy the Admiral share (VAIPX) instead.

☎ 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 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 Jan2018: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 is Calamos International Growth, the highest-rated Cat. 4 fund available is Kinetics Small Cap Opp, 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.

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).

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	Calamos Intl Growth
Stock Cat. 4: Small/Growth	16%	$8,000	Kinetics Small Cap Opp
Stock Cat. 3: Small/Value	16%	$8,000	ValueShares US Quant Value
Stock Cat. 2: Large/Growth	16%	$8,000	iShares Edge USA Momentum
Stock Cat. 1: Large/Value	16%	$8,000	SPDR Dow Jones Industrials
"Rotating" Bond Fund	10%	$5,000	Vanguard Inflation Protected
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	

[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 Jan2018: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 was roughly 0.5% per month. For more details, see Oct2011:p153.]

◆ **In the Small/Growth group, Oberweis Micro-Cap (OBMCX, 11/2015) and Conestoga Small Cap Investors (CCASX, 11/2017) are being replaced.** These two funds represent the extremes of the Upgrading process: Oberweis has been recommended for more than two years, while Conestoga was recommended just three months ago. Both fell below the quartile cutoff for their peer group this month and are being sold as a result of that valuable, mechanical selling discipline. In Oberweis' case we don't "wait and see if it bounces back since it's been such a big winner." And in Conestoga's case we don't "hold on a little longer, since we just bought it recently." The numbers tell the story, for better or worse.

The story the numbers tell about Oberweis is that it crushed its small/growth peer group over the 26 months we owned it. Oberweis gained +57.5% (thru 12/31), much more than the +32.5% gain of its average SMI small/growth peer.

Conestoga's story wasn't terrible: it gained +4.5% in the three months ended 1/22/18, which is nearly a +20% annualized rate! Usually we'd be thrilled with that type of gain, but not when the average small/growth fund tracked by Morningstar gained +8.3% during the same period.

• **Kinetics Small Cap Opportunities (KSCOX) is being added.**[1] We've had great success recommending this fund in the past. In 2005-08, we held it for 29 months and saw it gain +38.1% (while its average peer was up +14.3%). We owned it again for 15 months in 2013-14, and it outperformed again, +41.9% to +27.3%. So we're enthused to see it back at the top of the rankings once again.

In an era when many funds own hundreds of stocks and the largest holdings may only comprise 1%-2% of the fund's assets, the Kinetics funds are throwbacks to bigger manager bets on specific companies. This is a concentrated fund with only 28 holdings, and a whopping 27% of assets are invested in its top holding—Texas Pacific Land Trust. This trust, which began in 1871 with more than 3.4 million acres of Texas desert and grassland, has gradually sold that stake down to less than a million acres. Land has been a great investment in recent years, but what has lit a fuse under these share prices in recent years has been the resurgence of oil revenues. As those revenues come in, the trust pays out a small dividend, and uses the rest to retire outstanding shares, which just keeps pushing the value of the existing shares higher.

That said, with this degree of portfolio concentration, the fund's returns can be volatile at times. But KSCOX does employ a more value-oriented approach than most of its peers in the small/growth group, so hopefully that will help limit our risk somewhat.

• **Delaware Smid Cap Growth (DFCIX) is being added.**[1] Over the past year, we've recommended a handful of funds that normally charge a sales load to purchase, but are *available on a load-waived basis through certain brokers*. This has opened up a number of great funds to SMI members that previously were unavailable. Unfortunately, these recommendations can be more confusing, given that many of these funds are available load-waived at one broker but not at another.

Here's the crucial information about this fund: As of this writing, DFCIX is available load-waived *only at Schwab. If your account is elsewhere, do not buy this fund* (unless you first confirm that it is available with no load). We understand it is unusual for SMI to recommend funds with narrow availability like this, but during this transition when load funds are being added unevenly to the broker platforms, we think the best approach is to recommend the top funds as long as they're available load-waived at *either* Schwab or Fidelity. For those who can't buy a particular fund, there are two other recommendations offered in each risk category.

◆ **In the Small/Value group, Zacks Small Cap (ZSCCX, 11/2017) is being replaced.** There's no obvious explanation why this fund has faltered since we bought it three months ago, but it has gained only +1% at a time when most of its peers have earned more, so we're moving on. The beauty of a mechanical selling discipline is that we don't always have to figure out *why* a move needs to be made, just that it does.

• **ValueShares US Quantitative Value ETF (QVAL) is being added.**[1] This ETF is a "black box" in terms of how it screens for value stocks, meaning that there isn't much information provided as to exactly how it uses various valuation criteria to choose stocks. But its performance has been great, so we're trusting our rankings and adding it to our recommended list. ◆

BOND UPGRADING — NEW FUND RECOMMENDATION

[The SMI Bond Upgrading strategy debuted at the beginning of 2015. *This approach involves investing half of the bond portfolio in two "core" funds which do not change.* These two funds provide stability to the portfolio. The other half of the bond portfolio is invested in a single upgrading recommendation. This is the selection being updated this month. For more details about how the SMI Bond Upgrading strategy works, see Jan2015:p7.]

◆ **Vanguard Intermediate-Term Bond Index (BIV/VBILX/VBIIX, 7/2017) is being replaced.** Bonds were pretty quiet in the second half of 2017, but that picture has changed markedly so far in 2018. In just three weeks, the benchmark 10-year Treasury yield has jumped from 2.46% to 2.66%.

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

MONEYTALK

Given that bond prices *fall* when bond yields *rise*, that sharp move has been enough to wipe out the meager gains this fund earned in the final six months of last year. Unfortunately for bond investors, with the economy showing increased strength and the Fed set to continue hiking interest rates, there's little reason to expect this dynamic to change.

• **Vanguard Inflation-Protected Securities (VIPSX/VAIPX) is being added.**[1] For the first time in a decade, inflation is back as a bond-market concern. Global economies are heating up, and the threat of an inflationary surprise (albeit from low levels) is being discussed as a possible pitfall for the financial markets in 2018. Bond investors hate inflation because it erodes the buying power of their fixed returns and pushes down the value of their existing bonds. So as the risk of inflation has started to pick up again in recent months, so has the performance of inflation-protected bonds relative to conventional bonds.

Remember though, the protection these bonds offer is *relative*, not *absolute*. In other words, if interest rates continue to rise due to inflation risk, these types of bonds should do *better* than conventional bonds, but both types could still lose money. That's been the case in the early weeks of 2018. The advantage for inflation-protected bonds has come via earning more in the last half of 2017, while losing less so far in 2018. So while inflation-protected bonds certainly aren't foolproof, they do offer a bit of a cushion against rising rates. ◆

LEVEL 1 / CONTINUED FROM PAGE 22:

NEW YEAR, WHOLE NEW TAX CODE

improvement is no longer deductible, which may be especially painful for families who have been using—or planned to use—a home equity loan to help pay for college.

Gifts to charity. You can now deduct contributions to qualified charities up to 60% of your AGI—an increase from 50% previously.

Casualty and theft losses. The big change here is that personal casualty/theft losses may now be deducted only if related to a declared national disaster, such as Hurricane Harvey. Previously, such losses could be deducted if they exceeded $100 per incident and to the extent they were not covered by insurance and exceeded 10% of AGI.

Miscellaneous deductions. These have been eliminated, including unreimbursed employee expenses, tax-preparation fees, investment-advisory fees, and more. One bright spot for higher-income earners is that the phase-out of itemized deductions (the Pease limitation) has been repealed.

• **Saving for college.** The most significant change here is that tax-free distributions are now allowed from 529 college savings plan accounts for the payment of qualified *private elementary and secondary education* costs—up to $10,000 per student per year.

However, you may want to be cautious about moving forward too quickly with this one, especially if you live in one of the 30-plus states that allow state income-tax deductions or credits for contributions to 529 plans. A number of state treasurers have expressed concern that parents of private-school students will suddenly start funneling their tuition money through 529 plans to get the state tax break, leading to an unanticipated drop in state tax revenue. In some cases, state laws may need to be revised before tax-free withdrawals will be allowed to be used for K-12 expenses. So before making any changes to your 529 plan contributions or withdrawals, it's probably wise to check with your state's 529-plan administrator.

• **Paying for college.** The tax deduction for student loan interest (up to $2,500 per year) was retained, tuition waivers for grad students remain tax-free, and two tax credits—the Lifetime Learning and American Opportunity credits—remain.

• **Kiddie tax.** If you have children who receive *unearned* income, it will now be taxed according to the trust and estate-tax brackets instead of your marginal rate. Whether that's good news or bad depends on your tax bracket and how much unearned income your child receives.

• **Roth conversions.** Beginning this year, if you want to convert money from a traditional IRA to a Roth, you better be sure. The new tax law no longer allows such money to be recharacterized as traditional IRA money. Typically, recharacterizations have been used to undo conversions by those who ultimately decided the tax burden was too great. You can still get a do-over for conversions done in 2017, all the way until October 15, 2018, but not for conversions done in 2018 or beyond.

• **Alternative minimum tax.** While the AMT hasn't disappeared, it now hits far fewer people. You'll still have to calculate your AMT income (AMTI), but the exemption amount you can then subtract from that figure has risen to $70,300 for singles and $109,400 for married couples filing jointly—up from $54,300 and $84,500 respectively. In addition, phase-out of the exemption has risen substantially. Previously, singles would lose $.25 per dollar of exemption for every dollar of AMTI above $120,700 or $160,900 for couples. Those thresholds have now risen to $500,000 and $1 million respectively.

• **"Pass-through" businesses.** If you own a business structured as a sole proprietorship, S corporation, partnership, or LLC, you may be able to deduct up to 20% of your business income. However, there are important restrictions that could eliminate or reduce the deductible amount.

• **Estate tax.** Few people have been subject to this tax in recent years, and now even fewer will be. The new law doubles the estate- and gift-tax exemption to $11.2 million for individuals or $22.4 million for couples. The annual gift tax exclusion has also increased—from $14,000 to $15,000 per person.

• **Health insurance mandate.** The Obama administration's Affordable Care Act requirement that individuals buy health insurance or be subject to a fine has been repealed, effective beginning in 2019.

All in all, it's a lot to absorb, with lots of moving pieces. SMI will write further about some of these changes in the months ahead. ◆

[1] For more on this fund, visit www.morningstar.com. Those investing at least $50,000 should use the Admiral share (VAIPX) which has lower expenses.

LEVEL 2 / CONTINUED FROM PAGE 23:

SECTOR ROTATION IN LIGHT OF "UPGRADING 2.0"

portfolios is the application of the new 2.0 protocols to the 40% Upgrading portion of each.

Clearly, Upgrading 2.0 would have made a significant impact across the board. The "Growth of $10,000" row is included to illustrate how the power of compounding amplifies the difference. Framed a little differently, that row demonstrates that over 20 years, the new Upgrading 2.0 protocols would have boosted the total value of a $10,000 portfolio invested in 50/40/10 by 35% over the old approach.

From this baseline, we can make changes to the mix of strategies and measure the impact of those changes. Table 2 shows the same "Upgrading 2.0" baseline version of 50/40/10 from Table 1, then adds two variations. The middle column shows the impact of taking 5% of the total allocation away from Dynamic Asset Allocation (DAA), the safest of the three strategies, and giving that extra 5% to SR. The far right column shows the result of taking 10% away from DAA and giving it to SR. From left to right, then, the table shows the backtested results of a 50/40/10 portfolio, a 45/40/15 portfolio, and a 40/40/20 portfolio, *all using the new Upgrading 2.0 protocols*.

TABLE 2

1998-2017	50-40-10	45-40-15	40-40-20
9/2000-9/2002	–0.5%	–2.4%	–4.2%
11/2007-2/2009	–11.8%	–13.7%	–15.6%
20 Year Annualized	+14.0%	+14.7%	+15.4%
$10,000 Grows To	$136,665	$155,313	$175,194
Improvement from 50-40-10 >		$18,648	$38,529

Not surprisingly, decreasing the protection provided by DAA while increasing the riskier SR allocation causes the bear-market losses to be a bit more severe. But over the entire 20-year period, it also adds to the total returns sufficiently that some members would likely accept that tradeoff.

If this were the end of the story, many members would likely find this to be compelling evidence to boost their SR allocations. But unfortunately, there's an important complication that may make you rethink the wisdom of that maneuver.

Long-time readers may remember that for the first several years after SR's launch, we made a big deal out of one particular trade in the SR backtesting. Back in 1999, at the peak of the dot-com bubble, the SR research showed we would have bought a fund named "Amerindo Technology." The results of that trade were unlike anything else in the SR backtested history: Amerindo shot up to *+450%* gain in 16 months after being purchased. Subsequently, it endured the single worst month in Sector Rotaton's history, a loss of -27.2% in April 2000. But even after that, it still exited with a whopping +275% total gain.

To be blunt, we never expect to see another trade remotely close to that again, which is why for years we would often post two sets of SR results: one that included the Amerindo trade, and another that excluded it. That +275% gain had a powerful effect on SR's overall returns, especially when those 18 months constituted a large chunk of the 13-year backtested history we had at SR's launch. We didn't want to misrepresent what SMI readers should expect, given we believed Amerindo was a never-to-be-repeated outlier.

Over time, we've become a little more sanguine about the Amerindo trade. One reason is, with nearly 30 years of history on SR now, the impact of that trade—as great as it was—has been diluted dramatically in terms of SR's long-term return history. (It's worth pointing out that if Amerindo hadn't existed, the alternative fund SR would have bought gained +173% during the months that Amerindo earned +275%.) Also, witnessing multiple other triple-digit gains within SR since its launch has softened our stance on the idea that 1999 was so unusual and perhaps ought to be excluded from the strategy history.

That explanation leads us to Table 3, showing the same three portfolios from Table 2, with one key difference: we've *excluded 1999* from the 20-year total return calculation.

It's not that 1999 doesn't count. The tech bubble happened and the gains were real. But notice the "Improvement from 50-40-10" numbers in Table 3 are much lower than those in Table 2. That shows almost all of the overall gains of shifting money from DAA to SR across the portfolios are attributable to that single year of amazing stock-market bubble returns. When we exclude 1999, the advantage of decreasing DAA and increasing SR dwindles dramatically. Yet the downside risks still remain—there is no impact on the bear market returns experienced by the various portfolios.

TABLE 3

1999 Omitted	50-40-10	45-40-15	40-40-20
9/2000-9/2002	–0.5%	–2.4%	–4.2%
11/2007-2/2009	–11.8%	–13.7%	–15.6%
20 Year Annualized	+11.7%	+12.0%	+12.3%
$10,000 Grows To	$91,172	$96,040	$100,956
Improvement from 50-40-10 >		$4,868	$9,784

Over the other 19 years, each 5% allocation shifted from DAA to SR resulted in a boost of only +0.3% to overall returns. That doesn't seem like a compelling tradeoff to us. The psychological toll of SR can be significant at times, and not just in ancient history (like 1999—ha!). Many members likely remember SR falling a stunning -21.8% in just *seven trading days* back in 2015 when then-Presidential candidate Hillary Clinton tweeted about drug-company price gouging and sent SR's current biotechnology holding over the cliff. When we warn members that SR isn't for the faint of heart, we aren't kidding around.

Conclusion

The whole point of combining SMI's strategies into something like a 50/40/10 portfolio is to minimize the wear and tear on your emotions and make it easier to consistently do the right thing. Boosting SR—by far the most volatile SMI strategy—will likely boost returns over the long-term *if an investor can stick with the program through the emotionally trying periods*. In our experience, that's a huge "if."

That said, our approach to this type of information is to report it, warts and all, and let you decide how to apply it. SMI's "official" guidance regarding Sector Rotation allocations remains unchanged: For most members, 20% seems like an aggressive upper threshold, and many should limit its use well below that level. ◆

LEVEL 3 / CONTINUED FROM PAGE 24:

2017 YEAR IN REVIEW: STRONG STOCK MARKET LIFTS ALL BOATS

markets outpaced the U.S. for the first time since 2012. Growth stocks strongly outpaced value, and large-company stocks outperformed smaller ones. Overall, foreign and large/growth were the market's strongest categories, a marked reversal from 2016 when those were the two worst performers.

Bond Upgrading

The bond story was a bit more nuanced in 2017. Stronger economic growth reinforced a growing confidence by the Federal Reserve in the resilience of the U.S. economy, lending support for three interest-rate hikes. This pushed the short-term "Fed Funds rate" above 1% for the first time since the depths of the financial crisis in September 2008. However, interest rates didn't rise across the board. The benchmark 10-year Treasury yield started 2017 at 2.45%, spent much of the year below that level, and finished roughly unchanged at 2.40%.

Bond Upgrading saw modest returns of +2.3% for the year, which was less than our bond-market benchmark (Vanguard's U.S. Bond Market index fund, which gained +3.5%). A large part of that was our avoiding the riskier long-term and high-yield ("junk") portions of the bond market, both of which saw strong returns. While this cost us a performance boost in 2017, at this late point in the credit cycle, we simply don't think the risk/reward relationship warrants holding those types of securities in our Bond Upgrading portfolios now (particularly given that many SMI members already have exposure to long-term bonds via DAA). The fact that European junk bonds *currently yield roughly the same as U.S. Treasuries* just shows how out-of-whack some of these valuations have become, and we think there will be strong—and painful—repricing of this risk at some point. That's not something we want in the most conservative part of our SMI-member portfolios.

Dynamic Asset Allocation (DAA)

DAA bounced back from uninspiring performance in 2016 to produce excellent returns of +16.0% in 2017. While this trailed the stock market's overall return, we're very pleased to have participated in the market's gains to this degree. (Remember, DAA is never more than two-thirds invested in stocks.) This was DAA's second best annual return since the strategy was introduced in 2013. But in 2013, DAA gained +16.2% during a year when the stock market was up twice as much (+33.1%). DAA's gain in 2016 was more impressive given the stock market's more modest gain of +21.0%.

Being invested in both U.S. and foreign stocks the entire year was the key to DAA's success. While that may seem basic, there are many people who likely *would not have had the courage to be invested so heavily in stocks* outside of a defensively-oriented system such as DAA. Knowing that DAA is designed to quickly respond to market downturns gave many investors the confidence to stay invested and enjoy 2017's strong gains.

In light of last month's announcement regarding the new protective Upgrading 2.0 protocol, several members have asked whether they still need DAA. Our answer to that is yes, for two reasons. First, DAA remains SMI's best strategy for downside-risk protection. During the last bear market, Upgrading 2.0 would have fallen -17.4% whereas DAA would have lost only -1.4%. Secondly, as those results demonstrate, these two strategies manage risk differently. Having some exposure to both approaches provides a degree of strategy diversification that is likely to be beneficial over time. As excited as we are about Upgrading 2.0, we still think maintaining exposure to DAA is wise, particularly given the possibility that we're currently in the late stages of this long bull market.

2017 PERFORMANCE DAA ETF UNIVERSE

Ticker & Category	2017 Result
SPY U.S. Stocks	+21.7%
EFA Foreign Stocks	+25.1%
VNQ Real Estate	+4.9%
BLV Long-Term Bonds	+10.7%
SHY Money Market	+0.3%
GLD Gold	+12.8%

Sector Rotation (SR)

At the risk of sounding like a broken record, 2017 was another incredible year for SR in what has become an extended string of them. After posting an eye-popping +56.7% gain in 2017, SR's five-year annualized return sits at a dizzying +32.6%. Said differently, $10,000 invested in SR at the beginning of 2013 would have grown to more than $41,000 by the end of 2017. That $31,000 gain would pay for an annual SMI Premium membership for the next 182 years—a pretty good value! 2018 marks SR's 15th year as a live strategy, and its simplicity and consistency continue to amaze, just as they have since it was first launched back in 2003.

50/40/10

This portfolio refers to the specific blend of SMI strategies—50% DAA, 40% Upgrading, 10% Sector Rotation—examined in detail in our May 2014 cover article, *Higher Returns With Less Risk: The Best Combinations of SMI's Most Popular Strategies*. It's a great example of the type of diversified portfolio we encourage most SMI readers to consider.[1] The markets can shift suddenly between rewarding risk-taking and punishing it, so a blend of higher-risk and lower-risk strategies can help smooth your long-term path.

With all three of the component strategies posting excellent returns in 2017, it's no surprise that the 50-40-10 portfolio also excelled with a gain of +20.9%. Given that 90% of this portfolio would be expected to vastly outperform an indexed portfolio during market downturns (due to the risk management built into both DAA and Upgrading 2.0), it's amazing that it was able to nearly match a purely indexed portfolio during a year of such strong gains for stocks.

Gathering a large percentage of the market's gains during rising markets while avoiding even a portion of its losses during falling markets is a recipe for superior long-term returns—plus it provides the type of emotional stability so important to sustained investing success. ◆

[1] Blending multiple strategies adds complexity. Some members may prefer an automated approach. See bit.ly/SMI504010.

PERIODICALS POSTAGE
PAID AT LOUISVILLE, KENTUCKY

Dated Investment Material
Please Do Not Delay!

PERFORMANCE DATA

SOUND MIND INVESTING MODEL PORTFOLIOS • DATA THROUGH DECEMBER 31, 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]	21.0%	1.1%	6.4%	21.0%	11.4%	15.7%	8.6%	10.4%
Just-the-Basics[2]	21.4%	1.1%	5.6%	21.4%	10.3%	13.6%	7.7%	10.5%
Stock Upgrading[3]	18.1%	0.4%	3.8%	18.1%	9.5%	13.1%	6.8%	11.3%
U.S. Bond Market[4]	3.5%	0.4%	0.4%	3.5%	2.1%	1.9%	3.8%	4.0%
Bond Upgrading[5]	2.3%	0.2%	-0.1%	2.3%	1.4%	2.7%	6.1%	6.4%

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]	16.0%	1.5%	4.5%	16.0%	2.5%	7.2%	8.9%	11.5%
Sector Rotation[7]	56.7%	-1.8%	15.1%	56.7%	18.3%	32.6%	16.9%	19.9%
50-40-10 Blend[8]	20.9%	0.6%	5.5%	20.9%	7.0%	12.3%	9.4%	12.7%

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 12/31/2017	Year to Date	1 Month	3 Months	12 Months	3 Year Annual	5 Year Annual	10 Year Annual
SMIFX	17.47%	0.83%	4.28%	17.47%	7.09%	11.58%	5.51%
Wilshire 5000	21.00%	1.08%	6.39%	21.00%	11.36%	15.67%	8.64%
S&P 500	21.83%	1.11%	6.64%	21.83%	11.41%	15.79%	8.50%

Quarterly Returns as of 12/31/2017	Year to Date	1 Month	3 Months	12 Months	3 Year Annual	5 Year Annual	10 Year Annual
SMIFX	17.47%	0.83%	4.28%	17.47%	7.09%	11.58%	5.51%
Wilshire 5000	21.00%	1.08%	6.39%	21.00%	11.36%	15.67%	8.64%
S&P 500	21.83%	1.11%	6.64%	21.83%	11.41%	15.79%	8.50%

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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