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Financial Wisdom for Living Well

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Will Your Retirement Nest Egg Last? How to Use MoneyGuidePro® to Find Out

It's the paramount question of every retiree: Will my lifetime savings be enough to last through the years ahead? The good news is that it's easier to answer that question than ever before, with help from MoneyGuidePro®, the web-based financial-planning software available to SMI premium-level members.

by Joseph Slife and Austin Pryor

Will you have enough money to live on for the rest of your life? That uncomfortable question is haunting the retiring Baby Boom generation (people born between 1946 and 1964). For many, the answer is a not-too-reassuring "maybe"—even for people who saved and invested diligently during their working years. Or perhaps a more common answer would be, "I really have no idea."

The "de-accumulation" phase of life—when you're no longer building wealth but spending it—is difficult to plan for. Your "time horizon" is unknown. Will you live to 80? To 90? To 100? Long life is a blessing (Psalm 91:16, Proverbs 9:10-11), but with it comes the possibility that you might outlive your savings. This is known in the financial world as "longevity risk."

Improvements in healthcare, nutrition, and workplace safety are among the factors helping people live longer now than in previous generations. According to the Society of Actuaries, if both husband and wife reach the age of 65, there's a 25% chance at least one of them will survive to age 98. For anyone retiring at 65, or even age 70, it would be wise to have a de-accumulation strategy that can survive for roughly three decades.

In addition to longevity risk, retirees face the same "market risk" all investors face, but with potential consequences that aren't easily overcome. During the decades of building wealth in preparation for retirement, a market downturn can be an investor's friend (though that may not seem apparent at the time!). Those who stick to their investing plans during declines, steadily buying shares at lower prices, are rewarded when the market rebounds.

But for retirees, who are no longer making new investments, a downturn could affect how much they have to live on for years to come—especially if such a decline occurs early in retirement (this is called "sequence of returns" risk). A portfolio you worked decades to build can shrink before your eyes.

There is also "inflation risk." A rising cost of living can relentlessly eat away at the purchasing power of retirement savings, making your remaining funds worth less and less.

A strategy that works

In the face of these and other risks, how can you be confident that your financial resources will last? Perhaps the most common strategy, recommended by many *(continued on page 83)*

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

The Making of a Wise Money Manager

Among the attendees at my recent workshop, one was an avid reader of Morningstar analyst reports. Another was thinking about investing in GE, noting this seemed an opportune time since the blue-chip company's stock price has been cut in half over the past year. An adept point, given that the attendees were students at my sons' middle school!

A teacher invited me to speak about money and I jumped at the chance because I've long believed that this is one of the most important topics typically not taught in schools. While I hope the students learned some helpful lessons in our brief time together, here are four lessons *I* learned.

1. Kids understand more than we may assume. My kids have shown time and again they can handle more than I think they can—more responsibility, and more teaching delivered in grown-up terms. This experience of meeting with a large group of kids taught me this lesson once again.

Their teacher had them post questions to Google Docs, starting a couple of weeks before the first session. While a few students acknowledged they didn't know much about money, far more had questions about investing, 401(k) plans, and taxes. Several wanted to learn about cryptocurrencies.

2. Kids know a lot about their parents' finances. After the first session, the teacher emailed me this student comment: "My parents always have credit card debt, and they always have car payments. They haven't been able to dig out of that hole. I will have to save for and pay for my own college, and I know I will come out of college with some debt. I hate starting out behind, and want to know what to do to not end up in the cycle like my parents, but it's hard to get ahead. I don't get an allowance or money at birthdays like a lot of my friends."

That note was heartbreaking, but also showed remarkable maturity. I asked the teacher to forward the student a couple of recommendations, such as reading the book, *Debt-Free U*, and I mentioned local employers I was aware of that provide tuition assistance.

The note was a powerful reminder that children are watching how their parents use money and listening to how they talk about it. We are our kids' primary role models, which should motivate us to get our financial houses in order.

3. The best teaching is real, not abstract. At this school, most of the sixth graders are introduced to investing through an online game in which they have $100,000 to invest. They build a portfolio of stocks and the student who generates the highest return by the end of the school term wins.

While I'm sure the students learn some helpful investing lessons through the game, the short time-frame can't help but teach the kids to swing for the fences instead of learning the importance of a long-term perspective.

Also, it's far easier to take risks and accept losses with play money. I encouraged the students to start investing their own money and showed them how they could open a no-minimum custodial account at Fidelity or TD Ameritrade and build a diversified portfolio with commission-free ETFs, investing across the entire S&P 500 for just $32 (one share of SPLG) or holding a global stock portfolio for $73 (ACWI).

4. Youth is entrusted to the young—and their parents. At the beginning of the first session, I gave the students a sense of their financial potential. I showed them that if they earned $40,000 at age 21 and increased that salary with two percent annual raises, by age 70 they will have earned nearly $3.3 million. That represents an incredible opportunity.

I told them the financial habits they establish now, at a time of life when they don't have much money, are hugely important because those habits will be magnified—for better or for worse—when they start earning a full-time salary. If they get in the habit of giving and saving/investing a portion of every dollar they receive, they will be on track toward a meaningful, successful experience with money.

But someone has to come alongside them to teach and demonstrate those habits.

An old comedian once quipped, "Youth is wasted on the young." A better word is "entrusted." But youth isn't just entrusted to the young; it's entrusted to the parents of young people and others who have influence on them. I came away from this experience all the more mindful of that, and all the more committed to helping our own kids, and perhaps their classmates, get started in the right direction. ◆

Matt

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MANAGING EDITOR

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Will Your Retirement Nest Egg Last? How to Use MoneyGuidePro® to Find Out

(continued from front page)

financial planners, is to withdraw 4% of retirement holdings in the first year of retirement, then stick with the dollar amount of that withdrawal in subsequent years, increasing it only to account for inflation. Others think 4% is too low. Still others think 4% is too high—they suggest an initial withdrawal closer to 3%. Some dismiss the idea of a static percentage target altogether, suggesting instead that it's best to divide your age by 20 and use that number as your year-by-year percentage guide.

Financial writer Jonathan Clements recently complained that many such strategies seem "overly engineered and overly dependent on the investment returns assumed." He noted that "what we need is a strategy that'll work even if markets are miserable and even if we live an extraordinarily long life."

He's right—and if you have MoneyGuidePro® (the web-based financial-planning software available to SMI Premium-level members[1]), you have the tools necessary to help you figure out such a strategy, one based not on a percentage formula, but on funding *your specific spending goals*. As we have noted previously,[2] MoneyGuidePro® (MGP) provides a "goals-based approach to financial planning…[and can] help you easily see the impact of various trade-offs, sacrificing a little of this in order to get more of that."

Keep in mind that while you can use MGP to explore various spending possibilities and earnings assumptions, in the end your goals must be carefully thought through and realistic. Overly optimistic goals and wishful thinking about future earnings will produce a plan that isn't likely to work in the real world. Instead, you must be realistic about the possibilities and acknowledge that successful financial planning usually involves tough choices and trade-offs.

A hypothetical couple

Jack and Sara Rogers have reached the threshold of retirement, and are trying to come up with a sustainable withdrawal strategy. We will look at how MoneyGuidePro® can provide the information they need to manage the de-accumulation phase of life.

We'll assume Jack and Sara are both age 65. They've saved and invested diligently for several decades and are in reasonably good financial shape. Specifically, Jack and Sara have finished paying off their mortgage and they have a combined $800,000 in their retirement accounts. Sara also has a $4,000 annual pension from a job she once held.

In addition, they have Social Security retirement benefits coming. Although they could have started taking reduced retirement benefits at age 62, they decided to wait and take a higher monthly benefit later. Sara will retire and claim at age 66—her "full retirement age" as defined by the Social Security Administration. Her projected first-year benefit is $19,000. Jack also is retiring at 66 but will wait until age 70 to apply for SS, so that his monthly benefit will be 32% greater than if he claimed at 66. (His claiming strategy also will ensure the highest possible ongoing benefit for Sara if Jack dies first.)

Financially speaking, most people would be happy to trade places with Jack and Sara. It appears they have enough money to get through their senior years while enjoying a comfortable lifestyle and being generous. But do they? Let's use MoneyGuidePro® to find out.

In our February and March 2017 cover articles, we explained how to set up MoneyGuidePro®, so we won't repeat all that information here. Our hypothetical couple Jack and Sara already have input all the needed particulars about their retirement accounts, Sara's pension, their paid-off mortgage, and Social Security claiming strategies. Plus they have input reliable estimates for their basic living expenses (based on their budget) and the projected cost of various future goals (such as travel, additional giving, and minor home remodeling).

Now, they're ready to use MoneyGuidePro® to help them make wise choices about how much they can draw from their retirement portfolio each year without undermining the likelihood that their money will last for the next three decades.

The known unknowns

As suggested above, Jack and Sara's drawdown calculation will be complicated by significant unknowns:

- **They don't know how long they'll live.** Do they need their money to last for only a few years or for decades?
- **They don't know the rate of return they'll earn.** Will their average rate of return be 10%? 6%? More or less?
- **They don't know the sequence of returns.** If Jack and Sara's nest egg suffers a significant market loss right before or shortly after they start taking withdrawals, their portfolio will be less likely to last the full duration of their lives.
- **They can't predict future inflation.** Inflation slowly undermines purchasing power. That's why it's often called the "silent killer" of saving and investment. (Yes, sometimes inflation moves quickly, but that has been relatively rare.)

In dealing with these uncertainties, the life-expectancy unknown is the easiest to plan for: Jack and Sara must assume they will live a really long time! To be conservative, they decide to use age 95 as their plan's projected termination date.[3] This means they need their money to last for 30 more years.

Getting ready to run the numbers

Because our hypothetical Mr. and Mrs. Rogers already have done their MoneyGuidePro® set-up, they can simply log-in and click on the name of their account, "Jack and Sara's Plan." In the "About You" section, they go to the drop-down for "Goals," and then "Retirement Period," and they choose "Live to 95." (They have the option of choosing differing "live to" ages, of course. For example, Jack could select "Live to 88" and Sara "Live to 95.")

Jack and Sara already have input their projected first-year expenses in retirement (in the "Goals" section). That number will be carried forward year-by-year with a default 2.5% assumed annual inflation rate. (As we'll explain shortly, this inflation rate can be adjusted later to judge the impact of higher/lower inflation.) Based on their existing budget, Jack and Sara think their first-year spending will be about $75,000, which includes basic living expenses, ramped-up giving, and a

[1]See soundmindinvesting.com/moneyguidepro. MoneyGuidePro®, PlayZone®, and SuperSolve® are registered trademarks of PIEtech, Inc. [2]Feb2017:p18
[3]You can estimate your life expectancy at longevityillustrator.org.

few "wants," such as travel and minor home improvement. Keep in mind that $19,000 of what they need in year one is coming from Sara's Social Security and another $4,000 from her pension. That means Jack and Sara will need to draw down $52,000 from their retirement accounts in the first year to fund projected spending.

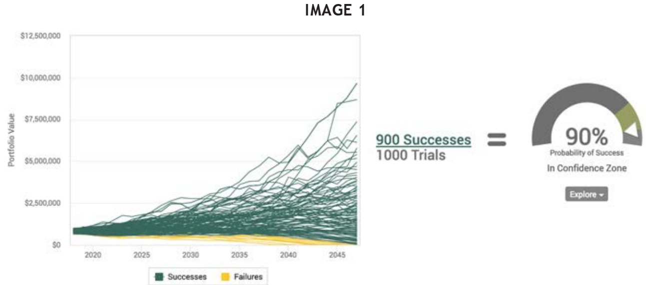
Our hypothetical couple also have already input their portfolio details in MoneyGuidePro's® "Money" section (this is also under "About You"). For simplicity, we'll assume their $800,000 portfolio is invested 50% in stocks (divided equally between stocks of large and small companies) and 50% in intermediate-term bonds. Most SMI readers likely have more diversified holdings. Some may have additional resources such as rental or business income, along with life insurance policies or an annuity. Our goal here is just to explain the basics of using MoneyGuidePro® to project, over a long period of time, one's financial resources against stated spending goals. The process of using MoneyGuidePro® is the same regardless of how simple or complex your portfolio or overall financial situation is. The key is to accurately input all the necessary information about your financial resources and your retirement-spending goals.

1000 scenarios

Having input all the necessary details, Jack and Sara are now ready to start finding out how well-positioned they are for the next 30 years. They click "Results"[1] near the top of the screen and from the drop-down menu choose "Current Scenario." The heading at the top of the Current Scenario page reads: "You have a simple question: 'Can I fund all my goals without running out of money?'"

Below is a link that says "1000 Trials." Clicking that link launches a series of Monte Carlo simulations which model the probability of various outcomes based on the 1) longevity projections, 2) asset allocation, and 3) spending data that Jack and Sara input, along with the default 2.5% annual inflation rate. Each of the 1000 simulations uses differing assumptions about the rate of return Jack and Sara will experience, as well as the sequence of those returns.

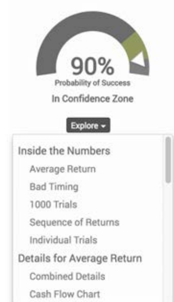
IMAGE 1



The results from the 1000 trials are shown in a summary graph, accompanied by a "Probability of Success" meter. As you can see in Image 1, the 1000 trials based on Jack and Sara's data found a 90% probability that their money will hold out if both live to age 95. Ninety percent is right on the line between MoneyGuidePro's® "Confidence Zone" and its "Above Confidence Zone." Jack and Sara would seem to be in very good financial shape as they enter retirement.

Of course, if 90% (i.e., 900) of the trials were successes, that means 10% (100) were not. To drill down and look at what happened in specific trials, Jack and Sara click the "Explore" button (under the Probability of Success meter). A drop-down menu (see Image 2) offers several options (including a "bad timing" option that shows the potential impact of a market downturn early in retirement). For now, Jack and Sara choose "Individual Trials" and—using the slide bar at the top—they examine the results of several specific trials. (Sliding the bar to the left highlights the better outcomes, sliding it to the right highlights not-so-desirable outcomes.)

IMAGE 2



Next, they choose "Cash Flow Chart" (again using the "Explore" drop-down menu). This generates a pop-up window that shows a table based on the average of all the 1000 trials. As you can see in Image 3 (page 94), the table lays out—year-by-year—the disposition of Jack and Sara's financial resources. (By scrolling to the right, they can see each year out to 2047, when their plan ends.)

For example, in 2021, they can see their living expenses ("total goal funding") will slightly exceed their "total income and earnings." When taxes are taken into account, they have a "cash deficit" of $1,344. But then in 2022, when Jack's SS benefits begin, the situation will change significantly.

They can also see, at the bottom, their portfolio withdrawal rate changes year by year and that the value of their portfolio remains fairly static for the first five years before beginning to grow substantially.

Jack and Sara go back to the "Explore" drop-down menu and this time they choose "Combined Details." This generates another pop-up window that, at the top, shows a "Portfolio Value Graph." Scrolling past the graph, Jack and Sara can look at a related "Portfolio Value Chart" that lays out, column by column, several key projections—beginning with the current year and continuing through the estimated year of their deaths.

The chart shows how long their portfolio is projected to last, based on their current holdings, projected earnings, Social Security and pension benefits (shown in the "post-retirement income" column), taxes, and assumptions about their future cost of living.

To examine any particular year in detail, Jack and Sara can simply click the number of the year, such as "2030." This yields yet another pop-up screen which lays out such things as the amount of any required minimum distributions that year and the projected amounts in their various retirement accounts (traditional IRAs, Roths, etc.[2]). Jack and Sara also can see (depending on how specific they were in setting up their "goals") whether they are likely to experience a shortfall in funding various "wants" and "wishes," such as travel expenses and special giving.

Play time

Now that our hypothetical couple has looked at their "Current Scenario," they can "play around" with the numbers to learn how various changes might affect the probabil-

[1] If "Results" isn't an active link, you may need to finish filling out the "About You" section.
[2] MoneyGuidePro® assumes you will draw from taxable accounts first, then non-taxable.

ity of their money lasting to a ripe old age. They close the pop-up windows and click again on "Results" at the top. But this time from the drop-down menu they choose "Recommended Scenario" rather than "Current Scenario." Then from the links on the left, they select "Play Zone®."

The Play Zone® area features a series of sliders that allow Jack and Sara to modify several assumptions and variables. Here, they can change their projected retirement age(s), for example, and add to (or subtract from) living expenses. They also can alter projected expenditures related to health care, travel, giving, and so on. In addition, they can project the impact of up/down changes in average investment returns.

Using the Play Zone®, Jack and Sara may find that they have more leeway to spend money on travel than they had anticipated. Or they may discover that even if their returns are somewhat lower than what they're hoping for, they'll still be able to fund most of their goals.

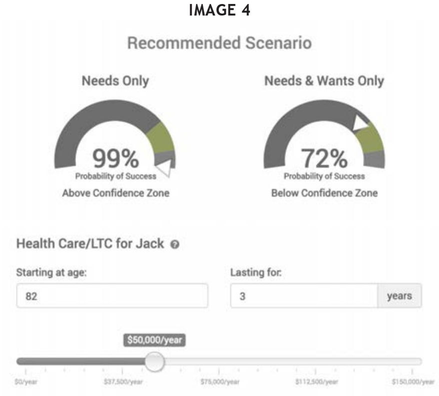
After using the Play Zone® to see the impact of modifying spending goals or earnings assumptions, Jack and Sara turn to another area of MGP to "stress test" their plan. This area is called "What Are You Afraid Of?" (The link to this section is found by clicking "Return" from the Play Zone® and then scrolling all the way to the bottom.)

At left on the "What Are You Afraid Of?" page, Jack and Sara see a list of key threats to their long-term financial well-being, including outsized healthcare expenditures, a massive market decline, higher-than-expected inflation rates, and the early death of a spouse. Although it would be comforting to think that none of these things will happen to them, Jack and Sara are realistic. Such things do happen, so it is wise to consider well in advance the possible impact that such events would have on their plan.

Now, instead of showing a single "Probability of Success" meter, MGP shows up to three—one gauging the impact on Jack and Sara's ability to fund basic living expenses, another that combines both basic living expenses and "wants," and a third (if applicable), that combines needs, wants, and "wishes."

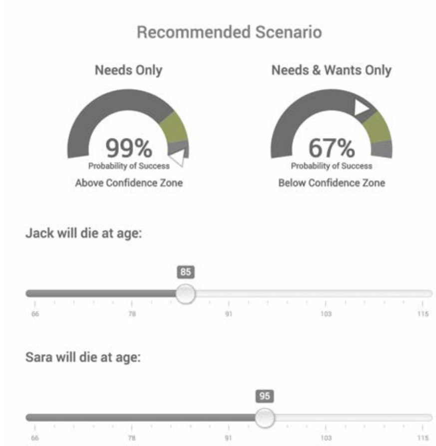
Our couple can run a healthcare-spending stress test by clicking the link that says "Health Care/LTC" (long-term care) and then choosing a scenario—for example, three years of long-term care for Jack starting at age 82 and costing $50,000 a year. As Image 4 shows, even with a long-term care expense, Jack and Sara's plan would still meet basic living-expense needs. However, it would hamper their ability to fulfill their "wants."

IMAGE 4



To keep the results of that test and add another stress test to it, they click the "lock" box at bottom right, otherwise the results would be erased when they go to the next test. (Locking any scenario allows users to analyze the effect of multiple variables simultaneously.) In this case, Jack and Sara want to look at the possible impact of 1) the aforementioned long-term care expense followed by 2) Jack's death at age 85 (rather than at 95, as in their original plan). Image 5 shows the projected impact.

IMAGE 5



Note that Sara is still able to meet her basic needs (left meter), but the Probability of Success drops a bit more on the "needs and wants" (right) meter. This is because although Sara will start receiving Jack's higher Social Security benefit when he passes away, she will lose her own SS benefit.

After running those two stress tests, Jack and Sara clear those variables (using the "Clear All Values" link) and run a test showing the impact of higher-than-expected inflation. They want to know what would happen if the inflation rate over the course of their plan averages 3.5% rather than the default rate of 2.5%. As you can see in Image 6, that single change has a significant impact on Jack and Sara's ability to fund all their "needs and wants."

Other MoneyGuidePro® tools Jack and Sara can use to work through various possibilities and make wise decisions about their retirement-years finances include Choices, the What If Worksheet, and SuperSolve®—all found in the Recommended Scenario area.

IMAGE 6

After running various scenarios and tests, they may decide it would be better for Jack not to retire at 66 but to continue, if possible, to work a few more years (either full- or part-time). That would enable them to reduce the early-years drawdown from their retirement accounts. Or perhaps they realize it would be wise to cut back on a few "wants" to help insure against the possibility of a costly extended illness, an earlier-than-expected death, or higher inflation.

Although Jack and Sara come away from this exercise thankful that, if all goes well, they should be able to live comfortably in retirement, they also now have some sense of how their long-term financial future could be altered significantly *(continued on page 94)*

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

MONEY-MARKET FUNDS ARE BACK IN THE GAME

The money-market fund (MMF) is back. After years of minuscule yields, this once-popular choice for savers is back to offering respectable returns—in some cases, at least equal to the rates offered by online banks.

Money-market *funds* are sometimes confused with money-market *accounts* (MMAs), but they differ from MMAs in significant ways. Most importantly, MMFs are mutual funds. While they invest in what would seem to be ultra safe securities, such as U.S. Treasury bills and commercial paper (a bond-like instrument sold by large corporations to meet short-term obligations), some of these investments come with no guarantees.

Money-market *accounts*, on the other hand, do not carry investment risk. The Federal Deposit Insurance Corporation (FDIC) insures most banks that offer MMAs. At most credit unions, the National Credit Union Administration or American Share Insurance covers depositors.

Prior to the past decade, money-market funds offered yields that were clearly superior to those of money-market accounts. For example, Vanguard's Prime money fund yielded a respectable 5% in 2007. Widely perceived as only marginally riskier than insured money-market accounts, the popularity of money-market funds soared.

That all changed during the Great Recession. First, the assumed safety of MMFs took a serious hit in September 2008. That's when the $65 billion Reserve Primary Fund "broke the buck" (that is, the value of each share fell below the customary money-fund share price of $1.00), causing the first-ever losses for retail MMF investors. The fund held nearly $800 million in commercial paper issued by Lehman Brothers, which became worthless when Lehman filed for bankruptcy. While the losses for Reserve Fund shareholders were small, the illusion that MMFs were as "safe as cash" was shattered.

Fearing a run on other companies' MMFs, the federal government stepped in, guaranteeing investors that the value of each MMF share would remain at $1. The government's temporary guarantee program ended in September 2009.

Then the Fed's interest-rate lowering QE initiatives took their toll on MMF yields. By 2010, the yields at most MMFs had plummeted to less than one-tenth of one percent, where they stayed through 2014. Only recently have they recovered.

A new day

As the economy cycled through its recovery, and with the Fed now raising interest rates, MMF yields have headed northward. Vanguard's Prime money market fund now yields more than 1.8%. MMFs offered by Schwab and Fidelity aren't far behind.

MONEY MARKET FUNDS

Fund	Ticker	Rate	Minimum
Vanguard Prime MMF	VMMXX	1.85%	$3,000
Schwab Value Advantage MF	SWVXX	1.70%	$1
Fidelity Money Market Fund	SPRXX	1.68%	$2,500

As MMFs start appearing on the radar screens of savers in search of better yields, it's natural to ask whether such funds are safe. On the one hand, the aftermath of 2008 brought new regulations to MMFs. They are required to take on less credit risk than before and to hold more cash to handle redemptions. Also, as has long been the case, all SIPC-insured brokers protect customer assets against fraud, including those held in MMFs, up to $500,000. However, there is no longer any protection against market loss, such as what happened with the Primary Reserve Fund in 2008.

What's a saver to do?

Right now, money-market fund yields are comparable to the interest rates being paid by online bank money-market accounts[1] (and both are miles ahead of what you're likely to earn at your local bank).

MONEY MARKET ACCOUNTS

Bank	Rate	Minimum
Virtual Bank	2.01%	$100
United Bank	1.95%	$2,500
Bank 7	1.80%	$5,000
EBSB Direct	1.80%	$10,000
All America Bank	1.75%	$50

Source: Depositaccounts.com

So, if you have money in a top online money-market account, there doesn't appear to be a compelling reason to switch to a money market fund. However, it would be worth checking to see where cash in your brokerage account(s) is being held. This is usually referred to as your *core position*, and you likely have more than one option.

At Fidelity, investors have three options: Fidelity Government Cash Reserves (currently yielding 1.38%), the Fidelity Government Money Market Fund (1.33%), and an FDIC-insured cash sweep account (0.19%). Neither of the first two options are Fidelity's highest-yielding MMF (Fidelity Money Market Fund is, ticker SPRXX, yielding 1.68%). However, a Fidelity representative said customers could buy shares of SPRXX with the money in their core position, which may be worthwhile if you have a large cash position. Settlement funds, dividends, and other distributions would continue going automatically into your core position.

Money-market funds have come a long way from their years of near-zero yields. At this point though, the interest rates and safety offered by the top online money-market *accounts* are still a step ahead. That said, either option would be a significant upgrade from your local bank for your emergency-fund savings. ◆

[1]Rates shown in the tables are from mid-May.

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

WHAT THE FLATTENING YIELD CURVE SAYS ABOUT THE ECONOMY & MARKETS

In the decade since the 2008 financial crisis ended, interest rates have dominated most discussions of the economy and financial markets. The Federal Reserve assured this would be the case by lowering short-term interest rates nearly to zero and keeping them there for years. Now, in the third year of their effort to "normalize" short-term interest rates through a series of gradual increases, the topic of the yield curve is getting hot once more.

The yield curve is simply the plot of interest rates paid on Treasury bills and bonds of varying lengths. For example, the chart below shows what the yield curve looked like on May 1, 2018, compared to that same plot one year prior.

The key to understanding the yield curve and its implications is to recognize that the Fed controls short-term interest rates, but the bond market sets longer-term interest rates. Looking at the chart, it's clear that short-term interest rates (three months out to three years) have risen fairly dramatically over the past year, but long-term interest rates (20 years and longer) have risen only slightly. This has caused the yield curve to "flatten"—in other words, the gap between short- and long-term interest rates has narrowed.

The reason for this is the Fed has been steadily raising the short-term rate, claiming to fight the higher inflation that is likely to occur as the economy continues to grow stronger. So short-term rates have moved higher. But the bond market doesn't seem to believe that story. If the bond market thought inflation was going to rise significantly, bond investors would demand higher yields on longer-term bonds. Yet longer-term rates have stayed low.

The slim difference in yields between shorter-term and longer-term bonds further reinforces that point. When investors are willing to accept such a small increase in yield in exchange for tying up their money for several additional years, it likely means they don't believe the economy will be strong enough to push interest rates higher.

An inverted yield curve has been a reliable recession indicator...

The primary reason economists and investors pay so much attention to the yield curve is it has a strong record when it comes to predicting economic recessions. Specifically, when the yield curve *inverts*—meaning short-term rates move *higher* than long-term rates—the economy is in serious danger of falling into a recession. In fact, the yield curve has inverted prior to all nine U.S. recessions that have occurred since 1955.

The fact that the gap between short- and long-term rates has recently narrowed to its closest point in the past decade is starting to get the attention of economists—and investors.

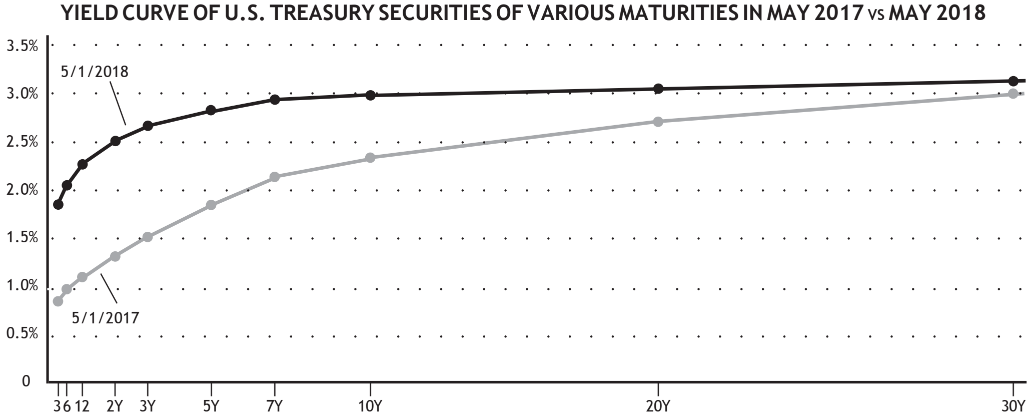
Stock-market investors pay close attention to recession warnings (and thus, the yield curve) for two reasons. First, recessions increase the chances that a bear market will occur. But recessions also make the *severity* of bear markets much worse than those that occur without a recession taking place.

But it's important to note that the yield curve *hasn't* inverted yet, and isn't even all that close to doing so. John Williams, President of the San Francisco Federal Reserve Bank, acknowledged in April that while the yield curve is a "very clear symbol that the economy's about to go into a recession," he also stated that he doesn't anticipate an inversion. This is certainly possible if economic growth continues to be strong, as long-term rates will likely rise along with short-term rates if the bond market starts to believe the Fed's "future growth, future inflation" outlook is accurate.

...with a long lead time

The "good news, bad news" aspect of the inverted yield curve's predictive ability is that while it has been a strong predictor of future recessions, it also operates with a long lead time. Looking at recessions of the past 50 years, the yield curve has inverted an average of 18 months prior, with the shortest lead time being 13 months. Investors will start selling stocks sooner if they believe a recession is coming, but inverted yield curves also preceded the start of bear markets by (continued on page 93)

YIELD CURVE OF U.S. TREASURY SECURITIES OF VARIOUS MATURITIES IN MAY 2017 VS MAY 2018



LEVEL 3 THREE

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

GROWTH HAS DOMINATED VALUE: WILL IT CONTINUE?

Two main distinctions are used when categorizing individual stocks. The first is *size*: is the company large or small? The second is *style*: is the stock primarily attractive to investors because of its *growth* characteristics or because it presents a particularly compelling *value*? Dividing along those lines, we get the large/growth, small/value and other variant groups that are commonly referenced in the industry, including the way SMI defines our U.S. stock-risk categories.

SMI has written in considerable detail about the differences between growth and value investing, including why you should have both in your portfolio, so we're not going to retrace all of that ground here.[1]

Instead, we want to draw your attention to the dramatic outperformance of growth stocks over value stocks in recent years. According to Morningstar, over the past year the returns of both *large*/growth funds and *small*/growth funds have been roughly twice that of their corresponding value counterparts. What's more, growth stocks have now beat value stocks in seven of the past 11 years (dating back to the financial crisis).

It's not that value stocks have been terrible performers: over the past decade, the Russell 1000 Value Index has more than doubled (+102%). It's just that growth has been even stronger—the Russell 1000 Growth Index is up +178% during that same time.

Long swings aren't uncommon

As the chart below shows, it's not uncommon for leadership between these two investing styles to swing back and forth in long trends. The last striking example of growth-fund dominance occurred in the late 1990s, when the "tech bubble" focused investor imaginations on an increasingly narrow number of high growth stocks to the utter exclusion of anything value-oriented. As you can see, however, investor appetites shifted quickly once the bubble popped. Value stocks dominated through the early 2000s.

Some investors have noted parallels between the late 1990s and today's market. While similarities such as the current market's fascination with the "FAANG" big tech stocks exist, it's not a perfect comparison. For one thing, growth-stock valuations aren't nearly as high today as they were then, and on the flip side, value isn't nearly as inexpensive.

Turning point ahead?

But it's certainly possible that a shift in the growth/value dynamic could be coming. Some value managers have pointed out that rising interest rates have historically led to value outperformance. While that point may be debated—Ken Fisher has written that growth stocks tend to outperform when the yield curve flattens (as we discuss in the Level 2 article on page 87)—other points are starting to line up in value's favor as well.

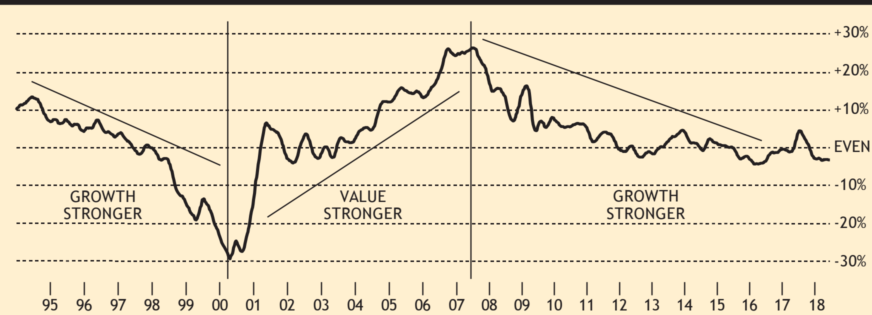
Accelerating profits have tended to boost the returns of value stocks historically, so this quarter's strong earning reports bode well. The recent tax cuts (and deregulation generally) tend to favor value-oriented sectors like financials, energy, and industrials. And the gap between the cheapest and most expensive stocks has been widening, which provides fertile ground for value investors.

Even the shift to passive index investing may eventually provide a boost to value stocks. Over the past decade, the huge cash inflows into index funds have pushed the more expensive growth stocks that dominate the indexes ever higher. In the next bear market, as investors sell index funds and that cycle reverses, the opposite effect is likely to transpire.

Ultimately though, you still need both types of investments in your portfolio. Even during this growth-dominated period since the last bear market, there were four years when value was the better performer. It's notoriously tricky to predict when these trends will reverse, which is why SMI maintains diversified portfolios that always include both growth and value stocks. ◆

GROWTH vs VALUE STOCKS

This "relative strength" graph shows the price action of a leading value-strategy stock index compared to that of a growth-strategy stock index. When the line is falling, as it did for most of 1994-1999, growth stocks—such as those purchased by the funds in SMI's Risk Categories 2 and 4—were outpacing value stocks. When it's rising, value stocks—such as those in SMI Risk Categories 1 and 3—are doing better. Note that "EVEN" roughly indicates the midpoint of the range the Growth and Value indexes have covered since their inception. In other words, "EVEN" doesn't necessarily imply fair value, but is merely to provide a scale for measuring the scope of various moves.



[1]See *Why You Should Own Both Growth- And Value-Oriented Investments*, Sep2015:p.135.

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

THE RULES HAVE CHANGED FOR REVERSE MORTGAGES

In recent years, reverse mortgages have ridden a popularity roller coaster. Once seen as loans of last resort, they came back in vogue in 2010 when a new "Saver" reverse mortgage became available that featured significantly lower upfront fees than those associated with the existing "Standard" reverse mortgage. In late 2017, however, the fee structure changed again, making reverse mortgages less appealing—especially for borrowers wanting to use a reverse mortgage as a line of credit.

Background

Most reverse mortgages are made through the Federal Housing Administration's Home Equity Conversion Mortgage (HECM) program.[1] Homeowners must be at least 62 years old, own their home outright or have a small loan balance that can be paid off at the closing of the reverse mortgage, live in their home, and have the means to pay ongoing costs, such as insurance, taxes, and utilities.

Qualified homeowners can borrow a percentage of their home's value. The percentage is determined by the *principal limit factor* (PLF), which in turn is determined by the age of the youngest borrower who is on the loan (or the borrower's spouse if he or she is not on the loan), the value of the home, and interest rates.

The loan does not have to be repaid until the borrower dies, sells the house, or moves out for at least 12 months. When the home is sold, the loan (including interest and finance charges) must be repaid with the proceeds. Any remaining equity belongs to the homeowners or their heirs. If the home's value is less than the amount owed, the government absorbs that loss.

In addition to standard mortgage closing costs, borrowers have to pay a one-time *initial* mortgage insurance premium (MIP) and an *ongoing* premium.

Reverse-mortgage proceeds may be taken as a lump sum, in monthly installments, or as a line of credit. That last option had become especially popular. The upfront costs were relatively low, and the amount of the credit line grew over time at the same rate as the interest being charged on the loan plus 1.25%—the rate used to determine ongoing insurance premiums. Borrowers pay the initial insurance premium when choosing the line of credit option, but don't pay any interest or the ongoing insurance premium unless and until the line of credit is accessed.

Until October 2017, a reverse mortgage line of credit was seen as an inexpensive backup source of funds for retirees. Given that the amount of money available would grow over time, setting up a line of credit as early as possible once a borrower reached the qualifying age of 62 was appealing.[2]

A program in peril, a need for change

However, high default rates put the government's reverse mortgage program on shaky financial ground. In announcing the October 2017 rule changes, a HUD statement said, "Quite simply, the HECM Program is losing money and can no longer remain viable in its present form." HUD Secretary Ben Carson echoed that sentiment while also noting that the same insurance program that covers losses in the HECM program also backstops traditional mortgages provided by the FHA. "Fairness dictates that future HECM loans do not adversely impact the overall health of FHA's insurance fund, which supports the financing needs of younger, mostly first-time homeowners."

The rule changes put new limits on how much of their equity homeowners can borrow. An AARP Public Policy Institute analysis found that under the new rules, a 62-year-old borrower getting a reverse mortgage with a 5% interest rate would be able to draw 11% less money than under previous rules. An 80-year-old borrower would see a 12% reduction. The *Wall Street Journal* estimated borrowers would be able to tap 58% of their home's value—down from 64% under the previous rules.

The new rules also changed how much borrowers have to pay for insurance. Previously, if a borrower took no more than 60% of the available amount up front, the initial premium was 0.5% of the *maximum claim amount* (the lesser of the home's appraised value or $679,650). If the borrower took more than 60%, the premium was 2.5% of the maximum claim amount. Under the new rules, all borrowers pay an initial premium of 2%. On a $600,000 loan, this means the upfront insurance cost has increased from as little as $3,000 to $12,000.

But another fee has gone down: the cost of ongoing insurance a borrower has to carry. That amount has dropped from 1.25% of the outstanding loan balance to 0.5%. So, for every $100,000 borrowed, annual costs have dropped by $750.

Time will tell how the new rules will affect lump-sum and monthly installment borrowers. Since most such borrowers opted to keep their initial borrowing at or below the amount at which they would qualify for lower initial insurance premiums, will the new rules dissuade some would-be borrowers from taking out a reverse mortgage? Or will the lower ongoing costs provide an equally appealing counter-weight?

Downsides for line-of-credit borrowers

For line-of-credit borrowers, both of these cost changes turn out to be significant negatives. Under the old rules, line-of-credit borrowers paid the 0.5% initial mortgage insurance premium. Now that cost is 2.0%, a huge upfront cost increase, as illustrated previously. (continued on page 94)

[1] bit.ly/2le9z9x [2] See *New Ways of Thinking About Reverse Mortgages*, SMI's May 2016 cover article, for more on the ins and outs of these loans.

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 4/30/2018	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	13.1	0.3%	0.5%	-5.2%	3.0%	15.3%	5.4%	1.12	0.11%	20%	16%	12%	8%	VXUS
Extended Market Index ETF	Small company stocks	13.0	0.4%	0.2%	-2.9%	3.8%	12.1%	8.7%	1.17	0.08%	40%	32%	24%	16%	VXF
S&P 500 Index ETF	Large company stocks	11.3	-0.5%	0.4%	-5.8%	3.8%	13.2%	10.5%	1.00	0.04%	40%	32%	24%	16%	VOO
Total Bond Mkt Index ETF	Medium-term bonds	-3.8	-2.5%	-0.9%	-1.2%	-2.0%	-0.5%	0.9%	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 4/30/2018[1]	Date Added	E-Trade 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. ☎ Advisory Res Intl Sm Cp Val	06/18	Yes	Yes	Yes	35.1	5.4%	3.6%	0.5%	11.2%	23.5%	10.0%	1.03	1.20	72	2%90days	ADVIX
	2. Vanguard Intl Growth	09/17	Yes	Yes	Yes	25.0	3.1%	-0.2%	-5.5%	4.9%	25.6%	10.7%	1.42	0.45	130	None	VWIGX
	3. Allianz Intl Sm Cap - LW[12]	05/18	NTF	NTF	No	30.6	2.8%	0.0%	-3.2%	7.4%	26.3%	10.0%	1.13	1.25	98	None	AOPAX
Category 4 Small/Growth	1. Kinetics Small Cap Oppor	02/18	NTF	NTF	NTF	54.1	9.4%	3.2%	1.6%	17.1%	35.5%	12.8%	1.29	1.66	35	2%30days	KSCOX
	2. Baron Opportunity	03/18	NTF	NTF	NTF	43.3	11.4%	2.1%	-0.2%	15.0%	28.5%	13.2%	1.49	1.41	56	None	BIOPX
	3. Delaware Smid Cap Gro - LW[12]	02/18	NTF	No	NTF	46.4	5.2%	1.0%	-3.4%	18.0%	31.8%	11.1%	1.36	1.21	38	None	DFCIX
Category 3 Small/Value	1. Hodges Small Cap	04/18	NTF	NTF	NTF	28.8	2.2%	1.5%	-1.8%	12.9%	17.7%	4.5%	1.48	1.28	47	1%30days	HDPSX
	2. ☎ Huber Capital Sm Cap Val	06/18	NTF	NTF	NTF	23.0	2.8%	3.9%	2.1%	6.7%	14.2%	4.8%	1.55	1.75	46	1%60days	HUSIX
	3. Aegis Value	05/18	Yes	Yes	Yes	44.3	2.4%	1.1%	1.8%	22.5%	20.0%	15.1%	2.69	1.50	45	None	AVALX
Category 2 Large/Growth	1. MS Multi-Cap Gro - LW[12]	05/18	NTF	NTF	NTF	46.5	8.8%	0.8%	0.1%	12.6%	33.8%	16.3%	1.49	1.24	37	None	CPOAX
	2. PowerShare S&P 500 EW Tech	04/17	ETF	ETF	ETF	27.5	5.8%	-0.2%	-2.8%	6.4%	23.8%	19.1%	1.32	0.40	70	None	RYT
	3. iShares Edge USA Momentum	12/17	ETF	ETF	ETF	29.1	3.5%	0.5%	-4.4%	6.5%	27.0%	16.7%	1.03	0.15	129	None	MTUM
Category 1 Large/Value	1. Toreador Core	05/17	NTF	NTF	NTF	15.9	-0.2%	-0.3%	-4.2%	3.4%	16.8%	10.4%	1.18	1.20	104	2%60days	TORLX
	2. Miller Opportunity - LW[12]	06/17	NTF	Yes[10]	NTF	13.5	-1.5%	1.1%	-5.3%	3.5%	15.2%	5.0%	2.04	1.35	37	None	LGOAX[10]
	3. SPDR Dow Jones Industrial	12/17	ETF	ETF	ETF	15.3	-1.8%	0.1%	-7.2%	4.4%	18.0%	13.3%	1.10	0.17	31	None	DIA
Bond Categories	Vanguard Inflation Protect [6]	02/18	Yes[11]	Yes[11]	Yes[11]	-0.3	-1.0%	-0.1%	-0.1%	-0.1%	-0.1%	0.8%	1.10	0.20	7.5[7]	None	VIPSX[11]
	Permanent: Vanguard I-T Bond	Perm	ETF	ETF	ETF	-6.3	-3.0%	-1.0%	-1.5%	-3.1%	-1.7%	0.8%	1.29	0.07	6.4[7]	None	BIV[8]
	Permanent: Vanguard S-T Bond	Perm	ETF	ETF	ETF	-1.9	-0.8%	-0.2%	-0.3%	-1.1%	-0.6%	0.6%	0.44	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-May, 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 E-Trade (800-387-2331), 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. **[12]** Normally is a load fund but is available load-waived (LW) through some brokers. Purchase only if available to you at your broker without paying a load. See original fund write-up for details.

☎ 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 Basic Strategies page, the highest-rated Cat. 5 fund available is Advisory Research Int'l Small Cap Value, 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.

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	Advisory Res Intl Sm Cap Val
Stock Cat. 4: Small/Growth	16%	$8,000	Kinetics Small Cap Oppor
Stock Cat. 3: Small/Value	16%	$8,000	Hodges Small Cap
Stock Cat. 2: Large/Growth	16%	$8,000	MS Multi-Cap Growth
Stock Cat. 1: Large/Value	16%	$8,000	Toreador Core
"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	

BOND UPGRADING

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

[1] Rounding off to the nearest hundred is fine. As time goes by, your portfolio will gradually move away from these starting percentages as some funds perform better than others. This will be fixed once a year when you "rebalance" back to your desired portfolio mix (see 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 (applies to taxable accounts only). Nevertheless, we suggest a change when a 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 Foreign group, Calamos International Growth (CIGRX, 12/2017) is being replaced.[$]** This fund has been a mediocre performer over the six months it has been recommended. Its gain of +3.5% is slightly below the +4.2% average gain of similar funds in Morningstar's Foreign Large Growth group over the same period. Not surprisingly, our Upgrading discipline is signaling that it's time to move on.

This is a good illustration of the value of our mechanical selling discipline. It's not that Calamos has been a bad performer, it just hasn't been particularly good either. Without an objective performance standard to measure performance against (Upgrading's top-quartile selling discipline), it would be easy to continue holding this fund indefinitely. Instead, Upgrading provides a clear—and relatively quick—signal that better performance is likely available elsewhere.

Note to TD Ameritrade account holders: If you own Calamos in a normal (non-Omnium/TDA) account, you may be a few days shy of their 180-day short-term trading fee window. This is likely only an issue for newer TDA accounts, as all of our other brokers have much shorter holding periods to avoid those fees, as do the older Omnium/TDA accounts. But if you have a newer TDA account, be sure to check your buy/sell dates carefully to be sure you've held at least 180 days before selling this fund.

• **Advisory Research International Small Cap Value (ADVIX) is being added.[1]** Sometimes there's a lot of information available about the funds SMI recommends, and other times we just have to trust the rankings. Here's what we can piece together about this selection. It's a very small fund, at just $17.2 million in assets. We don't normally recommend funds quite that small, but we're hoping the fact that the parent company manages over $7.6 billion in total, with a focus on separate accounts for private individuals and families, means they can easily absorb the additional inflows. There appears to have been a manager change at the fund roughly a year ago, which is fine, as our performance analysis focuses only on the past year anyway. The performance of the new management has been excellent, ranking within the top 4% of Morningstar's Foreign Small/Mid Value category over the past year.

◆ **In the Small/Value group, Alpha Architect US Quantitative Value ETF (QVAL, 2/2018) is being replaced.** This ETF started out great, handling the February correction better than most of its peers. But since then, the rest of the small/value group has bounced back while QVAL never did. Altogether, QVAL is down about -4.7% since it was recommended in February, while IWN, the Russell 2000 Value benchmark ETF is up +4.1%. That might be a slightly unfair comparison, since IWN has been on fire since the early-April retest of February's correction lows. But it makes plain that there are considerably better options available to us within the small/value group. While we never like losses, at least Upgrading is "keeping our losses short" by getting us out of this fund quickly and pivoting to a (hopefully) better performing alternative.

Here's a quick discussion of your options when selling this (or any other) ETF. You have two main options: you can enter a *Market* order, which gives you whatever the going Bid (buying offer) price is, or a *Limit* order, which fills the trade only if someone will pay the price you specify.

Here's a hypothetical example. At QVAL's recent price of $30.70 per share, a $10,000 position would amount to roughy 325 shares. According to ETF.com, QVAL normally trades with a 0.10% "spread"—that is, the difference between the currently quoted *Bid* (buy offer) price and *Ask* (sell) price. In dollar terms, at QVAL's current price, that would mean a spread of roughly three cents per share. That is, in fact, what we see quoted as this is being written: a Bid price of $30.70 and an Ask price of $30.73.

If the owner of 325 shares of QVAL were to enter a *Market* order at this present quote, s/he should expect to have the sale go through at $30.70, the current Bid price. In effect, this spread "cost" of three cents per share would amount to $9.75, which, when added to the $4.95 ETF commission charged by Fidelity or Schwab, would bring the total trading cost to $14.70. (This assumes the trade fills at the exact Bid price, but sometimes the big online brokers fill sell orders at prices a bit better than the current Bid.)

Our hypothetical owner could opt instead to enter a *Limit* order and specify a selling price higher than $30.70. Perhaps $30.71 or $30.72—a price between the current Bid and Ask. But on a trade like this it hardly seems worth the risk of having the trade not fill and the price of QVAL move higher, just to squeeze $3-$6 dollars out of the cost. If you were trading 30,000 shares, it absolutely might be worth trying to save with a limit order. But most SMI readers can likely take the easier path of selling all shares using a market order—assuming the Bid/Ask spread is within the normal range of a few cents. If it's higher, a limit order may be worthwhile.

• **Huber Capital Small Cap Value (HUSIX) is being added.[1]** This is an interesting fund from a firm we haven't

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

dealt with before. Started in 2007, manager Joe Huber's fund had tremendous early success applying his low-turnover, value approach. At one point in 2013, this fund had the best 5-year track record of the 370 funds in the Morningstar small/value category. But that success came when the fund was small. Huber's hot performance caused inflows to surge. The fund's assets soared from $50-60 million in 2012 to $310 million a year later! Probably not coincidentally, performance fell into the bottom decile of the category (i.e., the 90th percentiles) in each of the following three years. Not surprisingly, that hot money fled, and the fund's assets are once again back down in the $80 million range today.

But that's not the end of the story. While we don't want to paint too simplistic a picture, it's impossible to ignore that the fund's performance was back in the top 20% last year, and is in the top 1% so far in 2018. Was it simply a matter of asset flows swamping the manager's ability to find enough great small, value-oriented stocks? Perhaps Huber's approach lends itself to performance streaks, with the great five year-run, followed by a terrible three-year run, and now another swing towards top performance again?

We don't claim to have the answers. But the momentum rankings are clearly pointing to this fund as one worth adding to our portfolio. It could be that the fund is back in the manager's sweet spot from an assets standpoint and is due for another strong run of performance. It wouldn't be the first time Upgrading has uncovered an "off the beaten path" option for us and ridden it to significant profits! ◆

LEVEL 2 / CONTINUED FROM PAGE 87:

WHAT THE FLATTENING YIELD CURVE SAYS ABOUT THE ECONOMY & MARKETS

an average of 10 months during that same period. So while an inverted yield curve is an ominous sign that should certainly be noted, it's also not a signal that you want to act on before it has even triggered. Given that the yield curve hasn't yet inverted—and may not for some time, if at all—there's no reason to act simply because the curve has been flattening.

Takeaways for SMI investors

Despite the strong predictive track record of the inverted yield curve, every time it occurs a group of experts step up to explain why it doesn't apply *this time*. This is predictable, given that the yield curve normally inverts while economic conditions are still strong. Consider the last two times it happened, in early 2000 and late 2006. Both of those periods, like today, were periods of strong economic growth and optimism about the economic future. Granted, we've demonstrated there's a long lead-time between inversion and recession, but this pattern of behavior indicates the economy can shift from great to recession a lot faster than people think.

Most importantly, if you're following SMI's strategies—specifically Fund Upgrading and Dynamic Asset Allocation—you already have more sophisticated defensive protocols built into your portfolio than trying to time portfolio selling based on the yield curve. Selling stocks because you think the market will fall in the future, whether based on an

MARKET NOTES, QUOTES, AND ANECDOTES

Is this a good time to invest?

• "There is no BEST time to invest. There is just investing. There is doing it consistently. There is compounding." – Howard Lindzon, Chairman and Co-Founder of Stocktwits, writing on *Medium* on 4/24/18 in response to questions such as, "Where are we in the market cycle?" Read more at bit.ly/2HZ066N.

Good investing advice never goes out of fashion

• "Men of prudence and skill in the acquisition of capital often show astonishing recklessness in the disposition they make of it. The strangest caprices take possession of them when it comes to the critical moment that calls for a choice of investments. And as riches are always clothed with folded wings ready to expand at the most unlooked-for exigencies, it is not much wonder that they frequently take to the winds and pass beyond recall." – From, *The Art of Investing*, written 130 years ago. This quote, from the *Novel Investor* blog on April 26, 2018, reaffirms that: "1) Successful investing can be boiled down to simple, common sense ideas; and 2) The history of misbehavior goes back a very long time." More at bit.ly/2rFjejg.

Market timers don't make the list

• "We are always trying to second guess the market, but the facts are clear—there are no market timers on the Forbes 500 list of the richest people, whereas there are many, many investors." – Jim O'Shaughnessy, Chairman and CEO of O'Shaughnessy Asset Management, writing on his blog, *What Works on Wall Street*, on 4/26/18. Read more at bit.ly/2rH3SL7.

GE: Enron without the scandal

• "By comparison, the stock value lost by GE in the past 12 months is twice the amount that vanished when Enron Corp. collapsed in 2001—and more than the combined market capitalization erased by the bankruptcies of Lehman Brothers and General Motors during the financial crisis... Among those hard hit by GE stock losses have been company retirees, including former factory workers who took advantage of a stock-ownership plan to build their savings." – Thomas Gryta, reporter for the *Wall Street Journal*, in a 4/22/18 article about GE's troubles. The article points to the danger of holding too much employer (or former employer) stock. Read more at on.wsj.com/2JIoO0q. ◆

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inverted yield curve or any other reason, often comes at a considerable cost. Recent data from the Wells Fargo Investment Institute indicate that the market often rallies significantly between a yield curve inversion and the beginning of a bear market. Their data showed that large-cap U.S. stocks rise an average of +24.2% in the 12 months before the start of a bear market, while small-company stocks average gains of +36.4%! So if the yield curve normally inverts an average of 10 months prior to a bear market, you'd be giving up most of those gains if you exited stocks right away and events then followed their normal timetable.

Of course, those are only averages and events *could* unfold differently this time. But this research supports the rationale behind SMI's defensive strategies, which were purposely designed to wait until stock prices have actually begun to fall. This helps us stay invested for the final stanzas of the late bull market, harvesting those significant gains, while still shifting to a more defensive posture in time to mitigate the worst damage of subsequent bear markets. ◆

LEVEL 4 / CONTINUED FROM PAGE 89:

THE RULES HAVE CHANGED FOR REVERSE MORTGAGES

Less obviously, the change to the *ongoing* premiums also lessens the appeal of a line of credit. While the decrease in ongoing costs helps, the credit line now grows by that same lower rate. Under the old rules, it would grow by the loan's interest rate plus 1.25%. Now it grows more slowly—by the interest rate plus 0.5%.

Note that the October 2017 rules changes apply only to people taking out a reverse mortgage after that time. Those who already had a loan prior to that date remain subject to the previous rules. ◆

COVER ARTICLE / CONTINUED FROM PAGE 85:

WILL YOUR RETIREMENT NEST EGG LAST? HOW TO USE MONEYGUIDEPRO® TO FIND OUT

if certain events occur. They know they must plan accordingly.

They also realize that using MoneyGuidePro® to do this kind of analysis can't be a one-time thing. Life is not static. Living expenses can change. Aspirations can change. Investment returns can be worse (or better) than expected. That's why we suggest running an updated analysis at least once a year. Typically, that review process will be brief. But there will be occasions when you'll want to invest a bit more time updating and refining your plan.

True confidence and security

To be a good steward of what the Lord has entrusted to you, you must plan as best you can. Using MoneyGuidePro® to peer into the future (as much as is possible!) can enable you to structure a retirement-withdrawal strategy with a degree of confidence that you likely wouldn't be able to achieve otherwise.

But, as followers of Jesus Christ, our trust isn't in financial software or a retirement account. Our trust is in the one true God—the Maker of the heavens and the earth. Here are two verses you may want to meditate on as you plan, and pray, about your retirement years.

"For the eyes of the LORD move to and fro throughout the earth that He may strongly support those whose heart is completely His" (2 Chronicles 16:9 NASB).

"The Lord is near. Do not be anxious about anything, but in every situation, by prayer and petition, with thanksgiving, present your requests to God. And the peace of God, which transcends all understanding, will guard your hearts and your minds in Christ Jesus" (Philippians 4:5-7 NIV). ◆

IMAGE 3

Year Age (Jack / Sara)	2018 66 / 66	2019 67 / 67	2020 68 / 68	2021 69 / 69	2022 70 / 70	2023 71 / 71	2024 72 / 72	2025 73 / 73
Pension Income	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Social Security - Jack	0	0	0	0	32,836	33,657	34,498	35,360
Social Security - Sara	19,000	19,475	19,962	20,461	20,972	21,497	22,034	22,585
Total Income	23,000	23,475	23,962	24,461	57,808	59,153	60,532	61,945
Investment Earnings	56,583	56,755	56,801	56,706	58,669	60,393	62,126	63,866
Total Income & Earnings	79,583	80,230	80,763	81,167	116,477	119,546	122,658	125,811
Cash Used To Fund Goals								
Retirement - Basic Living Expenses	40,000	41,200	42,436	43,709	45,020	46,371	47,762	49,195
Anything Else	35,000	36,050	37,132	38,245	39,393	40,575	41,792	43,046
Total Goal Funding	(75,000)	(77,250)	(79,568)	(81,955)	(84,413)	(86,946)	(89,554)	(92,241)
Total Taxes	(531)	(539)	(548)	(556)	(4,173)	(8,106)	(8,470)	(8,855)
Cash Surplus/Deficit	4,052	2,441	647	(1,344)	27,891	24,495	24,635	24,715
Portfolio Value								
Beginning Value	800,000	804,052	806,493	807,141	805,797	833,687	858,182	882,817
Ending Value	804,052	806,493	807,141	805,797	833,687	858,182	882,817	907,532
Estimated Required Minimim Distribution (RMD)								
Jack	0	0	0	0	0	10,870	11,647	12,478
Sara	0	0	0	0	0	10,870	11,647	12,478
Portfolio Withdrawal Rate	**6.57%**	**6.76%**	**6.96%**	**7.19%**	**3.82%**	**4.31%**	**4.37%**	**4.43%**

PREMIUM STRATEGIES

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

DYNAMIC ASSET ALLOCATION

Overview

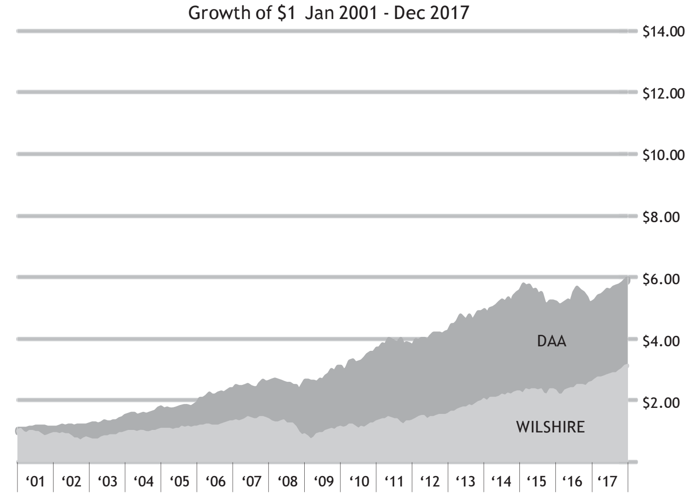
This is a stand-alone strategy that can be used in combination with (or in place of) SMI's basic strategies. DAA is designed to help you share in some of a bull market's gains, while minimizing or even preventing losses during bear markets. It's a low-volatility strategy that nonetheless has generated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

Who Should Consider This Strategy

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

Dynamic Asset Allocation vs Wilshire 5000

Growth of $1 Jan 2001 - Dec 2017



Strategy	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Avg[1]	Worst12[1]	Rel Risk[1]
DAA	4.0%	10.4%	22.4%	19.3%	8.6%	25.7%	10.1%	1.3%	17.6%	20.3%	1.4%	13.9%	16.2%	13.0%	-6.8%	-0.5%	16.0%	11.0%	-13.7%	0.64
Wilshire 5000	-11.0%	-20.9%	31.6%	12.5%	6.4%	15.8%	5.6%	-37.2%	28.3%	17.2%	1.0%	16.1%	33.1%	12.7%	0.7%	13.4%	21.0%	6.9%	-43.3%	1.00

SECTOR ROTATION

Overview

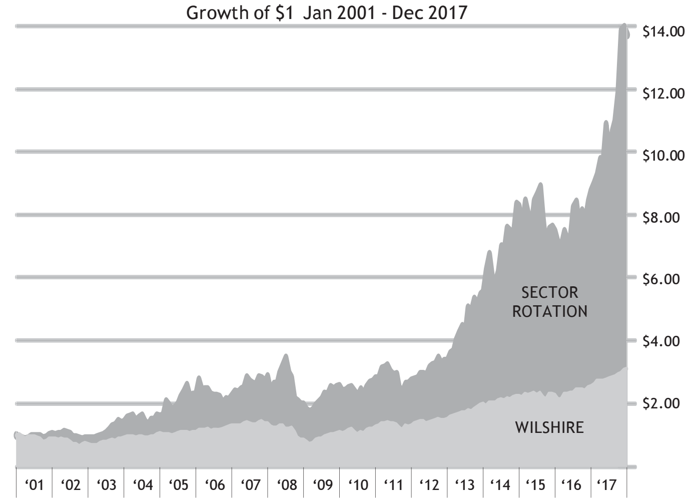
This high-risk strategy involves investing in a single special-purpose fund that focuses on a specific sector (such as biotech, energy, or financial services). Because these stock funds invest in a narrow slice of the economy, they carry a higher degree of risk. Only one fund, selected based on having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

Who Should Consider This Strategy

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

Sector Rotation vs Wilshire 5000

Growth of $1 Jan 2001 - Dec 2017



Strategy	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Avg[1]	Worst12[1]	Rel Risk[1]
Sector Rotation	3.7%	-13.1%	54.4%	12.6%	46.1%	-1.9%	28.1%	-31.5%	30.5%	9.1%	-3.2%	23.3%	65.7%	49.9%	-9.7%	16.8%	56.7%	16.7%	-38.6%	1.70
Wilshire 5000	-11.0%	-20.9%	31.6%	12.5%	6.4%	15.8%	5.6%	-37.2%	28.3%	17.2%	1.0%	16.1%	33.1%	12.7%	0.7%	13.4%	21.0%	6.9%	-43.3%	1.00

[1] The three data points on the far right in each of the two tables are for the Jan2001-Dec2016 period. "Avg" represents the average annualized return from 2001-2017. "Worst12" represents the worst investor experience over 181 rolling 12-month periods from 2001-2017.

PERIODICALS POSTAGE
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Dated Investment Material
Please Do Not Delay!

PERFORMANCE DATA

SOUND MIND INVESTING MODEL PORTFOLIOS • DATA THROUGH APRIL 30, 2018

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]	-0.4%	0.4%	-5.3%	12.9%	10.4%	12.8%	9.2%	10.0%
Just-the-Basics[2]	0.0%	0.3%	-4.5%	13.2%	8.8%	11.1%	8.2%	10.2%
Stock Upgrading[3]	0.5%	0.6%	-4.4%	12.6%	8.4%	10.8%	7.3%	11.1%
U.S. Bond Market[4]	-2.3%	-0.8%	-1.2%	-0.6%	0.9%	1.3%	3.4%	3.7%
Bond Upgrading[5]	-1.8%	-0.4%	-0.5%	-0.8%	0.5%	2.0%	5.6%	6.1%

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]	-1.5%	0.4%	-4.2%	7.2%	1.9%	4.4%	8.7%	11.4%
Sector Rotation[7]	0.2%	-7.8%	-9.8%	42.6%	22.1%	26.4%	16.6%	19.5%
50-40-10 Blend[8]	-0.5%	-0.4%	-4.9%	13.0%	6.6%	9.3%	9.5%	12.5%

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 April 2018 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 4/30/2018	Year to Date	1 Month	3 Months	12 Months	3 Year Annual	5 Year Annual	10 Year Annual
SMIFX	2.40%	0.08%	-3.95%	15.02%	7.29%	9.63%	6.22%
Wilshire 5000	-0.37%	0.39%	-5.34%	12.95%	10.43%	12.83%	9.16%
S&P 500	-0.38%	0.38%	-5.77%	13.27%	10.57%	12.96%	9.02%

Quarterly Returns as of 3/31/2018	Year to Date	1 Month	3 Months	12 Months	3 Year Annual	5 Year Annual	10 Year Annual
SMIFX	2.32%	-1.41%	2.32%	16.56%	7.00%	9.82%	6.93%
Wilshire 5000	-0.76%	-2.10%	-0.76%	13.69%	10.48%	13.13%	9.65%
S&P 500	-0.76%	-2.54%	-0.76%	13.99%	10.78%	13.31%	9.49%

Total/Gross expense ratio: 2.09% as of 4/27/18 (includes expenses of underlying funds)
Adjusted expense ratio: 1.15% as of 4/27/18 (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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