# AIS INVESTMENT GUIDE

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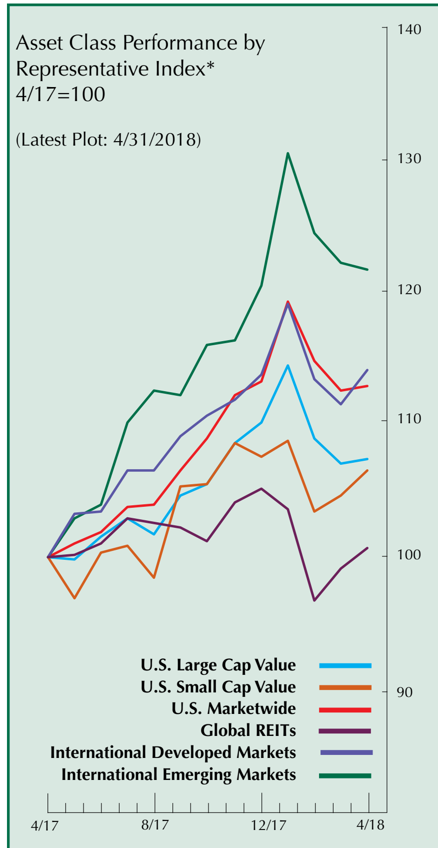


* See box, page 38, for representative indexes.

**Rates of Interest**
As of May 21, 2018

| | |
|---|---|
| **Government Obligations[1]** | |
| Fed Funds Rate | 1.70% |
| 3-Month Treas. Bill | 1.88% |
| 10-Yr. Treas. Note | 3.11% |
| 30-Yr. Treas. Bond | 3.25% |
| 10-Yr. TIPS | 0.95% |
| Muni Bonds - Nat'l 10-Yr. | 2.45% |
| **Mortgage Rates[2]** | |
| 15-Yr Fixed | 4.08% |
| 30-Yr Fixed | 4.61% |
| **Banking[3]** | |
| Savings | 0.07% |
| Money Market | 0.11% |
| 12-month CD | 0.37% |

[1] Federal Reserve, fmsbonds.com. Annualized Rates. Notes, bonds, TIPS reflect yield to maturity.
[2] Freddie Mac. Average (National average, mortgages with 0.4 points).
[3] FDIC. Average national rates, non-jumbo deposits (<$100k).

## AIER, the Media, and Bitcoin

Edward Stringham, the president of our parent organization, AIER, recently appeared on Bloomberg News to discuss bitcoin and blockchain technology. The interview, which can be viewed at https://www.aier.org/article/bitcoin-not-faint-heart, was instructive in several respects.

We suspect many people are both mesmerized and bewildered by contradictory claims of various "experts." Some hail bitcoin as an all-but-certain path to wealth while others confidently dismiss it as an overhyped gimmick that is sure to collapse.

AIER is a purveyor of useful economic information and as such does not seek notoriety for its own sake. Amidst the clamor Professor Stringham provides a prudent and thoughtful assessment. He explains that while the technology underlying these private currencies will likely prove to be a boon to growth, the fact is no one knows whether (or which) cryptocurrencies will appreciate, or by how much.

The bitcoin price has been extremely volatile and is likely to remain so despite increasing acceptance in established financial markets – crypto currency futures contracts and ETFs have emerged, and financial institutions are taking a larger stake. Dr. Stringham points out that while this interest has fostered greater demand for bitcoin, there remains no reliable means of assessing its underlying value. As we describe in the December 2017 *Investment Guide*, a purchase of bitcoin (or of competing crypto currencies) is a speculative transaction, rather than an investment.

The interview also illuminates the incentives and practices of the financial media versus those of AIER. The media's ratings depend on bold, provocative claims and commentators are often eager to stage a good fight. AIER is content to build its reputation steadily, through disciplined, rational inquiry.

The Bloomberg host characterized Dr. Stringham as "optimistic on bitcoin and on crypto currencies" and immediately introduced a professor from the NYU Stern School of Business deemed to be a bitcoin critic, as an antagonist.

*(continued next page)*

Dr. Stringham did not take the bait. When prodded to counter the skeptic, he instead agreed that bitcoin's price may indeed fall to zero -- but also asserted quite firmly that *no one* can forecast whether the price "will be zero, one million dollars or anything in between." Bitcoin defies valuation because a bitcoin token does not represent ownership in a company with earnings; rather it is a stake in a private fiat currency.

Our recommendations are based on empirical analysis, and there is simply insufficient price data available for assessing these nascent crypto currencies. The best way for investors to benefit from the promise of crypto technology is to maintain broad exposure to the stock market.

1. https://www.americaninvestment.com/component/edocman/?task=document.viewdoc&id=227&Itemid=

## SECOND-HAND NEWS[1]

Why don't the media run more good news? One view is bad news sells. If people preferred good news, the media would supply it. But markets don't see news as necessarily good or bad, rather in terms of what is already built into prices.

One academic study appears to confirm the view that the apparent preponderance of bad news is as much due to demand as to supply, with participants more likely to select negative content regardless of their stated preferences for upbeat news.[2]

"This preference for negative and/or strategic information may be subconscious," the authors conclude. "That is, we may find ourselves selecting negative and/or strategic stories even as we state that we would like other types of information."

So an innate and unrecognized demand among consumers for bad news tends to encourage attention-seeking commercial media to supply more of what the public appears to want, thus fueling a self-generating cycle.

Insofar as consumers of news are investors, though, the danger can come when the emotions generated by bad news prompt them to make changes to their portfolios, unaware that the news is likely already built into market prices.

This is especially the case when the notions of "good or bad" are turned upside down on financial markets. For example, stocks and Treasuries rallied and the US dollar weakened in October 2015 after a weaker-than-expected U.S. jobs report. Some observers said the "bad news" on jobs was "good news" for interest rates.[3]

Conversely, a month later, stocks ended mixed, bonds weakened, and the U.S. dollar rallied after a stronger-than-expected payrolls number. While an improving job market is good news, it was also seen by some as cementing the case for the Federal Reserve to begin raising interest rates. In both cases, the important thing for markets was not whether the report was good or bad but how it compared to the expectations already reflected in prices. As news is always breaking somewhere, expectations are always changing.

For the individual investor seeking to make portfolio decisions based on news, this presents a real challenge. First, to profit from news you need to be ahead of the market. Second, you have to anticipate how the market will react. This does not sound like a particularly reliable investment strategy.

Luckily, there is another less scattergun approach. It involves working with the market and accepting that news is quickly built into prices. Those prices, which are forever changing, reflect the collective views of all market participants and reveal information about expected returns. So instead of trying to second-guess the market by predicting news, investors can use the information already reflected in prices to build diverse portfolios based on the dimensions that drive higher expected returns.

As citizens and media consumers we are all entitled to our individual opinions on whether news is good or bad. As investors, though, we can trust market prices to assimilate news instantaneously and work from there.

In a sense, the work and the worrying are already done for us. This leaves us to work alongside an advisor to build diverse portfolios designed around our own circumstances, risk appetites, and long-term goals.

There's no need to respond to second-hand news.

1. December 3, 2015 Jim Parker, Outside the Flags Vice President, Dimensional Fund Advisors, LP
2. Marc Trussler and Stuart Soroka, "Consumer Demand for Cynical and Negative News Frames," International Journal of Press/Politics (2014).
3. Mark Hulbert, "How Bad News on Wall Street Can Be Good News," WSJ MarketWatch (October 5, 2015).

## TUNING OUT THE NOISE

For investors, it can be easy to feel overwhelmed by the relentless stream of news about markets. Being bombarded with data and headlines presented as impactful to your financial well-being can evoke strong emotional responses from even the most experienced investors. Headlines from the "lost decade" can help illustrate several periods that may have led market participants to question their approach.

- May 1999: DJIA Closes Above 11,000 for the First Time
- March 2000: Nasdaq Index Reaches an All-Time High of 5,048
- April 2000: In Less Than a Month, Nearly a Trillion Dollars of Stock Value Evaporates
- October 2002: Nasdaq Hits a Bear-Market Low of 1,114
- September 2005: Home Prices Post Record Gains
- September 2008: Lehman Files for Bankruptcy, Merrill Is Sold

While these events are now a decade or more behind us, they can still serve as an important reminder for investors today. For many, feelings of elation or despair can accompany headlines like these. We should remember that markets can be volatile and recognize that, in the moment, doing nothing may feel paralyzing. Throughout these ups and downs, however, if one had hypothetically invested $10,000 in US stocks in May 1999 and stayed invested, that investment would be worth approximately $28,000 today.

When faced with short-term noise, it is easy to lose sight of the potential

**Exhibit 1. Hypothetical Growth of Wealth in the S&P 500 Index, May 1999–March 2018**

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long-term benefits of staying invested. While no one has a crystal ball, adopting a long-term perspective can help change how investors view market volatility and help them look beyond the headlines.

## The Value of a Trusted Advisor

Part of being able to avoid giving in to emotion during periods of uncertainty is having an appropriate asset allocation that is aligned with an investor's ability to bear risk. It also helps to remember that if returns were guaranteed, you would not expect to earn a premium. Creating a portfolio investors are comfortable with, understanding that uncertainty is a part of investing, and sticking to a plan may ultimately lead to a better investment experience.

However, as with many aspects of life, we can all benefit from a bit of help in reaching our goals. The best athletes in the world work closely with a coach to increase their odds of winning, and many successful professionals rely on the assistance of a mentor or career coach to help them manage the obstacles that arise during a career. Why? They understand that the wisdom of an experienced professional, combined with the discipline to forge ahead during challenging times, can keep them on the right track. The right financial advisor can play this vital role for an investor. A financial advisor can provide the expertise, perspective, and encouragement to keep you focused on your destination and in your seat when it matters most. A recent survey conducted by Dimensional Fund Advisors found that, along with progress towards their goals, investors place a high value on the sense of security they receive from their relationship with a financial advisor.

Having a strong relationship with an advisor can help you be better prepared to live your life through the ups and downs of the market. That's the value of discipline, perspective, and calm. That's the difference the right advisor makes.

To learn more about our advisory services, please contact us at (413) 528-1216 ext. 3127, or LukeD@americaninvestment.com

**Exhibit 2. How Do You Primarily Measure the Value Received from Your Advisor?**

Source: Dimensional Fund Advisors. The firm surveyed almost 19,000 investors globally to help advisors who work with Dimensional better understand what is important to their clients.

# WHAT TO DO WHEN YOU SUSPECT CYBER FRAUD

The world is run amuck with scammers, identity thieves and cybercriminals of all types. Investors are particularly vulnerable to cyber threats. Here we provide guidance in case you suspect you've become a victim.

A family member of AIS staff was recently notified by mail that a bank account and brokerage account had been established in her name without any action having been taken on her part. We immediately counselled that she take action. The steps we recommended, based on guidance found at www.IdentityTheft.gov, are applicable to many types of cyber-crimes:

1. Contact the financial entity implicated to report that a fraudulent act has taken place. In this case the victim contacted both the bank and the brokerage firms where the accounts had been established, although they had a common owner.
2. Place a free, 90-day fraud alert by contacting one of the three credit bureaus. Once reported, that company must tell the other two. In this case the victim chose TransUnion.

   Experian.com/fraudalert
   1-888-397-3742

   TransUnion.com/fraud
   1-800-680-7289

   Equifax.com/CreditReportAssistance
   1-888-766-0008
3. Report the incident to the FTC; complete the online form or call 1-877-438-4338. Include as many details as possible. Based on the information entered, IdentityTheft.gov will create the Identity Theft Report and recovery plan. The identity theft report proves to businesses that the victim's identity has been stolen and guarantees certain rights.
   In this instance the bank and brokerage firm promptly closed the fraudulent accounts. Though neither firm provided an explanation, the individual also obtained her credit report from TransUnion, which revealed no unusual activity.

This type of cybercrime is increasingly common as is unfortunately the lack of information provided by financial institutions. On May 7th the FBI's Internet Crime Complaint Center (IC3) published its 2017 Internet Crime Report. The Center received over 300,000 reports last year with estimated losses reported to be in excess of $1.7 billion. While businesses may withhold details concerning breach events, the Center is actively soliciting reports of cyber incidents in order to "identify general trends related to current and emerging Internet-facilitated crimes."

IC3 urges consumers to download and read the report in order to better protect their own personal identity information. It is available at: https://pdf.ic3.gov/2017_IC3Report.pdf

## MUTUAL FUND DISTRIBUTIONS: CASH OR SHARES?

For clients in our Professional Asset Management (PAM) program, we typically stipulate that all dividends, interest, and mutual fund distributions be "swept" to the client's money market fund, rather than specifying that distributions be reinvested in additional shares of the same fund. This policy provides greater flexibility for investors who follow a structured approach to portfolio management.

Consider an investor with an investment portfolio based on our recommended asset classes, and that it includes an emerging markets mutual fund. Suppose that the emerging market fund's value had increased a great deal relative to the other asset classes in the portfolio. Rebalancing may well indicate that the investor should reduce his exposure to emerging markets in order to purchase shares of some other asset class or classes. However, if the emerging market fund has made a large distribution, an automatic reinvestment policy would instead reinvest these proceeds in additional shares, precisely when his allocation targets suggest selling them. The investor would then have to incur transaction costs, and possibly realize taxable capital gains, by subsequently selling shares of the emerging market fund, in order to maintain his portfolio target allocations.

On the other hand, if the investor were to instead allow his distributions to accumulate with interest in a money market fund, this pool of cash would be available to purchase shares selectively, exactly in accordance with the client's particular allocation plan, when appropriate.

There are additional considerations that favor cash over reinvesting. For example, investors who have liquidity needs may also prefer to have distributions held in their money market account so that they can write checks, wire funds or pay bills electronically. If the cash is instead reinvested in additional shares the investor may have to sell shares to meet these regular spending needs, as well as those which arise unexpectedly.

## UNHEALTHY ATTACHMENTS[1]

*Have you ever made yourself suffer through a bad movie because, having paid for the ticket, you felt you had to get your money's worth? Some people treat investments the same way.*

Behavioral economists have a name for this tendency of people to stick with a losing strategy purely on the basis that they have put so much time and money into it already. It's called the "sunk cost fallacy."

Let's say a couple buy a property next to a freeway, believing that planting trees and double-glazing will block out the noise. Thousands of dollars later the place is still unlivable, but they won't sell because "that would be a waste of money".

This is an example of a sunk cost. Despite the strong likelihood that you'll never get your money back, regardless of outcomes, you are reluctant to cut your losses and sell because that would involve an admission of defeat.

It works like this in the equity market too. People will often speculate on a particular stock on the basis of newspaper articles about prospects for the company or industry. When those forecasts don't come to pass, they hold on regardless.

It might be a mining stock that is hyped based on bullish projections for a new tenement. Later, when it becomes clear the prospect is not what its promoters claimed, some investors will still hold on, based on the erroneous view that they can make their money back.

The motivations behind the sunk cost fallacy are understandable. We want our investments to do well and we don't want to believe our efforts have been in vain. But there are ways of dealing with this challenge. Here are seven simple rules:

1. Accept that not every investment will be a winner. Stocks rise and fall based on news and on the markets' collective view of their prospects. That there is risk around outcomes is why there is the prospect of a return.

2. While risk and return are related, not every risk is worth taking. Taking big bets on individual stocks or industries leaves you open to idiosyncratic influences like changing technology.

3. Diversification can help wash away these individual influences. Over time, we know there is a capital market rate of return. But it is not divided equally among stocks or uniformly across time. So spread your risk.

4. Understand how markets work. If you hear on the news about the great prospects for a particular company or sector, the chances are the market already knows that and has priced the security accordingly.

5. Look to the future, not to the past. The financial news is interesting, but it is about what has already happened and there is nothing much you can do about that. Investment is about what happens next.

6. Don't fall in love with your investments. People often go wrong by sinking emotional capital into a losing stock that they just can't let go. It's easier to maintain discipline if you maintain a little distance from your portfolio.

7. Rebalance regularly. This is another way of staying disciplined. If the equity part of your portfolio has risen in value, you might sell down the winners and put the money into bonds to maintain your desired allocation.

These are simple rules. But they are all practical ways of taking your ego out of the investment process and avoiding the sunk cost fallacy.

There is no single perfect portfolio, by the way. There are in fact an infinite number of possibilities, but based on the needs and risk profile of each individual, not on "hot tips" or the views of high-profile financial commentators.

This approach may not be as interesting. But by keeping an emotional distance between yourself and your portfolio, you can avoid some unhealthy attachments.

1. By Jim Parker, Vice President DFA Australia Limited, Outside the Flags, October 2015 Dimensional Fund Advisors

## WHY YOUR RETURNS MAY DIFFER FROM FUND PERFORMANCE

Have you ever looked at the growth of your 401(k) balance in a mutual fund and wondered why it seemed to lag or perhaps exceed the published returns of that fund? Chances are it is not because the fund is publishing fishy numbers.

Funds calculate performance on a *time-weighted* basis. When you go to a mutual fund website, it will often show the hypothetical growth of $10,000 over the last 5, 10, or 20 years. This is an honest result. If you put $10,000 in at the beginning of the period and made no deposits or withdrawals, you would get exactly that result. That is the return that a fund will report, and it is entirely accurate.

The problem is that people don't invest in this manner. In 401(k) plans, for instance, people deposit additional savings every pay period. Even if we assume that people aren't trading in and out of different funds or withdrawing money, we should expect a different return pattern when the amount invested gradually increases as deposits are made over time. As opposed to the fund's published return, the investor experiences what is called a dollar-weighted return.

Imagine a worker who started putting $100 into his 401(k) every month beginning July 1996 through June 2016, for a total of 20 years. Let's further assume he simply places the money in a simple S&P 500 Index fund, and to really simplify the analysis, let's assume $0 fees, and that he never withdraws money or trades to another fund.

The first $100 he puts into the fund will receive exactly the rate of return that the fund reports. Over this 20-year period, this $100 would have grown to about $455, for an average annual return of 7.87 percent (the total return that includes the reinvestment of dividends). This exactly matches the fund's reported annual return over the last 20 years.

But since he's contributing each month, rather than up front, his total investment will not earn that 20-year, 7.87 percent average rate of return. For example, the $100 he contributed at the 10 year point (July 2006) would have earned an average annual return of only 7.42 percent per year over the final 10 years.

The sequence of returns matters for *investor* performance, but it doesn't matter for *fund* performance. If an investor is making equal, periodic investments throughout his investment horizon and if there are higher-than-average returns early in the investment period—when he has relatively less invested in the market—his overall performance will fall below the fund's return. Likewise, if the fund has weak returns early and great returns later on, his performance may be better than the fund's performance.

You can't control either the timing or the sequence of returns, but they will have a big impact on the terminal value of your holdings. Investors who have been in the markets for the last 20 years probably experienced excellent growth during the late 1990's, but realized more tepid returns since. The result may be that they have underperformed the funds in which they're invested.

We want to emphasize that this hypothetical example was based on a 20 year span during which the market happened to provide stronger returns over the first 10 years compared with the second. Readers should not conclude that timing the market is a worthwhile endeavor. Your savings rate should be based on your age, current earnings, and your future income goals.

### To Make the Point

Finally, a hypothetical (and extreme) example of how the sequence of returns can affect your performance is provided in the table below. Suppose someone invests $1,000 per year for 10 years. In the left panel, the fund returns 100 percent the first year, but 0 percent every year thereafter for 10 years, for a 7.2 annual fund return. In the right panel, the opposite sequence of returns is depicted; the fund returns nothing for nine years and 100 percent in the 10th year, when the investor now has $10,000 exposed to this large return. The *fund's* performance is still 7.2 percent per year, but the resulting outcome for the *investor* is quite different. The investor's realized performance swings from 1.7 percent to 12.3 percent. Notably both outcomes vary widely from the fund's 7.2 percent performance.

The bottom line is that the sequence of returns you experience will impact the returns you actually earn. There is little you can do about it, but it can be helpful in understanding why your returns may differ from the reported returns of the funds in which you invest.

**The Sequence of Returns Can Affect Performance (Hypothetical)**

| | | Early return high, late returns low | | Early returns low, late returns high | |
|---|---|---|---|---|---|
| Year | Deposit | Fund's Return | Investor's Balance | Fund's Return | Investor's Balance |
| 0 | 1,000 | | 1,000 | | 1,000 |
| 1 | 1,000 | 100% | 3,000 | 0% | 2,000 |
| 2 | 1,000 | 0% | 4,000 | 0% | 3,000 |
| 3 | 1,000 | 0% | 5,000 | 0% | 4,000 |
| 4 | 1,000 | 0% | 6,000 | 0% | 5,000 |
| 5 | 1,000 | 0% | 7,000 | 0% | 6,000 |
| 6 | 1,000 | 0% | 8,000 | 0% | 7,000 |
| 7 | 1,000 | 0% | 9,000 | 0% | 8,000 |
| 8 | 1,000 | 0% | 10,000 | 0% | 9,000 |
| 9 | 1,000 | 0% | 11,000 | 0% | 10,000 |
| 10 | - | 0% | 11,000 | 100% | 20,000 |
| **Fund** performance | | **7.2%** | | **7.2%** | |
| **Investor** performance | | | **1.7%** | | **12.3%** |

## THE HIGH-YIELD DOW INVESTMENT STRATEGY

### Recommended HYD Portfolio

*As of May 15, 2018*

| | Rank | Yield (%) | Price ($) | Status | —Percent of Portfolio— Value (%) | No. Shares (%)[1] |
|---|---|---|---|---|---|---|
| Verizon | 1 | 4.94 | 47.79 | Holding** | 23.62 | 32.76 |
| IBM | 2 | 4.37 | 143.74 | Holding** | 17.06 | 7.86 |
| Exxon Mobil | 3 | 4.01 | 81.79 | Buying | 18.21 | 14.74 |
| Proctor & Gamble | 4 | 3.93 | 72.95 | Buying | 1.53 | 1.38 |
| Pfizer | 5 | 3.81 | 35.69 | Selling | 13.30 | 24.68 |
| Chevron | 7 | 3.45 | 129.74 | Selling | 19.38 | 9.90 |
| General Electric | 8 | 3.26 | 14.71 | Holding | 1.71 | 7.68 |
| Boeing | 21 | 2.00 | 342.12 | Holding | 5.18 | 1.00 |
| Cash (6-mo. T-Bill) | N/A | N/A | | | 0.01 | N/A |
| Totals | | | | | 100.00 | 100.00 |

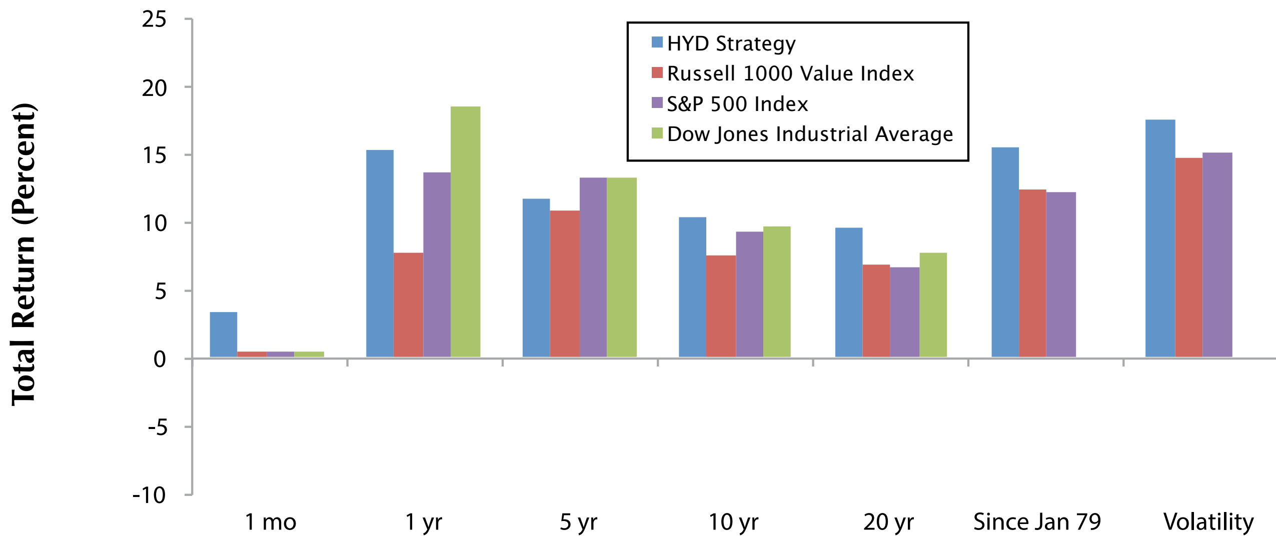
**Currently indicated purchases approximately equal to indicated purchases 18 months ago. 1 Because the percentage of each issue in the portfolio by value reflects the prices shown in the table, we are also showing the number of shares of each stock as a percentage of the total number of shares in the entire portfolio.

**Subscribers can find a full description of the strategy and methodology in the "Subscribers Only" (Log in required) section of our website: www.americaninvestment.com.**

### Comparative Hypothetical Total Returns (%) and Volatility

The data presented in the table and chart below represent total returns generated by a hypothetical HYD portfolio and by benchmark indexes for periods ending April 30, 2018*. Returns for the 5-,10- and 20-year periods are annualized, as is the volatility (standard deviation) of returns. (January 1979 is the earliest date for which data was available for both the HYD model and relevant benchmark indexes).

| | 1 mo. | 1 yr. | 5 yrs. | 10 yrs. | 20 yrs. | Since Jan 79 | Volatility (Std. Dev.) since 1979 |
|---|---|---|---|---|---|---|---|
| HYD Strategy | 3.18 | 14.90 | 11.40 | 10.05 | 9.32 | 15.11 | 17.12 |
| Russell 1000 Value Index | 0.33 | 7.50 | 10.52 | 7.30 | 6.63 | 12.05 | 14.38 |
| S&P 500 Index | 0.38 | 13.27 | 12.96 | 9.02 | 6.42 | 11.84 | 14.77 |
| Dow Jones Industrial Average | 0.34 | 18.09 | 12.96 | 9.39 | 7.50 | N/A | N/A |




*Data assume all purchases and sales at mid-month prices (+/–$0.125 per share commissions), reinvestment of all dividends and interest, and no taxes. Model HYD calculations are based on hypothetical trades following a very exacting stock-selection strategy. They do not reflect returns on actual investments or previous recommendations of AIS. Past performance may differ from future results. Historical performance results for the Russell 1000 Value Index, the Dow Jones Industrial Index and the S&P 500 Index do not reflect the deduction of transaction and/or custodial charges, or the deduction of an investment-management fee, the incurrence of which would have the effect of decreasing historical performance results. HYD Strategy results reflect the deduction of 0.73% management fee, the annual rate assessed to a $500,000 account managed through our High Yield Dow investment service.

**Representative asset class indexes:** U.S. large cap value - Russell 1000 Value Index; U.S. small cap value - Russell 2000 Value Index; U.S. Marketwide - Russell 3000 Index; Global REITs - S&P Global REIT Index; foreign developed markets - MSCI world ex-U.S.(net div.)Index; emerging markets - MSCI Emerging Markets Index(net div.); U.S. Bonds - Barclays U.S. Aggregate Bond Index; Foreign Bonds - Citi World Government Bond Index ex USA; Gold - London PM Fix. Past performance may not be indicative of future results. Therefore, no current or prospective investor should assume that the future performance of any specific investment, investment strategy (including the investments and/or investment strategies recommended by AIS), or product made reference to directly or indirectly, will be profitable or equal to past performance levels. Historical performance results for individual investment indexes and/or categories generally do not reflect the deduction of transaction and/or custodial charges, the deduction of mutual fund fees, or the deduction of advisory fees, the incurrence of which would have the effect of decreasing historical performance. The results portrayed above reflect the reinvestment of dividends and capital gains.

## RECENT MARKET STATISTICS

### Precious Metals & Commodity Prices ($)

| | *5/15/18* | *Mo. Earlier* | *Yr. Earlier* | *Prem. (%)* |
|---|---|---|---|---|
| Gold, London p.m. fixing | **1,295.00** | 1,343.70 | 1,233.30 | |
| Silver, London Spot Price | **16.41** | 16.51 | 16.59 | |
| Crude Oil, W. Texas Int. Spot | **71.01** | 67.35 | 48.85 | |
| **Coin Prices ($)[1]** | | | | |
| American Eagle (1.00) | **1,320.00** | 1,358.70 | 1,260.80 | 1.93 |
| Austrian 100-Corona (0.98) | **1,263.10** | 1,310.83 | 1,194.30 | -0.47 |
| British Sovereign (0.2354) | **304.84** | 316.31 | 288.32 | 0.00 |
| Canadian Maple Leaf (1.00) | **1,305.00** | 1,353.70 | 1,245.80 | 0.77 |
| Mexican 50-Peso (1.2056) | **1,553.25** | 1,611.96 | 1,468.62 | -0.51 |
| Mexican Ounce (1.00) | **1,313.00** | 1,361.70 | 1,249.80 | 1.39 |
| S. African Krugerrand (1.00) | **1,302.00** | 1,349.70 | 1,234.80 | 0.54 |
| U.S. Double Eagle-$20 (0.9675) | | | | |
| St. Gaudens (MS-60) | **1,315.00** | 1,300.00 | 1,220.00 | 4.96 |
| Liberty (Type I-AU50) | **2,000.00** | 2,000.00 | 3,000.00 | 59.63 |
| Liberty (Type II-AU50) | **1,325.00** | 1,325.00 | 1,325.00 | 5.75 |
| Liberty (Type III-AU50) | **1,310.00** | 1,290.00 | 1,210.00 | 4.56 |
| U.S. Silver Coins ($1,000 face value, circulated) | | | | |
| 90% Silver Circ. (715 oz.) | **12,280.50** | 11,627.00 | 11,902.00 | 4.66 |
| 40% Silver Circ. (292 oz.) | **4,895.50** | 4,641.50 | 4,701.00 | 2.17 |
| Silver Dollars Circ. | **22,875.00** | 22,875.00 | 21,750.00 | 80.23 |

[1]Note: Premium reflects percentage difference between coin price and value of metal in a coin. The weight in troy ounces of the precious metal in coins is indicated in parentheses.

### Recent Market Returns[2]

Data through April 30, 2018

| | U.S. Stocks (Mktwd) | Foreign Dev. Stocks | Foreign Emerg. Stocks | Global REITs | U.S. Bonds | Foreign Bonds (hedged) | Gold |
|---|---|---|---|---|---|---|---|
| 1-month | 0.38% ↑ | 2.30% ↑ | -0.44% ↓ | 1.51% ↑ | -0.74% ↓ | 0.12% ↑ | -0.35% ↓ |
| 3-month | -5.26% ↓ | -4.25% ↓ | -6.80% ↓ | -2.81% ↓ | -1.05% ↓ | 0.80% ↑ | -1.92% ↓ |
| 1 year | 13.05% ↑ | 14.11% ↑ | 21.72% ↑ | 0.64% ↑ | -0.32% ↓ | 1.78% ↑ | 4.16% ↑ |
| 5 year (annualized) | 12.75% ↑ | 5.58% ↑ | 4.74% ↑ | 3.21% ↑ | 1.47% ↑ | 1.60% ↑ | -2.13% ↓ |
| 15 year (annualized) | 9.88% ↑ | 8.13% ↑ | 12.21% ↑ | 8.11% ↑ | 3.84% ↑ | 2.74% ↑ | 9.53% ↑ |
| **Best and worst one-year returns, Jan. 2001 - Apr. 2018** | | | | | | | |
| Best | **56.0%** | **57.2%** | **91.6%** | **85.7%** | **13.8%** | **7.1%** | **57.6%** |
| During: | 03/2009-02/2010 | 04/2003-03/2004 | 03/2009-02/2010 | 04/2009-03/2010 | 11/2008-10/2009 | 07/2008-06/2009 | 06/2005-05/2006 |
| Worst | **-43.5%** | **-50.3%** | **-56.6%** | **-59.5%** | **-2.5%** | **0.1%** | **-27.4%** |
| During: | 03/2008-02/2009 | 03/2008-02/2009 | 12/2007-11/2008 | 03/2008-02/2009 | 09/2012-08/2013 | 04/2010-03/2011 | 12/2012-11/2013 |

[2]For representative asset class indexes see box on page 38.

## THE DOW JONES INDUSTRIALS RANKED BY YIELD*

| | *Ticker Symbol* | *Market Prices ($) 5/15/18* | *4/13/18* | *5/15/17* | *12-Month ($) High* | *Low* | *Latest Dividend Amount ($)* | *Record Date* | *Payable Date* | *Indicated Annual Dividend ($)* | *Yield† (%)* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Verizon | VZ | 47.79 | 47.66 | 45.38 | 54.77 | 42.80 | 0.590 | 4/10/18 | 5/1/18 | 2.360 | 4.94 |
| IBM | IBM | 143.74 | 156.71 | 151.51 | 171.13 | 139.13 | 1.570 | 5/10/18 | 6/9/18 | 6.280 | 4.37 |
| Exxon Mobil | XOM | 81.79 | 77.84 | 82.80 | 89.30 | 72.16 | 0.820 | 5/14/18 | 6/11/18 | 3.280 | 4.01 |
| Procter and Gamble | PG | 72.95 | 78.37 | 86.33 | 94.67 | 70.73 | 0.717 | 4/20/18 | 5/15/18 | 2.869 | 3.93 |
| Pfizer | PFE | 35.69 | 36.32 | 33.12 | 39.43 | 31.67 | 0.340 | 5/11/18 | 6/1/18 | 1.360 | 3.81 |
| Coca-Cola | KO | 41.72 | 44.51 | 43.73 | 48.62 | 41.45 | 0.390 | 6/15/18 | 7/2/18 | 1.560 | 3.74 |
| Chevron | CVX | 129.74 | 119.92 | 106.85 | 133.88 | 102.55 | 1.120 | 5/18/18 | 6/11/18 | 4.480 | 3.45 |
| General Electric | GE | 14.71 | 13.49 | 28.18 | 29.47 | 12.73 | 0.120 | 2/26/18 | 4/25/18 | 0.480 | 3.26 |
| Merck | MRK | 59.20 | 57.17 | 63.51 | 66.41 | 52.83 | 0.480 | 3/15/18 | 4/6/18 | 1.920 | 3.24 |
| Cisco | CSCO | 45.48 | 43.00 | 34.23 | 46.37 | 30.36 | 0.330 | 4/5/18 | 4/25/18 | 1.320 | 2.90 |
| Johnson & Johnson | JNJ | 125.13 | 130.62 | 126.99 | 148.32 | 121.28 | 0.900 | 5/29/18 | 6/12/18 | 3.600 | 2.88 |
| 3M Company | MMM | 202.41 | 215.52 | 197.63 | 259.77 | 191.44 | 1.360 | 5/18/18 | 6/12/18 | 5.440 | 2.69 |
| McDonald's | MCD | 163.06 | 161.73 | 146.28 | 178.70 | 145.81 | 1.010 | 3/1/18 | 3/15/18 | 4.040 | 2.48 |
| Wal-Mart Stores | WMT | 84.52 | 86.02 | 76.29 | 109.98 | 73.13 | 0.520 | 8/10/18 | 9/4/18 | 2.080 | 2.46 |
| Travelers | TRV | 129.86 | 136.29 | 120.25 | 150.55 | 113.76 | 0.770 | 6/8/18 | 6/29/18 | 3.080 | 2.37 |
| DowDupont | DWDP | 67.15 | 66.17 | 79.46 | 77.08 | 59.29 | 0.380 | 5/31/18 | 6/15/18 | 1.520 | 2.26 |
| United Tech. | UTX | 124.55 | 122.71 | 120.92 | 139.24 | 109.10 | 0.700 | 5/18/18 | 6/10/18 | 2.800 | 2.25 |
| Intel Corp | INTC | 53.92 | 51.86 | 35.63 | 55.79 | 33.23 | 0.300 | 5/7/18 | 6/1/18 | 1.200 | 2.23 |
| Home Depot, Inc. | HD | 187.98 | 172.80 | 157.33 | 207.61 | 144.25 | 1.030 | 3/8/18 | 3/22/18 | 4.120 | 2.19 |
| Caterpillar | CAT | 152.59 | 150.23 | 102.42 | 173.24 | 97.74 | 0.780 | 4/23/18 | 5/19/18 | 3.120 | 2.04 |
| Boeing | BA | 342.12 | 329.28 | 182.39 | 371.60 | 175.47 | 1.710 | 5/11/18 | 6/1/18 | 6.840 | 2.00 |
| J P Morgan | JPM | 113.03 | 110.30 | 87.34 | 119.33 | 81.64 | 0.560 | 4/6/18 | 4/30/18 | 2.240 | 1.98 |
| Microsoft Corp. | MSFT | 97.32 | 93.08 | 68.43 | 98.69 | 67.14 | 0.420 | 5/17/18 | 6/14/18 | 1.680 | 1.73 |
| Walt Disney | DIS | 102.92 | 100.35 | 109.13 | 113.19 | 96.20 | 0.840 | 12/11/17 | 1/11/18 | 1.680 | 1.63 |
| Apple | AAPL | 186.44 | 174.73 | 155.70 | 190.37 | 142.20 | 0.730 | 5/14/18 | 5/17/18 | 2.920 | 1.57 |
| American Express | AXP | 100.74 | 93.03 | 78.33 | 102.96 | 75.97 | 0.350 | 7/6/18 | 8/10/18 | 1.400 | 1.39 |
| Goldman Sachs | GS | 241.56 | 255.92 | 225.12 | 275.31 | 209.62 | 0.800 | 5/31/18 | 6/28/18 | 3.200 | 1.32 |
| Unitedhealth Group | UNH | 239.50 | 224.28 | 171.53 | 250.79 | 166.65 | 0.750 | 3/9/18 | 3/20/18 | 3.000 | 1.25 |
| Nike | NKE | 69.50 | 67.25 | 53.77 | 70.94 | 50.35 | 0.200 | 6/4/18 | 7/5/18 | 0.800 | 1.15 |
| Visa Inc. | V | 131.10 | 120.75 | 93.23 | 132.50 | 91.36 | 0.210 | 5/18/18 | 6/5/18 | 0.840 | 0.64 |

* See the Recommended HYD Portfolio table on page 38 for current recommendations. † Based on indicated dividends and market price as of 5/15/18. Extra dividends are not included in annual yields. All data adjusted for splits and spin-offs. 12-month data begins 5/15/17.

## ASSET CLASS INVESTMENT VEHICLES

| Data as of April 30, 2018 | | Security Symbol(s) (1) | | Avg. Market Cap / Avg. Maturity | Number of Holdings | Expense Ratio (%) | Turnover (%) | Price-to-Book Ratio | Trailing 12-Mo. Yield (%) | Annualized Returns (%) | | | Tax Cost Ratio - 3 Years (%) (3) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mutual Fund | ETF | | | | | | | 1-Year | 3-Year | 5-Year | |
| **Fixed Income** | | | | | | | | | | | | | |
| Short-Term Bonds | Vanguard Short-Term Bond | VBISX | BSV | 2.90 yrs | 2494 | 0.15 | 50 | | 1.54 | -0.66 | 0.50 | 0.65 | 0.66 |
| Short-Term Bonds | SPDR Portfolio Short Term Corp Bd ETF | | SPSB | 2.00 yrs | 1058 | 0.07 | 67 | | 1.97 | 0.41 | 1.14 | 1.13 | 0.74 |
| Short-Term Bonds | iShares 1-3 Year Treasury Bond ETF | | SHY | 2.29 yrs | 79 | 0.15 | 66 | | 1.07 | -0.51 | 0.17 | 0.32 | 0.35 |
| Interm-Term | Vanguard Total Bond Market | VBMFX | BND | 8.50 yrs | 17490 | 0.15 | 55 | | 2.32 | -0.59 | 0.86 | 1.27 | 1.08 |
| Interm-Term | iShares Core US Aggregate Bond ETF | | AGG | 8.12 yrs | 6783 | 0.05 | 242 | | 2.40 | -0.63 | 0.92 | 1.36 | 1.04 |
| Tax-Exempt | Vanguard Ltd-Term Tax-Exempt | VMLTX | | 3.20 yrs | 4861 | 0.19 | 19 | | 1.47 | 0.12 | 0.83 | 0.89 | 0.05 |
| Tax-Exempt | SPDR Nuveen Blmbg Barclays ST MunBd ETF | | SHM | 3.03 yrs | 1404 | 0.20 | 32 | | 1.09 | -0.81 | 0.44 | 0.54 | 0.00 |
| Tax-Exempt | Vanguard Interm-Term Tx-Ex Inv | VWITX | | 5.70 yrs | 7458 | 0.19 | 15 | | 2.56 | 0.86 | 1.87 | 2.02 | 0.07 |
| Inflation-Protected | iShares TIPS Bond ETF | | TIP | 8.09 yrs | 39 | 0.20 | 32 | | 2.11 | 0.11 | 0.87 | -0.27 | 0.59 |
| Inflation-Protected | Vanguard Inflation-Protected Securities | VIPSX | | 8.20 yrs | 41 | 0.20 | 22 | | 2.56 | -0.08 | 0.81 | -0.33 | 0.78 |
| International | Vanguard Total International Bond | VTIBX | BNDX | 9.40 yrs | 4821 | 0.13 | 19 | | 2.20 | 2.60 | 2.49 | 0.00 | 0.79 |
| **Real Estate (REITs)** | | | | | | | | | | | | | |
| U.S. REITs | Vanguard REIT | VGSIX | VNQ | 10.37 B | 186 | 0.26 | 6 | 1.99 | 4.60 | -3.97 | 2.97 | 4.43 | 1.50 |
| U.S. REITs | SPDR Dow Jones REIT | | RWR | 10.74 B | 102 | 0.25 | 9 | 2.06 | 3.17 | -2.23 | 3.02 | 4.62 | 1.53 |
| Int'l REITs | Vanguard Global ex-US Real Estate (2) | VGXRX | VNQI | 6.62 B | 636 | 0.34 | 6 | 0.99 | 3.75 | 16.95 | 5.00 | 3.79 | 1.47 |
| Int'l REITs | iShares International Developed Property | | WPS | 6.82 B | 386 | 0.48 | 8 | 0.94 | 4.32 | 13.51 | 4.58 | 3.63 | 1.57 |
| Global (incl. U.S.) | SPDR Dow Jones Global Real Estate ETF | | RWO | 8.87 B | 231 | 0.50 | 13 | 1.40 | 3.35 | 2.52 | 2.41 | 3.27 | 1.41 |
| **U.S. Stocks** | | | | | | | | | | | | | |
| Large Cap (blend) | Vanguard S&P 500 | VFINX | VOO | 97.32 B | 513 | 0.14 | 3 | 2.82 | 1.73 | 13.11 | 10.42 | 12.80 | 0.63 |
| Large Cap (blend) | iShares Core S&P 500 | | IVV | 97.16 B | 509 | 0.04 | 5 | 2.82 | 1.85 | 13.30 | 10.53 | 12.93 | 0.52 |
| Large Cap (blend) | iShares Russell 1000 ETF | | IWB | 75.18 B | 977 | 0.15 | 4 | 2.76 | 1.71 | 13.00 | 10.10 | 12.70 | 0.48 |
| Large Cap Value | Vanguard Value | VIVAX | VTV | 88.46 B | 342 | 0.17 | 9 | 2.11 | 2.28 | 11.20 | 9.51 | 11.68 | 0.80 |
| Large Cap Value | iShares Russell 1000 Value | | IWD | 57.58 B | 714 | 0.20 | 13 | 1.81 | 2.25 | 7.29 | 7.50 | 10.33 | 0.60 |
| Small Cap (blend) | iShares Core S&P Small-Cap ETF | | IJR | 1.59 B | 605 | 0.07 | 13 | 1.97 | 1.22 | 12.92 | 12.01 | 13.83 | 0.39 |
| Small Cap (blend) | Schwab US Small-Cap ETF | | SCHA | 2.56 B | 1736 | 0.05 | 11 | 1.96 | 1.30 | 11.07 | 8.73 | 11.82 | 0.50 |
| Small Cap Value | Vanguard Small Cap Value | VISVX | VBR | 3.53 B | 890 | 0.19 | 19 | 1.77 | 1.78 | 7.18 | 8.43 | 11.61 | 0.68 |
| Small Cap Value | iShares Russell 2000 Value | | IWN | 1.56 B | 1398 | 0.24 | 24 | 1.38 | 1.83 | 6.59 | 9.21 | 10.28 | 0.60 |
| Small Cap Value | iShares Micro-Cap | | IWC | 0.52 B | 1372 | 0.60 | 21 | 1.76 | 1.08 | 13.73 | 9.39 | 12.04 | 0.39 |
| Marketwide | Vanguard Total Stock Market | VTSMX | VTI | 55.53 B | 3641 | 0.14 | 3 | 2.69 | 1.64 | 12.98 | 10.07 | 12.60 | 0.61 |
| Marketwide | Fidelity Total Market Index | FSTMX | | 55.57 B | 3362 | 0.09 | 4 | 2.69 | 1.66 | 12.99 | 10.11 | 12.63 | 0.91 |
| **Foreign Stocks** | | | | | | | | | | | | | |
| Developed Markets | Vanguard FTSE Developed Markets ETF | VDVIX | VEA | 23.31 B | 3899 | 0.17 | 3 | 1.50 | 2.70 | 14.91 | 5.62 | 0.00 | 0.77 |
| Developed Markets | iShares Core MSCI EAFE ETF | | IEFA | 24.17 B | 2534 | 0.08 | 2 | 1.52 | 2.60 | 15.01 | 6.00 | 6.53 | 0.71 |
| Emerging Markets | Vanguard Emerging Markets Stock | VEIEX | VWO | 20.25 B | 4132 | 0.32 | 6 | 1.67 | 2.17 | 16.61 | 3.93 | 3.58 | 0.84 |
| Emerging Markets | Schwab Emerging Markets Equity ETF | | SCHE | 29.58 B | 916 | 0.13 | 7 | 1.60 | 2.31 | 16.77 | 4.54 | 3.98 | 0.77 |
| **Gold-Related Funds** | | | | | | | | | | | | | |
| Gold ETFs | iShares Gold Trust | | IAU | | | 0.25 | | | 0.00 | 3.36 | 3.33 | -2.54 | 0.00 |
| Gold ETFs | SPDR Gold Shares | | GLD | | | 0.40 | | | 0.00 | 3.16 | 3.17 | -2.69 | 0.00 |

Data provided by the funds and Morningstar. (1) Some funds are available as mutual funds and ETFs, in which case both symbols are shown. In these cases, data represent the mutual fund. The ETF may offer a lower expense ratio and returns may deviate. For Vanguard funds, the Investor share class is shown. The Admiral share class, which has a higher minimum investment, may offer lower expenses. (2) VGXRX includes a 0.25% fee on purchases and redemptions, which are paid directly to the fund. (3) This represents the percentage-point reduction in an annualized return that results from income taxes. This calculation (source: Morningstar) assumes investors pay the maximum federal rate on capital gains and ordinary income.

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