

## INVESTMENT GUIDE



* See box, page 53, for representative indexes.

| Rates of Interest <br> As of July 25, 2017 |  |
| :---: | :---: |
| Government Obligations ${ }^{1}$ |  |
| Fed Funds Rate | 1.16\% |
| 3-Month Treas. Bill | 1.16\% |
| 10-Yr. Treas. Note | 2.33\% |
| 30-Yr. Treas. Bond | 2.91\% |
| 10-Yr. TIPS | 0.52\% |
| Muni Bonds - Nat'l $10-\mathrm{Yr}$. | 1.90\% |
| Mortgage Rates ${ }^{2}$ |  |
| 15-Yr Fixed | 3.23\% |
| 30-Yr Fixed | 3.96\% |
| Banking ${ }^{3}$ |  |
| Savings | 0.06\% |
| Money Market | 0.08\% |
| 12-month CD | 0.26\% |
| [1] Federal Reserve, fmsbonds.com. Annualized Rates. Notes, bonds, TIPS reflect yield to maturity. <br> [2] Freddie Mac. Average (National average, mortgages with 0.5 points). <br> [3] FDIC. Average national rates, non-jumbo deposits (<\$100k). |  |

## Interest Rates and Your Wealth

The Federal Reserve Bank may again raise its fed funds interest rate target and has announced long term plans to reduce its bond holdings. These developments do not necessarily portend higher interest rates, nor do they point to lower returns for bonds or stocks. ${ }^{1}$

A large body of research shows that changes in interest rates and bond prices are unpredictable. ${ }^{2}$ Borrowers and lenders react almost instantly to news affecting rates so strategies that attempt to exploit Fed announcements or other known information are likely to fail.

But what about stocks? Unlike bond prices, which tend to go down when yields go up, stock prices might rise or fall with changes in interest rates. A stock's price depends on both future cash flows to investors and the discount rate they apply to those expected flows. When interest rates rise, the discount rate may increase, which in turn could cause the price of the stock to fall. But when interest rates change, expectations about future cash flows from holding a stock may also change. So, if theory doesn't tell us what the overall effect should be, the next question is what does the data say?

Exhibit 1 below compares monthly changes in U.S. stock returns with contemporaneous monthly changes in the fed funds rate. ${ }^{3}$ If higher rates were followed by lower stock returns, we would expect the points to approximate a line running from the top left quadrant to the lower right.

Clearly no pattern emerges.

There is no evidence that investors can reliably predict interest rates, and even if they could, this information would be of little value in predicting stock market returns. The best approach to capturing the returns of the stock market is to stay invested in it.

Exhibit 1. Monthly US Stock Returns against Monthly Changes in Effective Federal Funds Rate, August 1954-December 2016


[^0]This month we have revised our quarterly sample portfolio allocations. These changes are not dramatic and readers need not change their holdings
in response. These refinements emerge from our ongoing effort to provide generic guidance for thousands of subscribers who in fact have divergent preferences
and face widely-varying circumstances.
We last revised these sample
allocations two years ago based on our understanding of readers' and clients'

| AIS Sample Standard Allocations For the Period Ending June 30, 2017 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Asset Class ${ }^{(5)}$ |  |  |  |  | Asset Class Statistics: Risk and Return (\%) |  |  |  |
|  | Conservative Moderate Aggressive ${ }^{\text {Sample Percentage Allocations }}$ |  |  |  | otal Return (annualized) |  |  | Std. Dev. (annualized) |
|  |  |  |  | 1 Year | 5 Year | 10 Year | 15 year | 15 year |
| Cash \& Equivalent Assets ${ }^{(3)}$ | as needed | as needed | as needed | 0.48 | 0.17 | 0.58 | 1.30 | 0.49 |
| U.S. Inv. Grade Fixed Income | e 70 | 35 | 15 | 0.11 | 1.29 | 2.97 | 3.16 | 1.95 |
| Global Real Estate | 2.5 | 6 | 8 | -2.35 | 7.57 | 2.60 | 8.10 | 19.26 |
| U.S. Stocks | 15 | 36 | 48 | 18.51 | 14.58 | 7.25 | 8.66 | 14.60 |
| Foreign Stocks | 7.5 | 18 | 24 | 20.45 | 7.22 | 1.13 | 6.90 | 17.49 |
| Gold Related | 5 | 5 | 5 | -5.94 | -4.92 | 6.68 | 9.50 | 18.23 |
| Sample Portfolio Statistics: Risk, Return (\%) and Growth ${ }^{(4)}$ |  |  |  |  |  |  |  |  |
|  |  |  |  | vative | Moderate | Aggr | sive |  |
|  | Portfolio Return 1 Year |  |  |  | 8.77 |  |  |  |
|  | Portfolio Return 5 Year (annu | lized) |  |  | 6.65 |  |  |  |
|  | Portfolio Return 10 Year (ann | alized) |  |  | 4.33 |  |  |  |
|  | Portfolio Return 15 Year (ann | alized) |  |  | 6.33 |  |  |  |
|  | Portfolio Standard Deviation | 5 Year (ann | alized) |  | 8.98 |  |  |  |
|  | Growth of \$10,000 over 15 |  |  |  | \$25,113 | \$28, |  |  |

## AIS Sample Enhanced Allocations ${ }^{(1)}$ <br> For the Period Ending June 30, 2017

| Asset Class ${ }^{(5)}$ | Sample Percentage Allocations ${ }^{(2)}$ |  |  |  | Asset Class Statistics: Risk and Return (\%) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Conservative | Moderate | Aggressive |  | tal Return | (annualiz |  | Std. Dev. (annualized) |
|  |  |  |  | 1 Year | 5 Year | 10 Year | 15 year | 15 year |
| Cash \& Equivalent Assets ${ }^{(3)}$ | as needed | as needed | as needed | 0.48 | 0.17 | 0.58 | 1.30 | 0.49 |
| U.S. Inv. Grade Fixed Income | 46.67 | 23.33 | 10 | 0.11 | 1.29 | 2.97 | 3.16 | 1.95 |
| Foreign Inv. Grade Fixed Income (hedged) | 23.33 | 11.67 | 5 | 0.94 | 1.73 | 2.58 | 2.88 | 1.15 |
| U.S. Real Estate | 1.67 | 4 | 5.33 | -2.25 | 9.23 | 5.78 | 9.93 | 22.80 |
| Foreign Real Estate | 0.83 | 2 | 2.67 | -0.36 | 6.86 | 0.20 | 8.60 | 17.52 |
| U.S. Large Cap | 5 | 12 | 16 | 18.03 | 14.67 | 7.29 | 8.62 | 14.37 |
| U.S. Large Cap Value | 5 | 12 | 16 | 15.53 | 13.94 | 5.57 | 8.09 | 14.86 |
| U.S. Small Cap | 2.5 | 6 | 8 | 24.60 | 13.70 | 6.92 | 9.19 | 18.96 |
| U.S. Small Cap Value | 2.5 | 6 | 8 | 24.85 | 13.39 | 5.92 | 8.75 | 18.74 |
| Foreign Developed Markets | 5 | 12 | 16 | 19.49 | 8.14 | 1.00 | 6.42 | 16.96 |
| Foreign Emerging Markets | 2.5 | 6 | 8 | 23.74 | 3.96 | 1.91 | 10.60 | 21.87 |
| Gold Related | 5 | 5 | 5 | -5.94 | -4.92 | 6.68 | 9.50 | 18.23 |
| Sample Portfolio Statistics: Risk, Return (\%) and Growth ${ }^{(4)}$ |  |  |  |  |  |  |  |  |
| Portfolio Return 1 Year Cond |  |  |  | vative | Moderate | Aggr | sive |  |
|  |  |  |  |  | 9.49 |  |  |  |
| Portfolio Return 5 Year (annualized) |  |  |  |  | 6.58 |  |  |  |
| Portfolio Return 10 Year (annualized) |  |  |  |  | 4.23 |  |  |  |
| Portfolio Return 15 Year (annualized) |  |  |  |  | 6.62 |  |  |  |
| Portfolio Standard Deviation 15 Year (annualized) |  |  |  |  | 9.37 |  |  |  |
| Growth of \$10,000 over 15 Years |  |  |  |  | \$26,171 |  |  |  |

1 Performance was achieved by means of retroactive application of a model designed with the benefit of hindsight. 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 the AIS), or product made reference to directly or indirectly, will be profitable or equal to past performance levels. Historical performance results for investment indexes and/or categories generally 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. The results portrayed in this portfolio reflect the reinvestment of dividends and capital gains.
2 For our recommended investment vehicles for each asset class, please see page 55.
3 Investors should maintain cash balances adequate to cover living expenses for up to 6 months.
4 Sample Portfolio Statistics are hypothetical and do not reflect historical recommendations of AIS. Annual portfolio rebalancing is assumed. Sample portfolio returns reflect the deduction of $0.725 \%$ management fee, the PAM rate charged to $\$ 500,000$ account managed by AIS. A maximum annual management fee for the PAM service of $1.50 \%$ applies to accounts of $\$ 100,000$ (our minimum account size) in Assets Under Management ("AUM"). The fee decreases thereafter as AUM increases. Accounts with AUM less than $\$ 500,000$ would incur a fee greater than $0.725 \%$ and, therefore, returns would be lower than indicated. See AIS ADV Part 2 for full details, available at http://americaninvestment.com/images/pdf/ ADV_Part_2A.pdf.
5 Benchmarks used for returns are as follows: Cash and Equivalents - BofA Merrill Lynch Three-Month US Treasury Bill Index; U.S. Inv. Grade Fixed Income - Bloomberg Barclays U.S. Government/Credit Index 1-5 Years; Foreign Inv. Grade Fixed Income - Citi World Government Bond Index ex USA 1-5 Years (hedged to USD); Global Real Estate - S\&P Global REIT Index (net div.); U.S. Real Estate - S\&P United States REIT Index (gross div.); Foreign Real Estate - S\&P Global ex US REIT Index (net div.); U.S. Stocks - Russell 3000 Index; U.S. Large Cap - Russell 1000 Index; U.S. Large Cap Value - Russell 1000 Value Index; U.S. Small Cap - Russell 2000 Index; U.S. Small Cap Value - Russell 2000 Value Index; Foreign Developed Markets - MSCI World ex USA Index (net div.); Foreign Emerging Markets - MSCI Emerging Markets Index (net div.); Foreign Stocks - MSCI All Country World ex USA Index (net div.); Gold Related - Gold London PM Fix Price. All data from DFA Returns 2.0 program, except Gold data from World Gold Council.
preferences. We had come to realize that, while many investors were willing to tilt their portfolios toward small cap and value stocks in pursuit of higher returns, they often underestimated their own tolerance to endure the inevitable periods when their results would deviate from those of a simple, market-wide portfolio. So, at the time, in order to lower this "tracking risk" we incorporated revisions that reduced, but did not eliminate, these tilts.

We are now introducing further alterations (see page 49, Sample Allocations). This article describes the rationale behind them. In summary, these revisions are intended to:

1. Provide an alternative set of sample allocations to accommodate those investors who are content to simply pursue overall market returns with no tilts toward small cap or value stocks at all.
2. Provide allocations that are proportionally consistent across the risk spectrum, which can be easily customized to suit any investor's risk preference.
3. Simplify the process by which investors adjust their target allocations to match their preferences by narrowing the decisions required.

## Two Alternatives

The first table, AIS Standard Allocations includes just five broad asset classes beyond cash. It is intended for investors who are very sensitive to differences between the returns on the equities they hold and those of the overall stock market. This is understandable. The media provides daily returns for U.S. market indexes such as the S\&P 500. During episodes when "the market" is providing consistently strong returns, even long-term investors can become frustrated when their small/value tilted portfolios underperform. The table similarly eliminates these tilts within foreign stocks; it provides returns for broad market indexes that track both emerging and developed non-U.S. markets.

This standard "market" allocation was also developed in response to investors we have heard from who are just starting out. A basic, low-cost, broad-ly-diversified but not terribly complex portfolio can be the right choice for investors looking to get their feet wet.

The second table, AIS Sample

Enhanced Allocations, reflects tilted allocations and encompasses more asset classes. It is intended for investors who are willing to deviate from the market by investing more heavily in small cap and value stocks relative to their "natural" weighting in the overall market. This enhanced allocation is more in line with the sample allocations we have traditionally provided, and it is suitable for more experienced investors.

## Consistent Ratios

We have incorporated a feature in both tables that allows investors to more easily adopt risk-based portfolios that fall anywhere "between" our three discrete samples: conservative, moderate, and aggressive. We leave the overall equity to fixed income ratio entirely to each investor's discretion. But the ratios we assign within these broad asset classes are now consistent across all three of these models: the ratio of U.S. stocks to foreign stocks is universally 2-to-1 while the ratio of U.S. plus foreign stocks to global REITs is consistently 9-to-1. We have similarly prescribed a constant 2-to-1 ratio within each equity class (U.S. large to U.S. small caps, developed markets to emerging markets and U.S. REITs to foreign REITs). The share devoted to gold is 5 percent in all three portfolios.

## One Major Decision

These universal ratios allow investors to concentrate on the one allocation decision that matters most: the total allocation to equities versus the total allocation to fixed income. Empirical research is overwhelming -- this is the most critical determinant of returns. So, when discussing portfolios with clients, we typically begin the conversation by describing the overall equity/fixed income allocation implicit in these conservative, moderate, or aggressive portfolios. But, because of the ratios described, the overall stock/fixed income allocation decision is not confined to three static choices we publish; the number of choices is in fact infinite.

Once this crucial allocation decision is determined, the sample allocations to foreign, small caps, etc. emerge automatically when the ratios described are applied. By applying the simple ratios implicit in these tables, any overall equity/bond allocation chosen will prescribe specific target weights for each of
our recommended asset classes. See "A Customized Portfolio Made Easy" (page 52) for an example. ${ }^{1}$

We believe this refinement will be useful to both new and experienced investors. Beginning investors can quickly consider an infinite number of portfolios, each subdivided across 11 categories of assets, based on any chosen allocation between stocks and fixed income. Those with established portfolios can similarly use this tool to consider a limitless number of more conservative portfolios as they grow older.

## What about Cash?

These revised tables do not specify a specific percentage allocation for cash. Instead they acknowledge investors' needs to hold cash by describing a dollar level equal six months' worth of living expenses. This should serve only as a guideline since one's need for cash can is highly circumstantial.

## Fixed Income

The fixed income allocations in both tables include only short-term, high quality global government and corporate debt. This is based on a simplifying assumption that fixed income is intended to provide portfolio stability. In fact investors hold bonds for a variety of other purposes such as liquidity, income, inflation protection and tax management, depending on individual circumstances. Investors might also be willing to assume greater credit or term risk than these allocations provide. For these reasons we have included several recommended bond funds on the back page of this publication that can be used to augment or to replace the allocations suggested.

## The Self-Empowered Investor

Though these changes might appear to represent a move toward automation, they are in fact intended to enhance, rather than diminish customization and investor autonomy. They introduce efficiencies that allow investors to focus on the decisions that matter most, while providing an infinite number of sound choices backed by solid empirical research.

[^1]Capital markets across the globe generally turned in positive results during the second quarter. Foreign stocks, both in emerging and developed markets, led the pack. Developed market stocks in particular were boosted by a weaker dollar. In the U.S., growth shares surpassed value, while large caps outperformed small caps. Commercial real estate (global REITs) eked out positive returns; non-U.S. REITs outperformed U.S. REITs. Only gold registered a (slightly) negative return. Interest rates changed little during the three months.

## Cash Equivalent Assets ${ }^{2}$

In a widely anticipated move the Fed Reserve Open Market Committee (FOMC) in June again raised its fed funds interest rate target. The targeted range now stands at 1.00 to 1.25 percent. The yield on the three month U.S. Treasury bill rose to 1.03 percent while the one year bill reached 1.24 percent.

Consumer prices, measured by the non-seasonally adjusted Consumer Price Index, had increased 1.2 percent over the previous 12 months at the end of June. AIER's Everyday Price Index meanwhile increased by 0.9 percent. While both measures would seem to indicate mild price inflation by historical standards, we again remind our readers that the current one year "risk free" yield of 1.24 percent, measured by the one-year Treasury bill yield, is barely adequate to cover this rise in prices. On June 30th the U.S. Treasury market was pricing in an expected annual inflation rate of 1.74 percent over the next 10 years. Our recommended asset classes are intended to provide positive real (inflation-adjusted) returns for investors with varying circumstances and tolerance for risk.

## Fixed Income

The U.S. Treasury yield curve (see chart nearby) changed only slightly from the first quarter. Short term rates rose while longer-term rates fell. The yield on the two-year bill reached 1.38 percent while 10 -year and 30 -year yields ended the quarter at 2.31 percent and 2.84 percent, respectively.

The U.S. bond market as a whole returned 1.45 percent for the quarter. Investors who look to bonds for portfolio stability should favor short and intermediate term bonds. U.S. short/ intermediate bonds returned 0.56 percent while foreign bonds of similar duration returned 0.32 percent (hedged to the U.S. dollar). Short-term municipal bonds returned 1.25 percent while TIPS returned - 0.40 percent.

The Fed has described further possible hikes in its short term fed funds rate in coming months as well as a plan to begin shrinking its balance sheet. The latter move reinforced the trend toward higher rates because a reduction in bonds held by the Fed puts downward pressure on bond prices. However, markets have now reacted to these developments, so future interest rates ultimately will be determined by news yet to unfold.

At mid-year the average 30-year fixed mortgage rate stood at 3.88 percent
combined (global) basis returned 1.67 percent with U.S.
REITs registering 1.64 percent and foreign REITs returning 2.58 percent.

REITs are included among our recommended holdings because they are a distinct asset class. Historically they have provided positive real returns that are not highly correlated with changes in the returns of bonds or of other common stocks. This is not surprising; while REITs are equities, they are bond-like in that a large portion of their returns are attributable to investment income.

Asset location is an important consideration when it comes to REITs, especially for investors in high tax brackets. Most REIT distributions are considered non-qualified dividends, so they are typically taxed as ordinary income, versus the 15 percent capital gains rate that applies to qualified dividends. It is therefore often advisable to hold REITs in tax-deferred accounts if available.

## U.S. Equities ${ }^{4}$

The U.S. stock market continued to surge during the second quarter. The overall market returned 3 percent. The accompanying table reveals that large cap growth stock returns led the way, outpacing the returns from large cap value, small cap and small cap value shares.


[^2]For the second straight quarter our hypothetical high-yield Dow model's returns fell short of its benchmark indexes. This stretch of underperformance follows several quarters when the model provided strong relative returns. The model is currently weighted heavily toward telecommunications and energy firms, which were the only two industrial sectors within the S\&P 500 to turn in negative returns during the quarter. The three HYD stocks representing those industries are currently among the five highest yielding stocks in the model and have an average indicated annual dividend yield of 4.4 percent.

## International Equities ${ }^{5}$

For the second consecutive quarter foreign equities provided the strongest returns of our recommended asset classes. Returns were strong in local currencies as well as in U.S. dollars. Developed
markets benefited from a weaker dollar, which fell 8.4 percent against the euro and 3.8 percent against major currencies on a trade-weighted basis ${ }^{6}$. The currency effect on the other hand detracted slightly from U.S. dollar returns among emerging markets. Growth shares outperformed value shares and large cap shares outperformed small caps in both developed and emerging markets.

Austria and Denmark recorded the highest country performance in developed markets, while Australia and Canada posted the lowest returns for the quarter. In emerging markets, Greece, Hungary, and Turkey posted the highest country returns, while Qatar and Russia had the lowest performance.

## Gold ${ }^{7}$

The gold price ended the second

quarter where it began, closing at $\$ 1,242$ per ounce, only 0.21 percent below its opening level. The daily price ranged between $\$ 1,220.40$ and $\$ 1.293 .50$. The price fell in June when the Fed increased its short term interest rate target, confirming its longer term inclination toward monetary tightening. Geopolitical tensions during the three months were mild compared with the recent past, which tempered price volatility.

[^3]
## A CUSTOMIZED PORTFOLIO MADE EASY

The table to the right depicts a customized allocation plan designed for a hypothetical investor who desires a portfolio allocated 72 percent to equities, 23 percent to fixed income and 5 percent to gold. The 11 allocations depicted are produced by simply applying the ratios below to these chosen allocations.

## Asset Class Ratios

U.S. Fixed Income / Foreign Fixed Income: 2-to-1
U.S. / Foreign Stocks: 2-to-1
U. S. Stocks plus Foreign Stocks / Global REITs: 9-to-1
U.S. Large Caps / U.S. Small Caps: 2-to-1 Foreign Developed Markets / Emerging Markets 2-to-1
U.S. REITs / Foreign REITs: 2-to-1

A simple spreadsheet can be constructed to implement a customized portfolio as described. For assistance, contact us at (413) 528-1216 ext. 3127.

| Allocation Plan For An "In Between" Risk Profile |  |  |  |
| :---: | :---: | :---: | :---: |
| Fixed Income |  |  |  |
|  | U.S. Short ST Investment Grade Non-U.S. ST Investment Grade | $\begin{gathered} 15.33 \% \\ 7.67 \% \end{gathered}$ |  |
| Total Fixed Income |  |  | 23.00\% |
| U.S. Stocks |  |  |  |
|  | Large Cap | 14.40\% |  |
|  | Large Cap Value | 14.40\% |  |
|  | Small Cap | 7.20\% |  |
|  | Small Cap Value/Microcap | 7.20\% |  |
| Real Estate |  |  |  |
|  | Real Estate | 4.80\% |  |
|  | Foreign Real Estate | 2.40\% |  |
| Foreign Stocks |  |  |  |
|  | Developed Markets | 14.40\% |  |
|  | Emerging Markets | 7.20\% |  |
|  |  |  | 21.60\% |
| Total Equity |  |  | 72.00\% |
| Gold 5.00\% |  |  | 5.00\% |
|  |  |  | 100.00\% |

## THE HIGH-YIELD DOW INVESTMENT STRATEGY

| Recommended HYD Portfolio |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| As of July 15, 2017 |  |  |  |  | $-\mathrm{Pe}$ | Portfolio-- |
|  | Rank | Yield (\%) | Price (\$) | Status | Value (\%) | No. Shares (\%) ${ }^{1}$ |
| Verizon |  | 5.30 | 43.56 | Holding** | 21.20 | 30.93 |
| Chevron | 2 | 4.14 | 104.44 | Holding** | 24.30 | 14.79 |
| IBM | 3 | 3.89 | 154.24 | Holding** | 13.56 | 5.59 |
| Pfizer | 4 | 3.83 | 33.43 | Buying | 16.00 | 30.43 |
| Exxon Mobil | 5 | 3.79 | 81.28 | Holding | 4.44 | 3.47 |
| Cisco | 6 | 3.67 | 31.42 | Holding | 2.72 | 5.50 |
| Caterpillar | 12 | 2.87 | 108.77 | Selling | 13.87 | 8.10 |
| Boeing | 13 | 2.72 | 208.51 | Holding | 3.91 | 1.19 |
| Cash (6-mo. T-Bill) | N/A | N/A |  |  | 0.00 | 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 June 30,2017*. 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 lan 79 | Volatility (Std. Dev.) since 1979 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HYD Strategy | 0.18 | 5.16 | 12.44 | 7.01 | 9.52 | Stince | 17.21 |
| Russell 1000 Value Index | 1.63 | 15.53 | 13.94 | 5.57 | 7.70 | 12.16 | 14.48 |
| S\&P 500 Index | 0.62 | 17.90 | 14.63 | 7.18 | 7.15 | 11.81 | 14.87 |
| Dow Jones Industrial Average | 1.74 | 22.12 | 13.45 | 7.57 | 7.70 | 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.

[^4]
## RECENT MARKET STATISTICS

| Precious Metals \& Commodity Prices (\$) |  |  |  |  | Recent Market Returns ${ }^{2}$ <br> Data through June 30, 2017 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 7/14/17 | o. Earlier | Yr. Earlier | Prem. (\%) |  |  |  |  |  |  |  |  |
| Gold, London p.m. fixing | 1,230.30 | 1,254.55 | 1,327.00 |  |  | U.S. | Foreign | Foreign | Global |  | Foreign |  |
| Silver, London Spot Price | 15.71 | 16.86 | 20.14 |  |  | Stocks <br> (Mktwd) | Dev. | Emerg. | REITs | Bonds | Bonds (hedged) | Gold |
| Crude Oil, W. Texas Int. Spot | 46.54 | 44.46 | 45.95 |  |  |  |  |  |  |  |  |  |
| Coin Prices (\$) ${ }^{\mathbf{1}}$ |  |  |  |  | 1-month | 0.90\% | 0.09\% | 1.01\% | 0.93\% | -0.10\% | -0.13\% | -1.89\% |
| American Eagle (1.00) | 1,243.00 | 1,314.55 | 1,395.40 | 1.03 |  |  |  |  |  |  | $\checkmark$ |  |
| Austrian 100-Corona (0.9803) | 1,187.64 | 1,246.98 | 1,334.21 | -1.53 | 3-month | 3.01\% | 5.63\% | 6.27\% | 1.67\% | 1.45\% | 0.32\% | -0.21\% |
| British Sovereign (0.2354) | 286.72 | 300.97 | 331.00 | -1.00 |  |  |  |  |  |  |  |  |
| Canadian Maple Leaf (1.00) | 1,228.00 | 1,299.55 | 1,379.40 | -0.19 | 1 year |  |  |  |  |  |  |  |
| Mexican 50-Peso (1.2057) | 1,460.42 | 1,533.42 | 1,630.89 | -1.55 |  | 18.51\% | 19.49\% | 23.74\% | -2.35\% | -0.31\% | 0.94\% | -5.94\% |
| Mexican Ounce (1.00) | 1,236.00 | 1,303.55 | 1,409.40 | 0.46 |  |  |  |  |  |  |  |  |
| S. African Krugerrand (1.00) | 1,225.00 | 1,288.55 | 1,380.40 | -0.43 | 5 year | 14.58\% | 8.14\% | 3.96\% | 7.57\% | 2.21\% | 1.73\% | -4.92\% |
| U.S. Double Eagle-\$20 (0.9675) |  |  |  |  | (annualized) |  |  |  |  |  |  | $\checkmark$ |
| St. Gaudens (MS-60) | 1,215.00 | 1,235.00 | 1,345.00 | 2.07 | 15 year (annualized) | 8.66\% | 6.42\% | 10.60\% | 8.10\% | 4.48\% | 2.88\% | 9.50\% |
| Liberty (Type I-AU50) | 3,000.00 | 3,000.00 | 2,150.00 | 152.03 |  |  |  |  |  |  |  |  |
| Liberty (Type II-AU50) | 1,325.00 | 1,325.00 | 1,375.00 | 11.32 |  |  |  |  |  |  |  |  |
| Liberty (Type III-AU50) | 1,195.00 | 1,235.00 | 1,330.00 | 0.39 | Best and worst returns, Jan. 2001 - Feb. 2017 |  |  |  |  |  |  |  |
| U.S. Silver Coins (\$1,000 face value, circulated) |  |  |  |  | Best | 56.0\% | 57.2\% | 91.6\% | 85.7\% | 13.8\% | 7.1\% | 57.6\% |
| 90\% Silver Circ. (715 oz.) | 11,466.50 | 12,700.50 | 15,567.00 | 2.08 |  | $\begin{aligned} & \text { 03/2009- } \\ & \text { 02/2010 } \end{aligned}$ | $\begin{aligned} & \text { 04/2003- } \\ & 03 / 2004 \end{aligned}$ | $\begin{aligned} & \text { 03/2009- } \\ & 02 / 2010 \end{aligned}$ | $\begin{aligned} & \text { 04/2009- } \\ & 03 / 2010 \end{aligned}$ | $\begin{aligned} & 11 / 2008- \\ & 10 / 2009 \end{aligned}$ | $\begin{aligned} & 07 / 2008- \\ & 06 / 2009 \end{aligned}$ | $\begin{aligned} & \text { 06/2005- } \\ & 05 / 2006 \end{aligned}$ |
| 40\% Silver Circ. (292 oz.) | 4,476.50 | 4,985.50 | 5,824.00 | -2.42 | During: |  |  |  |  |  |  |  |
| Silver Dollars Circ. | 21,750.00 | 21,750.00 | 21,750.00 | 78.96 | Worst | -43.5\% | -50.3\% | -56.6\% | -59.5\% | -2.5\% | 0.1 \% | -27.4\% |
| ${ }^{1}$ Note: Premium reflects percentage difference between coin price and value of metal in a coin, with gold at $\$ 1,230.30$ per ounce and silver at $\$ 15.71$ per ounce. The weight in troy ounces of the precious metal in coins is indicated in parentheses. |  |  |  |  | During: | $\begin{gathered} 03 / 2008- \\ 02 / 2009 \end{gathered}$ | $03 / 2008-$ $02 / 2009$ | $12 / 2007-$ $11 / 2008$ dexes see | $03 / 2008-$ $02 / 2009$ box on pa | 09/2012- $08 / 2013$ age 53. | $\begin{aligned} & \text { 04/2010- } \\ & 03 / 2011 \end{aligned}$ | $\begin{aligned} & \text { 12/2012- } \\ & 11 / 2013 \end{aligned}$ |

THE DOW JONES INDUSTRIALS RANKED BY YIELD*

|  | Ticker Symbol | Market Prices (\$) |  |  | 12-Month (\$) |  | Latest Dividend |  |  | Indicated |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Amount | Record | Payable | Annual | Yield $\dagger$ |
|  |  | 7/14/17 | 6/15/17 | 7/15/16 |  |  | High | Low | (\$) | Date | Date | Dividend | \$) (\%) |
| Verizon | VZ | 43.56 | 46.64 | 55.84 | 56.25 | 42.80 | 0.5775 | 7/10/17 | 8/1/17 | 2.310 | 5.30 |
| Chevron | CVX | 104.44 | 106.33 | 107.03 | 119.00 | 97.53 | 1.080 | 5/19/17 | 6/12/17 | 4.320 | 4.14 |
| IBM | IBM | 154.24 | 154.22 | 159.78 | 182.79 | 147.79 | 1.500 | 5/10/17 | 6/10/17 | 6.000 | 3.89 |
| Pfizer | PFE | 33.43 | 32.81 | 36.77 | 37.39 | 29.83 | 0.320 | 8/4/17 | 9/1/17 | 1.280 | 3.83 |
| Exxon Mobil | XOM | 81.28 | 82.26 | 95.12 | 95.15 | 79.26 | 0.770 | 5/12/17 | 6/9/17 | 3.080 | 3.79 |
| Cisco | CSCO | 31.42 | 31.58 | 29.82 | 34.60 | 29.12 | 0.290 | 7/7/17 | 7/26/17 | 1.160 | 3.69 |
| General Electric | GE | 26.78 | 28.94 | 32.88 | 33.00 | 25.85 | 0.240 | 6/19/17 | 7/25/17 | 0.960 | 3.58 |
| Coca-Cola | KO | 44.68 | 45.25 | 45.63 | 46.06 | 39.88 | 0.370 | 6/15/17 | 7/3/17 | 1.480 | 3.31 |
| Procter and Gamble | PG | 87.10 | 89.38 | 86.01 | 92.00 | 81.18 | 0.6896 | 7/21/17 | 8/15/17 | 2.758 | 3.17 |
| Intel Corp | INTC | 34.68 | 35.31 | 35.07 | 38.45 | 33.23 | 0.2725 | 5/7/17 | 6/1/17 | 1.090 | 3.14 |
| Merck | MRK | 63.06 | 63.19 | 59.63 | 66.80 | 57.18 | 0.470 | 6/15/17 | 7/10/17 | 1.880 | 2.98 |
| Caterpillar | CAT | 108.77 | 106.40 | 80.70 | 110.00 | 78.34 | 0.780 | 7/20/17 | 8/19/17 | 3.120 | 2.87 |
| Boeing | BA | 208.51 | 195.45 | 132.39 | 208.73 | 126.31 | 1.420 | 8/11/17 | 9/1/17 | 5.680 | 2.72 |
| Wal-Mart Stores | WMT | 76.34 | 78.91 | 73.67 | 80.47 | 65.28 | 0.510 | 8/11/17 | 9/5/17 | 2.040 | 2.67 |
| Johnson \& Johnson | JNJ | 132.60 | 133.04 | 123.00 | 137.00 | 109.32 | 0.840 | 5/30/17 | 6/13/17 | 3.360 | 2.53 |
| McDonald's | MCD | 155.28 | 151.17 | 123.61 | 156.75 | 110.33 | 0.940 | 6/5/17 | 6/19/17 | 3.760 | 2.42 |
| Home Depot, Inc. | HD | 152.88 | 156.77 | 134.78 | 160.86 | 119.20 | 0.890 | 6/1/17 | 6/15/17 | 3.560 | 2.33 |
| Travelers | TRV | 125.72 | 129.02 | 118.64 | 129.60 | 103.45 | 0.720 | 6/9/17 | 6/30/17 | 2.880 | 2.29 |
| United Tech. | UTX | 123.41 | 120.75 | 105.50 | 124.79 | 97.62 | 0.700 | 8/18/17 | 9/10/17 | 2.800 | 2.27 |
| 3M Company | MMM | 211.77 | 211.29 | 181.40 | 214.57 | 163.85 | 1.175 | 5/19/17 | 6/12/17 | 4.700 | 2.22 |
| J P Morgan | JPM | 92.25 | 86.57 | 64.18 | 94.51 | 63.38 | 0.500 | 7/6/17 | 7/31/17 | 2.000 | 2.17 |
| Microsoft Corp. | MSFT | 72.78 | 69.90 | 53.70 | 73.27 | 52.93 | 0.390 | 8/17/17 | 9/14/17 | 1.560 | 2.14 |
| Dupont | DD | 84.75 | 82.17 | 67.16 | 84.97 | 66.02 | 0.380 | 7/31/17 | 9/29/17 | 1.520 | 1.79 |
| Apple | AAPL | 149.04 | 144.29 | 98.78 | 156.65 | 96.42 | 0.630 | 5/15/17 | 5/18/17 | 2.520 | 1.69 |
| Unitedhealth Group | UNH | 186.90 | 180.38 | 141.33 | 188.66 | 132.39 | 0.750 | 6/19/17 | 6/27/17 | 3.000 | 1.61 |
| American Express | AXP | 85.28 | 80.70 | 63.78 | 85.88 | 59.50 | 0.320 | 7/7/17 | 8/10/17 | 1.280 | 1.50 |
| Walt Disney | DIS | 105.09 | 105.98 | 99.80 | 116.10 | 90.32 | 0.780 | 7/10/17 | 7/27/17 | 1.560 | 1.48 |
| Goldman Sachs | GS | 228.60 | 223.23 | 161.64 | 255.15 | 155.37 | 0.750 | 6/1/17 | 6/29/17 | 3.000 | 1.31 |
| Nike | NKE | 58.00 | 52.90 | 57.87 | 60.33 | 49.01 | 0.180 | 6/5/17 | 7/5/17 | 0.720 | 1.24 |
| Visa Inc. | V | 96.93 | 94.17 | 78.30 | 97.37 | 75.17 | 0.165 | 5/19/17 | 6/6/17 | 0.660 | 0.68 |

* See the Recommended HYD Portfolio table on page 53 for current recommendations. + Based on indicated dividends and market price as of $7 / 15 / 17$.

Extra dividends are not included in annual yields. All data adjusted for splits and spin-offs. 12-month data begins 6/16/16.


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Data as of June 30， 2017 Short／Intermediate Term Fixed Income
Vanguard Short－Term Bond
SPDR Blmbg Barclays ST Corp Bd ETF
iShares 1－3 Year Treasury Bond ETF
Vanguard Ltd－Term Tax－Exempt
SPDR Nuveen Blmbg Barclays ST MunBd ETF Inflation－Protected Fixed Income
iShares TIPS Bond ETF Vanguard Inflation－Protected Securities

[^5] Vanguard Global ex－US Real Estate（2）
Shares International Developed Property
SPDR Dow Jones Global Real Estate ETF U．S．Large Cap Value Real Estate（RETs） SPDR Dow Jones REIT
Vanguard Global ex－US Real Estate（2） SPDR Dow Jones REIT
Vanguard Global ex－US Real Estate（2） Vanguard REIT Vanguard Value
iShares Russell 1000 Value
U．S．Mid Cap Vanguard Mid－Cap ETF
iShares Russell Mid－Cap
U．S．Small Cap Value Vanguard Small Cap Value
iShares Russell 2000 Value Shares Russell 2000 Value
iShares Micro－Cap
U．S．Marketwide
U．S．Marketwide
Vanguard Total Stock Market Fidelity Total Market Index
Foreign－Developed Markets
Shares MSCI EAFE Growth ETF Shares MSCI EAFE Growth ETF
Shares MSCI EAFE Value ETF Shares MSCI EAFE Value ETF
Vanguard Developed Markets SPDR S\＆P International Small Cap ETF Foreign－Emerging Markets
Vanguard Emerging Markets St Vanguard Emerging Markets Stock Gold－Related Funds Shares Gold Trust
SPDR Gold Shares



 affiliated with either organization may have positions in the investments referred to herein．


[^0]:    When Rates Go Up, Do Stocks Go Down? Dimensional Fund Advisors, 2nd Quarter, 2017
    See for example, Fama 1976, Fama 1984, Fama and Bliss 1987, Campbell and Shiller 1991, and Duffee 2002. Wei Dai, "Interest Rates and Equity Returns" (Dimensional Fund Advisors, April 2017).

[^1]:    1. A simple spreadsheet can be constructed to implement a customized portfolio as described. For assistance, contact us at (413) 528-1216 ext. 3127.
[^2]:    1. This article contains information and excerpts from The Vanguard Group, Fidelity Investments, and Dimensional Fund Advisors as well as data obtained from several index providers. 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. Indexes are not available for direct investment. Historical performance results for investment indexes and/or categories generally 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 results. The results portrayed in this portfolio reflect the reinvestment of dividends and capital gains. Returns depicted are hypothetical and do not reflect historical recommendations of AIS.
    2. Sources for cash and equivalent and fixed income statistics: U.S. Treasury, U.S. Labor Department (Bureau of Labor Statistics), Fidelity Management and Research Company, Dimensional Fund Advisors. EPI: American Institute for Economic Research. EPI, CPI not seasonally adjusted. U.S. bond market: Bloomberg Barclays U.S. Aggregate Bond Index. U.S. short intermediate term bonds - Bloomberg Barclays U.S. Government/Credit Index 1-5 Years; Global short intermediate bonds - Citigroup WGBI 1-5 Years (USD hedged); Short term municipal bonds - Bloomberg Barclays Municipal Bond Index 5 Years; TIPS - Bloomberg Barclays U.S. TIPS Index. Mortgage rates: Freddie Mac.
    3. Global REITs - S\&P Global REIT Index (net div.); U.S. REITs - S\&P United States REIT Index (gross div.); Foreign REITs - S\&P Global ex US REIT Index (net div). (Source: Dimensional Fund Advisors, Standard \& Poor's).
[^3]:    4. U.S. Market - Russell 3000 Index; Small cap value stocks - Russell 2000 Value Index; Small cap growth stocks - Russell 2000 Growth Index; Large Cap Value stocks - Russell 1000 Value Index; Large Cap Growth Stocks - Russell 1000 Growth Index. Sector returns represented by S\&P 500 sectors. Source: Dimensional Fund Advisors and Fidelity Management and Research Company.
    5. Non-U.S. Developed Markets: Market - MSCI World ex USA Index (net div.); Value - MSCI World ex USA Value Index (net div.); Small cap - MSCI World ex USA Small Cap Index (net div.); Emerging Markets: MSCI EM Index (net div.). Country performance provided by Dimensional Fund Advisors, based on respective indexes in the MSCI All Country World ex USA IMI Index (for developed markets) and MSCI Emerging Markets IMI Index. All returns in U.S. currency (except as noted) and net of withholding tax on dividends. MSCI data copyright MSCI 2016, all rights reserved. Currency data: Dimensional Fund Advisors, MSCI.
    6. Averages of daily figures. A weighted average of the foreign exchange value of the U.S. dollar against the currencies of a broad group of major U.S. trading partners. Broad currency index includes the Euro Area, Canada, Japan, Mexico, China, United Kingdom, Taiwan, Korea, Singapore, Hong Kong, Malaysia, Brazil, Switzerland, Thailand, Philippines, Australia, Indonesia, India, Israel, Saudi Arabia, Russia, Sweden, Argentina, Venezuela, Chile and Colombia.
    7. Gold Price: London PM Fix. Source: World Gold Council.
[^4]:    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; Global Bonds - Citi World Government Bond Index; Gold - London PM Fixed Price. 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.

[^5]:    International Fixed Income
    Vanguard Total International Bond

