



AIS

INVESTMENT GUIDE

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See box, page 30, for representative indexes.

Rates of Interest

As of April 26, 2019

Government Obligations¹

| | |
|---------------------------|-------|
| Fed Funds Rate | 2.44% |
| 3-Month Treas. Bill | 2.39% |
| 10-Yr. Treas. Note | 2.53% |
| 30-Yr. Treas. Bond | 2.94% |
| 10-Yr. TIPS | 0.57% |
| Muni Bonds - Nat'l 10-Yr. | 1.95% |

Mortgage Rates²

| | |
|-------------|-------|
| 15-Yr Fixed | 3.64% |
| 30-Yr Fixed | 4.20% |

Banking³

| | |
|--------------|-------|
| Savings | 0.10% |
| Money Market | 0.19% |
| 12-month CD | 0.66% |

[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).

The Little Known Stock Market Guru

When most investors think about the great investors of all-time, names like Warren Buffett, Peter Lynch, and Benjamin Graham often come to mind. Lesser known is David M. Blitzer, whose record for more than two decades has topped the majority of common stock mutual funds.

Mr. Blitzer, [who will soon be retiring](#), has been at the helm of Standard and Poor's for the past 24 years, where he chairs the committee that chooses those companies that comprise the S&P 500 Index.

Pioneers like Jack Bogle at Vanguard championed the idea of "passive" management by building index funds, which simply seek to replicate the returns of well-known benchmarks. The most popular benchmark for the U.S. equity market is the S&P 500.

When Mr. Blitzer began his tenure, passive funds made up less than 5 percent of total assets invested in stock mutual funds. By the time he officially steps down, passively managed funds and ETFs will account for about half of all U.S. equity funds. The trend shows no sign of slowing.

The investment record of the S&P 500 explains this shift. According to the [S&P Dow Jones SPIVA Scorecard](#), 92 percent of all large cap U.S. equity funds have underperformed the S&P 500 over the 15-year period ending in December 2018. Since 1994, the S&P 500 has returned an annualized 9.5 percent per year, including dividends. The index is largely driven by firm but simple rules, though the final decision for inclusion can come down to a subjective committee decision.

David Blitzer may not be a household name, but his work has helped spur the trend toward passive management. Our strategy is also rules-based, though not strictly passive. We assert that the first step is to recognize the shortcomings of active stock picking and high-cost mutual funds. Mr. Blitzer's legacy certainly helps to make the case.

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QUARTERLY REVIEW OF CAPITAL MARKETS¹

Stock markets across the globe rewarded disciplined investors during the first quarter. U.S. stocks dominated, with a 14.04 percent overall gain. This nearly offset the 14.3 percent loss endured during the final quarter of 2018.

When the year opened prognosticators were gloomy. The narrative was that trade concerns, tightening monetary policy, and a global economic slowdown would continue to drive markets lower. But instead stocks came roaring back.

Such turnabouts are not uncommon -- but they are also unpredictable. Readers who follow our disciplined approach were largely unfazed because their portfolio holdings probably regained a good deal of any decline in value suffered in the previous quarter.

The discipline to stay the course during such volatile times provides valuable benefits, both short and long term. Investors familiar with our data can sleep better during tumultuous periods, secure in the knowledge that such downturns are often short-lived. They will also avoid long term damage to their wealth, which so often results from attempts to time these episodes.

Cash Equivalent Assets²

The Federal Reserve has significant influence over short-term interest rates. In mid-March its Open Market Committee communicated that further short-term rate hikes were unlikely for the rest of the year. The Fed also said that it would end its quantitative tightening by terminating its policy of balance sheet reductions by year-end. By quarter-end the one month T-bill yield was relatively unchanged at 2.43 percent, while the one year T-bill

yield dipped slightly to 2.40 percent.

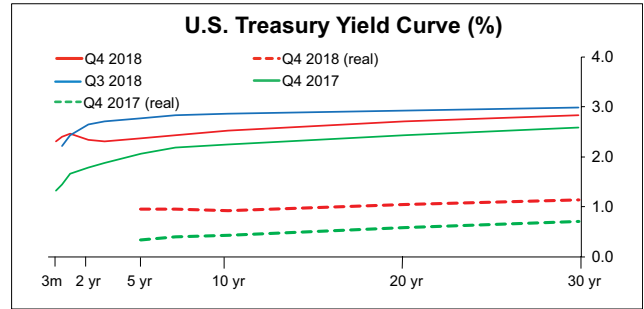
The nearby Sample Allocation tables suggest that investors maintain cash "as needed." This is in contrast to the specific allocations prescribed for our other asset classes. This is because investors' needs vary most widely when it comes to cash reserves, which are held to fund emergency cash plus other short-term spending. We suggest a level sufficient to accommodate six months of essential spending plus any planned discretionary purchases.

Investors should also keep price inflation in mind when considering how much cash to hold. Over the past 12 months, the EPI has risen 1.1 percent while the CPI including apparel was up 1.9 percent. Over the last five years, the EPI was up at a 0.10 percent annualized rate compared to an average annual rise of 1.5 percent for the CPI.

Fixed Income

Bonds provided positive returns as longer term interest rates dropped, largely in response the Fed's dovish turn. The yield on the 10-year Treasury note fell to 2.41 percent while the 30-year Treasury bond yield finished at 2.81 percent.

In terms of total return, short/intermediate term bonds in the U.S. and international markets returned 1.62 percent and 1.10 percent respectively. Municipal bonds returned 2.11 percent while TIPS returned 3.19 percent.



At quarter end the average 30-year fixed mortgage rate stood at 4.06 percent with 0.5 points.³

Real Estate

Whereas equity Real Estate Investment Trusts (REITs) make up just less than 3 percent of the S&P 500 Index, our sample portfolios essentially triple this weighting to REITs. This "overweighting" is based on research that suggests REITs perform neither like equities or bonds, and therefore offer a valuable source of portfolio diversification.

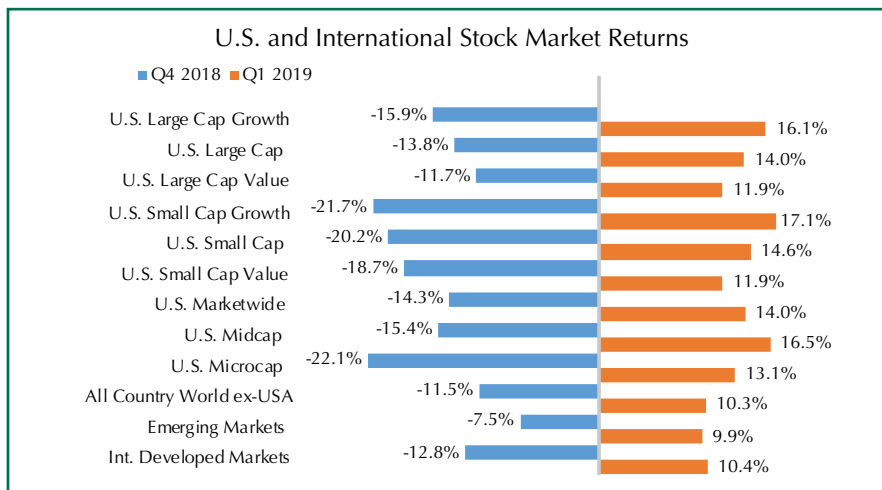
Because REITs must pay out at least 90 percent of their earnings to shareholders, they provide a relatively high dividend yield. REIT prices therefore tend to be sensitive (inversely) to interest rates compared with other stocks.

REITs had strong relative performance during the first quarter as interest rates fell. U.S. REITs returned 15.77 percent while foreign REITs registered 14.07 percent. Over the trailing 12-months U.S. REITs returned over 21 percent, the highest among the asset classes we track.

U.S. and Foreign Stocks

The first quarter of 2019 nearly erased the U.S. stock market downturn from the fourth quarter of 2018. This was a lesson in patience for equity investors. Those who maintained exposure through the past two quarters were rewarded. Small caps outperformed large caps while value underperformed growth.

Developed and emerging markets underperformed U.S. stocks, but both returned close to 10 percent. Again, these returns were almost enough to offset the losses of the previous quarter. The dollar was relatively unchanged against major currencies.



(continued page 28)

AIS Sample Standard Allocations⁽¹⁾ For the Period Ending March 31, 2019

| Asset Class | Sample Percentage Allocations ⁽²⁾ | | | Asset Class Statistics: Risk and Return (annualized, %) | | | | |
|---|--|-----------|------------|---|--------|---------|---------|-----------|
| | Conservative | Moderate | Aggressive | Total Return | | | | Std. Dev. |
| | | | | 1 Year | 5 Year | 10 Year | 15 year | 15 year |
| Cash & Equivalent Assets ⁽³⁾ | as needed | as needed | as needed | 2.12 | 0.74 | 0.43 | 1.35 | 0.50 |
| U.S. Inv. Grade Fixed Income | 70.00 | 35.00 | 15.00 | 3.54 | 1.56 | 2.20 | 2.70 | 1.79 |
| Global Real Estate | 2.50 | 6.00 | 8.00 | 13.93 | 6.63 | 14.84 | 6.39 | 19.41 |
| U.S. Stocks | 15.00 | 36.00 | 48.00 | 8.77 | 10.35 | 16.00 | 8.68 | 14.09 |
| Foreign Stocks | 7.50 | 18.00 | 24.00 | -4.21 | 2.57 | 8.85 | 5.58 | 16.88 |
| Gold Related | 5.00 | 5.00 | 5.00 | -1.70 | 0.15 | 3.57 | 7.77 | 17.80 |

| Sample Standard Portfolio Statistics: Risk, Return (%) and Growth ⁽⁴⁾ | | | |
|--|--------------|----------|------------|
| | Conservative | Moderate | Aggressive |
| PPortfolio Return 1 Year | 3.15 | 3.81 | 4.07 |
| Portfolio Return 5 Year (annualized) | 2.39 | 4.54 | 5.72 |
| Portfolio Return 10 Year (annualized) | 4.54 | 8.59 | 10.87 |
| Portfolio Return 15 Year (annualized) | 3.82 | 5.68 | 6.52 |
| Portfolio Standard Deviation 15 Year (annualized) | 4.10 | 8.79 | 11.73 |
| Growth of \$10,000 over 15 Years | \$17,553 | \$22,887 | \$25,808 |

AIS Sample Enhanced Allocations⁽¹⁾ For the Period Ending March 31, 2019

| Asset Class | Sample Percentage Allocations ⁽²⁾ | | | Asset Class Statistics: Risk and Return (annualized, %) | | | | |
|---|--|-----------|------------|---|--------|---------|---------|-----------|
| | Conservative | Moderate | Aggressive | Total Return | | | | Std. Dev. |
| | | | | 1 Year | 5 Year | 10 Year | 15 year | 15 year |
| Cash & Equivalent Assets ⁽³⁾ | as needed | as needed | as needed | 2.12 | 0.74 | 0.43 | 1.35 | 0.50 |
| Fixed Income | | | | | | | | |
| U.S. Short-Term Investment Grade | 46.67 | 23.33 | 10.00 | 3.54 | 1.56 | 2.20 | 2.70 | 1.79 |
| Foreign Investment Grade (hedged) | 23.33 | 11.67 | 5.00 | 3.09 | 1.96 | 1.96 | 2.79 | 1.08 |
| Real Estate | | | | | | | | |
| U.S. REITs | 1.67 | 4.00 | 5.33 | 21.27 | 8.90 | 18.40 | 8.41 | 23.05 |
| Foreign REITs | 0.83 | 2.00 | 2.67 | 4.76 | 5.03 | 12.18 | 5.66 | 17.42 |
| U.S. Stocks | | | | | | | | |
| Large Cap | 5.00 | 12.00 | 16.00 | 9.30 | 10.63 | 16.05 | 8.74 | 13.83 |
| Large Cap Value | 5.00 | 12.00 | 16.00 | 5.67 | 7.72 | 14.52 | 7.63 | 14.18 |
| Small Cap | 2.50 | 6.00 | 8.00 | 2.05 | 7.05 | 15.36 | 8.04 | 18.53 |
| Small Cap Value | 2.50 | 6.00 | 8.00 | 0.17 | 5.59 | 14.12 | 7.24 | 18.41 |
| Foreign Stocks | | | | | | | | |
| Developed Markets | 5.00 | 12.00 | 16.00 | -3.14 | 2.20 | 8.82 | 5.18 | 16.31 |
| Emerging Markets | 2.50 | 6.00 | 8.00 | -7.41 | 3.68 | 8.94 | 7.92 | 21.37 |
| Gold Related | | | | | | | | |
| | 5.00 | 5.00 | 5.00 | -1.70 | 0.15 | 3.57 | 7.77 | 17.80 |

| Sample Enhanced Portfolio Statistics: Risk, Return (%) and Growth ⁽⁴⁾ | | | |
|--|--------------|----------|------------|
| | Conservative | Moderate | Aggressive |
| Portfolio Return 1 Year | 2.59 | 2.61 | 2.48 |
| Portfolio Return 5 Year (annualized) | 2.24 | 4.00 | 4.94 |
| Portfolio Return 10 Year (annualized) | 4.43 | 8.43 | 10.67 |
| Portfolio Return 15 Year (annualized) | 3.86 | 5.71 | 6.56 |
| Portfolio Standard Deviation 15 Year (annualized) | 4.07 | 9.13 | 12.24 |
| Growth of \$10,000 over 15 Years | \$17,647 | \$23,005 | \$25,927 |

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 See back page for a list of investment vehicles that correspond to each asset class.

3 Investors should maintain a cash balance tailored to one's circumstances. Considerations should include anticipated short term spending, an emergency reserve and price inflation.

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 a \$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 https://www.americaninvestment.com/images/pdf/AIS-Firm-Brochure_31-March-2018.pdf.

Gold

We recommend gold as a component of many portfolios because it serves as a safe haven during financial crises. The gold price is weakly (and

often negatively) correlated with stocks. This remained true during the last two quarters.

Gold investors were likely pleased during the fourth quarter of 2018, when the gold price increased by nearly 8 per-

cent, offsetting some of the losses from stocks. The first quarter of 2019 provided a smaller gain of just one percent as concerns over the stock market seemingly subsided.

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.
2. Sources for cash and equivalent data: U.S. Treasury, U.S. Labor Department (Bureau of Labor Statistics), St. Louis Federal Reserve, EPI: American Institute for Economic Research. EPI, CPI not seasonally adjusted.
3. Mortgage rates: Freddie Mac

ARE SMALL CAP AND VALUE STOCKS STILL WORTH PURSUING?

Regular readers of the *Investment Guide* are familiar with “tilts” among our recommended portfolios, which assign higher allocations to certain asset classes that have rewarded investors with higher returns relative to less risky asset classes. These “risk premiums” are generated by the overall stock market (versus the bond market) and by small cap and value stocks (versus the overall stock market).

Chart 1 depicts the growth of \$100 invested in each of these alternatives since 1979. Over this 40+ year span, a portfolio comprised purely of small cap value stocks would have grown to \$12,078 versus \$8,905 for the S&P 500 and \$1,745 for bonds. The chart reflects an average annual return on the U.S. stock market (approximated by the commonly cited S&P 500 Index) of 11.8 percent, versus only 7.4 percent for U.S. bonds (represented by the Barclays U.S. Aggregate Bond Index). Over the same period the Russell 2000 Value Index, which reflects the returns of U.S. small cap value stocks, returned 12.6 percent.

The stock market premium, first described by William Sharpe and developed in the Capital Asset Pricing Model (CAPM), served as the prevailing investment framework for decades. It still underlies the most fundamental question for investors: how much should be invested in stocks versus bonds?

This premium asserts that stocks should outperform bonds over time, but with greater volatility because stocks bear much greater risk. All profits accrue to stock holders, while bondholders earn only a fixed coupon payment and redemption value when the bond matures. But future profits are highly uncertain and, if a company fails stockholders have only a subordinate claim on liquidated assets (as creditors, bond investors get paid back first).

This presents a simple trade-off for investors to weigh. Stocks are essential for investors who hope to earn positive

returns that outpace price inflation. In theory, as purchasing power falls, firms can raise their prices and pass on higher nominal profits to stockholders, while bond holders are “stuck” with fixed nominal payments. Bonds, however, serve a critical role because they offset the volatility inherent in stocks and thereby discourage the highly destructive behavioral tendency among investors to buy stocks when prices are rising and to abandon them when prices are falling.

Fama and French’s seminal paper on the source of portfolio returns went beyond this fundamental stock market premium by identifying two new sources of stock returns among stocks: the small cap and value premiums. These premiums show up empirically both across time and across countries, and are consistent with the notion that higher returns can only be achieved through greater risk exposure. For example small cap stocks may have more difficulty raising capital, may have a less diversified product base, or be more reliant on key personnel in comparison with larger firms.

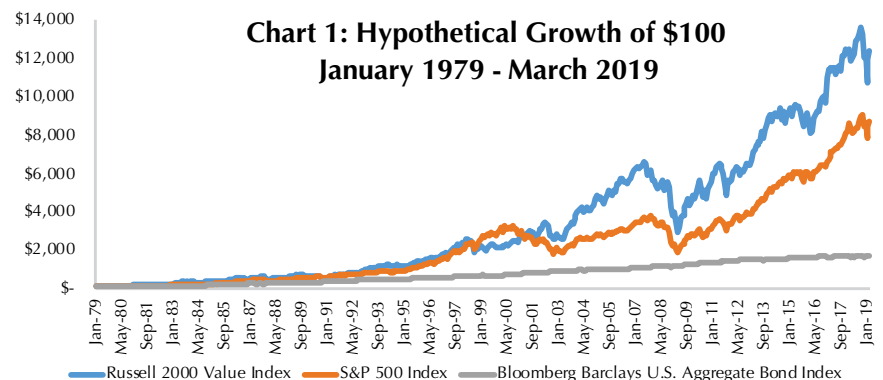
Russell 2000 Value Index. This has led many investors to question whether these small cap and value premiums still exist. Some have asserted that these premiums were never explained by risk but by an inefficient market that had consistently underpriced these firms relative to their “true” value, and that these premiums have now vanished after finally being discovered.

We believe it is premature to conclude that the market had for decades failed to price these securities properly. There have been similar long term spans when the overall stock market premium did not materialize, but these episodes did not prompt similar claims that stocks could no longer be expected to outperform bonds. Even in the aftermath of the so-called “lost decade” from 2000 through 2009, when the S&P 500 fell 9 percent while the Barclays’s U.S. Aggregate Bond Index increased by 85 percent, few were willing to conclude that stocks were dead.

If long-term history is a guide to the future, it is essentially a toss-up as to whether the small and value premiums will occur over any particular span, even over extended periods. Among the 483 months between January 1979 and March 2019, the Russell 2000 Value Index outperformed the S&P 500 Index in only 245 occasions – just greater than half the time. Likewise, during rolling

Where Have the Premiums Gone?

In recent years, the small cap and value premiums have been scarce. For the 10-year period ending March 2019, the total return on the S&P 500 was 338 percent versus only 275 percent for the



The Small Cap Value Premium: Very Real, Very Elusive

January 1979 - March 2019

| Month | Total Return Russell 2000 Value minus Total Return S&P 500 |
|--|--|
| December 2000 | 10.3% |
| January 1992 | 10.2% |
| April 2002 | 9.6% |
| November 2016 | 9.6% |
| February 2001 | 9.0% |
| Cumulative outperformance during these five months | 59.0% |
| Cumulative outperformance during all other months | -15.7% |

10-year periods, the Russell 2000 Value Index has outperformed the S&P 500 only about 49 percent of the time. It's clear that investors who "tilt" their stock exposure toward small cap and value stocks risk a strong chance of sustained underperformance relative to the overall market.

The *magnitude* of outperformance also appears unimpressive *on average*. The average outperformance among those 245 months when the Russell 2000 Value "won" was about 2.27 percent. When the S&P 500 won (the remaining 238 months) the average outperformance was a similar 2.13 percent.

These outcomes might seem puzzling. In Chart 1 we demonstrate that the long term outperformance of small cap value stocks relative to the overall stock market is profound. But we have demonstrated that: 1. the odds of outperformance versus underperformance during any sub-period are essentially even, and 2. the magnitude of monthly outperformance for small cap value stocks appears modest on average.

The explanation is twofold. First, compounding a small advantage over a long period makes a big difference.¹ Second, this modest *average* monthly small cap advantage disguises the fact that a just a few months with extremely high returns accounted for virtually all of the substantial outperformance over the entire 40+ years. Because such months are few and far between, investors who want to partake in these premiums may need to endure stretches of underperformance

relative to the market in order to capture upswings. These premiums cannot be realized by jumping on the bandwagon only after they appear. As many disappointed investors have learned, by the time they have materialized, the bandwagon has usually left town.

The Trouble with Timing

If premiums showed up predictably, arriving every other month and showing persistent outperformance, investors would be quite comfortable tilting their portfolios toward them. In reality, however, we see long periods where premiums do not occur at all, and short bursts where premiums emerge powerfully.

It's risky enough just attempting to time positive returns, let alone specific premiums. For example, the growth depicted in Chart 1 for the S&P 500 reflects a total return of 8,805 percent over the entire 483 months since 1979. The total return on *just* the best 63 best months was 9,310 percent. In other words, an

investor who was out of the market during those 63 months would have seen a negative total return.²

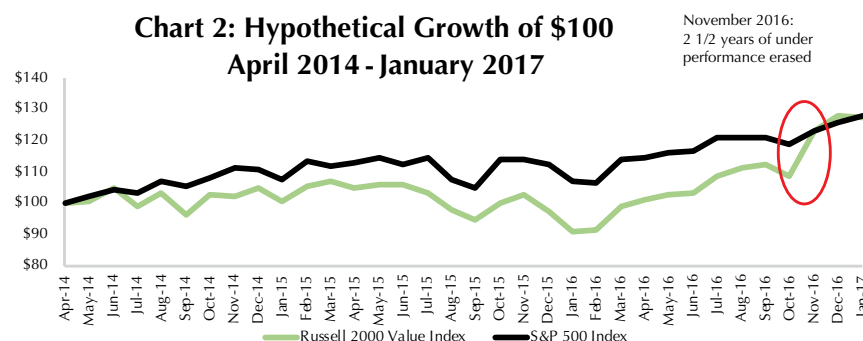
It is even more difficult to go in and out of the market to capture specific premiums. Consider the value and size premiums. Since 1979, the five "best" months for small cap value stocks constitute a 59 percent cumulative outperformance (premium) over the S&P 500. The premium of the remaining 478 months is *negative*. The accompanying table displays the magnitude of this premium during each of these five months.³ Investors tempted to time the small cap value premium (rather than continuously tilt toward it) would have been severely hobbled had they failed to capture just a few very successful months.

Conclusion

As is the case with U.S. and international stocks, real estate and gold, small cap and value premiums are unpredictable. The best way to pursue these elusive returns is to remain consistently invested, to ensure participation in the unpredictable months where premiums show up the strongest.

We recommend exposure to small cap and value stocks and to the stock market in general, even when the "experts" can provide no reason for them to surge. Investors who maintain their positions and regularly rebalance to target allocations should be rewarded over the long-term.

Chart 2: Hypothetical Growth of \$100
April 2014 - January 2017



1. This central tenet of finance also underlies our emphasis on funds with low expense ratios. These expenses compound continually, but can be easily monitored and controlled.
2. Financial advisor and author Larry Swedroe estimates that the entire market return is accounted for by about 1 out of every 12 months.
3. We calculate the small cap value premium as monthly returns on the Russell 2000 Value minus the monthly returns on the S&P 500 Index. This may understate returns because it does not compound at the same pace as stock market returns, but the point remains: the small cap value outperformance is concentrated in a handful of months.

THE HIGH-YIELD DOW INVESTMENT STRATEGY

Recommended HYD Portfolio

As of April 15, 2019

| | Rank | Yield (%) | Price (\$) | Status | —Percent of Portfolio— | |
|---------------------|------|-----------|------------|-----------|------------------------|-----------------------------|
| | | | | | Value (%) | No. Shares (%) ¹ |
| Dow, Inc. | 1 | 4.85 | 57.78 | Buying | 1.54 | 2.14 |
| IBM | 2 | 4.36 | 143.90 | Holding** | 23.99 | 13.51 |
| Verizon | 3 | 4.10 | 58.71 | Holding** | 26.43 | 36.47 |
| Exxon Mobil | 4 | 4.07 | 80.65 | Holding** | 24.11 | 24.22 |
| Chevron | 5 | 3.96 | 120.14 | Holding | 16.20 | 10.92 |
| Pfizer | 6 | 3.42 | 42.09 | Holding | 5.88 | 11.33 |
| Proctor & Gamble | 10 | 2.82 | 105.73 | Holding | 1.85 | 1.42 |
| General Electric | NA | 0.44 | 8.98 | Selling | 0.00 | 0.00 |
| Wabtec | NA | 0.66 | 71.12 | Selling | 0.00 | 0.00 |
| Cash (6-mo. T-Bill) | N/A | N/A | | | 0.01 | N/A |
| Totals | | | | | 100.00 | 100.00 |

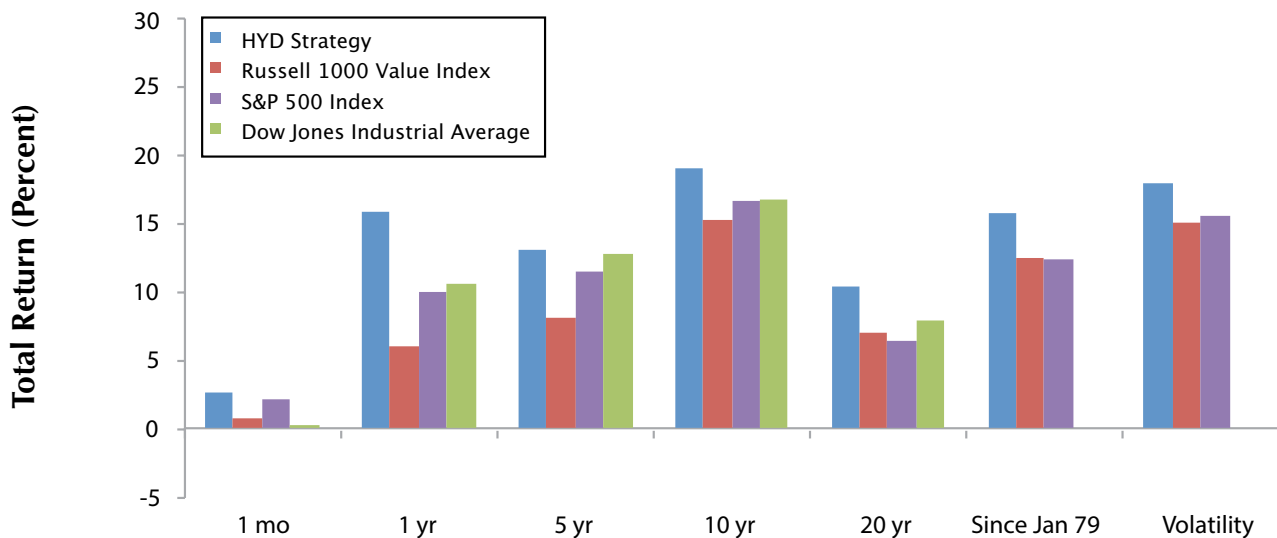
**Currently indicated purchases approximately equal to indicated purchases 18 months ago. ¹Because the percentage of each issue in the portfolio by value reflects the prices shown in the table (closing prices on the date indicated), we are also showing the number of shares of each stock as a percentage 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 March 31, 2019*. Returns for the 5-,10- and 20-year periods are annualized, as is the volatility (standard deviation) of returns.

| | <u>1 mo.</u> | <u>1 yr.</u> | <u>5 yrs.</u> | <u>10 yrs.</u> | <u>20 yrs.</u> | <u>since Jan 79</u> | <u>Volatility since 1979</u> |
|------------------------------|--------------|--------------|---------------|----------------|----------------|---------------------|------------------------------|
| HYD Strategy | 2.44 | 15.10 | 12.49 | 18.20 | 9.84 | 15.05 | 17.11 |
| Russell 1000 Value Index | 0.64 | 5.67 | 7.72 | 14.52 | 6.68 | 11.90 | 14.40 |
| S&P 500 Index | 1.94 | 9.50 | 10.91 | 15.92 | 6.04 | 11.80 | 14.80 |
| Dow Jones Industrial Average | 0.17 | 10.09 | 12.21 | 15.97 | 7.49 | N/A | N/A |



*Data assume all purchases and sales at mid-month prices (+/-\$.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 Average 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 0.725% management fee, the annual rate assessed to a \$500,000 account managed through our Professional Asset Management service.

Unless otherwise specified returns and data cited within this publication are derived from the following sources: **U.S. stock benchmarks:** U.S. Marketwide - Russell 3000 Index; U.S. Large Cap Stocks - Russell 1000 Index; U.S. Large Cap Value - Russell 1000 Value Index; U.S. Large Cap Growth - Russell 1000 Growth Index; U.S. Midcap Stocks - Russell Midcap Index; U.S. Small Cap Stocks - Russell 2000 Index; U.S. Small Cap Value - Russell 2000 Value Index; U.S. Small Cap Growth - Russell 2000 Growth Index; U.S. Micro-caps - Russell Microcap Index. **Fixed income benchmarks:** Cash & Equivalents - ICE BofAML US 3-Month Treasury Bill Index; U.S. Short-Term Investment Grade - Bloomberg Barclays US Government/Credit Bonds Index 1-5 Years; U.S. Bonds - Bloomberg Barclays US Aggregate Bond Index; U.S. Government Bonds - Bloomberg Barclays US Government Bond Index; TIPS - Bloomberg Barclays US TIPS Index; Municipal Bonds - Bloomberg Barclays Municipal Bond Index 5 Years; Foreign Bonds (hedged) - FTSE Non-USD World Government Bond Index 1-5 Years (hedged to USD). **Foreign stock benchmarks:** All returns in U.S. dollars. Developed Markets - MSCI World ex USA Index (net div.); Developed Markets Value - MSCI World ex USA Value Index (net div.); Developed Markets Growth - MSCI World ex USA Growth Index (net div.); Developed Markets Small Cap - MSCI World ex USA Small Cap Index (net div.); Developed Markets Small Cap Value - MSCI World ex USA Small Value Index (net div.); Developed Markets Small Cap Growth - MSCI World ex USA Small Growth Index (net div.); Emerging Markets - MSCI Emerging Markets Index (net div.); Emerging Markets Value - MSCI Emerging Markets Value Index (net div.). **Real estate benchmarks:** Global REITs - S&P Global REIT Index (net div.); U.S. REITs - S&P United States REIT Index (gross div.); International REITs - S&P Global ex US REIT Index (net div.). **Gold benchmark:** Gold London PM Fix Price. All data from DFA Returns 2.0 program, except Gold data from World Gold Council and Currency data from St. Louis Federal Reserve. 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. Sector returns represented by S&P 500 sectors.

RECENT MARKET STATISTICS

| Precious Metals & Commodity Prices (\$) | | | | | Recent Market Returns | | | | | | | |
|--|------------------|-------------|-------------|-----------|---|---------------------|-----------------------|-----------------|-----------------|------------------------|-----------------|-----------------|
| | 4/15/19 | Mo. Earlier | Yr. Earlier | Prem. (%) | Data through March 31, 2019 | | | | | | | |
| | | | | | U.S. Stocks (Mktwd) | Foreign Dev. Stocks | Foreign Emerg. Stocks | Global REITs | U.S. Bonds | Foreign Bonds (hedged) | Gold | |
| Gold, London p.m. fixing | 1,285.65 | 1,303.50 | 1,343.70 | | 1.46% | 0.51% | 0.84% | 2.87% | 1.92% | 0.56% | -1.80% | |
| Silver, London Spot Price | 14.93 | 15.36 | 16.51 | | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | ↓ | |
| Crude Oil, W. Texas Int. Spot | 63.43 | 58.51 | 67.35 | | 14.04% | 10.45% | 9.92% | 14.07% | 2.94% | 1.10% | 1.07% | |
| Coin Prices (\$)¹ | | | | | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | |
| American Eagle (1.00) | 1,310.65 | 1,328.50 | 1,358.70 | 1.94 | 1 year | 8.77% | -3.14% | -7.41% | 13.93% | 4.48% | 3.09% | -1.70% |
| Austrian 100-Corona (0.98) | 1,253.94 | 1,271.43 | 1,310.83 | -0.48 | ↑ | ↓ | ↓ | ↑ | ↑ | ↑ | ↓ | |
| British Sovereign (0.2354) | 302.64 | 306.84 | 316.31 | 0.00 | 5 year (annualized) | 10.35% | 2.20% | 3.68% | 6.63% | 2.74% | 1.96% | 0.15% |
| Canadian Maple Leaf (1.00) | 1,295.65 | 1,313.50 | 1,353.70 | 0.78 | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | |
| Mexican 50-Peso (1.2056) | 1,541.98 | 1,563.50 | 1,611.96 | -0.52 | 15 year (annualized) | 8.68% | 5.18% | 7.92% | 6.39% | 3.89% | 2.79% | 7.77% |
| Mexican Ounce (1.00) | 1,303.65 | 1,321.50 | 1,361.70 | 1.40 | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | |
| S. African Krugerrand (1.00) | 1,292.65 | 1,310.50 | 1,349.70 | 0.54 | Best and worst one-year returns, Jan. 2001 - Mar. 2019 | | | | | | | |
| U.S. Double Eagle-\$20 (0.9675) | | | | | Best | 56.0% | 57.2% | 91.6% | 85.7% | 13.8% | 7.1% | 57.6% |
| St. Gaudens (MS-60) | 1,273.00 | 1,296.00 | 1,300.00 | 2.34 | 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 |
| Liberty (Type II-AU50) | 1,291.00 | 1,314.00 | 1,325.00 | 3.79 | Worst | -43.5% | -50.3% | -56.6% | -59.5% | -2.5% | 0.1% | -27.4% |
| Liberty (Type III-AU50) | 1,261.00 | 1,286.00 | 1,290.00 | 1.38 | 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 |
| U.S. Silver Coins (\$1,000 face value, circulated) | | | | | | | | | | | | |
| 90% Silver Circ. (715 oz.) | 10,616.00 | 11,085.00 | 11,627.00 | -0.59 | | | | | | | | |
| 40% Silver Circ. (292 oz.) | 4,311.50 | 4,506.50 | 4,641.50 | -1.14 | | | | | | | | |
| Silver Dollars Circ. | 18,000.00 | 18,000.00 | 22,875.00 | 55.83 | | | | | | | | |
| ¹Premium 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. | | | | | | | | | | | | |

THE DOW JONES INDUSTRIALS RANKED BY YIELD*

| Ticker Symbol | Market Prices (\$) | | | 12-Month (\$) | | Latest Dividend Amount (\$) | Record Date | Payable Date | Indicated Annual Dividend (\$) | Yield† (%) | |
|--------------------|--------------------|---------|---------|---------------|--------|-----------------------------|-------------|--------------|--------------------------------|------------|------|
| | 4/15/19 | 3/15/19 | 4/13/18 | High | Low | | | | | | |
| Dow, Inc. | DOW | 57.78 | n/a | n/a | 60.52 | 48.00 | 0.700 | 5/31/19 | 6/14/19 | 2.800 | 4.85 |
| IBM | IBM | 143.90 | 139.43 | 156.71 | 154.36 | 105.94 | 1.570 | 2/8/19 | 3/9/19 | 6.280 | 4.36 |
| Verizon | VZ | 58.71 | 58.39 | 47.66 | 61.58 | 46.09 | 0.603 | 4/10/19 | 5/1/19 | 2.410 | 4.10 |
| Exxon Mobil | XOM | 80.65 | 80.15 | 77.84 | 87.36 | 64.65 | 0.820 | 5/13/19 | 6/10/19 | 3.280 | 4.07 |
| Chevron | CVX | 120.14 | 125.31 | 119.92 | 131.08 | 100.22 | 1.190 | 5/17/19 | 6/10/19 | 4.760 | 3.96 |
| Pfizer | PFE | 42.09 | 41.78 | 36.32 | 46.47 | 34.37 | 0.360 | 2/1/19 | 3/1/19 | 1.440 | 3.42 |
| Coca-Cola | KO | 47.00 | 45.30 | 44.51 | 50.84 | 41.45 | 0.400 | 3/15/19 | 4/1/19 | 1.600 | 3.40 |
| Walgreen's | WBA | 54.24 | 62.63 | 63.82 | 86.31 | 52.42 | 0.440 | 5/20/19 | 6/12/19 | 1.760 | 3.24 |
| J P Morgan | JPM | 109.94 | 106.55 | 110.30 | 119.24 | 91.11 | 0.800 | 4/5/19 | 4/30/19 | 3.200 | 2.91 |
| Procter and Gamble | PG | 105.73 | 102.44 | 78.37 | 107.20 | 70.73 | 0.746 | 4/19/19 | 5/15/19 | 2.984 | 2.82 |
| Merck | MRK | 78.53 | 81.57 | 57.17 | 83.85 | 56.26 | 0.550 | 3/15/19 | 4/5/19 | 2.200 | 2.80 |
| 3M Company | MMM | 215.83 | 208.08 | 215.52 | 219.75 | 176.87 | 1.440 | 2/15/19 | 3/12/19 | 5.760 | 2.67 |
| Home Depot, Inc. | HD | 204.86 | 182.23 | 172.80 | 215.43 | 158.09 | 1.360 | 3/14/19 | 3/28/19 | 5.440 | 2.66 |
| Johnson & Johnson | JNJ | 136.52 | 137.60 | 130.62 | 148.99 | 118.62 | 0.900 | 2/26/19 | 3/12/19 | 3.600 | 2.64 |
| Cisco | CSCO | 56.56 | 53.20 | 43.00 | 57.53 | 40.25 | 0.350 | 4/5/19 | 4/24/19 | 1.400 | 2.48 |
| Caterpillar | CAT | 140.25 | 132.67 | 150.23 | 161.60 | 112.06 | 0.860 | 4/22/19 | 5/20/19 | 3.440 | 2.45 |
| McDonald's | MCD | 191.85 | 185.33 | 161.73 | 198.60 | 153.13 | 1.160 | 3/1/19 | 3/15/19 | 4.640 | 2.42 |
| Travelers | TRV | 136.79 | 134.18 | 136.29 | 141.52 | 111.08 | 0.770 | 3/11/19 | 3/29/19 | 3.080 | 2.25 |
| Intel Corp | INTC | 56.28 | 54.33 | 51.86 | 59.59 | 42.36 | 0.315 | 5/7/19 | 6/1/19 | 1.260 | 2.24 |
| Boeing | BA | 375.46 | 378.99 | 329.28 | 446.01 | 292.47 | 2.055 | 2/8/19 | 3/1/19 | 8.220 | 2.19 |
| United Tech. | UTX | 134.55 | 125.92 | 122.71 | 144.15 | 100.48 | 0.735 | 2/15/19 | 3/10/19 | 2.940 | 2.19 |
| Wal-Mart Stores | WMT | 102.43 | 98.42 | 86.02 | 106.21 | 81.78 | 0.530 | 5/10/19 | 6/3/19 | 2.120 | 2.07 |
| Goldman Sachs | GS | 199.91 | 198.26 | 255.92 | 245.88 | 151.70 | 0.800 | 5/30/19 | 6/27/19 | 3.200 | 1.60 |
| Unitedhealth Group | UNH | 230.20 | 251.40 | 224.28 | 287.94 | 208.07 | 0.900 | 3/11/19 | 3/19/19 | 3.600 | 1.56 |
| Microsoft Corp. | MSFT | 121.05 | 115.91 | 93.08 | 131.37 | 92.45 | 0.460 | 5/16/19 | 6/13/19 | 1.840 | 1.52 |
| Apple | AAPL | 199.23 | 186.12 | 174.73 | 233.47 | 142.00 | 0.730 | 2/11/19 | 2/14/19 | 2.920 | 1.47 |
| American Express | AXP | 110.53 | 113.52 | 93.03 | 117.06 | 89.05 | 0.390 | 4/5/19 | 5/10/19 | 1.560 | 1.41 |
| Walt Disney | DIS | 132.04 | 114.96 | 100.35 | 139.63 | 97.68 | 0.880 | 12/10/18 | 1/10/19 | 1.760 | 1.33 |
| Nike | NKE | 86.83 | 86.80 | 67.25 | 90.00 | 66.53 | 0.220 | 3/4/19 | 4/1/19 | 0.880 | 1.01 |
| Visa Inc. | V | 160.44 | 155.46 | 120.75 | 162.03 | 121.60 | 0.250 | 5/17/19 | 6/4/19 | 1.000 | 0.62 |

† Based on indicated dividends and market price as of 4/15/19. Extra dividends are not included in annual yields.

All data adjusted for splits and spin-offs. 12-month data begins 4/15/18.

ASSET CLASS INVESTMENT VEHICLES

Data as of March 31, 2019

Fixed Income

| | 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) |
|---------------------|---|---------------------------------|--------------------|-------------------|--------------|---------------------|---------------------------|------------------------|--------|--------|----------------------------------|
| | | | | | | | | 1-Year | 3-Year | 5-Year | |
| Short-Term Bonds | Vanguard Short-Term Bond Adm | 2.80 yrs | 2453 | 0.07 | 48 | | 2.10 | 3.54 | 1.42 | 1.51 | 0.74 |
| Short-Term Bonds | SPDR Portfolio Short Term Corp Bd ETF | 1.91 yrs | 1171 | 0.07 | 56 | | 2.51 | 3.76 | 1.98 | 1.65 | 0.85 |
| Short-Term Bonds | iShares 1-3 Year Treasury Bond ETF | 1.95 yrs | 69 | 0.15 | 85 | | 1.87 | 2.59 | 0.87 | 0.85 | 0.51 |
| Interm-Term | Vanguard Total Bond Market Adm | 8.30 yrs | 17312 | 0.05 | 54 | | 2.79 | 4.45 | 2.02 | 2.67 | 1.10 |
| Interm-Term | iShares Core US Aggregate Bond ETF | 8.00 yrs | 7227 | 0.05 | 252 | | 2.71 | 4.57 | 1.98 | 2.72 | 1.04 |
| Tax-Exempt | Vanguard Ltd-Term Tax-Exempt Inv | 3.00 yrs | 5193 | 0.17 | 28 | | 1.85 | 3.30 | 1.45 | 1.49 | 0.00 |
| Tax-Exempt | SPDR Nuveen Blimbg Barclays ST MunBd ETF | 3.09 yrs | 1174 | 0.20 | 27 | | 1.27 | 2.69 | 0.89 | 1.03 | 0.00 |
| Tax-Exempt | Vanguard Interm-Term Tx-Ex Inv | 5.50 yrs | 8026 | 0.00 | 15 | | 2.76 | 5.08 | 2.38 | 3.15 | 0.00 |
| Inflation-Protected | iShares TIPS Bond ETF | 7.99 yrs | 38 | 0.19 | 21 | | 2.61 | 2.69 | 1.61 | 1.82 | 0.87 |
| Inflation-Protected | Vanguard Inflation-Protected Securities Inv | 8.20 yrs | 45 | 0.20 | 27 | | 2.64 | 2.55 | 1.54 | 1.76 | 1.03 |
| International | Vanguard Total International Bond Adm | 9.40 yrs | 5545 | 0.11 | 22 | | 2.93 | 5.15 | 3.19 | 4.11 | 0.98 |

Real Estate (REITs)

| | | | | | | | | | | | |
|---------------------|---|---------|-----|------|----|------|------|-------|------|------|------|
| U.S. REITs | Vanguard REIT Adm | 13.53 B | 190 | 0.12 | 24 | 2.40 | 3.96 | 20.04 | 5.85 | 8.96 | 1.47 |
| U.S. REITs | SPDR Dow Jones REIT | 13.05 B | 96 | 0.25 | 6 | 2.26 | 3.67 | 19.54 | 5.06 | 8.69 | 1.52 |
| Int'l REITs | Vanguard Global ex-US Real Estate Adm (2) | 6.53 B | 608 | 0.12 | 7 | 0.94 | 3.95 | 2.19 | 8.39 | 6.27 | 1.68 |
| Int'l REITs | iShares International Developed Property | 6.94 B | 358 | 0.48 | 11 | 0.93 | 4.07 | 3.99 | 6.92 | 5.64 | 1.66 |
| Global (incl. U.S.) | SPDR Dow Jones Global Real Estate ETF | 10.24 B | 230 | 0.50 | 11 | 1.49 | 3.44 | 12.21 | 4.29 | 6.27 | 1.45 |

U.S. Stocks

| | | | | | | | | | | | |
|-------------------|---------------------------------|----------|------|------|----|------|------|-------|-------|-------|------|
| Large Cap (blend) | Vanguard S&P 500 Adm | 102.05 B | 515 | 0.04 | 4 | 2.92 | 1.96 | 9.46 | 13.56 | 11.05 | 0.58 |
| Large Cap (blend) | iShares Core S&P 500 | 104.02 B | 509 | 0.04 | 4 | 2.97 | 1.92 | 9.39 | 13.46 | 10.86 | 0.49 |
| Large Cap (blend) | iShares Russell 1000 ETF | 80.51 B | 983 | 0.15 | 4 | 2.86 | 1.82 | 9.15 | 13.39 | 10.52 | 0.48 |
| Large Cap Value | Vanguard Value Adm | 89.81 B | 348 | 0.05 | 8 | 2.12 | 2.59 | 7.23 | 12.24 | 9.55 | 0.75 |
| Large Cap Value | iShares Russell 1000 Value | 61.59 B | 726 | 0.20 | 15 | 1.89 | 2.43 | 5.53 | 10.27 | 7.53 | 0.62 |
| Small Cap (blend) | iShares Core S&P Small-Cap ETF | 1.65 B | 606 | 0.07 | 12 | 1.80 | 1.45 | 1.62 | 12.57 | 8.44 | 0.38 |
| Small Cap (blend) | Schwab US Small-Cap ETF | 2.68 B | 1741 | 0.04 | 9 | 1.90 | 1.35 | 2.53 | 11.88 | 6.96 | 0.46 |
| Small Cap Value | Vanguard Small Cap Value Adm | 3.49 B | 866 | 0.07 | 18 | 1.59 | 2.10 | 1.60 | 10.35 | 7.53 | 0.65 |
| Small Cap Value | iShares Russell 2000 Value | 1.69 B | 1373 | 0.24 | 23 | 1.30 | 1.87 | 0.19 | 10.81 | 5.52 | 0.58 |
| Small Cap Value | iShares Micro-Cap | 0.52 B | 1454 | 0.60 | 22 | 1.63 | 0.95 | -2.54 | 12.17 | 4.95 | 0.33 |
| Marketwide | Vanguard Total Stock Market Adm | 58.94 B | 3375 | 0.04 | 3 | 2.72 | 1.93 | 8.80 | 13.62 | 10.54 | 0.66 |
| Marketwide | Fidelity Total Market Index | 58.77 B | 3379 | 0.02 | 2 | 2.72 | 1.80 | 8.67 | 13.60 | 10.53 | 0.91 |

Foreign Stocks

| | | | | | | | | | | | |
|-------------------|-------------------------------------|---------|------|------|----|------|------|-------|-------|------|------|
| Developed Markets | Vanguard FTSE Developed Markets Adm | 22.87 B | 3956 | 0.07 | 3 | 1.37 | 3.06 | -4.72 | 7.59 | n/a | 0.83 |
| Developed Markets | iShares Core MSCI EAFE ETF | 23.72 B | 2503 | 0.08 | 2 | 1.42 | 3.14 | -4.82 | 7.68 | 2.75 | 0.76 |
| Emerging Markets | Vanguard Emerging Markets Stock Adm | 21.07 B | 4123 | 0.14 | 11 | 1.53 | 2.54 | -6.82 | 10.49 | 3.79 | 0.84 |
| Emerging Markets | Schwab Emerging Markets Equity ETF | 31.12 B | 1029 | 0.13 | 18 | 1.56 | 2.44 | -6.97 | 10.42 | 3.92 | 0.84 |

Gold-Related Funds

| | | | | | | | | | | | |
|-----------|--------------------------|--|--|------|--|--|------|-------|-----|-----|------|
| Gold ETFs | SPDR Gold Minishares | | | 0.18 | | | 0.00 | n/a | n/a | n/a | 0.00 |
| Gold ETFs | GraniteShares Gold Trust | | | 0.17 | | | 0.00 | -2.56 | n/a | n/a | 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, Adm indicates the Admiral share class is shown; Inv indicates the Investor share class is shown. (2) VGRXL 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. The calculation assumes investors pay the maximum federal rate on capital gains and ordinary income. The calculation comes directly from Morningstar.

The information herein is derived from generally reliable sources, but cannot be guaranteed. American Investment Services, the American Institute for Economic Research, and the officers, employees, or other persons affiliated with either organization may have positions in the investments referred to herein. Opinions expressed are subject to change.