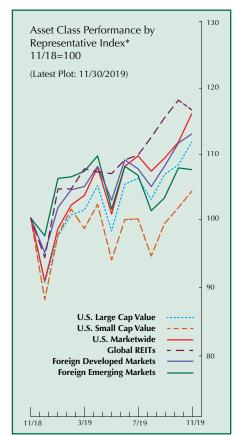
Vol. XLII, No. 12 Great Barrington, Massachusetts 01230 December 31, 2019



See box, page 94, for representative indexes.

| Rates of Inter As of December 17, | |
|---|----------------------|
| Government Obligations ¹ | |
| Fed Funds Rate | 1.55% |
| 3-Month Treas. Bill | 1.54% |
| 10-Yr. Treas. Note | 1.82% |
| 30-Yr. Treas. Bond | 2.26% |
| 10-Yr. TIPS | 0.12% |
| Muni Bonds - Nat'l 10-Yr. | 1.45% |
| Mortgage Rates ² | |
| 15-Yr Fixed | 3.19% |
| 30-Yr Fixed | 3.73% |
| Banking ³ | |
| Savings | 0.09% |
| Money Market | 0.15% |
| 12-month CD | 0.49% |
| [1] Federal Reserve, fmsbonds.com. Annu bonds, TIPS reflect yield to maturity. | alized Rates. Notes, |

[2] Freddie Mac. Average (National average mortgages with 0.7 points).

[3] FDIC. Average national rates, non-jumbo deposits (<\$100k)

China Chatter and your Portfolio

It's hard to avoid news about China these days. Headlines appear almost every day involving trade and investing, military expansion, political repression, the environment, even professional sports. But investors should put these developments in perspective.

Though China is still a developing nation, its economy (GDP) is the now second only to the U.S. It boasts a large and growing manufacturing sector in particular. State ownership, heavy regulation and mercantilist trade policy predominate, but over the past four decades Chinese leaders have embraced many of the features of the free market. Growth has leapt in response. Chinese consumers are reaping the benefits as a booming middle class has emerged.

Many Chinese businesses have access to global capital markets, so U.S. investors can take a stake in Chinese equities. Chinese stocks trade in local exchanges, in Hong Kong, and even in the U.S. through ADRs. Foreign investors have only limited access to local exchanges (through A shares), but many companies are available (through H shares) on the Hong Kong exchange.

With a population of well over one billion and vast natural resources China has enormous potential to grow, to the benefit of the entire world. But investment risk is high. Until personal freedoms, including property rights, are secure, China will remain a wild card.

Amidst the media hype, we caution investors to give China only the attention it deserves. Notably, while the Chinese economy accounts for over 16 percent of global economic output, Chinese firms account for less than three percent of the world's total equity market value.¹ Our sample moderate portfolio proposes a 6 percent allocation to emerging markets stocks. As China represents 34 percent of the emerging markets index, the sample moderate portfolio has only about a 2 percent allocation to Chinese stocks (0.34 multiplied by 0.06). The index is also broadly diversified across many Chinese companies.

Those who choose to include China in a globally diversified portfolio are best served by purchasing emerging market index-type funds such as those listed on page 96, in accordance with their circumstances and preferences.

Source: IMF World Economic Outlook, Oct. 2019 (IMF.org), Dimensional Fund Advisors

Contact information: (413) 645-3327 • aisinfo@americaninvestment.com American Investment Services, Inc. is wholly owned by the American Institute for Economic Research.

2019 CAPITAL MARKETS: FIRING ON ALL CYLINDERS

Investors who follow our approach may well have experienced a pretty good year so far. Across the board, asset classes have provided hefty returns. After an uninspiring 2018, stock, bonds, commercial real estate (REITs) and gold have all rallied, and not by just a small amount.

Year-to-date through November, the broad U.S. stock market had appreciated by 27 percent. International stocks had returned 19 percent with emerging markets stocks returning 10 percent. The gold price had increased by 14 percent while U.S. REITs had returned 25 percent. Even U.S. bonds were up sharply, by almost 9 percent.

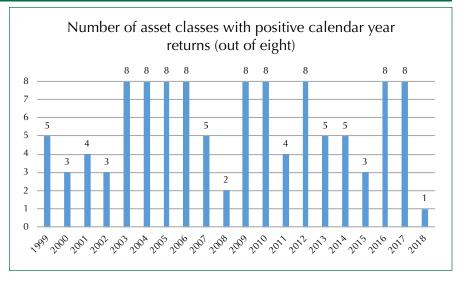
How unusual is it for everything to appreciate all at once? Not as unusual as you might think. When we consider eight major assets classes – U.S. stocks overall, U.S. value stocks, U.S. small cap stocks, international stocks, emerging markets stocks, U.S. bonds, gold, and real estate – there have been nine calendar years in the past two decades during which all eight provided positive returns for the full year.

In other words in nine of the past 20 years, even a portfolio invested in only one of these asset classes would have grown. No advance knowledge of winning asset classes would have been required... As a matter of fact, it happened as recently as 2012, 2016 and 2017.

What *is* unusual this time around is the *magnitude* of these gains. This is especially true of bonds. Generally speaking, bonds are meant to provide portfolio stability. They tend to bolster portfolio returns when stocks fall. But annual bond returns are often in the low single digits, especially when stocks are on the rise. For example, the returns on bonds in 2016 and 2017 were just 2.6 and 3.5 percent while the U.S. stock market was up by double digits in both years.

Only rarely have bonds and stocks have provided such strong returns in the same calendar year. The last calendar year in which bond registered returns as high as 8 percent was 2002 when the great tech stock rally ended badly and the stock market fell by over 11 percent.

Gold is intended to provide protection against financial instability and turmoil, has been exceptional this year. For example, in the depths of the financial crisis the gold price soared by more than 70 percent (from 2007 through 2009). When the stock market marched higher



in 2013, 2014, and 2015, gold registered three consecutive years of losses. Gold's strong showing thus far in 2019 is unusual considering the robust returns in global stocks.

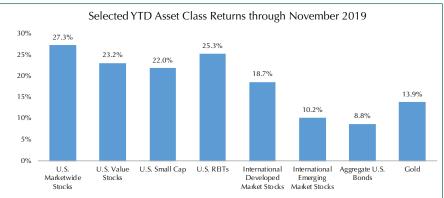
These favorable outcomes should be viewed in proper perspective, however. After all, last year among of these eight major assets classes, U.S. bonds were the best performing asset class – with a return of zero percent.

This year's remarkable returns may seem especially bewildering considering bad news trumpeted daily in the media. Presidential impeachment proceedings are underway, and global trade wars are again on the rise. Turmoil prevails in the Middle East, Asia and South America. While the U.S. gross federal debt, that is, the accumulated annual deficits and surpluses since 1789, stands at \$23 trillion -- this year's deficit alone is estimated to reach \$1 trillion.

But markets reflect good news as well as bad. As we have pointed out, markets also consider the potential for growth driven by emerging technologies and other sources of future productivity gains. So, despite the apparent contradiction between bad news and the stock market rally, one can only wonder where the markets would be in the absence of such uncertainty.

Thus far 2019 has served to remind us that, while it is difficult to predict which asset classes will outperform in any given year (and by how much), it is not uncommon for all asset classes to appreciate simultaneously. But the most important takeaway is the importance of being invested.

No doubt there are many rueful investors who "moved to cash" at the end of 2018 in the midst of a year-end market tumble. Even worse off are those investors who fled to cash during the financial crisis and have been reluctant to return – they may well have missed out on five years of the last 10 during which all major asset classes provided gains. Almost any reasonably well-diversified portfolio – whether conservative, moderate, or aggressive – would show healthy gains over the past 10 and 20 year spans.



WHAT TO EXPECT WHEN YOU'RE INVESTING

Experts often use industry jargon that can be confusing. The field of financial economics is no exception. Terms such as "expected return" and "diversification" are used often, but can be easily misinterpreted. In this article we hope to clarify these concepts.

Homo Economicus

Economics is a social science. When considering human interactions economists begin with the reasonable assumption that people act rationally in their own best interest. This is why, for example, we tend to be skeptical of efforts or policies that thwart or interfere with free exchange. When a voluntary exchange takes place between a willing buyer and seller, economists assume that both parties are made better off (or at least are left no worse off) than they would have been had the exchange never happened. We are comfortable making this assumption because it stands to reason that as long as both acted freely, neither would have chosen to knowingly act against his or her own best interest.

Human beings are of course not perfectly rational. We are also motivated by emotions such as greed and fear; we can procrastinate or act impetuously. That can lead to bad decisions that don't work out so well for us. But based on what we observe, rational self-interest is a solid assumption when it comes to predicting how people make decisions.

Expected Return

When it comes to personal finance, we assert that individuals act rationally in their own interest and that they remain informed regarding their alternatives. When investors buy stocks or bonds they are well aware that their investment may lose value or even become worthless. While they willingly accept this risk, investors are risk averse, so they demand compensation for bearing it. They are also aware that there is a broad spectrum of risky financial assets that entail tradeoffs between risk and return.

However, confusion sometimes arises when we discuss *expected returns*. An example might help to explain the concept. Consider the choice between an investment guaranteed to earn a 7 percent return and a second investment with a 50/50 chance to either lose 3 percent or gain 17 percent. Each of these investments has an expected return of 7 percent, but most people would choose the guaranteed 7 percent. The alternative, which could return anywhere between minus -3 and 17 percent, is clearly riskier. A risk averse investor would be willing to accept this riskier alternative only if it was expected it to return *more* than 7 percent.

A situation like this would not last in actual financial markets, where risk is reflected in security prices. Investors would abandon the second, riskier option in favor of the guaranteed option. The price of the riskier choice would fall, and its expected return would increase until it reached a level consistent with the risk it bears. If for example the price of the risky choice were to fall such that it had a 50/50 chance of returning either 0 percent or +20 percent, its expected return would rise to 10 percent (the weighted average of the two outcomes), so some investors might well choose it over the safer 7 percent alternative.

Our example illustrates an important point that is sometimes lost on investors: an investment with higher *expected* returns is not *guaranteed* to produce higher returns. After all, if a risky investment always provided a greater return it would not be risky. The additional reward for owning an investment considered to be risky is only a *potential* reward – the possibility of never earning it, and possibly suffering a loss -- must exist.

The notion of expected return is fundamental to investing but it shows up in many places. Gamblers who bet on a horse that is a proven winner expect a lower payoff versus a longshot. In that case the expected payoff is observable in the form of odds that are calculated and readily available for gamblers to weigh. Similarly, an investor expects a greater payoff for taking on an investment with greater risk. This is why, for example, stocks have a higher expected return than bonds.

Stocks and Bonds

Investors demand higher expected returns as reward for holding higher risk (higher volatility) assets. This "risk premium" generated by stocks shows up in historical market returns over relatively long time periods. Assets that demonstrate high volatility, such as common stocks, have provided higher returns versus assets with lower volatility, such as bonds. This is depicted in the table nearby.

Bonds are a form of debt while stock is equity, so bonds are safer than stocks. Bonds make regular interest payments and have a redemption value at a stated maturity date. Stocks pay a dividend only if one is declared and have no stated redemption value; they promise only some unknown future market price. Bond owners also get paid before stock holders if the firm is liquidated.

Among bonds and among stocks there is also a wide spectrum of risk, depending on the industry, company size, and many risks unique to the issuer.

A Closer Look

It's also worth considering risk from the firm's point of view. The return investors demand represents a cost to the firm known as its *cost of capital*. When a company is at risk, investors have high expected returns, so the firm's management confronts a higher cost of capital. Investors expect lower returns from less risky firms and such firms have a lower cost of capital.

Imagine a "big tobacco" company in the late 1990s, when such firms were subject to massive legal liability for smoking-related health claims. These companies' future earnings were in clear jeopardy. Suppose that one of these firms decided at the time to raise capital by selling bonds. A rational investor would



"I was spreading some risk around, and apparently it all wound up in your portfolio."

| | k and Return T 1979 - Nov. 2 | |
|-----------------|---|------------|
| | Total Return | Volatility |
| U.S. Bonds | 7.38 | 5.38 |
| U.S. Stocks | 11.87 | 15.1 |
| | tal return, volatili standard deviatio | |
| See p. 94 for a | dditional index d | isclosures |

have realized that the risk of such bonds defaulting was far greater than the risk of default for bonds issued by the U.S. government or firms in safer industries. So investors expected a far higher interest rate on the tobacco company bonds and these firms were compelled to make higher interest rates on debt they issued.

The same concept applies to stocks. Suppose instead the tobacco company decided to raise capital by issuing new shares of stock. Unlike bonds, stocks provide no fixed income stream so their expected return is not observable. But the concept is the same -- no rational stock investor would purchase these shares unless the price fell to a level low enough to provide an expected return adequate to justify the risk of incurring a substantial loss. The price of tobacco stocks plummeted as smoking litigation dominated the financial news, and expected returns soared. In early 2000 Philip Morris shares fell to a level such that one measure of investors' expectations, its dividend yield, rose above 10 percent.

The only way a tobacco company could entice investors was by issuing bonds that promised high interest payments or by issuing stock at a low price. Either option would have incurred a high cost of capital. Conversely firms perceived to be safe have a lower cost of capital because investors are content with lower expected returns.

The Market as a Whole

The trade-off between risk and expected return naturally extends to overall stock and bond markets. One relative measure of stock market risk is the market's price-to-earnings ratio (P/E ratio), which is an index of aggregate stock prices relative to those companies' aggregate earnings.

When the outlook for economic growth is bright and investors grow optimistic about companies' future earnings, the P/E ratio tends to increase. During such periods, risk is perceived to be lower, and investors have lower expected returns, so firms confront a lower cost of capital. Currently the economy is strong and the P/E ratio is high.

Conversely, when conditions are viewed as risky investors demand, or expect, higher returns and firms face a higher cost of capital. At

the peak of the financial crisis conditions were certainly risky. Stock prices dropped precipitously for several months as investors fled. Eventually the market hit bottom, but of course during the decline no one knew how far prices would fall before expected returns would rise high enough to entice investors to return. Disciplined investors who understood this did not speculate. Ultimately they were rewarded.

Diversification

An understanding of risk and expected return enables an understanding of portfolio diversification. Diversification is among the most powerful tools available to investors because it can reduce portfolio volatility without reducing expected returns. Some economists consider it the closest thing to a "free lunch" as can be found.

Suppose you were aware of two stocks, A and B, which are equally risky and have the same expected return. But they are not shares in the same firm, so their returns do not move in tandem. When bad news specific to stock A drives its price down, there is often good news pushing the price of B the other way. By holding both, company-specific risk can be reduced; by doing so the investor gets the same expected return gained from holding A or B individually, but with less risk (lower volatility).

Investors should diversify both within and among groups of securities that are deemed asset classes. Securities within an asset class have similar investment returns (for more criteria, see box nearby). For example, large value U.S. stocks have similar expected returns. By holding all of the companies within the asset class, investors get the expected return of the asset class without the company-specific risk associated with any single company. One can further reduce portfolio volatility by holding U.S. large value stocks alongside several other asset classes, each of which provides a distinct source of risk and return.

An investor can create a portfolio that accommodates his or her willingness to trade off risk and expected return by holding these asset classes in proper proportion. This publication is intended to assist investors in that process. Every quarter we provide a sample portfolio allocations for investors with differing risk tolerances. Every month (see page 96) we list well-diversified funds designed to capture the returns of these asset classes.

We also construct and maintain individualized portfolios for our clients through our Professional Asset Management service. For more information call (413) 645-3327.

Strict Scrutiny

From time-to-time claims of "new" asset classes, said to provide risk-adjusted returns over the market, gain media attention. Under closer scrutiny these claims often fail. Among the questions we pose are whether these returns are:

- Sensible
- Persistent across time periods
- Pervasive across markets
- Robust to alternative specifications (whether premiums are sensitive to a single form of measurement)
- Cost-effective to capture in well-diversified portfolios
- Peer reviewed
- Transparent to our clientele regarding the proposed risk-return trade off they must be willing to accept

SOCIAL SECURITY: TURNING THE TABLES ON THE SCAMMERS

The Social Security Administration (SSA) is asking the public for help in tracking and pursuing scammers attempting to defraud senior citizens.

The SSA and its Inspector General (OIG) announced the launch of a dedicated online form at <u>https://oig.ssa.</u> <u>gov</u> to enable the public to report Social Security scams. Information submitted will enable the SSA and OIG to analyze the data for trends. Importantly, the OIG will use the data to identify investigative leads and ultimately find and prosecute the scammers.

The OIG's existing Social Security Fraud Hotline receives thousands of Social Security fraud allegations every year. These are reviewed and processed by trained program specialists. Referrals are then forwarded to SSA investigators across the country. The new form will expand and enhance those efforts.

The public is encouraged to use the new form to report Social Security scams perpetrated through robocalls, live calls, email, text messages or in-person. The depth and detail of information provided is critical to developing a solid allegation that can then be pursued.

Individuals submitting reports are encouraged to create a unique Personal Identification Number (PIN). This will be used to legitimize any subsequent communication(s) from the OIG. Reporting individuals can request confidentiality when submitting an allegation. The SSA will, in turn, protect their identity to the maximum extent allowed by law, only releasing such information to law enforcement officials when necessary.

The SSA cannot provide reporting individuals with an update on any actions taken on the referral. Federal regulations prohibit disclosure of information contained in law enforcement records even to the individual making the allegation. So if you file a report there will be no further communication from the agency unless one of its investigators contacts you for additional information.

Self Defense

Be wary of any call concerning your participation in Social Security. Generally, the SSA will only call people who (i) have recently applied for a Social Security benefit; (ii) are already receiving payments and require an update to their record; or (iii) have requested a phone call from the agency. All other calls should be approached skeptically.

If a problem exists with a person's Social Security number or record, the agency typically will mail a letter. Similarly, if a person needs to submit payment(s) to Social Security, the agency will send a letter with instructions and payment options. The agency cautions people to never provide information or payment over the phone or Internet unless they are certain they are speaking with an SSA agent.

Social Security employees will never

MUTUAL FUND DISTRIBUTIONS

At this time of year mutual funds make annual distributions. This can effect both the fund's net asset value and the number of shares an investor holds.

A mutual fund's Net Asset Value per share (NAV) is determined by the ratio of the total market value of the cash and securities it holds, less any liabilities, to the total number of fund shares outstanding. Therefore a fund's NAV will be reduced whenever it makes distributions of interest, dividends, or realized net capital gains realized.

Investors can choose to either take distributions as cash or to reinvest them in additional shares. This election has no immediate impact on an investor's wealth. If the proceeds of a fund distribution are reinvested in additional shares, the shareholder's value will reflect the reduced NAV, but it will also reflect the greater number of shares owned, so the value of the investor's holdings will not change. On the other hand if the investor takes the distribution as cash he will have the proceeds available for other purposes. In that case the total value of his shares will fall, because the fund's NAV will be reduced but the number of shares owned will not increase.

Mutual fund distributions and redemptions are subject to annual income taxes (unless shares are held in a tax deferred account). Taxes will be due on a fund's distributions of interest, dividends and net realized capital gains. The fund custodian will issue a 1099-DIV that accounts for these distributions.

When mutual fund shares are eventually redeemed, the shareholder

threaten a person. Nor will they promise to approve a Social Security benefit or increase in exchange for information or money. Anyone receiving such a call purportedly from the SSA should hang up and report the incident to SSA through the website above.

Additionally the Social Security Administration will never:

- tell you that your Social Security number has been suspended,
- contact you to demand an immediate payment,
- ask you for credit or debit card numbers over the phone,
- require a specific means of debt repayment, such as a prepaid debit card, a retail gift card or cash, or
- demand that you address a Social Security debt without the ability to appeal the amount you owe.

We encourage you to share this information, and more importantly, take the time to report any instance of a Social Security-related scam using the online form. We know that cybercriminals freely share among themselves stolen personal information that can result in full-blown identity theft.

You can help take a page from the cybercriminals' playbook by utilizing this new platform. This will enable the SSA to collect, slice and dice scammers' information and (hopefully) prosecute them.

will owe taxes on any resulting taxable capital gains realized on the difference between the cost basis of the shares redeemed and the proceeds generated by the redemption. This transaction will be reported on a separate 1099.

If you choose to reinvest distributions in additional fund shares (versus taking a cash distribution), make sure that your cost basis is updated accordingly; otherwise you may end up paying the tax man twice (once when you paid taxes due on the distribution and again when the additional shares purchased were sold). Custodians are required to track and report your cost basis, but it is prudent to review these transactions at year-end to ensure your cost basis is accurate.

THE HIGH-YIELD DOW INVESTMENT STRATEGY

Recommended HYD Portfolio

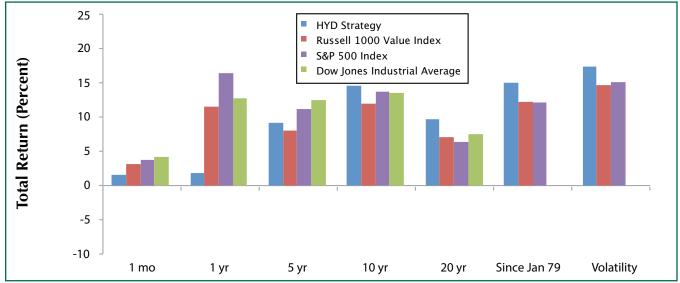
| As of December 15, 2 | 019 | | | | —-Percen | t of Portfolio-— |
|---|------|--|-------------------------|-------------------------------|---|--|
| , · · · · · · · · · · · · · · · · · · · | Rank | Yield (%) | Price (\$) | Status | Value (%) | No. Shares (%) ¹ |
| Dow, Inc. | 1 | 5.26 | 53.28 | Buying | 13.91 | 19.70 |
| Exxon Mobil | 2 | 5.03 | 69.23 | Holding** | 23.02 | 25.09 |
| IBM | 3 | 4.83 | 134.21 | Holding** | 24.62 | 13.84 |
| Verizon | 4 | 4.05 | 60.81 | Holding** | 25.09 | 31.13 |
| Chevron | 5 | 4.04 | 117.96 | Holding | 12.07 | 7.72 |
| Pfizer | 6 | 3.76 | 38.33 | Selling | 1.28 | 2.53 |
| Cash (6-mo. T-Bill) | N/A | N/A | | | 0.01 | N/A |
| Totals | | | | | 100.00 | 100.00 |
| **Commented in directed accorden | | ومحمد والمستجور المتعمد المتعار متعارف | 10 months and ID answer | the meneration of each income | المتعامية والمتعارفة المتعارضة والمتعارفة والمتعارفة والمتعارفة والمتعارفة والمتعارفة والمتعارفة والمتعارفة وال | والمراجع والمراجع والمراجع والمراجع والمراجع |

**Currently indicated purchases approximately equal to indicated purchases 18 months ago. 'Because 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 November 30, 2019*. Returns for the 5-,10- and 20-year periods are annualized, as is the volatility (standard deviation) of returns.

| | | | | | | | | _ |
|------------------------------|---------------|--------------|----------------|-----------------|----------------|---------------------|-------------------|---|
| | | | | | | | Volatility | |
| | <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>since 1979</u> | |
| HYD Strategy | 1.50 | 1.77 | 9.00 | 14.30 | 9.51 | 14.73 | 17.07 | |
| Russell 1000 Value Index | 3.09 | 11.33 | 7.83 | 11.69 | 6.91 | 11.96 | 14.39 | |
| S&P 500 Index | 3.63 | 16.11 | 10.98 | 13.44 | 6.20 | 11.91 | 14.77 | |
| Dow Jones Industrial Average | 4.11 | 12.48 | 12.20 | 13.30 | 7.38 | 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 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>U.S. stock benchmarks</u>; 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. 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. Microcaps - Russell Microcap Index. <u>Fixed income benchmarks</u>; 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 1-5 Years (hedged to USD). <u>Foreign stock benchmarks</u>; All returns in U.S. dollars. Developed Markets - MSCI World ex USA Value Index (net div.); Developed Markets Value - MSCI World ex USA Value Index (net div.); Developed Markets Growth - MSCI World ex USA Small Cap Index (net div.); Developed Markets Small Cap Value - MSCI World ex USA Small Cap Index (net div.); Developed Markets Small Cap Value - MSCI World ex USA Small Growth Index (net div.); Developed Markets Small Cap Growth - MSCI World ex USA Small Growth Index (net div.); Developed Markets - MSCI Emerging Markets Index (net div.); Emerging Markets Value - MSCI Emer

RECENT MARKET STATISTICS

Precious Metals & Commodity Prices (\$)

| | | | | Prem. |
|---------------------------------|----------------|-------------|-------------|-------|
| | 12/13/19 | Mo. Earlier | Yr. Earlier | (%) |
| Gold, London p.m. fixing | 1,466.60 | 1,466.90 | 1,235.35 | |
| Silver, London Spot Price | 16.94 | 16.87 | 14.58 | |
| Crude Oil, W. Texas Int. Spot | 58.99 | 57.54 | 51.26 | |
| | Coin Price | es (\$)1 | | |
| American Eagle (1.00) | 1,482 | 1,482 | 1,260 | 1.02 |
| Austrian 100-Corona (0.9802) | 1,432 | 1,432 | 1,205 | -0.42 |
| British Sovereign (0.2354) | 345 | 345 | 291 | 0.00 |
| Canadian Maple Leaf (1.00) | 1,477 | 1,477 | 1,245 | 0.68 |
| Mexican 50-Peso (1.2057) | 1,760 | 1,761 | 1,481 | -0.45 |
| Mexican Ounce (1.00) | 1,485 | 1,485 | 1,253 | 1.23 |
| S. African Krugerrand (1.00) | 1,474 | 1,474 | 1,242 | 0.48 |
| U.S. Double Eagle-\$20 (0.967 | 5) | | | |
| St. Gaudens (MS-60) | 1,455 | 1,457 | 1,215 | 2.54 |
| Liberty (Type II-AU50) | 1,465 | 1,467 | 1,325 | 3.25 |
| Liberty (Type III-AU50) | 1,440 | 1,442 | 1,206 | 1.48 |
| U.S. Silver Coins (\$1,000 face | value, circula | ited) | | |
| 90% Silver Circ. (715 oz.) | 12,638 | 12,529 | 10,147 | 4.37 |
| 40% Silver Circ. (295 oz.) | 5,165 | 5,121 | 4,117 | 3.39 |
| | | | | |

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. Premiums will vary; these indicated premiums are provided in The CDN Monthly Greysheet.

| | D | ata throu | ıgh Nove | ember 30 | , 2019 | | |
|--------------|---------------------------|---------------------------|-----------------------------|---------------------|---------------------|------------------------------|---------------------|
| | U.S. Stocks (Mktwd) | Foreign Dev. Stocks | Foreign Emerg. Stocks | Global REITs | U.S. Bonds | Foreign Bonds (hedged) | Gold |
| 1-month | 3.80% | 1.25% | -0.14% | -1.19% | -0.05% | -0.03% | -3.36% |
| | | | • | - | - | • | - |
| 3-month | 7.90% | 7.46% | 6.06% | 3.67% | -0.28% | 0.00% | -4.47% |
| | | | 1 | | - | 1 | |
| 1 vear | 15.49% | 12.57% | 7.28% | 16.14% | 10.79% | 4.05% | 19.93% |
| i yeu | 1 | 1 2157 /0 | ↑ . <u>2</u> 0,0 | 1 | 1 | 1 | 1 31353 / 0 |
| | - | | - | | | | |
| 5 year | 10.61% | 4.06% | 3.12% | 5.76% | 3.08% | 2.13% | 4.40% |
| (annualized) | | 1 | 1 | | | 1 | 1 |
| 15 year | 9.08% | 4.97% | 7.30% | 6.09% | 4.22% | 2.83% | 8.14% |
| (annualized) | | 1 | • | | | | • |
| Best and v | vorst one | -year ret | urns, Jan | n. 2001 - | Nov. 20 | 19 | |
| 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 |

Recent Market Returns

THE DOW JONES INDUSTRIALS RANKED BY YIELD*

| | | | | | | L | atest Divide | nd | Indica | ted |
|--------------------------------|------------|--------------|----------|--------------|--------------|---------|--------------|----------|------------|---------|
| Ticker | · | arket Prices | (\$) | 12-Ma | onth (\$) | Amount | Record | Payable | Annual | Yield† |
| Symbo | l 12/13/19 |) 11/15/19 | 12/14/18 | High | Low | (\$) | Date | Ďate | Dividend (| \$) (%) |
| Dow Chemical DOV | N 53.28 | 54.86 | n/a | 60.52 | 40.44 | 0.700 | 11/29/19 | 12/13/19 | 2.800 | 5.26 |
| Exxon Mobil XON | A 69.23 | 69.19 | 75.58 | 83.49 | 64.65 | 0.870 | 11/12/19 | 12/10/19 | 3.480 | 5.03 |
| IBM IBM | 134.21 | 134.40 | 119.90 | 152.95 | 105.94 | 1.620 | 11/8/19 | 12/10/19 | 6.480 | 4.83 |
| Verizon VZ | 60.81 | 59.51 | 57.08 | 61.70 | 52.28 | 0.615 | 1/10/20 | 2/3/20 | 2.460 | 4.05 |
| Chevron CVX | 117.96 | 120.64 | 113.83 | 127.34 | 100.22 | 1.190 | 11/18/19 | 12/10/19 | 4.760 | 4.04 |
| Pfizer PFE | 38.33 | 37.28 | 43.80 | 44.56 | 33.97 | 0.360 | 11/8/19 | 12/2/19 | 1.440 | 3.76 |
| 3M Company MM | M 168.79 | 171.88 | 196.10 | 219.75 | 150.58 | 1.440 | 11/22/19 | 12/12/19 | 5.760 | 3.41 |
| Walgreen's WB/ | ٩ 57.88 | 62.14 | 78.74 | 77.69 | 49.03 | 0.4575 | 11/18/19 | 12/12/19 | 1.830 | 3.16 |
| Cisco CSC | O 45.30 | 45.09 | 45.82 | 58.26 | 40.25 | 0.350 | 1/3/20 | 1/22/20 | 1.400 | 3.09 |
| Coca-Cola KO | 54.42 | 52.67 | 49.34 | 55.92 | 44.42 | 0.400 | 12/2/19 | 12/16/19 | 1.600 | 2.94 |
| Caterpillar CAT | 145.53 | 145.31 | 126.77 | 148.47 | 111.75 | 1.030 | 1/21/20 | 2/20/20 | 4.120 | 2.83 |
| Merck MR | | 84.90 | 76.48 | 89.96 | 70.89 | 0.610 | 12/16/19 | 1/8/20 | 2.440 | 2.05 |
| Johnson & Johnson JNJ | 141.38 | 134.94 | 133.00 | 144.98 | 121.00 | 0.950 | 11/26/19 | 12/10/19 | 3.800 | 2.69 |
| J P Morgan JPM | | 129.53 | 100.29 | 138.83 | 91.11 | 0.900 | 1/6/20 | 1/31/20 | 3.600 | 2.63 |
| Home Depot, Inc. HD | 214.08 | 237.29 | 172.29 | 239.31 | 158.09 | 1.360 | 12/5/19 | 12/19/19 | 5.440 | 2.54 |
| McDonald's MCI | | 193.97 | 183.29 | 221.93 | 169.04 | 1.250 | 12/2/19 | 12/16/19 | 5.000 | 2.54 |
| Travelers TRV | 135.66 | 133.57 | 120.55 | 155.09 | 111.08 | 0.820 | 12/10/19 | 12/31/19 | 3.280 | 2.42 |
| Boeing BA | 341.67 | 371.68 | 318.75 | 446.01 | 292.47 | 2.055 | 11/8/19 | 12/6/19 | 8.220 | 2.41 |
| Procter and Gamble PG | 125.47 | 120.54 | 96.64 | 125.98 | 86.74 | 0.746 | 10/18/19 | 11/15/19 | 2.984 | 2.38 |
| Goldman Sachs GS | 225.00 | 220.25 | 172.77 | 232.07 | 151.70 | 1.250 | 12/2/19 | 12/30/19 | 5.000 | 2.22 |
| | | | | | | | | | | |
| Intel Corp INT | C 57.79 | 57.96 | 47.86 | 59.59 | 42.86 | 0.315 | 11/7/19 | 12/1/19 | 1.260 | 2.18 |
| United Tech. UTX | 149.07 | 149.36 | 118.80 | 150.15 | 100.48 | 0.735 | 11/15/19 | 12/10/19 | 2.940 | 1.97 |
| Wal-Mart Stores WM | T 120.29 | 118.87 | 91.85 | 125.38 | 85.78 | 0.530 | 12/6/19 | 1/2/20 | 2.120 | 1.76 |
| Unitedhealth Group UNI | H 285.48 | 269.40 | 265.02 | 292.78 | 208.07 | 1.080 | 12/9/19 | 12/17/19 | 4.320 | 1.51 |
| American Express AXP | 124.72 | 120.76 | 105.70 | 129.34 | 89.05 | 0.430 | 1/3/20 | 2/10/20 | 1.720 | 1.38 |
| Microsoft Corp. MSF | T 154.53 | 149.97 | 106.03 | 155.90 | 93.96 | 0.510 | 2/20/19 | 3/12/19 | 2.040 | 1.32 |
| Walt Disney DIS | 146.38 | 144.67 | 112.20 | 153.41 | 100.35 | 0.880 | 12/16/19 | 1/16/20 | 1.760 | 1.20 |
| Apple AAP | L 275.15 | 265.76 | 165.48 | 281.77 | 142.00 | 0.770 | 11/11/19 | 11/14/19 | 3.080 | 1.12 |
| Nike NKE | 97.77 | 93.04 | 72.53 | 100.17 | 66.53 | 0.245 | 12/2/19 | 1/2/20 | 0.980 | 1.00 |
| Visa Inc. V | 185.14 | 179.77 | 135.09 | 187.05 | 121.60 | 0.300 | 11/15/19 | 12/3/19 | 1.200 | 0.65 |
| + Based on indicated dividends | | | | e not includ | ed in annual | yields. | | | | |

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

| | | | | | | | | | I | Annual | Annualized Returns (%) | IS (%) | |
|---|--|---|--|---|---|--|--|---|---|---------------------------------|---------------------------------|--------------------------------|---|
| Data as of November 30, 2019 | rr 30, 2019 | Security Symbol(s) (1) | ibol(s) (1) | Avg. Market Cap / Avg. Maturity | Number of Holdings | Expense Ratio (%) | Turnover (%) | Price-to- Book Ratio | Trailing 12-Mo. Yield (%) | 1-Year | 3-Year | 5-Year | Tax Cost Ratio - 3 Years (%) (3) |
| Fixed Income | | Mutual Fund | ETF | | | | | | | | | | |
| Short-Term Bonds | Vanguard Short-Term Bond Adm | VBIRX | BSV | 2.80 yrs | 2508 | 0.07 | 48 | | 2.24 | 5.89 | 2.40 | 1.86 | 0.78 |
| Short-Term Bonds | SPDR Portfolio Short Term Corp Bd ETF | | SPSB | 1.89 yrs | 1163 | 0.07 | 46 | | 2.79 | 5.49 | 2.68 | 2.10 | 0.93 |
| Short-Term Bonds | iShares 1-3 Year Treasury Bond ETF | | ЯΗУ | 1.58 yrs | 95 | 0.15 | 62 | | 2.10 | 4.01 | 1.67 | 1.17 | 0.62 |
| Interm-Term | Vanguard Total Bond Market Adm | VBTLX | BND | 8.20 yrs | 17566 | 0.05 | 54 | | 2.73 | 10.95 | 4.00 | 3.05 | 1.09 |
| Interm-Term | iShares Core US Aggregate Bond ETF | | AGG | 2.24 yrs | 7664 | 0.05 | 146 | | 2.71 | 10.66 | 4.08 | 3.00 | 1.05 |
| Tax-Exempt | Vanguard Ltd-Term Tax-Exempt Inv | VMLTX | | 3.00 yrs | 5773 | 0.17 | 28 | | 1.88 | 4.36 | 2.50 | 1.65 | 0.00 |
| Tax-Exempt | SPDR Nuveen Blmbg Barclays ST MunBd ETF | | SHM | 3.08 yrs | 932 | 0.20 | 35 | | 1.39 | 4.08 | 2.11 | 1.21 | 0.00 |
| Tax-Exempt | Vanguard Interm-Term Tx-Ex Inv | VWITX | | 5.30 yrs | 9145 | 0.17 | 15 | | 2.62 | 7.84 | 4.28 | 3.11 | 0.00 |
| Inflation-Protected | iShares TIPS Bond ETF | | TIP | 0.36 yrs | 42 | 0.19 | 21 | | 1.87 | 8.55 | 3.07 | 2.20 | 0.88 |
| Inflation-Protected | Vanguard Inflation-Protected Securities Inv | VIPSX | | 8.30 yrs | 46 | 0.20 | 27 | | 2.29 | 8.26 | 2.87 | 2.08 | 1.16 |
| International | Vanguard Total International Bond Adm | VTABX | BNDX | 9.90 yrs | 8609 | 0.11 | 22 | | 2.84 | 9.58 | 4.60 | 4.02 | 0.95 |
| Real Estate (REITs) | | | | | | | | | | | | | |
| U.S. REITs | Vanguard REIT Adm | VGSLX | ΟNΛ | 16.06 B | 186 | 0.11 | 24 | 2.66 | 3.37 | 18.85 | 9.34 | 7.40 | 1.53 |
| U.S. REITs | SPDR Dow Jones REIT | | RWR | 14.23 B | 95 | 0.25 | 6 | 2.39 | 3.22 | 13.32 | 8.70 | 6.72 | 1.49 |
| Int'l REITs | Vanguard Global ex-US Real Estate Adm (2) | VGRLX | IDNV | 6.39 B | 683 | 0.12 | 7 | 0.99 | 3.64 | 14.09 | 10.27 | 5.58 | 1.63 |
| Int'l REITs | iShares International Developed Property | | WPS | 6.61 B | 360 | 0.48 | 6 | 0.99 | 4.11 | 14.98 | 9.53 | 5.46 | 1.67 |
| Global (incl. U.S.) | SPDR Dow Jones Global Real Estate ETF | | RWO | 10.65 B | 231 | 0.50 | 11 | 1.55 | 3.08 | 13.93 | 8.35 | 5.21 | 1.40 |
| U.S. Stocks | | | | | | | | | | | | | |
| Large Cap (blend) | Vanguard S&P 500 Adm | VFIAX | 000 | 114.59 B | 515 | 0.04 | 4 | 3.20 | 1.87 | 17.06 | 14.75 | 10.94 | 0.55 |
| Large Cap (blend) | iShares Core S&P 500 | | 2 | 114.95 B | 510 | 0.04 | D. | 3.20 | 1.95 | 16.22 | 14.86 | 10.94 | 0.53 |
| Large Cap (blend) | iShares Russell 1000 ETF | | IWB | 88.20 B | 1005 | 0.15 | 9 | 3.08 | 1.74 | 16.14 | 14.51 | 10.66 | 0.51 |
| Large Cap Value | Vanguard Value Adm | VVIAX | VTV | 87.14 B | 341 | 0.05 | 8 | 2.19 | 2.37 | 12.02 | 11.75 | 9.54 | 0.69 |
| Large Cap Value | iShares Russell 1000 Value | | IWD | 58.86 B | 771 | 0.19 | 17 | 1.92 | 2.25 | 11.30 | 9.42 | 7.64 | 0.65 |
| Small Cap (blend) | iShares Core S&P Small-Cap ETF | | IJR | 1.65 B | 909 | 0.07 | 14 | 1.70 | 1.37 | 4.71 | 8.48 | 9.51 | 0.40 |
| Small Cap (blend) | Schwab US Small-Cap ETF | | SCHA | 2.53 B | 1733 | 0.04 | 11 | 1.72 | 1.42 | 8.53 | 8.50 | 7.86 | 0.44 |
| Small Cap Value | Vanguard Small Cap Value Adm | VSIAX | VBR | 3.72 B | 860 | 0.07 | 18 | 1.58 | 1.95 | 6.50 | 6.47 | 7.23 | 0.61 |
| Small Cap Value | iShares Russell 2000 Value | | NM | | 1387 | 0.24 | 26 | 1.24 | 1.82 | 3.67 | 4.83 | 69.9 | 0.58 |
| Small Cap Value | iShares Micro-Cap | | IWC | 0.44 B | 1389 | 0.60 | 25 | 1.31 | 1.08 | 1.61 | 5.93 | 6.44 | 0.33 |
| Marketwide | Vanguard Total Stock Market Adm | VTSAX | ITV | 67.18 B | 3613 | 0.04 | c. | 2.95 | 1.70 | 16.29 | 14.11 | 10.57 | 0.61 |
| Marketwide | Fidelity Total Market Index | FSKAX | | 64.74 B | 3472 | 0.02 | ω | 2.88 | 1.61 | 16.34 | 14.10 | 10.58 | 0.90 |
| Foreign Stocks | | | | | | | c | | 0 | , , | | | |
| Developed Markets | Vanguard FISE Developed Markets Adm | VIMUX | VEA | 23.22 B | 3933 | 0.07 | ς, α | 1.42 | 2.96 | 97.11 | 9.30 | 4.66 | 0.80 |
| Developed Markets | IShares Core MSCI EAFE ETF | | IEFA | 24.06 B | 2493 | 0.07 | n, | 1.47 | 3.04 | 11.87 | 9.69 | 4.84 | 0.84 |
| Emerging Markets | Vanguard Emerging Markets Stock Adm | VEMAX | OWV | 20.63 B | 4200 | 0.14 | 11 | 1.52 | 2.65 | 9.41 | 8.10 | 2.56 | 0.81 |
| Emerging Markets | Schwab Emerging Markets Equity ETF | | SCHE | 31.30 B | 1324 | 0.13 | 13 | 1.56 | 3.02 | 8.78 | 8.75 | 3.13 | 0.81 |
| Gold-Related Funds | ds | | | | | | | | | | | | |
| Gold ETFs | SPDR Gold Minishares | | GLDM | | | 0.18 | | | 0.00 | 19.56 | n/a | n/a | 0.00 |
| Gold ETFs | GraniteShares Gold Trust | | BAR | | | 0.17 | | | 0.00 | 19.61 | n/a | n/a | 0.00 |
| Data provided by the fun Adm indicates the Admir that results from income | Data provided by the funds and Momingstar. (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; IN indicates the Investor share class is shown. (2) VGRIX 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 Momingstar. | ll funds and ETFs, ir ass is shown. (2) V(n federal rate on ca | ı which case SRLX include pital gains an | both symbols are ss a 0.25% fee or d ordinary incon | : shown. In these purchases and ne. The calculati | t cases, data reprired redemptions, when the case on comes directly | esent the mutu iich are paid d y from Mornin | al fund. The ETF irectly to the fu gstar. | may offer a lowe nd. (3) This repres | r expense rati ents the perc | o and returns entage-point i | may deviate. reduction in a | For Vanguard funds, ın annualized return |
| | | | | | | | | | | | | | |

Investment Guide

ASSET CLASS INVESTMENT VEHICLES

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