

See box, page 86, for representative indexes.

| Rates of Interest <br> As of November 20, 2019 |  |
| :---: | :---: |
| Government Obligations ${ }^{1}$ |  |
| Fed Funds Rate | 1.55\% |
| 3-Month Treas. Bill | 1.54\% |
| 10-Yr. Treas. Note | 1.81\% |
| 30-Yr. Treas. Bond | 2.30\% |
| 10-Yr. TIPS | 0.18\% |
| Muni Bonds - Nat'l 10-Yr. | 1.55\% |
| Mortgage Rates ${ }^{2}$ |  |
| 15-Yr Fixed | 3.20\% |
| 30-Yr Fixed | 3.75\% |
| Banking ${ }^{3}$ |  |
| Savings | 0.09\% |
| Money Market | 0.15\% |
| 12-month CD | 0.50\% |
| [1] Federal Reserve, fmsbonds.com. A bonds, TIPS reflect yield to maturity. [2] Freddie Mac. Average (National av 0.5 points). <br> [3] FDIC. Average national rates, non- | zed Rates. Notes, <br> mortgages with <br> deposits ( $<\$ 100 k$ ) |

## Selling at the Top

The U.S. stock market has continued its recent ascent. As of this writing the Dow Jones Industrial Average (DJIA, or "the Dow") has reached 28,000 and is near to another all-time high. At times like these it can be tempting to "take some money off the table" by reducing your exposure to stocks. After all, this sounds like a reasonable way to "lock in gains." But a recent-run up in the market is a poor reason for altering your asset allocation.

The chart below plots the Dow's monthly closing level since January 2006. Imagine it is February 2013. The stock market has just recovered from the greatest financial crisis since the Great Depression. Looking back it might seem a simple matter to have exited the market during October 2007, when the market had reached an alltime high, and then to have re-entered it after March 2009, when the market hit bottom.

But identifying these turning points in advance is quite another matter. The red points denote new market highs at month-end. Since February 2013, the Dow has gone on to reach new highs on 34 occasions. We would ask hopeful market timers at which of these points they would have sought refuge by "taking money off the table?"

While market timing should be avoided, successful investing is by no means a "hands off" endeavor. Astute investors will pay attention to the relative value of their portfolio holdings and rebalance across asset classes as needed, following new additions and withdrawals, or when warranted when market conditions drive actual allocations sufficiently from target allocations. For more detail on rebalancing, see the September 2016 Investment Guide.


## EXCHANGE RATES: A PRIMER FOR INVESTORS

$T$ he financial media often describe the U.S. dollar as being "strong" or "weak" relative to other currencies, without explaining why exchange rates are relevant to investors. Here we describe the basics of exchange rates and their relevance to your portfolio.

## Good as Gold?

Under the classic gold coin standard citizens throughout the globe could convert their national currency for gold coin (or vice versa) at a fixed rate of exchange. While every country had its own unit of account (e.g. the English pound, U.S. dollar, French franc, etc.) each could be redeemed by citizens for a designated quantity of gold that was fixed. For example between 1834 and 1933 (with the exception of the Greenback era, 1862-1879) an ounce of gold was worth $\$ 20.67$. Since each currency was defined as a specific weight in gold, currencies were also interchangeable at a fixed rate. For consumers and investors there were virtually no exchange rate fluctuations that would otherwise affect prices of foreign goods, services and assets. ${ }^{1}$

Today currencies are no longer linked to gold at a fixed rate. Instead gold prices in various currencies fluctuate (or "float") throughout the day, based on supply and demand, as do exchange rates between most currencies. For example on January 2, 2019, the dollar price of the Euro was 1.13, or $\$ 1.13 / \epsilon$. It has since ranged between $\$ 1.15 / €$ and $\$ 1.09 / €$ and closed at $\$ 1.10 / €$ on November 7. The Euro has therefore become cheaper year-to-date, so the dollar is said to have strengthened (or appreciated) against the Euro. This is depicted in the nearby chart.

## Consumers and Investors

Exchange rates affect virtually all consumers. In a global economy the final goods or services we consume are often imported directly from another country or created using factors of production (natural resources, labor and capital) obtained in international markets. Since these items are priced in foreign currencies, dollars must at some point be exchanged for foreign currencies in order
U.S. / Euro Foreign Exchange Rate, U.S. Dollars to One Euro (\$/€)


Source: St. Louis Federal Reserve (daily, not seasonaly adjusted)
to obtain them. Therefore, all else equal, a strengthening dollar means lower prices for U.S. consumers. In our example on January $2 \$ 1.13$ was required to purchase one euro, so a bottle of French Bordeaux priced at $€ 35.39$ would have cost $\$ 40$ (calculated as $\$ 1.13 / € \mathrm{x}$ $€ 35.39=\$ 40$. But by November 7 the exchange rate had fallen to $\$ 1.10 / €$. So, assuming the price in France remained $€ 35.39$, by November that same bottle of wine would cost an American only $\$ 38.93$ (calculated as $\$ 1.10 / € \times € 35.39$ $=\$ 38.93)$.

Foreign travelers are familiar with exchange rate volatility. If the dollar depreciates (the dollar price of euros increases) during a trip to Europe, so will the dollar cost of dinner and entertainment. Of course the opposite may hold as well; U.S. travelers would benefit from an appreciating dollar.
U.S. households can invest in both foreign stocks and bonds or in funds that invest in them. While this offers the potential to diversify globally and take advantage of growth worldwide, it can also entail exchange rate risk. When you invest dollars in the Vanguard FTSE Developed Markets Fund for example, those dollars must first be converted to a foreign currency before the fund can purchase shares of stock in a foreign company. Once purchased, if the share price in local currency does not change but the dollar subsequently weakens relative to that currency, those shares will be worth more when sold and converted
back to dollars. Conversely, the dollar value of foreign shares will fall when the dollar appreciates. So far this year the dollar has grown stronger against the Euro, which has negatively impacted the returns of euro-denominated securities.

## Exchange Rate Determinants

What drives exchange rate changes? Currency rates are ultimately determined by supply and demand for goods, services, and capital assets that are accounted for through international fund flows. All such flows over a given time period are recorded and classified as either current account or capital account transactions. The current account measures a nation's short-term transactions such as imports and exports of goods, services transactions and investment income. The capital account records a nation's inflows and outflows of capital, such as changes in a country's holdings of debt and equity. While a full description of international flow of funds accounting is beyond the scope of this article, all such transactions require an exchange of currencies. Changes in exchange rates are therefore driven by the shifting preferences of consumers, producers, creditors and investors throughout the globe.

Future exchange rates are extremely volatile. Research suggests that currency movements are very difficult to predict in the short to medium-term in a manner that is relevant for making investment decisions. ${ }^{2}$ While it is reasonable to

[^0]| Returns and Volatility for U.S. Investors Jan. 2001 - Oct. 2019* |  |  |
| :--- | :---: | :---: |
| Total Return | Volatility |  |
| International Stocks, Unhedged | $4.2 \%$ | $16.4 \%$ |
| International Stocks, Hedged to U.S. Dollar | $3.5 \%$ | $13.7 \%$ |
| International Bonds, Unhedged | $2.7 \%$ | $7.4 \%$ |
| International Bonds, Hedged to U.S. Dollar | $3.0 \%$ | $1.1 \%$ |
| * Annualized total return, volatility measured by annualized standard deviation |  |  |
| See additional disclosures regarding indexes, page 86. |  |  |

assume that investors are rewarded for bearing currency risk in the long run, many would prefer to reduce, or even eliminate it. Fortunately, capital markets provide a means of doing so.

## Hedging

Money managers can invest in foreign securities while eliminating foreign exchange risk through currency hedging. Futures and forward contracts are commonly used for this purpose. For example, the eventual maturity value in dollars of a Euro bond purchased today would be negatively impacted if the dollar were to appreciate by the time the bond is redeemed. Conversely if the dollar were to depreciate the dollar value of the bond would increase. A fund manager purchasing such a bond
would eventually receive bond proceeds denominated in euros at a currently unknown exchange rate. But he can reduce or even eliminate this unknown by entering a forward contract today to deliver euros at today's exchange rate when the bond matures.

While we favor international bond funds that hedge against the dollar, our stock and REIT fund selections are not hedged. We make this distinction because we recommend bonds for portfolio stability. Foreign exchange rate volatility can overwhelm the generally moderate volatility of fixed income, turning an otherwise stable investment into a wild ride. However, exchange rate volatility does not overwhelm the already volatile experience of investing in stocks.

This is demonstrated in the table nearby, which depicts how currency
hedging affects returns and volatility for international bonds and stocks. By hedging away currency risk for international bonds during this period, returns change only slightly but volatility falls substantially. But for international stocks changes in volatility and returns from hedging are relatively small. Since hedging incurs transaction costs, we have concluded that currency hedging is justified for bonds but not for stocks.

## Conclusion

It is not meaningful to describe the strength of the dollar relative to another currency as "good" or "bad." As consumers of imports, households benefit from a stronger dollar, but suffer as owners of (unhedged) foreign assets. Conversely, a weaker dollar hurts consumers while benefiting these investors. Firms that rely on exports benefit from a weaker dollar because their customers can buy more of their goods, but a weak dollar hurts importers and producers who rely on foreign inputs; a stronger dollar reverses these outcomes.

Most long term investors are well served by maintaining exposure to global capital markets. Every quarter we describe sample allocations that can be used as a starting point in tailoring an individualized portfolio.

## DOWNSIDE RISK AND THE PATIENT INVESTOR

Advisors and investors invariably equate stocks with risk. When we discuss increasing the risk in our portfolio, we are usually talking about increasing the portfolio's exposure to stocks.

The traditional definition of risk is the variability of returns. If we use standard deviation as our measure of variability, we can clearly see that stock returns are more volatile than bond returns. Going back to 1926, the annualized standard deviation on stocks has been 19 percent, while the standard deviation on bonds is only 4 percent.

Investors familiar with statistics will recognize that a move of plus or minus two standard deviations is statistically "normal" in that we can be 95 percent confident that stocks will fluctuate from their average by plus or minus 38 percent in any given year. Bond returns fluctuate by only plus or minus 8 percent.

However, perhaps a better measure of risk is the likelihood of loss. If we take this more liberal definition of risk, it is especially important to consider historical outcomes over differing time spans.

In the accompanying table we show

| Trailing Period | Worst Return <br> (Annualized) | Percent of Periods with <br> Negative Returns |
| :---: | :---: | :---: |
| 1 -Year | $-67.6 \%$ | $25 \%$ |
| $3-$ Year | $-42.4 \%$ | $16 \%$ |
| $5-$ Year | $-17.4 \%$ | $12 \%$ |
| 10 -Year | $-4.9 \%$ | $5 \%$ |
| $20-$ Year | $1.9 \%$ | $0 \%$ |

the worst returns for the S\&P 500 over different lengths of time. ${ }^{1}$ Over one year, the risk of investing in the stock market is very high, with a worst one year return of negative 68 percent. Moreover, in roughly one in four 12-month periods historically, the stock market has lost value. Even over three years, the risk of investing is the stock market is incredibly high - with a worst annualized return of negative 42 percent, which took place during the Great Depression.

But over longer time horizons we see that the worst returns and the likelihood of having a negative outcome diminish. Only about one in eight fiveyear periods have had a negative return in the stock market. Long term investors should note that there has never been a negative 20-year period in the stock market. The absolute worst 20-year period, which started at the outset of the Great Depression, still provided a 45 percent total return (1.9 percent annualized).

Investors who are 50 or 60 years old

and bonds are even more reassuring. There has never historically been even a ten year period in which a 60/40 portfolio provided a loss. ${ }^{2}$ The worst 20-year period for a 60/40 portfolio provided a total return of 111 percent, which would have more than doubled the portfolio's value and well outpaced price inflation
may be starting to think about retirement, but they also have a potential investment horizon of several decades. After all, money should be invested throughout retirement. The future may not replicate the past, but for many, the greatest risk lies not in the stock market but in the chance we many lose our nerve and give up on stocks instead of waiting for recovery.

The chart above shows instances during which rolling returns in the stock
market were negative. The blue dots show trailing one-year periods that were negative, and there were many of them (275 of 1,115 trailing 12-month periods). The number of instances of negative returns decreases substantially as the time horizon increases, and there are zero instances of negative returns over a 20-year period.

Historical outcomes for more moderate portfolios comprised of both stocks
(this period coincided with the worst period for stocks, which began with the Great Depression).

Historical data is only that; it provides no guarantee of the future. While history is the only light we have to guide our path, it also tells us that free enterprise and property rights have been essential to prosperity. To reap the benefits investors must maintain their faith in capital markets.

1. Based on monthly returns, rolling time spans. Total returns, dividends reinvested, See page 86 for additional disclosures regarding indexes.
2. 60 percent S\&P 500, 40 percent Five-Year Treasury Notes, rebalanced quarterly, no transaction or advisory fees, reinvestment of all dividends and interest.

## ROTH CONVERSIONS: WHAT TO CONSIDER

Throughout one's working career and in early retirement an owner of a traditional IRA account faces an opportunity to convert his or her IRA to a Roth IRA. The decision is not simple so it sometimes gets ignored entirely. However, prudent investors with IRA accounts should keep this technique in mind.

## Roth vs Traditional IRA

A traditional IRA allows workers to put aside earnings "pre-tax." This means that you can avoid paying income taxes on earned income (subject to limitations) by contributing such income to an IRA account. Many employer-sponsored retirement plans are similar in principle, including 401(k), 403(b), or SEP IRA plans (upon retirement, many investors choose to convert $401(\mathrm{k})$ and similar plans to "Rollover" IRAs). When a retiree withdraws funds from a traditional or rollover IRA, those funds are 100 percent taxable as ordinary income, just like taxable wages. Retirement withdrawals are mandatory because Required Minimum Distributions (RMDs) begin at age 70.

A Roth IRA on the other hand allows only "after-tax" deposits. Contributions
are made from earnings that have already been taxed (employer plans with similar features, such as Roth 401 (k) accounts, are now increasingly available). Contributions to a Roth are not tax deductible. Their advantage is that withdrawals in retirement are taken 100 percent taxfree, regardless of their size. Roth IRAs are not subject to the RMDs that apply to traditional IRAs, so they are ideal for long-term investing. Many investors designate their Roth IRA as the last account to tap for retirement spending and earmark these assets as an eventual bequest for heirs.

Many workers want to know whether it is better to put money in a traditional or a Roth IRA. The answer depends on tax rates now and in the future. If your marginal income tax rate is the same during your career as it is in retirement, then there is no difference in "after-tax"
value of a traditional IRA versus a Roth account.

Consider an example. Henry, age 45, who earned \$1,000 from his employer that he wants to save for retirement (on which he has not yet paid income taxes). His marginal tax rate is 24 percent now, and he expects it to be 24 percent in retirement. The table nearby shows how contributions would grow under both the traditional and Roth options. It is evident that Henry will be equally well off whether he chooses to save in a traditional or a Roth IRA.

The only way that we can know whether one option would be better is if we know Henry's current and future income. Since most investors cannot predict how much they will have in retirement, and tax rates are subject to change, this is unknowable.

| Hypothetical Growth | Traditional IRA | Roth IRA |
| :--- | :---: | :---: |
| After-tax contribution (24\% marginal tax rate) | $\$ 1,000$ | $\$ 760$ |
| Growth rate | $7 \%$ | $7 \%$ |
| Future value (20 years) | $\$ 3,870$ | $\$ 2,941$ |
| After-tax future value (24\% marginal tax rate) | $\$ 2,941$ | $\$ 2,941$ |

## Tax Diversification

Clearly future tax rates are a critical unknown when facing the "traditional versus Roth" decision. In other words, future taxation is a form of risk.

Diversification is an invaluable tool to managing financial risk, and taxation is no exception. In essence, by contributing to both a traditional and a Roth account, an investor can hedge against risk that future tax rates will differ from today's rates.

As a rule of thumb, since we don't know which way tax rates will go in the future, it is sensible to hold both traditional and Roth accounts. But much depends on individual circumstances.

## Other Considerations

One reason that many people seem to prefer a traditional IRA or $401(\mathrm{k})$ is that they suspect that their income tax rate will be lower in retirement. There is some evidence that income on average tends to be lower in retirement, when taxable wages come to an end.

However, retired investors with large IRA balances may nonetheless find their income to be quite high after age 70, when RMDs begin. One's required distribution at any given age is based on the account balance and the taxpayer's remaining life expectancy.

For example, at age 70, the annual minimum distribution is 3.65 percent of the IRA balance ${ }^{1}$, meaning a retiree with $\$ 1$ million in IRAs would be forced to withdraw about $\$ 36,500$ and pay taxes on that amount. The required minimum payout rises to 5.35 percent at age 80 and to 8.77 percent at age 90 . So a retiree who still had a $\$ 1$ million IRA at age 90 would be forced to withdraw and pay taxes on about $\$ 87,700$. This "threat" of a potentially larger-than-expected

IRA balance in retirement would argue toward hedging this risk by reducing contributions to a traditional IRA or 401(k) early in one's working career, in favor of Roth contributions.

On the other hand, a young worker with a very high current income taxable income, who is highly confident that his future tax rate will be lower, might emphasize tax-deductible contributions to his employer-sponsored traditional 401(k) over the Roth alternative.

The good news is that there is flexibility; an early decision to forego a Roth account can be modified later, as circumstances change, through a Roth conversion.

## Roth Conversions

Investors have the opportunity to "convert" traditional IRAs to a Roth status. Investors can elect to effect a conversion by withdrawing money from the traditional IRA, paying income taxes on it, and placing the after-tax balance in a Roth IRA. Custodians such as Charles Schwab or TD Ameritrade have a simple form for Roth conversions that can be used to elect a tax withholding for this purpose. Alternatively, the taxes due can be paid from an "outside" source (other than the IRA), if such funding is available. Conversions are flexible in that an investor can elect to convert all or just a portion of an IRA.

Conversions should be approached with caution. For example, a younger worker who has no outside source for paying taxes due might be wise to forego a conversion because the amount converted to the Roth may be significantly reduced by current taxes due. The future value of the tax incurred, had it instead grown tax-free in a traditional IRA, can be quite large.

There is also a timing risk associated
with conversions. Roth conversions that take place right before a decline in markets can generate a tax liability on value that no longer exists. In the past, the tax code had permitted retroactive "recharacterizations" that effectively nullified the conversion in order to avoid such an outcome. That option is no longer available.

When deciding how much to convert one should carefully consider applicable tax brackets. It is often advisable to convert only an amount that would avoid pushing you into a higher tax bracket in the current year. For late-career investors and early retirees with little income, this can still allow for a fairly large conversion opportunity.

Consider for example a married, late-career worker who earns \$100,000 and files a joint tax return. Tax brackets for 2019 provide for a 22 percent levy on taxable income between $\$ 78,950$ and $\$ 168,400$. This means that until year-end the worker could convert up to $\$ 68,400$ of a traditional IRA at the taxpayer's current 22 percent tax rate. Although the tax hit today would be painful, the remaining funds would grow tax-free in the Roth IRA without the onus of required minimum distributions. This could turn out to be a wise decision, especially if the new tax rates are allowed to expire in 2025 as the law specifies.

Anyone facing a period of reduced taxable income may want to take advantage of a Roth conversion. For example, it is common today for workers to shift to part-time work in the years leading up to retirement, while delaying Social Security. This period of lower taxable income might create an opportunity to convert an IRA to a Roth while in a lower tax bracket.

We encourage our clients to discuss with their advisor whether a partial Roth conversion might be prudent.

1. This payout applies to the combined value of all IRAs and similarly structured retirement plans such as $401(\mathrm{k})$ accounts owned by the taxpayer.

## YEAR-END ESTATE PLANNING REMINDER

$Y_{\text {ear-end }}$ is a great time to review your estate planning needs. First of all, you should review beneficiaries listed on your investment accounts. IRAs and Roth IRAs can pass outside of probate directly to listed beneficiaries, but people often forget to update their beneficiaries for many years. Taxable brokerage accounts can also include "transfer on death" designations, that will transfer directly
to listed beneficiaries outside of probate (probate is the lengthy legal process for settling estates).

You may also choose to establish a trust for your estate planning needs. A trust will require that you work with an estate planning attorney, which will entail some upfront cost, but seeks to ensure that your assets are passed to your heirs as you wish. Again, a trust can help
you pass your assets to your heirs outside of probate.

Finally, if you are working with an attorney, it may be prudent to update or draft new advance medical directives, living wills or durable powers of attorney for health care. These documents can help appoint a decision maker in the event that you are unable to make your own health care decisions.

## THE HIGH-YIELD DOW INVESTMENT STRATEGY

## Recommended HYD Portfolio

As of November 15, 2019

|  | Rank |
| :--- | :---: |
| Dow, Inc. | 1 |
| Exxon Mobil | 2 |
| IBM | 3 |
| Verizon | 4 |
| Chevron | 5 |
| Pfizer | 6 |
| Proctor \& Gamble | 16 |
| Cash (6-mo. T-Bill) | N/A |
| Totals |  |

${ }^{* *}$ 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 porffolio and by benchmark indexes for periods ending October 31, 2019*. Returns for the 5 -,10- and 20 -year periods are annualized, as is the volatility (standard deviation) of returns.

*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.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. Microcaps - 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 (\$)

|  | 11/15/19 | Mo. Earlier | Yr. Earlier | Prem. (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Gold, London p.m. fixing | 1,466.90 | 1,487.80 | 1,211.85 |  |
| Silver, London Spot Price | 16.87 | 17.67 | 14.13 |  |
| Crude Oil, W. Texas Int. Spot | 57.54 | 52.81 | 56.45 |  |
| Coin Prices (\$) ${ }^{1}$ |  |  |  |  |
| American Eagle (1.00) | 1,482 | 1,503 | 1,237 | 1.02 |
| Austrian 100-Corona (0.9802) | 1,432 | 1,452 | 1,182 | -0.42 |
| British Sovereign (0.2354) | 345 | 350 | 285 | 0.00 |
| Canadian Maple Leaf (1.00) | 1,477 | 1,498 | 1,222 | 0.68 |
| Mexican 50-Peso (1.2057) | 1,761 | 1,786 | 1,453 | -0.45 |
| Mexican Ounce (1.00) | 1,485 | 1,506 | 1,230 | 1.23 |
| S. African Krugerrand (1.00) | 1,474 | 1,495 | 1,219 | 0.48 |
| U.S. Double Eagle-\$20 (0.9675) |  |  |  |  |
| St. Gaudens (MS-60) | 1,457 | 1,457 | 1,190 | 2.66 |
| Liberty (Type II-AU50) | 1,467 | 1,467 | 1,325 | 3.37 |
| Liberty (Type III-AU50) | 1,442 | 1,442 | 1,162 | 1.60 |
| U.S. Silver Coins (\$1,000 face value, circulated) |  |  |  |  |
| 90\% Silver Circ. (715 oz.) | 12,529 | 12,529 | 9,930 | 3.87 |
| 40\% Silver Circ. (295 oz.) | 5,121 | 5,121 | 4,028 | 2.89 |

${ }^{1}$ Premium reflects percentage difference between coin price and value of metal in a coin. The weight in troy ounces of the precious metal in coins is indicated in parentheses. Premiums will vary; these indicated premiums are provided in The CDN Monthly Greysheet..


THE DOW JONES INDUSTRIALS RANKED BY YIELD*

|  | Ticker <br> Symbol | Market Prices (\$) |  |  | 12-Month (\$) |  | Latest Dividend |  |  | Indicated |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Amount | Record | Payable | Annual | Yield $\dagger$ |
|  |  | 11/15/19 | 9/13/19 | 10/15/18 |  |  | High | Low | (\$) | Date | Date | Dividend | ) (\%) |
| Dow Chemical | DOW | 54.86 | 47.20 | n/a | 60.52 | 40.44 | 0.700 | 11/29/19 | 12/13/19 | 2.800 | 5.10 |
| Exxon Mobil | XOM | 69.19 | 69.42 | 78.19 | 83.49 | 64.65 | 0.870 | 11/21/19 | 12/10/19 | 3.480 | 5.03 |
| IBM | IBM | 134.40 | 143.00 | 121.44 | 152.95 | 105.94 | 1.620 | 11/8/19 | 12/10/19 | 6.480 | 4.82 |
| Verizon | VZ | 59.51 | 60.55 | 59.08 | 61.34 | 52.28 | 0.615 | 10/10/19 | 11/1/19 | 2.460 | 4.13 |
| Chevron | CVX | 120.64 | 116.31 | 116.95 | 127.34 | 100.22 | 1.190 | 11/18/19 | 12/10/19 | 4.760 | 3.95 |
| Pfizer | PFE | 37.28 | 36.50 | 43.21 | 46.47 | 33.97 | 0.360 | 11/8/19 | 12/2/19 | 1.440 | 3.86 |
| 3M Company | MMM | 171.88 | 162.98 | 204.91 | 219.75 | 150.58 | 1.440 | 11/22/19 | 12/12/19 | 5.760 | 3.35 |
| Cisco | CSCO | 45.09 | 46.36 | 46.77 | 58.26 | 40.25 | 0.350 | 10/4/19 | 10/23/19 | 1.400 | 3.10 |
| Coca-Cola | KO | 52.67 | 53.51 | 49.74 | 55.92 | 44.42 | 0.400 | 12/2/19 | 12/16/19 | 1.600 | 3.04 |
| Walgreen's | WBA | 62.14 | 54.51 | 82.29 | 86.31 | 49.03 | 0.458 | 11/18/19 | 12/12/19 | 1.830 | 2.94 |
| Caterpillar | CAT | 145.31 | 131.03 | 129.42 | 148.47 | 111.75 | 1.030 | 10/21/19 | 11/20/19 | 4.120 | 2.84 |
| Johnson \& Johnson | JNJ | 134.94 | 132.84 | 144.50 | 148.99 | 121.00 | 0.950 | 11/26/19 | 12/10/19 | 3.800 | 2.82 |
| J P Morgan | JPM | 129.53 | 119.96 | 110.07 | 131.29 | 91.11 | 0.900 | 10/4/19 | 10/31/19 | 3.600 | 2.78 |
| Merck | MRK | 84.90 | 85.04 | 74.84 | 87.35 | 70.89 | 0.550 | 9/16/19 | 10/7/19 | 2.200 | 2.59 |
| McDonald's | MCD | 193.97 | 207.22 | 183.56 | 221.93 | 169.04 | 1.250 | 12/2/19 | 12/16/19 | 5.000 | 2.58 |
| Procter and Gamble | - PG | 120.54 | 117.20 | 93.83 | 125.77 | 86.74 | 0.746 | 10/18/19 | 11/15/19 | 2.984 | 2.48 |
| Travelers | TRV | 133.57 | 143.31 | 125.59 | 155.09 | 111.08 | 0.820 | 12/10/19 | 12/31/19 | 3.280 | 2.46 |
| Home Depot, Inc. | HD | 237.29 | 235.62 | 177.36 | 239.31 | 158.09 | 1.360 | 9/5/19 | 9/19/19 | 5.440 | 2.29 |
| Goldman Sachs | GS | 220.25 | 206.46 | 203.74 | 224.77 | 151.70 | 1.250 | 12/2/19 | 12/30/19 | 5.000 | 2.27 |
| Boeing | BA | 371.68 | 370.96 | 341.57 | 446.01 | 292.47 | 2.055 | 11/8/19 | 12/6/19 | 8.220 | 2.21 |
| Intel Corp | INTC | 57.96 | 52.65 | 48.11 | 59.59 | 42.86 | 0.315 | 11/7/19 | 12/1/19 | 1.260 | 2.17 |
| United Tech. | UTX | 149.36 | 136.15 | 129.73 | 149.81 | 100.48 | 0.735 | 11/15/19 | 12/10/19 | 2.940 | 1.97 |
| Wal-Mart Stores | WMT | 118.87 | 119.53 | 99.54 | 125.38 | 85.78 | 0.530 | 12/6/19 | 1/2/20 | 2.120 | 1.78 |
| Unitedhealth Group | UNH | 269.40 | 238.59 | 264.94 | 287.94 | 208.07 | 1.080 | 12/9/19 | 12/17/19 | 4.320 | 1.60 |
| American Express | AXP | 120.76 | 117.59 | 109.60 | 129.34 | 89.05 | 0.430 | 10/4/19 | 11/8/19 | 1.720 | 1.42 |
| Microsoft Corp. | MSFT | 149.97 | 141.57 | 107.28 | 151.33 | 93.96 | 0.510 | 11/21/19 | 12/12/19 | 2.040 | 1.36 |
| Walt Disney | DIS | 144.67 | 129.76 | 117.11 | 150.63 | 100.35 | 0.880 | 7/8/19 | 7/25/19 | 1.760 | 1.22 |
| Apple | AAPL | 265.76 | 235.32 | 191.41 | 268.00 | 142.00 | 0.770 | 11/11/19 | 11/14/19 | 3.080 | 1.16 |
| Nike | NKE | 93.04 | 94.79 | 74.33 | 96.87 | 66.53 | 0.220 | 9/3/19 | 9/30/19 | 0.880 | 0.95 |
| Visa Inc. | V | 179.77 | 178.75 | 141.84 | 187.05 | 121.60 | 0.300 | 11/15/19 | 12/3/19 | 1.200 | 0.67 |
| + Based on indicated di All data adjusted for spli | dividends an plits and spin | price as of month data | 1/15/19. E begins $11 / 1$ | dividends a | not includ | d in annua | yields. |  |  |  |  |


| Data as of October 31, 2019 |  | Security Symbol(s) (1) |  | Avg. Market Cap / Avg. Maturity | Number of Holdings | Expense <br> Ratio (\%) | Turnover <br> (\%) | Price-toBook Ratio | Trailing12-Mo. Yield$(\%)$ | Annualized Returns (\%) |  |  | Tax Cost Ratio - <br> 3 Years (\%) (3) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1-Year | 3-Year |  |  |  |  |  |  | 5-Year |  |
| Fixed Income |  |  |  | Mutual Fund | ETF |  |  |  |  |  |  |  |  |
| Short-Term Bonds | Vanguard Short-Term Bond Adm | VBIRX | BSV | 2.80 yrs | 2448 | 0.07 | 48 |  | 2.23 | 6.19 | 2.12 | 1.92 | 0.78 |
| Short-Term Bonds | SPDR Portfolio Short Term Corp Bd ETF |  | SPSB | 1.91 yrs | 1192 | 0.07 | 46 |  | 2.79 | 5.57 | 2.51 | 2.09 | 0.92 |
| Short-Term Bonds | iShares 1-3 Year Treasury Bond ETF |  | SHY | 1.92 yrs | 89 | 0.15 | 62 |  | 2.11 | 4.45 | 1.52 | 1.21 | 0.60 |
| Interm-Term | Vanguard Total Bond Market Adm | VBTLX | BND | 8.30 yrs | 17493 | 0.05 | 54 |  | 2.73 | 11.48 | 3.25 | 3.20 | 1.09 |
| Interm-Term | iShares Core US Aggregate Bond ETF |  | AGG | 7.78 yrs | 7637 | 0.05 | 146 |  | 2.71 | 11.27 | 3.20 | 3.14 | 1.05 |
| Tax-Exempt | Vanguard Ltd-Term Tax-Exempt Inv | VMLTX |  | 2.90 yrs | 5636 | 0.17 | 28 |  | 1.89 | 4.76 | 1.89 | 1.63 | 0.00 |
| Tax-Exempt | SPDR Nuveen Blmbg Barclays ST MunBd ETF |  | SHM | 3.07 yrs | 916 | 0.20 | 35 |  | 1.38 | 4.64 | 1.47 | 1.20 | 0.00 |
| Tax-Exempt | Vanguard Interm-Term Tx-Ex Inv | VWITX |  | 5.30 yrs | 8788 | 0.17 | 15 |  | 2.63 | 8.65 | 3.13 | 3.09 | 0.00 |
| Inflation-Protected | iShares TIPS Bond ETF |  | TIP | 8.30 yrs | 41 | 0.19 | 21 |  | 1.93 | 8.75 | 2.26 | 2.17 | 0.88 |
| Inflation-Protected | Vanguard Inflation-Protected Securities Inv | VIPSX |  | 8.60 yrs | 43 | 0.20 | 27 |  | 2.29 | 8.36 | 2.08 | 2.10 | 1.16 |
| International | Vanguard Total International Bond Adm | VTABX | BNDX | 10.00 yrs | 6089 | 0.11 | 22 |  | 2.83 | 10.36 | 4.35 | 4.30 | 0.96 |
| Real Estate (REITs) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. REITs | Vanguard REIT Adm | VGSLX | VNQ | 16.16 B | 185 | 0.11 | 24 | 2.64 | 3.33 | 24.87 | 9.56 | 8.10 | 1.53 |
| U.S. REITs | SPDR Dow Jones REIT |  | RWR | 14.24 B | 96 | 0.25 | 9 | 2.38 | 3.18 | 20.54 | 8.72 | 7.48 | 1.49 |
| Int'I REITs | Vanguard Global ex-US Real Estate Adm (2) | VGRLX | VNQI | 6.22 B | 691 | 0.12 | 7 | 0.97 | 3.62 | 19.46 | 9.09 | 5.61 | 1.63 |
| Int'I REITs | iShares International Developed Property |  | WPS | 6.55 B | 359 | 0.48 | 9 | 0.98 | 4.07 | 18.97 | 8.55 | 5.13 | 1.67 |
| Global (incl. U.S.) | SPDR Dow Jones Global Real Estate ETF |  | RWO | 10.63 B | 233 | 0.50 | 11 | 1.55 | 3.05 | 19.39 | 8.05 | 5.67 | 1.40 |
| U.S. Stocks |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Large Cap (blend) | Vanguard S\&P 500 Adm | VFIAX | VOO | 110.88 B | 516 | 0.04 | 4 | 3.13 | 1.93 | 14.30 | 14.87 | 10.74 | 0.55 |
| Large Cap (blend) | iShares Core S\&P 500 |  | IVV | 112.11 B | 509 | 0.04 | 5 | 3.14 | 2.02 | 14.29 | 14.87 | 10.75 | 0.53 |
| Large Cap (blend) | iShares Russell 1000 ETF |  | IWB | 86.18 B | 1005 | 0.15 | 6 | 3.03 | 1.81 | 14.03 | 14.59 | 10.43 | 0.51 |
| Large Cap Value | Vanguard Value Adm | VVIAX | VTV | 85.25 B | 341 | 0.05 | 8 | 2.16 | 2.45 | 11.00 | 12.57 | 9.32 | 0.69 |
| Large Cap Value | iShares Russell 1000 Value |  | IWD | 58.26 B | 769 | 0.19 | 17 | 1.90 | 2.32 | 11.02 | 10.32 | 7.46 | 0.65 |
| Small Cap (blend) | iShares Core S\&P Small-Cap ETF |  | IJR | 1.60 B | 606 | 0.07 | 14 | 1.67 | 1.41 | 3.28 | 11.72 | 8.82 | 0.40 |
| Small Cap (blend) | Schwab US Small-Cap ETF |  | SCHA | 2.47 B | 1742 | 0.04 | 9 | 1.68 | 1.48 | 6.11 | 10.46 | 7.20 | 0.44 |
| Small Cap Value | Vanguard Small Cap Value Adm | VSIAX | VBR | 3.66 B | 862 | 0.07 | 18 | 1.54 | 2.00 | 5.64 | 9.03 | 6.93 | 0.61 |
| Small Cap Value | iShares Russell 2000 Value |  | IWN | 1.55 B | 1399 | 0.24 | 26 | 1.22 | 1.86 | 3.01 | 8.44 | 6.14 | 0.58 |
| Small Cap Value | iShares Micro-Cap |  | IWC | 0.42 B | 1398 | 0.60 | 25 | 1.28 | 1.13 | -3.20 | 8.24 | 5.36 | 0.33 |
| Marketwide | Vanguard Total Stock Market Adm | VTSAX | VTI | 64.99 B | 3626 | 0.04 | 3 | 2.89 | 1.76 | 13.44 | 14.45 | 10.28 | 0.61 |
| Marketwide | Fidelity Total Market Index | FSKAX |  | 64.78 B | 3472 | 0.02 | 8 | 2.88 | 1.67 | 13.43 | 14.44 | 10.29 | 0.90 |
| Foreign Stocks |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Developed Markets | Vanguard FTSE Developed Markets Adm | VTMGX | VEA | 23.20 B | 3951 | 0.07 | 3 | 1.40 | 3.00 | 10.50 | 8.27 | 4.38 | 0.80 |
| Developed Markets | iShares Core MSCI EAFE ETF |  | IEFA | 23.63 B | 2484 | 0.07 | 3 | 1.44 | 3.08 | 11.21 | 8.68 | 4.65 | 0.84 |
| Emerging Markets | Vanguard Emerging Markets Stock Adm | VEMAX | VWO | 19.83 B | 4214 | 0.14 | 11 | 1.49 | 2.66 | 13.83 | 6.36 | 2.32 | 0.81 |
| Emerging Markets | Schwab Emerging Markets Equity ETF |  | SCHE | 29.31 B | 1327 | 0.13 | 18 | 1.51 | 3.03 | 14.77 | 7.37 | 3.09 | 0.81 |
| Gold-Related Funds |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gold ETFs | SPDR Gold Minishares |  | GLDM |  |  | 0.18 |  |  | 0.00 | 24.10 | n/a | n/a | 0.00 |
| Gold ETFs | GraniteShares Gold Trust |  | BAR |  |  | 0.17 |  |  | 0.00 | 24.19 | n/a | n/a | 0.00 |

 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.


[^0]:    1. Richard M. Salsman, Gold and Liberty, American Institute for Economic Research, Great Barrington, Mass., 2019.
    2. Mary Phillips, Karen Umland, "Currency Hedging" Dimensional Fund Advisors, May 2015.
