

Investment Strategy: “Time”

"Time is Archimedes' Lever in Investing - Archimedes is often quoted as saying, 'Give me a lever long enough and I can move the earth.' In investing, that lever is time. The length of time investments will be held, the period of time over which investment results will be measured and judged, is the single most powerful factor in any investment program. If time is short, the highest investments – the ones an investor naturally most wants to own – will be undesirable, and the wise investor will avoid them. But, if the time period for investing is abundantly long, the wise investor can commit without great anxiety to investments that appear in the short-run to be very risky. Given enough time, investments that might otherwise seem unattractive may become highly desirable. Time transforms investments from least attractive to most attractive – and vice versa – because, while the average expected rate of return is not at all affected by time, the range or distribution of actual return around the expected average is very greatly affected by time. The longer the time period over which investments are held, the closer the actual returns in a portfolio will come to the expected average.

The following table shows the compounding effect on \$1.00 invested at different compound rates compounded over different periods of time. It's well worth careful study – particularly to see how powerful is time. That's why time is the “Archimedes lever” of investment management."

... Investment Policy, *Winning the Loser's Game*, by Charles D. Ellis

Compound Rates of Return	Investment Returns		
	5 Years	10 Years	20 Years
20%	\$2.49	\$6.19	\$38.34
10%	1.61	2.59	6.73
4%	1.22	1.48	2.19

Source: "Winning the Loser's Game," by Charles D. Ellis

According to Wikipedia, "Charles 'Charley' D. Ellis (born October 22, 1937) is an American investment consultant. In 1972, Ellis founded Greenwich Associates, an international strategy consulting firm focused on financial institutions. Ellis was appointed twice to the faculty of the Harvard Business School in 1970 and 1974 and to the Yale School of Management in 1986. At both Harvard and Yale, he taught advanced courses on investment management. Ellis served as a successor trustee of Yale University from 1997 to 2008, where he chaired the university's investment committee for nine years alongside Chief Investment Officer David Swensen. He received the Yale Medal in 2009 for his service to the University. Ellis served as chair of the board of the Institute of Chartered Financial Analysts and is one of only twelve people recognized by the CFA Institute for lifetime contributions to the investment profession." We recalled his piece on “Time” while reflecting on a comment from Ron Baron, of Baron Capital fame, who told me his average holding period for a stock is 10 years!

When asked what he considered man's greatest discovery, Albert Einstein replied, without hesitation, “Compound interest!” Yet, compound interest is ignored in this bull market. For instance, the baby boomer bulls say that compounding dividends doesn't matter anymore. Nobody wants to pay double taxes on them. And, that old bear growl about the markets being vulnerable when the yield on the S&P 500 drops below 3% hasn't been valid for years. So, who cares if the current yield on the S&P 500 is only marginally above 2%?

Well, we happen to think dividends are very important. Indeed, historically, a major percentage of the return on stocks has come from dividends. How much? Of the 10.4% compounded annual return generated by stocks in the S&P 500 since 1926, nearly half has come from dividends. There are a number of equity incomes funds that I own that have not only provided decent capital gains, but good dividend income as well. For some of those names please contact our Mutual Fund Research Department.

As for the state of the current stock market, so far we have been wrong in that after identifying the December lows, we have been looking for a

Please read domestic and foreign disclosure/risk information beginning on page 3 and Analyst Certification on page 3.

pullback from the 2600 -2620 level basis the S&P 500 (SPX/2664.76). We did say that if a resolution to either the China trade tiff, or the government shutdown, were resolved that “call” might not be correct. This week we should get more clarity on which way this market wants to move as the FOMC will announce its latest views on monetary policy Wednesday, followed by a Jerome Powell Press conference. It is worth mentioning that the S&P 500 has rallied close to its downtrend line and it will be interesting to see if it can break out above it. Our question remains whether there is just not much “internal energy” in the stock market to power stocks higher from these levels.

The call for this week: I am in NYC for the week seeing portfolio managers, doing media, conducting presentations for our financial advisors and their clients, and marinating some olives with Arthur Cashin and the Friends of Fermentation. Since my schedule is pretty full, there may not be any more letters this week. That might be just as well since the near-term direction of the stock market is likely not going to be known until after the FOMC press conference. This morning the preopening S&P Futures are down a large 12 points at 5:00 a.m. as China’s industrial production sinks, President Trump doubts a border deal can be achieved, and fears of a global economic slowdown swirl.

IMPORTANT INVESTOR DISCLOSURES

Raymond James & Associates (RJA) is a FINRA member firm and is responsible for the preparation and distribution of research created in the United States. Raymond James & Associates is located at The Raymond James Financial Center, 880 Carillon Parkway, St. Petersburg, FL 33716, (727) 567-1000. Non-U.S. affiliates, which are not FINRA member firms, include the following entities that are responsible for the creation and distribution of research in their respective areas: in Canada, Raymond James Ltd. (RJL), Suite 2100, 925 West Georgia Street, Vancouver, BC V6C 3L2, (604) 659-8200; in Europe, Raymond James Euro Equities SAS (also trading as Raymond James International), 40 rue La Boetie, 75008, Paris, France, +33 1 45 64 0500, and Raymond James Financial International Ltd., Broadwalk House, 5 Appold Street, London, England EC2A 2AG, +44 203 798 5600.

This document is not directed to, or intended for distribution to or use by, any person or entity that is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation. The securities discussed in this document may not be eligible for sale in some jurisdictions. This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. **Investors should consider this report as only a single factor in making their investment decision.**

For clients in the United States: Any foreign securities discussed in this report are generally not eligible for sale in the U.S. unless they are listed on a U.S. exchange. This report is being provided to you for informational purposes only and does not represent a solicitation for the purchase or sale of a security in any state where such a solicitation would be illegal. Investing in securities of issuers organized outside of the U.S., including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of, the U.S., including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of, the U.S. Securities and Exchange Commission. There may be limited information available on such securities mentioned in this report. Please ask your Financial Advisor for additional details and to determine if a particular security is eligible for purchase in your state.

The information provided is as of the date above and subject to change, and it should not be deemed a recommendation to buy or sell any security. Certain information has been obtained from third-party sources we consider reliable, but we do not guarantee that such information is accurate or complete. Persons within the Raymond James family of companies may have information that is not available to the contributors of the information contained in this publication. Raymond James, including affiliates and employees, may execute transactions in the securities listed in this publication that may not be consistent with the ratings appearing in this publication.

Raymond James ("RJ") research reports are disseminated and available to RJ's retail and institutional clients simultaneously via electronic publication to RJ's internal proprietary websites ([RJ Client Access](#) & [RJ Capital Markets](#)). Not all research reports are directly distributed to clients or third-party aggregators. Certain research reports may only be disseminated on RJ's internal Proprietary websites; however, such research reports will not contain estimates or changes to earnings forecasts, target price, valuation or investment or suitability rating. Individual Research Analysts may also opt to circulate published research to one or more clients electronically. This electronic communication is discretionary and is done only after the research has been publically disseminated via RJ's internal factors including, but not limited to, the client's individual preference as to the frequency and manner of receiving communications from Research Analysts. For research reports, models, or other data available on a particular security, please contact your Sales Representative or visit [RJ Client Access](#) or [RJ Capital Markets](#).

Links to third-party websites are being provided for information purposes only. Raymond James is not affiliated with and does not endorse, authorize, or sponsor any of the listed websites or their respective sponsors. Raymond James is not responsible for the content of any third-party website or the collection of use of information regarding any website's users and/or members.

Additional information is available on request.

Analyst Information

Registration of Non-U.S. Analysts: The analysts listed on the front of this report who are not employees of Raymond James & Associates, Inc., are not registered/qualified as research analysts under FINRA rules, are not associated persons of Raymond James & Associates, Inc., and are not subject to FINRA Rule 2241 restrictions on communications with covered companies, public companies, and trading securities held by a research analyst account.

Analysts Holdings and Compensation: Equity analysts and their staffs at Raymond James are compensated based on a salary and bonus system. Several factors enter into the bonus determination, including quality and performance of research product, the analyst's success in rating stocks versus an industry index, and support effectiveness to trading and the retail and institutional sales forces. Other factors may include but are not limited to: overall ratings from internal (other than investment banking) or external parties and the general productivity and revenue generated in covered stocks.

The analyst Jeffrey D. Saut, primarily responsible for the preparation of this research report, attests to the following: (1) that the views and opinions rendered in this research report reflect his or her personal views about the subject companies or issuers and (2) that no part

of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views in this research report. In addition, said analyst(s) has not received compensation from any subject company in the last 12 months.

Ratings and Definitions

Raymond James & Associates (U.S.) definitions: **Strong Buy (SB1)** Expected to appreciate, produce a total return of at least 15%, and outperform the S&P 500 over the next six to 12 months. For higher yielding and more conservative equities, such as REITs and certain MLPs, a total return of 15% is expected to be realized over the next 12 months. **Outperform (MO2)** Expected to appreciate and outperform the S&P 500 over the next 12-18 months. For higher yielding and more conservative equities, such as REITs and certain MLPs, an Outperform rating is used for securities where we are comfortable with the relative safety of the dividend and expect a total return modestly exceeding the dividend yield over the next 12-18 months. **Market Perform (MP3)** Expected to perform generally in line with the S&P 500 over the next 12 months. **Underperform (MU4)** Expected to underperform the S&P 500 or its sector over the next six to 12 months and should be sold. **Suspended (S)** The rating and price target have been suspended temporarily. This action may be due to market events that made coverage impracticable, or to comply with applicable regulations or firm policies in certain circumstances, including when Raymond James may be providing investment banking services to the company. The previous rating and price target are no longer in effect for this security and should not be relied upon.

Raymond James Ltd. (Canada) definitions: **Strong Buy (SB1)** The stock is expected to appreciate and produce a total return of at least 15% and outperform the S&P/TSX Composite Index over the next six months. **Outperform (MO2)** The stock is expected to appreciate and outperform the S&P/TSX Composite Index over the next twelve months. **Market Perform (MP3)** The stock is expected to perform generally in line with the S&P/TSX Composite Index over the next twelve months and is potentially a source of funds for more highly rated securities. **Underperform (MU4)** The stock is expected to underperform the S&P/TSX Composite Index or its sector over the next six to twelve months and should be sold.

In transacting in any security, investors should be aware that other securities in the Raymond James research coverage universe might carry a higher or lower rating. Investors should feel free to contact their Financial Advisor to discuss the merits of other available investments.

	Coverage Universe Rating Distribution*		Investment Banking Relationships	
	RJA	RJL	RJA	RJL
Strong Buy and Outperform (Buy)	57%	72%	23%	26%
Market Perform (Hold)	39%	26%	10%	8%
Underperform (Sell)	5%	3%	5%	0%

* Columns may not add to 100% due to rounding.

Suitability Ratings (SR)

Medium Risk/Income (M/INC) Lower to average risk equities of companies with sound financials, consistent earnings, and dividend yields above that of the S&P 500. Many securities in this category are structured with a focus on providing a consistent dividend or return of capital.

Medium Risk/Growth (M/GRW) Lower to average risk equities of companies with sound financials, consistent earnings growth, the potential for long-term price appreciation, a potential dividend yield, and/or share repurchase program.

High Risk/Income (H/INC) Medium to higher risk equities of companies that are structured with a focus on providing a meaningful dividend but may face less predictable earnings (or losses), more leveraged balance sheets, rapidly changing market dynamics, financial and competitive issues, higher price volatility (beta), and potential risk of principal. Securities of companies in this category may have a less predictable income stream from dividends or distributions of capital.

High Risk/Growth (H/GRW) Medium to higher risk equities of companies in fast growing and competitive industries, with less predictable earnings (or losses), more leveraged balance sheets, rapidly changing market dynamics, financial or legal issues, higher price volatility (beta), and potential risk of principal.

High Risk/Speculation (H/SPEC) High risk equities of companies with a short or unprofitable operating history, limited or less predictable revenues, very high risk associated with success, significant financial or legal issues, or a substantial risk/loss of principal.

Stock Charts, Target Prices, and Valuation Methodologies

Valuation Methodology: The Raymond James methodology for assigning ratings and target prices includes a number of qualitative and quantitative factors, including an assessment of industry size, structure, business trends, and overall attractiveness; management effectiveness; competition; visibility; financial condition; and expected total return, among other factors. These factors are subject to change depending on overall economic conditions or industry- or company-specific occurrences.

Target Prices: The information below indicates our target price and rating changes for the subject companies over the past three years.

Risk Factors

General Risk Factors: Following are some general risk factors that pertain to the business of the subject companies and the projected target prices and recommendations included on Raymond James research: (1) Industry fundamentals with respect to customer demand or product/service pricing could change and adversely impact expected revenues and earnings; (2) Issues relating to major competitors or market shares or new product expectations could change investor attitudes toward the sector or this stock; (3) Unforeseen developments with respect to the management, financial condition or accounting policies or practices could alter the prospective valuation; or (4) External factors that affect the U.S. economy, interest rates, the U.S. dollar or major segments of the economy could alter investor confidence and investment prospects. International investments involve additional risks such as currency fluctuations, differing financial accounting standards, and possible political and economic instability.

Additional Risk and Disclosure information, as well as more information on the Raymond James rating system and suitability categories, is available at raymondjames.bluematrix.com/sellside/Disclosures.action. Copies of research or Raymond James' summary policies relating to research analyst independence can be obtained by contacting any Raymond James & Associates or Raymond James Financial Services office (please see RaymondJames.com for office locations) or by calling 727-567-1000, toll free 800-237-5643.

U.S. Markets Index Information: *U.S. Treasury securities* are guaranteed by the U.S. government and, if held to maturity, offer a fixed rate of return and guaranteed principal value. The *Dow Jones Industrial Average* is an unmanaged index of 30 widely held securities. The *Dow Jones Transportation Average* is the most widely recognized gauge of the American transportation sector. The *Dow Jones Utility Average* keeps track of the performance of 15 prominent utility companies. The *S&P 500* is an unmanaged index of 500 widely held stocks. The *S&P Mid Cap 400 Index* is a capitalization-weighted index that measures the performance of the mid-range sector of the U.S. stock market. The *S&P Small Cap 600 Index* is an unmanaged index of 600 small-cap stocks. The *NASDAQ Composite Index* is an unmanaged index of all stocks traded on the NASDAQ over-the-counter market. The *Russell 2000 index* is an unmanaged index of small cap securities which generally involve greater risks. The *KBW Bank Sector (BKX)* is a capitalization-weighted index composed of 24 geographically diverse stocks representing national money center banks and leading regional institutions. The *NYSE Arca Biotechnology Index (BTK)* is an equal dollar weighted index designed to measure the performance of a cross section of companies in the biotechnology industry that are primarily involved in the use of biological processes to develop products or provide services. The *NYSE Arca Oil Index (XOI)* is a price-weighted index of the leading companies involved in the exploration, production, and development of petroleum. The *PHLX Semiconductor Sector Index (SOXX)* measures the performance of U.S.-traded securities of companies engaged in the semiconductor business, which includes companies engaged in the design, distribution, manufacture, and sales of semiconductors. The *Philadelphia Gold and Silver Index (XAU)* is an index of 16 precious metal mining companies that is traded on the Philadelphia Stock Exchange.

Futures: Futures prices are current as of the publication of this report, but will fluctuate. Please contact your financial advisor for updated information.

Foreign Markets Information: The FTSE 100 Index is a share index of the stocks of the 100 companies with the highest market capitalization listed on the London Stock Exchange. The *DAX* (German stock index) is a blue chip stock market index consisting of the 30 major German companies trading on the Frankfurt Stock Exchange. The *Bovespa* Index is a gross total return index weighted by traded volume and is comprised of the most liquid stocks traded on the Sao Paulo Stock Exchange. The *Nikkei 225* is a price-weighted index consisting of 225 prominent stocks on the Tokyo Stock Exchange. The *Hang Seng Index* is used to record and monitor daily changes of the largest companies of the Hong Kong stock market and is the main indicator of the overall market performance in Hong Kong. International investing involves additional risks such as currency fluctuations, differing financial accounting standards, and possible political and economic instability. These risks are greater in emerging markets.

Commodity Price Information: The *CRB Index* measures the overall direction of commodity sectors. The *US Dollar Index (USDIX)* is an index (or measure) of the value of the United States dollar relative to a basket of foreign currencies. Commodities are generally considered speculative because of the significant potential for investment loss. Commodities are volatile investments and should only form a small part of a diversified portfolio. There may be sharp price fluctuations even during periods when prices overall are rising.

Market Valuation Information: The *McClellan Oscillator* is a market breadth indicator that is based on the difference between the number of advancing and declining issues on the NYSE. Technical Analysis is a method of evaluating securities by analyzing statistics generated by market activity, such as past prices and volume. Price Earnings Ratio (P/E) is the price of the stock divided by its earnings per share. The earnings yield is earnings per share divided by the current market price per share. The equity risk premium is the earnings yield minus the current rate on the 10-year U.S. Treasury note and is the excess return that the stock market provides over a risk-free rate.

Simple Moving Average (SMA) - A simple, or arithmetic, moving average is calculated by adding the closing price of the security for a number of time periods and then dividing this total by the number of time periods.

Exponential Moving Average (EMA) - A type of moving average that is similar to a simple moving average, except that more weight is given to the latest data.

Relative Strength Index (RSI) - The Relative Strength Index is a technical momentum indicator that compares the magnitude of recent gains to recent losses in an attempt to determine overbought and oversold conditions of an asset.

International securities involve additional risks such as currency fluctuations, differing financial accounting standards, and possible political and economic instability. These risks are greater in emerging markets.

Small-cap stocks generally move greater risks. Dividends are not guaranteed and will fluctuate. Past performance may not be indicative of future results.

Investors should consider the investment objectives, risks, and charges and expenses of mutual funds and exchange-traded funds carefully before investing. The prospectus contains this and other information about mutual funds and exchange-traded funds. The prospectus is available from your financial advisor and should be read carefully before investing.

International Disclosures

For clients in the United Kingdom:

For clients of Raymond James Financial International Limited (RJFI): This document and any investment to which this document relates is intended for the sole use of the persons to whom it is addressed, being persons who are Eligible Counterparties or Professional Clients as described in the FCA rules or persons described in Articles 19(5) (Investment professionals) or 49(2) (high net worth companies, unincorporated associations, etc.) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended) or any other person to whom this promotion may lawfully be directed. It is not intended to be distributed or passed on, directly or indirectly, to any other class of persons and may not be relied upon by such persons and is, therefore, not intended for private individuals or those who would be classified as Retail Clients.

For clients of Raymond James Investment Services, Ltd.: This report is for the use of professional investment advisers and managers and is not intended for use by clients.

For purposes of the Financial Conduct Authority requirements, this research report is classified as independent with respect to conflict of interest management. RJFI, and Raymond James Investment Services, Ltd. are authorised and regulated by the Financial Conduct Authority in the United Kingdom.

For clients in France:

This document and any investment to which this document relates is intended for the sole use of the persons to whom it is addressed, being persons who are Eligible Counterparties or Professional Clients as described in "Code Monétaire et Financier" and Règlement General de l'Autorité des marchés Financiers. It is not intended to be distributed or passed on, directly or indirectly, to any other class of persons and may not be relied upon by such persons and is, therefore, not intended for private individuals or those who would be classified as Retail Clients.

For clients of Raymond James Euro Equities: Raymond James Euro Equities is authorised and regulated by the Autorité de Contrôle Prudentiel et de Résolution and the Autorité des Marchés Financiers.

For institutional clients in the European Economic Area (EEA) outside of the United Kingdom:

This document (and any attachments or exhibits hereto) is intended only for EEA institutional clients or others to whom it may lawfully be submitted.

For Canadian clients:

This report is not prepared subject to Canadian disclosure requirements, unless a Canadian analyst has contributed to the content of the report. In the case where there is Canadian analyst contribution, the report meets all applicable IROC disclosure requirements.

Proprietary Rights Notice: By accepting a copy of this report, you acknowledge and agree as follows:

This report is provided to clients of Raymond James only for your personal, noncommercial use. Except as expressly authorized by Raymond James, you may not copy, reproduce, transmit, sell, display, distribute, publish, broadcast, circulate, modify, disseminate, or commercially exploit the information contained in this report, in printed, electronic, or any other form, in any manner, without the prior express written consent of Raymond James. You also agree not to use the information provided in this report for any unlawful purpose.

This report and its contents are the property of Raymond James and are protected by applicable copyright, trade secret, or other intellectual property laws (of the United States and other countries). United States law, 17 U.S.C. Sec. 501 et seq, provides for civil and criminal penalties for copyright infringement. No copyright claimed in incorporated U.S. government works.