

Boosting the Portfolio

Two years ago, Moderna was still a fledgling drug research company with miniscule revenues, but Covid-19 suddenly changed the company's fortunes. When Moderna introduced a revolutionary and effective messenger RNA (mRNA) Covid-19 vaccine to the world, Moderna became a house-hold name and a prominent industry leader. The company's stock, with the ticker symbol MRNA, had a meteoric rise, rocketing 450 percent in 2020 and another 140 percent in 2021 to above \$495 per share in September.

Since then, the wind has been whistling out of MRNA as it plunged below \$140 per share recently. Behind the deflation was the consensus that revenue from Moderna's Covid-19 vaccine, called Spikevax, would be declining in the years ahead. It was a classic Wall Street swing of excesses, as MRNA turned from a high-flying, over-valued speculation into an outright value proposition. It is now worthy of inclusion into our portfolio.

The mRNA Technology

There are inherent advantages of an mRNA platform over traditional drug development. Once the sequence and the proteins of a virus are established, it is a relatively simple process to synthesize a vaccine. In a historically rapid time-frame, the vaccine moves from inception to clinical trials. Following an expedited approval, manufacturing can then scale-up. The entire process can take a matter of weeks rather than years. Moderna's Covid vaccine took less than eight weeks, from design to shipping.

Another advantage of the mRNA platform is versatility. Most traditional drugs require a dedicated facility to develop the proteins or viruses, and a long time to grow them. The mRNA vaccine does not need a dedicated facility or the growing time. The synthesized mRNA vaccine is simply injected, and the human body becomes the facility.

Additionally, the nature of mRNA technology allows for synthesizing several vaccines and treatments at the same time. The mRNA vaccine manufacturing plant can be used to produce any other mRNA-based drug. This includes vaccines for various mutations of COVID-19, but also includes viruses for the flu, HIV, *Cytomegalovirus* (CMV), Tuberculosis, Zika, or Rabies. This versatility substantially lowers capital costs of production.



Gray Emerson Cardiff,
Editor Since 1988

Investment returns in prior years have been calculated independently by the Hulbert Financial Group and concur with ours. From 2000 through 2021, the *Sound Advice* model portfolio averaged a 9.5% annual return versus 5.7% from the S&P 500.

Supply and Demand

Moderna shipped 807 million doses of Spikevax in 2021. However, shipments were limited and did not meet demand because the higher dosage over Pfizer's version caused Moderna to incur supply constraints. Moderna has since developed additional manufacturing capacity and is now in better shape to meet demand. In the fourth quarter, Moderna shipped 300 million doses, which is an annual rate of 1.2 billion doses. Management believes that Moderna can produce two to three billion doses in 2022.

Fourth quarter results were announced on February 24. Earnings of \$11.29 per share from revenue of \$7.2 billion was substantially higher than expected and the stock jumped on the news. In 2021, earnings ended up being \$28.39 per share. At the current price, MRNA has a trailing twelve-month (TTM) price/earnings (P/E) ratio of 5.5.

Based on its backlog of orders and future commitments, management announced that it expects Moderna to sell at least \$19 billion of its Covid-19 vaccine in 2022, as compared to \$17.7 billion in 2021.

Moderna is working on a booster that targets both Omicron and the other circulating Covid variants, which management believes will be most appealing to governments buying booster doses later this year. Management also believes that a seasonal booster will be necessary to prevent future mutations and reduce hospitalizations in vulnerable populations.

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Expanding Production

Regulators have approved Moderna's Covid vaccine in more than 70 markets, including Canada, Japan, the European Union, the UK, Israel, South Korea, and Australia.

Moderna's priority is investing its war chest of \$15 billion in cash to expand its manufacturing and commercial infrastructures. Moderna has agreements with Canadian and Australian governments to build out mRNA vaccine manufacturing plants within those countries. Moderna also plans to build a factory in Africa capable of producing 500 million doses annually. In mid-February, Moderna announced plans to expand its presence in Asia with four new subsidiaries to scale up delivery of mRNA vaccines and therapeutics in Malaysia, Taiwan, Singapore, and Hong Kong.

Beyond Covid

Moderna is conducting clinical trials for vaccines targeting common seasonal respiratory viruses. The company has launched a phase three trial of a vaccine targeting the respiratory syncytial (cold-like) virus. A phase two trial for a flu vaccine has been fully enrolled and is expected to move to final phase three trials this year. Moderna also expects to initiate a phase one trial for a combination flu and Covid vaccine in 2022.

Moderna is also planning to bundle a Covid vaccine with different seasonal respiratory vaccines into a single seasonal booster that can be customized to target different respiratory diseases among various demographic groups as well as unique geographic regions. Management believes such a vaccine will compete well against competitors.

In addition to Covid and seasonal respiratory vaccines, Moderna is developing vaccines for latent viruses, which can lay dormant in the body with the ability to activate. A vaccine for Ebola is in development and Moderna is also working on vaccines for other latent viruses that are more prevalent. Another vaccine for HIV is about to begin trials. Other potential vaccines already in clinical trials are for the Epstein-Barr virus (EBV) and for the *Cytomegalovirus* (CMV) which is currently in final phase III trials and furthest along in the approval process. CMV is the leading cause of birth defects in the US. News of approval would be very positive for MRNA because revenues would likely be in the range of \$2 to \$5 billion annually, and it would be a bridge to new horizons from Moderna's Covid-19 vaccines.

Moderna is also working on therapeutics using mRNA technology for oncology and cardio applications, along with treatments for autoimmune diseases. Collaborating with other companies on these fronts is a priority, as evidenced by recent joint ventures with Metagenomi and Carisma Therapeutics. Metagenomi and Moderna are collaborating to develop solutions against genetic diseases using gene-editing enzymes. Carisma Therapeutics and Moderna are collaborating to use Moderna's mRNA technology to develop solutions against solid tumor cancers, which kills 80 percent of all cancer victims.

Moderna is maintaining alliances with a broad range of domestic and overseas government collaborators. For exam-

ple, in early February, Moderna agreed to supply Colombia with an additional 10.8 million doses of Spikevax in 2022, in addition to the 10 million doses supplied to Colombia in 2021.

Moderna's pipeline is substantial, which currently includes 40 development programs, 25 of which are in clinical trials.

Risk/Reward

The primary risk is that Moderna's revenue declines significantly from its Covid vaccines before new products can be approved and marketed. The market is assuming that will be the case, which is revealed by the absurdly low current P/E, telling us that a severe impending revenue decline is already reflected in the current price of the stock. Even if a substantial earnings drop were to occur, of say 50 percent to \$14 per share, the P/E ratio would still be below 11 with MRNA at its current price. A P/E of 11 is still a very modest P/E, especially in comparison to the S&P 500 stocks which trade at close to 20 times earnings. Therefore, the downside risk in MRNA is limited even under such a draconian scenario because it is already anticipated in the price of the stock.

If a substantial earnings decline does not happen, MRNA should rise profoundly because the P/E will expand. For example, even a modest P/E of 10 on last year's earnings would push MRNA back up above \$280 per share, nearly double its current price.

This is a more likely scenario because there is an abundance of worldwide demand for Covid vaccines that should continue to be a strong revenue generator for Moderna for many years ahead. There are still billions of unvaccinated people outside the US which is an enormous market for Moderna as it builds out its world-wide infrastructure to gain access. The need for annual vaccines for Covid and variants is likely to continue indefinitely. Prospects of bundling annual Covid with other respiratory vaccines is bound to perpetuate demand annually. These increasing sources of demand are likely to mitigate or stem any pricing pressures.

Beyond the near-term uncertainties, the long-term growth potential is monumental, coming from break-through mRNA treatments for our most dreaded and deadly diseases for which there are currently no effective solutions.

The Sound Advice Indicators

The **Sound Advice Risk Indicator** (page 10), which compares the S&P 500 index to house prices, ended the year substantially above 2.0, revealing that the risk in the stock market is historically high for the sixth time in the last 100 years.

The **Sound Advice Diffusion Indexes** (page 11) reverted to a "Caution" signal in November when the Federal Reserve announced the end of its fourth quantitative easing (QE) program.

During "Caution" signals over the last 47 years, the S&P 500 has either crashed, meandered, or climbed moderately, recording an average increase of 0.1 percent. This is in

comparison to periods during “Aggressive” signals, when the S&P 500 climbed an average of 31.7 percent.

Aside from the warnings from the *Sound Advice* proprietary indicators, along with the certainty of rising bond yields and interest rates, there are more reasons to be cautious. Recent volatility has been centered on events in Ukraine, but the market as measured by most stocks started to deteriorate in mid-2021.

Stock Market Breadth

As the popular indexes climbed to new highs during 2021, an under-current of caution appeared in the stock market, as evidenced by the deterioration of the stock market breadth. As illustrated below, participation narrowed to the largest capitalized stocks. As a result, most portfolios underperformed the popular averages in 2021.

A healthy bull market will have broad participation among a wide range of stocks. Conversely, near major tops, participation will narrow. The largest capitalized stocks will still be rising as money managers look for places to put the onslaught of money coming to them from eager investors. Because large cap stocks carry more weight in the popular market averages, they will be hitting new highs. However, the overall breadth of the market will be declining. This was precisely the case during the last half of 2021.

We can measure the breadth of the market by tracking the number of stocks that advance on the New York Stock Exchange each trading day, and then subtract the number that decline. By keeping a cumulative total, we construct an “advance-decline line” or ADL. Take a look at the graph.

The orange line on the chart shows the ADL since the beginning of the year. The blue line shows the S&P 500.

From mid-June 2021 to the end of the year, the S&P 500 climbed to new highs while the ADL drifted downward, without confirming the new highs in the S&P 500. Breadth deteriorated as fewer and fewer stocks joined the climb. In February, this divergence continued to deteriorate as the ADL line fell faster than the S&P 500. This divergence is a rare occurrence and a warning sign.

Assessing Value

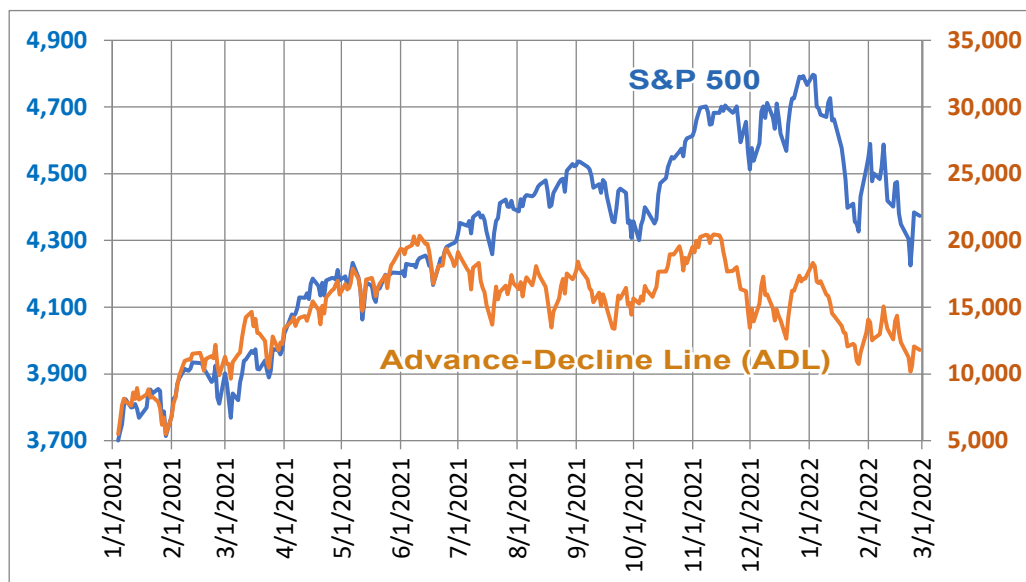
As we note regularly, a reliable way to evaluate the S&P 500 index is to measure it against the trailing twelve-months (TTM) of “operating” earnings of the individual 500 stocks that make up the index.

Operating earnings are actual cash earnings, as opposed to so-called GAAP (generally accepted accounting principles) earnings which include non-cash write-offs such as depreciation, impairment charges because of falling commodity prices, or charges for bad loan reserves. Each quarter, companies report both GAAP earnings and *operating* earnings which reflect actual cash results.

With the S&P 500 Index at 4,374, the TTM price/earnings (P/E) ratio is 21, based on the TTM operating earnings of the S&P 500 companies. This is an historically high TTM P/E.

Since the 2008 melt-down, the TTM P/E based on operating earnings has averaged 19. To gauge a reasonable value for the market currently as well as a likely path of stock prices ahead, we can reasonably apply a P/E of 19 to the rolling

Stock Market Breadth
NYSE Advance-Declines vs. S&P 500



Barchart.com is the data source of the NYSE advancing and declining stocks. ETFs and Unit Investment Trusts are excluded.

Operating Earnings Projections for the S&P 500

Quarter Ending	Quarterly Operating Earnings	Actual/Projected	TTM Operating Earnings	Value of the S&P 500 @TTM 19 P/E	Difference From Today's S&P 500
12/31/2020	38.18	Actual	122.37		
3/31/2021	47.41	Actual	150.28		
6/30/2021	52.05	Actual	175.54		
9/30/2021	52.02	Actual	189.66		
12/31/2021	54.00	Actual	205.48		
3/31/2022	51.21	Projected	209.28	3,976.32	-9%
6/30/2022	54.94	Projected	212.17	4,031.23	-8%
9/30/2022	57.88	Projected	218.03	4,142.57	-5%
12/31/2022	56.45	Projected	223.27	4,242.13	-3%

Earnings projections are by S&P Senior Index Analyst, Howard Silverblatt who publishes extensive data of the S&P 500 companies. See <https://us.spindices.com/documents/additional-material/sp-500-eps-est.xlsx>

TTM total of operating earnings. The operating earnings projections for the companies comprising the S&P 500 are shown in the table above.

The TTM operating earnings are projected to be 209.28. At a P/E of 19, the S&P 500 index would be 3,976.32, which is 9 percent below today's level.

The TTM operating earnings are projected to grow to \$223.27 by the end of 2022. At a P/E of 19, the S&P 500 index would be 4,242.13, which is 3 percent below today's level. Assuming there are no surprise events impacting earnings projections, 4,242 is a reasonable value for the S&P 500 index. Of course, most of the time, the market moves in waves. Like a pendulum, it swings above and below reasonable values.

The Sound Advice Portfolio

All of the *Sound Advice* model portfolio recommendations are made with our current "Caution" mode in mind. They are summarized in the table on page 9 and sorted by investment objective categories and then in alphabetical order. Our individual stock recommendations are special situations offering a compelling value proposition. We are also recommending liquid electronically traded funds (ETFs) and mutual funds investing in sectors that are bound to benefit in the months and years ahead from fundamental changes in geopolitical, medical, and economic landscapes.

A Downside Hedge

ProShares UltraShort S&P 500 (SDS) is included in the *Sound Advice* model portfolio because of the unusually high downside risk in the S&P 500. This ETF essentially short-sells the market and will benefit from down-drafts in the S&P 500. It is designed to produce two times the daily fluctuations of the S&P 500 index. A decline of say, 1.0 percent in the S&P 500 will cause SDS to increase by 2.0 percent. Conversely, an increase in the S&P 500 will cause SDS to decline in the same fashion. We have been tracking SDS and confirmed that it is performing as it should, with daily premiums and discounts within 0.5 percent. It is also very liquid. Including

SDS as part of a portfolio will dampen its volatility.

ETFs for Rising Bond Yields

The most significant force on the bond markets in recent years was the Federal Reserve's quantitative easing (QE) program. At the rate of \$80 billion per month, the Federal Reserve purchased more than one-half of all US Treasury securities issued. Now that QE has officially ended, and with bond yields still near historic lows, yields have nowhere to go but up. As other buyers of Treasuries recognize this inevitability, it stands to reason that they will cut back purchases too.

The question is not whether bond yields will be rising in the months ahead, but how much will they rise? Will it be substantial? If so, it is certain to disrupt the stock and bond markets.

We can look back at history to find the answer. Bond investors have traditionally demanded a positive real return, which means over and above the inflation rate. The table below shows that since 1980, long-term Treasury bonds have yielded close to 3 percent above the inflation rate. If we only look at recent history, since 2000, which has been a low inflationary period, long-term Treasury bonds have yielded a lower real return of 1.79 percent.

Historical Real Rates of Return

Years	30 Yr Note (Avg. Yield)	CPI Annual Increase	Real Rate
1980 - 2000	8.61	4.33	4.28
2000-04	5.70	2.60	3.10
2005-09	4.52	2.60	1.92
2010-14	3.57	2.00	1.57
2015-18	2.87	1.93	0.94
2019	2.58	1.81	0.77
2020	1.56	0.62	0.94
Average			2.98
Average Since 2000			1.79

The Fed's definition of acceptable inflation is 2.5 percent. To be conservative, we can assume that the Fed will eventually meet its inflation targets in the foreseeable future, and inflation will cool down to the vicinity of 2.5 percent. Even this scenario means that the yield on long-term treasury bonds should be at least 4.29 percent, not close to 2 percent as it is today.

Of course, if inflation remains stubbornly higher, bond yields will be commensurately higher. What is often forgotten is that while inflation surges may come and go, higher prices tend to be sticky.

The three ETFs listed below are designed to benefit from rising long-term Treasury bond yields. They differ in the amount of leverage used. You can choose among them depending on your investment objectives and risk tolerance.

The **Direxion Daily 20 Plus Year Bear 3 Shares (TMV)** uses 3:1 leverage.

The **Proshares UltraShort Lehman 20 Plus Year Treasury (TBT)** uses 2:1 leverage.

The **Proshares Short 20 Plus Year Treasury (TBF)** uses no leverage.

The price action of these ETFs is based on the changes in long-term Treasury bond indexes, only in the opposite direction, and then multiplied by the leverage each ETF uses. For example, a decline of say, 1.0 percent in their respective benchmark bond indexes will cause TMV to increase by 3.0 percent, TBT by 2.0 percent, and TBF by 1.0 percent.

The table below shows the approximate upside potential of our selected ETFs at the end of 2022 at various levels of long-term Treasury bond yields. The first row shows today's ETF prices at today's long-term Treasury bond yields. Note that the approximate price of these ETFs would rise dramatically as Treasury bond yields rise. With long-term bond yields bouncing off historic lows, the upside potential is significant.

The Erosion Factor

These ETFs have an erosion factor because they decline slightly faster than they increase with an equivalent change in bond yields. This factor becomes greater as the leverage of the ETF increases. To gauge this factor, we assume that Treasury bond yields simply tread water, rising and falling

Upside Potential

Date	20-Year Bond Yields	ETF Prices		
		TBF	TBT	TMV
2/28/2022	2.24	16.84	18.50	62.61
12/31/2022	2.50	17.45	19.85	69.45
12/31/2022	3.00	18.64	22.46	82.71
12/31/2022	3.50	19.73	24.85	94.86
12/31/2022	4.00	20.73	27.05	106.00
12/31/2022	4.50	21.65	29.06	116.23

by an unusually large amount, say, 0.03 percentage points (3 basis points) every day, and thus go nowhere. By the end of 2022, TMV would decline by 3.7 percent, TBT by 2.0 percent, and TBF by 0.8 percent.

Special Situations

The rest of our portfolio are stocks of individual companies that are presenting extraordinary values within their respective industries. Here they are in alphabetical order:

Apple (AAPL) was added to the portfolio in 2016 at \$29.08 per share (adjusted for the 4:1 split in 2020). We are recommending continuing to hold and add to the position at our buying target of \$100 per share. At that price, the TTM P/E would be close to 20, which is still higher than we like to bet on, but it is much more reasonable than the current ratio.

Cisco Systems (CSCO) is transitioning from a network equipment seller into a contractual subscription and services company that generates recurring revenues from the equipment it sells, leading to a more reliable income stream. During the past five years, CSCO's annual recurring subscription revenues and services have more than doubled and now represents close to one-half of total revenues.

In addition, the industry is in the early stages of a major new upgrade cycle as it rolls into 5G, which is able to download data 100 times faster than the previous generation of 4G. Cisco will be a direct beneficiary as demand for faster equipment accelerates.

Cisco also has a substantial and growing Cyber Security division. If there was ever an inexorable growth market, cyber security is it.

Additionally, Cisco has a strong balance sheet which has been improving in recent years as assets have grown faster than liabilities. The company is flush with cash, even after making 5 synergistic acquisitions in 2021. The company is in an acquisition mode to boost growth.

Crown and Castle International (CCI) CCI presents a relatively low risk way of investing in this high-tech area because of its ownership of hard assets comprised of more than 40,000 cell towers and approximately 50,000 active small cell nodes on buildings with 60,000 committed or under construction. The company also has 80,000 route miles of fiber cable concentrated in the top US markets. These assets are difficult to create because of scarce locations in urban areas, zoning and governmental regulations, and sheer cost. As a result, there are high barriers to entry for competitors. Furthermore, income is secure and growth is assured because these assets are leased to credit-worthy tenants with pre-determined escalating rent clauses.

CCI will also benefit from the bright future of the fifth generation (5G) of wireless technology because 5G requires a higher density of large and small cells sites and related infrastructure throughout the US.

The company emphasizes sharing its growth with its

stockholders. The dividend has been increased every year since 2014 at an average rate of 9 percent. The 2021 dividend was increased by 11 percent.

Intel (INTC) has the size, diversity, industry dominance, and financial health to make a relatively safe investment in a high-growth, and often high-risk business. Intel can leverage new technology into its existing large platform without introducing unacceptable risks.

Earnings are expected to dip in 2022 to the vicinity of \$3.28 per share because Intel is still being hampered by shortages leading to overall lower chip production and sales. However, the longer term future remains bright because Intel is working on restoring its technology leadership along with developing new US production facilities for chips.

JP Morgan Chase (JPM) has been under pressure recently. The TTM earnings are \$15.35 per share. At the current price of the stock, the P/E ratio is under 10 which makes JPM a strong value.

Banks benefit from larger profit margins during an economic recovery because the spread widens between short-term interest rates (paid on deposits) and long-term interest rates (income received on mortgages). However, the yield curve had been flattening recently, while short-term interest rates have increased faster than long-term interest rates. This is unusual and is bound to be a temporary aberration in the wake of the Federal Reserve's recent announcement of intentions to begin raising short term interest rates in March. As we discuss elsewhere, long-term interest rates are absurdly low and cannot remain so indefinitely.

NCR Corp (NCR) makes automatic tellers (ATMs), retail point-of-sale (POS) workstations, self-service kiosks, and other self-service checkout systems. Management has made significant progress in the strategic initiatives that are transforming NCR into a software platform and payments company. As a result, NCR is delivering solid results with growth in recurring revenue streams, higher profitability, and consistent cash generation.

Valero Energy (VLO) is our selection as the best refiner because it has the unique flexibility to refine substantial quantities of a variety of crude oil types. The company also has access to the US pipeline network for delivery to its gulf coast locations. This flexibility and access allows Valero to capture the highest margins among its competitors because it can take advantage of the temporary gluts of crude, whether it's low or high-quality crude, or light sweet (low sulfur) or heavy sour (high sulfur) and receive the best discounts for its feedstocks.

Refining profits come from the "crack-spread", the difference between the cost of oil as a feedstock and the price of refined products, predominantly gasoline and jet fuel. Although oil prices have risen, Valero is seeing gasoline demand at pre-pandemic levels and demand for diesel actually higher than pre-pandemic levels. Demand for jet fuel recovered as travel opened up, increasing from approximately 60% of pre-pandemic levels to 80% at the end of the year.

For the longer term, Valero is diversifying from a pure oil

refiner to a "green" company through its joint-venture with Diamond Green Diesel, which is producing renewable diesel at large profit margins. Renewable diesel is made from animal or plant waste material which reduces greenhouse gas emissions up to 80 percent because it only releases as much carbon dioxide that the material originally contained. It does not gel at low temperatures which means it can be easily transported through pipelines.

Cash flow, from diesel production turned positive in 2016 and is increasing. Renewable diesel volumes are expected to quadruple production capacity by 2023, from 290 million gallons per day to 1.2 billion gallons per day. Use for sustainable aviation fuel is expected to be a primary escalating demand factor.

Management maintained the dividend throughout the pandemic and is expected to continue to do so, which annualizes to \$3.92 per share and is still close to a 4.5 percent annual yield.

Medically-Related Selections

Both of our stock selections make medical devices and products which are well-suited for an aging population.

Boston Scientific (BSX) has been a global medical technology leader for three decades by providing a range of high-performance solutions aimed at addressing medical needs and reducing healthcare costs in a wide range of critical areas, including cardiac rhythm and intervention, oncology, urology, and neuromodulation. The company's stream of new inventions acquisitions continues to add to promising growth prospects.

Stryker (SYK) has a diverse array of innovative medical technologies, including reconstructive, medical and surgical, as well as neuro-technological and spine products. Its orthopaedic devices for artificial knees and hips lead the industry. SYK has a very high return on equity which is propelled by its strong balance sheet and its ability to continue to make strategic and synergistic acquisitions.

The Best in Biotech ETFs

Biotech companies offer the most explosive profits because they are the source of the world's top breakthrough vaccines and treatments. Their stocks are often volatile, making diversification essential. This can be accomplished by investing in a diversified electronically traded fund (ETF) investing exclusively in a portfolio of biotech companies. We are recommending three top performers, all of which have pulled back substantially, offering timely buying opportunities.

ARK Genomic Revolution Multi-Sector (ARKG) is an actively managed biotech ETF investing in companies expected to benefit by incorporating technological and scientific developments and advancements stemming from mapping the human genome. Breakthroughs and advancements have cut the cost substantially of mapping the human genome which is opening new opportunities and putting this sector on the cutting edge of many new innovations.

Virtus LifeSci Biotech Products (BBP) is a passively managed biotech ETF that weighs the portfolio selections

essentially equally, as opposed to the more typical practice of weighing selections according to market capitalization. This is an important aspect because biotech ETFs who weigh their portfolio selections essentially equally have been the best performers by far because they have larger investments in smaller biotechnology companies which are acquisition targets for large pharmaceutical companies looking for ways to revitalize their drug portfolios by scooping up smaller companies.

Real Estate

Our three cumulative preferred stocks are inherently safe because any unpaid dividends must be retroactively restored first before any common dividends can be paid. In addition, these preferred stocks have a "liquidation preference" which must be paid out in full in the event of a liquidation of the company before any proceeds are paid to common stockholders. In all three cases, there is substantial equity in the common stocks of all three companies, evidencing that the market does not expect liquidation to be plausible.

These preferred stocks are trading below the company's call price (the right of the company to purchase the preferred at a certain "call" price), or have no call feature at all, which is very unusual for preferred stocks. These preferred stocks have a small number of outstanding shares, which is typical for preferred stocks in general. Accordingly, we recommend using limit orders rather than market orders.

Hersha's Preferred D (HTRPD) was recommended when the stock price was under \$4.00 a share as the pandemic was gaining momentum in early 2020 and the company suspended all dividends to preserve liquidity. We believed that the eventual resumption and payment of preferred dividends would propel this stock back close to its call price and liquidation preference value of \$25. In March 2021, the company announced that it was resuming the dividends on its preferred stocks and making up for unpaid preferred dividends. That happened on the Preferred D in April at the annual rate of \$1.64 per share.

During the fourth third quarter, there was a resurgence of weekday demand in core urban markets which nearly doubled corporate cash flow from the prior quarter. The company was able to refinance its debt in 2021 which included some relaxation of debt-covenants. However, \$337.3 million in debt matures in August 2022. The credit markets have been accommodating, which makes it likely that the maturity of this debt will be extended. In its most recent late-February earnings call, management said "we are in active dialogue with members of our bank syndicate and are evaluating a range of refinancing options providing flexibility and extending the duration of our debt. We are very comfortable with our ability to refinance our upcoming debt and to simultaneously lower our overall cost of financing".

However, there is the possibility that some of this debt

would need to be paid down by hotel asset sales. The most drastic scenario is a bankruptcy and complete liquidation of the company in the event debt cannot be extended or refinanced, or asset sales would not be sufficient to pay down debt. The stock market does not believe this is a plausible scenario, as evidenced by the substantial value of the outstanding shares of the common Stock (HT), which stands behind the liquidation preference of the preferred shares.

The price of this preferred is below its call price of \$25. The current yield is 7.5 percent. More can be accumulated on dips, but don't purchase above the call and liquidation price of \$25.

RLJ's \$1.95 Series A Cumulative Convertible Preferred (RLJPRA) is paying a current of 7.4 percent. This is the only RLJ preferred stock and the dividend in 2019 amounted to less than 7 percent of the company's pre-covid funds from operations (FFO).

RLJPRA is convertible into 0.2806 common shares in RLJ. This sets the conversion price at \$89.09 per common share. RLJ cannot force conversion unless their common shares are trading at 130% of the conversion price, or at a price of \$115.82. This means that the preferred is essentially not callable without an astronomical rise in the price of the common stock (RLJ).

Strong operating results provided positive corporate cash flow for the 2021 full-year. The company ended 2021 with approximately \$665 million of unrestricted cash and \$2.4 billion of debt with no maturities until 2023. There was no debt encumbering 82 of the company's 97 hotels.

This is an opportunity to lock in a safe extraordinary current yield. It is hard to imagine that this yield will remain this high indefinitely, which means the price of this preferred stock will rise significantly.

RPT Realty 7.25% Series D Cumulative Convertible Perpetual Preferred (RPTPRD) is simply not callable by the company. This means that we can lock in a very high yield for as long as we desire. It pays an annual dividend of \$3.62, which is a current yield of 6.3 percent. This is the only RPT preferred stock for RPT Realty. This is a convertible preferred stock, convertible into 3.47 shares of the common stock (RPT) at the holder's option.

RPT Realty is a real estate investment trust (REIT) that owns 49 shopping centers across the eastern US, consisting of urban-infill neighborhoods, and power center properties with national chain store tenants, market-leading supermarket tenants, as well as a strong lineup of smaller national retailers.

In 2020, the company maintained the dividend on its preferred stock but suspended the dividend on its common stock. The dividend on the common stock was resumed for the first quarter of 2021 and increased in the fourth quarter. That means the preferred dividend is more secure because common dividends cannot be paid without paying the preferred dividend.

Third Avenue Real Estate Value Investor Fund (TVRVX) declared a distribution of \$2.40 per share at the

end of 2021. This mutual fund has an advantage over other mutual funds during recessions. Unlike the typical REIT, management will go to cash when asset prices are generally high. Cash is preserved for scooping up opportunities. It is a global real estate fund which means it is not confined to US real estate with low cap rates which translate to high valuations. Management looks for growth more than current income by focusing on real estate operating companies which, unlike REITs, can reinvest profits back into the business. Management also searches for opportunities in different aspects of a real estate company's capital structure by investing in senior debt in addition to equity.

Management is very price conscious, especially in relation to net asset value. Just as we do at *Sound Advice*, they eat their own cooking – they invest their personal assets into their funds.

US Infrastructure

The bi-partisan infrastructure bill enacted in November 2021 will benefit both PSCI and RTM during the next 10 years.

Invesco S&P SmallCap Industrials ETF (ticker symbol PSCI) is based on the S&P SmallCap 600 Capped Industrials Index which is designed to measure the overall performance of the securities of US industrial companies with small capitalizations (caps). These domestic companies are engaged in the business of providing industrial products and services, including engineering, heavy machinery, construction, electrical equipment, aerospace and defense, as well as general manufacturing. They will reflect the positive impacts more strongly than larger companies from an increase in infrastructure spending. Small cap construction companies are also typically domestic companies operating inside the US. It is likely that a government-sponsored program will stipulate that US companies are to be employed to perform the services. Even absent such stipulations, construction projects tend to employ local companies as subcontractors even when general contractors are national companies.

The portfolio consists of 96 securities, and it is more dispersed than the typical peer in the category. Management has maintained an emphasis on stocks with low financial leverage and strong returns on equity. This ETF rebalances its investments quarterly to maintain an equal weighting in its holdings. This strategy tends to improve and maintain diversification as well as deliver a stronger longer-term performance.

Basic Materials

Invesco S&P 500 Equal Weight Materials ETF (RTM) declared a quarterly distribution in December of 68.3 cents per share. RTM invests in the common stocks that comprise the S&P 500 Equal Weight Materials Index. All 29 sections are prime examples of basic materials companies outside of the oil and gas industries. Basic materials companies are particularly sensitive to economic

changes. They thrive when the economy strengthens and are bound to benefit substantially in the months and years ahead as economic activity increases along with increased infrastructure spending. Basic materials are also classic inflation hedges. Prices are typically pushed upward by increasing inflation, benefiting the entire sector.

This ETF rebalances holdings quarterly to equalize their values. Calendar rebalancing ensures a greater degree of evenly weighted diversification which adds stability and safety to a portfolio. This practice often provides a superior performance because it offers exposure to many stocks that are under-weighted in most other portfolios and are therefore targets for new capital.

Consumer Staples

Invesco S&P 500 Equal Weight Consumer Staples ETF (RHS) declared a quarterly distribution in December of 1.14 cents per share. RHS is unique because it invests equal amounts in a collection of 33 consumer staple stocks within the S&P 500 index.

Consumer staples are those unexciting products we use every day without much thought, ranging from food, beverages (including alcohol), household goods (including cleaning supplies), hygiene products, and tobacco. These are products that people are unable (or unwilling) to remove from their budgets regardless of their financial situation. The nature of these products makes this sector defensive and much less vulnerable to recessions and bear markets.

RHS rebalances the investments at the beginning of each calendar quarter, which has given RHS a superior performance over other consumer staples funds because it has given investors exposure to many consumer staple stocks that are under-weighted in most other portfolios, making those stocks targets for new capital.

Small Caps

Small caps and this fund are bound to continue to benefit from a shift to value as investors look for undiscovered bargains. Small caps are relatively small companies that are pure plays on the early stages of new industries and inventions. They have more dynamic and entrepreneurial management, and they are much more likely to be the target of an acquisition or merger, which is usually quite profitable. Numerous studies show that small caps perform better over the long run than the market as a whole.

Third Avenue Small-Cap Value Investor Fund (TVSVX) declared a distribution of \$1.72 per share at the end of 2021. This mutual fund invests in companies with small capitalizations using the same value-oriented approach. Management looks for companies that combine the three main features: creditworthiness, a meaningful discount to a conservatively estimated net asset value, and the ability to consistently grow NAV, with an initial targeted holding period of three to five years. A patient and price conscious acquisition is a critical first step in both protecting capital and in realizing an attractive investment return.

Portfolio Summary Table

This table is updated and live on our website:

www.soundadvice-newsletter.com

Income with Growth	Symbol	Price / NAV	Yield	Action	Limit
Hersha Hospitality Trust - Preferred D *	HTPRD	\$21.78	7.53%	BUY	\$25.00
RLJ Lodging Trust - Preferred A *	RLJPRA	\$26.40	7.39%	BUY	\$29.50
RPT Realty 7.25% Preferred D *	RPTPRD	\$57.71	6.28%	BUY	\$61.00
Valero	VLO	\$86.61	4.53%	BUY	\$90.94
Growth with Moderate Income					
Cisco Systems	CSCO	\$56.17	2.63%	BUY	\$58.98
Crown and Castle	CCI	\$184.00	3.20%	BUY	\$193.20
Intel	INTC	\$49.51	2.81%	BUY	\$51.99
Invesco Consumer Staples ETF	RHS	\$170.04	2.68%	BUY	\$178.54
JP Morgan Chase	JPM	\$149.94	2.67%	BUY	\$157.44
Growth					
Apple	AAPL	\$175.84	0.47%	HOLD	\$100.00
Boston Scientific	BSX	\$41.44	0.00%	BUY	\$43.51
Genomic Revolution Multi-Sector	ARKG	\$49.23	0.00%	BUY	\$51.69
Invesco Basic Materials ETF	RTM	\$176.35	1.55%	BUY	\$185.17
Invesco Small Cap Industrials ETF	PSCI	\$89.57	1.09%	BUY	\$94.05
Moderna	MRNA	\$153.60	0.00%	BUY	\$160.00
NCR Corp	NCR	\$38.62	0.00%	BUY	\$40.55
Stryker Corp	SYK	\$254.47	1.09%	BUY	\$267.19
Third Avenue Real Estate Value Investor *	TVRVX	\$24.88	0.00%	BUY	\$30.00
Third Avenue Small-Cap Value Investor Fund *	TVSVX	\$19.14	0.00%	BUY	\$23.00
Virtus LifeSci Biotech Products	BBP	\$42.89	0.00%	BUY	\$45.03
ETFs for Rising Bond Yields					
Direxion Daily 20+Treasury Bear Shares 3X Leverage	TMV	\$59.13	0.00%	BUY	\$62.09
Proshares Short 20+Treasury - 2X Leverage	TBT	\$18.13	0.00%	BUY	\$19.04
Proshares Short 20+Treasury - No Leverage	TBF	\$16.61	0.00%	BUY	\$17.44
Hedges					
S&P 500 ProShares Ultra Short ETF	SDS	\$37.73	0.00%	BUY	\$39.62

Notes to the table: The right hand column is the highest recommended price limit for purchases.

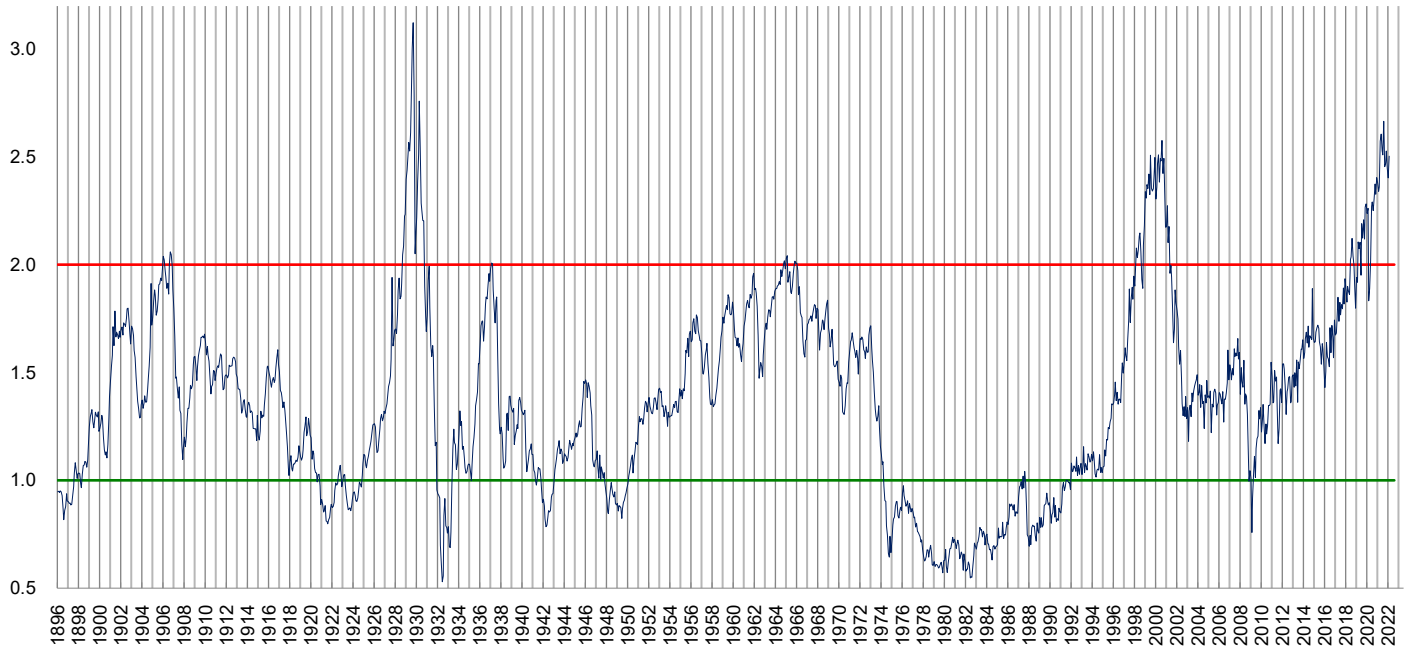
* It is not possible to offer live pricing.

General Comments: Our statistics are based on the assumption that \$10,000 is invested in each position. When a new position is added, we assume the same \$10,000 amount is invested in the new recommendation. When we recommend adding to a particular position, as we have done over the years, we assume another \$10,000 is invested again in that position.

If you are picking and choosing, you can focus on the sector of the portfolio that matches your investment objectives. Alternatively, you may have a higher degree of comfort with certain industries, funds, or stocks because of past experience or your profession. In that case, you may want to invest more heavily in one sector, or in one or more individual recommendations.

As always, broad diversification will temper volatility, add to safety, and improve long-term performance.

Capital Competition: Real Estate versus Stocks: The SoundAdvice Risk Indicator



There are few forces that are more important to a market's destiny than the amount of capital that is available to it. In a normal situation, capital will flow easily between markets as their underlying conditions change. But if a market becomes dangerously superheated, it will absorb a larger proportion of available investment capital than economic conditions and market demand can justify. This change will be reflected not only in the rising market's prices but also in the prices of competing markets, which will be lower than their underlying fundamentals would indicate they should be. Over the last 120+ years, we can see this titanic struggle between the stock market and its foremost competitor for investment dollars: real estate.

To reveal this phenomenon, we have set up an equation based on the ratio of the S&P 500 Stock Index to median price of new houses for each month over the last 100+ years. This equation exhibits an elegant financial minuet as each market has taken turns outperforming the other.

As we look at the historical data, we find that there is a range in which the price disparities are so strong that they are too great to be accounted for by the fundamental economic conditions underlying each market. Every time prices get into these danger zones it has meant that the prices in one market or the other have gone too high, and that they are in imminent danger of falling.

We label this new tool the **Sound Advice** "Risk Indicator," since it will allow us to locate the point at which prices are so high when compared to competing markets that they have come loose from their moorings and are on the verge of declining or under performing the other market.

What is too high? When stock prices are very high relative

to house prices, the **Sound Advice** Risk Indicator will rise over the line marked 2.0, revealing a high-risk time for stocks. In contrast, when the indicator drops below the line marked 1.0, it means that it is a very low-risk time to buy stocks. Notice from the chart how the **Sound Advice** Risk Indicator has oscillated back and forth, revealing the ongoing struggle between Stocks and houses for investment capital. We have labeled these long vacillations Supercycles.

But though an investment beginning with \$25,000 in 1895 could have made money being in either stocks or housing, had an investor followed the signals of the **Sound Advice** Risk Indicator, he or she would have made \$679 million, or 26.5 times more money than by simply holding stocks though the ups and downs.

A brief walk through history shows just how reliable this indicator is. The first recorded time the Risk Indicator rose above 2.0 was in February 1906, after the eight-year-old Dow-Jones average doubled since 1903. The market peaked in September of 1906. A massive sell-off in October would later be labeled the Panic of 1907. Stock prices trended downward for 14 more years until the end of 1921 while, searing inflation after World War I boosted house prices 48 percent. The combination of falling stock prices and rising real estate prices forced the Risk Indicator to fall below 1.0 in 1920, just in time for the Roaring 20's when stock prices tripled. Then, in October 1928, the Risk Indicator rose above 2.0 again. On Tuesday, September 3, 1929, the Dow

The New York Times

"Cardiff's equation reveals an elegant financial minuet as each market takes turns outperforming the other."

peaked at 318.17. The October crash marked the beginning of a decline that lasted until July 8, 1932. Houses had declined only by 15 percent compared with the 85 percent loss in stocks. The relative superior performance of houses caused our Risk Indicator to fall below 1.0 at the beginning of 1932.

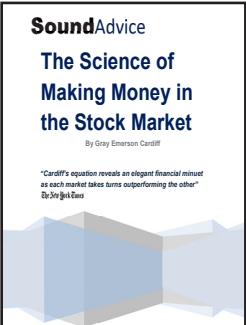
As America's GNP began posting positive gains and with 46 percent growth in three short years, stock prices would triple. Then the Risk Indicator crossed 2.0 in March 1937. This time, the signal came only one month after the zenith in stock prices. As stock prices retreated 50 percent, house prices remained relatively steady, causing the Risk Indicator to fall below 1.0 again in June 1941, within 9 months from the bottom.

As U.S. corporations expanded to meet growing demand, and the economy came to a rolling boil during the Eisenhower years, the stately rise would multiply stock prices by ten times until November 1964, when the Risk Indicator crossed over 2.0 again. The stock market would continue to climb into 1968, and then crashed into late 1974, wiping out the inflation-adjusted gains scored by investors since 1954.

However, a switch to an investment in houses would avoid all that and double in price by the time the next signal came for stocks in May 1974, as the Risk Indicator fell below 1.0 again, as the Dow careened below 700.

It would not be until March 1998 when the Risk Indicator would cross 2.0 again, after stocks were up by more than tenfold. The Dot-Com bubble would push stocks higher into early 2000, but then began another 50 percent retracement. A switch to houses would produce a 44 percent gain through the end of 2008 while stock prices were lower by 17 percent. In February 2009, with the Dow careening below 700 once again, the Risk Indicator quietly dropped below 1.0 to 0.77 as the S&P tumbled under 700. Since then, the stock market has delivered stunning gains as the S&P 500 has quadrupled. For the sixth time in the last 125 years, the Risk Indicator rose above 2.0 again in July 2018. The Risk Indicator has since remained above 2.0.

With the latest median house price at \$395,500 in December (the latest data) and with the S&P 500 averaging 4,436 in February, the *Sound Advice* Risk Indicator reads 2.50, revealing the risk in stocks is very high, for the sixth time during the last 100+ years.



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Business Cycles and Stocks: The **SoundAdvice** Diffusion Indexes

If the Supercycles identified by our Risk Indicator are the solemn, inexorable seasons that roll across the market's landscape, business cycles are the highly visible, sometimes serene but frequently blustery fronts and storms that we actually perceive as weather. The Risk Indicator has given us a reliable tool to determine the investment season in the stock market. This information is all-important; there will be no heat waves in January, no blizzards in July. But in our search for fair winds, we need to know more than the season. We also must be able to predict the shorter-term weather -- the bull and bear markets that fluctuate along the path of Supercycles.

The data we need is contained in the leading and lagging economic indicators. We have hand picked the most sensitive of these economic indicators to produce our "Diffusion Indexes" which function with amazing accuracy as predictors of the birth of cyclical bull and bear markets in stocks.

To construct our *Sound Advice* Diffusion Indexes, we observe changes in each of our selected indicators

over a five-month period, and take the percentage of those increasing.

When the *Sound Advice* Diffusion Index of LEADING Indicators drops to zero, it is time to buy stocks aggressively, regardless of how negative the atmosphere may be. This is not just an empirical coincidence. It is also logical. In order for all of the leading economic indicators to be giving off a zero value compared to five months before, it is nearly certain that the soft economy is providing an atmosphere for stable or declining interest rates.

This Diffusion Index gave us a zero reading in December 2008, close to the bottom, officially giving us an "Aggressive" signal. That signal came at a time when the Risk Indicator was below 1.0, which revealed that Supercycle 5 came to an end, and that Supercycle 6 was born.

The *Sound Advice* Diffusion Index of LAGGING Indicators gives "Caution" signals when all three of its individual lagging economic indicators rise above their respective levels of six months earlier, providing a 100 percent reading. This reading reveals that the US economy is strong enough to put upward pressures on interest rates.

Track Record of the SoundAdvice Diffusion Indexes

Drumming the last 47+ years, after each “Aggressive” signal, the S&P 500 climbed an average of 31.7 percent. During “Caution” signals, the S&P 500 either crashed, meandered, or climbed, recording an average increase of 0.1 percent.

Aggressive	S&P 500	Caution	S&P 500
Sep-74	68.12	Apr-76	101.9
Jul-76	104.20	Dec-76	104.7
Oct-78	100.58	Jun-79	101.7
Nov-79	100.00	Oct-83	167.7
Aug-84	164.48	Jun-85	188.9
Jul-86	240.18	Aug-87	329.4
Feb-88	258.13	Jun-88	270.7
Mar-89	280.00	Mar-93	449.7
Mar-95	493.15	Dec-98	1,141.0
Jun-00	1,429.40	Dec-00	1,320.3
Jun-03	974.50	May-05	1,191.5
Jun-06	1,276.66	Mar-08	1,325.4
Dec-08 (1)	865.58	Apr 10 (2)	1,197.3
Sep 10 (3)	1,122.08	Jun 12 (4)	1,359.8
Sep-12 (5)	1,437.82	Nov 14 (6)	2,044.6
Mar-15	2,079.99	May-15	2,111.9
Sep-17	2,492.84	Feb-18	2,705.2
Mar-20 (7)	2,761.98	Nov 21 (8)	4,667.4
Ave +/-	31.7%		0.1%

A Powerful Overriding Force

Most of the time, the Diffusion Indexes are excellent detectors of the natural business cycle and a path to the science of making money in the stock market. However, the forces of the natural business cycle can be dominated by extraordinary changes in monetary policy during emergency situations.

The COVID-19 pandemic was the most recent example. In mid-March 2020, the Federal Reserve declared the institution of its fourth “Quantitative Easing” (QE) program whereby it dropped the Federal Funds rate to zero and commenced buying massive amounts of US Treasury bonds. With its mighty power, the Fed drove down interest rates and infused massive amounts of liquidity into the US economy. The money supply mushroomed.

At times like this, we need to ignore readings from the Diffusion Indexes. Interest rates are dropping by the Federal Reserve’s mandate, just as if the Diffusion Index of Leading Indicators had plunged to zero. Conversely, whenever the Federal Reserve declares an end to its QE program, we return to our Diffusion Indexes to follow their readings. If the Diffusion Index has moved to a “Caution” signal during the QE program, we should follow that reading. This is the most likely pattern of events because the economy will likely have strengthened in order for the Federal Reserve to end its QE program.

The impact of the Federal Reserve’s four QE programs on existing Diffusion Index signals are noted in the footnotes under the track record table.

Quantitative Easing (QE) Overriding Signals

- (1) QE-1 announced 4 months before Aggressive signal
- (2) QE-1 terminated into existing Caution signal
- (3) QE-2 announced but already in Aggressive mode
- (4) QE-2 terminated into existing Caution signal
- (5) QE-3 announced, changed to Aggressive mode
- (6) QE-3 terminated into existing Caution signal
- (7) QE-4 announced, changed to Aggressive mode
- (8) QE-4 terminated into existing Caution signal

Current Status

The Diffusion Index of LAGGING Indicators is in caution mode based on a 100 percent reading in October 2021. The latest data for January (reported in late February) caused a 100 percent reading. In November 2021, the Federal reserve announced the end of the latest QE program. Accordingly, the “Caution” signal was restored and is now in force.

Our next Aggressive signal will come when the Diffusion Index of LEADING Indicators drops to zero. The latest reading was 100 percent.

Sound Advice versus the S&P 500

