CLS's WEEKLY 3

What You Need To Know About the Markets

MAY 2, 2019

1. Sell in May and go away? We review this old market chestnut
2. A look back at the returns of various asset classes over the last 20 years
3. Potential future returns, and why we believe emerging markets will lead the way

Market Performance (as of 4/30/2019)

Fixed Income	10-YEAR	5-YEAR	3-YEAR	1-YEAR	YTD	QTD	APRIL
Cash Equivalent[1]	+0.42%	+0.76%	+1.23%	+2.15%	+0.79%	+0.20%	+0.20%
U.S. Investment Grade Bonds[2]	+3.72%	+2.57%	+1.90%	+5.29%	+2.97%	+0.03%	+0.03%
Equities	**10-YEAR**	**5-YEAR**	**3-YEAR**	**1-YEAR**	**YTD**	**QTD**	**APRIL**
Global Equity Market[3]	+11.33%	+7.01%	+11.31%	+4.82%	+15.81%	+3.32%	+3.32%
Total U.S. Market[4]	+15.38%	+11.33%	+14.83%	+13.01%	+18.67%	+4.01%	+4.01%
Domestic Large-Cap Equity[5]	+15.19%	+11.88%	+15.39%	+14.13%	+17.88%	+4.15%	+4.15%
Domestic Small-Cap Equity[6]	+14.81%	+8.29%	+12.15%	+6.35%	+19.67%	+3.61%	+3.61%
International Equity[7]	+8.12%	+3.07%	+8.10%	-3.19%	+13.00%	+2.54%	+2.54%
Developed International Equity[8]	+8.11%	+2.62%	+7.22%	-2.86%	+13.48%	+2.73%	+2.73%
Emerging Market Equity[9]	+8.22%	+4.59%	+11.30%	-4.20%	+11.58%	+1.98%	+1.98%
Diversifiers	**10-YEAR**	**5-YEAR**	**3-YEAR**	**1-YEAR**	**YTD**	**QTD**	**APRIL**
Diversified Alternatives[10]	+4.19%	+0.53%	+1.42%	+0.91%	+3.65%	+0.67%	+0.67%
Commodity[11]	-2.67%	-9.43%	-0.66%	-8.03%	+5.88%	-0.42%	-0.42%

[1]Morningstar Cash Index [2]Bloomberg Barclays Capital U.S. Aggregate Bond Index [3]Morningstar GblMkt Large-Mid Index [4]Morningstar U.S. Market Index [5]Morningstar U.S. Large Cap Index [6]Morningstar U.S. Small Cap Index [7]Morningstar Gbl xU.S. Large-Mid Index [8]Morningstar DM xUS Large-Mid Index [9]Morningstar EM Large-Mid Index [10]Morningstar Diversd Alt Index [11]Bloomberg Commodity Index

April Market and Portfolio Review

2019 is off to a fantastic start for the global markets, and we believe the odds are good that it's going to get even better.

The U.S. stock market, for instance, has already recovered its losses from the fourth quarter of last year. While the market is technically overbought (according to various short-term indicators), suggesting it could take a pause to catch its breath, we believe gains will likely continue into the summer and year-end.

Here are some reasons for optimism: Economic growth remains solid and better than most investors expected, inflation expectations are muted, the Federal Reserve continues to be market-friendly, investor sentiment is in control and not overly bullish or greedy, and this is, historically, the best year of the presidential election cycle to be in the stock market. Volatility is also currently low, although investors should expect that to change, as it always does. But since the positives tend to dominate the outlook ledger, investors should stay balanced and stay the course.

Let's look at the numbers.

The overall global stock market ended April up more than 3%. It is now up nearly 16% for the year. The U.S. stock market gained more than 4% and is now up nearly 19% for the year. Smaller companies in the U.S. gained less than 4% (up just under 20% year-to-date), and larger U.S. companies gained more than 3% (up nearly 18% year-to-date).

April Market and Portfolio Review (Cont.)

International equity markets were up just shy of 3% in April and are now up 13% so far, this year. Emerging markets lagged, gaining less than 2% last month and are higher by less than 12% for the year. Developed international markets gained less than 3% and are up over 13% for the year.

The bond market had a small loss for the month, but is up nearly 3% for the year. The 10-year U.S. Treasury yield ended March at 2.51%. The three-month U.S. Treasury yield ended the month at 2.43%.

Real assets had a tough month last month. Commodities had a slight loss, but remain up nearly 6% for the year, while global real estate investment trusts (REITs) lost about 1% last month but are still up more than 13% for the year.

In general, we believe CLS portfolios performed well in absolute terms in April, and they have performed well so far, this year. With all major asset classes posting strong returns, globally diversified, multi-asset portfolios are participating in those gains. However, CLS's relative returns compared to benchmarks lagged due to the underperformance of emerging markets. Our preference for value over growth stocks also detracted from performance, as did our exposure to real assets.

Sell in May and Go Away?

Each year, many investors subscribe to the notion that the stock market will be weak between May 1 and the end of October. There is some truth to that, as returns tend to be relatively weaker than other times of the year. But it's still a poor reason to get out of the market and into cash. Let's review why.

Over the last 50 years, for instance, the S&P 500 Index has been up nearly 2% on average during this time frame, and it has been positive 67% of the time. Over the last 16 years, the S&P 500 Index has been positive 75% of the time.

Thus, getting out the stock market and into cash doesn't seem to make sense. On average, the stock market generates higher returns than cash over this time frame. Additionally, not making trades saves on transaction costs and may reduce tax costs for taxable investors.

The table below shows various sectors and their performance during this time of the year. It's interesting to note that the two sectors that have lagged in 2019 so far – health care and consumer staples – are notable outperformers in the following months due to seasonal patterns.

Lastly, we are in the third year of the four-year presidential election cycle, which tends to be the most favorable for stock market returns. Combine this with the market's historical tendency to generate above-average returns in the years that follow downturns (like we had last year) and its tendency to post additional gains after a strong first quarter (like we had in the first quarter of this year), the "sell in May" advice looks even less likely than usual to work.

S&P 500 Sector Relative Performance April 30 – October 31 (All Cases 1972-2017)

S&P 500 Sector	Mean Relative Return (%)	% Outperform S&P 500
Consumer Staples	3.1	65%
Healthcare	2.7	63%
Financials	-0.1	61%
Information Technology	0.1	57%
Telecom Services	0.4	52%
Utilities	1.1	52%
Energy	0.4	48%
Consumer Discretionary	-1.6	39%
Materials	-3.3	37%
Industrials	-1.5	24%
S&P 500 (Absolute)	**1.6**	**67% pos**

Source: S&P 500 Dow Jones Indices & Ned Davis Research, Inc.

A Look Back at Asset Class Returns Over the Last 20 Years

- Using a variety of resources, we reviewed the 20-year returns of various asset classes and the average investor.
- We found that the average investor underperformed a classic, U.S.-based, balanced portfolio by more than 3.5% per year – ouch!
- The average investor even underperformed inflation. But at least they ever so slightly "beat the bank" and outperformed U.S. Treasury bills.

Thanks to data from JPMorgan, Bloomberg, Morningstar, and the work of CLS analyst Dustin Dorhout, we reviewed the 20-year annualized returns of the major asset classes and the average U.S. investor, as well as the annualized rate of inflation and residential housing costs.

The most noteworthy takeaway is that the average investor significantly underperformed. For a good frame of reference, a U.S.-based, balanced portfolio (60% stocks and 40% bonds) would have returned about 5.5% over this 20-year time frame, but the average investor gained less than 2%. That's a whopping shortfall of more than 3.5% per year.

If we were reviewing a globally balanced, multi-asset portfolio, which includes international stocks, real estate, alternatives, high-yield bonds, and commodities, the shortfall would even be larger. That's a painful truth.

At CLS, it is our mission to help advisors help investors have better investment experiences. We can do this through communication, education, and providing and building portfolios that they understand and are comfortable with. Doing so may help investors stay balanced and stay the course, which we believe are among the most important ingredients of successful investing outcomes.

So, why such a hefty shortfall for investors?

Much is said about investment fees – and, of course, all else being equal, lower fees are unequivocally better. But there is too much concern over fees. Too much money is in motion simply because investors are searching for lower fees, and this money may be moving into inferior investment products.

Active management may also be cited as a contributing factor to an investor's underperformance. This style of management, which refers to portfolios that are managed to differ from their benchmarks, does underperform over time. But that underperformance can primarily, if not entirely,

Asset Class	Benchmark	20-yr Return through 12/31/2018
Emerging Market Equities	Morningstar EM Large-Mid NR USD	9.1%
Emerging Market Debt	JPM EMBI Global TR USD	9.0%
Global Real Estate	Morningstar Gbl Real Estate NR USD	7.4%
High-Yield Bonds	ICE BofAML US High Yield TR USD	6.4%
Long-Term Government Bonds	IA SBBI US LT Govt TR USD	6.0%
U.S. Stock Market	Morningstar US Market TR USD	6.0%
International Stock Market	Morningstar Gbl xUS Large-Mid NR USD	5.0%
Diversified Alternatives	Morningstar Diversd Alt TR USD**	5.9%
Investment-Grade Bonds	BBgBarc US Agg Bond TR USD	4.5%
Developed International Stock Market	Morningstar DM xUS Large-Mid NR USD	4.4%
Homes	Homes	3.4%
Inflation	Inflation	2.2%
Average Investor	Average Investor	1.9%
T-Bills	BBgBarc US Treasury Bill 1-3 Mon TR USD	1.8%
Commodities	Bloomberg Commodity TR USD	1.8%

This information is prepared for general information only. Past performance is not a guide to future performance. Future expectations may not be realized.

according to some studies, be explained by the aforementioned fees and "cash drag" (active managers typically have some cash in portfolios). That explains some of the difference.

The most significant contributing factor is that investors routinely chase performance. This "behavior gap" is a subject we often write about at CLS. It has been quantified by various research firms, including Dalbar, Vanguard, and Morningstar. In my opinion, the behavior gap accounts for about 2%+ per year, which makes up the lion's share of the average investor's shortfall in returns.

Other takeaways from the table on the previous page include the strong performance of emerging markets, which is predictable since this is where the economic and demographic growth has taken place over the last 20 years and we believe will continue to do so over the next 20+ years.

Rusty Vanneman, CFA, CMT

President, Chief Investment Officer

Rusty Vanneman is responsible for leading CLS's Portfolio Management Team and overseeing all investment operations at CLS, including investment philosophy, process, positioning, and performance. Mr. Vanneman is also responsible for internal and external communications regarding market environment and current investment strategies. He is part of the management team for several of CLS's proprietary mutual funds. In 2018, Mr. Vanneman took on the role of President of CLS, in addition to his position as CIO.

*Mr. Vanneman joined CLS in September 2012 as Chief Investment Officer. Previously, he served as Chief Investment Officer and Portfolio Manager at Kobren Insight Management (KIM) in the greater Boston area. His 11-year tenure at KIM included a 5-year span during which the firm was owned by E*TRADE Financial and he served as the Senior Market Strategist for E*TRADE Capital. Prior to working at KIM, he was a Senior Analyst at Fidelity Management and Research (FMR Co) in Boston. He was also a Managing Analyst at Thomson Financial.*

*Mr. Vanneman received a Bachelor of Science degree in Management from Babson College where he graduated with high distinction. He has held the Chartered Financial Analyst (CFA) designation since 1994, and is a member of the CFA Institute. He has also been a Chartered Market Technician (CMT) since 1999, and is a member of the Market Technician's Association (MTA). In addition, Mr. Vanneman authored the book "Higher Calling: A Guide to Helping Investors Achieve Their Goals." He was named one of the Top 10 Portfolio Managers to Watch by Money Management Executive in 2017.**

Did you know? Rusty had a brief stint as a cowboy near the town of Valentine in Cherry County, Nebraska.

A Look at Forward Returns

While it's helpful to know where the markets have been and what they've returned, we invest for the future. To determine an expected long-term return, we should first examine the building blocks of all investment returns:

- Current yield
- Expected growth in that yield
- Change in valuations (how much we pay for that asset)

At CLS, we look at each of these factors, but our recipe for expected returns includes additional variables, such as:

1. Momentum – The amount of enthusiasm that investors have for an asset class. If an asset class is currently performing relatively well, we should expect it to have a relative return benefit in the near future.
2. Fundamental factors – We evaluate whether the profitability (quality) of a company is improving or declining. All else being equal, we favor companies that have increasing profitability.
3. Changes in risk – An asset class with a marked change in risk characteristics suggests returns will be impacted relative to other asset classes.

At CLS, our long-term expected returns are built using our own proprietary model, which we call the CLS Edge Score. Relative valuations seem to carry the most weight, and they clearly do when valuations are at extremes. In other words, if something is relatively inexpensive by historical standards, we are likely to favor or buy that asset class. If it's expensive, then we will likely disfavor or sell it.

Most firms rely heavily on valuations. Since we add more ingredients to our expected returns, it could be argued that we de-emphasize valuations by comparison. When valuations are not at extremes, for instance, momentum carries more weight in determining relative expected returns via the CLS Edge Score.

Long-term expected returns, often referred to as capital market assumptions (CMAs) within the industry, are the drivers of portfolio construction. Combined with our expectations for risk and the interactions of asset classes, it forms the foundation for how we build portfolios at CLS.

Below is a table of our current, long-term expected returns. We also consider expected returns from Research Affiliates, a Newport Beach, California-based investment firm. Key takeaways:

Key takeaways:

1. We expect below-average returns from the U.S. stock market.
2. We expect developed international markets, such as Japan and Europe, to have higher returns than the U.S. stock market.
3. We expect emerging market stocks to provide above-average returns, especially versus the U.S. stock market.
4. Although many investors dislike bonds, note the expected returns for bonds are still quite competitive versus U.S. stocks — and they have substantially lower volatility. They also serve to diversify portfolio risk, especially during weaker stock market performance.
5. We believe the expected returns for bonds will likely be higher than cash. In other words, long-term investors should favor bonds, not cash, as their primary equity diversifier over time.

Thank You

As always, a sincere thank you for reading. If you have any questions or feedback, please let me know.

Stay balanced and stay the course.

Rusty Vanneman, CFA, CMT
CLS Investments
President, Chief Investment Officer
Rusty.Vanneman@CLSInvest.com
402-896-7641

	CLS	RAFI
U.S. Stocks	3.0%	2.8%
International Stocks	3.5%	7.5%
Emerging Markets	7.3%	9.1%
Bonds	2.2%	2.8%
As of date	3/31/2019	2/28/2019
Outlook	10-Year	10-Year

Information contained herein is derived from sources we believe to be reliable, however, we do not represent that this information is complete or accurate and it should not be relied upon as such. This information is prepared for general information only. Past performance is not a guide to future performance. Future expectations may not be realized.

The Morningstar Global Market Large-Mid Index is an index that measures the performance of the global market's equity markets targeting the top 90% of stocks by market capitalization. The Morningstar U.S. Market Index is an index that measures the performance of U.S. securities and targets 97% market capitalization coverage of the investable universe. It is a diversified broad market index. The Morningstar U.S. Large Cap Index is an index that measures the performance of U.S. large-cap stocks. These stocks represent the largest 70% capitalization of the investable universe. The Morningstar U.S. Small Cap Index is an index that measures the performance of U.S. small-cap stocks. These stocks fall between the 90th and 97th percentile in market capitalization of the investable universe. In aggregate, the Small Cap Index represents 7% of the investable universe. Morningstar Global ex U.S. Large-Mid Index is an index that measures the performance of Global Markets (ex-U.S.) equity markets targeting the top 90% of stocks by market capitalization. The Morningstar DM ex U.S. Large-Mid Index is an index that measures the performance of developed markets ex-U.S. equity markets targeting the top 90% of stocks by market capitalization. The Morningstar EM Large-Mid Index is an index that measures the performance of emerging markets targeting the top 90% of stocks by market capitalization. The Barclay's Capital U.S. Aggregate Bond® Index measures the performance of the total United States investment-grade bond market. The Morningstar Cash Index is an index that measures the performance of a Treasury Bill with six to eight weeks until maturity in the U.S. market. The Bloomberg Commodity Index is made up of exchange-traded futures on physical commodities and represents commodities that are weighted to account for economic significant and market liquidity. This index provides investors with a means of understanding the performance of commodity futures markets and serves as a benchmark for investment performance of commodities as an asset class. The volatility of the indexes may be materially different from the individual performance attained by a specific investor. In addition, portfolio holdings of investors may differ significantly from the securities that comprise the indexes. You cannot invest directly in an index.

The S&P 500 Index is an unmanaged composite of 500-large capitalization companies. This index is widely used by professional investors as a performance benchmark for large-cap stocks. An index is an unmanaged group of stocks considered to be representative of different segments of the stock market in general. You cannot invest directly in an index.

CLS Strategies are not sponsored, endorsed, sold or promoted by Morningstar, Inc. or any of its affiliates (all such entities, collectively, "Morningstar Entities"). The Morningstar Entities make no representation or warranty, express or implied, to the owners of the CLS Strategies or any member of the public regarding the advisability of investing in CLS Strategies generally or in the specific strategy presented here in particular or the ability of the CLS Strategies to track general market performance.

THE MORNINGSTAR ENTITIES DO NOT GUARANTEE THE ACCURACY AND/OR THE COMPLETENESS OF THE CLS STRATEGIES OR ANY DATA INCLUDED THEREIN AND MORNINGSTAR ENTITIES SHALL HAVE NO LIABILITY FOR ANY ERRORS, OMISSIONS, OR INTERRUPTIONS THEREIN

Any graphs and charts contained in this work are for informational purposes only. No graph or chart should be regarded as a guide to investing. While some CLS portfolios may contain one or more of the specific funds mentioned, CLS is not making any comment as to the suitability of these, or any investment product for use in any portfolio. The views expressed herein are exclusively those of CLS Investments, LLC, and are not meant as investment advice and are subject to change. No part of this report may be reproduced in any manner without the express written permission of CLS Investments, LLC. Information contained herein is derived from sources we believe to be reliable, however, we do not represent that this information is complete or accurate and it should not be relied upon as such. This material does not constitute any representation as to the suitability or appropriateness of any security, financial product or instrument. There is no guarantee that investment in any program or strategy discussed herein will be profitable or will not incur loss. This information is prepared for general information only. It does not have regard to the specific investment objectives, financial situation, and the particular needs of any specific person who may receive this report. Investors should seek financial advice regarding the appropriateness of investing in any security or investment strategy discussed or recommended in this report and should understand that statements regarding future prospects may not be realized. Investors should note that security values may fluctuate and that each security's price or value may rise or fall. Accordingly, investors may receive back less than originally invested. Past performance is not a guide to future performance. Individual client accounts may vary. Investing in any security involves certain non-diversifiable risks including, but not limited to, market risk, interest-rate risk, inflation risk, and event risk. These risks are in addition to any specific, or diversifiable, risks associated with particular investment styles or strategies.

The CFA is a globally respected, graduate-level investment credential established in 1962 and awarded by CFA Institute — the largest global association of investment professionals. To learn more about the CFA charter, visit www.cfainstitute.org

The CMT Program demonstrates mastery of a core body of knowledge of investment risk in portfolio management. The Chartered Market Technician® (CMT) designation marks the highest education within the discipline and is the preeminent designation for practitioners of technical analysis worldwide. To learn more about the CMT, visit https://cmtassociation.org/

CLS Investments, LLC ("CLS") Chief Investment Officer, Rusty Vanneman, CFA, CMT, was selected as a "Top 10 Fund Managers to Watch" in 2017 by Money Management Executive. Money Management Executive is an unbiased, third-party publication covering the asset management industry. Money Management Executive chose the list of managers to watch by screening Morningstar data from funds with a single manager, ranked as having the best three-year annualized returns in their respective categories. The list of managers was published March 27, 2017. Money Management Executive is not affiliated with CLS. Ratings and awards may not be representative of any one client's experience and are not indicative of CLS's future performance.

0742-CLS-5/2/2019