CLS's WEEKLY 3

What You Need To Know About the Markets

APRIL 10, 2019

1. There's a tremendous opportunity for female investors, and financial advisors need to take notice

2. An inside look at how CLS uses alternative investments to enhance the risk-reward profile in portfolios

3. Five lessons the NCAA basketball tournament can teach us about investing

Market Performance (as of 4/5/2019)

Fixed Income	10-YEAR	5-YEAR	3-YEAR	1-YEAR	YTD	QTD	LAST WEEK
Cash Equivalent[1]	+0.40%	+0.73%	+1.19%	+2.11%	+0.63%	+0.04%	+0.04%
U.S. Investment Grade Bonds[2]	+3.78%	+2.65%	+1.83%	+4.53%	+2.64%	-0.30%	-0.30%
Equities	**10-YEAR**	**5-YEAR**	**3-YEAR**	**1-YEAR**	**YTD**	**QTD**	**LAST WEEK**
Global Equity Market[3]	+11.75%	+6.87%	+12.13%	+3.96%	+14.41%	+2.07%	+2.07%
Total U.S. Market[4]	+15.64%	+11.09%	+14.64%	+10.43%	+16.52%	+2.13%	+2.13%
Domestic Large-Cap Equity[5]	+15.27%	+11.68%	+14.90%	+11.21%	+15.42%	+1.98%	+1.98%
Domestic Small-Cap Equity[6]	+15.75%	+7.87%	+13.25%	+5.23%	+18.92%	+2.95%	+2.95%
International Equity[7]	+8.71%	+3.04%	+10.05%	-2.35%	+12.49%	+2.07%	+2.07%
Developed International Equity[8]	+8.62%	+2.57%	+9.27%	-1.93%	+12.61%	+1.94%	+1.94%
Emerging Market Equity[9]	+9.13%	+4.59%	+12.77%	-3.69%	+12.14%	+2.49%	+2.49%
Diversifiers	**10-YEAR**	**5-YEAR**	**3-YEAR**	**1-YEAR**	**YTD**	**QTD**	**LAST WEEK**
Diversified Alternatives[10]	+4.49%	+0.50%	+1.68%	+1.31%	+3.26%	+0.52%	+0.52%
Commodity[11]	-2.74%	-8.65%	+3.59%	-3.41%	+8.06%	+1.63%	+1.63%

[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

Week in Review

The second quarter of 2019 got off to a strong start with both domestic and international stocks rising about 2%. Growth continued to outperform value, while emerging markets were especially strong last week.

On a sector level, materials led all sectors with financials, discretionary, and communication services not far behind. Consumer staples and utilities lagged, providing the only negative performance for the week. Within domestic equities, small-cap stocks shined, besting their large-cap counterparts.

International markets showed signs of strength, with emerging markets leading the way. European stocks performed well, with Finland, Sweden, Greece, and Turkey particularly strong.

The fixed income markets were down for the week but managed to rally following the rebound in non-farm payroll, which also showed no real threat to inflation. On a relative basis, longer-duration maturities struggled, while corporate bonds fared slightly better than their Treasury counterparts. Commodities continued to show strength, up almost 2% for the week and 8% for the year. Oil has reached its highest levels in five months.

At this year's Inside ETFs conference, I had the pleasure of attending the kick-off breakfast with Women in ETFs. Founded in 2014, Women in ETFs is a nonprofit organization with the mission to help further the careers of women in the financial services industry. This mission is one that I am incredibly passionate about.

When I began my career, I quickly realized that I was often the only woman in the room. In 2006, while working at Fidelity Investments, I was asked to judge the final presentations of a stock-picking contest for local high schools, sponsored by a firm. Of the five group finalists, only one was comprised of young women, and their group won the contest. After announcing the winners, someone asked the three young women what their career goals were, and their responses surprised me. All three said they were planning to pursue careers in fields traditionally dominated by women: teaching and nursing. I asked why they weren't considering a career in investment management. Obviously, they had talent in the field. They replied that they weren't sure what opportunities were out there for them. They wanted to pursue careers where they could help people, and finance didn't seem like the best place to have a positive impact. This response saddened me because, as we all know, our industry does positively impact the lives of others.

Gender equality is all the rage today. It may seem odd, but I don't support the broad push for mandated gender equality. I don't think forcing parity is the answer. That said, I firmly believe our industry has failed to truly harness the power of women as investors and employees. Right now, we have a tremendous opportunity to change this and help drive real progress for women in our field.

As investors, women are leaving massive amounts of money on the sidelines, deterring their ability to reach their true financial potential. Here are some powerful statistics that show the real opportunity women have as investors:

- In 2018, 35% of millionaires in the U.S. were women.
- By 2030, women will control two-thirds of the wealth in the U.S.
- Mothers are the primary breadwinners in 40% of U.S. households.
- 56% of women do not invest outside of retirement.
- More than one-third of women have at least $50,000 just sitting in savings accounts.
- A recent study by consulting firm Kanter estimated that, by failing to engage better with women, the cost to our industry is about $800 billion.

Across our industry, the lack of female talent continues to be cause for concern. We must ask ourselves why women aren't entering our field and why those who do don't stay or advance to executive roles. I can only speak for myself, but I think there are many industry stereotypes that deter women from a career in finance. Almost every movie ever made about our industry highlights dominant alpha males acting like overgrown frat boys ("The Wolf of Wall Street" anyone?). We don't highlight our strong female leaders enough, which means we're not offering young women a glimpse of what is possible.

The talent shortage happens over time. About half of entry-level employees in financial services are women, but they hold only 19% of the leadership roles. One of the reasons for this is that women tend to have greater disruptions in their careers due to having children. This is a unique problem that we can't easily resolve. But I propose the most logical solution is to help develop career plans early on and help our talented female counterparts work through the challenges they face. Women have the potential to transform our industry for the better, and we will all benefit by harnessing the power of women.

In today's turbulent markets, more and more financial professionals are beginning to look to alternative funds for investment options. As a result, more investment managers are beginning to create alternative funds, and many hedge funds are registering their products under the 40 Act, making them more accessible to investors. As the interest in alternatives grows, so does the confusion. At many of the industry conferences I've attended lately, I've heard investment advisors ask "But where does it fit?" A review of the endowment model may shed some light on the issue.

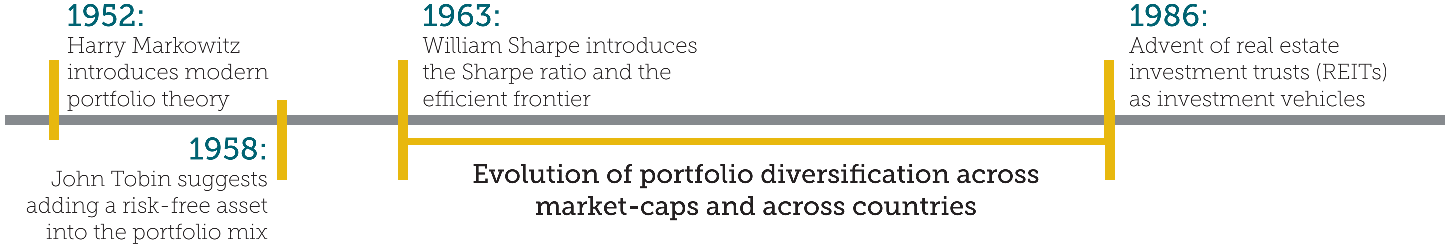
In 1952, Harry Markowitz introduced the world to modern portfolio theory. Originally, modern portfolio theory focused on having a diversified basket of stocks to help spread out the risk in a portfolio. In 1958, John Tobin suggested introducing a risk-free asset into the portfolio mix to create a more attractive risk-reward profile. Five years later, William Sharpe introduced the Sharpe ratio and the efficient frontier. The idea was simply that with the right mix of stocks, bonds, and cash, you could create the optimal risk-reward profile for your portfolio. Over the next few decades, these ideas became even more refined, first suggesting diversification across market-caps, then across countries, and finally additional asset classes with the advent of real estate investment trusts (REITs) as investment vehicles in 1986. As you can see, the theory of portfolio diversification is constantly evolving to create the best risk-reward profile for investors.

As the media becomes more and more influential in our daily lives, we, as investors, are beginning to recognize the fantastic returns generated by the large university endowments, such as Harvard and Yale. The consistency of the endowments' outpaced returns, even during difficult markets, has piqued the curiosity of many investors and led to increased research into their methods. As a result, investors are beginning to realize that these portfolios contain significant exposure to alternative investments, in the form of hedge funds, private equity, and real assets. The average endowment allocates between 60% and 80% of its portfolio to these investments.

So, the question remains, how do we enhance the risk-reward profile in our portfolios? Clearly, it is not feasible to allocate 60-80% of our portfolios to alternatives, simply because the liquidity needs and time horizon of the average individual investor are very different from an endowment. In my research, I've analyzed several different models to find the best mix, regardless of risk tolerance. That "optimal" allocation seems to be somewhere between 10% and 20%. In my research, 10% to 20% provides enough improvement in the risk profile without negatively affecting the excess return potential of the portfolio.

Recently, the Alternatives Broad Asset Class ETF (BACE) team at CLS met to review our current Focused Alternatives portfolio. We had noticed that despite the portfolio's strong performance, it was not exhibiting the risk and correlation characteristics that we want our alternatives allocation to have. The portfolio had a correlation with equity markets that was simply too high,

Developments in Portfolio Construction



so we worked to make a change. We evaluated the landscape of alternative ETFs, and after completing an analytical review, we landed on AGFiQ U.S. Market Neutral Anti-Beta Fund (BTAL). BTAL provides exposure to the spread return between low and high beta stocks by investing long in U.S. equities that have below-average betas and shorting those securities that have above-average betas, within sectors. We chose to replace our allocation to ProShares Large-Cap Core Plus (CSM), a 130/30 fund. We chose CSM because it had a correlation of about 1 with the S&P 500 Index. By swapping CSM with BTAL, we could quickly and effectively reposition our portfolio to better meet our objectives for our alternatives allocation. It reduced our overall correlation with equities and significantly improved our CLS Risk Score.

Ultimately, that's what using alternatives is all about: diversification and risk management. By using alternatives to improve both risk and diversification, it allows us to take risk in areas where the rewards can be more lucrative. I think that's what many investors forget. Alternatives aren't necessarily where you get the most bang for your buck; they are a tool to help you construct a portfolio with a better risk-reward profile. So, when you start thinking about using alternatives, consider it the seasoning to enhance the other ingredients you've included in your recipe for the optimal portfolio.

Shana Sissel, CAIA

Portfolio Manager

Shana Sissel joined the CLS Portfolio Management Team in 2018. She is responsible for actively supporting the Portfolio Management Team's efforts within a variety of special projects and investment management strategies, as well as writing and speaking on behalf of CLS.

Ms. Sissel has more than two decades of industry experience at leading investment firms, primarily in Boston and Chicago. Most recently, she was a Client Portfolio Manager at Ariel Investments where she represented Ariel's Domestic Research Team. Ms. Sissel also brings a vast background in market research and analysis through various roles held at Fidelity Investments' Strategic Advisor Inc., Mercer Investments, Peak Financial Management, and Russell Investments.

Ms. Sissel earned a Bachelor of Science Degree in Sport Management from the University of Massachusetts at Amherst before receiving her Master of Business Administration Degree from Bentley University's McCallum School of Business. She also holds the Chartered Alternative Investment Analyst (CAIA) designation.

As a frequent media contributor, Ms. Sissel has appeared on CNBC and other regional news outlets. She has also been quoted extensively in the Wall Street Journal, Smart Money, and Investment News.

(More) Investing Lessons from March Madness

Last month, CLS Junior Investment Research Analyst Dustin Dorhout wrote about the parallels in the way basketball fans fill out their March Madness brackets and the way many people select their investments. Now, as the Virginia Cavaliers celebrate their victory in the NCAA tournament, it seems like a great time to highlight some lessons the tournament can teach us about investing. The idea isn't exactly unique, I certainly am not the first and definitely won't be the last person to make these connections, but the idea is popular because it's a fun way to create a teaching exercise from a universally loved event.

There are hundreds of lessons that can be learned from March Madness, but below I've highlighted my top five:

1. Diversification is the key to success: In the history of March Madness, there has only been one time where all four number-one seeds made it to the Final Four. That year was 2008. Similarly, it is rare that the top performing stock/asset class in any given year will maintain its dominance as time moves on.

2. It's not about being perfect; it's about positioning yourself to get the most right: The odds of a perfect bracket are one in nine quintillion (9,223,372,036,854,775,808 to be exact). Consistently picking winning investments is equally as daunting. The key is to be thoughtful in your decisions, diversify, and be right more than you are wrong.

3. Past performance is no guarantee of future results: Yes, Villanova won last year. Yes Duke, has a long history of success. Yes, MSU under Izzo has made the Final Four eight times. As this year proved, none of that matters when you pick your bracket. If you relied on that information to pick your winner this year, only MSU would have been a successful Final Four pick. But had you picked them as your champion, you would have been wrong.

4. Success requires removing emotional and personal biases from your decisions: Just because it's your alma mater doesn't mean they will win a game. Your hatred of the Blue Devils may result in your refusal to pick Duke to win in the first round. None of those things are going to help you win your office pool. The same holds true for investing. Your personal beliefs about certain geographies or industries aren't going to help you generate excess returns. Focused, unbiased research will help you uncover the best opportunities for your portfolio and your bracket.

5. Don't overanalyze; the drama increases the more you watch: Okay, so this is kind of a two-in-one, but they are certainly related. Much like overanalyzing your portfolio can lead to mistakes and paying attention to every little move of the market stresses you out, the same is true for the tournament. If you let the big upset in the Round of 64 stress you out, you might not realize your champion is still in the mix and you're still in the running. What happens in the near term is irrelevant if you still end up meeting your goal.

So, as UVA celebrates their thrilling win over Texas Tech, remember that in the end, all that matters is whether you reached your intended goal. If not, don't fret. Second place isn't so bad. I should know; that's where I'm going to end up finishing this year, and I'm OK with that. When it comes to investing, you don't need to win the whole game to reap the rewards of the journey.

0363-CLS-4/9/2019