CLS's WEEKLY 3

What You Need To Know About the Markets

NOVEMBER 20, 2018

1. A focus on risk and diversification may not win every game, but it is more likely to bring home the championship
2. Active managers rejoice! Correlations within asset classes are falling
3. Understanding the creation of the first ETF is one of the best ways to comprehend the product

Market Performance

Equities	LAST WEEK	QTD	YTD '18
Global Equity Market[1]	-1.19%	-6.67%	-3.10%
Total U.S. Market[2]	-1.49%	-6.41%	+3.49%
Domestic Large-Cap Equity[3]	-1.54%	-5.84%	+4.11%
Domestic Small-Cap Equity[4]	-1.37%	-9.83%	+0.55%
International Equity[5]	-0.73%	-7.35%	-10.21%
Developed International Equity[6]	-1.43%	-7.96%	-9.27%
Emerging Market Equity[7]	+1.05%	-5.78%	-13.01%
Diversified Alternatives[8]	-0.51%	-1.85%	-1.19%
Fixed Income	**LAST WEEK**	**QTD**	**YTD '18**
U.S. Investment Grade Bonds[9]	+0.47%	-0.36%	-1.95%
Cash Equivalent[10]	+0.04%	+0.28%	+1.54%
Commodities	**LAST WEEK**	**QTD**	**YTD '18**
Commodity[11]	+1.27%	-1.21%	-3.21%

[1]MSCI ACWI Index [2]Russell 3000 Index [3]S&P 500 Index [4]Russell 2000 Index [5]MSCI ACWI ex-U.S. Index [6]MSCI EAFE Index [7]MSCI Emerging Markets Index [8]Morningstar Diversified Alternatives Index [9]Bloomberg Barclays Capital U.S. Aggregate Bond Index [10]Bloomberg Barclays Capital 1-3 Month U.S. Treasury Bill Index [11]Bloomberg Commodity Index As of 11/16/2018

Week in Review

Global equity markets were down on the week. Within domestic equities, large-caps slightly underperformed small-caps, but small-caps continue to be the performance laggards this quarter. It is interesting to note that value outperformed growth for the second week in a row.

International markets outperformed domestic, but it was emerging markets that stood out as top performers, being the only major equity asset class with positive returns for the week. Developed markets were hurt by weak European performance amidst mounting Brexit worries.

The 10-year U.S. Treasury yield fell last week on expectations for fewer rate hikes to come next year, ending at 3.1%. This led to positive returns for the broad bond market. Broad commodities had strong positive performance despite weakness in oil prices, supported by other sub-classes including metals and agriculture.

In economic news, the Consumer Price Index (CPI) for October was up 2.5%, in line with expectations. There was healthy economic data released with the Empire Manufacturing Index rising and retail sales exceeding expectations with a 0.8% increase.

Defense Wins Championships

Bill Murray: Swing it around to Mike, over here. You go to the hole and dominate!

Michael Jordan: Bill! We're on defense!

Bill Murray: Whoa ho ho! I don't play defense. Okay, you're gonna have to listen to Mike on this guys, listen up.

—Space Jam (1996)

There are several variables investors can control when investing, including the cost, time until withdrawals, how we react to volatility, and how much risk we take on. Unfortunately, we tend to focus most on returns, which we have no control over.

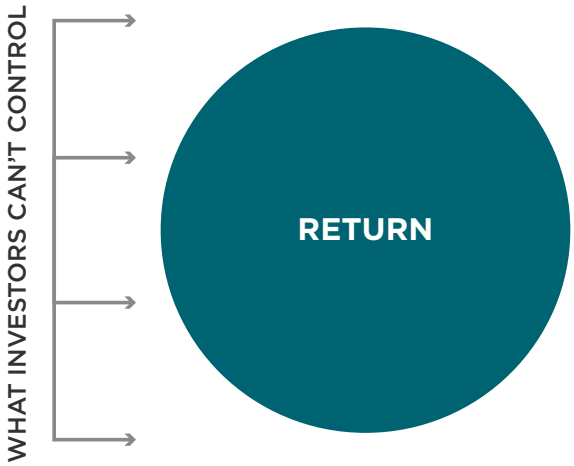
One of the most important elements investors can control is risk, and it can have a significant impact on returns. CLS focuses on measuring and targeting specific risk levels (Risk Budgeting). We do not make allocation changes based on market moves (performance chasing). By holding risk steady over the long term, we can match specific client needs and help control client emotions. Ultimately, CLS believes that keeping clients invested for the long run is the best way to achieve financial goals.

	Diversified Portfolio		Non-Divers. Portfolio	
Starting Value	$10,000		$10,000	
Year	Return	Std Dev	Return	Std Dev
2000	-2%	10%	-9%	17%
2001	-6%	11%	-12%	20%
2002	-7%	11%	-22%	21%
2003	22%	8%	29%	11%
2004	11%	6%	11%	7%
2005	7%	5%	5%	8%
2006	14%	5%	16%	6%
2007	9%	5%	5%	10%
2008	-23%	16%	-37%	21%
2009	23%	15%	26%	22%
2010	12%	11%	15%	19%
2011	1%	10%	2%	16%
2012	12%	8%	16%	11%
2013	14%	6%	32%	8%
2014	6%	6%	14%	8%
2015	-1%	8%	1%	14%
2016	7%	7%	12%	10%
2017	15%	2%	22%	4%
Annualized Total Ret	6%		5%	
Cumulative Total Ret	174%		158%	
Total Period Std Dev	9%		15%	
Ending Value	$27,419		$25,788	

Source: Morningstar data. Non-diversified portfolio represented by 100% S&P 500 Index. You cannot invest directly in an index. Diversified portfolio represented by a 60% equity / 40% fixed income portfolio with 60% of the equity in U.S. stocks and 40% in international. U.S. stocks represented by the Russell 3000 Index, international stocks by the MSCI ACWI ex-USA Index, and fixed income by the Bloomberg Barclays U.S. Aggregate Bond Index.

Additionally, we build globally diversified, balanced portfolios. A diversified approach can help defend against significant price drops in any one asset class. A consistent level of risk combined with a diversified approach results in a powerful matchup that is hard to beat. Take a look at the table above, which shows yearly risk and return for two portfolios starting in the year 2000:

- The diversified portfolio consists of 60% equities and 40% bonds, with the equity portion broken up into 60% U.S. stocks and 40% international stocks.



- The non-diversified portfolio is the S&P 500 Index.
- The diversified portfolio generally underperforms in the up years but outperforms in down years – a defensive approach.
- There were many more up years than down over the last 18 years; and yet, the annualized/cumulative returns favor the diversified portfolio. How can this be?
- It is because the risk of the diversified portfolio is so much lower; for the entire period it is 9% versus 15% – a 40% relative reduction in risk.
- For every down day that the diversified portfolio outperforms, it is able to compound returns and grow faster on the rebound.
- The result is a 16% higher cumulative return for the diversified portfolio. Translated into dollars, if you started the period with $10,000, the diversified approach results in an additional $2,000 in your pocket.

As a reminder, CLS builds Risk Budgeted, global, balanced portfolios to help investors succeed over time.

Kostya Etus, CFA

Senior Portfolio Manager

Konstantin "Kostya" Etus specializes in international investments. He is a co-manager on two mutual funds (aggressive allocation and international) and manager on various separate account strategies, including Core Plus ETF and ESG. In addition, he manages 529 plans.

Mr. Etus began his career at CLS in 2011 as a Trading Specialist and became a Research/Portfolio Analyst in early 2013. In 2016, he was promoted to Portfolio Manager. Prior to working at CLS, Mr. Etus worked as an Associate Financial Analyst at ConAgra Foods, Inc., managing the company's global cash network.

He graduated from the University of Nebraska at Omaha with a Bachelor of Science degree in Business Administration and obtained Master of Investment Management and Financial Analysis and Master of Business Administration degrees from Creighton University. He holds the FINRA Series 65 securities registration and the Chartered Financial Analyst (CFA) designation.

Did you know? Kostya grew up in Soviet Russia.

Country Correlation Conundrum

Alfred Pennyworth: Why do we fall, sir? So that we can learn to pick ourselves up.

—Batman Begins (2005)

We often group similar investments into categories known as "asset classes." The idea is that securities within an asset class tend to have similar drivers of performance, and thus, their returns are correlated to each other.

Two common asset classes are international developed markets and emerging markets. International developed includes countries such as the United Kingdom, Canada, and Japan. Emerging markets include countries like China, Brazil, and Russia. But let's think about the U.K., Canada, and Japan for a second. They are located on different continents, each has its own unique government and central banking system, and each produces and exports different types of products. So, why would they be grouped together?

They are grouped because they share some key characteristics that are different from emerging markets. Developed markets tend to have higher standards of living, stable and efficient stock markets, and, most importantly, free trade. Emerging markets on the other hand are like growing children on their way to becoming developed adults. They tend to have more rapid economic growth rates that are typically driven by exports of raw materials, but their governments, markets, and economies are less stable.

Thus, developed markets tend to exhibit higher correlations in stock market moves to each other, as do emerging markets. The graph below shows average correlations of individual developed countries relative to a broad developed index (teal) and individual emerging market country correlations relative to a broad emerging market index (gold).

As you can see, correlations have fallen over the last decade.

What does this mean?

Certain developed markets are behaving more differently from other developed markets. The same can be said for emerging markets.

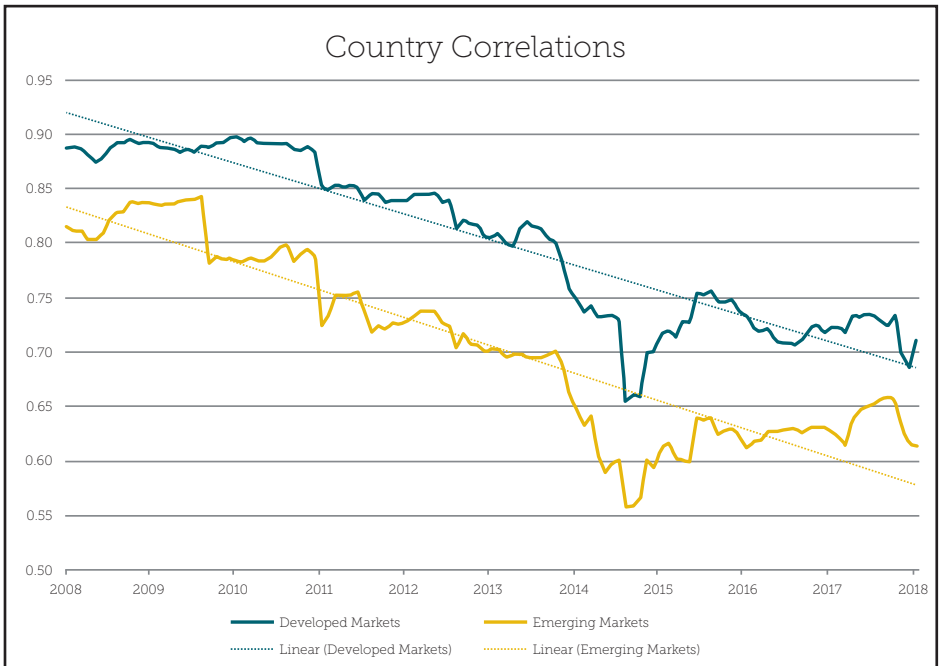
Why is this important?

When correlations within asset classes are low, active managers rejoice!

1. The diversification benefits of those asset classes become much more powerful as correlation drops. So, broad international investments become even more valuable risk reducers in diversified portfolios.

2. There are more opportunities for security selection within a given asset class as countries perform differently from one another. Through the beauty of ETFs, we are able to allocate more granularly within asset classes to regions and even countries – we have close to 50 countries we can invest in through ETFs!

Lower correlations = better diversification = more investment opportunities = higher potential for active outperformance = clients better able to reach investment goals.



Source: Morningstar October 31, 2008 – October 31, 2018. Three-year monthly correlations between Russell's individual country indices and Russell's developed market and emerging market indices

A Star is Born

By Dustin Dorhout, Junior Investment Research Analyst

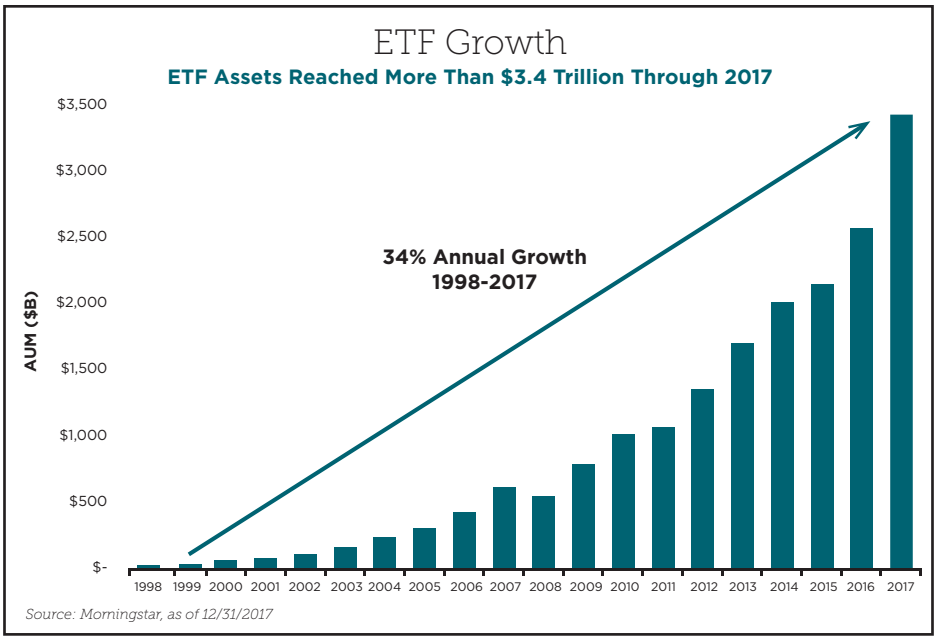
"It started out as a product, and it became an industry."

—Steven Bloom

In October 1987, the market saw its largest ever one-day crash, falling 23% in value. This infamous day was coined "Black Monday" — the worst day ever for stocks by almost two-fold. People wanted answers for the chaos, so a team from the Securities and Exchange Commission (SEC) set out to investigate what happened and how it could be prevented. This led to an 840-page report which pointed the finger at portfolio insurance and program trading as the main culprits of the crash. What the SEC did not know, however, was that a "suggestion" in its document spurred the idea for the first exchange traded fund (ETF) and the $3.4 trillion industry that followed — and that's just in the U.S.

Nate Most, a 74-year-old industry veteran, and Steve Bloom, a recent Harvard grad with a Ph.D. in economics, served as the two-person product development team at AMEX, an exchange that was struggling to gain securities listings from the New York Stock Exchange (NYSE) and Nasdaq. They were tasked with reading the daunting report and coming up with an idea that could put the exchange back on the map and maintain its relevance.

After reading this document in just a few short days, they discovered a potential home run. The SEC wrote that if well-capitalized specialists and supplementary market makers could have turned to a single product for trading baskets of stocks, the market damage and volatility may have been significantly reduced. Most and Bloom took that idea and ran with it.



The first step for the duo was to see if index mutual funds, in their current form, could be traded. Without much hesitation, they discussed the idea with Jack Bogle, the pioneer of the first index investment trust and founder of the behemoth Vanguard. Bogle was not interested in the product, expressing distaste for the idea of investors moving in and out of the fund and causing a meaningful increase in operating costs.

Most and Bloom took Bogle's criticism and strived to produce an investment product that, despite trading throughout the day, did not drive up costs. Most found inspiration from his days trading commodities. When investors store a commodity in a warehouse, they receive a warehouse receipt so there is more ease of transfer and use. Most wanted to create a parallel system for a group of stocks. Essentially, the stocks would remain with a custodian in return for shares, and those shares could be sold on an exchange – all without affecting the underlying securities in the custodian's electronic warehouse or increasing operational trading costs for investors of the fund.

The duo, by accident, also managed to create another positive within the structure — one that CLS consistently emphasizes as a main reason for using ETFs — the significant potential tax benefits. Because there is no exchange of money at the creation or redemption of shares, there are no capital gains distributions produced, giving

the structure a competitive advantage to its counterpart in the mutual fund space.

To bring their brainchild from concept to reality, the duo needed to find a virtual warehouse to serve as the trustee and custody agent, an index to track the product to, and the SEC to expedite approval. State Street gladly filled the need as the trustee and custody agent, and the S&P 500 Index was chosen for its widespread following of institutional investors. This left only one final component — the SEC approval, which became a four-year hurdle to launch the product.

During this long process, Most and Bloom had shared their idea with a team from a Canadian stock exchange. Given the absence of stringent regulatory burdens at the time, the Canadians were able to launch their version of the product within a year, thus beating the U.S. to the punch. However, in 1993, the SEC finally approved AMEX's exchange traded basket of stocks, which was named, "The Standard & Poor's Depositary Receipts" or "SPDRs."

Despite some setbacks with the SEC in bringing the product to market and some minor setbacks in the product's ability to gain assets in its early stages, SPY (the ETF that seeks to replicate the performance of the S&P 500 Index) has certainly outdone itself in its original intent. Bringing portfolio diversification and risk management, meaningful tax benefits, lower costs, and trading flexibility to investors of all variety, the ETF may be one of the most important financial innovations of our time.

The U.S. ETF market now has more than $3.4 trillion in assets, with more than 2,100 funds, and does not appear to be losing steam. This, to me, is a creation story worth telling and one that I believe investors can strongly benefit from.

The Russell 3000 Index is an unmanaged index considered representative of the U.S. stock market. The index is composed of the 3,000 largest U.S. stocks. The S&P 500 Index is an unmanaged index of 500-large capitalization companies. This index is widely used by professional investors as a performance benchmark for large-cap stocks. The Russell 2000 Index is an index comprised of the 2,000 smallest companies on the Russell 3000 Index and offers investors a benchmark for small-cap stocks. The MSCI ACWI ex U.S. Index (MSCI All-Countries World Index, excluding U.S.) is an index considered representative of stock markets of developed and emerging markets, excluding those of the U.S. The MSCI EAFE Index is an index which tracks performance of international equity securities in developed countries in Europe, Australia, Asia, and the Far East, excluding the U.S. and Canada. The MSCI Emerging Markets Index is an index which tracks performance of large and mid-cap firms across countries classified as emerging market countries. The Bloomberg Barclays Capital U.S. Aggregate Bond Index measures performance of the U.S. investment-grade bond market. The Bloomberg Barclays Capital 1-3 Month U.S. Treasury Bill Index includes all publicly issued zero-coupon U.S. Treasury Bills that have a remaining maturity of less than 3 months and more than 1 month, are rated investment grade, and have $250 million or more of outstanding face value. 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. The Morningstar Diversified Alternatives Index is an index comprised of exchange traded funds (ETFs) in the ProShares lineup that use alternative and non-traditional strategies. 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.

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