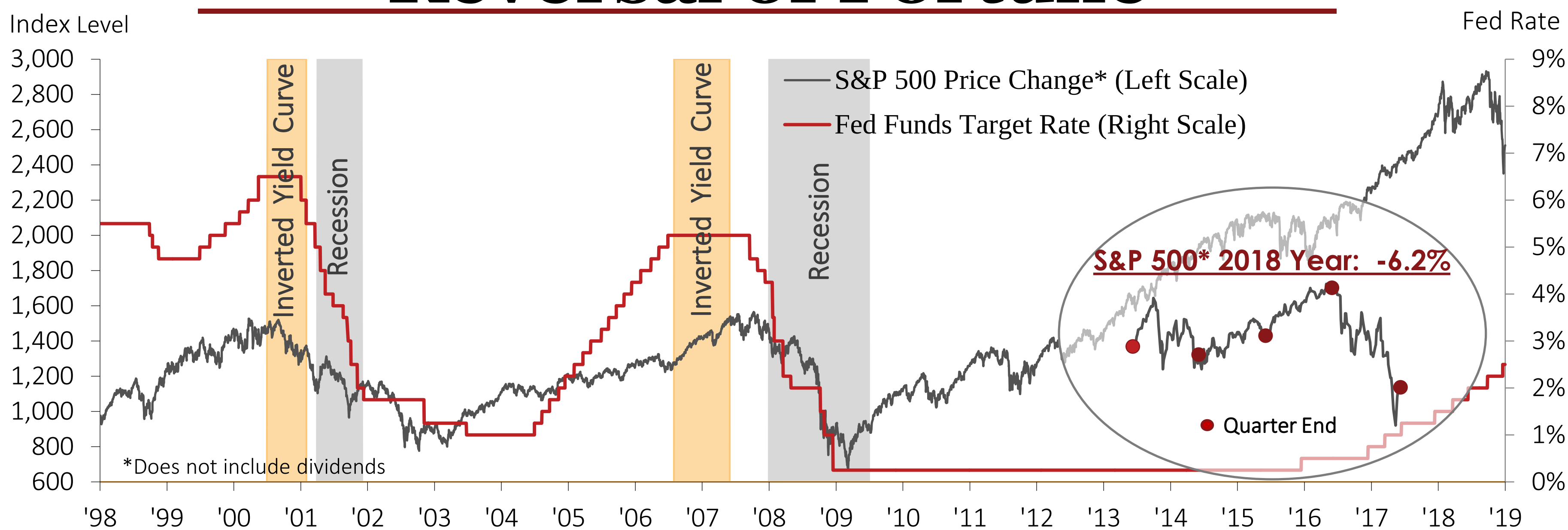
Capital Market Review

December 31, 2018




DeMarche

Reversal of Fortune



Source: Standard & Poor's, Federal Reserve

Possible Yield Curve Inversion?

Yield Curve Inversion Period	Number of Months	Average* Yield 3 Mo T-Bills	Average* Yield 10 Yr Treas	Average Spread	Start of Inversion to Start of Recession (Months)
July 2000 - Jan 2001	7	6.07	5.65	0.42	9
Aug 2006 - May 2007	10	5.03	4.70	0.33	17
Dec 2018**		2.41	2.83	Not Yet	?

Source: DeMarche Associates, Inc.

*Average month-end yield over inversion period.

**Yield as of 12/31/2018.

Domestic equities hit all-time highs during the year but came crashing back to earth during the 4th quarter in response to signs of a slowing economy and tighter monetary policy. Does this mean we are heading into a recession and a bear market? Yield curve watchers note that an "inverted" yield curve typically foreshadows a recession. Inversions have occurred before the last two recessions. However, today, while the curve has flattened, it still slopes upward. Let's not forget that it's the third year of the Presidential cycle. Since 1945, the third year has been the best year for stock returns. Interestingly, the second year has been the worst year of the four. What will this year hold for investors?

S&P 500 Total Returns Since 1945

Presidential Cycle Year*	1st	2nd	3rd	4th
No. of Occurrences	19	19	**18**	18
Average Return	12.0%	8.9%	**19.1%**	10.0%
Percent Positive	63.2%	63.2%	**100.0%**	88.9%
Std. Deviation	18.14	21.00	**11.77**	15.07

* Both 1st and 2nd Term where applicable.

Source: DeMarche Associates, Inc.

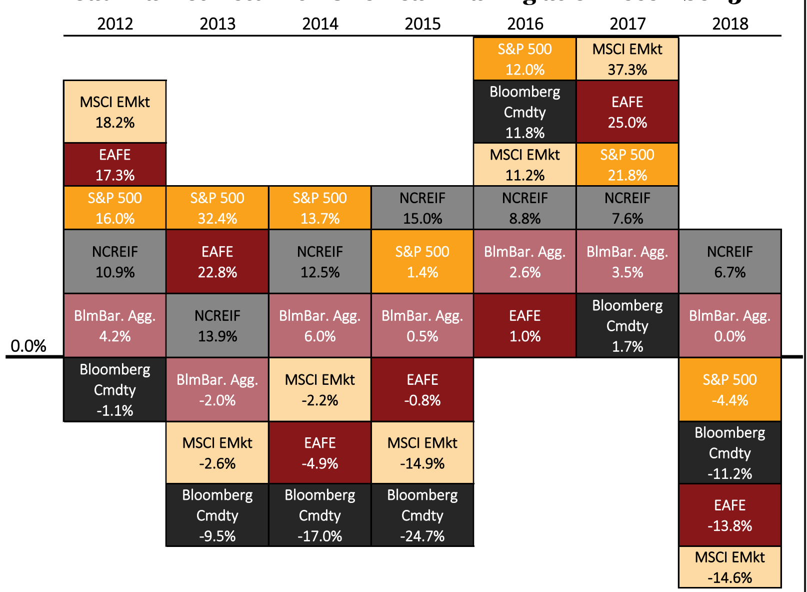
Highest Return
Lowest Standard Deviation

INDEX	4th Qtr	1-YEAR	3-YEAR	5-YEAR	10-YEAR
MSCI World	-13.4	-8.7	6.3	4.6	9.7
DeMarche World*	-13.1	-10.0	6.1	3.8	9.1
DeMarche 3000	-13.7	-7.1	8.1	5.9	10.9
Russell 3000	-14.3	-5.2	9.0	7.9	13.2
S&P 500	-13.5	-4.4	9.3	8.5	13.1
DeMarche International	-12.2	-13.6	3.4	1.8	7.2
MSCI EAFE USD	-12.5	-13.8	2.9	0.5	6.3
BlmBarc Aggregate	1.6	0.0	2.1	2.5	3.5
FTSE Non-US Gov't Bond	1.3	-1.8	3.3	0.3	1.3
BlmBarc Global Aggregate	1.2	-1.2	2.7	1.1	2.5
NCREIF (Private RE)	1.4	6.7	7.2	9.3	7.5
Bloomberg Commodity	-9.4	-11.2	0.3	-8.8	-3.8

*Notes: Data are presented as percent returns. All 3, 5 and 10-year returns are annualized. *Does not include Canada or Brazil.*

Indicator Year Ending 12/31	2018	2017	2016	2015	50 Year Average
GDP Annual Growth Rate	N/A	2.5	1.9	2.0	2.8
Unemployment	3.9	4.1	4.7	5.0	6.2
Inflation (CPI)	1.9	2.1	2.1	0.7	4.0
10-Year Interest Rates	2.8	2.4	2.5	2.3	6.4

Broad Market Returns - One Year Trailing as of December 31



Source: DeMarche Associates, Inc.

- Global markets tumbled and bond yields fell in the 4th quarter as concerns that the Federal Reserve may be hiking short term rates too aggressively. Additionally, concerns about global growth, the unwinding of central bank balance sheets, and continued trade tensions, prompted a flight to quality in the 4th quarter.

- Global markets posted their steepest annual declines since the financial crisis of 2008. Despite the large selloff, the S&P 500 posted a robust 13.1% return for the past ten years. Ten-year returns for international stocks were much more modest at 6.3%, reflecting slower growth in those economies.

- Bonds, as measured by the BlmBarc Aggregate, struggled for the first nine months of the year, but marked a strong 1.6% return for the quarter finishing the year at 0%. During the quarter, interest rates fell, boosting bond prices on higher quality longer duration bonds as investors sought a safe haven from stock market's volatility.

- As the table to the left shows, there were few positively performing asset classes in 2018. Bonds returned 0% and equities across all markets experienced a negative return. Emerging markets performed best in 2017, worst in 2018, and in the middle of the pack in 2016. Yet over three years the S&P 500 and Emerging Market index have returned 9.3% and 9.2%, respectively. This example shows the importance of systematic rebalancing to manage risk.

DeFact

The dollar closed out 2018 up 4.3% against a basket of 16 other major currencies. The only other major currency to record a gain for the year was the Japanese yen, which rose a bit more than 2%. A stronger dollar hurts foreign purchasers of commodities such as oil and copper because most raw materials are priced in dollars. Multinational companies that need to convert overseas earnings into dollars, are also hurt by dollar strength. Several factors apparent in 2019 may help reverse the trend. Among these are the Fed curtailing interest rate increases, slower pace of domestic economic growth and an unwinding of ECB balance sheet quantitative easing.

~ WSJ

INDEX	4th Qtr	1-YEAR	3-YEAR	5-YEAR	10-YEAR
DeMarche Growth	-14.3	-3.9	9.8	8.6	12.6
DeMarche Value	-12.7	-11.3	5.9	2.3	8.8
DeMarche Aggressive	-19.3	-13.2	4.5	0.3	11.0
DeMarche Defensive	-13.2	-6.5	8.4	6.4	10.8
DeMarche Large Cap	-13.0	-5.8	8.2	6.2	10.2
Large Cap Growth	-13.9	-2.1	10.6	9.5	12.3
Large Cap Value	-11.5	-10.3	5.5	2.2	7.6
DeMarche Small Cap	-20.9	-14.8	7.7	2.7	12.8
Small Cap Growth	-19.0	-12.4	6.6	3.1	11.7
Small Cap Value	-22.4	-16.7	8.3	2.3	13.5
S&P 500	-13.5	-4.4	9.3	8.5	13.1
S&P Mid-Cap 400	-17.3	-11.1	7.7	6.0	13.7
S&P Small-Cap 600	-20.1	-8.5	9.5	6.3	13.6
Russell 1000	-13.8	-4.8	9.1	8.2	13.3
Russell 1000 Growth	-15.9	-1.5	11.1	10.4	15.3
Russell 1000 Value	-11.7	-8.3	7.0	5.9	11.2
Russell 2000	-20.2	-11.0	7.4	4.4	12.0
Russell 2000 Growth	-21.7	-9.3	7.2	5.1	13.5
Russell 2000 Value	-18.7	-12.9	7.4	3.6	10.4

Notes: Data are presented as percent returns. All 3, 5 and 10-year returns are annualized.

Returns One Year After a Quarterly Return of -10% or Worse
Last 20 Years (1/1/1999 to 12/31/2018)

	Russell 1000	Russell 2000
# Qtrs with ≤ -10% quarterly return	9	7
Average Return of those quarters	-14.6%	-19.6%
Average subsequent 1 year return	18.7%	27.4%
4th Qtr 2018 Drawdown	-13.8%	-20.2%
Subsequent 1 year return	?	?

Source: DeMarche Associates, Inc.

- Domestic stocks fell in the quarter, with growth stocks reporting the largest declines. However, growth stocks still have a significant lead over value for all other time periods shown. Large cap growth stocks were led downward by tech and discretionary stocks. Apple had a tough quarter, down over 30%; Amazon also struggled, down almost 22%. These two stocks are the largest weights in their respective industry sectors.
- Small caps were leading large caps at the end of the 3rd quarter, but underperformed by more than 6% for the 4th quarter to finish in bear market territory. Small cap stocks were hit hard by economic growth worries. Small cap energy stocks were the worst performing by far, down over 45%, but make up less than 4% of the broad small cap index. In the past few quarters, small health care stocks (15+% weight in the index) led the way but were down over 21% for the quarter.
- Price-to-earnings ratios improved in the quarter, due to the dramatic price decline. According to JP Morgan, over the course of the 4th quarter the S&P 500 forward P/E ratio declined from 16.8 to 14.4.
- As shown in the chart to the left, stocks tend to rebound smartly following a quarter that declined over 10%. Since 1999, for large cap stocks there have been nine quarters where the quarterly loss was in excess of negative 10%. Subsequently, the market was up double digits for the next one-year period. The trend is mirrored in small cap stocks, but the swings in small cap returns appear to be more volatile.

DeFact

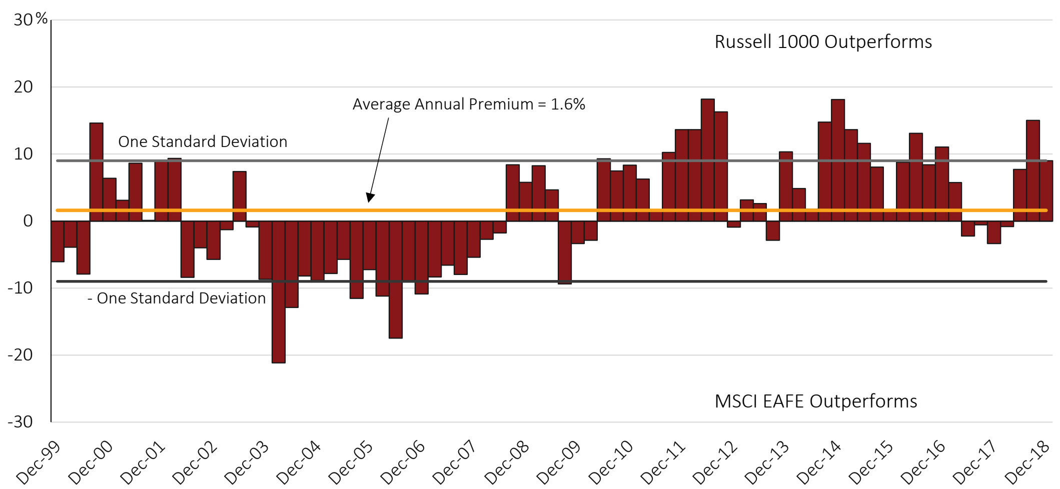
During the 3rd quarter, Apple posted its largest ever market cap at about $1.1 trillion. At the end of the 4th quarter, it fell to just over $700 billion, a loss of almost $400 billion. This amount of market cap loss is greater than all but five companies in the S&P 500, including such stalwarts as JP Morgan, Exxon, and Johnson & Johnson which all started the 4th quarter at market capitalizations just under $400 billion.

~ Standard and Poor's, DeMarche

International Equities

INDEX	4th Qtr	1-YEAR	3-YEAR	5-YEAR	10-YEAR
DeMarche Int'l	-12.2	-13.6	3.4	1.8	7.2
Growth	-12.0	-13.6	1.9	1.5	7.3
Value	-12.5	-13.2	5.2	1.4	6.8
DeMarche Int'l Small Cap	-13.8	-19.2	2.1	1.8	10.8
DeMarche EM	-8.3	-18.1	3.7	2.0	8.0
MSCI EAFE Local	-12.2	-11.0	2.6	3.8	7.5
MSCI EAFE USD	-12.5	-13.8	2.9	0.5	6.3
Growth	-13.3	-12.8	2.9	1.6	7.1
Value	-11.7	-14.8	2.8	-0.6	5.5
MSCI Japan	-14.2	-12.9	3.4	3.1	5.3
MSCI AC Asia-ex Japan	-8.7	-14.4	8.6	4.0	10.1
MSCI Germany	-15.5	-22.2	0.7	-2.1	5.6
MSCI France	-15.0	-12.8	5.6	1.2	5.5
MSCI UK	-11.8	-14.2	1.6	-1.7	6.8
MSCI EAFE Small Cap	-16.0	-17.9	3.7	3.1	10.5
MSCI EM	-7.5	-14.6	9.2	1.6	8.0
MSCI All Country-ex US	-11.5	-14.2	4.5	0.7	6.6

Notes: Data are presented as percent returns. All 3, 5 and 10-year returns are annualized.



Source: DeMarche Associates, Inc.

- Developed international stocks also suffered in the quarter, however, not to the degree of domestic stocks. The dollar did not have much impact on relative returns for the quarter, but it did strengthen during the year which is reflected in local returns outperforming U.S. dollar returns for the year. All in all, the expectation for slow growth in overseas economies had already negatively impacted returns earlier in 2018.

- Emerging market stocks outperformed international developed stocks and domestic stocks in the 4th quarter, but lagged those stocks for calendar year 2018. Tariff headlines and economic growth concerns in the 2nd and 3rd quarters negatively impacted 1-year results. By the end of the December, a slight thawing in trade tensions, and the fact that a significant drawdown happened earlier in the year helped the emerging markets to outperform other equity markets for the quarter.

- International small cap stocks struggled during the quarter, losing 16% to finish the year down 17.9%. Over a longer-term horizon of 10 years, international small cap stocks have outperformed their larger cap brethren. The MSCI EAFE Small Cap Index is heavily weighted to Japanese and U.K. companies and suffered a drag on performance for the year from the Brexit overhang and Japan's dormant consumers.

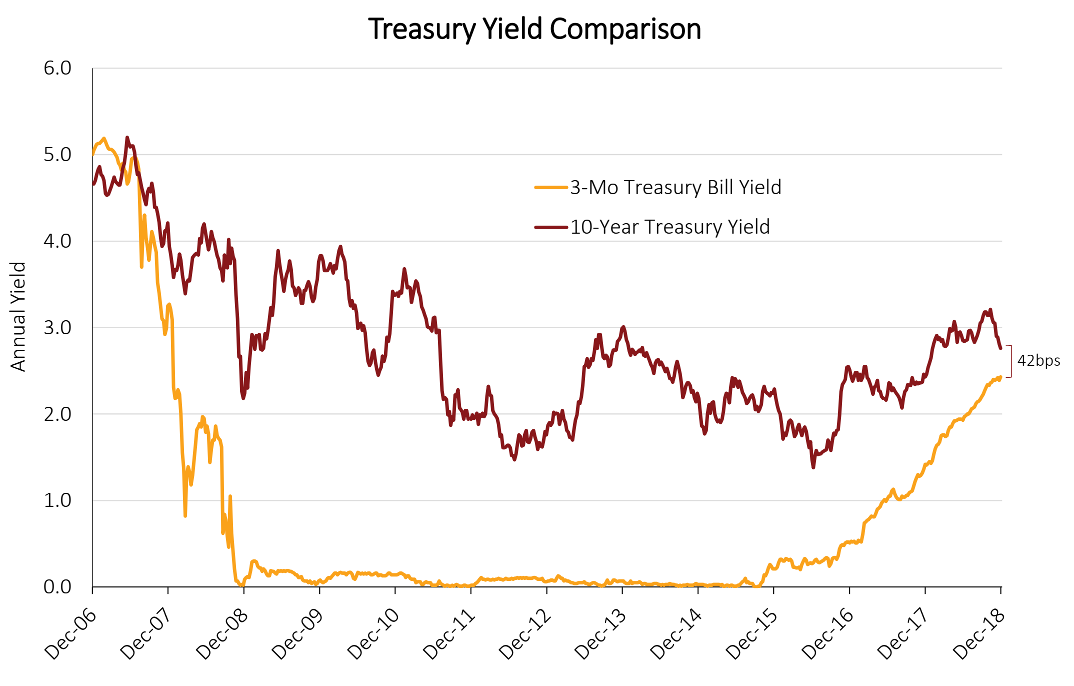
- Developed international stocks have lagged domestic large cap stocks for a large part of the past 20 years. The last time international stocks had sustained outperformance was between 2003 and 2007. Over the past ten years, the developed markets have been led by growth stocks and the U.S. has a greater proportion of technology stocks than Europe and Japan. At the end of 2018, the Russell 1000 index weight of technology was 20%; in the EAFE index, it was about 6%.

DeFact

It looks like the Brexit resolution will continue to be messy. Prime Minister Theresa May decided to pull a parliamentary vote on the current plan in December. With the March 29, 2019 deadline looming, politicians will reengage in debate in early 2019. European and U.K. markets will likely remain volatile in the 1st quarter 2019 as various constituencies battle it out. ~ T Rowe

INDEX	4th Qtr	1-YEAR	3-YEAR	5-YEAR	10-YEAR
BlmBarc 1-3 Gov Credit	1.2	1.6	1.2	1.0	1.5
BlmBarc Aggregate	1.6	0.0	2.1	2.5	3.5
BlmBarc Gov Credit Long	0.8	-4.7	4.0	5.4	5.9
BlmBarc US TIPS	-0.4	-1.3	2.1	1.7	3.6
Merrill Lynch High Yield	-4.6	-2.3	7.2	3.8	10.9
CSFB Leveraged Loan (bank loans)	-3.1	1.1	5.0	3.3	8.3
BlmBarc Global Aggregate	1.2	-1.2	2.7	1.1	2.5
JPM EmgMkt Bd Glbl Dvrsfd (hard)	-1.3	-4.3	5.2	4.8	8.2

Notes: Data are presented as percent returns. All 3, 5 and 10-year returns are annualized.



Source: St. Louis Federal Reserve

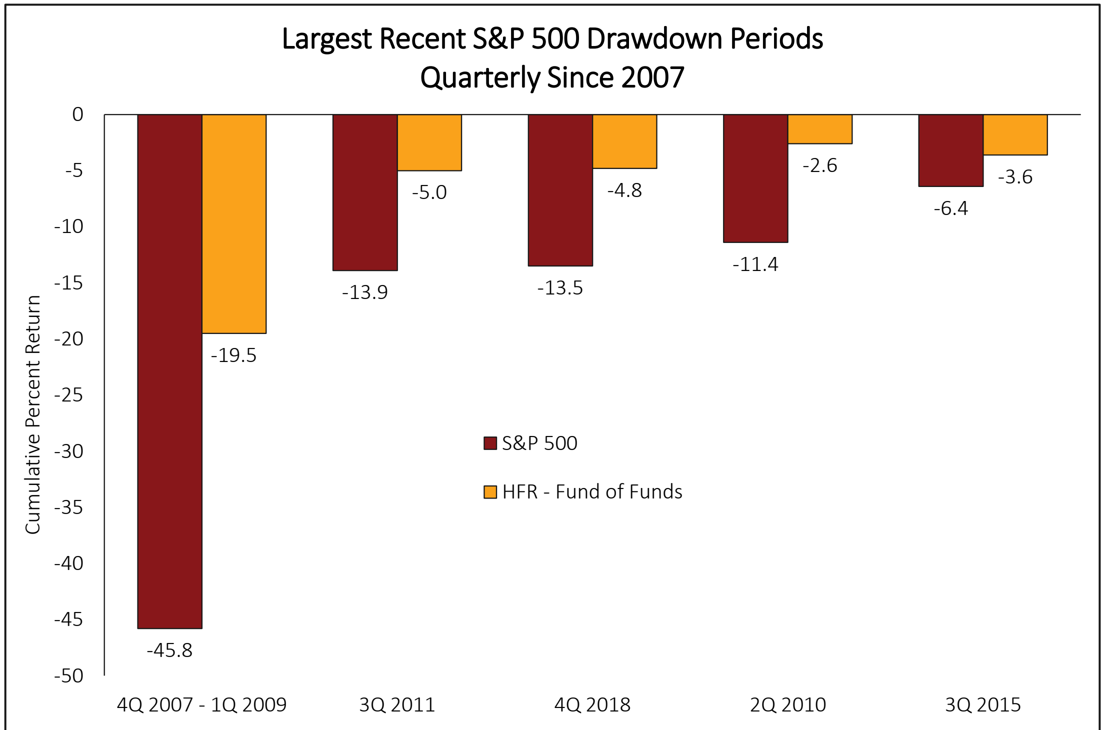
- Not only did investors flee equities in the quarter, they also sold credit risk resulting in wider spreads and higher yields. At the beginning of October the broad high yield spread was the narrowest for the year at 316 basis points; at the end of December it was the widest at 533 basis points. The spread widening negatively impacted total return for the quarter.
- Investment grade bonds, such as high quality corporates and Treasuries did well in the 4th quarter. The BlmBarc Aggregate had a negative year-to-date return at the beginning of the quarter, but rallied as interest rates fell in the second half of December. It posted a strong 1.6% return for the quarter as investors fled volatility in the stock market.
- Emerging market debt struggled through the quarter as investors shed risk, leading to spread widening of about 50 basis points on the broad index. In addition, the continued strength in the dollar for the year did not help the asset class. Countries that issue debt in dollars must use local currency to buy dollars to make coupon and maturity payments. A stronger dollar makes this activity more expensive.
- The graph to the left shows the relationship for the 3-month to 10-year Treasury spread since 2007. The graph shows the significant narrowing of the spread over the past three years. The bond market is signaling lower economic growth ahead, tepid inflation prospects, and a greater likelihood of a bad credit environment in the near term. Therefore, bond buyers demand greater compensation on near-term bonds than longer-term bonds. The spread has not yet turned negative, but it is close.

DeFact

While the Fed has backed off a more aggressive pace (3 to 4 increases) of interest rate tightening at its December meeting to state that it is targeting two rate hikes in 2019 (to 3%), the Fed Funds futures market doesn't believe it. Futures are signaling that there is almost an 80% chance the Fed will stay put on rates for 2019. Futures are even pricing in a 25% chance that the Fed will begin to cut rates in the 1st quarter of 2020. ~ Chicago Mercantile Exchange, DeMarche

INDEX	4th Qtr	1-YEAR	3-YEAR	5-YEAR	10-YEAR
NCREIF Property (Private RE)	1.4	6.7	7.2	9.3	7.5
Apartment	1.4	6.1	6.5	8.3	7.5
Industrial	3.4	14.3	13.2	13.6	9.2
Office	1.7	6.8	6.4	8.6	6.4
Retail	-0.4	2.2	5.6	9.0	8.2
NAREIT (Public RE)*	-6.1	-4.1	4.6	8.3	12.4
NCREIF Timberland	1.0	3.4	3.2	5.0	3.8
HFR FOF Composite	-4.8	-3.9	1.3	1.4	3.1
Conservative	-3.4	-1.1	1.6	1.7	3.1
Diversified	-4.7	-3.4	1.2	1.4	3.2
Strategic	-6.0	-6.2	1.4	1.3	3.4
Bloomberg Commodity	-9.4	-11.2	0.3	-8.8	-3.8

Notes: Data are presented as percent returns. All 3, 5 and 10-year returns are annualized.
**Public RE is not a less liquid strategy. It is listed for comparative purposes.*



Source: DeMarche Associates, Inc.

- Concerns about global growth spilled over into the commodity markets. Oil prices fell dramatically in the quarter. Crude oil prices, as measured by West Texas Intermediate, fell almost 40% in the quarter and over 20% for the year. Precious metals prices rallied in the quarter amid investors' reluctance to take risk, but most commodity sectors struggled and the broad index posted a negative 9.4% for the quarter.

- REITs outperformed domestic stocks for the quarter and the year. The dividend on REITs, which is higher (4.8%) than on broad domestic stocks indexes helps cushion against downside risk and volatility. However, REITS have lagged over the past three years primarily due to the same dividend effect that gives it a bond-like quality causing a lag in performance when interest rates increase.

- Private real estate posted a positive return of 1.4% for the quarter and 6.7% for 2018. While the 2018 return is well below the 5-year annualized pace of 9.3%, real estate outperformed all other asset classes for the year and proved to be a point of stability during a period of heightened volatility across most major asset classes.

- Hedge funds lived up to their name in the quarter, limiting the downside performance compared to stocks. In addition, over the year, hedge fund returns also beat out stocks. The chart to the left shows how hedge funds have protected capital in down markets as represented by the S&P 500. Broadly diversified hedge fund strategies performed well during the five largest S&P 500 drawdowns since 2007.

DeFact

One of the most consistent performers in the real estate world, industrial and warehouse space, continues to grow at a steady pace. Robust growth of companies like Amazon is creating a new dynamic where almost 30% of warehouse space is devoted to online retailing. At last count, Amazon had 342 fulfillment centers, Prime hubs and sortation centers in the U.S., up from 18 in 2007.

~ The Atlantic, Curbed.com

2019 Will Be A Year Of Change

The aging economic expansion, low unemployment, and generous fiscal policy will go head to head with shifting interest rates, growing debt, and the likelihood of more market volatility. There's no room for complacency.

DeMarche Recommends: It's time for a Reality Check

Education followed by action is the best strategy to avoid getting caught off guard in changing times. Our spring workshops will address some of the most critical and interesting issues facing institutional investors in 2019.

Reality Check: The 2019 DeMarche Workshops

Tuesday, February 12, 2019 | Kansas City – Intercontinental Hotel
Hidden Portfolio Opportunities and Risks - Institutional investors face the prospect of lower returns as the market cycle shifts, volatility increases, and capital markets undergo dramatic but underreported changes. We'll examine ways to a build a more efficient portfolio including asset allocation and new diversification strategies.

Tuesday, March 19, 2019 | Chicago – The University Club
Strategic Horizon for Global Markets - Short-term market corrections may provide opportunities over the next three to five years for returns that may be quite different from secular return expectations. In times of market disruption, different opportunity sets are discovered globally. Come hear insights from thought leaders on how these opportunities may help your portfolio.

Tuesday, May 21, 2019 | Twin Cities – The Marquette Hotel Minneapolis
Making a Difference through Responsible Investing – Value driven investing principles have become an increasingly mainstream concept for many institutional investors. These include Impact, Socially Responsible, Mission Related and Environmental, Social and Governance (ESG) investing opportunities. But there is still no common agreement on critical metrics and definitions. We'll address how to determine whether Responsible Investing is a fit for your organization and what implementation strategies you could consider.

Tuesday, June 18, 2019 | Philadelphia – Venue TBD
Retirement Readiness in Turbulent Markets – Join us to discuss how to find the strategic balance between risks and opportunities in your retirement plans. For much of the last decade, Defined Contribution plan sponsors have benefited from correlated markets that provided positive returns for many options, regardless of quality, composition, or underlying characteristics. However, not all investment options will continue to outperform in volatile and turbulent markets. It's time to reassess risk. Defined Benefit fiduciaries have likewise benefited from improved funding ratios. But, new funding levels mean fiduciaries must now reconsider the balance between risk and opportunity within their plan.