



## Economic and Capital Market Review

First Quarter 2018

The market complacency of 2017 gave way to volatility in the first quarter of 2018 as investors grew concerned about upcoming Fed policy and domestic trade protectionism.

Expectations about central bank liquidity and the direction of monetary policy were the most important factors influencing the financial markets in the first quarter. A strong January employment report indicated employment earnings were increasing at a +3.0% annual rate, the fastest since 2009. The markets reacted swiftly as investors feared the report would force the Fed to increase interest rates faster than originally anticipated. As a result, the following seven trading days saw the S&P 500 decline 10% and the 10-year U.S Treasury yield increase to 2.84%.

The other unforeseen development that played a role in increased volatility was the initiation of a confrontational trade policy by the Trump administration. While this issue has been simmering in the background for some time, it kicked into high gear when the administration initiated a series of trade tariffs, first on steel and aluminum, and then with provisions specifically targeting China. Not only do these actions raise the risk of retaliatory measures by foreign governments, they also introduce uncertainty for businesses and consumers around the world, as trade tariffs will likely affect costs, prices, and demand. While the specific impact of a trade war on the global economy is difficult to estimate or quantify, the sour tone of the rhetoric about retaliatory tariffs diminished investors' appetite for risk.

The good news is that even with macro uncertainty on the rise, the financial markets remain supported by solid fundamentals. The synchronized global economic expansion continues. The U.S. tax overhaul has boosted corporate capital investment and earnings, making the markets' valuation multiples more reasonable.

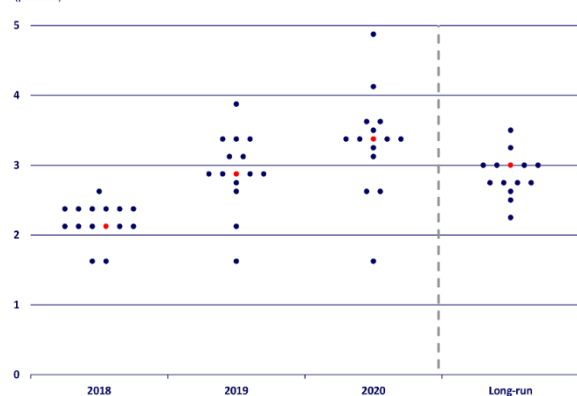
As we discussed last quarter, the lynchpin for determining asset prices is the long-term bond yield. The data makes it hard to argue against the fact that global central bank policies have distorted bond markets and, by extension, the prices of financial assets. Outside of an unforeseen geo-political event, the most direct threat to the current economic climate is a significant rise in interest rates. Thus, we are keeping our eyes open for any upward pressure on long-term rates.

### Federal Open Market Committee (FOMC)

Federal Chairman Powell presided over his first meeting of the FOMC in March, in which the committee voted to increase short-term rates by 25 basis points. The Fed Funds rate now stands at 1.50% to 1.75%

While the path of rate increases that the committee outlined for 2018 was a bit shallower than the market anticipated, the longer-term projection for the fed funds rate as demonstrated by the post-meeting "dot plot" was steeper. The committee believes the economy is on a faster and more sustainable growth path than it was in 2017, with inflation set to pick up "notably" this spring. Despite stated caution about the longer term risks the economy faces, the Fed appears determined to continue the path of policy normalization begun under Janet Yellen.

Target Federal Funds Rate at Year-End (percent)



In our view, the Federal Reserve will remain on their path of gradually increasing short term interest rates in 2018. The chart at the right depicts the FOMC's projection for the federal funds rate at the end of 2018, 2019 and 2020. Their current projection indicates a rate of 2.125% at the end of 2018 which implies two more rate hikes.

## Real Gross Domestic Product (GDP)

Real GDP measures the value of all goods and services produced by the nation's economy.

U.S. economic growth slowed in the first quarter. In the advance estimate, GDP grew at a 2.3% annual rate following 4Q17 growth of 2.9% and 3Q17 growth of a 3.2%. This is the weakest reading since 1Q17.

The culprit was consumer spending which accounts for more than two-thirds of U.S. economic activity. Consumer spending increased 1.1% which was the slowest since the second quarter of 2013. It also was a payback for a 4.0% surge in Q4.

For a better sense of underlying domestic demand, economists look at final sales to domestic purchasers, which strips out inventories and trade, the two most volatile components of GDP. Domestic final sales grew +1.6% percent this quarter.

We anticipate continued +3.0% GDP growth in 2018 as the overall economic environment supports consumer spending through low interest rates, modest inflation, low energy prices and lower taxes.

## Inflation

The Consumer Price Index (CPI) measures price changes in consumer goods and services from the perspective of the purchaser.

The Personal Consumption Expenditures Index (PCE) includes a broader range of expenditures than CPI and uses a formula that adjusts for changes in consumer behavior. PCE measures price changes from the perspective of the purchaser.

The Producer Price Index (PPI) measures the change in selling prices of goods and service by domestic producers from the perspective of the seller. PPI inflation generally appears before CPI and PCE.

When making decisions on monetary policy, the Fed is most interested in the less volatile Core PCE, which excludes food and energy. Core PCE inflation increased +1.9% on a year-over-year basis and continues to trend below the Fed's target of +2.0%.

Minutes of the Fed's March 20-21 policy meeting showed officials expected the annual PCE price indexes to accelerate in March partly because of "the arithmetic effect of the soft readings on inflation in early 2017 dropping out of the calculation." The minutes also noted that the rise in inflation emanating from the so-called base effects "by itself, would not justify a change in the projected path" for the central bank's benchmark overnight interest rate.

## Business

The Conference Board's Leading Economic Index (LEI) increased +6.2% during the quarter to 109.0, its highest ever reading. For the six-month period ending March, the leading economic index has increased by +4.3% which suggests solid economic growth throughout 2018.

According to the latest Manufacturing ISM Report on Business, the overall economy grew for the 107<sup>th</sup> consecutive month. The Purchasing Manager's Index (ISM PMI) ended March at 59.3%. The past relationship between PMI and the overall economy indicates that the average PMI reading in March corresponds to a +4.9% increase in

Economic Growth	1Q18	4Q17	3Q17
<b>Real GDP <sup>(1)</sup></b>	<b>2.3%</b>	<b>2.9%</b>	<b>3.2%</b>
Personal Consumption <sup>(2)</sup>	0.7%	2.8%	1.5%
Private Investment <sup>(2)</sup>	1.2%	0.8%	1.2%
Government <sup>(2)</sup>	0.2%	0.5%	0.1%
Net Exports <sup>(2)</sup>	0.2%	-1.2%	0.4%
<b>Real GDP Components</b>			
Domestic Final Sales <sup>(1)</sup>	1.6%	4.5%	1.9%
Foreign Trade Effect <sup>(1)</sup>	<u>0.3%</u>	<u>-1.1%</u>	<u>0.5%</u>
Final Sales <sup>(1)</sup>	1.9%	3.4%	2.4%
Inventory Effect <sup>(1)</sup>	<u>0.4%</u>	<u>-0.5%</u>	<u>0.8%</u>
Real GDP <sup>(1)</sup>	2.3%	2.9%	3.2%
<b>Demand Components</b>			
Personal Consumption <sup>(1)</sup>	1.1%	4.0%	2.2%
Business Fixed Investment <sup>(1)</sup>	6.1%	6.8%	4.7%
Residential Investment <sup>(1)</sup>	0.1%	12.8%	-4.7%
Government Spending <sup>(1)</sup>	1.2%	3.0%	0.7%

<sup>(1)</sup> Annualized Q/Q % Change, <sup>(2)</sup> Contribution to GDP Growth

Inflation	3/18	5 Year High	5 Year Low
<b>Headline (All Items)</b>			
CPI <sup>(3)</sup>	2.4%	2.7%	-0.2%
PCE <sup>(3)</sup>	2.0%	2.2%	0.2%
PPI <sup>(3)</sup>	3.0%	3.0%	-1.5%
<b>Core (Less Food and Energy)</b>			
CPI <sup>(3)</sup>	2.1%	2.3%	1.6%
PCE <sup>(3)</sup>	1.9%	1.9%	1.3%
PPI <sup>(3)</sup>	2.7%	2.7%	0.2%
<b>Inflation Expectations</b>			
5Yr Breakeven Inflation	2.0%	2.1%	1.1%
10Yr Breakeven Inflation	2.1%	2.4%	1.3%
30Yr Breakeven Inflation	2.1%	2.5%	1.5%

<sup>(3)</sup> Y/Y % Change

Business	3/18	5 Year High	5 Year Low
Leading Economic Index	109.0	109.0	88.9
Leading Economic Index <sup>(3)</sup>	6.2%	6.5%	0.5%
Small Business Optimism	104.7	107.4	91.5
ISM PMI	59.3	60.8	47.8
ISM NMI	58.8	59.9	51.6

<sup>(3)</sup> Y/Y % Change

real gross domestic product on an annualized basis. (A reading above 50% indicates that the manufacturing economy is generally expanding and a reading below 50% indicates that it is generally contracting.)

The latest Non-Manufacturing ISM Report on Business indicates economic activity in the non-manufacturing sector grew for the 98<sup>th</sup> consecutive month. The Non-Manufacturing Index (ISM NMI) ended March at 58.8%, well into expansionary territory. The past relationship between NMI and the overall economy indicates that the latest reading corresponds to a +3.6% increase in real gross domestic product on an annualized basis. (A reading above 50% indicates that the non-manufacturing economy is generally expanding and a reading below 50% indicates that it is generally contracting.)

### Employment

The labor market has now posted 90 consecutive months of employment growth, by far the longest streak on record. Employers have added an average of just over 200,000 jobs per month so far in 2018, a pace that has held relatively steady for the past two years. The unemployment rate hasn't budged since October and remains at its lowest level since 2000. The labor force participation rate and the employment to population ratio remain low, suggesting higher wages might draw workers off the sidelines and into the labor market adding fuel for continued growth.

Labor	3/18	5 Year High	5 Year Low
Wage Growth <sup>(3)</sup>	2.9%	2.9%	1.7%
Unemployment Claims <sup>(5)</sup>	225	357	225
Nonfarm Payrolls <sup>(6)</sup>	202	290	134
Unemployment Rate	4.1%	7.6%	4.1%
Under-employment Rate	8.0%	14.2%	8.0%
Labor Force Participation	62.9%	63.4%	62.3%

<sup>(3)</sup> Y/Y % Change, <sup>(5)</sup> Four Week Moving Average in Thousands, <sup>(6)</sup> Three Month Moving Average in Thousands

Despite the relatively strong employment situation, meaningful wage gains remain elusive. The employment-cost index, a broad measure of wages and salaries in the private industry, increased 2.9% year over year through March 2018. The current slow wage growth, low labor force participation and elevated unemployment duration measures seem to indicate the unemployment rate could drift below 4.0% before the labor market reaches full capacity.

### Consumer

Historically, strength in consumer confidence surveys bodes well for increased economic activity in the following months. The most recent survey indicates consumers remain optimistic on the prospects for the economy as reflected by the March reading of 127.7.

Consumer	3/18	5 Year High	5 Year Low
Consumer Confidence	127.7	130.0	69.0
Consumer Sentiment	102.0	102.0	73.2
Auto Sales <sup>(3)</sup>	4.0%	11.5%	-6.5%
Retail Sales <sup>(3)</sup>	4.5%	5.9%	1.6%

<sup>(3)</sup> Y/Y % Change

According to the survey, consumers remain quite confident that the solid pace of economic growth seen in late 2017 will continue well into 2018.

### Housing

The combination of low inventory, rising prices and higher mortgage rates is expected to weigh on the U.S. housing market this year, with several economists and housing experts forecasting U.S. home sales will be flat or only slightly higher than in 2017.

Housing	3/18	5 Year High	5 Year Low
Housing Affordability	160	187	148
Housing Starts <sup>(4)</sup>	1,319	1,339	826
Building Permits <sup>(4)</sup>	1,354	1,377	947
New Home Sales <sup>(4)</sup>	694	711	376
Existing Home Sales <sup>(4)</sup>	5,600	5,720	4,720

<sup>(4)</sup> Monthly Seasonally Adjusted Annual Rate in Thousands

U.S. mortgage rates have hit their highest level since 2014, a new challenge for a housing market that has been central to the economic recovery but has remained vulnerable to even modest headwinds. If the trend should persist, it could hamper a sector that represents about 15% of U.S. GDP. Rising mortgage rates have already crimped refinancing activity and pushed would-be home buyers who were on the margins, out of the market as home prices also have risen.

A continued increase in home prices has been a sign of strength for the economy. But in recent months, home sales activity has dropped sharply amid low inventory levels, tax-code changes and buyers' growing weariness from being priced out of the market.

### The view forward

**Overall, domestic economic indicators maintained their strength during the first quarter of 2018. We believe the prospects for 2018 appear favorable based on positive trends in consumer spending, job gains, wage growth, housing and inflation. We expect the U.S. economy to grow at annualized rate of +3.0% in 2018 due in large part to low energy prices and low unemployment, a combination that produces stronger consumer purchasing power. We expect inflation to remain within the Fed's 2.0%-2.5% threshold until a tighter labor market delivers meaningful wage gains.**

## Equity Market Summary

The S&P 500 declined **-0.8%** during the quarter, marking its first negative quarter since 2015. However, this small decline masked a surge in volatility that saw the market reach an all-time high on January 26 and then enter correction territory (defined as a 10% decline from peak) two weeks later. The market's selloff was sparked by increased expectations of tightening by the Fed, fears of an imminent trade war particularly between the U.S. and China, and company-specific issues with Facebook, Apple and Amazon.

Among international equities, emerging market stocks outperformed developed market stocks. The performance of the international equity segment benefited from continued weakness in the dollar, which makes holdings of foreign stocks more valuable for U.S. investors. As it stands now, we are maintaining our weightings to international equities in portfolios but watching closely. The dynamics around tariffs and a possible trade war could have important implications for the relative performance of various geographies.

Current valuations appear reasonable as they are supported by improving corporate earnings and modest inflation. The estimate for S&P 500 earnings in 2018 is \$156.00, an increase of 25% over 2017, so the index now trades at less than 16.4 times this forward earnings estimate, just a bit higher than the 25-year average of 16.1.

### Domestic Market Cap and Style

Small-cap stocks outperformed large-cap as investors deemed their business less susceptible to a trade war. Growth continued to outperform value as growth-oriented companies leveraged the improving economy to drive earnings growth.

### Domestic Sectors

Sector performance for the S&P 500 Index was overwhelmingly negative, with nine of the eleven sectors landing in negative territory. The growth-oriented Technology and Consumer Discretionary sectors were the only positive areas, returning 3.5% and 3.1%, respectively. The dividend heavy Consumer Staples and Telecom sectors each declined over 7.0% as investors shunned areas considered to be "bond proxies" that were likely to suffer further if interest rates continued to move higher. Energy, Materials, and Real Estate stocks each declined over 5% for the quarter.

### Corporate revenue and earnings

Corporate earnings maintained their momentum in 4Q 2017 with a year-over-year increase of +17.0%. Projections for 1Q 2018 corporate earnings call for a year-over-year gain of +18.0%. The consensus forecast for full year 2018 corporate earnings growth currently stands at +25.0%. (Earnings data is according to S&P Dow Jones.) Earnings growth drives sustainable gains in stocks, so the recent improvement provides hope for forward-looking valuations and the sustainability of the bull market.

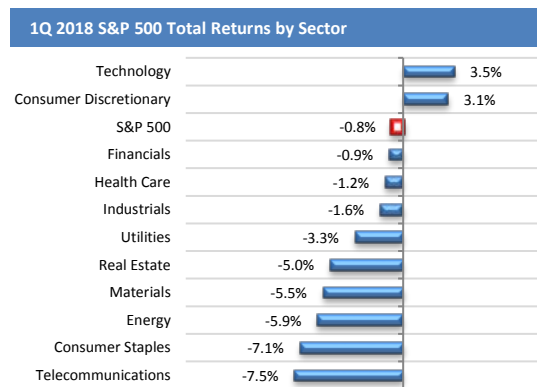
Corporate revenue also maintained momentum in 4Q 2017 with a year-over-year increase of +7.0%. Projections for 1Q 2018 corporate revenue call for a year-over-year increase of +7.5%. The consensus forecast for full year 2017 corporate revenue currently stands at +6.2%. (Revenue data is according to S&P Dow Jones.)

### The view forward

*In the current environment, we are neutral on equities and will maintain a base allocation exposure as long as earnings continue to justify the current P/E multiples.*

Equity Total Returns			
	1Q 18	YTD	12 MO
DJIA	-2.0%	-2.0%	19.4%
S&P 500	-0.8%	-0.8%	14.0%
Nasdaq	2.6%	2.6%	20.9%
International <sup>(1)</sup>	-1.2%	-1.2%	16.5%
Emerging Markets <sup>(2)</sup>	1.3%	1.3%	24.5%
<b>Domestic Market Cap</b>			
Mega <sup>(3)</sup>	-1.9%	-1.9%	13.1%
Large <sup>(4)</sup>	-0.8%	-0.8%	14.7%
Mid <sup>(5)</sup>	-0.5%	-0.5%	12.2%
Small <sup>(6)</sup>	-0.1%	-0.1%	11.8%
<b>Domestic Style</b>			
Growth <sup>(7)</sup>	1.5%	1.5%	21.1%
Core <sup>(7)</sup>	-0.7%	-0.7%	13.8%
Value <sup>(7)</sup>	-2.8%	-2.8%	6.8%

<sup>(1)</sup> MSCI EAFE IMI, <sup>(2)</sup> MSCI Emerging Markets IMI, <sup>(3)</sup> Russell Top 50, <sup>(4)</sup> Russell top 200, <sup>(5)</sup> Russell Midcap, <sup>(6)</sup> Russell 2000, <sup>(7)</sup> Russell 3000



## Taxable Bond Market Summary

In a continuation of themes that dominated 2017, fixed income markets remained focused on the Fed and inflation. The market is dealing with the implications of tax reform, fiscal policy stimulus and monetary policy tightening in a perplexing environment characterized by low interest rates, low inflation, low unemployment and solid economic growth. Ultimately, fiscal policy stimulus combined with less accommodative monetary policy to push rates higher during the quarter.

On the international front, global fixed income investors benefited from continued demand due to quantitative easing, a supportive economic backdrop and a weaker U.S. dollar.

In our view, the biggest risk to the current inflation outlook is the possibility of a trade war. Tariffs and trade wars are inflationary, causing prices on imported goods to increase and pressing U.S. companies to raise prices on domestic products to make up for the loss of export sales. If tariffs are implemented they will lead to higher input prices and result in higher prices for U.S. consumers. Altogether the strong U.S. economy, weaker dollar and potential trade war lead us to factor rising inflation into our thinking.

### Yield Curve

The Treasury yield curve continued to flatten, as short-term rates increased more than long-term rates. Short-term rate increases were driven by Fed rate hikes and expectations of tighter monetary policy.

The yield spread between 2-year and 10-year maturities narrowed by 4 basis points (bps) to end the period at 47 bps.

### Domestic Sector, Quality, Maturity

The Barclays Aggregate Bond Index declined **-1.5%**, bringing its trailing-twelve month return down to +1.2%.

Within the Barclays Aggregate Index, investment-grade corporate bonds were down **-2.3%**. Within the investment-grade corporate bond category, the financial, industrial and utilities sectors were down **-2.2%**, **-2.3%** and **-2.9%**, respectively. Lower-quality and shorter-duration portions of the investment-grade credit market outperformed.

High yield generated a negative return of **-0.9%** during the quarter. While high yield bond valuations are slightly less attractive now than in months past, we believe that spreads are poised to continue to tighten based on stable energy prices, healthy credit metrics and stable economic conditions.

During the quarter, credit spreads widened across virtually every sector, quality and maturity category. Within fixed income sectors, spreads widened by 16 basis points on corporate bonds and widened by 5 basis points on securitized bonds.

### The view forward

*We continue to underweight Treasury and Agency bonds in favor of Corporate and Securitized bonds. As market conditions allow, and as appropriate for each client, we will keep duration slightly shorter than respective benchmarks, improve credit quality and increase coupons in anticipation of gradually rising interest rates.*

U.S. Treasury Yield Curve				
	Mar 18	QTR Δ	YTD Δ	12 MO Δ
2 Year	2.27%	38 bps	38 bps	100 bps
5 Year	2.56%	36	36	63
10 Year	2.74%	34	34	34
30 Year	2.97%	23	23	-5

Credit Spreads				
	Dec 17	QTR Δ	YTD Δ	12 MO Δ
Aaa	14 bps	1	1	0
Aa	57 bps	7	7	-9
A	91 bps	18	18	-7
Baa	138 bps	14	14	-13
< Baa	354 bps	11	11	-29

Taxable Bond Total Returns			
	1Q 18	YTD	12 MO
Aggregate Bond Index	-1.5%	-1.5%	1.2%
International	3.6%	3.6%	11.7%
Emerging Markets	-1.5%	-1.5%	3.2%
<b>Domestic Sector</b>			
Treasury	-1.2%	-1.2%	0.4%
Agency	-0.7%	-0.7%	1.1%
Corporate	-2.3%	-2.3%	2.7%
Securitized	-1.2%	-1.2%	0.8%
<b>Domestic Quality</b>			
Aaa	-1.2%	-1.2%	0.6%
Aa	-1.4%	-1.4%	1.9%
A	-2.5%	-2.5%	2.3%
Baa	-2.2%	-2.2%	3.4%
< Baa	-0.9%	-0.9%	3.8%
<b>Domestic Maturity</b>			
Short <sup>(1)</sup>	-0.2%	-0.2%	0.2%
Intermediate <sup>(2)</sup>	-1.2%	-1.2%	0.6%
Long <sup>(3)</sup>	-3.6%	-3.6%	5.0%

<sup>(1)</sup> Short 1-3 Years, <sup>(2)</sup> Intermediate 5-7 Years, <sup>(3)</sup> Long 10+ Years

## Municipal Bond Market Summary

The municipal bond market was a bit unsteady during the first quarter. As we pointed out in our last commentary, the new tax law significantly limited the ability of municipal issuers to refinance their tax-exempt debt prior to call dates, and many deals were accelerated into the fourth quarter of 2017 before enactment of the tax bill. As a result, new issuance in the first quarter declined nearly 30% versus the year-ago period.

On the demand side, retail investors (individuals and mutual funds) continue buying municipal bonds as they seek protection from tax reform that now limits the deduction of state and local taxes to \$10,000. Institutional investors (banks and insurance companies) reduced their purchases of municipal bonds as a result of the reduction in corporate income tax rates from 35% to 21%. This new, lower tax rate altered the taxable equivalent relationship to other bond markets.

### Yield Curve

U.S. AAA Municipal rates increased noticeably during the quarter and the municipal yield curve steepened. During the quarter, the 2-year rate increased by 12 basis points (bps), while the 30-year rate increased by 39 bps. As a result, total returns favored short maturity portfolios during the quarter. Over the past twelve months, the 2-year rate has increased by 65 bps, while the 30-year rate declined by 6 bps.

Looking at yields after taxes, muni bonds remain attractive, with tax-equivalent yields significantly above those of comparable maturity corporate and Treasury bonds. We believe this “cheapness” will eventually evaporate as short-term yields move higher and the economy continues to grow.

### Municipal bonds

The Barclays Municipal Bond Index declined **-1.1%** for the quarter, bringing its trailing twelve month return down to **+2.7%**. Within the Municipal Bond Index, both general obligation and revenue bonds performed in line with the Municipal Bond Index. Lower-quality and shorter-duration portions of the municipal market outperformed.

The market signaled continued acceptance of credit risk as spreads continue to tighten. For A-rated bonds, credit spreads tightened 4 bps and high yield municipal bonds (<Baa) spreads tightened 21 basis points.

### Municipal credit concerns

The state of Connecticut has agreed to make payments of \$40M annually for the next 20 years on Hartford’s \$550M of outstanding general obligation debt. As part of the plan, a new oversight board must approve budgets and labor agreements.

Not having a budget for the past two years has taken a toll on the state of Illinois deficit. According to recent reports, the state’s general fund deficit increased by \$5B in FY2017, leaving Illinois’ structural deficit at **-\$14.6B**, up from **-\$9.6B** in FY2016.

### The view forward

*We believe that municipals are fairly valued when compared to other asset classes on a tax-equivalent basis. We favor A-rated bonds in the intermediate part of the curve. As market conditions allow, and as appropriate for each client, we will keep duration slightly shorter than respective benchmarks, improve credit quality and increase coupons in anticipation of gradually rising interest rates.*

AAA Municipal Yield Curve (%)				
	Mar 18	QTR Δ	YTD Δ	12 MO Δ
2 Year	1.68%	12 bps	12 bps	65 bps
5 Year	2.07%	37	37	49
10 Year	2.48%	47	47	22
30 Year	3.01%	39	39	-6

Municipal AAA Yield to Treasury Yield Ratio (%)				
	Mar 18	QTR Δ	YTD Δ	12 MO Δ
2 Year	74%	-8%	-8%	-7%
5 Year	81%	3%	3%	-1%
10 Year	91%	7%	7%	-4%
30 Year	101%	6%	6%	-1%

Municipal Credit Spreads				
	Mar 18	QTR Δ	YTD Δ	12 MO Δ
Aa	9 bps	-1	-1	-6
A	45 bps	-4	-4	-25
Baa	115 bps	0	0	-48
<Baa	283 bps	-21	-21	-133

Municipal Bond Total Returns			
	1Q 18	YTD	12 MO
Municipal Bond Index	-1.1%	-1.1%	2.7%

Type			
General Obligation	-1.2%	-1.2%	2.3%
Revenue	-1.2%	-1.2%	3.0%

Quality			
Aaa	-1.2%	-1.2%	1.8%
Aa	-1.1%	-1.1%	2.3%
A	-1.1%	-1.1%	3.2%
Baa	-1.0%	-1.0%	5.4%
<Baa	0.6%	0.6%	6.0%

Maturity			
Short <sup>(1)</sup>	0.1%	0.1%	0.4%
Intermediate <sup>(2)</sup>	-1.2%	-1.2%	1.2%
Long <sup>(3)</sup>	-1.6%	-1.6%	2.3%

<sup>(1)</sup> Short 3 Years, <sup>(2)</sup> Intermediate 6-8 Years, <sup>(3)</sup> Long 8-12 Years

## Economic Index Descriptions

**Real Gross Domestic Product (GDP):** Real GDP is a basic measure of U.S. economic output adjusted for inflation. Alternatively, it can be thought of as the final value of all goods and services produced within the U.S. Positive Real GDP growth signals an expanding economy.

**Consumer Price Index (CPI):** Measuring the change in the CPI provides an estimate for inflation. The CPI tracks the price of a basket of consumer goods and services. High inflation or deflation (negative inflation) can be signs of economic worry. CPI is typically reported in two ways: headline and core CPI. Headline CPI includes all categories that comprise the CPI basket of goods and services. Core CPI, which is closely monitored by the Fed, strips out the more volatile Food and Energy categories.

**Personal Consumption Expenditure Chain-type Price Index (PCE):** Measuring the change in the PCE provides an estimate for inflation. In comparison to CPI, which uses one set of expenditure weights for several years, this index uses expenditure data from the current period and the preceding period. This price index method assumes that the consumer has substituted from goods whose prices are rising to goods whose prices are stable or falling. Core PCEPI, which is closely monitored by the Fed, strips out the more volatile Food and Energy categories.

**Producer Price Index (PPI):** Measuring the change in the PPI provides an estimate for inflation. The PPI is a weighted index of prices measured at the wholesale, or producer level. A monthly release from the Bureau of Labor Statistics (BLS), the PPI shows trends within the wholesale markets (the PPI was once called the Wholesale Price Index), manufacturing industries and commodities markets. All of the physical goods-producing industries that make up the U.S. economy are included, but imports are not. The PPI measures the average changes over time in the selling prices received by domestic producers.

**Conference Board Index of Leading Economic Indicators (LEI):** The LEI is designed to signal peaks and troughs in the business cycle. The ten components of for the U.S. include: average weekly manufacturing hours; average weekly initial claims for unemployment insurance; manufacturers' new orders for consumer goods and materials; ISM® Index of New Orders; manufacturers' new orders for nondefense capital goods excluding aircraft orders; building permits for new private housing units; stock prices of 500 common stocks; Leading Credit Index™; interest rate spread on 10-year Treasury bonds less federal funds and average consumer expectations for business conditions.

**NFIB Small Business Optimism Index:** The small business optimism index is compiled from a survey that is conducted each month by the National Federation of Independent Business (NFIB) of its members. The index is a composite of 10 seasonally adjusted components based on the following questions: plans to increase employment, plans to make capital outlays, plans to increase inventories, expect economy to improve, expect real sales higher, current inventory, current job openings, expected credit conditions, now a good time to expand, and earnings trend.

**The Institute for Supply Management (ISM) PMI Index:** The PMI is a composite index of five "sub-indicators", which are extracted through surveys to purchasing managers from around the country, chosen for their geographic and industry diversification benefits. The five sub-indices are: Production, New orders, Supplier deliveries, Inventories and Employment level. An Index value over 50 indicates expansion; below 50 indicates contraction.

**The Institute for Supply Management (ISM) Non-manufacturing Index (NMI):** The NMI is a composite index of four "sub-indicators", which are extracted through surveys to purchasing managers from around the country, chosen for their geographic and industry diversification benefits. The four sub-indices: Business activity, New orders, Employment, Supplier deliveries. An Index value over 50 indicates expansion; below 50 indicates contraction.

**Consumer Confidence Index (CCI):** The Consumer Confidence Index is a well-known proxy for the attitudes of U.S. consumer towards topics such as the business climate, personal finances and spending. In essence, this index attempts to measure the confidence that consumers have in the overall economy. This is important because consumer spending accounts for a large portion of U.S. GDP.

**Unemployment Rate:** Calculated monthly by the Bureau of Labor Statistics, the unemployment rate is a gauge of the health of the U.S. labor market. High unemployment can stifle the growth of the economy.

## Domestic Equity Benchmark Descriptions

**Investment Style:** Performance of different types of stocks will vary over time. A common way to characterize a stock is by market capitalization (e.g., large cap or small cap) or style (e.g., value or growth).

**Large Cap vs. Small Cap:** Large companies tend to be more established companies and therefore exhibit lower volatility. Over an extended period of time, expected returns of small cap companies are often higher due to the risks associated with smaller, less established companies.

**Mega Cap:** The Russell Top 50 Index measures the performance of the 50 largest companies in the Russell 1000 Index, which represents approximately 40% of the total market capitalization of the of the Russell 1000 Index.

**Large Cap:** The Russell Top 200 Index measures the performance of the 200 largest companies in the Russell 1000 Index, which represents approximately 68% of the total market capitalization of the of the Russell 1000 Index.

**Mid Cap:** The Russell Midcap Index measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 36% of the total market capitalization of the Russell 1000 Index.

**Small Cap:** The Russell 2000 Index measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represents approximately 10% of the total market capitalization of the Russell 3000 Index.

**Value vs. Growth:** Value companies typically trade at discount valuations and may pay a dividend. Growth companies are those that are experiencing greater earnings growth prospects.

**Growth:** The Russell 3000 Growth Index measures the performance of those Russell 3000 index companies with higher price-to-book ratios and higher forecasted growth values.

**Value:** The Russell 3000 Value Index measures the performance of those Russell 3000 companies with lower price-to-book ratios and lower forecasted growth values.

#### **Domestic Fixed Income Benchmark Descriptions**

**U.S. Aggregate Bond:** The Barclays U.S. Aggregate Bond Index measures the performance of USD-denominated, SEC-registered, investment-grade, fixed-rate or step up, taxable bonds. The index includes bonds from the Treasury, Government-Related, Corporate and MBS (agency fixed-rate and hybrid ARM pass-through), ABS, and CMBS sectors. Securities included in the index must have at least 1 year until final maturity.

**U.S. Treasury:** The Barclays Capital U.S. Treasury Index measures the performance of public obligations of the U.S. Treasury with a remaining maturity of one year or more.

**U.S. Agency:** The Barclays Capital U.S. Agency Bond Index measures the performance of the agency sector of the U.S. government bond market and is comprised of investment-grade U.S. dollar-denominated debentures issued by government and government-related agencies, including FNMA. The index includes both callable and non-callable securities that are publicly issued by U.S. government agencies, quasi-federal corporations, and corporate and foreign debt guaranteed by the U.S. government.

**U.S. Corporate:** The Barclays Capital U.S. Corporate Bond Index measures the performance of publicly issued USD-denominated corporate and Yankee debentures and secured notes that meet specified maturity, liquidity, and quality requirements.

**U.S. MBS:** The Barclays Capital U.S. Mortgage Backed Securities Index measures the performance of mortgage-backed pass-through securities of Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC).

**U.S. Municipal Bond:** The Barclays Capital Municipal Bond Index measures the performance of the USD-denominated, investment grade, fixed-rate tax exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds and pre-refunded bonds. Securities included in the index must have at least 1 year until final maturity.

**General Obligation Bond Index:** The Barclays General Obligation Bond Index measures the average market-weighted performance of general obligations securities that have been issued in the last five years with maturities greater than one year.

**Revenue Bond Index:** The Barclays Revenue Bond Index measures the average market-weighted performance of revenue backed securities that have been issued in the last five years with maturities greater than one year.