ENTASIS ASSET MANAGEMENT

QUARTERLY NEWSLETTER

1Q2020

CEO Comments

As we were sitting down to write this quarter's newsletter, one thing became clear rather quickly – our typical format felt inappropriate because the current environment has been anything but typical.

Consider this series of facts from the past 60 days.

1) The S&P 500® Index fell roughly 34% in less than a month only to recover approximately 25% in about three weeks.
2) Congress signed stimulus bills totaling about $3 trillion. For perspective, the U.S. is about a $22 trillion economy and stimulus provided in 2008-09 was less than $1 trillion.
3) U.S. air travel has dropped by over 95% and the largest players in the industry are burning hundreds of millions of dollars per day with planes parked on the runways.
4) Oil futures traded at a negative value, which is to imply someone would rather pay you to take the oil than keep it themselves.
5) Initial unemployment claims in a short 5-week window exceeded 26 million. Relative to a national labor force of about 160 million that means roughly 16% of Americans were without a job in less than a month. (We are very thankful much of our work just requires a desk, chair and computer and are extremely hopeful this resolves quickly for those that need to be present.)
6) In 2008 at the height of the financial crisis, high-yield bond markets saw spreads (yield in excess of a U.S. Treasury) widen to about 9% over roughly seven months. That same widening occurred this year in less than one month.
7) In order to stem some of the price risk in the market, the U.S. Federal Reserve (Fed) stepped in to buy securities – with no limit. If we were to compare its balance sheet now to the assets under management of the world's largest asset managers, the Fed would almost be at the top with over $6 trillion.

That list of historic events could be much longer, but I think the point is made. We are in unprecedented times, which begs the question – What do we do with this surge of data?

In short, we focus. We believe that at a certain point more information just creates an illusion of knowledge and doesn't improve perspective.

From a high level, we are always focused on a few key items: economic growth, interest rates and earnings. We believe that with an understanding of those key variables we can develop a solid foundation for asset allocation decisions and fundamental investment decisions. In all environments (this one included), those factors remain the endpoints for us, and we try to understand change in those variables. The drivers vary by environment, but we always want to consolidate what those drivers mean to economic growth, interest rates and earnings.

Bob Batchelor, CFA
Chief Executive Officer

Summary

We are in unprecedented times, which begs the question – What do we do with this surge of data?

We focus. We believe that at a certain point more information just creates an illusion of knowledge and doesn't improve perspective.

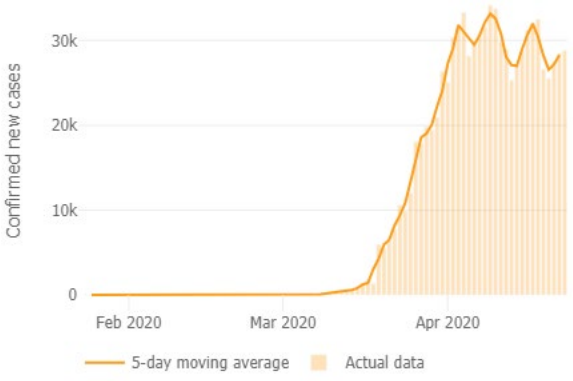
We are always focused on a few key variables: economic growth, interest rates and earnings.

The drivers vary by environment, but we always try to understand change in those variables as a foundation for our investment decisions.

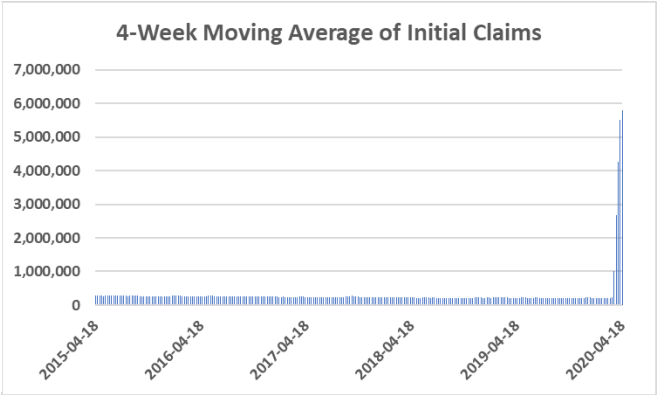
In our view, the two statistics that will be the most telling are the daily change in coronavirus cases and the weekly change in initial unemployment claims. As each of those improve, so should our understanding of the core variables that we follow.

CEO Comments

During this recent 60-day period, what has become apparent to us is that the current drivers of change in our key variables has become the trend in coronavirus case growth, the development of medicinal solutions and the timeline of a return to normal business and consumer activity. (Normal being roughly defined as how we were operating as an economy prior to this outbreak.) We aren't looking to be surgical with our assessment. We are just looking to understand directionality. The political arguments, media reporting and governmental initiatives may have some short-term effects, but it is the long-term trend that is critical to us. In our view, the two statistics that will be the most telling are the daily change in coronavirus cases (business health) and the weekly change in initial unemployment claims (consumer health). In both cases we are focused on the trend versus the absolute numbers. As each of those improve, so should our understanding of the core variables that we follow.



Source: Johns Hopkins Coronavirus Resource Center
Coronavirus.jhu.edu/data/new-cases



Source: U.S. Employment & Training Administration
fred.stlouisfed.org

In the pages that follow, C.J. and Mike will share thoughts on their areas of expertise and then we will bring it all together with some final thoughts. Each section has summaries if you would prefer the cliffsnotes. We won't mind if you are efficient with your time. Just click on the boxes below to get to each summary page.

Bob

Market Performance

Equity Portfolio Comments

Fixed Income Portfolio Comments

Final Thoughts

Click on any button to skip to a new section.

Market Performance

Annualized % Returns (As of 03/31/2020)

Source: Morningstar Direct

Index Name	Index Category	1 year	3 year	5 year	10 year
S&P 500 Index	Large Cap Stocks	-6.98	5.10	6.73	10.53
Russell 1000 Index	Mid/Large Cap Stocks	-8.03	4.64	6.22	10.39
Russell 1000 Growth Index	Growth Stocks	0.91	11.32	10.36	12.97
Russell 1000 Value Index	Value Stocks	-17.17	-2.18	1.90	7.67
Russell 2000 Index	Small Cap Stocks	-23.99	-4.64	-0.25	6.90
MSCI EAFE Index	Non-U.S. Developed Market Stocks	-14.38	-1.82	-0.62	2.72
MSCI Emerging Markets Index	Emerging Markets Stocks	-17.69	-1.62	-0.37	0.68
MSCI ACWI Ex USA Small Cap Index	Non-U.S. Small Cap Stocks	-21.18	-4.89	-0.81	2.79
BofAML Preferred Stock Fixed Rate Index	Preferred Stocks	-1.27	2.57	3.86	5.87
Barclays Municipal Bond Index	U.S. Municipal Bonds	3.85	3.96	3.19	4.15
Barclays Aggregate Bond Index	U.S. Bonds	8.93	4.82	3.36	3.88
Barclays Intermediate U.S. Gov/Credit Index	Government/Corporate Bonds	6.88	3.79	2.76	3.14
BofAML U.S. Treasury Master Index	Treasury Bonds	13.92	6.08	3.79	3.96
BofAML U.S. Mortgage Backed Securities Index	Mortgage Backed Bonds	7.06	4.08	2.96	3.29
BofAML U.S. Corporate Master Index	Corporate Bonds	4.37	4.00	3.27	4.87
BofAML U.S. High Yield Master II Index	High Yield Bonds	-7.46	0.55	2.67	5.49
BofAML Convertible Bonds Index	Convertible Bonds	-2.63	5.88	6.07	8.86
BofAML Euro Broad Market Index	European Bonds	-0.16	3.13	1.81	1.54
BofAML Local Debt Market Plus Index	Emerging Markets Bonds	-2.54	1.42	1.42	1.32

Calendar Year % Returns (Recent Peak and YTD as of 04/23/2020, QTD as of 03/31/2020)

	Recent Peak	YTD	QTD	2019	2018	2017	2016	2015
S&P 500 Index	-17.08	-12.87	-19.60	31.49	-4.38	21.83	11.96	1.38
Russell 1000 Index	-17.86	-13.46	-20.22	31.43	-4.78	21.69	12.05	0.92
Russell 1000 Growth Index	-13.49	-5.48	-14.10	36.39	-1.51	30.21	7.08	5.67
Russell 1000 Value Index	-22.89	-21.95	-26.73	26.54	-8.27	13.66	17.34	-3.83
Russell 2000 Index	-28.04	-26.91	-30.61	25.52	-11.01	14.65	21.31	-4.41
MSCI EAFE Index	-20.03	-20.66	-22.83	22.01	-13.79	25.03	1.00	-0.81
MSCI Emerging Markets Index	-18.85	-19.60	-23.60	18.42	-14.57	37.28	11.19	-14.92
MSCI ACWI Ex USA Small Cap Index	-22.67	-24.09	-29.01	22.42	-18.20	31.65	3.91	2.60
BofAML Preferred Stock Fixed Rate Index	-5.58	-4.26	-8.82	17.71	-4.34	10.58	2.32	7.58
Barclays Municipal Bond Index	-2.83	-0.94	-0.63	7.54	1.28	5.45	0.25	3.30
Barclays Aggregate Bond Index	2.89	4.95	3.15	8.72	0.01	3.54	2.65	0.55
Barclays Intermediate U.S. Gov/Credit Index	2.32	3.66	2.40	6.80	0.88	2.14	2.08	1.07
BofAML U.S. Treasury Master Index	6.93	9.50	8.80	6.99	0.80	2.43	1.14	0.83
BofAML U.S. Mortgage Backed Securities Index	2.36	3.24	2.79	6.51	1.00	2.45	1.67	1.46
BofAML U.S. Corporate Master Index	-1.84	0.84	-4.05	14.23	-2.25	6.48	5.96	-0.63
BofAML U.S. High Yield Master II Index	-11.23	-10.12	-13.13	14.41	-2.27	7.48	17.49	-4.61
BofAML Convertible Bonds Index	-13.80	-5.54	-12.68	23.06	0.68	16.03	11.94	-1.15
BofAML Euro Broad Market Index	-3.07	-4.93	-3.43	4.11	-4.39	14.61	0.37	-9.30
BofAML Local Debt Market Plus Index	-11.12	-11.21	-13.01	16.44	-4.90	14.71	6.53	-12.02

How should you use the information provided in the table?

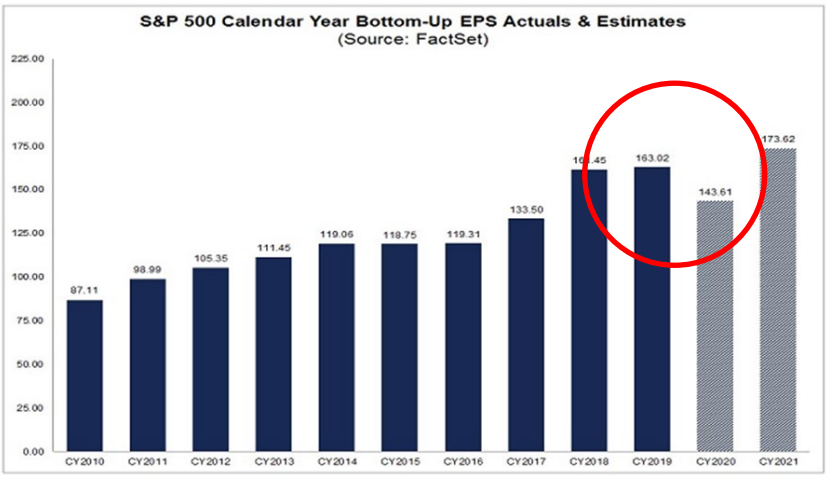
- The returns are not projections. They are historical. Future returns will vary.
- Annualized returns can generally be used to understand historical return trends.
- Calendar returns provide a general understanding of year-by-year return volatility.

Corporate Earnings and Market Valuations

The overall corporate earnings environment remains fluid. An increasingly large number of companies have withdrawn earnings guidance, businesses are cutting costs (and investment), stock buybacks are being shelved and first quarter earnings have just gotten underway.

In response to the crisis, we have sifted through a wide variety of sources and corporate earnings models to gather as much data as possible on how earnings and forward P/E multiples may evolve. Many of the third-party models we have reviewed utilize historical ranges during prior earnings downturns and economic recessions. However, each period has its own unique set of circumstances, and this period is no different. Keeping this in mind, we triangulated a broad range of potential outcomes (emphasis on "broad"), but we do not believe the data is exceedingly relevant at this juncture because of an absence of reliable data that is reflective of the current environment. Said differently, we believe the mantra of "garbage in, garbage out" applies to many projections. This does not prevent some market prognosticators from making specific, bold predictions (for many, this is their entire job) for corporate earnings and year-end stock levels but being bold does not make the exercise any less foolhardy in our opinion. The goal with our exercise is not to make bold predictions but rather provide a relatively higher probability path as a foundation for future decision-making.

What we believe we can say with certainty at this point is that 2020 earnings will continue to face immense, negative downward revisions from where they entered the year, the extent of which we do not believe has been fully appreciated by the market. Currently (as of 4/17/20), analysts expect year-over-year earnings declines for every quarter in 2020, with total earnings forecasted to decline -12.3% for calendar year 2020. (See chart below.)



Charles (CJ) Batchelor, CFA
Chief Investment Officer – Equity

Summary

An increasingly large number of companies have withdrawn earnings guidance, businesses are cutting costs (and investment), stock buybacks are being shelved and first quarter earnings have just gotten underway.

We believe 2020 earnings will continue to face immense, negative downward revisions from where they entered the year, the extent of which we do not believe has been fully appreciated by the market.

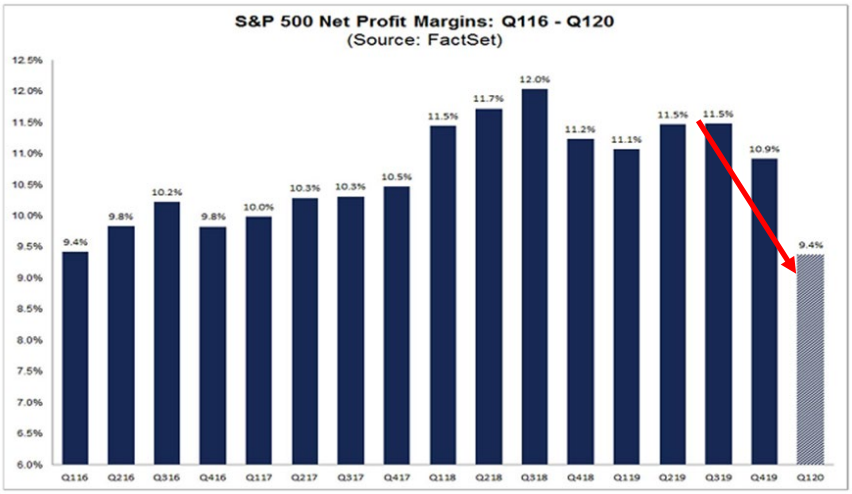
The Fed has once again encouraged risk-taking with the promise to "do whatever it takes" to blunt downward price movement in financial markets.

We believe there should be consequences for poor decision-making. Interest in making investors "whole" for bad decisions, regardless of the catalyst for those losses, is an extremely dangerous precedent and one we fear will only compound excessive risk taking in the future.

We will not chase short-term rallies or have our investment theses hinge on a need for the Fed or government to bail us out if we are wrong.

These estimates are indeed bleak, but they are also still too optimistic in our view (not to mention earnings expectations for 2021, which we also believe are too optimistic). As we discussed in previous newsletters, earnings growth had already been on a downward trajectory pre-virus (even though the equity market continued to rise) – three out of the past four quarters experienced negative year-over-year earnings growth. Certainly, we did not foresee the specific catalyst that would push the U.S. economy and corporate earnings into a severe contraction (and by this magnitude). However, it was evident that corporate America was in a precarious position as earnings growth (in aggregate) appeared to have peaked in late 2018 into 2019. As a result, many corporations entered the crisis from a position of weakening fundamentals as opposed to a position of strength.

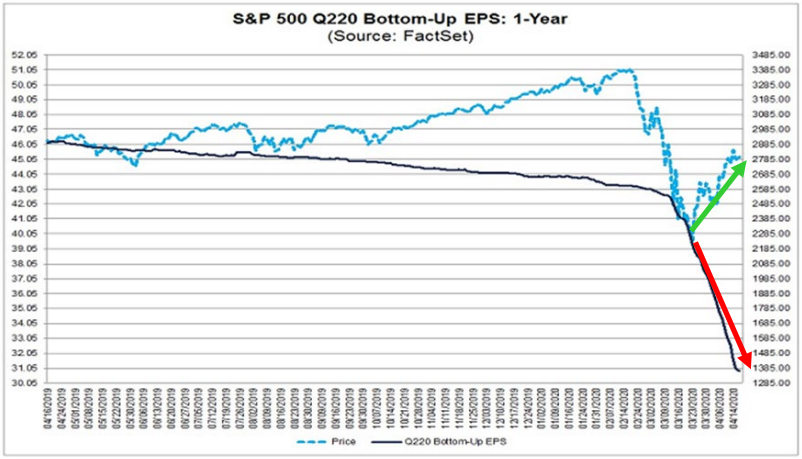
Two factors that kept earnings levels elevated despite a softening of underlying business conditions were relatively high profit margins (although this too had begun to erode), and an artificial boost to earnings per share through a reduction in share count (stock buybacks). Regarding the latter, stock buybacks continued in earnest throughout 2019, which was reflective of an environment that had persisted for much of the past decade. In fact, according to data from HSBC, corporations as a group (in the form of stock buybacks) were the largest buyers of stocks over the past 10 years. However, as companies now look to preserve cash wherever possible, many previously announced share buyback programs have already been scrapped for 2020. HSBC estimates that the suspension of buyback programs could result in $300 billion in lost inflows to U.S. stocks over the next two quarters alone. We do not know the exact damage this will end up causing to corporate earnings per share estimates, but it will clearly no longer be supportive of artificial growth. Add this to the fact that revenues will remain challenged and profit margins will undoubtedly decline further (See chart to the right.), and we believe the recipe is in place for a more meaningful earnings contraction than what is currently anticipated by the market.



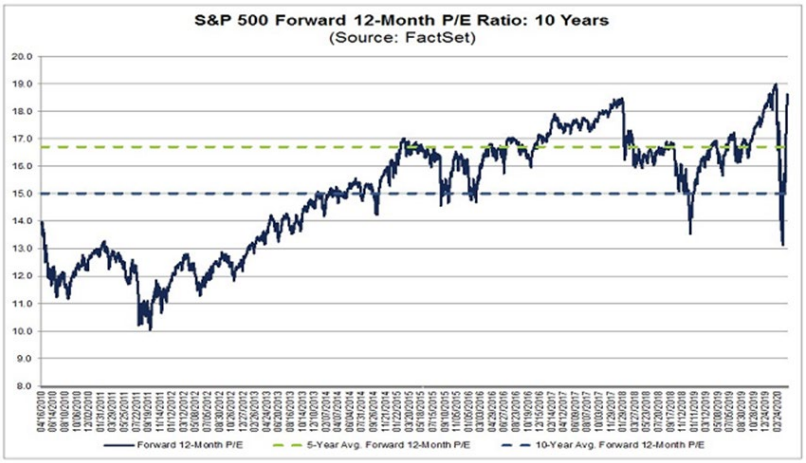
Overall, based on our own broad estimates and estimates that we have gathered from other respected third-party sources, we believe earnings could very easily fall by -25% to -30% (or more) for 2020. If that were to materialize, we believe the stock market's recent, sharp gains (off the near-term low on 3/23) would be fleeting as economic reality begins to set in. Again, as we noted earlier, we are not looking to perfectly pinpoint earnings estimates for 2020 (We do not think that is a constructive exercise.) but rather are simply looking to be directionally right relative to current earnings expectations. As always, regardless of the environment, we believe a thorough examination of corporate earnings is a worthwhile exercise because stock prices generally follow earnings over the long-term.

Even though this relationship generally holds true over the long-term, as we have discussed in the past (especially throughout much of 2019), stock prices may become detached from reality over shorter timeframes. This has become apparent once again, which can be seen when looking at recent stock

price movements relative to earnings expectations. (See chart to the right.) After briefly converging during the stock market selloff in the latter half of the first quarter, stock prices shot higher following the announcements of significant measures undertaken by the Fed to shore up financial markets.



As we noted earlier, even though it was not long ago, it may be easy to forget that corporate earnings growth had already "rolled over" pre-virus. Despite softness in earnings (in aggregate) in 2019, U.S. equities still managed to gain over +30% as valuation multiples expanded. A primary reason for this was because earnings were expected to rebound strongly in 2020 (notably over the second half of the year), which would thereby provide support for market gains achieved in 2019. Unfortunately, as we know now, 2020 earnings are slated to decline significantly. Despite this development, valuation multiples have gone nowhere (when compared to where they started the year) because of the Fed-induced rally that occurred from the market low on 3/23. Investors may question, "how could this be?" Supposedly, one reason valuations have rocketed higher is because the market is now looking past 2020 earnings, with the hope of a significant earnings rebound in 2021. Needless to say, this has left us scratching our heads. 2020 corporate earnings no longer matter? We should look past an entire year? What about the large gains from 2019 that were predicated on a rebound in earnings this year? What about the damage to businesses and consumers that is still being inflicted because of the economic shutdown? Regardless of the answers provided to these basic questions for why the market is behaving the way that it is, in our view, it is difficult to find another recent time that financial markets have been more unhinged from economic reality than they are now (despite very different circumstances, the dotcom tech boom/bust comes to mind).



We believe this overly optimistic way of thinking is largely because of the extraordinary measures taken by the Fed, along with historically large stimulus packages passed by Congress. Whether intentional or not, these institutions (particularly the Fed) have once again encouraged risk-taking with the promise to "do whatever it takes" to blunt downward price movement in financial markets. This is not healthy. Looking ahead, the big question now is whether the Fed can suspend economic gravity in what may end up being the sharpest economic contraction since the Great Depression.

OUTLOOK

We are only a little over 10 years removed from one of the worst financial crises in history, the Great Financial Crisis of 2007-2009. In the wake of the crisis, we had thought (or rather hoped) that government intervention into free markets would be an eye-opening moment for the right reasons – namely, for corporations to be more judicious with capital allocation decisions and excessive risk taking and leverage. Unfortunately, we believe it ended up being an eye-opening moment for the wrong reasons. Aided by artificially low interest rates, many corporate balance sheets exploded with debt to repurchase stock while speculators saw it as a sign to take on inordinate amounts of risk.

The culmination of these activities came to a "head" in early April when the Fed announced it would take the extraordinary step of purchasing high-yield debt (debt rated BB or lower), including broad-based ETFs (exchange-traded funds), to stabilize these markets. To put it bluntly, we were never more disappointed in our country's financial institutions than we were following this announcement. Individual corporate bailouts aside, direct, broad-based intervention by the Fed into this segment of the market was stunning. We appreciate that financial markets have found stability. We obviously do not like declining markets. We are also not trying to make a political statement. We are just shocked by the implications this has for our financial system, markets, and investor behavior. In addition, we fear what may be next. Will the Fed step in to buy equities? What seemed far-fetched only a few months ago has now become a possibility. If you think this cannot happen, consider the following statement from former Federal Reserve Chair Janet Yellen. "It would be a substantial change to give the Federal Reserve the ability to buy stock," Former Federal Reserve Chair Janet Yellen told CNBC. "I frankly don't think it's necessary at this point. I think intervention to support the credit markets is more important, but longer term it wouldn't be a bad thing for Congress to reconsider the powers that the Fed has with respect to assets it can own." (The Bank of Japan has been doing this for over a decade.)

It is also important to note that we do not believe the Fed's decision to purchase high-yield debt was a bailout of individual investors or retirement plans. To the contrary, we view this to be a bailout of poor actors – businesses that saddled companies with debt for the wrong reasons, and investors driven by greed with no understanding or regard for the underlying risks of their investments. Many pundits that came to the defense of the Fed's intervention into financial markets stated that because "the virus wasn't companies' or investors' fault they should not be punished." While it is obviously true these groups did not cause the virus, we would argue that the specific catalyst that necessitates broad market and economic losses is rarely any one company's or individual's fault. However, what is entirely their fault, are the poor capital allocation decisions that stressed balance sheets, and the underlying motivations that landed them in higher risk investments in the first place. Yes, the Fed's actions brought a degree of stability to financial markets, but we are concerned about the long-term cost. We believe there should be consequences for poor decision-making, not a skewed, positively tilted risk/reward ratio for artificially inflating earnings, or blindly reaching for higher returns and yields. Interest in making investors "whole" for bad decisions, regardless of the catalyst for those losses, is an extremely dangerous precedent and one we fear will only compound excessive risk taking in the future.

Regardless of what we think about the Fed's recent actions, it is the hand that has been dealt, and therefore we need to adjust our investment thinking accordingly. More than ever, we need to avoid the behavioral impediments that prevent many investors from long-term success. We will not chase short-term rallies, and unlike a portion of the investing public, our investment theses will never hinge on a need (nor will we speculate on the possibility) for the Fed or government to bail us out if we are wrong.

Fixed Income Portfolio Comments

Understanding Fixed Income (Bond) Dynamics

I've spent most of my 17-year career specializing in fixed income. Over that period, I have heard many people describe it as confusing, complicated, boring and many other not so flattering adjectives. I am biased, but I think it gets a bad rap – mainly because it is misunderstood. Considering the recent (pandemic induced) price volatility in fixed income at the end of the first quarter, I felt it was appropriate to take some time to review basic factors that influence bond pricing – interest rates, duration and credit quality.

Let's first look at how **interest rates** impact bond prices with a dollars and cents example. Let's say you buy a newly issued U.S. Treasury bond at par ($1,000), with a maturity (principal returned in full) of ten years and a coupon (interest rate) of 2.00% (pays $20 per year). Suppose the day after you purchase the bond, Treasury interest rates suddenly rose by 1.00% to 3.00%. What would happen if you tried to sell your bond? Would someone pay you $1000 for it? When you enter your sell order, potential buyers will compare your bond to others on the market and offer you a price that reconciles the differences. Since interest rates went up, buyers can get a newly issued bond paying them 3.00% (or $30.00 per year) for ten years for $1,000. As a result, if you want someone to buy your bond paying 2.00% when they could by a bond paying 3.00% with similar risk, it must go through a price adjustment. In this circumstance, you would receive an offer of about $915 for your bond. Why $915?

In order to understand this, we need to first look at how cash flows impact bond prices because a bond's price is equal to the present value of all its future cash flows (including principal repayment). I'm not going to bore you with the math details, but for those interested see the calculation below.

Newly Issued Bond

Bond Details

Maturity Years	10
Par Value	$1,000.00
Coupon	3%
Discount Percent	**3%**

Here is the formula for calculating a bond's price, which uses the basic present value (PV) formula:

$$\text{Bond Price} = \frac{C}{(1+i)^1} + \frac{C}{(1+i)^2} + \cdots + \frac{C}{(1+i)^n} + \frac{M}{(1+i)^n}$$

C = coupon payment
n = number of payments
i = interest rate, or required yield
M = value at maturity, or par value

	1	2	3	4	5	6	7	8	9	10	Total
Payment	$ 30.00	$ 30.00	$ 30.00	$ 30.00	$ 30.00	$ 30.00	$ 30.00	$ 30.00	$ 30.00	$1,030.00	$1,300.00
Discount Value	103%	106%	109%	113%	116%	119%	123%	127%	130%	134%	
Present Value	$ 29.13	$ 28.28	$ 27.45	$ 26.65	$ 25.88	$ 25.12	$ 24.39	$ 23.68	$ 22.99	$ 766.42	$1,000.00

Your Bond

Bond Details

Maturity Years	10
Par Value	$1,000.00
Coupon	2%
Discount Percent	**3%**

	1	2	3	4	5	6	7	8	9	10	Total
Payment	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$1,020.00	$1,200.00
Discount Value	103%	106%	109%	113%	116%	119%	123%	127%	130%	134%	
Present Value	$ 19.42	$ 18.85	$ 18.30	$ 17.77	$ 17.25	$ 16.75	$ 16.26	$ 15.79	$ 15.33	$ 758.98	$ 914.70

Source: Entasis Asset Management

Mike Peters, CFA
Chief Investment Officer – Fixed Income

Summary

Bond prices move opposite the direction of interest rates. As interest rates increase bond prices go down. As interest rates decrease bond prices go up.

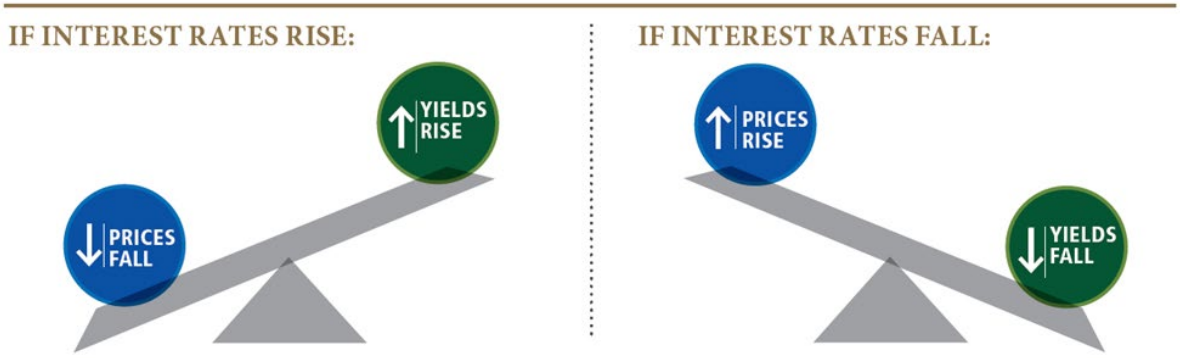
Duration measures the sensitivity of a change in the price of a bond for a given change in interest rates. Generally for every 1% move in interest rates, a bond's price will change approximately 1% in the opposite direction.

The certainty of principal and interest payments will depend on the credit worthiness of the issuer and that can vary with market conditions.

The current environment, being far from normal, has amplified those factors and introduced two others not usually part of the equation.

Over the long-term, income accounts for approximately 80-90% of returns for investment grade bonds. We hold U.S. Treasuries and mortgage-backed securities for their near-term price stability but will use them to fund investments in other asset classes long-term.

As a result of that cash flow dynamic, bond prices move in the opposite direction of interest rates. As interest rates increase, bond prices go down. As interest rates decrease, bond prices go up.



Source: PIMCO

This should make sense because in our example the price of the bond paying 2.00% needed to go down to $915 to compensate for the difference in expected cash flows compared to the bond paying a higher market rate (3.00%). In short, bond prices are simple math, if all else is equal.

Now let's build on this by looking at the other factors that influence bond prices starting with **duration**. Duration measures the sensitivity of a change in the price of a bond for a given change in interest rates. Generally, for every 1% move in interest rates, a bond's price will change approximately 1% in the opposite direction of the interest rate move. For example, if a bond has a duration of 5 years, and interest rates increase 1%, the bond's price will decline approximately 5%. Conversely, if a bond has a duration of 5 years and interest rates fall by 1%, the bond's price will increase by approximately 5%.

Given that interest rates are declining, you may be asking why some bond prices went down in this environment. The answer is that not all bonds are created equal, which brings us to **credit quality**.

U.S. Treasury bonds are considered risk-free because they are backed by the full faith and credit of the United States government, which can print money to pay back its debts if needed. As a result, there's no doubt investors will get their scheduled principal and interest payments. However, there are many types of bonds that are issued by other entities such as municipal bonds, corporate bonds, mortgage-backed securities, asset-backed securities, international bonds and emerging markets bonds. The cash flows (and sometimes assets) of the entities support the bond payments. As a result, the certainty (or timing) of principal and interest payments will depend on the credit worthiness of the issuer and that can vary with market conditions. A great example of this in today's market is Boeing. If someone predicted 3 years ago, they would need a bail out from the government to survive you probably would have called them crazy. Unfortunately, every non-Treasury entity has the potential for this to happen. To compensate for that risk. the market requires additional interest for taking on the risk. The more likely a bond is to deviate from its scheduled principal and interest payments (cash flow schedule) the higher the interest compensation the market requires. It is the same as banks requiring higher interest rates from people with lower credit scores. The additional compensation above the risk-free rate is often referred to as a credit spread. In times of economic stress, credit spreads typically widen (become larger), as the market places a lower probability of receiving the scheduled principal and interest payments from non-Treasury entities. (Returning to our earlier calculation, higher rates on new bonds make the prices of existing bonds fall and if the rates are meaningfully higher the price declines will be commensurate with the change.)

Fixed Income Portfolio Comments

At the start of 2019, the market generally demanded an additional 1.01% interest to lend money to the average investment grade corporation versus the U.S. Treasury (Investment grade corporate bond spreads were +101 basis points). By the end of the first quarter, those spreads increased to 3.05% as markets demanded more interest for the additional risk of owning corporate bonds in this environment. Over the same period, the rate on a 10-year Treasury decreased from 1.88% to 0.70%. This explains why the prices of corporate bonds went down in the first quarter while the prices of Treasury bonds went up. Many other classes of bonds followed a similar pattern as buyers attempted to account for a change in their credit worthiness. See the table below.

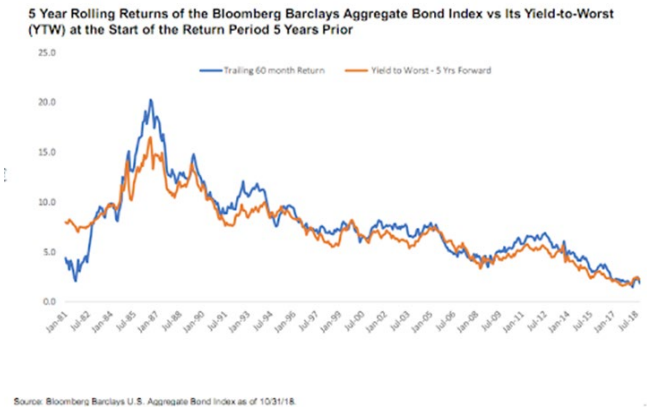
Total Returns of Selected Barclays Indices and Subsectors

Bloomberg Barclays Index/Sector	March	Q1	2019	Effective Duration (yrs)
U.S. Aggregate Index	-0.59%	3.15%	8.72%	5.69
U.S. Gov't/Credit Index	-1.11%	3.37%	9.71%	7.23
U.S. Intermediate Gov't/Credit Index	-0.44%	2.40%	6.80%	3.93
U.S. 1-3 Yr. Gov't/Credit Index	0.31%	1.69%	4.03%	1.87
U.S. Treasury	2.89%	8.20%	6.86%	7.02
U.S. Agency (Non-Mortgage)	0.98%	4.14%	5.89%	3.93
U.S. Agency Pass-throughs	1.06%	2.82%	6.35%	1.67
CMBS (Commercial Mortgage Backed Securities)	-3.13%	1.19%	8.29%	5.31
ABS (Asset-Backed Securities)	-2.07%	-0.21%	4.53%	2.07
U.S. Corporate Investment Grade	-7.09%	-3.63%	14.54%	7.98
U.S. High Yield Corporates	-11.46%	-12.68%	14.32%	4.06
Emerging Market Debt	-15.75%	-16.58%	10.90%	4.22
Municipal Bond Index	-3.63%	-0.63%	7.54%	5.36
TIPS (Treasury Inflation Protected Securities)	-1.76%	1.69%	8.43%	6.73

That is how the accounting for bonds should work in a normal environment. The current environment, being far from normal, has amplified those factors and introduced two others not usually part of the equation. The first non-traditional factor was a huge lack of demand as panic sellers unloaded assets of all kinds. Oddly enough, the bonds that experienced the most price pressure amid the low demand were in many cases low duration and high quality – essentially the opposite of normal. All non-Treasury bonds were impacted, but higher quality, short duration bonds would typically be least impacted. Essentially the simple bond math broke down due to a temporary liquidity strain. The second non-traditional factor was Fed intervention. In order to stem the liquidity strain, the Fed initiated a massive bond buying program that even made its way into the high-yield corporate sector. This artificial demand stabilized the bond market, but ultimately furthered the disconnect between market prices and traditional bond math. Bob mentioned this and C.J. elaborated further, so I won't add additional comments other than to say I look forward to a return to a more normal bond pricing environment.

OUTLOOK

Over the long-term, income accounts for approximately 80-90% of returns for investment grade bonds. See the chart to the right. For this reason, an increase in yield (lower prices) can be a good thing for bond investors over the long-term. The obvious exception to this is default. Considering the magnitude and variation of recent moves in interest rates and credit spreads, the long-term return outlook of the different fixed income sectors has changed meaningfully.



Source: Bloomberg Barclays U.S. Aggregate Bond Index as of 10/31/18.

Fixed Income Portfolio Comments

If we look at the first table of fixed income indices below, U.S. Treasury bonds ended the quarter with a yield of 0.58%. If we follow the logic of our bond math and the chart on the prior page, returns for Treasuries look somewhat bleak. The same could be said for mortgage-backed securities, which ended the quarter with a yield of 1.15%. However, if markets stay volatile over the short-term, both should provide meaningful diversification and price stability. Over the long-term, we will likely use those asset classes as a source to fund better total return opportunities for client portfolios. As you can see by the second table below, return opportunities vary with market conditions, so we need to remain diligent in our research.

	Averages						Total Returns (%)						
Index	Coupon (%)	Price ($)	Yield to Worst (%)	Spread (bps)	Maturity (yrs.)	Duration (yrs.)	Since 2/19/20*	1-Mo.	3-Mo.	YTD	1Y	3Y	5Y
U.S. High Grade													
Bloomberg Barclays U.S. Aggregate Index	3.12	109.1	1.47	83	7.9	5.8	1.92	-1.94	3.78	4.01	10.12	5.06	3.52
U.S. Treasury	2.26	112.0	0.58	-	8.6	7.2	5.80	-1.13	7.99	8.31	13.82	5.81	3.69
U.S. Agency	2.62	109.5	0.90	43	5.6	3.9	2.50	-1.38	3.83	4.03	8.42	4.14	2.89
U.S. Mortgage Backed Securities	3.50	107.0	1.15	41	3.3	1.5	2.40	0.94	3.15	3.29	7.73	4.15	3.02
U.S. Asset Backed Securities	2.64	101.1	2.11	184	2.2	2.1	-0.70	-2.36	0.11	0.30	3.32	2.50	2.09
U.S. Commercial Mortgage Backed Securities	3.34	105.4	2.27	176	5.9	5.3	-0.72	-3.16	1.20	1.72	6.87	4.30	3.29
U.S. Corp. Investment Grade	3.97	108.0	3.05	233	11.9	8.2	-3.66	-5.64	-1.19	-1.01	7.89	5.05	3.88
Bloomberg Barclays Municipal Bond Index	4.59	110.2	2.01	-	13.0	5.7	-2.56	-4.24	-1.29	-0.67	4.03	3.79	3.18
Bloomberg Barclays Taxable Municipal Bond Index	4.91	115.4	3.01	-	17.2	9.7	-3.58	-10.75	0.01	0.62	8.17	6.08	4.79
U.S. High Yield													
ICE BofAML US High Yield Index	6.23	88.0	8.43	796	6.1	4.0	-11.76	-5.54	-11.11	-10.76	-5.53	1.36	3.06
S&P/LSTA Leveraged Loan Index	L+3.45	85.3	8.73	935	4.9	-	-10.79	-5.98	-10.61	-10.19	-6.95	0.23	1.73
Emerging Markets													
J.P. Morgan EM Bond Index (EMBI) Global Diversified	5.57	92.7	6.84	607	-	7.2	-13.96	-10.06	-12.34	-12.02	-5.67	0.79	2.81
J.P. Morgan Corp. EM Bond Index (CEMBI) Broad Diversified	5.08	93.3	6.46	584	-	4.6	-11.02	-9.23	-9.58	-9.05	-2.56	1.86	3.23
J.P. Morgan Govt. Bond Index-EM (GBI-EM) Global Diversified	5.87	-	5.33	-	-	5.2	-12.67	-8.63	-13.55	-13.65	-6.15	-0.10	0.10
Global Developed Markets													
Bloomberg Barclays Global Aggregate Ex-U.S. Index	2.09	111.1	0.78	54	9.8	8.3	-1.70	-7.03	-1.72	-2.49	1.08	2.63	2.13

Fixed Income

Asset class return analysis (%)

Higher

2011	2012	2013	2014	2015	2016	2017	2018	2019	YTD through last close	Since 2/19/20*
Municipal 10.70	EMD (Hard Currency) 18.54	High Yield 7.42	Municipal 9.05	Municipal 3.30	High Yield 17.49	EMD (Local Currency) 15.21	Municipal 1.28	Investment Grade 14.54	Treasury 8.31	Treasury 5.80
Treasury 9.81	EMD (Local Currency) 16.76	Bank Loan 5.29	Investment Grade 7.46	MBS 1.51	EMD (Hard Currency) 10.19	Global Agg Ex-U.S. 10.51	MBS 0.99	EMD (Hard Currency) 14.42	MBS 3.29	MBS 2.40
EMD (Hard Currency) 8.46	High Yield 15.58	EMD (Corp. Bonds) -0.60	MBS 6.08	EMD (Corp. Bonds) 1.30	Bank Loan 10.16	EMD (Hard Currency) 9.32	Treasury 0.86	High Yield 14.41	Municipal -0.67	Global Agg Ex-U.S. -1.70
Investment Grade 8.15	EMD (Corp. Bonds) 15.02	MBS -1.41	EMD (Hard Currency) 5.53	EMD (Hard Currency) 1.23	EMD (Local Currency) 9.94	EMD (Corp. Bonds) 7.96	Bank Loan 0.44	EMD (Local Currency) 13.47	Investment Grade -1.01	Municipal -2.56
MBS 6.23	Investment Grade 9.82	Investment Grade -1.53	Treasury 5.05	Treasury 0.84	EMD (Corp. Bonds) 9.65	High Yield 7.48	EMD (Corp. Bonds) -1.65	EMD (Corp. Bonds) 13.09	Global Agg Ex-U.S. -2.49	Investment Grade -3.66
High Yield 4.38	Bank Loan 9.66	Municipal -2.55	EMD (Corp. Bonds) 4.96	Investment Grade -0.68	Investment Grade 6.11	Investment Grade 6.42	Global Agg Ex-U.S. -2.15	Bank Loan 8.64	EMD (Corp. Bonds) -9.05	Bank Loan -10.79
Global Agg Ex-U.S. 4.36	Municipal 6.78	Treasury -2.75	High Yield 2.50	Bank Loan -0.69	MBS 1.67	Municipal 5.45	High Yield -2.26	Municipal 7.54	Bank Loan -10.19	EMD (Corp. Bonds) -11.02
EMD (Corp. Bonds) 2.31	Global Agg Ex-U.S. 4.09	Global Agg Ex-U.S. -3.08	Bank Loan 1.60	High Yield -4.64	Global Agg Ex-U.S. 1.49	Bank Loan 4.12	Investment Grade -2.51	Treasury 6.86	EMD (Hard Currency) -10.61	High Yield -11.76
Bank Loan 1.52	MBS 2.59	EMD (Hard Currency) -6.58	Global Agg Ex-U.S. -3.08	Global Agg Ex-U.S. -6.02	Treasury 1.04	MBS 2.47	EMD (Hard Currency) -4.61	MBS 6.35	High Yield -10.76	EMD (Local Currency) -12.67
EMD (Local Currency) -1.75	Treasury 1.99	EMD (Local Currency) -8.98	EMD (Local Currency) -5.72	EMD (Local Currency) -14.92	Municipal 0.25	Treasury 2.31	EMD (Local Currency) -6.21	Global Agg Ex-U.S. 5.09	EMD (Local Currency) -13.65	EMD (Hard Currency) -12.81

Lower

Source: Eaton Vance

Final Thoughts

The current market environment has been unique in many respects and should be analyzed in a way that is different from past market disruptions. As a result, we are looking at certain market drivers more closely than we might have before (unemployment claims) and drivers we have never looked at before (coronavirus case growth). However, we are not assessing those drivers in and of themselves. We are looking at them to understand the impact they have on the core market variables we track – interest rates, economic growth and earnings. We are not looking to understand changes in those drivers or the impact they have on our core variables with any level of precision. We believe that to be a fool's errand because there are too many considerations. Our goal is always to understand the directionality of change in our core variables. We know this will occasionally lead to mismatched timing over the short-term, but we believe it will serve clients well over the long-term.

On the equity side of client portfolios, we continue to believe that long-term success is not driven by reactions to day-to-day headlines but rather requires in-depth research and analysis of broad market and company fundamentals. As a result, we have dug in as we are more convinced than ever that the current risk "party" will not last indefinitely. We are holding more cash in portfolios than we have held at any point in the past (we raised cash recently following the sharp bear market rally off lows), and where we have made investments in equities, we remain focused in active managers that focus their efforts on businesses, sectors and areas of the market they believe are well-positioned to weather the fallout from the U.S. economic shutdown.

On the fixed income side of client portfolios, two areas of the market where we are evaluating opportunities are investment grade and high-yield corporate bonds. Those two asset classes ended the quarter yielding 3.05% and 8.43%, respectively. From those levels, the average forward return has historically been attractive, but short-term returns can vary greatly. We are carefully reviewing active managers in those asset classes and will keep you posted as our research evolves.

We hope you find a portion of this newsletter useful.

Thank you for taking the time to read it. If you have any feedback on the new format or anything else, it is always appreciated.

Our Team

Bob Batchelor, CFA
CEO
Co-Founder

Bob J. Batchelor, CFA is Co-Founder and Chief Executive Officer of Entasis Asset Management. Bob has 20 years of experience in the investment industry. Prior to founding Entasis, Bob worked at Artisan Partners where he held a variety of roles including Head of Corporate Communications, Managing Director, Head of Marketing and Technology and Head of Marketing and Communications. He also served as a member of Artisan Partners Executive Committee. Before Artisan Partners, Bob worked at Strong Capital Management as Client Account Manager and Director of Investment Research and Communication.

Bob holds an M.B.A. from Marquette University and a B.B.A. from the University of Wisconsin-Madison. He has earned the right to use the CFA designation. Bob is a member of the CFA Institute and CFA Society of Milwaukee.

C.J. Batchelor, CFA
CIO – Equity
Co-Founder

Charles J. (C.J.) Batchelor, CFA is Co-Founder and Chief Investment Officer – Equity of Entasis Asset Management. C.J. has 15 years of experience in the investment industry. Prior to founding Entasis, C.J. worked at Cleary Gull, a multi-billion dollar investment advisory firm, as Director of Investment Research. He also served as a member of Cleary Gull's Investment Policy Committee, Investment Committee and Equity Strategy Group.

C.J. holds a B.B.A. in Finance from the University of Wisconsin-Milwaukee. He has earned the right to use the CFA designation. C.J. is a member of the CFA Institute and CFA Society of Milwaukee, where he currently serves on the Board of Directors.

Mike Peters, CFA
CIO – Fixed Income
Co-Founder

Mike Peters, CFA is Co-Founder and Chief Investment Officer – Fixed Income of Entasis Asset Management. Mike has 15 years of experience in the investment industry. Prior to founding Entasis, Mike worked at Cleary Gull, a multi-billion dollar investment advisory firm, as Fixed Income Portfolio Manager. In his role he served as voting member of Cleary Gull's Fixed Income Strategy Group and Complement (Alternative) Strategy Group. Before Cleary Gull, Mike worked for several years at Madison Investment Advisors, a multi-billion dollar asset management firm, as a Fixed Income Analyst.

Mike holds a B.B.A. in Finance from the University of Wisconsin-Milwaukee. He has earned the right to use the CFA designation. Mike is a member of the CFA Institute and CFA Society of Milwaukee.

David LaCroix
Senior Financial
Advisor

David D. LaCroix is a Senior Financial Advisor at Entasis Asset Management. David has more than 45 years of experience in the investment industry. Prior to joining Entasis, David worked at Cleary Gull Advisors, a Johnson Financial Group Company, and Cleary Gull Inc., a prior affiliate of Cleary Gull Advisors, where he most recently served as Vice President, Relationship Manager responsible for high net worth clients. Before Cleary Gull, David worked in a variety of portfolio management and client relationship management positions with A.G. Edwards and M&I Capital Markets Group.

David received his M.B.A. and B.B.A. in Finance from the University of Wisconsin-Madison. He has served as a member of the Archdiocese of Milwaukee Investment Committee, as a Trustee for the Village of Shorewood and as Director/Treasurer of Milwaukee Summerfest.

IMPORTANT INFORMATION

Statements may be forward looking and are not intended as specific investment advice without further review of individual circumstances. Commentary, opinions, analysis, and recommendations may be subjective, do not guarantee future performance, and could change at any time without notice. Under no circumstances does the information contained within represent a recommendation to buy or sell any security. Charts and graphs provided are for illustrative purposes only.

This information is provided for informational purposes only and does not constitute individualized financial advice or create an advisor-client relationship. This newsletter is published for the exclusive use of our clients and friends and is not intended as investment, legal or tax advice. This newsletter was prepared using information from third-party sources, which we believe to be reliable; however, we have not audited the data from these sources and are not responsible for its accuracy.

The **Dow Jones Industrial Average℠** is a price weighted index that measures the performance of thirty component large-cap U.S. stocks. The **S&P 500® Index** is a market capitalization weighted index that measures the performance of 500 leading companies in leading industries of the U.S. economy. The **Russell 1000® Index** measures the performance of roughly 1,000 U.S. large-cap companies. The **Russell 1000® Growth** Index measures the performance of U.S. large-cap companies with higher price/book ratios and forecasted growth values. The **Russell 1000® Value Index** measures the performance of U.S. large-cap companies with lower price/book ratios and forecasted growth values. The **Russell 2000® Index** measures the performance of roughly 2,000 U.S. small-cap companies. The **MSCI EAFE® Index** is a market capitalization weighted index that is designed to measure the performance of developed markets, excluding the U.S. and Canada. The **MSCI Emerging Markets Index** is a market capitalization weighted index that is designed to measure equity market performance of emerging markets. **The MSCI ACWI Ex USA Small Cap Index** is a market capitalization weighted index that represents the performance of smaller capitalization companies in developed and emerging markets excluding the U.S.

The **Barclays Aggregate Bond Index** tracks the performance of intermediate-term government bonds, investment grade corporate debt securities and mortgage-backed securities with at least one year to final maturity. The **Barclays Intermediate U.S. Gov/Credit Index** tracks the performance of intermediate U.S. government and corporate bonds. The **Barclays Municipal Bond Index** is considered representative of the broad market for investment grade, tax-exempt bonds with a maturity of at least one year.

The **BoAML Fixed Rate Preferred Securities Index** tracks the performance of fixed rate U.S. dollar denominated preferred securities in the U.S. domestic market. The **BoAML Treasury Master Index** tracks the performance of the direct sovereign debt of the U.S. Government. The **BoAML U.S. Mortgage Back Securities Index** tracks the performance of U.S. dollar denominated fixed rate and hybrid residential mortgage pass-through securities publicly issued by U.S. agencies in the U.S. market. The **BoAML U.S. Corporate Master Index** tracks the performance of U.S. dollar denominated investment grade corporate debt publicly issued in the U.S. domestic market. The **BoAML High Yield Master II Index** is a broad based index consisting of all U.S. dollar-denominated high-yield bonds with a minimum outstanding of $100 million and maturing over one year. The **BoAML All Convertibles All Qualities Index** measures convertible securities' performance of U.S. dollar denominated convertible securities not currently in bankruptcy with a total market value greater than $50 million at issuance. The **BoAML Euro Broad Market Index** gives exposure to euro-denominated investment grade debt publicly issued in the Eurobond or euro member domestic markets including government, quasi-government, corporate, securitized and collateralized securities. The **BoAML Local Debt Markets Plus Index** is a broad composite designed to track the performance of local currency sovereign debt of emerging markets countries.

Past performance is no guarantee of future results. All indices are unmanaged. Investors cannot invest directly in an index. Index returns do not include expenses.

Investment Terms

Valuation levels are typically shown by calculating the price level of an index or a company relative to any number of characteristics of an index or company. For instance, the price-to-earnings valuation metric looks at the price of an index (or stock) divided by the total earnings of an index (or stock). Based on the multiple (in this instance, the multiple is how much investors are willing to pay – the price – for a given amount of earnings), it provides investors with a general sense of how expensive, or cheap, the overall market is at the present time. While there are a significant number of valuation metrics that are used in practice, and many ways to vary/modify the calculation of the price-to-earnings ratio, in this summary we are focused on the price investors are willing to pay (the level of the S&P 500® Index) divided by earnings expectations for the equity market (S&P 500 Index) over the next 12 months. This valuation metric is referred to as the forward P/E. A **yield curve** is a line that plots the interest rates, at a set point in time, of bonds having equal credit quality but differing maturity dates. The most frequently reported yield curve compares the three-month, two-year, five-year and 30-year U.S. Treasury debt. A **basis point** is a common unit of measure for interest rates and other percentages in finance. One basis point is equal to 1/100th of 1%, or 0.01% (0.0001). **Interest coverage** is a measure of a company's ability to meet its interest payments on its debt. **Federal funds rate** is the interest rate at which a depository institution lends funds maintained at the Federal Reserve to another depository institution overnight. It is one of the most influential interest rates in the U.S. economy, since it affects monetary and financial conditions, which in turn have a bearing on key aspects of the broad economy including employment, growth and inflation.

To learn more please visit us at
www.EntasisAM.com

CONTACT US
Entasis Asset Management
300 N Corporate Drive
Suite 220
Brookfield, WI 53045
262-794-5299
Info@EntasisAM.com

FOLLOW US

DOWNLOAD OUR APP

Download on the App Store

GET IT ON Google Play