Stembrook Asset Management

Stembrook Market Review — First Quarter 2020

2020 started with a continuation of the bull market in equities and growth of the global economy. The U.S. economy was in the midst of its longest expansion in history. Leading indicators looked strong in the U.S. through the end of February. The Coronavirus (COVID-19) gained broad attention in China in January and spread globally at a rapid pace. Beginning February 19th, global equity markets plunged by –33.6%[1] before hitting a low on March 23rd, the largest dip since the Global Financial Crisis, ending a 132 month bull market that began in March 2009. During this downturn, global bonds fell by -3.1%.[2] Since then, equities have recovered some of their losses, up 24.6%[1] through April 14th while bonds have returned 3.7%.[2] There is no telling if we have reached a bottom in equity markets, but the recent rally has given investors an opportunity to reevaluate their allocations, as noted in our most recent commentary . The real economy also suffered as large parts of global economies simply stopped operating, and workers were forced to shelter in place.

The Coronavirus ended the bull market and in all likelihood will send the global economy into a recession. The next few months will be difficult from both an economic and societal perspective as global leaders try to reopen their economies while providing a safe environment for citizens. Meanwhile, central banks and governments have taken drastic measures to provide liquidity to the economy, with asset purchases and lower interest rates. The CARES Act, outlined in the center chart at the bottom of this page, was introduced on March 19th in the United States to provide economic relief to those impacted by the virus.

Our proprietary models forecast long-term, pre-tax returns ranging from 1% to 6% for fixed income-like asset classes and 5% to 11% for equity-like asset classes (see table to the right). We maintain target weight allocations for equities and fixed income, and have purchased risk assets after the initial selloff. Our more detailed observations and current portfolio positioning are outlined in the following comments.

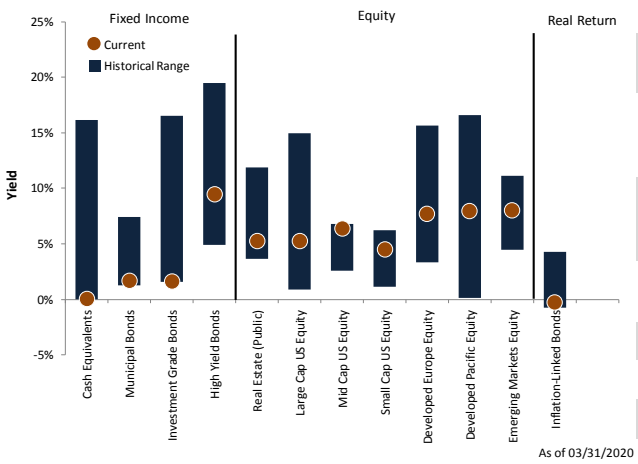
Expected Market Returns and Risks

7-10 Year Horizon

		Pre-Tax Annualized Return	After-Tax Annualized Return	Volatility[1]
	Inflation	0.9%	0.9%	3.1%
Fixed Income	Municipal Bonds	1.6%	1.6%	4.4%
	Investment Grade Bonds	1.4%	0.7%	6.7%
	High Yield Bonds	6.3%	3.4%	13.2%
Equity	Broad Market US Equity	10.3%	8.1%	16.9%
	Developed Non-US Equity	9.8%	7.6%	21.4%
	Emerging Asian Equity	13.1%	10.5%	25.5%
	Emerging Markets Equity	11.4%	7.6%	29.6%

A sampling of return expectations produced by our models. Expected returns are projections and are not guaranteed.

Yields Across Asset Classes



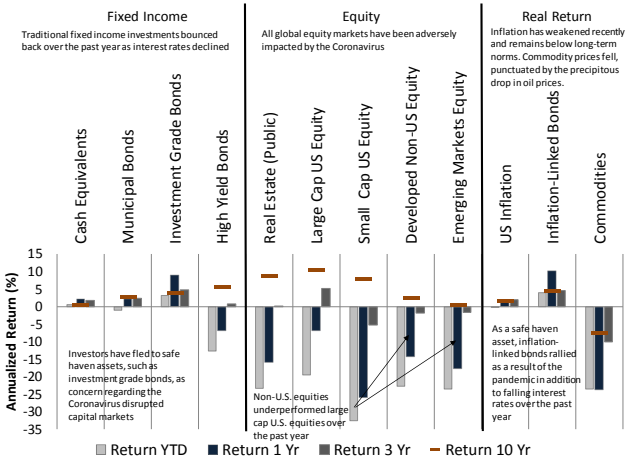
Yields are an indicator of future returns. Orange dots show current yields, blue bars show historical ranges. Bond yields are generally low versus historical range.

Summary of the CARES Act

$ Billion	Measure
$290	One time stimulus checks amounting to $1,200 per adult and $500 per child up to certain income limits.
$260	Enhanced, expanded and extended unemployment benefits, adding $600 per week to every unemployment check for 4 months, expanding program to cover contractors and self–employed. Extended from 26 to 39 weeks.
$510	Loans to distressed businesses, cities and states. $29 B for airlines, $17 B for firms deemed important to national security and $454 B as a backstop for loans to other businesses, cities and states
$377	Small business relief, largely in the form of "forgivable loans" for spending on payroll, rent and utilities
$150	Direct aid to state and municipal governments
$180	Health-related spending
$516	Other spending and tax breaks
$2.28 T	Approximately 10.8% of GDP

The Coronavirus Aid, Relief and Economic Security Act summary compiled by J.P. Morgan Asset Management.

Historical Market Returns



Historical market returns as of March 31st, 2020. Note that looking backwards at recent returns is not a reliable method for predicting future returns.

Global Asset Class Returns

Asset Class Name	Last 10 Years	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Small Cap US Equity	S&P 500 11.2%	Real Estate 28.6%	Infl-Indx Bnd 14.0%	EM Eq 18.2%	Small Cap 41.3%	Real Estate 31.8%	Real Estate 2.8%	Small Cap 26.5%	EM Eq 37.3%	CPI 2.0%	S&P 500 31.5%
Large Cap US Equity	Small Cap 11.0%	Small Cap 26.3%	Real Estate 9.2%	Real Estate 17.6%	S&P 500 32.4%	S&P 500 13.7%	S&P 500 1.4%	HY Bnd 17.5%	Intl Eq 25.0%	Inv Grd Bnd 0.0%	Real Estate 28.7%
Real Estate (Public)	Real Estate 10.5%	EM Eq 19.2%	Inv Grd Bnd 7.8%	Intl Eq 17.3%	Intl Eq 22.8%	Inv Grd Bnd 6.0%	CPI 0.8%	S&P 500 12.0%	S&P 500 21.8%	Infl-Indx Bnd -1.8%	Intl Eq 22.8%
High Yield Bonds	HY Bnd 6.2%	Commod 16.8%	HY Bnd 4.5%	Small Cap 16.3%	HY Bnd 7.4%	Small Cap 5.8%	Inv Grd Bnd 0.5%	Commod 11.4%	Small Cap 13.2%	HY Bnd -2.1%	Small Cap 22.7%
Emerging Markets Equity	Intl Eq 4.8%	HY Bnd 15.2%	CPI 3.0%	S&P 500 16.0%	Real Estate 1.9%	Infl-Indx Bnd 4.6%	Intl Eq -0.2%	EM Eq 11.3%	Real Estate 8.7%	Real Estate -4.0%	EM Eq 18.6%
Developed Non-US Equity	EM Eq 3.1%	S&P 500 15.1%	S&P 500 2.1%	HY Bnd 15.4%	CPI 1.5%	HY Bnd 2.5%	Infl-Indx Bnd -1.4%	Real Estate 8.6%	HY Bnd 7.5%	S&P 500 -4.4%	HY Bnd 14.3%
Investment Grade Bonds	Inv Grd Bnd 3.1%	Intl Eq 7.8%	Small Cap 1.0%	Infl-Indx Bnd 7.2%	Inv Grd Bnd -2.0%	CPI 1.3%	Small Cap -2.0%	Infl-Indx Bnd 3.6%	Inv Grd Bnd 3.5%	Small Cap -8.5%	Infl-Indx Bnd 10.6%
Inflation-Linked Bonds	Infl-Indx Bnd 2.9%	Infl-Indx Bnd 6.5%	Intl Eq -12.1%	Inv Grd Bnd 4.2%	EM Eq -2.6%	EM Eq -1.8%	HY Bnd -4.6%	Inv Grd Bnd 2.6%	Infl-Indx Bnd 3.0%	Commod -13.0%	Inv Grd Bnd 8.7%
Inflation	CPI 1.5%	Inv Grd Bnd 6.5%	Commod -13.3%	CPI 2.0%	Infl-Indx Bnd -9.4%	Intl Eq -4.5%	EM Eq -14.8%	CPI 1.8%	CPI 2.1%	Intl Eq -13.3%	Commod 5.4%
Commodities	Commod -4.4%	CPI 1.5%	EM Eq -18.4%	Commod -1.1%	Commod -9.5%	Commod -17.0%	Commod -24.7%	Intl Eq 1.6%	Commod 0.7%	EM Eq -14.5%	CPI 2.1%

Returns are arranged in columns, by year. Each color represents a different asset class. Each year, the leaders and laggards tend to shift. Diversification across a range of asset classes can smooth returns and enhance growth.

Economic Backdrop

- **The Coronavirus is weighing heavily on the global economy. Some of this is reflected in the first quarter numbers, but economists expect the impact to be more pronounced in the second quarter.**
- Global economic output, as measured by GDP, is expected to shrink in the first quarter by -2%.[3] Inflation for the same country group is expected to remain stable at 2.4%.[4]
- The U.S. economy is expected to contract by -2.5% in the first quarter after growing by 2.1% in the fourth quarter of 2019. The Chinese economy is expected to shrink by –6.8%, after growing by 6% in the fourth quarter of 2019, after having been impacted by the virus for a longer period of time.[3]
- Driven mostly by the contraction of GDP in China, Emerging Markets GDP is expected to decrease by –2% in the first quarter.[3]
- Business confidence plummeted globally as the Global Purchasing Manager's Index for Services fell to 37 and the index for manufacturing fell to 47.6. A level above 50 indicates expansion, while a level below 50 indicates contraction.[5]

Equities

- **Global equity markets suffered from the impacts of the Coronavirus. Overall, global equities fell by –22.7% in the first quarter of 2020.**[6]
- Small cap equities in the U.S. were most adversely impacted by the selloff, falling by –33.7% in the first quarter.[7]
- Technology stocks did the best at fending off losses. The NASDAQ fell by only –10.3% in the quarter.[8]
- Energy equities were some of the hardest hit in the quarter as the Saudis and OPEC struggled to strike a deal with Russia regarding production cuts amid a decline in global demand. Global energy stocks were down –43.8% for the quarter.[9]

Fixed Income

- **Fixed income, for the most part, protected portfolios as it tends to do in volatile times. Investment grade bonds in the U.S. were up 3.2% for the quarter.**[10]
- TIPS rallied, up 4%, as investors raced for safe haven assets.[11]
- Due to their economic exposure and credit sensitivity, high yield bonds underperformed investment grade credits. High yield was down –12.7% for the quarter.[12]

Current Positioning

- On March 17th we made our largest purchase of risky assets while selling short-term, stable bonds. These purchases included some of the hardest hit parts of the market.
- We continue to look for investment opportunities. While these times are challenging, history shows us that these scenarios provide opportunities to purchase great assets at discounted prices which can ultimately lead to years of long-term growth.
- We maintain our **overweight to developed non-U.S. and emerging market equities**, where valuations and long-term return potential remain attractive.
- We also maintain our **underweight to large cap U.S. equities.**
- We favor **lower priced, value-oriented equities, both in the U.S. and abroad,** which tend to outperform the broad market over time, with less volatility.
- We remain **overweight municipal bonds** for taxable investors.

Times like these are a good reminder of why we go through an exhaustive planning exercise with every one of our clients. We know that markets will be volatile at times and we take this into account when constructing your portfolio. If you have any questions or feel uneasy about your investments, please do not hesitate to contact us. We can review your plan and make sure that it is still the right one for you.

We continue to focus our efforts on helping you meet your financial objectives by following our disciplined investment approach. Our approach uses return and risk models, incorporating fundamental valuations and tax-efficient strategies. This investment discipline is tailored to your individual situation in our continuing effort to craft and implement your customized investment solution.

As always, we thank you for placing your trust in our investment management and advice and welcome your questions and comments at any time.

Peter D. D'Agati, CFA Thomas Kosinski

Endnotes and Sources:

Text:

(1) Bloomberg: MSCI ACWI Total Return. 2/19/20-3/23/20, 3/23/20-4/14/20.
(2) Bloomberg: Bloomberg Barclays Global Aggregate Bond Index Total Return. 2/19/20-3/23/20, 3/23/20-4/14/20.
(3) Bloomberg, Stembrook Research: GDP measures are based on the most recent annualized quarterly, seasonally-adjusted data. Statistics are stated in inflation-adjusted terms. Aggregate Statistics are weighted by each country's GDP translated into USD. Where available, official estimates are used. Where official estimates are not available, GDP data is based on Bloomberg Contributor Forecasted GDP. Emerging Markets measures are based solely on Bloomberg Contributor Forecasted GDP. As of 3/31/20.
(4) Bloomberg, Stembrook Research: Aggregate inflation statistics are weighted by each country's GDP translated in to USD. As of 3/31/20.
(5) Bloomberg: Markit Global Purchasing Managers Index for Manufacturing and Service. As of 3/31/20.
(6) Bloomberg: MSCI ACWI Total Return. 12/31/19-3/31/20.
(7) Bloomberg: S&P 600 Total Return. 12/31/19-3/31/20.
(8) Bloomberg: NASDAQ 100 Total Return. 12/31/19-3/31/20.
(9) Bloomberg: MSCI ACWI/Energy Total Return. 12/31/19-3/31/20.
(10) Bloomberg: Bloomberg Barclays U.S. Aggregate Index Total Return. 12/31/19-3/31/20.
(11) Bloomberg: S&P 10 Year TIPS Total Return. 12/31/19-3/31/20.
(12) Bloomberg: Bloomberg Barclays U.S. Corporate High Yield Index Total Return. 12/31/19-3/31/20.

Charts:

Expected Market Returns and Risks, 7-10 Year Horizon: As of 3/31/20.

Source: Stembrook Research.

(1) Volatility is measured in terms of Standard Deviation. Standard deviation is the statistical measurement of dispersion about an average, which depicts how widely a stock or portfolio's returns varied over a certain period of time. Investors use the standard deviation of historical performance to try to predict the range of returns that is most likely for a given investment. When an investment has a high standard deviation, the predicted range of performance is wide, implying greater volatility. If an investment's returns follow a normal distribution, then approximately 68 percent of the time they will fall within one standard deviation of the mean return of the investment, and 95 percent of the time within two standard deviations. For example, for a portfolio with a mean annual return of 10 percent and a standard deviation of two percent, you would expect the return to be between 8 and 12 percent about 68 percent of the time, and between 6 and 14 percent about 95 percent of the time. Source: Morningstar.

Yields Across Asset Classes: As of 3/31/20.

Sources: *Cash Equivalents Yields* since March 1976. Ibbotson, Federal Reserve Bank, Thomson Reuters, *Municipal Bond Yields* since March 1988. Barclays Capital, Charles Schwab, BofA Merrill Lynch, Standard & Poor's/Investortools Municipal Bond Indices, *Investment Grade Bond Yields* since March 1976. Barclays Capital, *High Yield* since December 1984. BofA Merrill Lynch, Barclays Capital, *Real Estate (Public) Earnings Yield* since March 1976. NAREIT all Equity, *Large Cap U.S. Equity Earnings Yield* since March 1976. Standard & Poor's, BARRA, *Mid Cap U.S. Equity Earnings Yield* since June 1991. Standard & Poor's, BARRA, *Small Cap U.S. Equity Earnings Yield* since December 1993. Standard & Poor's, BARRA, *Developed Europe Equity Earnings Yield* since March 1976. MSCI Europe, Standard & Poor's Europe 350, *Developed Pacific Equity Earnings Yield* since March 1976. MSCI Pacific, S&P/Citi PMI Asia Pacific, S&P Asia 50, *Emerging Market Equity Earnings Yield* since December 1998, *Inflation-Linked Bond Real Yield to Maturity* since March 1997. Citi Yield Book, Federal Reserve Bank. Note: Yields are not perfect predictors of future returns and should not be used in isolation.

Summary of the CARES Act

Source: J.P Morgan Asset Management.

Historical Market Returns: As 3/31/20.

Source: Bloomberg, Stembrook Research.

Indices: Bloomberg Barclays U.S Treasury Bills 1-3 Month Total Return, Bloomberg Barclays Municipal Bond 5 Year (4-6) Total Return, Bloomberg Barclays U.S. Aggregate Bond Total Return, Bloomberg Barclays U.S. Corporate High Yield Total Return, FTSE All Equity REIT Total Return, S&P 500 Composite Total Return, S&P SmallCap 600 Total Return, MSCI EAFE Total Return, MSCI EM (Emerging Markets) Total Return, Consumer Price Index – U.S., S&P 10 Year U.S. TIPS Total Return, Bloomberg Commodity (Total Return) Index.

Global Asset Class Returns: As of 12/31/19.

Source: Thomson Reuters, Bloomberg, Stembrook Research.

Indices: Consumer Price Index – US, U.S. 30-Day Treasury Bills, Bloomberg Barclays U.S. Treasury Bills: 1-3 Month Index, Citigroup Inflation-Linked Index, S&P 10 Year US TIPS Index, Bloomberg Barclays U.S. Aggregate Bond Index, BofA Merrill Lynch U.S. High Yield Cash Pay, Bloomberg Barclays U.S. Corporate High Yield Index, Dow Jones Wilshire REIT Index, FTSE All Equity REIT Index, S&P 500 Composite Total Return, S&P SmallCap 600 Total Return, MSCI EAFE Index, MSCI EM (Emerging Markets) Index, Dow Jones AIG Commodity (Totl Ret) Index, Bloomberg Commodity Index.

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Additional information is available upon request.