Perspectives

MAR 2020

March 23: Coronavirus Update and Portfolio Guidance

The following pages present our most recent guidance on the Coronavirus pandemic, stimulus measures enacted across the globe, and asset class summaries. This is an extremely fluid environment with markets changing by the minute; we will continue to update clients as the week progresses. All of the data cited in this update is as of March 20th unless otherwise noted.

CORONAVIRUS UPDATE

As of Sunday evening (March 22nd), the worldwide number of cases is approximately 335,000. The top four countries by case numbers are as follows:

Country	Cases	Deaths
China	81,054	3,264
Italy	59,138	5,476
USA	32,356	414
Spain	28,603	1,756

The statistics in Italy are the most frightening. For every 1 million people in the country, there are 978 cases; in the U.S. that number is currently at 98 and for China it is at 56. At this point, the biggest questions seem to be when the number of cases in Italy will exceed those in China and when the U.S. will catch Italy, considering the sky-rocketing number of cases in the U.S. over the weekend. Given the relative infancy and inconsistent "shelter in place" orders across the U.S., the worst is yet to come; an optimistic hope is that the growth starts to abate in 2–3 weeks' time as social distancing and home confinements help slow the spread.

CONTENTS

Overview
Greg Leonberger, FSA, EA, MAAA
Director of Research

Fixed Income 2
Ben Mohr, CFA
Director of Fixed Income

U.S. Equity 3
Rob Britenbach, CFA, CIPM
Research Analyst, U.S. Equities
Colleen Flannery
Research Analyst, U.S. Equities

Non-U.S. Equity 4
David Hernandez, CFA
Senior Research Analyst, Non-U.S. Equities
Nicole Johnson-Barnes, CFA
Research Analyst

Hedge Funds 6
Joe McGuane, CFA
Senior Research Analyst, Alternatives

Real Assets 6
Jeremy Zirin, CAIA
Senior Research Analyst, Real Assets

Private Equity 8
Derek Schmidt, CFA, CAIA
Director of Private Equity

Private Credit 9
Brett Graffy, CAIA
Research Analyst

Summary 9

FIXED INCOME

- Last week's cash dash pushed 1-month and 3-month Treasury yields down to negative territory in intraday trading. Bonds joined stocks in the sell-off that pushed medium- and long-term yields higher, steepening the yield curve. Over the week the Agg returned -2.3%, bank loans -11.3%, high yield -10.2%, and emerging markets debt -9.2%.
- Liquidity became constrained as bid/ask spreads for all fixed income across the board widened to as much as two to four times the norm. Redemptions were led by retail vehicles such as ETFs and passive funds. Active managers were forced to sell the most liquid assets in order to raise cash. Many credits in industries most affected by social distancing, especially energy, are now distressed and a wave of downgrades, defaults, and restructurings are expected.
- Year-to-date, the Agg returned 0.0%, bank loans -17.5%, high yield -18.1%, and emerging markets debt -17.2%. Active bond commingled funds have largely so far had negligible redemptions while active bond mutual funds have largely so far seen redemptions on the order of 10%.
- Bank loan spreads are now 40% away from all-time highs, high yield spreads are now 51% away from all-time highs, and emerging markets debt spreads are now 56% away from all-time highs. Strategies are generally underweight in energy and tilted up in quality going into the new week.
- Credit Suisse forecasts 1Q annualized real U.S. GDP growth at -1.5% with 2Q at -12% and 2020 at -0.9%. Lockdowns and testing have been slow and inconsistent across the country, but once that ramps up and the pathogen is contained and controlled, the economy is expected to be on course to going back to normal. However, the biggest unknown is when the outbreak will be contained and daily life can return to a sense of normalcy for individuals and businesses.
- The Fed has reactivated 2008-era backstops to ensure liquidity in money market funds, commercial paper, short-term Treasury and Agency bonds, corporate bonds, municipal bonds, and commercial real estate debt. With $10 billion of support from the Treasury, the Fed launched two facilities last week to achieve this by either accepting these types of debt as collateral for loans or outright purchasing the debt. This morning (March 23rd), the Fed announced that it would purchase assets without a limit to support the markets. Furthermore, the Fed will for the first time add corporate bonds to its purchases by buying investment grade corporate bonds in both the primary and secondary markets as well as through ETFs, along with commercial mortgage-backed securities to support commercial real estate. The fed funds rate has already been lowered to an effective 0%, the level last reached from 2008 to 2015 in order to pull the economy out of the Great Recession. Last week, the Fed committed to purchasing $500 billion of Treasury bonds and $200 billion in MBS.
- The Fed said this morning that it plans to purchase an additional $375 billion in Treasury bonds and $250 billion in MBS this week. Furthermore, the Fed has set up a $300 billion facility to provide further support, with $30 billion in losses to be backstopped by the Treasury. This $300 billion in aid will be split across three new lending facilities: (**1**) a Term Asset-Backed Securities Lending Facility (TALF) to support the consumer and business credit markets by lending money for investors to purchase securities backed by credit card debt and other consumer debt, (**2**) a facility to provide four-year bridge lending for investment grade companies, and (**3**) a facility to purchase the abovementioned investment grade corporate bonds through the primary markets, the secondary markets, and ETFs.
- Last week, President Trump signed a relief package that included loan facilities for small businesses and airlines as well as funding for more tests. The next critical piece of stimulus is expected to

be checks sent straight to households, which at best will only serve as a payments bridge that — together with lower mortgage rates and energy prices — will soften the blow for U.S. consumers.

- Last night (March 22nd), Senate Democrats blocked the next portion of the now-estimated $2 trillion relief package designed by Republicans as it favored corporations but did not provide enough aid to individuals. The Democrats were opposed to the Republican proposal for the package to include $500 billion for the Treasury to provide loans to businesses and are calling for increased aid to hospitals and state and local governments along with expanding unemployment insurance to four months at 100% pay, which the Republicans had failed to include. The package also includes roughly $75 billion to distressed companies in travel and critical infrastructure, $15.6 billion for the Supplemental Nutrition Assistance Program (SNAP), $14.4 billion for medical services for the Department of Veteran Affairs, $12.7 billion for a public health emergency fund for the development of treatments and vaccines for the virus, and $4.5 billion for the Centers for Disease Control and Prevention.
- Still available in the Fed's arsenal are measures such as purchasing corporate bonds, increasing the size of its quantitative easing, and loosening Dodd-Frank regulations. However, these are regarded as lower-impact measures than those already implemented and would serve only to incrementally soften the blow for U.S. consumers. All eyes are on the government's plan and implementation to contain and control the virus.

U.S. EQUITIES

- The S&P 500 Index suffered its third largest daily decline ever last Monday (March 16th), plunging nearly 12%. Heightened volatility persisted throughout the week with multiple circuit breakers being hit and the S&P 500 ending the week down 15%. Last week saw the largest decline for the S&P 500 since October 2008. The S&P 500 index now trades below the low set on December 24th, 2018. Since hitting an all-time high on February 19th, the S&P 500 is down 31.9%. Year to date, the index is down 28.7%.
- The Russell 2000 index fell by 14.3% last Monday and finished the week down 16.2%. Since hitting its all-time high on August 31st, 2018, the Russell 2000 is down 41.8%. Year-to-date, the index is down 39.2%.
- Low volatility strategies have protected in this recent downturn relative to their broad market indices; however, downside protection was less than hoped for. The sharp down moves in the market caused virtually all stocks to move in lock-step over recent days. Similar short-term effects occurred during the GFC and are expected to normalize as volatility declines.
- Growth has continued to outperform value across the capitalization spectrum through the drawdown, with the Russell 1000 Growth outperforming the Russell 1000 Value by 6.18% MTD; the spread is more than 10% for the year-to-date period. Within small-cap, growth is outperforming value by 3.47% MTD and 7.43% YTD. Growth continues to attract investors relative to value in this uncertain environment, but when the economic outlook becomes more clear, value usually outperforms (i.e., deep value rally).
- Large-cap stocks outperformed their riskier small-cap peers for the month and year by 8.44% and 10.10%, respectively. Small-caps traded at a substantial relative discount to large-caps before the market correction and that valuation spread has only further widened in recent weeks. Sentiment around economic sensitivity is very poor, so it makes sense to see small-cap (with greater economic sensitivity) underperform larger-cap and to see cyclical sectors underperform defensive and growth areas as economic and earnings forecasts are severely revised downward.

- Valuations have compressed. The forward P/E for the S&P 500 finished the week at 13.9x, a decline of 18.5% since the end of February. The S&P 500 now trades below its 20-year average of 16.7x. While forward earnings are substantially lower than at the end of February, they still remain above the average 10x–14x where we see equity markets bottom.
- From a valuation and sentiment perspective, small-cap is the most attractive but does carry added risk. A wave of bankruptcies in small-cap energy is expected, over-levered balance sheets are being highly scrutinized, and the lasting effects to consumer discretionary have yet to unfold. The forward P/E for the Russell 2000 finished the week at 17.6x, a decline of 25.3% since the end of February. The Russell 2000 trades below its 20-year average of 27.2x.
- **The worst performing S&P 500 sectors:** Energy (down 43% MTD, down 57% YTD) and Financials (-29% MTD, -39% YTD). Lower energy prices and interest rates (although banks are well capitalized and will play a key role in supporting the economy) continue to weigh on Energy and Financials, respectively.
- **The best performing S&P 500 sectors:** Consumer Staples (down 13% MTD, down 20% YTD) and Utilities (down 23% MTD, down 26% YTD) as investors search for high yielding, low volatility areas of the market. Technology (-19% MTD, -22% YTD) and Health Care (-15% MTD, 23% YTD) also outperformed on expected earnings resilience and vaccine hopes. Communication Services (-19% MTD, -24% YTD) has performed better than the overall market, as consumers flock to media during the "shelter-in-place" era.
- On a positive note, the VIX Index, a sentiment tool used to measure fear in the market, has been in steady decline since hitting an all-time high last Monday of 82.7. The index closed at 66.0 on Friday (March 20th), but remains well above its 20-year average of 19.5.

NON-U.S. EQUITIES

YTD Market Performance

- Given the increasing number of COVID-19 cases in the Eurozone (mainly Italy and Spain) — a critical component of the developed international market — the MSCI EAFE index has faced extreme downward pressure, returning -31.3% YTD.
- With the rout of extreme volatility last week, emerging markets continued to outperform developed international markets, with the MSCI Emerging Markets Index posting -27.8% YTD.
- Within developed international markets, small-cap stocks are lagging their larger peers by over 500 basis points, with the MSCI EAFE Small Cap posting -36.9% YTD.
- Additionally, within emerging markets, small-cap stocks are also underperforming their larger-cap peers by 800+ basis points, with the MSCI EM Small Cap posting -35.3% YTD.

Fiscal and Monetary Policy

- **ECB Monetary Stimulus Measures:** Asset purchases, rates remain negative
  - On March 18th, the ECB announced a €750B ($820B) Pandemic Emergency Purchase Programme (PEPP), in which they will be purchasing private and public sector securities under the existing asset purchase program (APP). This is on top of the March 12th announcement, which amounted to €120B ($130B) asset purchase commitment. That totals $950B of asset purchases that will run at least until the end of 2020 and potentially beyond.

- The ECB will consider dropping the 33% issuer limit. The ECB will widen eligible assets to include non-financial commercial paper.
- The ECB's main interest rate remains unchanged at 0% and its deposit rate unchanged at -0.5%.

- **Eurozone Fiscal Measures:** Individual EU member states also kicked fiscal spending packages up a notch last week, with several escalating prior measures to mitigate the economic effects of the pandemic.
  - On March 10th, the Italian government pledged €25B ($28.3B) to combat the epidemic, up from €7.5B announced a week prior.
  - On March 17th, France announced a €45B ($48–49B) package that included social security tax-cuts, unemployment benefits, and funds to help small businesses and other hard-hit sectors of the economy. France will also guarantee bank loans up to €300B ($320B).
  - Spain announced a $220B rescue package.
  - Germany is expected to announce a fiscal stimulus package this week.

- **UK Stimulus Measures:** Rate cuts, asset purchases, and fiscal spending
  - On March 19th, the Bank of England (BOE) cut interest rates to a record low 0.1%. This 15 basis point cut comes roughly a week after the BOE dropped rates to 0.25% on March 11th, which was a half point rate cut at that time.
  - The BOE also added an additional 200B pounds ($230B) to its asset purchase program, now totaling £645B ($740B). The increase will include corporate asset purchases, not just government assets.
  - The BOE announced loan program for companies starting at $400B.
  - UK also announced a $39B emergency boost to fiscal spending.

- **Japan Stimulus Measures:** Buying into the market
  - On March 16th, Bank of Japan (BOJ) announced a significant increase in QE, pledging to double the amount of ETF purchases, from $56B per year to $112B per year. BOJ also pledged to double the amount of purchases of real estate trust funds to $1.6B per year, as well as increase purchases of corporate bonds and commercial paper. It also announced a new program of 0% interest loans to increase lending to businesses hurt by the virus.
  - BOJ kept its short-term interest rate target unchanged at -0.1%.
  - Japan is expected to announce a fiscal spending packing in the coming weeks.

- **Emerging Markets:** Rate cuts and fiscal spending
  - China has cut several key interest rates including its reserve requirement ratio (RRR) to encourage bank lending. Markets expect further cuts as well as a large spending package.
  - Brazil cut interest rates to an all-time low, 3.75%.
  - Taiwan is rolling out a $1.99B stimulus package to combat the negative impacts of the coronavirus.
  - South Korea implemented a 50bps emergency rate cut, moving a to a record low of 0.75%. The country also plans to launch a $9.8B stimulus package in response to the outbreak.

HEDGE FUNDS

- The Latest HFRX data thru Thursday, March 19th: HFRX Global Hedge Fund Index -8.10% MTD, -9.05% YTD / HFRX Equity Hedge Index -11.9% MTD, -15.55% YTD.
- At the money put premiums ranged from 5%–7% throughout last week, while selling at implied volatility (VIX) levels ranged from 71–85.
- VRP strategies have caught between 60–70% of the downside of the S&P 500 but are collecting premiums never before seen over the life of these strategies.
- CBOE liquidity has not been as robust as in the past, which includes wider bid/ask spreads and less volume indicated at those levels.
- Execution of option trades were relatively close to mid-market levels and managers were able to trade at desired prices.
- The Goldman Sachs VIP index (most crowded HF longs) underperformed the S&P 500 to start the week. L/S equity HFs only really started de-grossing (taking down total portfolio exposure) this week, and relative to historical standards, are only about halfway done, which could mean more pressure if the selling continues.
- We are hearing L/S equity HFs are generally bringing down net exposure, covering shorts as they hit price targets, backfilling with index shorts until things start to normalize, and positioning the long book for a rebound (adding to high conviction names, taking advantage of lower entry points, identifying stocks poised for the sharpest rally).
- A large group of hedge funds were hit by the unwinding of the basis trade, a long running investment that seeks to exploit pricing gaps between Treasury securities and futures.
- Leveraged loans have experienced 5 of the 6 worst days in its history over the last two weeks
- Nearly 40% of the leveraged loan market trading below 80, up from 4% at the beginning of the year
  - Credit hedge funds are adding slightly to loans that have <40% LTV (loan-to-value), multi-year liquidity runway and strong sponsorship — and staying away from everything else.
- Investment grade bonds spreads have blown out over the past week as the combination of collapsing oil prices, and a panic in gaming/lodging/leisure credit led to selling in high quality names:
  - Credit hedge funds added to some high quality credit names during the sell-off last week.
  - They are not touching anything that is stressed or distressed at the moment, still too many unknowns in the market, much better value in high quality names.

REAL ESTATE

Overall, the virus has had minimal effect on real estate markets to date, especially compared to equities and bonds. However, we expect to see negative impacts to real estate returns take effect sometime in the second half of 2020 or early 2021. While global growth is being impacted in the near-term (through Q3/Q4), we still expect a recovery to take hold once the disruption fades. Any broad hit to the economy will certainly impact the commercial real estate market; however, contracted leases will help smooth the impact of a down cycle.

- Growth impacts are expected through supply chain disruption, reduced demand (tourism, retail) and the impact of tighter financial conditions on consumer and business confidence.

- The sharp fall in interest rates means 1Q20 investment returns will likely be hurt by debt mark to market write-downs. However, lower interest rates make debt more accretive, improving go-forward levered returns.
- Lower energy costs from the oil shock and a temporary reduction in demand are likely to help operating performance for most properties.
- On the construction side, cost increases and material shortages are already being felt on materials typically sourced from China. So far there have not been major disruptions, but some delays are expected.
- Expect a flight to quality with investor activity focused on the highest quality assets in the best locations. Cap rates may gap out in secondary locations or less favored asset classes (e.g., retail and hotel).
- While it is too early to determine impacts on real estate capital flows and fundamentals, the uncertainty and market volatility combined with travel restrictions impacting investors' ability to conduct due diligence is likely to create a near term slowdown in transaction activity.

Real Estate Sector Impacts:

- **Hotel:** Negative effects from a pullback in tourism have already been seen. Revenue Per Available Room (RevPAR) declines will be significant due to reduced travel and conferences.
- **Retail:** Entertainment, food & beverage, and fashion retailers will likely be most impacted as consumers stay home and cut back on discretionary spending. Some landlords are providing waivers to retail tenants, typically 1 to 1.5 months.
- **Office:** Leasing will continue to slow as occupiers postpone any expansion/renewal decisions. If disruption extends into Q3, will likely result in job losses and a reduction in office demand. Additionally, the virus has caused many businesses to initiate contingency plans that include having part of their workforce work from home. If successfully implemented this could hasten a shift to more remote working and possibly accelerate the pace of hoteling/densification.
- **Logistics:** As shoppers shift spending to online, impact is likely to be more insulated. This may be offset by supply chain disruptions and an overall pullback in manufacturing from slower global growth.
- **Residential:** likely to be the most insulated sector. New construction is likely to slow in some markets like the U.S. as slower economic growth is anticipated and supply chains may be disrupted. This more moderate expectation on new supply might help existing owners.
- **Senior Housing:** Infectious diseases pose a more significant risk to senior housing residents given their age and underlying health conditions. Skilled nursing is the segment of senior housing most at risk given the age and health of those residents. This is the most at-risk sector because the loss of life could be significant and regaining lost occupancy could take years.
- **Student Housing:** SH is a bit less clear but can affect areas with a high proportion of international students or where schools are shut down in response to the virus. There has been a spike in online classes and extended spring breaks. While this semester's cash flows shouldn't be impacted, there is near-term risk in delayed 2020/2021 leasing, which could pressure rents. There is also a long-term risk of a greater shift toward online classes.

- **Self-Storage:** Risks to the self-storage portfolio as a result of COVID-19 are minimal. Demand for self-storage is driven by life change events, such as disaster, death, divorce, downsizing and military deployment, all of which continue to occur regardless of the general economy.
- **Medical Office/Life Sciences:** Expect minimal impact as landlords typically have long term leases with leading healthcare systems and physician groups with a strong credit profile.

INFRASTRUCTURE

This is clearly an evolving situation for the entire market and it is hard to know the ultimate impact with respect to oil prices and COVID-19. Managers with primarily contracted/regulated exposures in high income OECD economies should be better positioned than those with GDP-sensitive (both volume-based and commodity-linked) assets

- Infrastructure is expected to be less sensitive to broader market and economic movements. "Core" essential services, such as regulated utilities and long-term contracted assets, are anticipated to hold-up well given their inelastic demand profile.
- Infrastructure strategies that are highly diversified and invest in core, yield-focused assets in high income OECD geographies are expected to perform well on a relative basis.
- "Core-plus" and "value-add" GDP-sensitive assets with volumetric and/or GDP exposures are anticipated to be more affected on a relative basis. Examples include airports, ports, terminals, railways, marine shipping midstream energy.
- Heat, water and electricity remain essential to daily life whether at home or at work, and in many cases regulated businesses have an obligation to serve customers. In addition, contracted power and energy companies remain focused on monitoring any potential counterparty exposures across customers.

PRIVATE EQUITY

- Private equity firms have been in frequent contact with their portfolio companies and are working closely with management to evaluate rapidly evolving cash flow forecasts. These private equity backed businesses are benefiting from the management expertise and guidance private equity firms can provide as they help management navigate difficult decisions and assess their ability to maintain core operations with the ongoing impact of COVID-19 (impact varies by end market focus, geographical exposure, among other factors).
- While some late stage deals and fundraising efforts have closed, many are now either getting pushed out or halted as investors await clarity over the next several weeks and months. Private equity is inherently a people business and when managers are unable to meet face-to-face with investors and owners it is likely to slow the industry efforts on a new go-forward basis.
- Q1 2020 valuations will see a partial impact from the effects of COVID-19 on portfolio companies as the impact in the U.S. will only be felt in the last 2–3 weeks of March. However, Q2 valuations will experience more significant write-downs with potential permanent capital losses should the current environment extend into the April–June timeframe. The impact to portfolio companies will highly depend on the overall duration and severity of the pandemic on each unique business model.
- The significant dry powder that has been held by the private equity industry is now a very valuable resource that can be used to help support portfolio companies.

- Overall, while the environment within private markets looks bleak, the future will heavily depend on the government's ability to be successful in both shortening this crisis as well as the support/bailout package that is likely to be required to help all U.S. businesses and restart the economy.

PRIVATE CREDIT

- Lenders are requesting revised monthly projections with scenario cases built in from their borrowers to provide additional conservatism.
- Lenders will need to provide some flexibility in the near term from strained companies who have had core business operations obstructed by COVID-19.
- Private credit teams are closely examining credit covenants to properly negotiate remedies when covenants are breached, such as implementing covenant amendments, payment step-ups, and capital infusions.
- Ultimately, this crisis may prove to be a catalyst for market consolidation as larger well-resourced lenders remain supportive and add value in helping companies through this difficult environment. Emerging lenders with less resourced platforms are likely to disproportionately struggle the longer and deeper this crisis extends.

SUMMARY

The market losses stemming from the Coronavirus pandemic have not spared any asset class to date, though the typical flight to quality behavior has taken place. Unfortunately, the situation is likely to worsen across the globe before it improves. However, markets are forward looking and typically bottom before pandemics peak, so the critical issue is identifying when the market truly has bottomed. That is essentially a market timing call and we have repeatedly stressed to clients that successfully timing market troughs is a difficult if not impossible exercise to consistently get right, and this time is no different. Therefore, we continue to encourage our clients to rebalance in a disciplined and prudent manner.

PREPARED BY MARQUETTE ASSOCIATES

180 North LaSalle St, Ste 3500, Chicago, Illinois 60601
CHICAGO BALTIMORE MILWAUKEE PHILADELPHIA ST. LOUIS

PHONE 312-527-5500
WEB MarquetteAssociates.com

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