FIXED INCOME STRATEGY HIGHLIGHTS | APRIL, 2020

IN BRIEF: The U.S. Fixed Income Markets

The U.S. Broad Market Index rose 3.1% in the first quarter, as measured by the Bloomberg Barclays Aggregate Index, while investors fled to safety from the fallout of the Coronavirus. The Federal Reserve lowered rates twice and took a wide range of actions to combat market instability, as the yield on the 10-year Treasury fell to 0.7% at the end of the quarter. Here is an update on the unprecedented "mad dash for cash" that occurred during March:

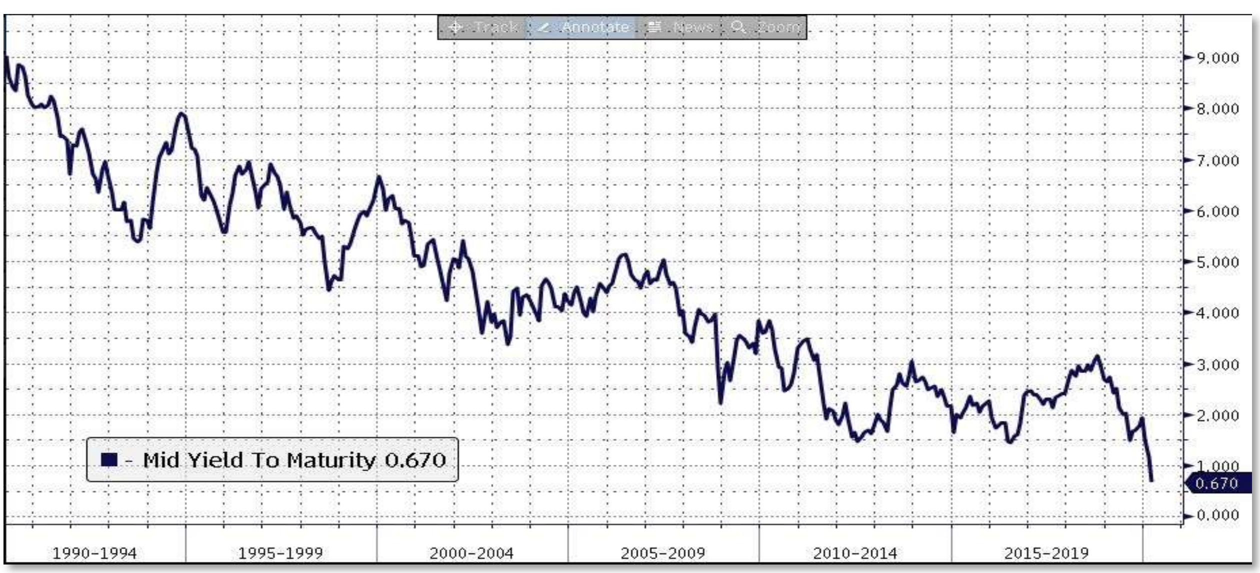
- ***Bond and equity funds***. During the four weeks through April 1, bond and equity funds, including mutual funds and exchange-traded funds (ETFs), had estimated net outflows of $301.6 billion, according to the Investment Company Institute. Bond funds had outflows of $277.9 billion, while stock funds lost $23.7 billion.

- ***Liquid assets***. During the four weeks through March 30, liquid assets jumped by $1.1 trillion, led by money market mutual funds held by institutions ($511.8 billion) and savings deposits ($492.9 billion).

- ***Bank balance sheets.*** Total deposits at U.S. commercial banks jumped $811 billion during the four weeks through April 1. Their borrowing increased $330 billion over the same period. On the asset side of their balance sheets, commercial & industrial loans rose $486 billion, while their portfolios of U.S. Treasury and agency securities rose $38 billion.

EXHIBIT I

Ten Year Generic Treasury Yield



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Source: Altman Investment Management Research and Bloomberg

After previously announcing it would purchase $700 billion in U.S. Treasuries and mortgage-backed securities, the Federal Reserve committed to buying government bonds in unlimited quantities. Its latest move is an effort to "support smooth market functioning and effective transmission of monetary policy to broader financial conditions and the economy".

Additionally, the Fed revealed two new facilities - a Primary Market Corporate Credit Facility for new bond and loan issuances and a Secondary Market Corporate Credit Facility to provide liquidity for outstanding corporate bonds. This was a bold move considering the Fed stopped short of buying corporate debt during the great recession that began in 2007. Due to the current monetary policy, yields are likely to cap out at these levels with the potential to fall further throughout the remainder of the year.

***Central Banks Prop Up Financial System*:**

During the past several months, there has been a mad dash by the major central banks to pump liquidity into their financial systems to avert a credit crunch as a result of the GVC (Great Corona Virus). We have commented recently on the latest such moves by the Fed, the European Central Bank (ECB), and Bank of Japan (BOJ) and the People's Bank of China (PBOC) in early April pumped up China's economy as well with lots of credit by lowering their reserve requirement ratios (RRR) as needed. The PBOC has been lowering RRRs (Reserve Requirement Ratio) as early as December 2011. These ratios that peaked at 21.5% and 19.5% for large and small banks are now down to 12.5% and 10.5%, as the quarter unfolded.

The PBOC undoubtedly pushed the banks and other lenders to lend more in response to the GVC. Social financing rose by a record-high $736 billion during March, surpassing January's $732 billion and totals $1.6 trillion in just the first three months of this year. The Fed and the ECB Balance sheets soared. The Fed's balance sheet rose to $1.8 trillion by the end of the quarter to a record $6.0 trillion and the ECB's assets rose €498 billion over the same time period.

As the 2nd quarter unfolded, the Federal Reserve announced $2.3 trillion lending program. While massive, we believe this is just the beginning. The program amounts to only a bit more than half of the Fed's lending power under the Coronavirus Aid, Relief, and. Economic Security (CARES) Act, signed into law on March 27. Under CARES, the U.S. Treasury allocated $454 billion in capital as backing for the Fed's Special Purpose Vehicles (SPVs) that can be leveraged up to a total of $4 trillion in new loans to bolster the U.S. economy.

In addition, the Fed created the Primary & Secondary Market Corporate Credit Facilities (PMCCF & SMCCF). These were created to provide credit to large corporations - the former by financing new bond and loan issuances, the latter by increasing the liquidity of outstanding corporate bonds. The PMCCF is open to investment-grade companies and provides bridge financing for four years; borrowers may elect to defer interest and principal payments during the first six months of the loan, an option that may be extended at the discretion of the Fed.

Then in early April, the Fed expanded the amount of credit that the PMCCF and SMCCF can extend to $750 billion, backed by $75 billion in credit protection provided by the Treasury - up from an initial $20 billion under the Exchange Stabilization Fund (ESF). The scope of the PMCCF and SMCCF was expanded to include purchases of bonds that were rated BBB-/Baa3, as well as U.S.-listed corporate-bond ETFs, with a focus on ETF holdings exposed to U.S. investment-grade corporate bonds but including high-yield corporate bonds as well.

The list goes on to include the Term Asset-Backed Securities Loan Facility (TALF) that was originally created during the GFC. It was brought back to support the flow of credit to consumers and businesses. The TALF enables the issuance of asset-backed securities (ABS) backed by student loans, auto loans, credit card loans, loans guaranteed by the Small Business Administration (SBA), and certain other assets. In addition, the Main Street New and Expanded Loan Facility (MSNLF & MSELF) allows the Fed to purchase up to $600 billion in additional loans.

The Fed also addressed Municipals through the Municipal Liquidity Facilities to provide a liquidity backstop to U.S. issuers of commercial paper also backed by the Treasury. In addition, it expanded its reach to include high-quality assets from money market mutual funds that included unsecured and secured commercial paper, agency securities, and Treasury securities and certain high-quality assets purchased from single state and other tax-exempt municipal money market mutual funds."

The Paycheck Protection Program Liquidity Facility (PPPLF) was established in early April to supply liquidity to financial institutions that originate small business loans under Congress' $350 billion Paycheck Protection Program (PPP). The Small Business Association's PPP is intended to help small businesses keep their workers on payroll.

COVID-19, QE And Inflation Risk Revisited:

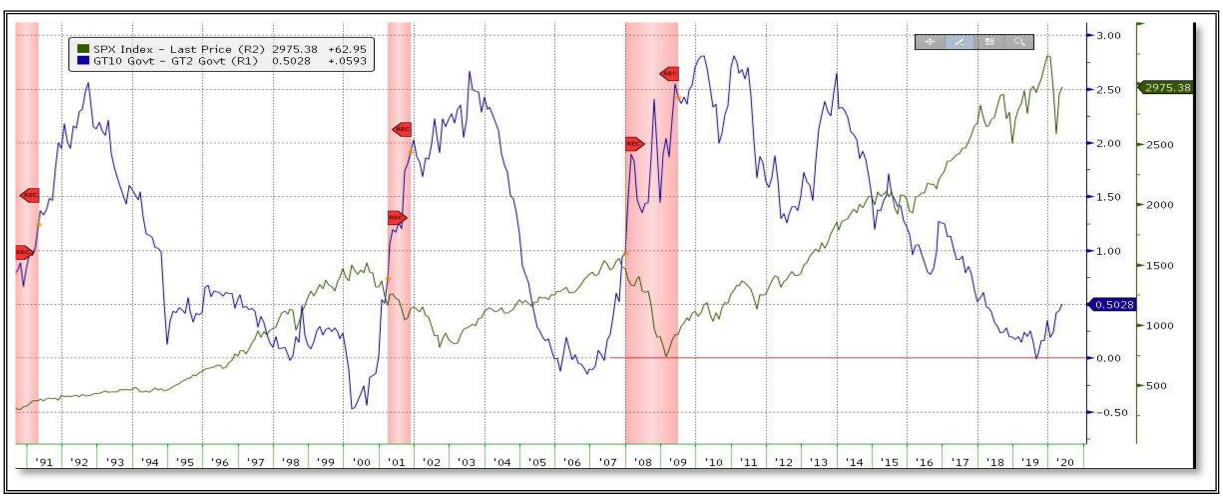
We took a closer look at the inflationary period of the 1970's, in order to reexamine the potential risk associated with the enormous monetary response by the Fed to remedy the unemployment fallout associated with an economic shut down. We have concluded that the institutional backdrop is much different today than it was in the 1970s, and many of that era's rigidities do not exist today. The COVID-19 crisis can be viewed as a major supply shock and it could cause a significant shift in relative prices. But there has been no massive re-ordering of the global monetary system as occurred in the early-1970s. Inflation has been persistently below central bank targets for the past decade against a backdrop of historically subdued economic growth, which is in significant contrast to the lead-up to the 1970s.

Market-based measures of long-term inflation expectations are well below central bank targets and have been trending lower over the past decade. In the U.S., the median consumer expectation for inflation over the next five years currently is just over 2% versus nearly 10% at the end of the 1970s. To date, the U.S. dollar has appreciated only modestly, while food and energy prices have fallen rather than risen. In the near term, these represent deflationary pressures, although eventually they should help support consumer spending down the road. We have concluded that there is little danger of an imminent surge in labor costs that could set off an inflationary spiral and inflation expectations remaining depressed for the time being.

The Inflation Outlook - Near Term Disinflationary Pressure: Supply chain disruptions and large stimulus programs have vastly increased the range of potential inflation outcomes over the medium term.

EXHIBIT II

Ten Year- Two Year Yield Spread versus S&P 500



Source: Altman Investment Management Research and Bloomberg

Today's negative real policy rates are still significantly higher than was the case in the 1970s. This is not to downplay the risks of inflation in the coming years, which we expect will rise. The global monetary system has not undergone an abrupt change as occurred in the early-1970s, but has nonetheless changed significantly since the Global Financial Crisis. Many mistakenly argued that central banks were "printing money" over the past decade, but the increasing reliance of central banks on their balance sheets rather than interest rates as policy tools represents an important shift in the monetary landscape, with the potential to trigger higher inflation if it were to persist and stimulate significant private-sector spending.

We recognize that the Fed's balance sheet has expanded more than eightfold since the beginning of 2008 and is equivalent to more than 30% of GDP compared with an average of 5-8% from 1970 until 2008. Meanwhile, the ECB's balance sheet has increased 2.5 times since mid-2014, although growth and inflation have remained subdued. Moreover, high and rising levels of government debt increase the risk that policymakers will pursue inflationary strategies. Elevated debt/GDP levels can only be brought down via debt write-offs or rapid nominal GDP growth. The latter, in turn, can be achieved either via strong real growth (and low or moderate inflation) or higher inflation. Higher inflation may wind up being the more politically-acceptable path for authorities to pursue. A key lesson of the 1970s, however, is that once unleashed, inflation can build upon itself and compound underlying economic problems. For investors, an important implication is that profound changes to global monetary policy and tools, and the inevitable link to fiscal policy, can trigger unpredictable and potentially adverse consequences for growth, inflation and asset prices. Accordingly, investors should expect higher risk premia in the years ahead. Unfortunately, current rich valuations for most assets provide a limited cushion for adverse economic outcomes and could disappoint prospective returns for balanced portfolios over the longer term.

Bond Market Performance:

EXHIBIT III
Fixed Income Sector Performance – Q1 2020

Fixed Income Sector Performance – 2019 Q4 - Sector	Rating	Maturity	Duration Mod Adj	Yield	Spread	Price	Trailing12 Month Total Return
Treasury (Intermediate)	Aaa/AAA	4.0	3.7	1.7%	N/A	$102.3	5.1%
Agency	Aaa/AA+	3.3	2.7	1.8%	10	$102.3	5.6%
MBS	Aaa/AAA	3.7	3.4	2.1%	40	$ 102.4	7.4%
Municipal	Aa3/A+	4.9	3.6	1.2%	0	$112.6	5.1%
Corporate (Intermediate)	A2/A-	4.9	4.2	2.5%	90	$ 104.8	10.2%
High Yield	B1/B	6.0	3.1	4.5%	280	$ 103.6	15.1%

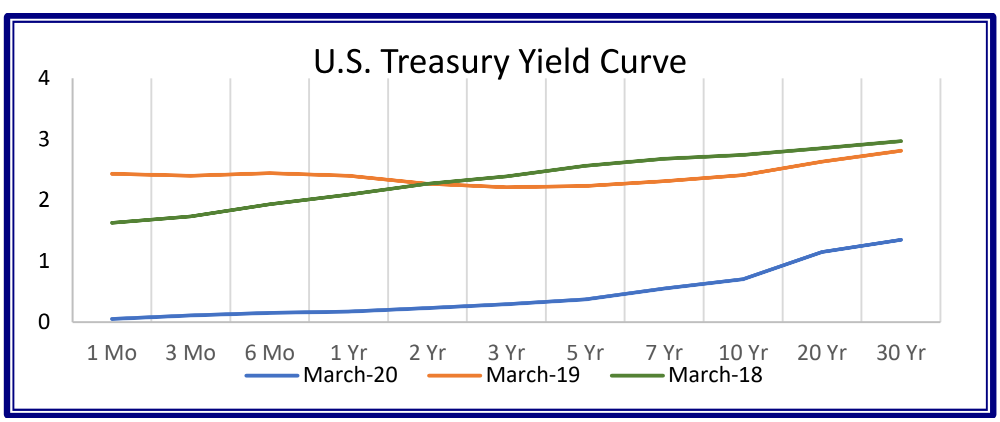
Source: Altman Investment Management Research and Bloomberg

CLOSE-UP:

➢ Government Bonds

Longer term treasuries outperformed the short end during the first quarter, with the 2-year benchmark Treasury climbing 2.8%, the 10- year 11.9%, and the 30-year 25.9%. Yields fell as the Fed lowered rates two times this year in response to the virus impact. Yields could potentially fall further from here, given the uncertainty surrounding the longevity and overall severity of the pandemic.

EXHIBIT IV
U.S. Government Yield Curves



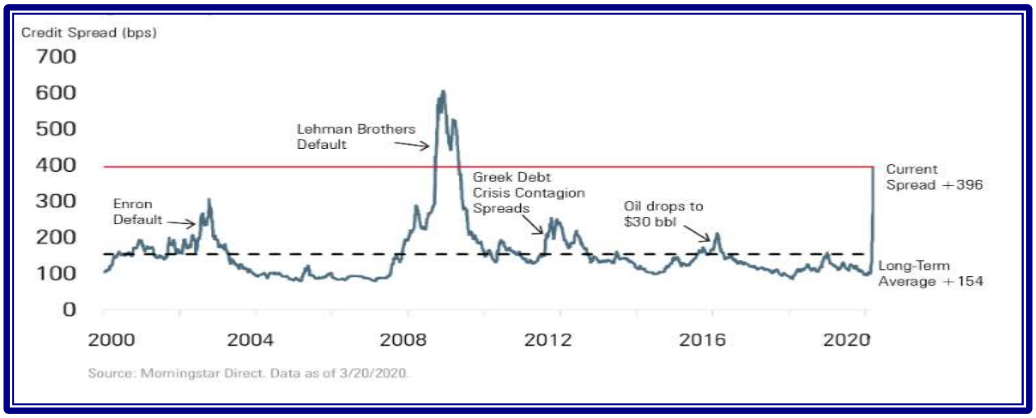
Source: Altman Investment Management Research and Bloomberg

➢ Investment-Grade Corporate Bonds

Corporate bonds fell -4.1% in Q1, as fear caused investors to seek greater liquidity. Corporate credit spreads have spiked which tells us that the market is already pricing in potential downgrades in the onset of a recession. Credit spreads could widen further from here until a trough in the market is evident, the timing of which is still highly uncertain. Both monetary and fiscal actions are supportive of the liquidity needs in the corporate debt space. In this sector, we continue to seek opportunities in high quality issuers with the liquidity to weather the downturn.

EXHIBIT V

U.S. Corporate 7-10 year versus U.S. Treasury 7-10 year



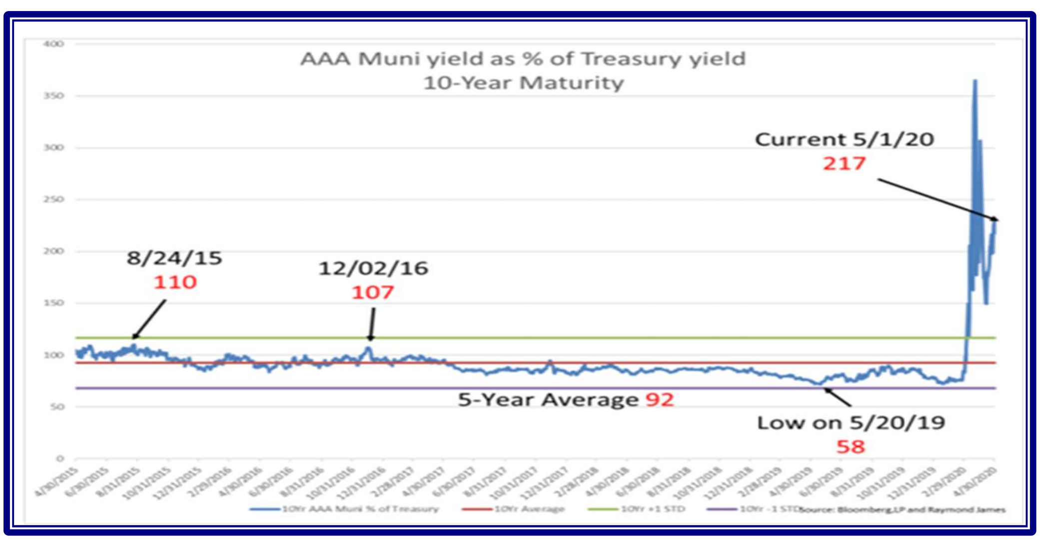
Source: Morningstar Direct Data as of 03/20/2020

➢ Municipal Bonds

Municipal bonds returned -0.7% in Q1, trailing U.S. Treasuries by a wide margin. Investors began pricing in contracting balance sheets for state and local governments as a result of the delay in tax filings and other virus-related revenue reductions. In response, the Federal Reserve initiated a Municipal Lending Facility in which it will purchase up to $500bn of short-term debt directly from select states and counties based on population. The Fed has also lengthened the duration of bonds it will purchase up to three years, limiting the program to investment grade issuers. In municipals, we continue to emphasis high quality debt as the spread over Treasuries surges.

EXHIBIT VI

Long Term Municipal to Treasury Yield Spreads



Source: Altman Investment Management Research and Bloomberg

Are Negative Interest Rates Set to Become More Widespread? The discussion about a negative interest rate policy (NIRP) is reviving in markets where policy rates have come close to zero percent. Pricing in the Fed fund futures market has resulted in a slightly negative implied policy rate next year, short-term Gilt yields have turned negative, and the RBNZ (Royal Bank of New Zealand) has recently hinted at the possibility of negative interest rates. In the U.S., the implied negative Fed fund futures contracts were likely due to bank hedging activity, rather than investors betting on policy easing into negative territory as the Fed remains against NIRP. However, the heads of the BoE (Bank of England) and RBNZ have recently changed their tune and are considering all options.

The U.K. has sold its first negative yielding government bond as the second quarter commenced, a three-year Gilt yielding negative 0.003%. The issue has gained importance as central banks face pressure to provide further stimulus to severely impaired economies. The policy debate revolves around the risks of the negative side-effects of a negative rate versus the reward of marginally lower interest rates. A major critique of NIRP is that it hurts the banking sector, which is the main transmission mechanism for monetary policy, especially in Europe. Interest paid to the central banks cuts into bank profitability, with potentially negative effects for lending. In turn, the BoJ (Bank of Japan) and ECB (European Central Bank) have created additional policy measures to offset these negative effects. The "two-tiered" deposit system shields some reserves from negative rates according to our Morgan Stanley Investment Research.

It is ambiguous if negative rates actually help to boost consumption, whereas it is a clear detriment to savers. In fact, euro area interest rates went negative in 2014 - and so far, the household saving rate has moved higher by roughly 1%. The economic rationale behind this behavior is that people have an absolute savings goal and adjust their spending accordingly versus the traditional trade-off between consumption and savings. Further, a sub-zero (or even just a very low nominal) risk-free interest rate pushes savers and pension funds into riskier assets in a search for yield, leaving the overall financial system in a riskier position and potentially inflating asset bubbles. It important to note that Sweden exited its NIRP last year and the Riks bank governor acknowledged that indefinite negative rates could have a harmful impact.

Stepping back, the better question is if lowering interest rates is even the appropriate reflationary tool. At a minimum, it's our belief that it is an extremely inefficient tool as central banks have effectively been pushing on a string. The cost of capital has not been the impediment to bank lending, faster economic growth, or higher inflation. As we have mentioned in past Fixed Income commentaries, bank lending this past cycle was constrained by deleveraging in the banking and household sectors. Efforts by banks to rebuild their balance sheets curtailed credit supply, while household deleveraging curbed credit demand. In other words, the household sector's desire to improve its balance sheet, cautiousness towards debt following the Great Financial Crisis, and stricter lending standards at banks, have all weighed substantially on credit growth.

In summary, the house hold and banking sector fundamentals had improved substantially over the past decade, which could allow greater scope for a gradual increase in credit growth, albeit only once economic confidence is reestablished. However, the pandemic has taken a severe toll on economies, and the longer-term impacts on consumer behavior and lending markets remain to be seen. In the end, once interest rates have been pushed to near-zero, that policy lever has been exhausted and other unconventional policies, such as what the Fed has recently pursued, are likely to yield larger economic benefits than pushing rates into negative territory. The COVID-19 fallout has definitely rekindled the debate over negative interest rate policy. The current level of interest rates is not in our view an impediment to stronger economic growth. In turn, negative interest rates will only result in marginal benefits that have potentially substantial negative consequences. We do not expect the Fed to resort to negative interest rates that would drag Treasury yields sustainably lower.