VANDERBILT Ave.
ASSET MANAGEMENT

3rd Quarter 2020

We want to highlight and provide an overview of the evolution of changes at the Federal Reserve from two perspectives: (1) an operational viewpoint on implementing monetary policy and (2) the formulation of monetary policy.

From an **operational** viewpoint, before the 2007-09 financial crisis the Fed implemented monetary policy with limited reserves in the banking system and relied on open market operations. This involved the buying and selling of short-term U.S. Treasury securities. Today, the Fed implements monetary policy with ample reserves by relying on an administrative rate and paying interest on reserves (IOR).

Previously, the Fed did not pay interest on bank reserves deposited with it. Banks would borrow or lend excess reserves in the fed funds market. Supply and demand determined the fed funds rate (FFR) - the rate that banks lent to one another on an overnight basis. The FFR was the policy rate the FOMC used to set monetary policy. To raise the FFR, the Fed decreased the supply of reserves by selling U.S. Treasury securities; to lower the FFR, the Fed increased the supply of reserves by buying U.S. Treasury securities in the open market.

Due to the seriousness of the 2007-2009 financial crisis, the Fed conducted a series of large-scale purchases across the yield curve spectrum of both U.S. Treasury and mortgage-backed securities, referred to as quantitative easing. These purchases not only increased the Fed's holdings of securities but also increased reserves in the banking system. For example, the Fed's balance sheet has risen from $900 billion in 2008 to $7 trillion dollars in 2020.

The 2007-2009 financial crisis led to new monetary policy tools for the Fed. The Fed was given authority to pay interest on reserves (for both required and excess reserves). Because banks did not receive interest on reserves prior to this change, they would minimize holdings of excess reserves at the Fed. The Fed's decision to pay interest on excess reserves (IOER) changed incentives for banks to hold excess reserves at the Fed. The IOER became a tool to influence banks to hold more or fewer excess reserves.

The Fed's primary tool now for holding the FFR in its target range is the interest on reserves rate (IOR) that is paid for both required and excess reserves. Because the IOR rate offers banks a risk-free option, they are unlikely to lend reserves in the fed funds market for less than the IOR rate. When the Fed raises or lowers the IOR rate, the FFR moves up or down. The Fed's discount rate (the rate at which banks can borrow from the Fed) acts as a ceiling for the FFR because banks would be unlikely to borrow funds at a higher rate in the fed funds market than they could borrow from the Fed at the discount window.

The **formulation** of monetary policy has evolved in an important manner. Historically the Fed has had dual mandates to (1) maximize employment that is consistent with (2) stable inflation. In recent times, Chairman Powell described the 2% inflation threshold as a "symmetric" target, meaning it would be allowed to move higher to make up for periods when inflation was too low. This strategy is expected to yield **economic** gains by allowing rates to stay lower for longer.

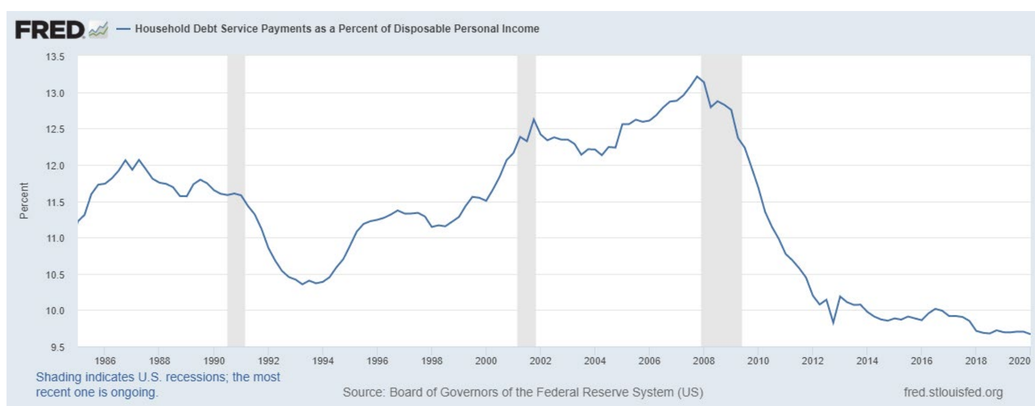
The Fed also seeks to give more priority to employment gains, by recently saying they will not raise interest rates to guard against coming inflation just because the unemployment rate is low. Research has found that the expected long-term unemployment rate and the unemployment rate that does not increase inflation can have a disconnect. They can be different numbers, and neither can be measured in advance. For example, in 2018 and 2019, the actual unemployment rate was below expectations of the long-run rate, meanwhile inflation remained contained during that period. By saying they will tolerate slightly faster price gains, Chairman Powell is laying the groundwork for years of low rates. This policy move has the potential to translate into long periods of cheap mortgages and business loans

that may foster strong demand and a solid job market. The benefits of a strong labor market are particularly beneficial for low- and moderate-income communities.

As price gains prove tepid and interest rates slip lower, the Fed (and other central banks) have less room to cut borrowing costs and encourage higher growth in recessionary environments. The Fed's updated framework recognizes that too low inflation is now the problem rather than too high inflation. The change in the Fed's inflation approach is now aiming to **average** 2% inflation over time, thus limiting its continuous 2% target undershoot. The Fed did not specify exactly how high or how long it would allow inflation to rise above 2%. In effect, the Fed said the tradeoff between employment and inflation (the Phillips Curve) is not totally applicable in today's economy. This increases the risk that the Fed might end up looking through inflation until it is too late. At that point, the Fed may have to raise rates higher and more severely than if they had acted earlier.

The key to the U.S. **economic outlook** is the consumer sector. The consumer sector is roughly 70% of U.S. GDP. U.S. GDP is approximately $20 trillion which means consumer spending is about $14 trillion. This makes the consumer sector as large as the Chinese economy and almost three times larger than Japan's economy - the second and third largest economies, respectively. Monitoring the consumer involves three broad categories: the labor market, consumption and sentiment, and consumer debt levels and balance sheet. The decline in payroll employment in March and April amounted to 21.2 million, effectively wiping out job creation for the last 10 years. May through August has seen a positive 10.4 million new jobs added, however, a residual balance of some 16 million people remains unemployed. Over 87% of jobless workers believe that the loss of their job will be temporary and that the monetary and fiscal stimulus provided will set the foundation for the economy to recover. Consumer spending has rebounded because of fiscal and monetary stimulus in addition to pent up demand during the lockdown. Personal income increased by 16% during April and currently is up 8.4% for July from a year ago. Retail sales and food services continued to recover through July from a 10-year low, thereby creating a "V" shaped recovery. A large volume of spending came from online shopping, an ecommerce trend that has been accelerating for several years. For example, during the second quarter both Walmart and Amazon enjoyed huge increases in online sales, +37% and +43%, respectively. Barring an aggressive lockdown in the winter, the US may be able achieve pre-recession output levels in six quarters (i.e., by 2Q21) versus the 10 quarters it took during the global financial crisis.

Consumer sentiment is starting to stabilize after falling sharply earlier in the year. Post the 2007-2009 financial crisis debt payments as a percent of income have significantly declined, placing American households in a better recovery position (See chart below).



VAAM's base case economic forecast is for a quick and strong bounce as the economy reopens and monetary and fiscal stimuli continue to have an impact. GDP growth should then stabilize around 1.5% as fiscal stimulus fades and activity remains below its previous peak. U.S. population is projected to grow only 0.1% annually and productivity by 1.4% for a combined trend growth of 1.5%.

Corporates Securities

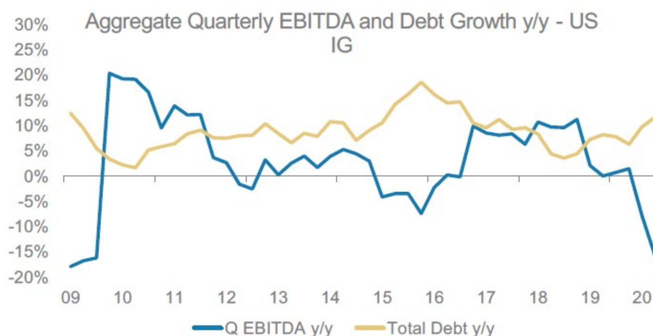
The rally continued in the U.S. corporate bond market. Credit spreads tightened further against comparable risk-free U.S. Treasury yields. The partial re-opening of the economy and resulting rebound in economic activity and employment, though still significantly weaker than prior to the beginning of the pandemic, provided reason for optimism. As shown in the table below, Intermediate Investment Grade Corporate bonds spreads compressed by an additional 0.14% during the quarter and provided 1.19% excess return. The 1-3 Year Investment Grade Corporate market moved 0.23% tighter and had a positive excess return of 0.53%. Shorter maturity bonds have now outperformed comparable U.S. Treasury securities for the year.

Bloomberg Barclays Corporate Spreads & Excess Return

	12/31/2019	3/23/2020	3/31/2020	6/30/2020	9/30/2020
Inter .Corp. Spread	0.67%	3.85%	2.72%	1.16%	1.02%
YTD Change		+3.18%	+2.05%	0.49%	0.35%
YTD Excess Return		-12.67%	-8.96%	-2.04%	-0.85%
1-3 Corp. Spread	0.33%	3.91%	2.57%	0.67%	0.56%
YTD Change		+3.58%	+2.24%	+0.34%	0.23%
YTD Excess Return		-6.66%	-4.24%	-0.42%	0.11%

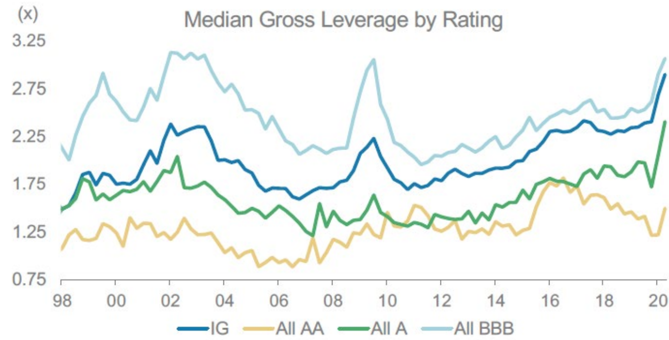
All Spreads & Excess Returns are from the Bloomberg Barclays Corporate Intermediate or 1-3 Corporate Index
All Spreads & Excess Returns are based on Sovereign Yield Curve

The Federal Reserve's actions this year have clearly added a large amount of liquidity to corporate bond issuers. Corporate bond issuance has remained elevated since their announcements to support the market in March. New issuance has reached $1.463 trillion year-to-date, a full year record with 3 months still to go in the year. Net issuance, after maturities and redemptions, has also easily exceeded prior years at approximately $979 billion. As a comparison, last year's new issuance was approximately $1.0 trillion and net issuance was $350 billion. (Bloomberg Barclays Indices, Barclay's Research)



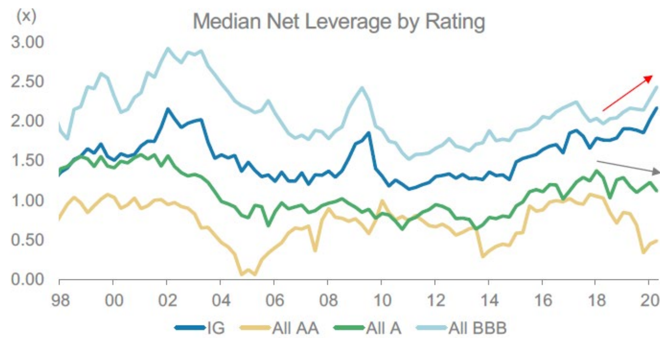
Source: Bloomberg, FTSE Fixed Income, Morgan Stanley Research;Note: Constant universe back to 2008.

New debt issuance has exploded (Yellow graph line) while EBITDA (Earnings Before Interest, Taxes, Depreciation, & Amortization, a measurement of corporate cash flow growth) fell an estimated -15% from 12 months earlier. The combination of rising debt and declining EBITDA resulted in a spike higher in Gross Leverage (Total Debt/EBITDA) to 2.9x. The highest leverage number since the beginning of the series in 1992. Leverage increased for all investment grade ratings. Gross leverage is expected to peak by year-end as the full impact of the recession is reflected in lower EBITDA and debt issuance remains elevated.



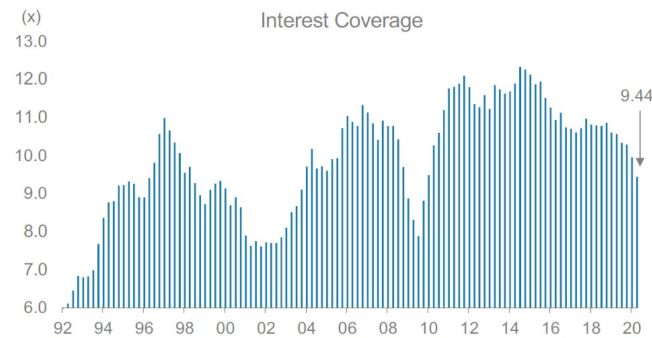
Source: Bloomberg, FTSE Fixed Income, Morgan Stanley Research

A significant amount of the new issuance has been defensive in nature, raising liquidity and/or terming out maturities at relatively attractive long-term interest rates. Merger/Acquisitions and stock buybacks have moderated during the period. For now, building an adequate cash reserves to ride out the downturn have been paramount. Cash to debt stood at 22.9% for the most recent earnings period. Though Net Leverage (Total Debt-Cash /EBITDA) is also at an all-time high, 2.19x, it has risen by less than Gross Leverage due to the large cash build. As shown in the table below, "BBBs" have seen their net leverage increase during the period while "A" rated companies ratio have fallen modestly. Therefore, debt issuance for the higher rated companies has been defensive to provide protection in case the recession drags on longer than expected. Lower rated companies have been utilizing more of the cash build to fund current operations.



Source: Bloomberg, FTSE Fixed Income, Morgan Stanley Research

Interest Coverages (EBITDA/Interest Expense) declined to its lowest level since the last recession, 9.44 times. Even though U. S. Treasury yields are at historically low levels, the lower interest costs for the new debt did not offset the higher debt levels and declining EBITDA.



Source: Bloomberg, FTSE Fixed Income, Morgan Stanley Research

On a positive note, 2nd quarter earnings had S&P 500 companies reporting strong results versus expectations. Sales exceeded expectations for 66% of the companies and earnings surpassed expectations for approximately 85%. These results are strong as compared to historical results. The next two months will provide further information on the

impact of the severe economic downturn on the financial fundamentals of investment grade issuers as they report third quarter results.

Our portfolios are modestly overweighted in the corporate bond sector, however, the quality remains higher than the relevant corporate index. The portfolios are underweight “BBB” rated companies and have no exposure to the lowest investment credit rating of “BBB3”/”BBB-“. During the past quarter, our corporate bond holdings modestly underperformed the relevant corporate index as the rally in corporates was broad based and the underweight to lower quality bonds hurt relative performance. As discussed in the prior quarterly report, lower quality investment grade issuers have an elevated risk of downgrade over the coming quarters. 64% of “BBB” companies have leverage consistent with a high yield rating. This high level of downgrade potential, coupled with the likely adverse impact on price performance at the time of a downgrade, continues to call for caution in adding these securities.

During the past quarter, several adjustments were made to our portfolios. Positions in Boeing and Camden Properties were sold. These investments were purchased during the second quarter at spreads significantly wider and had provided large excess returns over a comparable U.S. Treasuries during the holding period. Both were trading at fair value at the time of the sale based on their near-term business risk and exposure to ongoing risk of the pandemic. Morgan Stanley (A3/BBB+) was purchased during the quarter. Morgan Stanley is a diversified financial services company with a global securities business and global asset management business. Their Tier 1 Common Equity % was 16.5% and their return on equity was 11.61%. Their investment management operations provide a stable source of income. They had a significant earning surprise for their 2nd quarter results.