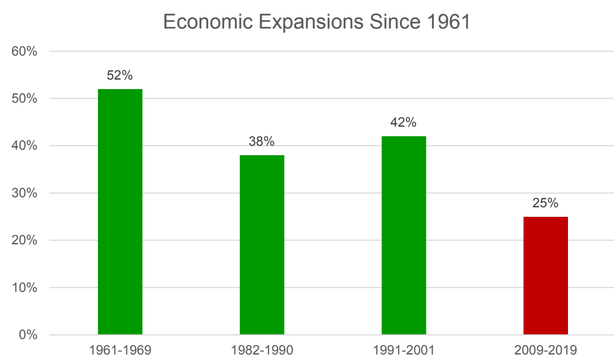
VANDERBILT Ave. ASSET MANAGEMENT

3rd Quarter 2019

Vanderbilt's forecast is for slower economic growth (1.5% - 2.0%), but no recession. While the current expansion is the longest on record, the economy has grown at a slower rate than prior.



Source: Bureau of Economic Analysis

Second-quarter GDP grew 2.0%-significantly lower than the 3.1% growth rate seen in the first quarter, reinforcing the notion that the U.S. economy is slowing. There were two contrasting sectors during the quarter. Consumer spending grew at a 4.6% annual rate-its fastest pace since the fourth-quarter 2017. However, business investment fell 1.4%, registering its first decline since 2015. The housing market is a leading indicator. Housing sales have stagnated, and single-family home permits have cooled since 2018. At a time of rising trade tensions, slowing global growth and shrinking profit margins, there is a possibility that the decline in job growth could slow further. In addition, earnings for the S&P 500 were below year earlier levels in the first two-quarters of this year (1Q was 0.6% lower and 2Q was 0.5% lower than the comparable periods in 2018) and a further decline in the third quarter is projected.

VAAM's inflation outlook differs from the consensus in that we think there is the potential for a surprise acceleration in inflation. Despite full employment, two key drivers appear to have kept inflation relatively low: technological innovations and global supply chains. Technological innovation provides constant downward pressure on prices, reducing the need for certain goods and services. Global supply chains have grown rapidly complex the past 20 years. Competition has brought down the cost of moving raw materials from one country and having them assembled in another country. This lower production cost to a certain degree has been passed on to consumers. Obviously, inflation has also been impacted by online retailers such as Amazon.

Fundamental indicators of inflation are showing potential pressure on prices. In terms of monetary policy, the velocity of money has been increasing which historically has been correlated with rising inflation. Demand pull inflation could be greater as capacity utilization has reached 79%. Finally, cost push inflation is a greater likelihood as there is very little slack in the labor market causing the Phillips curve to reflect continued wage increases. Wages are currently running at 2.9% year over year through September 2019. Furthermore, health care costs (one-sixth of GDP) are rising as Medicare payments have accelerated.

After the Great Recession, the Fed adopted an official inflation target of 2%. The Federal Reserve is currently reviewing inflation targeting policy and there is an expectation that the central bank could adopt an "average" inflation target. By raising the target above the current threshold of 2% during periods of expansion, it would offset low inflation during periods of recession. Average inflation targeting would make it less likely that rate hikes would occur during economic expansions until inflation reached a higher level.

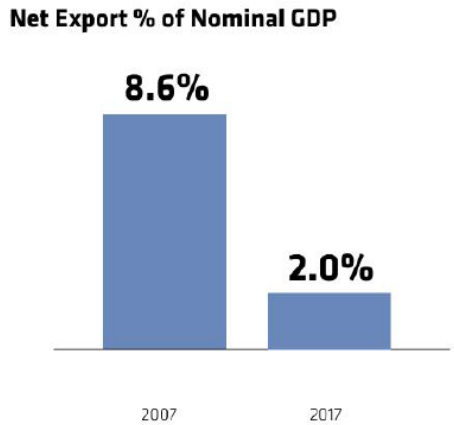
The Fed reduced the fed funds rate by 25 basis points at their recent policy meeting. The Fed cited slowing growth and subdued inflation. The Fed's preferred measurement of inflation, core PCE, has recently increased to 1.8% (year-over-year) but has remained below the Fed's target of 2% for a prolonged period. A variety of measures meant to measure the trend in inflation suggest prices are rising a bit faster than the PCE indicates. The core CPI is running at 2.4%. There has been discussion both in Europe and the U.S. of the marginal impact of lower rates when they are already at such low levels. While the ECB has implemented negative interest rates, there continues to be disappointing economic growth, subdued inflation and retarded loan growth. Federal Reserve chief Powell has emphasized the limitations of interest rate reductions vis-à-vis continuing trade policy uncertainties. With interest rates already at low levels, there is less room to lower rates to counter a recession. In addition, with annual fiscal deficits of approximately one trillion dollars, there is limited flexibility to expand the deficit through spending increases and/or tax cuts to support the economy.

Trade flows risk further slowing due to ongoing tariff disputes. Protectionism will result in lower economic growth. Tariffs act as a consumer tax. Manufacturers simply pass on higher costs due to tariffs to consumers thereby lowering disposable income. In addition to slower growth, tariffs lead to inflation in the affected categories and lower productivity. A protracted trade dispute can reduce U.S. GDP by -0.2% to -1.0% annually and even by a greater amount for economies outside the U.S.

Contrary to popular belief, tariffs should have a limited effect on China, but there could be unknown ramifications for years to come. The effect on export volumes and GDP will most likely be low. Less than a fifth of China's exports come to the U.S. For instance, if annual export volume drops by $100 billion and we net out one-third as an estimate of the import content, the impact on China's economy would only be one-half percentage point. The main impact of the tariffs will be the increased uncertainty about the business and trade environment along with the risk of future escalation and the impact it will have on consumers.

China has counter measures it can take vis-a-vis U.S. tariffs. China's state economic structure permits it to dictate both monetary and fiscal stimulus measures. In addition, China is moving towards a more consumer-oriented economy. As its domestic retail sales grow and its consumer sector expands, its exports as a percent of future growth will become less relevant.

Chinese Exports



Another measure China has utilized to counter higher tariffs has been the devaluation of their currency, the yuan, versus the U.S. dollar. Since the spring, the yuan has declined approximately 6.4% against the dollar thereby partially offsetting the higher tariffs. China has also pressured U.S. farmers by purchasing their agricultural products from other countries.

The U.S.-China trade dispute makes forecasting the global economic outlook difficult. The first concern is the tariff that has been levied on imports to the United States from China at a rate of 25%. Estimates expect the impact to subtract as much as .4% from real U.S. GDP. Less certain to identify are future actions taken against specific companies or industries that are designed to disrupt the operations of those companies or industries in a punitive manner. The targeting of Huawei Industries is an example. If the U.S. and China continue to escalate the economic tensions between their two countries, there is the possibility of client states being drawn into the conflict such as North Korea, Taiwan or Hong Kong. A serious miscalculation on either side could cause damage to any future cooperation.

The most difficult aspect of assessing the long-term effects of a trade or currency conflict such as the one we are witnessing today, is the breadth and width of the damage that could be inflicted on the global market. The twentieth century has numerous examples where this was the case. The Smoot-Hawley tariffs launched a global trade and currency war in 1929-30 and upended the global economy resulting in the Great Depression. In 1971, President Nixon enacted tariffs and dissolved the Bretton Woods system which led to high global inflation that took years to bring under control. A trade war between the U.S. and Japan in the 1980’s and 90’s led to a surge in the value of the Yen and pushed Japan’s economy into a debt deflation spiral. The current situation between the U.S. and China has the potential to create another long-term economic crisis between the two largest economies. The predictability of the current trade order has been disrupted, as has the global manufacturing cycle. Central banks must now factor into their metrics the effects of this trade crisis on the global economy and weigh monetary solutions that can help insulate against a global economic downturn.

We still think it is in the interest of both sides to ultimately reach a trade agreement. Some recent concessions by both sides lends itself to this viewpoint. However, the recent Trump impeachment inquiry raises renewed uncertainty.

During the third quarter, both the level and shape of the yield curve changed in a “bull flattener” manner. As outlined in the table below, interest rates declined, the amount of the decline was greater as maturities extended from 2 years to 30 years and the shape of the yield curve (2 year versus 30 year) flattened.

	6/30/19	9/30/19	Change
1-month Treasury Bills	2.13	1.86	-0.27
3-monthTreasury Bills	2.09	1.81	-0.28
2-year Treasury Note	1.76	1.62	-0.14
5-year Treasury Note	1.77	1.54	-0.23
7-year Treasury Note	1.88	1.61	-0.27
10-year Treasury Note	2.00	1.66	-0.34
30-year Treasury Bond	2.53	2.11	-0.42
10-year vs. 2-year	24	4	-20

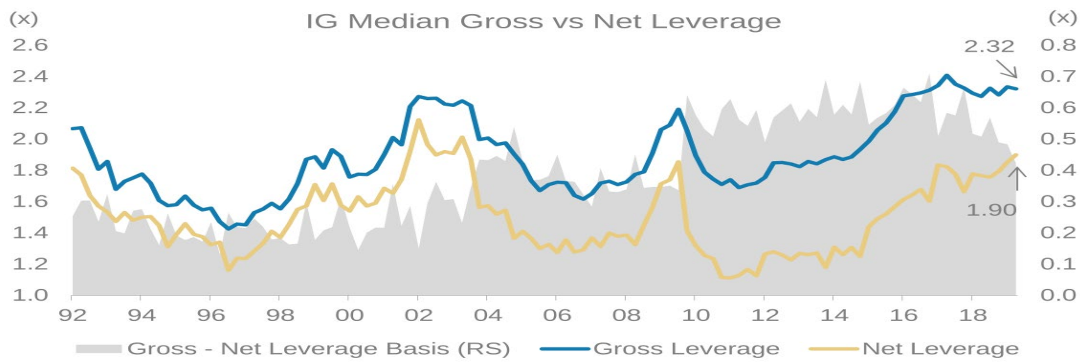
Lower rates across the yield curve during the quarter reflects the slowing of economic growth, continued subdued inflation and expectations of slowing economic momentum. While the 2-versus-10-year sector of the curve has basically flattened (four basis points), the yield curve is inverted from 3-month to 10 year. While an inversion has preceded every recession since the 1970's, an inversion does not always mean a recession. A recession can also occur in the absence of an inverted yield curve. The average length of time between an inverted curve and a recession has a lot of variability with an average period of 14 months.

Date of inversion prior to recession	Time to recession
April 11, 1968	19 months
March 9, 1973	7 months
August 18, 1978	16 months
September 12, 1980	9 months
December 13, 1988	18 months
February 2, 2000	12 months
June 8, 2006	17 months
Average	**14 months**

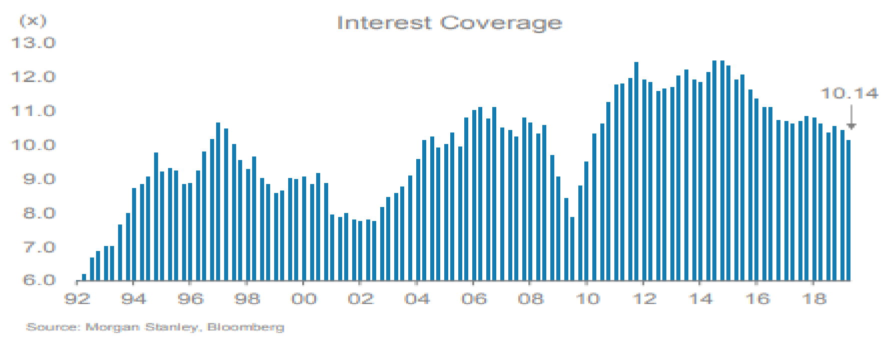
Corporate Securities

After strong performance during the first seven months of the year, the corporate bond market faltered in the middle of the third quarter. Weaker global growth and trade uncertainty drove business investments lower. Strong consumer spending, rising income, solid employment growth coupled with the Federal Reserve's lowering of short-term rates calmed the market during September. The net effect on performance turned out to be positive. For instance, the ICE BofAML 1-10 Year Corporate Index provided a solid 0.46% of outperformance versus comparable U.S. Treasury securities during the quarter, while the ICE BofAML 1-3 Year Corporate Index enjoyed a 0.35% outperformance. The sector benefited from the higher income than Treasury bonds, as well as modest spread tightening. Your portfolio benefited as it remained overweight the sector throughout the period.

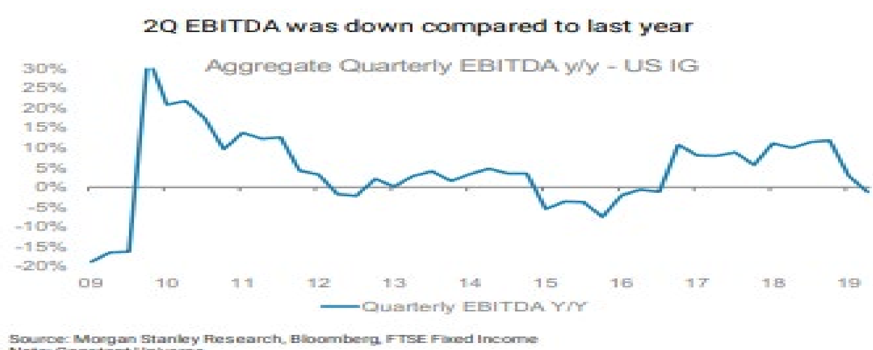
Key corporate financial fundamentals remain at reasonable levels but weaker than prior economic cycles. In fact, as shown below, gross leverage is at levels reached during prior recessions. During this business cycle, corporate cash positions have provided an offset to this higher leverage; however, record stock buybacks have continued to erode corporate cash balances and net leverage has risen to a peak for the cycle.



Interest coverage for the investment grade corporate market is strong based on historical levels but continues to trend lower.



Both leverage and interest coverage ratios are not of concern based on current economic conditions and current levels of corporate cash flow. An economic downturn, however, would drive these ratios to weaker levels. Higher levered investment grade issuers would be exposed to negative rating action and potentially price depreciation at that time. As shown in the graph below, cash flow as measured by EBITDA (earnings before interest, depreciation, taxes and amortization) is lower from a year earlier. Since capital expenditures has been weaker than previous cycles, and a significant component of excess cash flow is being utilized for stock buybacks, future cash flow may continue to trend lower.

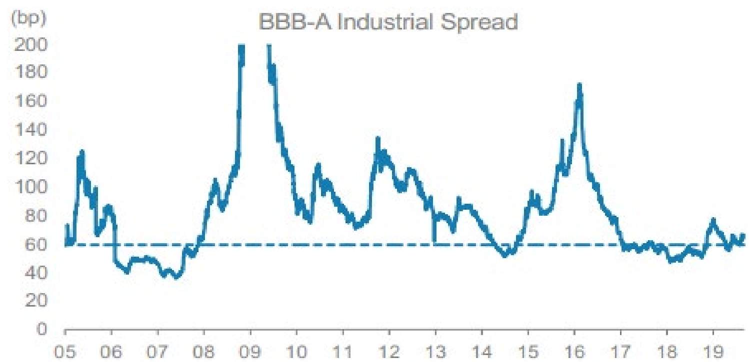


The modest tightening in corporate spreads during the third quarter and full year has moved the sector this year from historically fair value to overvalued, as shown in the table below. (History for period from 12/31/1996 through 9/30/2019)

Corporate Index	Corporate Spread 9/30/2019	Corporate Spread 6/30/2019	Corporate Spread 12/31/2018	Corporate Spread Historical Median
ICE BofAML 1-10 Year	0.96%	1.00%	1.39%	1.43%
ICE BofAML 1-3 Year	0.59%	0.66%	0.93%	1.16%

In addition, the spread between the lower quality "BBB" subsector and "A" rated corporate bonds remain near all-time tights.

The BBB-A basis remains near record tights



Source: Morgan Stanley Research, FTSE Fixed Income

Though still overweight, our portfolios overweight to the sector were reduced during the year due to still elevated leverage of the sector, relatively tight spreads and an expected slowdown in the U.S. growth rate. In addition, the credit risk is also being controlled through an underweight to lower rated "BBB" exposure and higher quality investments within each rating group. The median Gross Debt/EBITDA ratio of corporate issuers held by the target portfolio is 2.1x compared to the Morgan Stanley estimate of 2.3x and a median EBITDA/Interest ratio of 16.3x compared to Morgan Stanley estimate of 10.1x. None of the issuers had a significant negative earnings surprise.

Our portfolios extended maturities in issues of Apple (Aa1/AA+), Amazon (A3/AA-) and Bank of America (A2/A) in order to offset normal portfolio roll down. Each of these securities had a positive earnings surprise and solid financial fundamentals. In addition, AT&T (Baa2/BBB) was added to the portfolio during the quarter. AT&T is a diversified communications company with businesses in wireless, wireline, fiber optic cable, satellite Pay-Tv and media content. Upon the acquisition of Time Warner, the combined company had elevated debt levels (4.3x Gross Debt to EBITDA) but strong free cash flow. During the last quarter, free cash flow was $8.8 billion, a portion of which is being dedicated to reducing their debt level. Significant progress has been since the acquisition as their Gross Debt to EBITDA was 3.0x as of 6/30/2019. AT&T is expected to further reduce this ratio to 2.5x over the coming quarters.