

QUARTERLY ECONOMIC UPDATE

For the 1st Quarter of 2019

Abstract

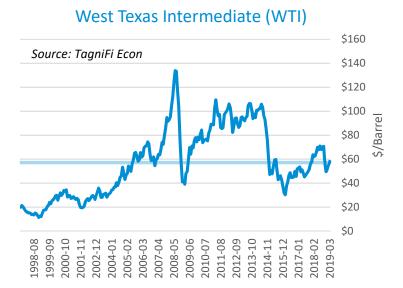
Designed for business valuation professionals, TagniFi's Quarterly Economic Update provides timely macroeconomic data to satisfy Revenue Ruling 59-60.

Summary

After the Federal Reserve announced tepid expectations for the economy in 2019, the BEA reported strong 1st-quarter growth in real GDP. The gains should bolster confidence in the U.S. economy despite concerns over cooling inflation, soft housing data, and weak growth in personal consumption expenditures. The year began with the U.S. government in the midst of a 35-day partial shutdown, which cost the economy an estimated \$11 billion by stalling federal purchases and weakening personal consumption during the shutdown period.

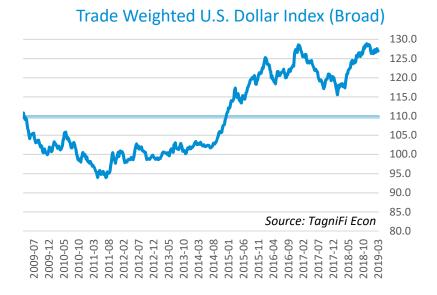
The labor market remained strong in the 1st quarter, and both capital markets and oil prices rebounded from the previous quarter. The resurgence in equity markets came as strength in multinational corporations calmed fears of global economic slowdown. Additionally, the Federal Reserve announced its intention to hold off on target interest rate hikes in 2019, a favorable condition for equity markets. Following the strong GDP performance in the first quarter, the Fed will likely upgrade its economic predictions for the year but is expected to remain steady on interest rates.

Strong manufacturing data from the U.S. and China, along with progress in trade talks between the two nations, overcame worries and boosted oil prices to end March on a high note. Crude oil prices¹ rose steadily over the 1st quarter to \$58.15 per barrel in March, up 5.8% from the previous quarter. Prices were 7.3% lower than last March.



¹ U.S. Energy Information Administration, Crude Oil Prices: West Texas Intermediate (WTI) – Cushing, Oklahoma [MCOILWTICO], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/MCOILWTICO, April 26, 2019.

Driven by weaker-than-expected inflation data, the U.S. dollar index² fell by 1.17% from the 4th quarter, yet rose 7.93% since the same period last year. In addition to the soft inflation data and concerns over U.S. economic growth, investors trended toward riskier global currencies and assets.



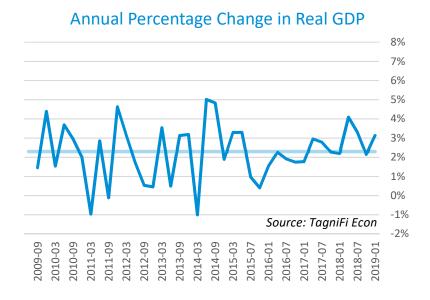
Economic Highlights

- Real GDP growth advanced to an annual rate of 3.2% in the 1st quarter, up by 0.2% from the previous quarter.
- Oil prices rebounded, with WTI crude up to \$58.15 per barrel in March.
- The U.S. dollar index declined by 1.17% in the 1st quarter but rose 7.93% since the same period last year.
- In March, the Federal Reserve held the federal funds target rate at a range of 2.25 to 2.50 percent and indicated target rates would hold steady throughout the year.
- Interest rates declined during the quarter with the 10-year U.S. treasury yielding 2.41% and the 30-year U.S. treasury yielding 2.81%.
- Consumer inflation cooled slightly to 1.86% during the quarter.
- The housing market continued to show weakness as the number of new housing starts fell by 8.7% to 1.16 million in February.
- The U.S. labor market remained strong, and the unemployment rate held steady to end the quarter at 3.8%.
- U.S. capital markets rebounded, with the S&P 500 up 13.1% from the end of 2018, after dropping sharply last December.

² Board of Governors of the Federal Reserve System (US), Trade Weighted U.S. Dollar Index: Broad [TWEXB], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/TWEXB, April 26, 2019.

Business Activity

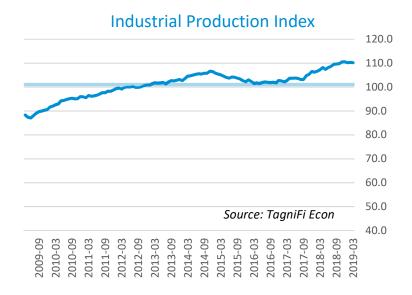
According to the Bureau of Economic Analysis (BEA), real gross domestic product (GDP)³ for the 1st quarter of 2019 grew at an annual rate of 3.2%, the highest 1st-quarter growth since 2015 and above the 30-year average rate of 2.5%. The growth rate exceeded economists' expectations, rising 0.2% from the 3.0% recorded in the 4th quarter. According to the BEA, exports increased while imports decreased, resulting in strong net trade gains. Inventory investments also contributed to the growth, as did personal consumption spending, especially on services and nondurable goods.



As of March, the Industrial Production Index⁴ slipped to 110.22, down by 0.3% for the first quarter of 2019. A drop in automobile production, the largest in nearly eight years, led the decline in the manufacturing sector this quarter. Output in mining fell in March, while utility production rose slightly. Despite the 1st-quarter decline, the Industrial Production Index rose 2.8% over the same period last year.

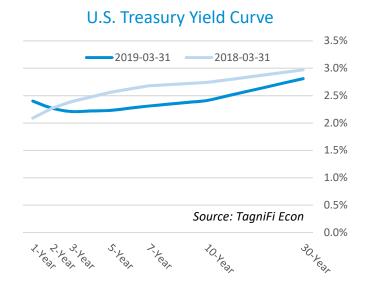
³ U.S. Bureau of Economic Analysis, Real Gross Domestic Product [GDPC1], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/GDPC1, April 26, 2019.

⁴ Board of Governors of the Federal Reserve System (US), Industrial Production Index [INDPRO], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/INDPRO, April 26, 2019.



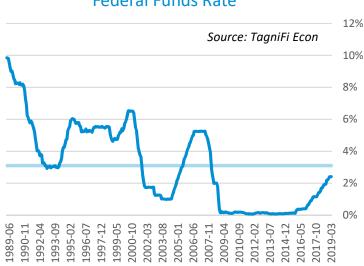
Interest Rates

The U.S. treasury yield curve⁵ remains relatively flat with the 1-year treasury yielding 2.40% and the 30-year treasury yielding 2.81%. The annual yield on the 10-year treasury ended the quarter at 2.41%. The yield curve inverted briefly during late March when 10-year bond yields fell below 3-month yields. It was the first inversion of the curve since 2007, indicating the potential for an economic slowdown and triggering stock sell-offs. Several factors influenced the event, such as lowered expectations of Fed interest rate hikes this year, signs of weakness from European markets, and Brexit confusion. Ten-year bonds again overtook short-term yields by the end of the month.



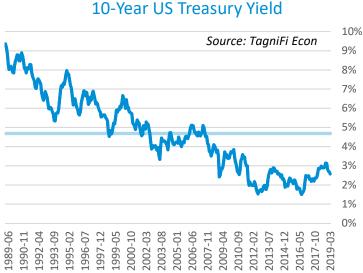
⁵ Board of Governors of the Federal Reserve System (US), 1-Year to 10-Year Treasury Constant Maturity Rate [IDGS1 – IDGS30], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org, April 26, 2019.

In March, the Federal Reserve held the federal funds target rate steady at a range of 2.25 to 2.50 percent and indicated no rate hikes for the remainder of 2019. The move came as the Committee's expectations of economic growth cooled, with GDP and inflation projections moderating, and unemployment rate expectations edging up. The effective federal funds rate⁶ as of March is at 2.41%.



Federal Funds Rate

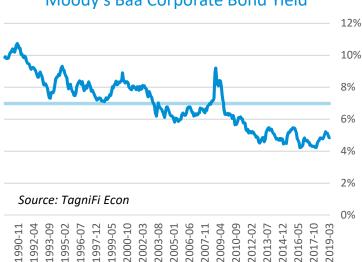
During the first quarter, the yield on the 10-year U.S. treasury peaked at 2.79% in mid-January, but fell throughout March to end the quarter at 2.41%. This is below the average yield of 4.67% over the last 30 years and the 2.74% yield from the same period last year.



⁶ Board of Governors of the Federal Reserve System (US), Effective Federal Funds Rate [FEDFUNDS], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/FEDFUNDS, April 26, 2019.

⁷ Board of Governors of the Federal Reserve System (US), 10-Year Treasury Constant Maturity Rate [DGS10], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/DGS10, April 26, 2019.

Corporate bond yields also decreased this quarter, with the Moody's Baa Corporate Bond Yield Index⁸ ending the 1st quarter at 4.84% compared to 5.13% for the previous quarter. Rates remained higher than the 4.64% yield from the same period last year, yet well below the index's average yield of 7.02% for the last 30 years.



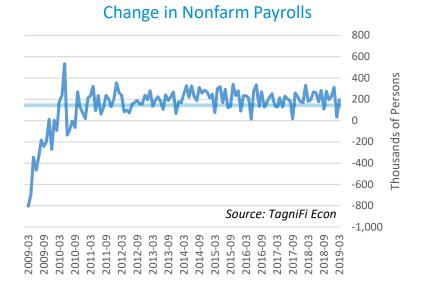
Moody's Baa Corporate Bond Yield

Employment

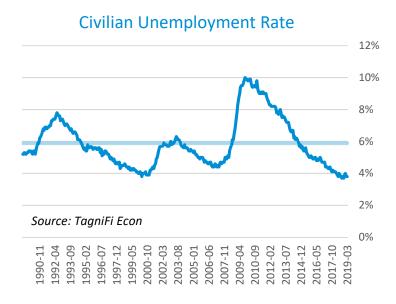
In the 1st quarter of 2019, the U.S. unemployment rate remained close to its lowest level since 1969. Total nonfarm payrolls⁹ have increased by 2.5 million over the same period last year, as net job creation rebounded in March from a weak February report.

⁸ Moody's, Moody's Seasoned Baa Corporate Bond Yield [BAAS], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/BAA, April 26, 2019.

⁹ U.S. Bureau of Labor Statistics, All Employees: Total Nonfarm Payrolls [PAYEMS], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/PAYEMS, April 26, 2019.



The unemployment rate¹⁰ ended the 1st quarter holding steady at 3.8%. The rate was down 0.2 percentage point from the same period a year ago and remained well below the 30-year average unemployment rate of 5.9%. The unemployment rate has been falling steadily since the Great Recession.



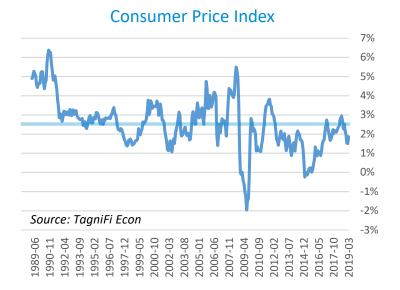
Inflation

Inflation slowed in the 1st quarter due largely to lower energy prices. The Consumer Price Index (CPI)¹¹ has increased by 1.86% since March 2018. According to Federal Reserve Bank of New

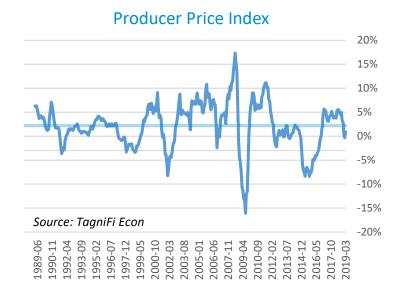
¹⁰ U.S. Bureau of Labor Statistics, Civilian Unemployment Rate [UNRATE], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/UNRATE, April 26, 2019.

¹¹ U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items [CPIAUCSL], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CPIAUCSL, April 26, 2019.

York's Survey of Consumer Expectations, inflation expectations one year ahead are holding steady at 2.8%, while expectations for the three-year horizon inched up to 2.9% in March.



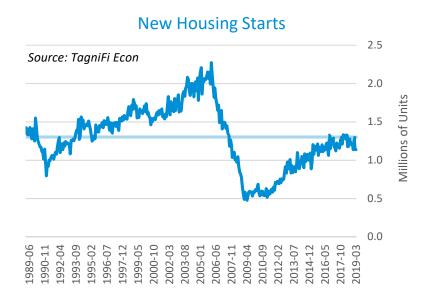
Prices at the producer level decelerated in the 1st quarter, with the Producer Price Index (PPI)¹² increasing by 0.90% in March compared to the same period last year. Producer-level inflation this quarter fell below the 30-year average of 2.22%.



¹² U.S. Bureau of Labor Statistics, Producer Price Index for All Commodities [PPIACO], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/PPIACO, April 26, 2019.

Housing

During the 1st quarter, the housing market continued to show signs of weakness as new home starts¹³ fell by 14.2% to 1.14 million in March. Single-family homes dropped to their lowest level in nearly 2 years, led by the Midwest region where severe flooding occurred in March. Single-family building permits have fallen for three straight months; land and labor shortages may be contributing to the continued weakness in the housing market. The current level is well above the lows seen in 2009 when only 0.5 million new homes were built, yet below the 30-year average of 1.30 million.



The cost of financing for would-be home-buyers declined steadily over the 1st quarter as the 30-year fixed-rate mortgage¹⁴ slipped to 4.06%. The Fed decreased pressure on interest rates when it announced in March that target rates would not rise this year.

¹³ U.S. Bureau of the Census, Housing Starts: Total: New Privately Owned Housing Units Started [HOUST], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/HOUST, April 26, 2019.

¹⁴ Freddie Mac, 30-Year Fixed Rate Mortgage Average in the United States [MORTGAGE30US], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/MORTGAGE30US, April 26, 2019.



The S&P Case-Shiller Home Price Index (20-city)¹⁵ for January 2019 reaffirmed the vulnerability of the housing market as home prices decelerated due to fewer eligible buyers. January growth in annual home prices was 3.5%, the lowest since September 2012. Last January, home prices were increasing at a 6.3% annual rate.



S&P Case-Shiller Home Price Index

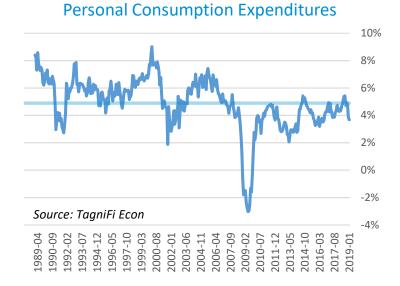
Consumer Spending

The level of Personal Consumption Expenditures (PCE)¹⁶ increased by 3.68% from January 2018 to January 2019. Lower spending on motor vehicles tempered the recent expenditure gain,

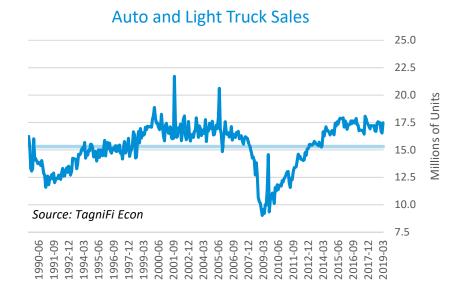
¹⁵ S&P Down Jones Indices LLC, S&P/Case-Shiller 20-City Composite Home Price Index [SPCS20RSA], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/SPCS20RSA, April 26, 2019.

¹⁶ U.S. Bureau of Economic Analysis, Personal Consumption Expenditures [PCE], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/PCE, April 26, 2019.

which was below both the 30-year average level of 4.91% and the 4.31% level from the same period a year ago.



Automotive companies reported 17.5 million autos and light trucks sold¹⁷ in March, up 1.0 million units from February and 0.2 million from the same period last year. March sales were 2.2 million units above the 30-year average of 15.3 million.



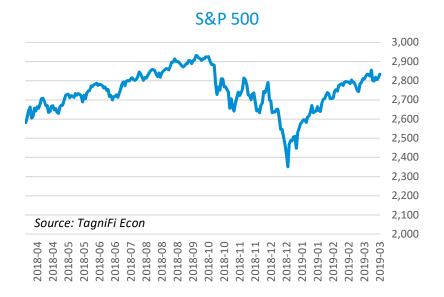
Capital Markets

U.S. stock indices rebounded in the 1st quarter of 2019 after dropping sharply at the end of last year. Strong growth among multinational corporations mitigated investors' fears of a global

¹⁷ U.S. Bureau of Economic Analysis, Light Weight Vehicle Sales: Autos and Light Trucks [ALTSALES], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/ALTSALES, April 26, 2019.

slowdown. Further, the Fed's intention to pause rate increases through 2019 bolstered stocks. The S&P 500 closed the quarter at 2,834.40, up 13.1% from the previous quarter and 7.3% from the same period last year. The Dow Jones was up 11.2% in the 1st quarter and 7.6% over the year. The NASDAQ Composite showed the strongest growth, jumping 16.5% over the quarter and 9.4% from time last year.

	Closing	% Change		
Index	Value	Quarter	YTD	12-Mo.
S&P 500	2,834.40	13.1%	13.1%	7.3%
Dow Jones Industrial Average	25,928.68	11.2%	11.2%	7.6%
Russell 1000	3,018.49	13.4%	13.4%	7.2%
Russell 2000	3,826.64	14.2%	14.2%	0.7%
Russell 3000	3,069.16	13.5%	13.5%	6.7%
NASDAQ Composite	7,729.32	16.5%	16.5%	9.4%



Outlook

The U.S. Federal Open Market Committee is projecting real GDP growth¹⁸ to slow steadily to 1.85% by 2021. They expect growth in Personal Consumption Expenditures (PCE)¹⁹ to accelerate to 2.05% by 2020 and 2021. Their forecast for the unemployment rate²⁰ is a decline to 3.70% in 2019 followed by a gradual climb to 3.90% by 2021.

FOMC Summar	of Economic	Projections
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Year	Real GDP	PCE	Unemployment
2019	2.05%	1.85%	3.70%
2020	1.90%	2.05%	3.75%
2021	1.85%	2.05%	3.90%
2022	1.85%	2.05%	3.90%

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¹⁸ Federal Reserve Bank of St. Louis, FOMC Summary of Economic Projections for the Growth Rate of Real Gross Domestic Product [GDPC1CTM], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/GDPC1CTM, April 26, 2019.

¹⁹ Federal Reserve Bank of St. Louis, FOMC Summary of Economic Projections for the Personal Consumption Expenditures Inflation Rate, Central Tendency, Midpoint [PCECTPICTM], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/PCECTPICTM, April 26, 2019.

²⁰ Federal Reserve Bank of St. Louis, FOMC Summary of Economic Projections for the Civilian Unemployment Rate, Central Tendency, Midpoint [UNRATECTM], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/UNRATECTM, April 26, 2019.