FARMER MAC

Economic and Interest Rate Market Update

August 2017

Economic & Interest Rate Environment: Low for Longer? Gradual Normalization?

Economic and Interest Rate Environment

- Job growth remains steady with unemployment at 18-year low of 4.3%

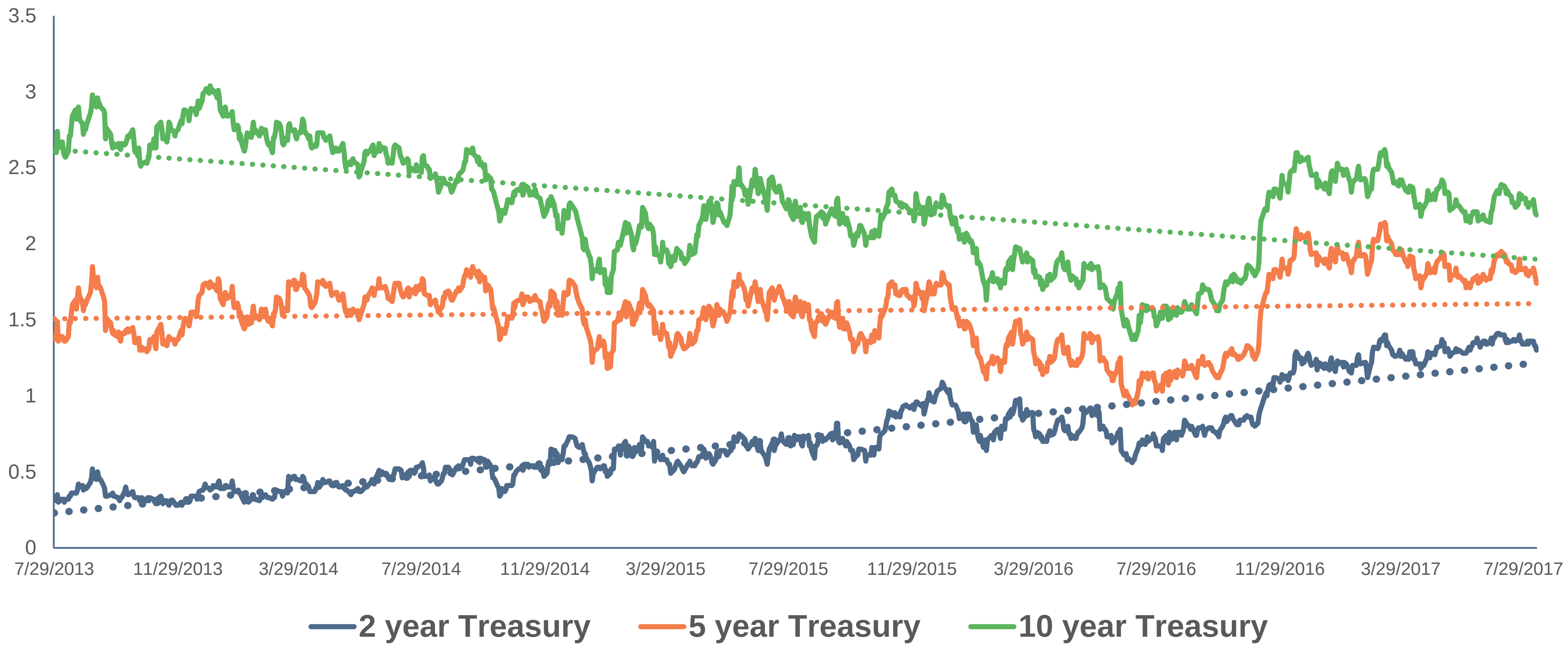
- Average monthly nonfarm payroll job growth of 184,000 in 2017
  - Just below the 187,000 pace from 2016 but off 2015 pace of 226,000
  - Economy needs fewer new jobs on a monthly basis with unemployment rate so low

- Continued weak readings on inflation keeping longer term interest rates in check
  - Core Consumer Price Inflation (CPI) has fallen from 2.3% in January to 1.7% in July
  - Fed's goal is 2% inflation

- Wage growth measures also reveal weakness in wage inflation
  - Fed seeking to balance full employment with price stability want to see further signs of wage growth
  - Pace of further rate increases likely to ultimately depend on a pick up in wage growth

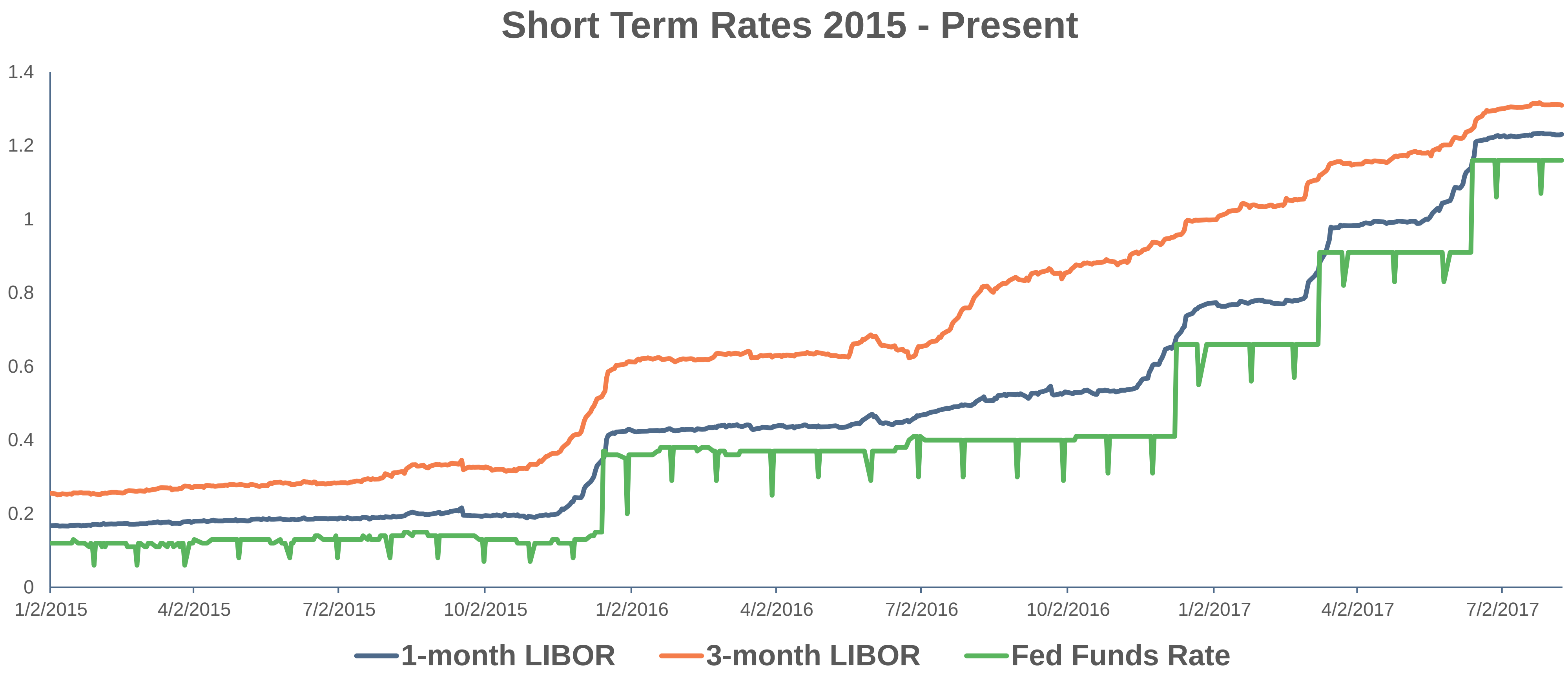
Interest Rate Environment

Long Term Treasury Yields – 2013 to Present



- Long-term rates are down moderately in 2017 after increasing significantly in Q3 and Q4 2016
- 2-year Treasury rates have climbed as the Fed has continued to raise the Federal Funds rate
- Yield curve flattening is being driven by low inflation and a Fed that is determined to increase short-term interest rates to prevent the economy from overheating

Interest Rate Environment



- Short-term rates such as Fed Funds and LIBOR have all been steadily increasing since 2015, however the pace of increases has been gradual compared with other Fed hiking cycles
  - Prime Rate moved from 3.25% to 4.25% since 2015

Federal Reserve Normalization and Market Impacts

Federal Reserve Normalization & Market Impacts

- Four rate hikes since 2015 have brought the target fed funds rate to 1.00% to 1.25%
  - Following 0.25% increases in March and June of 2017 the futures market is now projecting just a 36% chance of another rate hike in 2017, likely in December

- The Fed has indicated they will begin to taper reinvestments of their mortgage bond and treasury bond holdings
  - Maturing investments had been reinvested over the past several years
  - New policy will simply reinvest less of the maturing investments to bring down the portfolio size
  - Ultimate size and composition of Fed balance sheet remains unclear, likely to consist of only Treasuries

- Reduced reinvestments from the Fed's portfolio could impact markets in two ways:
  - Higher longer-term rates with a steeper curve
  - Wider spreads to Treasuries on mortgage securities

- Portfolio tapering may start as soon as September, however process will be very gradual
  - Some Fed officials have indicated a pause in the rate hike cycle may be prudent during the initial phase of the reinvestment tapering

Federal Reserve Normalization & Market Impacts

- Economists are forecasting short term rates to increase roughly the same as long term rates over the next 12 months in a parallel yield curve shift
  - Economists are only pricing in one more rate hike from the Fed in 2017

- Market pricing via futures market implies slower rate hike pace than Fed member indications and economist forecasts
  - Futures markets projecting a 36% chance of Fed rate hike in December

- The Fed may pause or slow rate hikes as they begin to let their portfolio of Treasury and Mortgage securities run off

Interest Rate Forecasts	Current	12/31/2017	03/31/2018	06/30/2018
Overnight Fed Rate	1.25%	1.50%	1.60%	1.85%
3-month LIBOR	1.31%	1.55%	1.71%	1.91%
2-year US Treasury	1.32%	1.64%	1.80%	1.98%
10-year US Treasury	2.20%	2.56%	2.70%	2.81%

Estimates pulled via Bloomberg consensus forecasts of Economists polled. Surveys include greater than 20 economists estimates however do not include the view of Farmer Mac's on staff Economist

Product and Pricing Update

Product Impact – Farm & Ranch

- Long Term Rates are slightly lower for the year, however remain above lows seen in July 2016
  - Strong demand for Farm and Ranch fixed rate loans
  - 15-year products remain very attractive relative to other products
  - 5-year ARM beginning to see more volume due to relative attractiveness on the yield curve

Product	January 2016	August 2016	January 2017	August 2017
1-month ARM, 25-year AM	1.91%	2.20%	2.46%	2.92%
5-year ARM, 25-year AM	3.56%	3.02%	3.65%	3.25%
10/1 ARM, 25-year AM	3.70%	3.28%	4.07%	3.87%
15-year Fixed, 25-year AM	4.48%	3.72%	4.39%	4.14%
15-year Reset, 30-year AM	4.51%	3.74%	4.43%	4.20%
25-year Fixed, 25-year AM	4.83%	3.93%	4.98%	4.63%

- LIBOR-based reset product (1-month ARM, AgEquity) remain popular however demand beginning to moderate as rates rise
  - These products are much more sensitive to actions by the Federal Reserve than products with initial fixed rate periods greater than 5-years

Product Impact – USDA

- Long Term Rates have moved lower in 2017 however remain well above the 2016 lows
  - Long term fixed rate products remain most popular, led by the 20-year and 30-year fixed rate
  - Reset products provide attractive initial pricing with flexibility of longer amortizations to help borrowers
  - Short Term 3-month COFI remains low, however is seeing a move higher as the Fed raises short term rates
  - 20-year Fixed remains attractively priced relative to 30-year Fixed
    - 20-year fixed has averaged approximately 47bps lower than the 30-year fixed over the last 18 months

Product	January 2016	August 2016	January 2017	August 2017
3 month COFI	1.86%	2.05%	2.24%	2.56%
5-year Reset, 30-year AM	3.07%	2.53%	3.29%	3.13%
10-year Reset, 30-year AM	3.56%	2.88%	3.87%	3.60%
15-year Reset, 30-year AM	3.90%	3.10%	4.15%	3.89%
20-year Fixed, 20-year AM	3.85%	3.04%	4.04%	3.77%
30-year Fixed, 30-year AM	4.39%	3.43%	4.55%	4.20%