

## Market Observations April 2017

### HIGHER & HIGHER

Federal Reserve Chair Janet Yellen recently articulated what cannot be done through monetary policy. Investors clearly understand what the central bank can do: lower and raise the price of money. Through its policymaking body, the Federal Open Market Committee (“FOMC”), the Federal Reserve has raised its target range for the federal funds rate three times in the past sixteen months. What are the implications for financial markets and investors as the federal funds rate moves higher and higher? Some perspective can be helpful.

### Perspective

In late 1982, the FOMC shifted its monetary policy to targeting the price of money, the federal funds rate. As shown in **Chart I**, five full tightening cycles have occurred since then. On average, these cycles included 9 rate hikes over 17 months. In comparison, the current cycle at 3 rate hikes has been quite gradual. This has been deliberate policy on the part of the Federal Reserve. It reflects in large part the ongoing U.S. economic expansion being the slowest since World War II with real growth averaging only about 2% per year.

**Table I** provides an overview of trends in key measures during the past five tightening cycles. The average increase in the federal funds rate was 310 basis points (“BPS”; 100 BPS = 1%). With the current federal funds rate target range at 0.75% to 1.00%, this tightening cycle could see the federal funds rate reach 3%. The average increase in the 10-Year U.S. Treasury yield has been 126 BPS. An average increase for the balance of this cycle would bring this yield to 3.5%, well below the historical median monthly yield of 5.6%.

Stock market returns have been favorable during tightening cycles with an average cumulative return of +13.4%. The +17.0% return for the total U.S. stock market (as measured by the Wilshire 5000 Index) in the current cycle suggests that further gains from here could be more modest. Rising interest rates often are associated with a stronger currency. Trends in the U.S. dollar over the past five tightening cycles have been quite mixed. This outcome suggests the importance of relative comparisons of interest rate and inflation trends among countries.

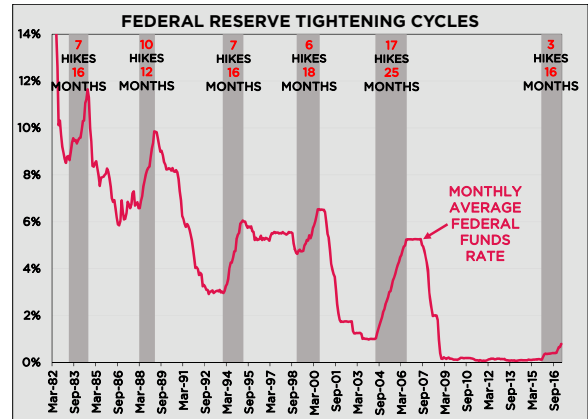
### Investment Implications

While a tightening cycle for U.S. monetary policy has begun, the Federal Reserve must balance too-much-too-soon against too-little-too-late with respect to policy impacts on economic activity and rates of inflation. The experiences of past cycles can provide only rough guidance for market outcomes. Portfolios are best managed in the period ahead with holdings that are diversified appropriately for the uncertainties that can accompany a period of higher and higher interest rates.

*Monetary policy cannot generate technological breakthroughs, affect demographic factors, address income inequality, or improve the productivity of workers.*

Janet Yellen – March 3, 2017

**Chart I**



**Table I**

CHANGES DURING TIGHTENING CYCLES		
CYCLE	FEDERAL FUNDS RATE CHANGE (BPS)	10-YEAR U.S. TREASURY YIELD CHANGE (BPS)
5/1983 - 8/1984	301	234
3/1988 - 3/1989	327	99
12/1993 - 4/1995	309	129
1/1999 - 7/2000	191	133
6/2004 - 7/2006	421	36
11/2015 - ??	79	22

CYCLE	WILSHIRE 5000 TOTAL RETURN	CHANGE IN U.S. DOLLAR
5/1983 - 8/1984	+3.51%	+10.28%
3/1988 - 3/1989	+17.29%	+3.62%
12/1993 - 4/1995	+11.67%	-12.35%
1/1999 - 7/2000	+15.77%	+6.72%
6/2004 - 7/2006	+18.83%	-6.47%
11/2015 - ??	+17.00%	+0.76%