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Fed Rate Cycle

Fed is late in raising rates

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MACRO | STRATEGY | MONETARY POLICY

- Fed is behind the curve in raising the rate
- It was inevitable for the Fed to raise interest rate
- We expect the trajectory of interest rate hike should be steeper than their projection

Fed raised rate

The Federal Open Market Committee (FOMC) raised its targeted Fed Fund rate by 25bps and delivery a rather hawkish statement in its press conference. In light of a rising inflation, FOMC chairwoman, Janet Yellen, mentioned that the committee has increased its Fed rate hike projection for 2017 to thrice a year (one more hike than the initial projection). However, she has insisted that the FOMC is not behind the curve.

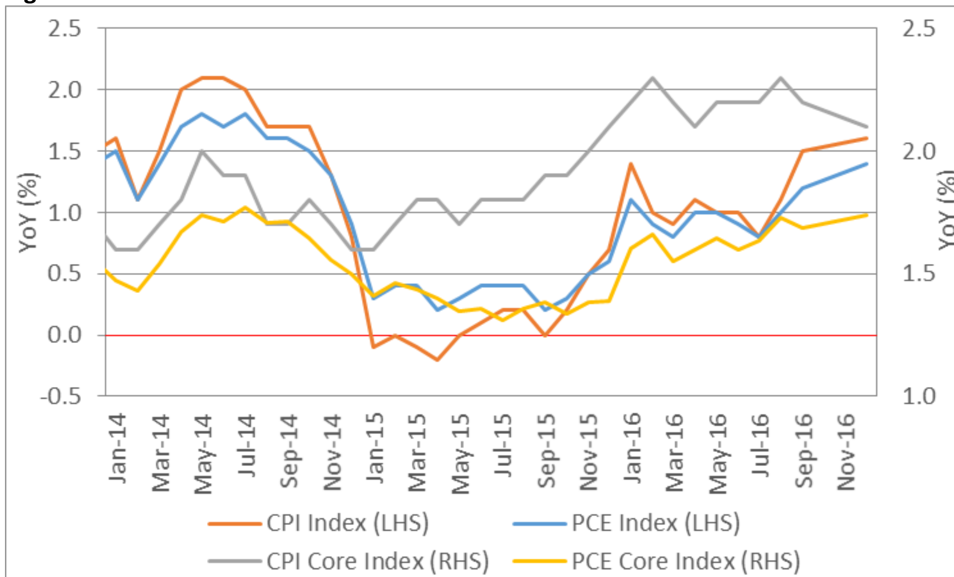
The rate hike was not by choice

We believe otherwise and that FOMC have no choice but to raise the rate due to its given mandate. FOMC's mandate is to maintain price stability and reduce unemployment through its monetary policy. Our study on both economic data has shown that FOMC was indeed late in raising its interest rate, and this will lead to the inevitable chasing of the curve, resulting in a steeper increment of interest rate as compared to their original projection.

Inflation and Unemployment

The Personal Consumption Expenditures deflator (PCE), FOMC preferred measurement for inflation, has been trending up since September 2015 and shrugging off the deflationary scare in January 2015. Since the start of this year, the core PCE, which exclude the volatile energy and food price, has held steady at a rate of c1.60% year-on-year (YoY). Core Consumer Price Index (CPI), a more commonly used indicator for inflation, has also held steady above 2% since start of this year.

Figure 1: Inflation Masurements



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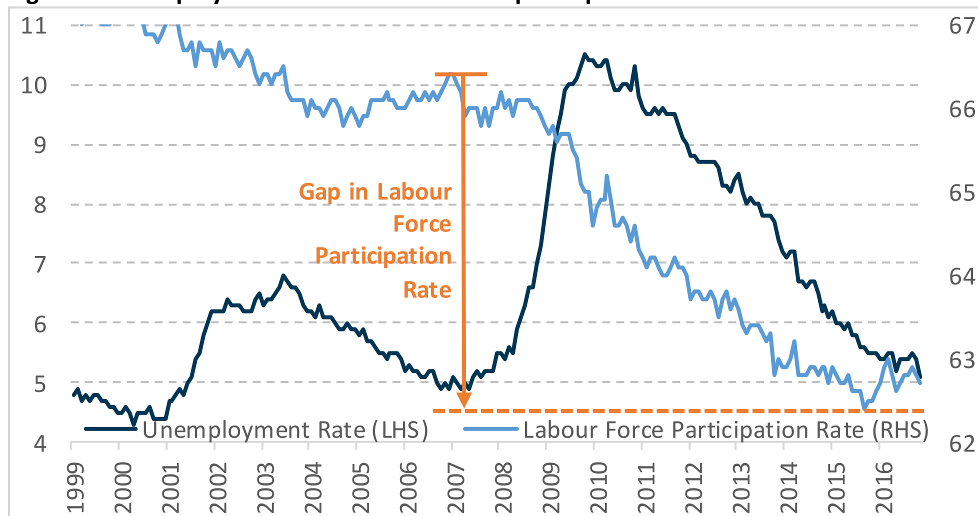
Meanwhile, unemployment rate has been heading down since its peak in October 2009. FOMC's initial target for a healthy economy was for unemployment to be below 5%. As of November 2016, unemployment stands at 4.6%. During the FOMC press conference, Janet Yellen has also reiterated that they are comfortable with the current unemployment rate and that it has recovered back to the 2007 level.

The unemployment rate has dropped below 5% since August 2016. However, we have been emphasising that the problem lies with the labour force participation rate rather than the unemployment rate. Labour force participation rate has been presistently low and have not recovered to its 2007 level. Some economists are brushing this off due to the effect of an ageing population with a majority of the baby boomers retiring during this period of time.

Figure 2: Unemployment rate vs Labour force participation



Source: Bloomberg, Phillip Securities Research (Singapore)

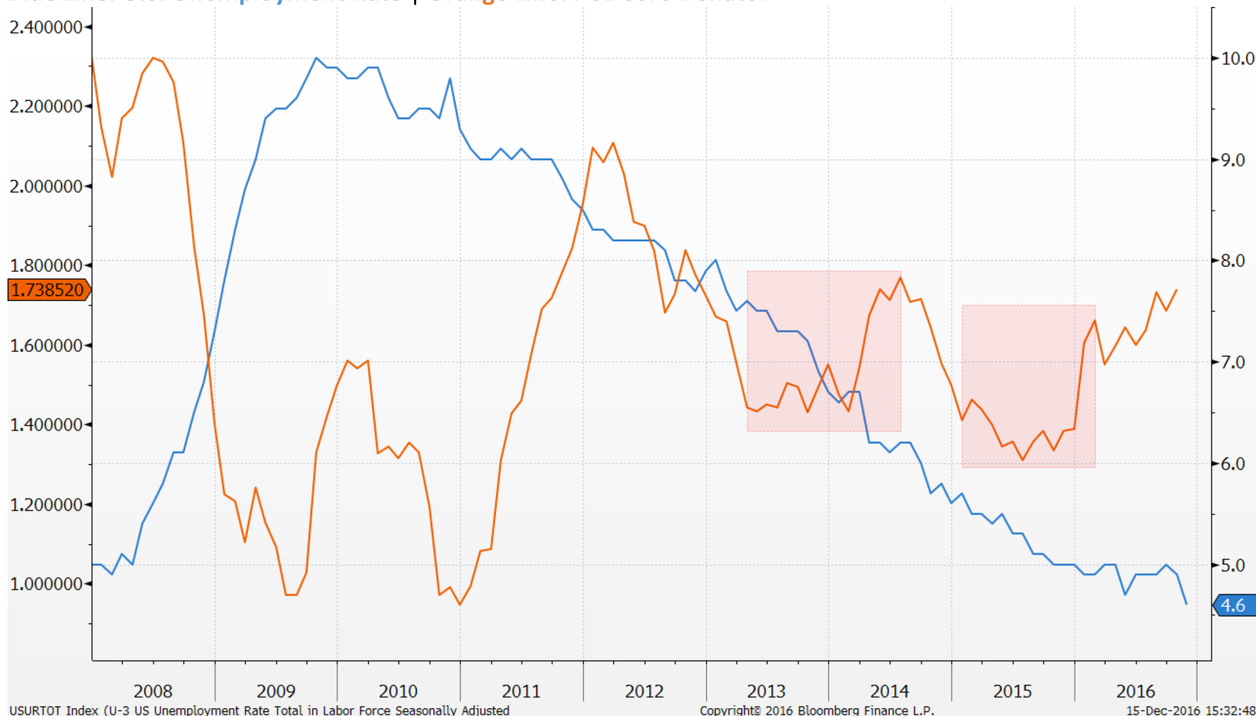
Chasing the Curve

By overlaying the inflation data and unemployment data, we could see that potential windows of opportunity for the Fed to raise rate. In the red shaded area of **Figure 3**, we could see unemployment heading lower while Core PCE deflator remain stable or even increasing. This would have be an opportune timing for FOMC to start raising rates, but they have chosen to delay raising rates twice in the past 4 years.

Instead of increasing interest rate during the 2013 window, the Fed chose to lower their targetted unemployment rate from 7% to 6%. When unemployment rate hit below 6% in 2015 and inflation has stabilised, they chose to lower their unemployment target rate to 5% yet again.

Figure 3: PCE Core Deflator and Unemployment rate

Blue Line: U.S. Unemployment Rate | Orange Line: PCE Core Deflator



Source: Bloomberg

Fed rate cycle always ends the same way

Since 1983 we have recorded a total of 5 periods of rate hike and rate cut cycles. We observed that most rate hikes end up with a larger rate cut than its preceding rate hike, expect in June 1995.

Figure 4: Periods of Federal Reserve interest rate hike

	Period of first rate Hike	Percentage points increase in Fed Fund rate	Months of continuous increase
1	April 1983, February 1984*	3.25	16
2	March 1987, February 1988*	3.75	23
3	January 1994	3.00	13
4	May 1999	1.75	12
5	May 2004	4.25	25

**There was a pause in increment between the 2 dates*

Source: Bloomberg

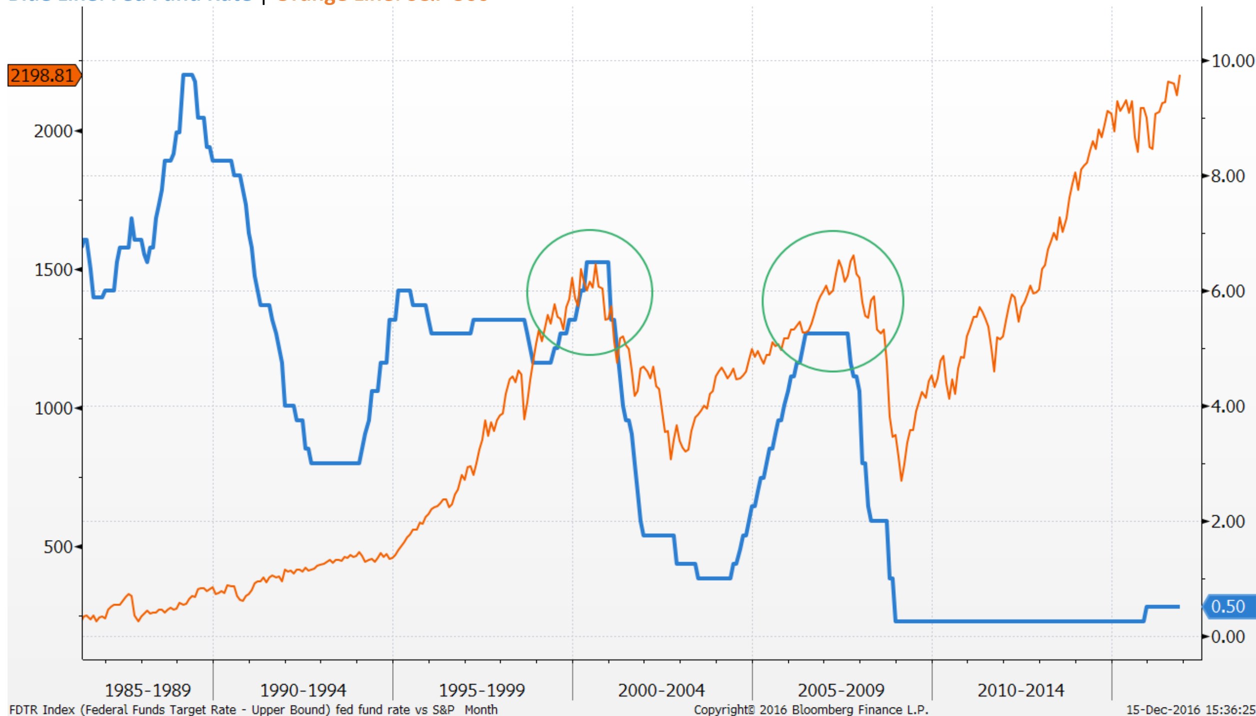
Figure 5: Periods of Federal Reserve interest rate cut

	Period of first rate Cut	Percentage points decrease in Fed Fund rate	Months of continuous decrease
1	September 1984	-5.88	17
2	May 1989	-6.75	26
3	June 1995	-0.75	17
4	December 2000	-5.50	19
5	August 2007	-5.00	39

If we were to learn from history, we can postulate that the Federal Reserve will have to increase their Fed Fund rate significantly to prevent a runaway inflation or to water-down an overheated economy. The rate of increase will be steep, potentially pulling the economy to a halt.

When comparing the Fed rate cycle with the equity markets, we observe that the start of a rate hike cycle usually happens within a bull market and the rate cuts are usually accompanied by a market downturn. However we should not mixed-up the causes and its effects. Markets are generally forward looking and are usually leading indicators. Therefore it can be assured that the next market downturn will once again trigger the Fed to cut rates.

Figure 6: Fed Fund Rate vs S&P 500
Blue Line: Fed Fund Rate | Orange Line: S&P 500



Conclusion

FOMC hike interest rate to prevent inflation from overrunning. Contrary to what FOMC mention, we believe they are behind the curve and the increment in interest rate will be steep. If history repeats itself, we should see Fed increasing rate faster than their projection as they try to control price inflation. This will lead to a higher cost of capital for businesses and increase the risk of default from overleveraged companies.

This month should signify the first month of the Fed rate hike cycle. For the past 5 cycles, on average, a rate hike cycle takes about 18 months and an average increase of 3.2 percentage points before it reach its peak. Let's start counting.

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