



CITIZENS BANK GLOBAL MARKETS

Interest Rate Risk Management

May 4, 2017

Christopher Pelletier

Director

Interest Rate Risk Management

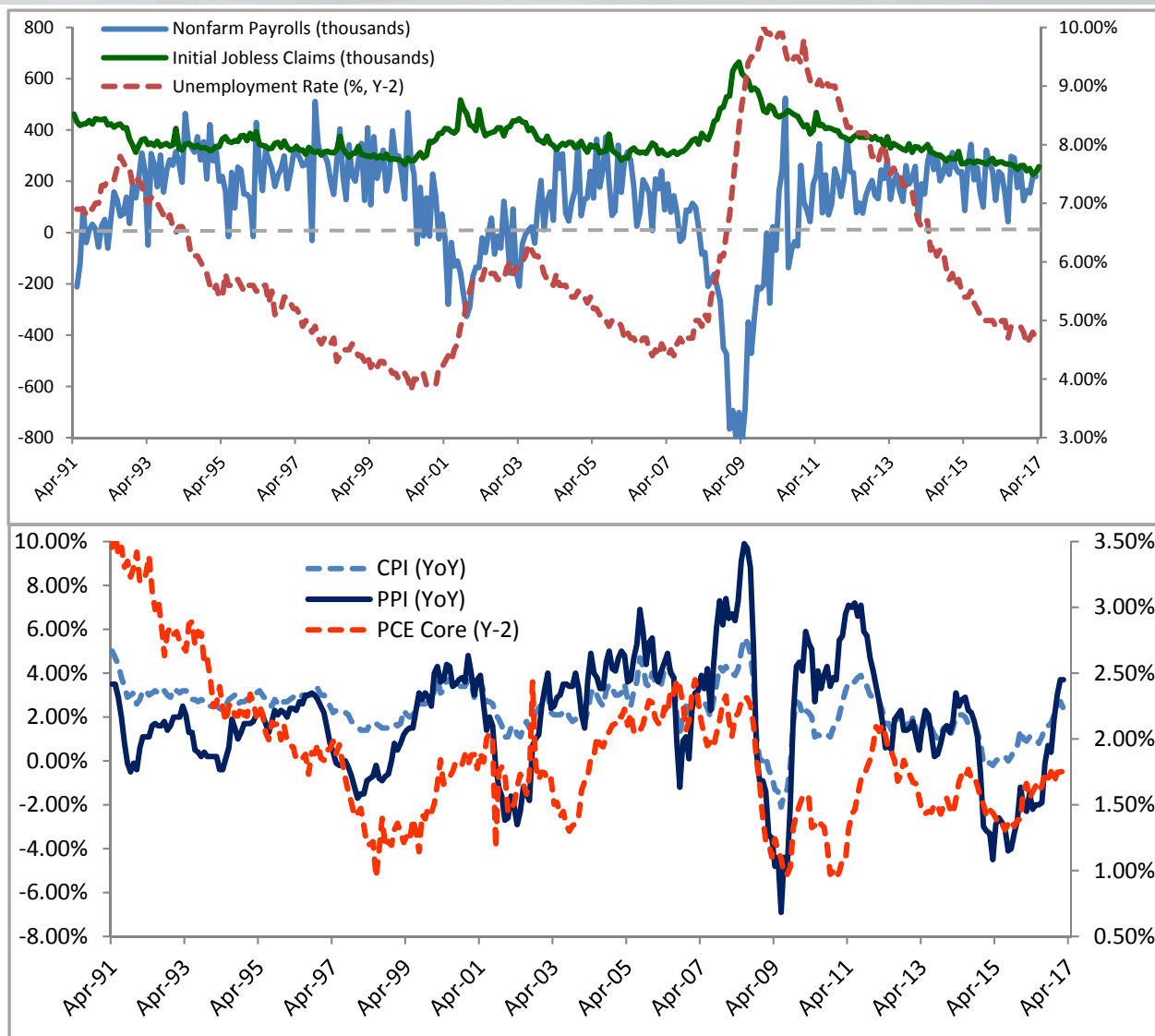
617-725-5580

christopher.pelletier@citizensbank.com

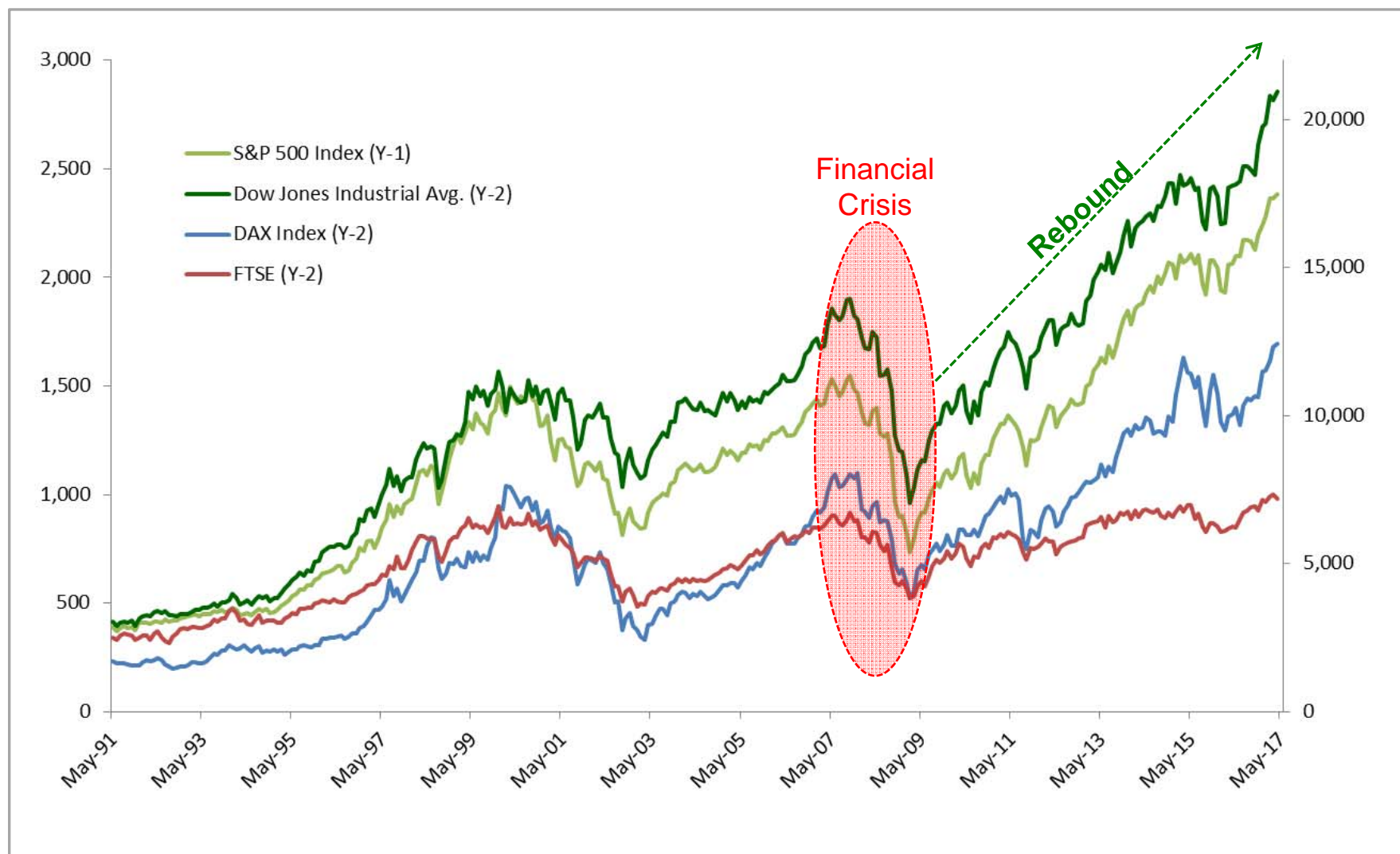
Agenda

1. The 2008 Financial Crisis
 - Employment Report / Inflation Data
 - Global Equity Market
2. Monetary Policy: Tools of the World's Central Banks
 - U.S. Federal Reserve Policy
 - European Central Bank Policy
3. Global Yields: U.S. Federal Reserve vs. European Central Bank
4. Looking Ahead:
 - The Federal Reserve's Projections for Future (U.S.) Interest Rates
 - Market Implied Probability for Fed Policy Change (Rate Hike) – Since June 2016
 - What has the Fed Signaled for Future Changes to Policy
5. What to Expect: How the Market Has Reacted To Changes in Monetary and Potential Fiscal Policies
6. Market Outlook: Potential Drivers of Central Bank Policy Over the Next Three Years
7. Q & A Session

Economic Crisis: A Time For Central Bank Action



Global Equities React to Financial Crisis, and then Rebound ('07 – Present)



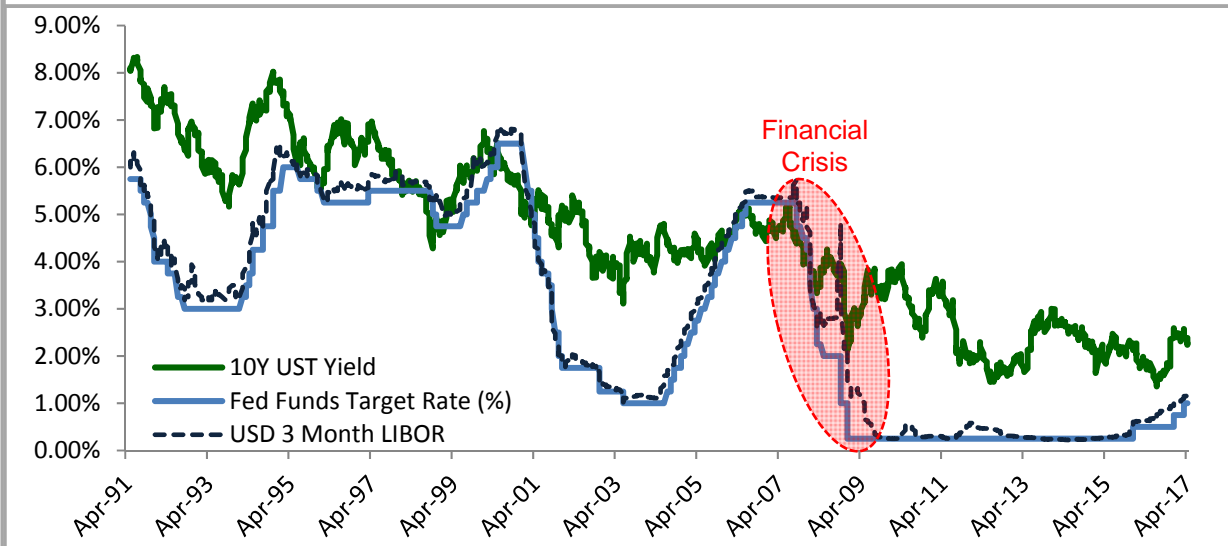
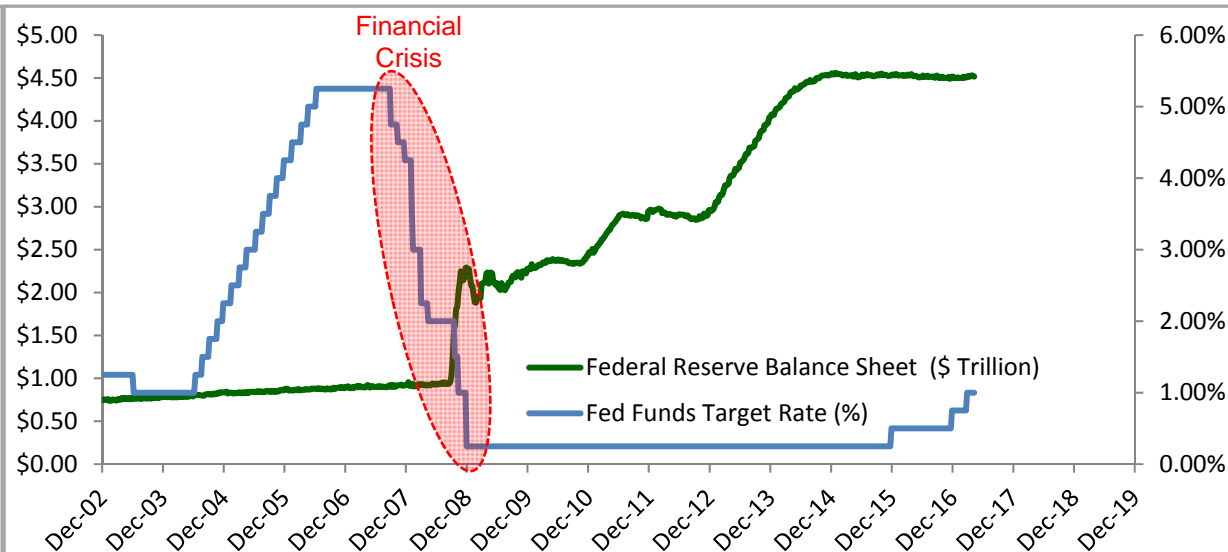
Monetary Policy: Tools of the World's Central Banks (U.S. Federal Reserve)

Pre-Crisis Fed Policy ('04 – '07)

- From 2004 – 2006, the Fed tightened monetary policy by increasing the Fed Funds Target Rate by 25 basis points every 6 weeks – for 2 years straight
 - The net impact was a 4.25% increase in short-term rates over a 2 year period

Post-Crisis Fed Policy ('07 – Today)

- Following the start of the credit crisis, the Fed lowered the Target Rate from 5.25% in September of 2007, to 0.25% by December of 2008
 - The Target Rate remained at 25 basis points through December 2015; the Fed's first rate hike since the crisis
- Since the initial rate hike in December 2015, the Fed has raised rates two additional times: first in December 2016 and then in March 2017.
 - The market is now pricing a 70.4% Probability of a second 2017 rate hike at the June 14th Fed meeting



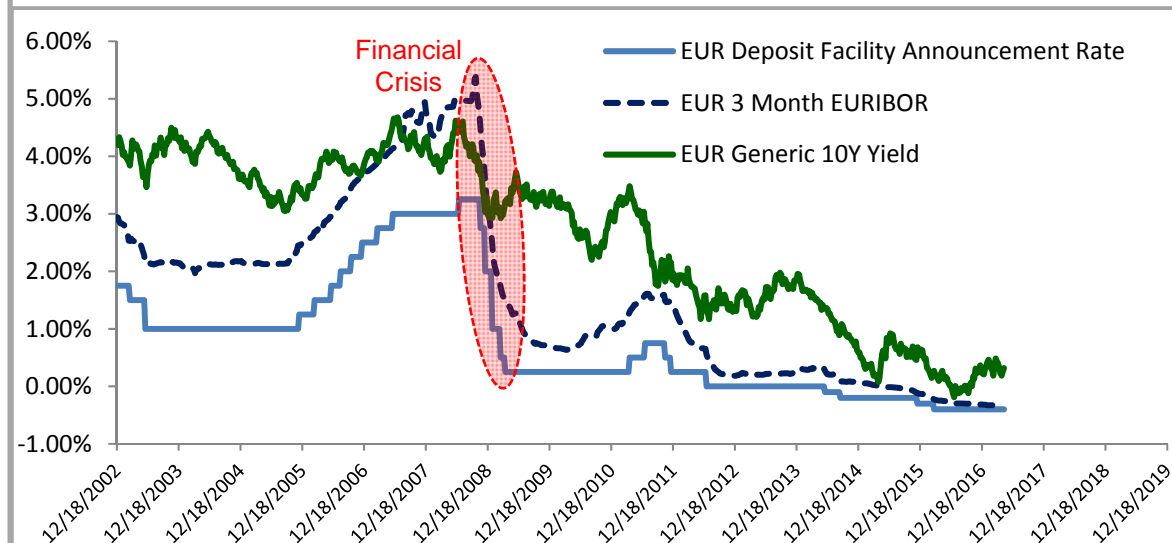
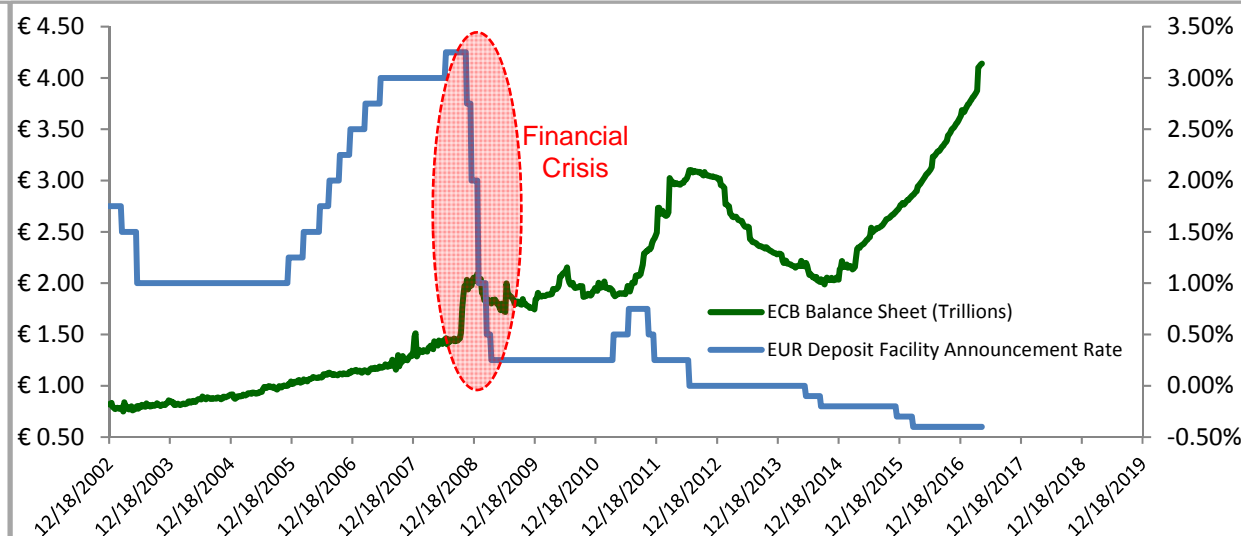
Monetary Policy: Tools of the World's Central Banks (European Central Bank – “ECB”)

Pre-Crisis ECB Policy ('04 – '07)

- Like the Federal Reserve, the ECB increased its benchmark short-term rate from 2005 - 2007
 - > The net impact was a 2.00% increase in short-term rates over a 2 year period

Post-Crisis ECB Policy ('07 – Today)

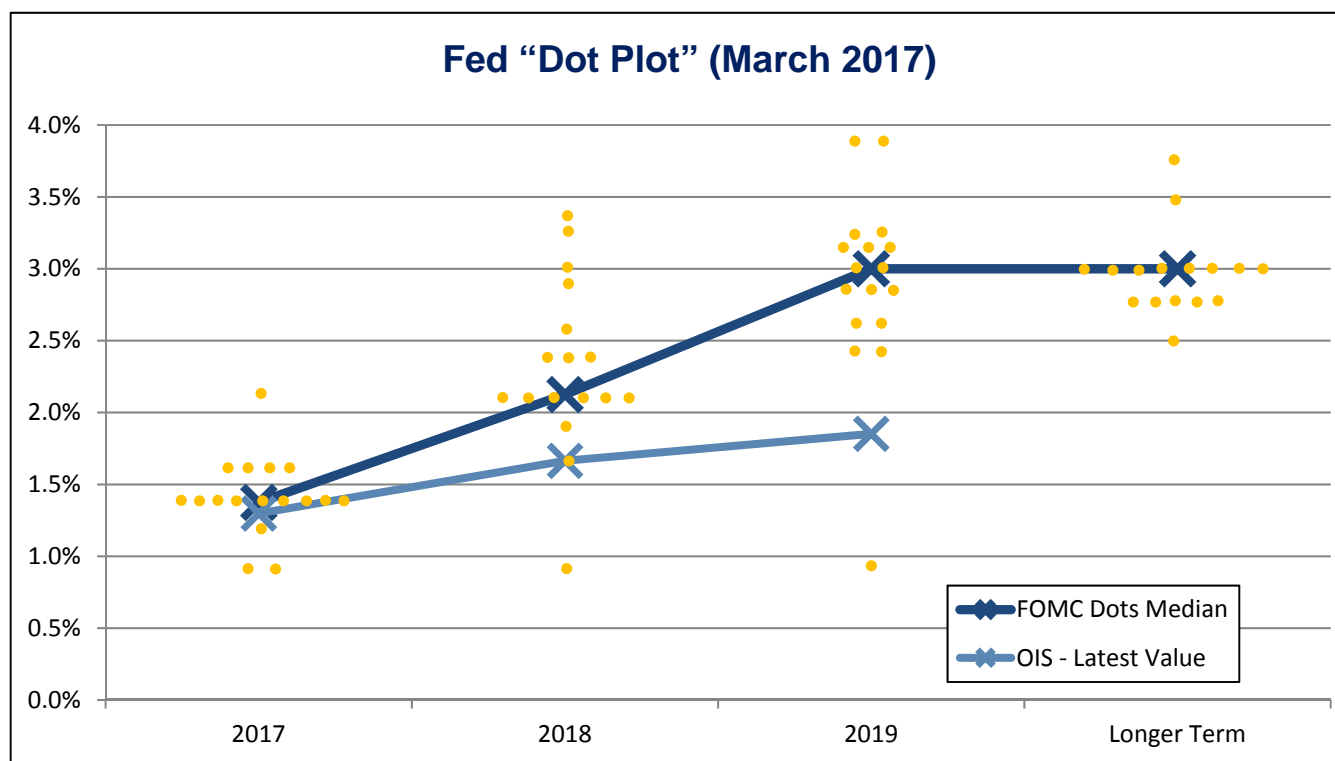
- Following the start of the credit crisis, the ECB lowered the Deposit Rate from 3.25% in October of 2008, to 0.25% by April of 2009
 - > The deposit rate was lowered again in 2011 to combat the European Sovereign Debt Crisis (Greece, Spain, Italy etc)
 - > Today the ECB has a negative interest rate policy with a Deposit Announcement Rate of -0.40%
 - > Additionally, the ECB is still conducting its own form of quantitative easing; purchasing EUR 60 billion in bonds on a monthly basis



Global Yields: U.S. Federal Reserve vs. European Central Bank

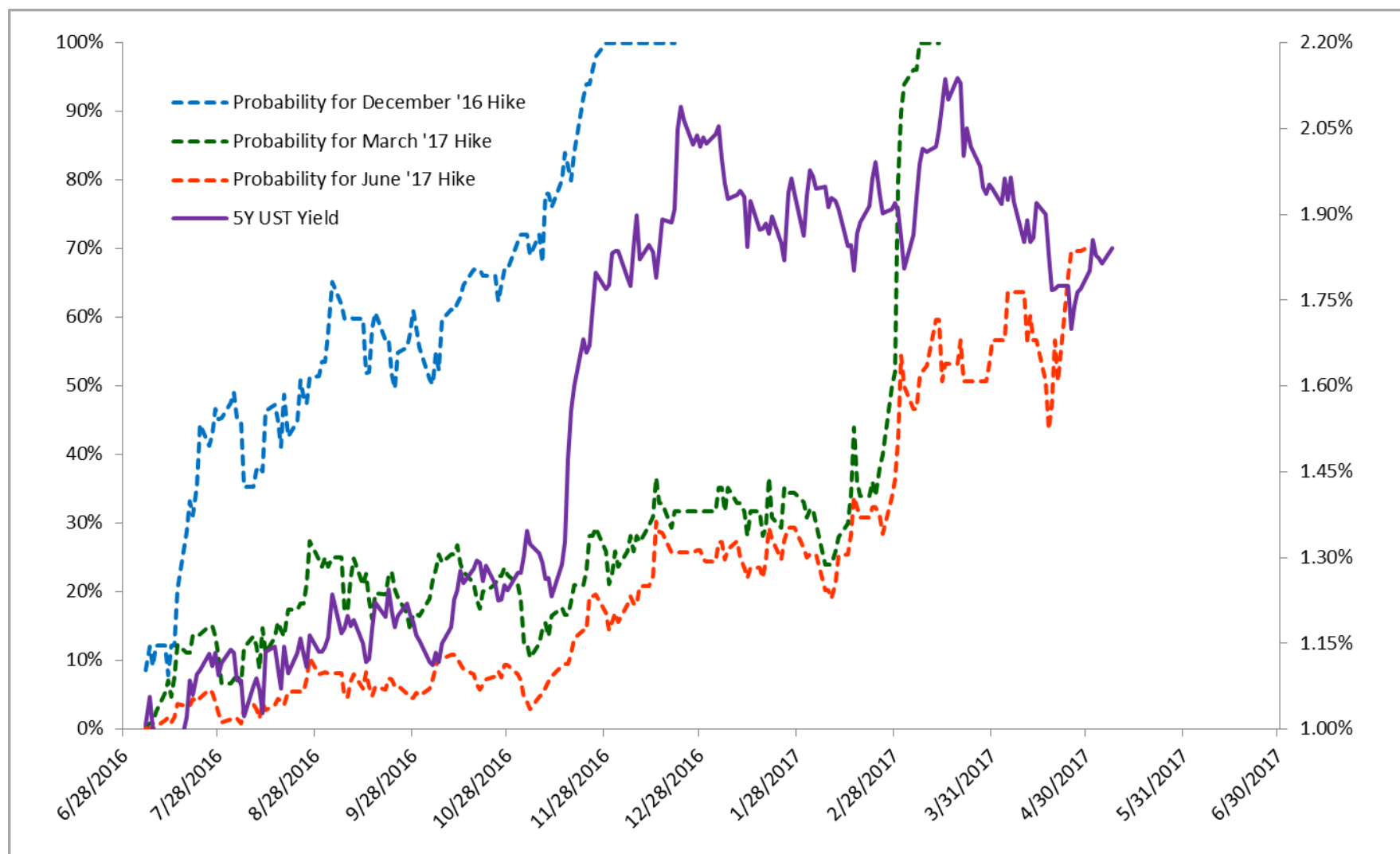


Looking Ahead: Federal Reserve Interest Rate Projections

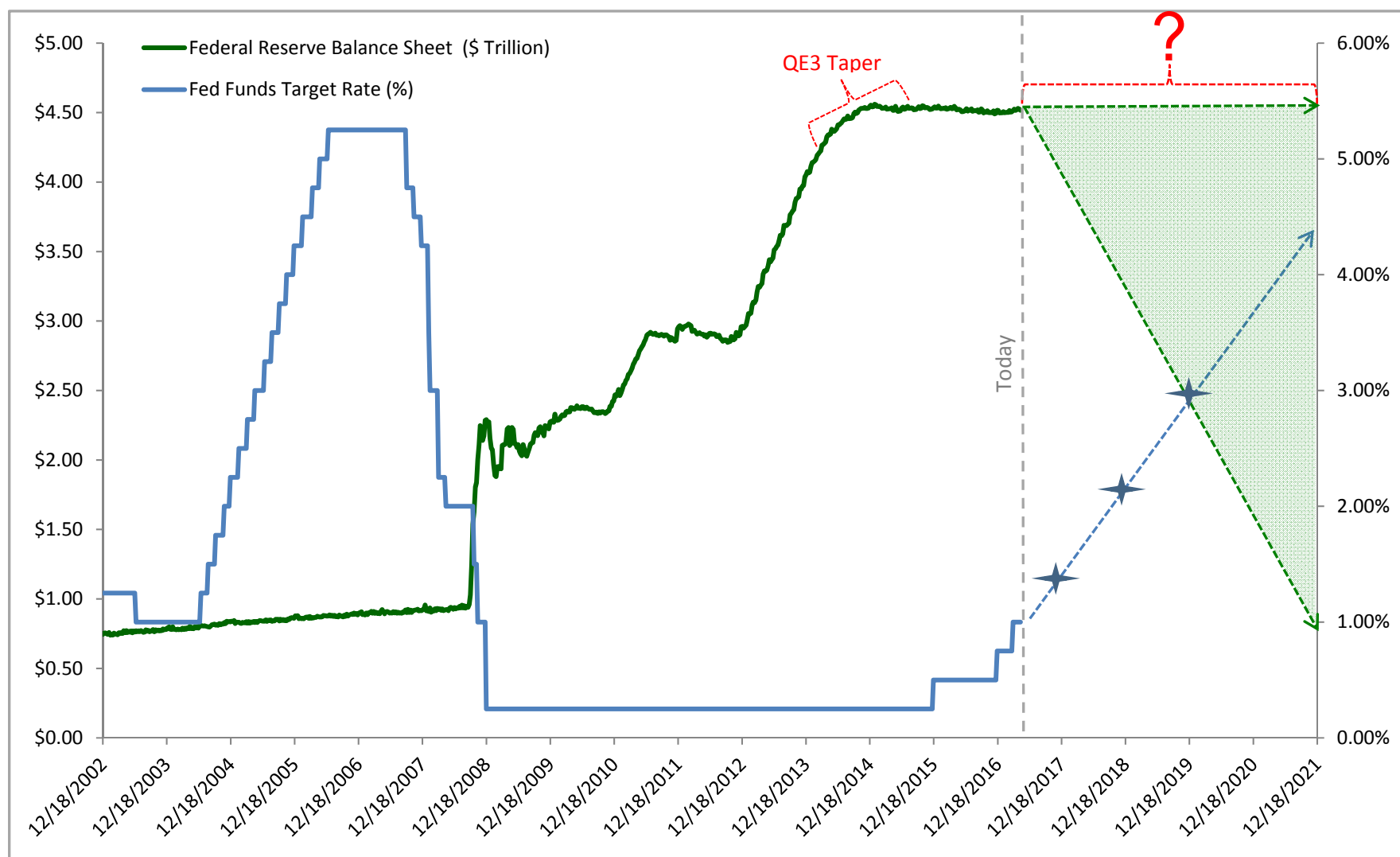


- After the March FOMC Meeting, Fed officials increased the federal funds rate by 25 basis points. The Fed kept the “dot plot” mostly unchanged, but did raise the 2019 target to 3.0% from 2.875%, while maintaining its forecast of 2 more increases this year.
- Chairwoman Yellen reiterated that the economic outlook is strong and that job gains are “solid.” Yellen commented on improving inflation (“will stabilize around 2%”), previously stating it would “rise to 2%.” The market will continue to keep a close eye on inflation data, as greater inflationary pressure could force the Fed to move more quickly.
- **Currently, the probability for a rate hike in June 2017 is 70.4%.**

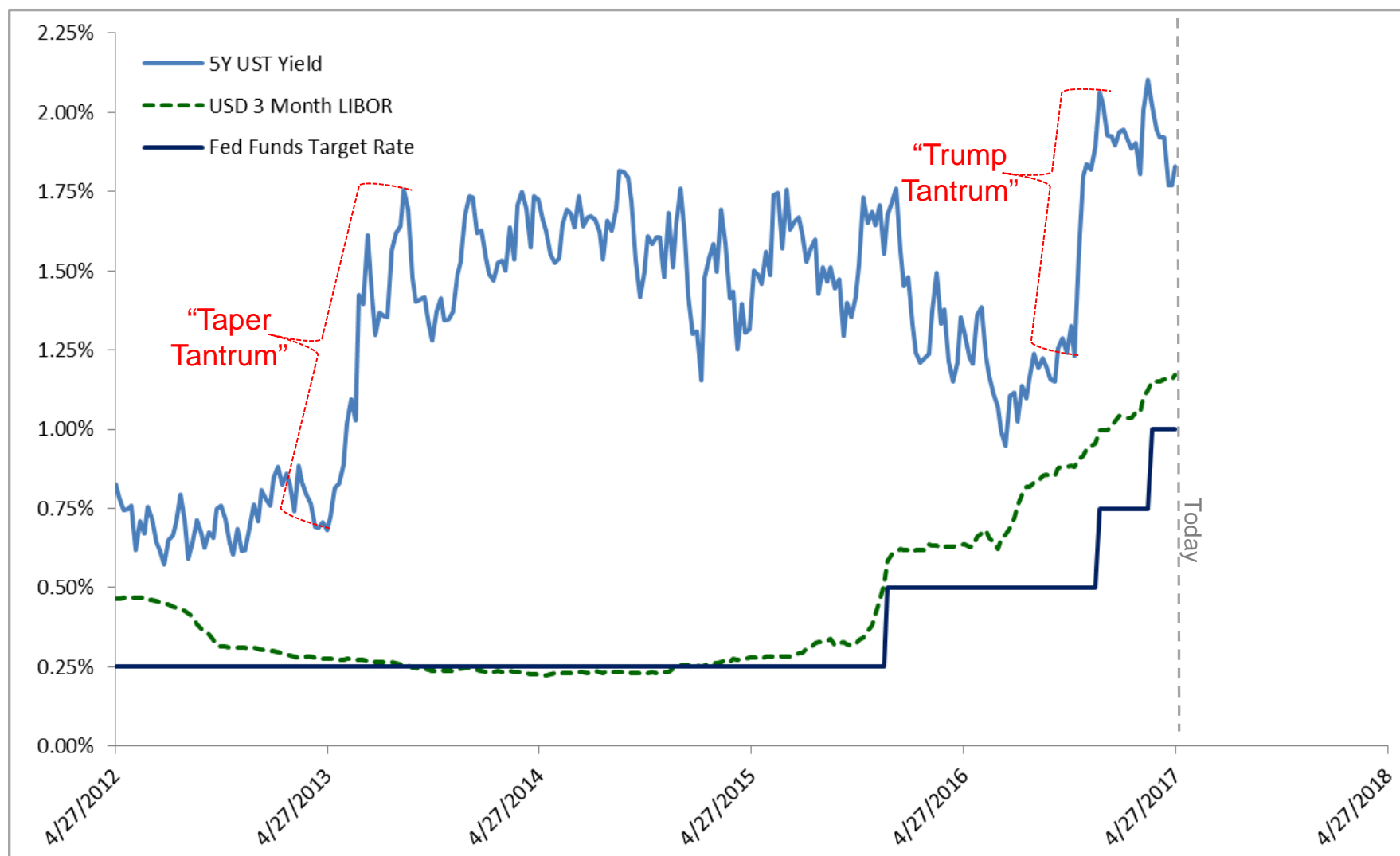
Looking Ahead: Market Implied Probabilities for a Fed Policy Change (Rate Hike) - since June 2016



Looking Ahead: What has the Fed Signaled for Future Changes to Policy



What to Expect: How the Market Has Reacted To Changes in Monetary and Potential Fiscal Policies



Market Outlook: Potential Drivers of Federal Reserve Policy Over the Next Three Years

1. Payrolls, Inflation and other Economic Indicators
2. U.S. Equity Markets Historic Highs Despite Interest Rates Remaining Near Historic Lows
3. Global Central Bank Policy
 - ECB, BoE, BoJ
4. Fiscal Policy
 - Healthcare Reform
 - Tax Reform
 - Infrastructure Spending
5. Geopolitical Risks
 - North Korea
 - European Union (Brexit, Frexit, etc)
 - U.S. Relations with Russia
6. The Unknown...

Q & A Session

Citizens
Commercial Banking™

Disclaimer

The contents of this document are indicative and are subject to change without notice. This document is intended for your sole use on the basis that before entering into this, or any related transaction, you will ensure that you fully understand the potential risks and return of this, and/or any related transaction and determine it is appropriate for you given your objectives, experience, financial and operational resources, and other relevant circumstances. You should consult with such advisers as you deem necessary to assist you in making these determinations. The Citizens Commercial Banking ("Citizens") will not act and has not acted as your legal, tax, accounting or investment adviser or owe any fiduciary duties to you in connection with this, or any related transaction and no reliance may be placed on Citizens for advice or recommendations of any sort. Citizens makes no representations or warranties with respect to the information, and disclaims all liability for any use you or your advisers make of the contents of this document. Where the document is connected to OTC financial instruments you should be aware that over-the-counter derivatives ("OTC Derivatives") can provide significant benefits but may also involve a variety of significant risks. All OTC Derivatives involve risks which include (inter-alia) the risk of adverse or unanticipated market, financial or political developments, risks relating to the counterparty, liquidity risk and other risks of a complex character. In the event that such risks arise, substantial costs and/or losses may be incurred and operational risks may arise in the event that appropriate internal systems and controls are not in place to manage such risks. Therefore you should also determine whether the OTC transaction is appropriate for you given your objectives, experience, financial and operational resources, and other relevant circumstances. Citizens and its affiliates, connected companies, employees or clients may have an interest in financial instruments of the type described in this document and/or in related financial instruments. Such interest may include dealing, trading, holding, acting as market-makers in such instruments and may include providing banking, credit and other financial services to any company or issuer of securities or financial instruments referred to herein.