

We Are All FIT-ers Now: Is Flexible Inflation Targeting fit to a new financial environment?

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Outline

- FRB and BOJ adopted explicitly Flexible Inflation Targeting (FIT) in 2012 and 2013, respectively.
- With possible exception of ECB, all major central banks in advanced and EM countries have adopted FIT
 - FIT means that output (gap) is also in the objective function
- Many central banks are converging to best practice of FIT
- Just when we have become FITers, some challenges have emerged
 - Some central banks are tasked with keeping financial stability. Is it compatible with FIT?
 - Should FIT respond to asset prices as monetary policy?
 - Should dual mandate be more explicit?
 - Under ZIRP, can QE be an effective instrument for FIT?
- How will FIT survive these challenges?
 - FIT will survive

FRB and BOJ

- FRB declared a 2% target in Jan. 2012
 - Earlier, publishing FOMC members’ “longer-run projections” (median and range)
- BOJ declared a 2% target in Jan. 2013
 - Changing from 1% goal in February 2012
 - Publishing Board members’ forecast (median and range)
- Both had previously resisted declaring a target agreed by members of FOMC or Board

Fed moving closer to FIT

January 2009

- FOMC members are asked to make “projections” of macroeconomic variables, four times a year, for the next three years.
- A majority view, eliminating highest three and lowest three, is called “central tendency.”
- Until June 2008, 3-year ahead projection of the inflation rate has been always close to, but below, 2.0 %.
 - In June 2008 projection, the inflation rate of 2010 was projected to be in the range of 1.8 to 2.0.
- However, in October 2008, the range dropped to 1.4 to 1.7.
- The FOMC was concerned that this projection may not be consistent with their medium run (implicit) inflation target
- January 2009, in the middle of global financial crisis, the FOMC started to issue “longer run” projection.
 - The longer run projection is the medium-term inflation rate when the desirable monetary policy is employed
 - Essentially, this is another way of expressing inflation targeting

Table 1

PCE inflation rate pojections by FOMC members							
Central tendency							
Time of projection	2008	2009	2010	2011	Longer Run		
October 2007	1.8 to 2.1	1.7 to 2.0	1.6 to 1.9				
January 2008	2.1 to 2.4	1.7 to 2.0	1.7 to 2.0				
April 2008	3.1 to 3.4	1.9 to 2.3	1.8 to 2.0				
June 2008	3.8 to 4.2	2.0 to 2.3	1.8 to 2.0				
October 2008		1.3 to 2.0	1.4 to 1.8	1.4 to 1.7	n.a.		
January 2009		0.3 to 1.0	1.0 to 1.5	0.9 to 1.7	1.7 to 2.0		
April 2009		0.6 to 0.9	1.0 to 1.6	1.0 to 1.9	1.7 to 2.0		
September 2009		1.0 to 1.4	1.2 to 1.8	1.1 to 2.0	1.7 to 2.0		
			2010	2011	2012	Longer run	
Novembe 2009			1.3 to 1.6	1.0 to 1.9	1.2 to 1.9	1.7 to 2.0	
January 2010			1.4 to 1.7	1.1 to 2.0	1.3 to 2.0	1.7 to 2.0	
April 2010			1.2 to 1.5	1.1 to 1.9	1.2 to 2.0	1.7 to 2.0	
June 2010			1.0 to 1.1	1.1 to 1.6	1.0 to 1.7	1.7 to 2.0	
				2011	2012	2013	Longer run
November 2010				1.1 to 1.7	1.1 to 1.8	1.2 to 2.0	1.6 to 2.0
January 2011				1.3 to 1.7	1.0 to 1.9	1.2 to 2.0	1.6 to 2.0
April 2011				2.1 to 2.8	1.2 to 2.0	1.4 to 2.0	1.7 to 2.0
July 2011				2.3 to 2.5	1.5 to 2.0	1.5 to 2.0	1.7 to 2.0
Notes:							
Source: Compiled by the author from various issues of FOMC members' projections							

File: ProjectionHistory

FRB adopting FIT (1)

“Longer-run Goals and Policy Strategy” January 25, 2012

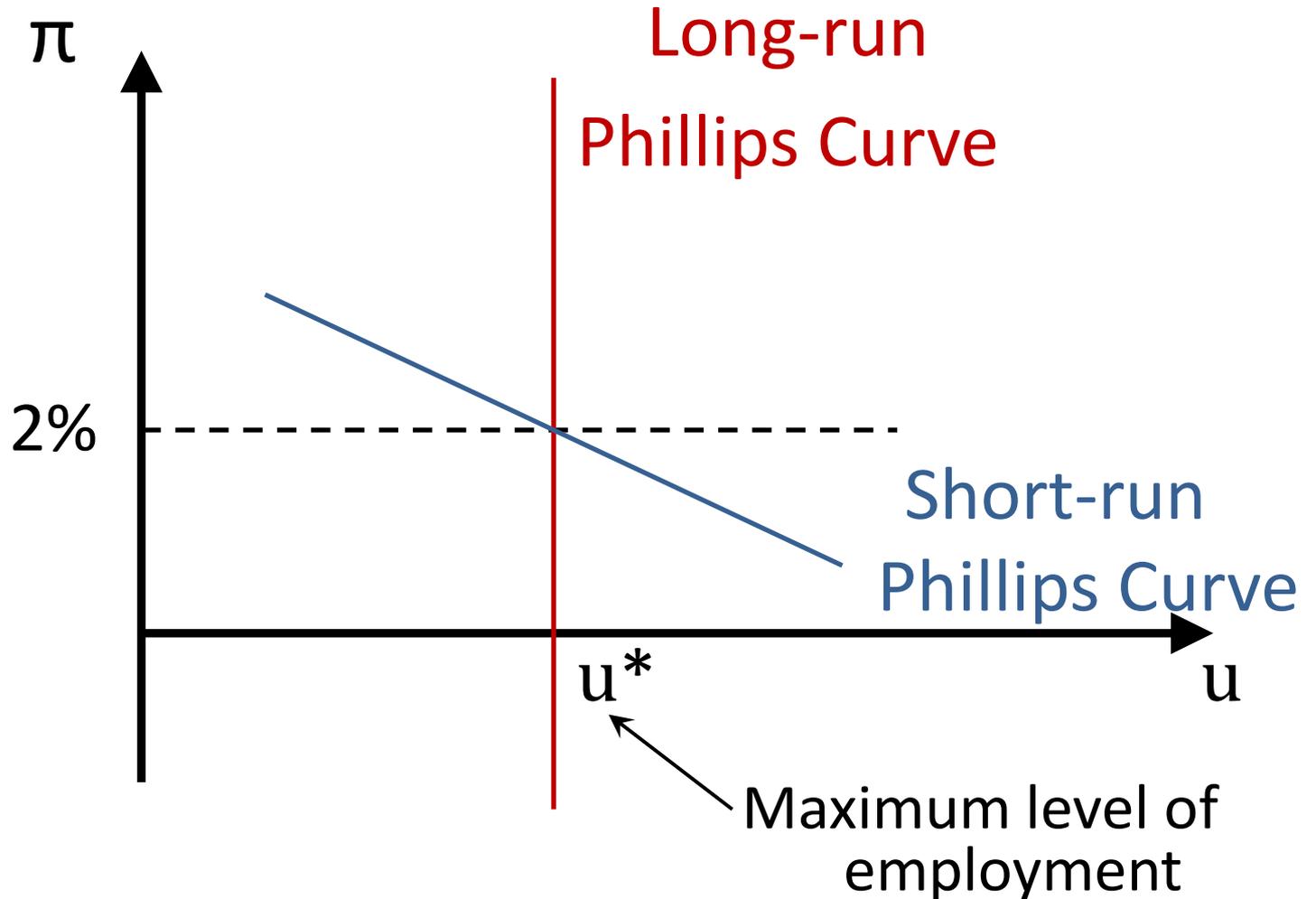
- FOMC decision (not only members’ forecast)
- Confirm dual mandate
- Monetary policy determines the longer-run inflation rate
 - “The inflation rate over the longer run is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation”
- 2% inflation targeting
 - “inflation at the rate of 2 percent, ... , is most consistent over the longer run with the Federal Reserve's statutory mandate.”
- Communication is important for anchoring inflation expectation
- The maximum level of employment cannot be determined to be monetary policy
 - “largely determined by nonmonetary factors that affect the structure and dynamics of the labor market.”
- **Combining these, FRB states the long-run Phillips curve is vertical**

After adoption of FIT,

	2011	2012	2013	Longer run		
November 2010	1.1 to 1.7	1.1 to 1.8	1.2 to 2.0	1.6 to 2.0		
January 2011	1.3 to 1.7	1.0 to 1.9	1.2 to 2.0	1.6 to 2.0		
April 2011	2.1 to 2.8	1.2 to 2.0	1.4 to 2.0	1.7 to 2.0		
July 2011	2.3 to 2.5	1.5 to 2.0	1.5 to 2.0	1.7 to 2.0		
		2012	2013	2014	Longer run	
November 2011		1.4 to 2.0	1.5 to 2.0	1.5 to 2.0	1.7 to 2.0	
January 2012		1.4 to 1.8	1.4 to 2.0	1.6 to 2.0	2	
April 2012		1.9 to 2.0	1.6 to 2.0	1.7 to 2.0	2	
June 2012		1.2 to 1.7	1.5 to 2.0	1.5 to 2.0	2	
		2012	2013	2014	2015	Longer run
September 2012		1.7 to 1.8	1.6 to 2.0	1.6 to 2.0	1.8 to 2.0	2
December 2012		1.6 to 1.7	1.3 to 2.0	1.5 to 2.0	1.7 to 2.0	2

Figure 1

FRB View (1) Longer-Run Goals

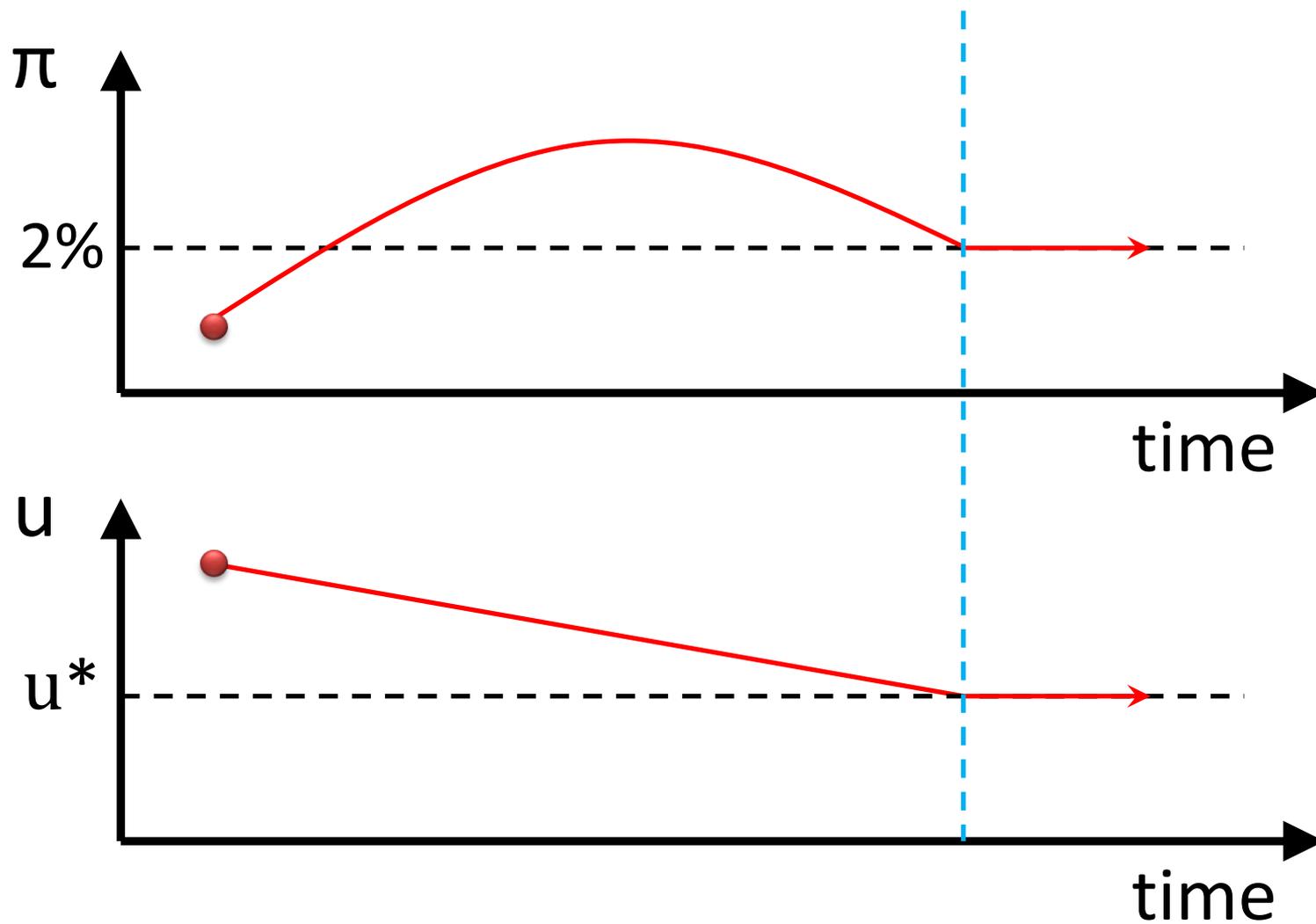


FRB adopting FIT (2)

- The level of maximum employment changes over time
 - “Consequently, it would not be appropriate to specify a fixed goal for employment”
 - “FOMC participants' estimates of the longer-run normal rate of unemployment had a central tendency of 5.2 percent to 6.0 percent,”
- In the short-run, deviations from two goals are treated in a balanced manner
 - “seeks to mitigate deviations of inflation from its longer-run goal and deviations of employment from the Committee's assessments of its maximum level. These objectives are generally complementary.”
 - When “not complementary, it follows a balanced approach in promoting them, taking into account the magnitude of the deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate.”
- These means that two objectives have weights; the inflation may overshoot or undershoot depending on the employment situation.

Figure 3

FRB View (3) example



BOJ inching toward FIT

“The Price Stability Goal in the Medium to Long Term”

- February 14, 2012 (three weeks after FRB adopting FIT), BOJ announced the “price stability goal as 1%”
 - “[T]he Board decided to express “the price stability goal in the medium to long term” in specific inflation rates by making some allowances as “a positive range of 2 percent or lower in terms of the year-on-year rate of change in the CPI.” Within this range, the Board decided to set a goal at 1 percent for the time being to clarify the inflation rate which the Bank's monetary policy aims to achieve.”

BOJ adopting FIT

The "Price Stability Target", January 22, 2013

- Policy Board decision
- Price stability mandate but with growth
 - "achieving price stability, thereby contributing to the sound development of the national economy."
- Inflation targeting
 - "the Bank sets the 'price stability target' at 2 percent"
- Anchoring expectation
 - "as prices are expected to rise moderately, it is judged appropriate to clearly indicate the target of 2 percent in order to anchor the sustainable rate of inflation."
- Flexibility (and dual mandate(?))
 - "The conduct of monetary policy has to be flexible by examining various risk factors, including those related to financial imbalances, in addition to the assessment of current developments and outlook for economic activity and prices, from the perspective of achieving sustainable growth with price stability."
- Getting out of deflation
- Caution
 - examining, as regards economic activity and prices over the next two years or so, whether the outlook deemed most likely by the Bank of Japan follows a path of sustainable growth under price stability.
 - examining, in a longer term, various risks that are most relevant to the conduct of monetary policy aimed at achieving sustainable growth under price stability.

Follow up

- March 20, 2013. New Governor Kuroda
- April 4, 2013. Announcement of Quantitative and Qualitative Easing (QQE)
- April 26, 2013. Semiannual “Outlook” document
 - Inflation projections of Board members were raised

Table 2

Inflation rate, projection		FY 2013	FY 2014	FY 2015
Oct 2012	Range	0.2 – 0.6	0.4 – 1.0	
	Median	0.4	0.8	
Jan 2013	Range	0.3 – 0.6	0.5 – 1.0	
	Median	0.4	0.9	
April 2013	Range	0.4 – 0.8	0.7 – 1.6	0.9 – 2.2
	Median	0.7	1.4	1.9
July 2013	Range		0.7 – 1.6	0.9 – 2.2
	Median		1.3	1.9
Oct 2013	Range		0.8 – 1.6	0.9 – 2.2
	Median		1.3	1.9

1. The forecast range is a range of point estimates by a majority of Policy Board members, i.e., excluding the highest and lowest figures.
2. Individual Policy Board members make their forecasts assuming the effects of past policy decisions and with reference to views incorporated in financial markets regarding future policy.
3. The scheduled consumption tax hikes for April 2014 and October 2015 -- to 8 percent and 10 percent, respectively -- are incorporated in the forecasts. In terms of the outlook for the CPI, individual Policy Board members make their forecasts based on figures excluding the direct effects of the consumption tax hikes.

File: BOJ Members Forecasts

Inflation Targeting

Convergence to best practice

- Declare a numerical target as an institution's target
 - A point (2%) or a range (1-3%)
- Independence
 - Legal; Governor term
- Price stability target (single or dual)
- Communication of forecasts and bank's view
 - “inflation report” or members' forecast
 - Governor's press conference
 - Future interest rate path (FRB, BOJ—no; Riksbank yes)
 - Minutes publication
 - Voting records
 - Transcript publication

So we are all FIT-ers

- But, just when we have become all FITers, some challenges have emerged,,,

“Is Inflation Targeting Dead? Central Banking After the Crisis” —VoxEU (2013)

- FIT must have a flaw (VoxEU introduction)
 - [pre-crisis]FIT could not prevent a global financial crisis
 - [post-crisis] FIT is not helpful in stimulating the economy
- Can a FIT framework handle these challenges?
 - **Prevention of a bubble**
 - Should FIT respond to asset prices as monetary policy?
 - Some central banks are tasked with keeping financial stability. Is it compatible with FIT?
 - **Helping growth?**
 - Dual mandate helps in the post-crisis recovery?
 - Under ZIRP, can QE be an effective instrument for FIT?

Financial supervision role?

- After global financial crisis, BOE and FRB were tasked with financial supervision role, which they did not have previously
 - Any possible conflict between monetary policy and financial supervision
- Central banks vary on the role of financial supervision
 - BOJ and ECB do not have supervision role
 - BOJ join the FSA in monitoring banks (but no power to discipline them)
 - BOT, BI and other EM central banks tend to have the supervision role also
 - Lack of competent supervisor outside the central bank.
 - BOK does not have the supervision role
- I think having the supervisory role does not undermine FIT

Preventing a financial bubble?

- Some critics (esp. Bill White and BIS) argue that FIT may allow a bubble to form, and, when burst, it results in financial systemic instability.
 - A bubble may get large while the CPI inflation rate stays low and stable, e.g., the second half of 1980s in Japan; and the subprime bubble in the United States, in 2004-07
- They argue that monetary policy should be adjusted for a large asset price increase or decrease.
- Essentially they argue that asset price should be added to the objective variable, along with the CPI inflation rate and employment (or GDP gap)
- I think, prevention of a financial bubble can be done through macro-prudential measures, not necessarily monetary policy

Case of Subprime Crisis leading to Global Financial Crisis

- Who to blame?
 - Lack of Supervision and Regulation on Securitization
 - Conflict of interest of mortgage originators
 - Conflict of interest of rating agencies
 - Failure of risk evaluations of CDOs
 - Failure of supervision over investment banks, insurance companies (AIG)
 - Global Imbalances
 - Risk tolerance
 - Too low interest rates (lower than the Taylor rule)
 - Failure of monetary policy?

Case of Earlier debate in Japan: Precursor to the subprime crisis

- Housing bubble in 1984-89; but CPI inflation rate remained low until mid-1989
- Bursting of the bubble in 1990-2003
- Was the monetary policy in the 1980s to blame?
 - CPI inflation rate was low and stable
 - Even if FIT had been adopted, monetary policy would not have been different and creating the bubble would have been the same
- Then should BOJ have tightened earlier? By how much?
- Or is it a failure (lack) of financial supervision?
- This experiences haunted BOJ—became a hawk in the 2000s, resisting pressures of 2% FIT and QE
 - Fighting the last war?

Getting out of deflation/stagnation

- Would FIT help economic recovery from ZIRP deflation and stagnation?

Explicit dual mandate?

- Dual mandate of FRB used to be viewed as a scar on its legal structure by many scholars. The single mandate has a higher score on the independence scoring of central banks. Single-mandate on price stability, like Bundesbank before euro and ECB now, were viewed as a superior institutions
- After the global financial crisis, dual mandate seems to be viewed more positively
- Flexible inflation targeting is like dual mandate anyway.
- BOJ law also put price stability as a foundation for a sound economic development, implying price stability cannot be pursued without paying attention to the real side of the economy
- ECB has a single-mandate defined by the Treaty. In practice, during the European sovereign debt crisis, many scholars think that ECB stepped out of single-mandate on price stability, introducing LTRO and OMT
- Having a dual mandate is actually good for FIT in getting out of a recession or deflation, e.g., recall FRB view (3)

Is QE effective?

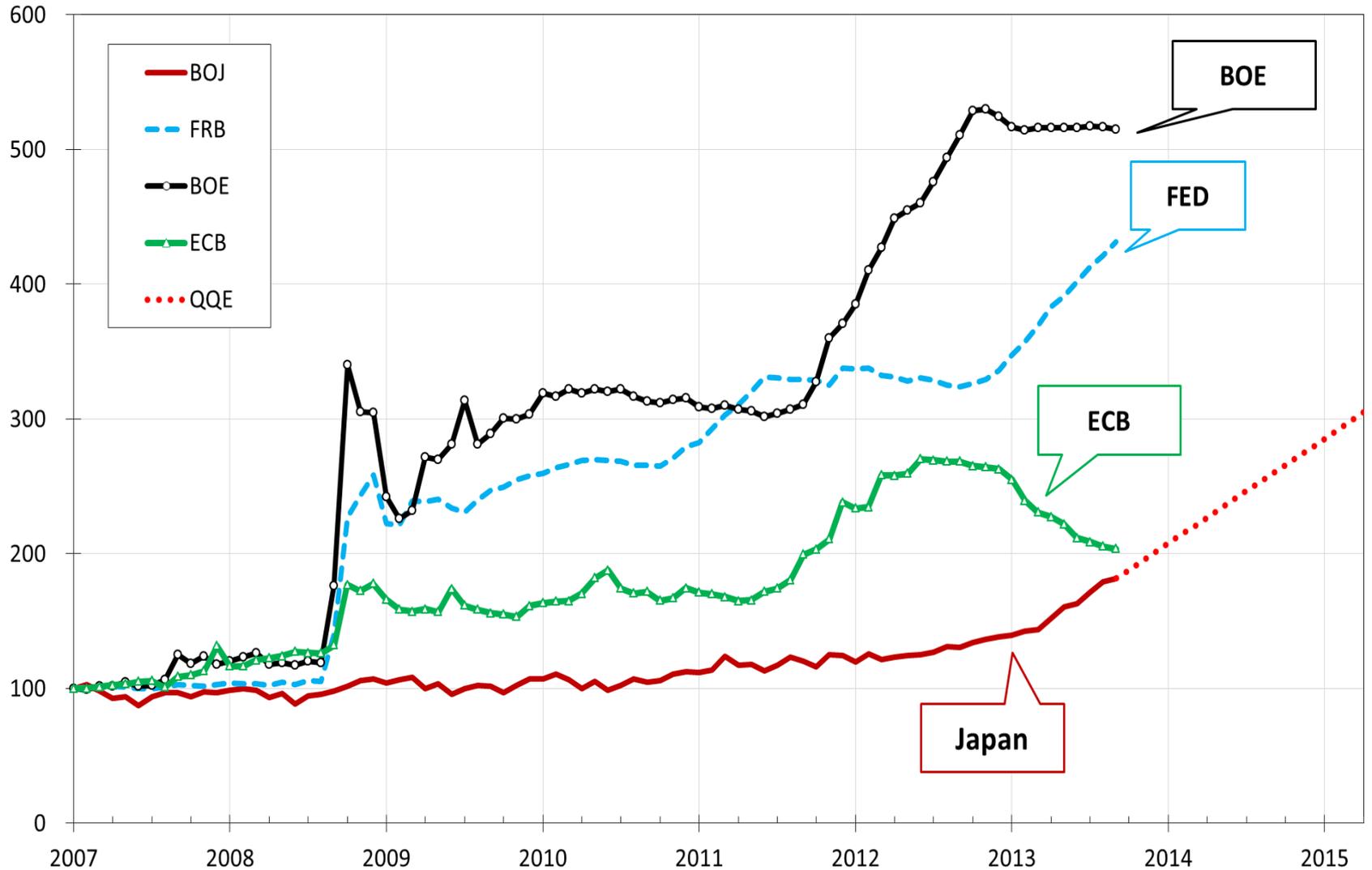
- Under ZIRP, a main monetary policy instrument becomes quantitative easing (QE)
- But, there is a debate over effectiveness of QE
 - Some think QE is ineffective in stimulating the economy
 - Others think QE with FIT will be effective in stimulating economy
 - Transmission channels may be different
 - Exchange rate
 - Stock prices

Major central banks (FRB, ECB, BOE, BOJ) are adopting QE now

- B/S expansion experiences
 - FRB, ECB, BOE have adopted ZIRP and QE since the beginning of Global Financial Crisis.
 - FRB had QE1 (credit easing), QE2, and QE3
 - BOJ's earlier experiences: QE from 2001 to 2006
 - BOJ has adopted QE since April 2013
 - It is called Quantitative and Qualitative Easing
- B/S of FRB, ECB, BOE after 2007 → Figure 4

Figure 4

Balance Sheets of 4 Major Central Banks (Jan 2007=100)



BOJ, QQE (April 4, 2013)

- The Bank will achieve the price stability target of 2 percent in terms of the year-on-year rate of change in the consumer price index (CPI) at the earliest possible time, with a time horizon of about two years. In order to do so, it will enter a new phase of monetary easing both in terms of quantity and quality. It will double the monetary base and the amounts outstanding of Japanese government bonds (JGBs) as well as exchange-traded funds (ETFs) in two years, and more than double the average remaining maturity of JGB purchases.

Effectiveness Debate

- Effective
 - Financial stability
 - Real activities, via
 - Lowering long rates
 - Portfolio balance
 - Stock prices
 - Exchange rate
 - Preventing deflation
 - Getting out of deflation
- Not Effective
 - (agreed)
 - No on real activities
 - Not stimulating investment
 - No evidence of portfolio rebalance (just excess reserves)
 - Temporary asset bubble
 - Beggar-thy-neighbor policy
 - Without real activities, deflation cannot be avoided; or getting out of it is impossible

QE is effective in Japan: Expectation of BOJ QQE of 2013

(mid-Nov, 2012 to end-April 2013)

- Yen depreciation and stock price rise, mid-Nov to early-April
 - The USD/JPY moved from 78 yen to 98 yen/\$ → Figure 3
 - 20% depreciation
 - Stock prices (Nikkei 225): 8660 → 13,800 → Figure 4
 - 50% increases
- These happened **even before** the actual QE implementation
- PM Abe's approval rating has increased
 - Emphasis on the economy is working
 - Strong leadership (e.g., inflation targeting); No wobbling
 - His words were “believable”
- Communication is important

Figure 3

Yen/USD (2012/1/1/- 2013/10/10)

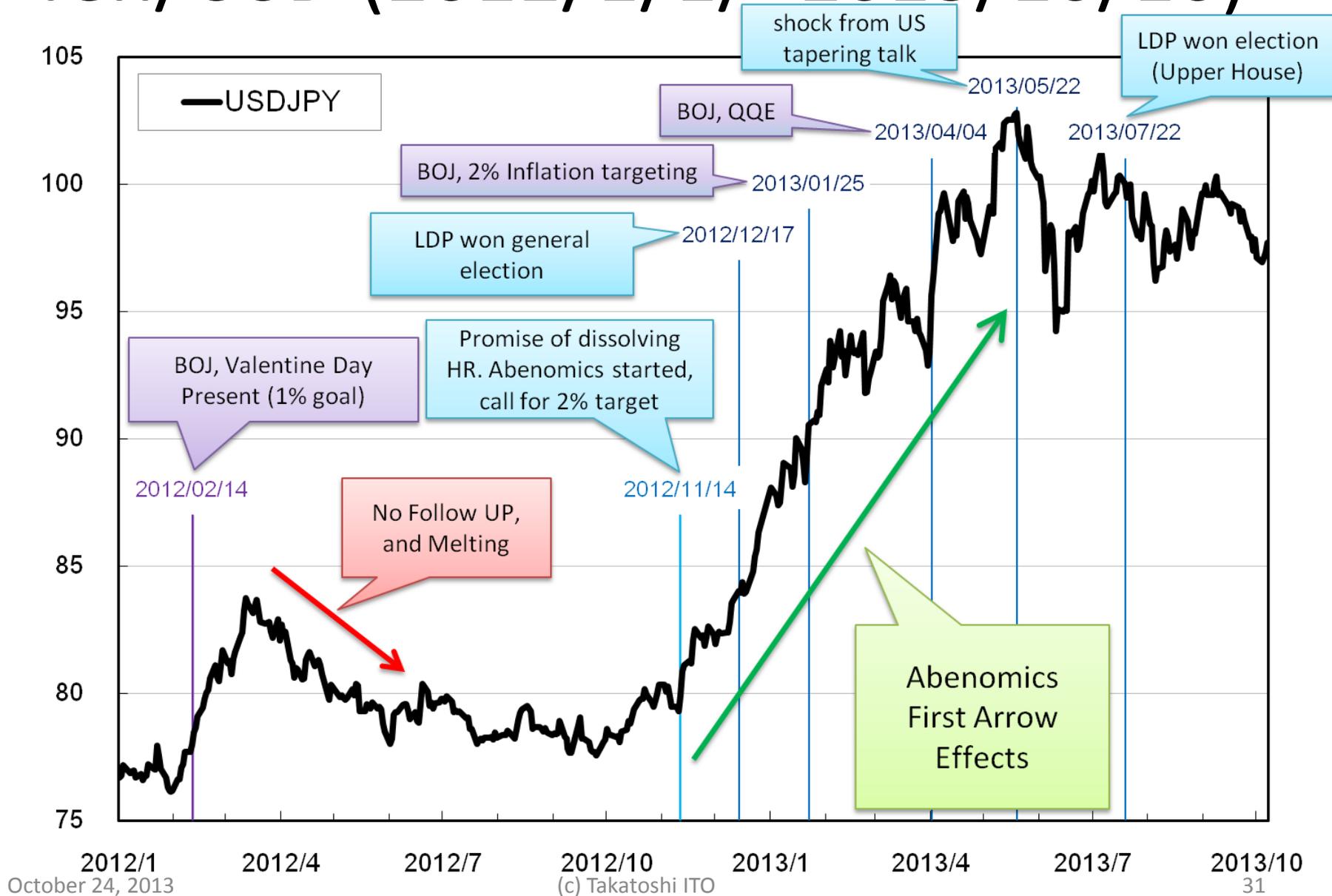
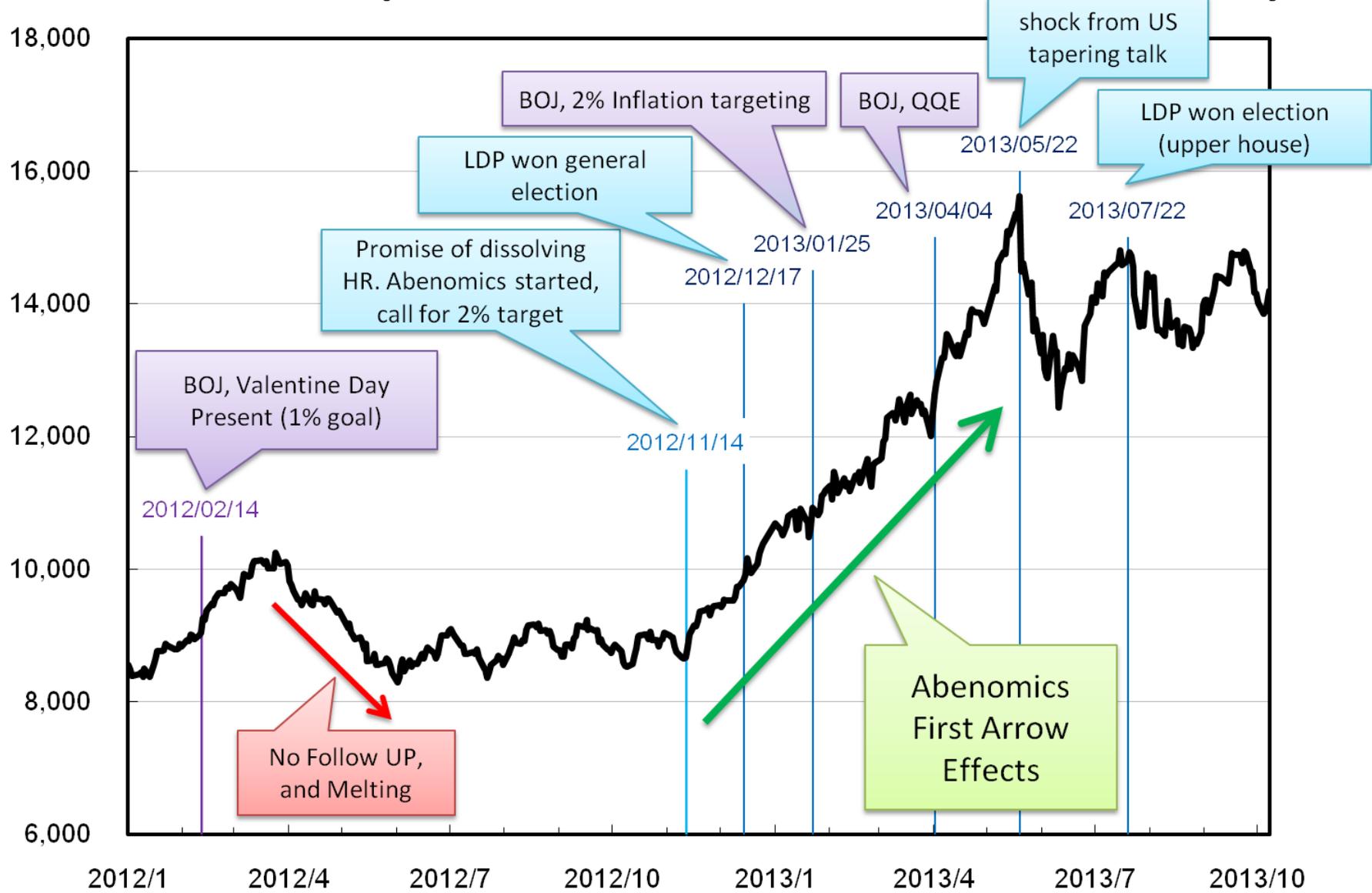


Figure 4

Nikkei 225(2012/1/1/- 2013/10/10)



Japanese QE as joining currency wars?

- No.
 - No action when BOE, FRB, and ECB expanded B/S, and suffered
 - So, it is a catch-up game to BOE, FRB, and ECB
 - Going back to 100 yen/\$ is a normalization
- QE is for strengthening domestic economies, not targeting the exchange rate level
- Why is QE more often mistaken for currency wars (as opposed to lowering the policy rate)?
 - Maybe reliance on the exchange rate is higher in QE

Conclusion

- Many central banks have become FITer
 - FRB in 2012 and BOJ in 2013 became FITer
 - They have converged to best practices
- Some critics thinks FIT has problems:
 - Financial stability may override FIT
 - Prevention of an asset bubble may override FIT
 - Dual mandate may upset FIT
 - Under ZIRP, QE may not be effective to achieve FIT
- However, after examining these issues, central banks are better off to **STAY FIT**