

# Economic Advisory Panel Meeting

## April 18, 2008

### Agenda:

Overview of FRBNY Central Scenario  
(Dick Peach)

Economics of the Federal Reserve's New Lending Facilities  
(Jamie McAndrews)

Risks to Central Scenario  
(Simon Potter)

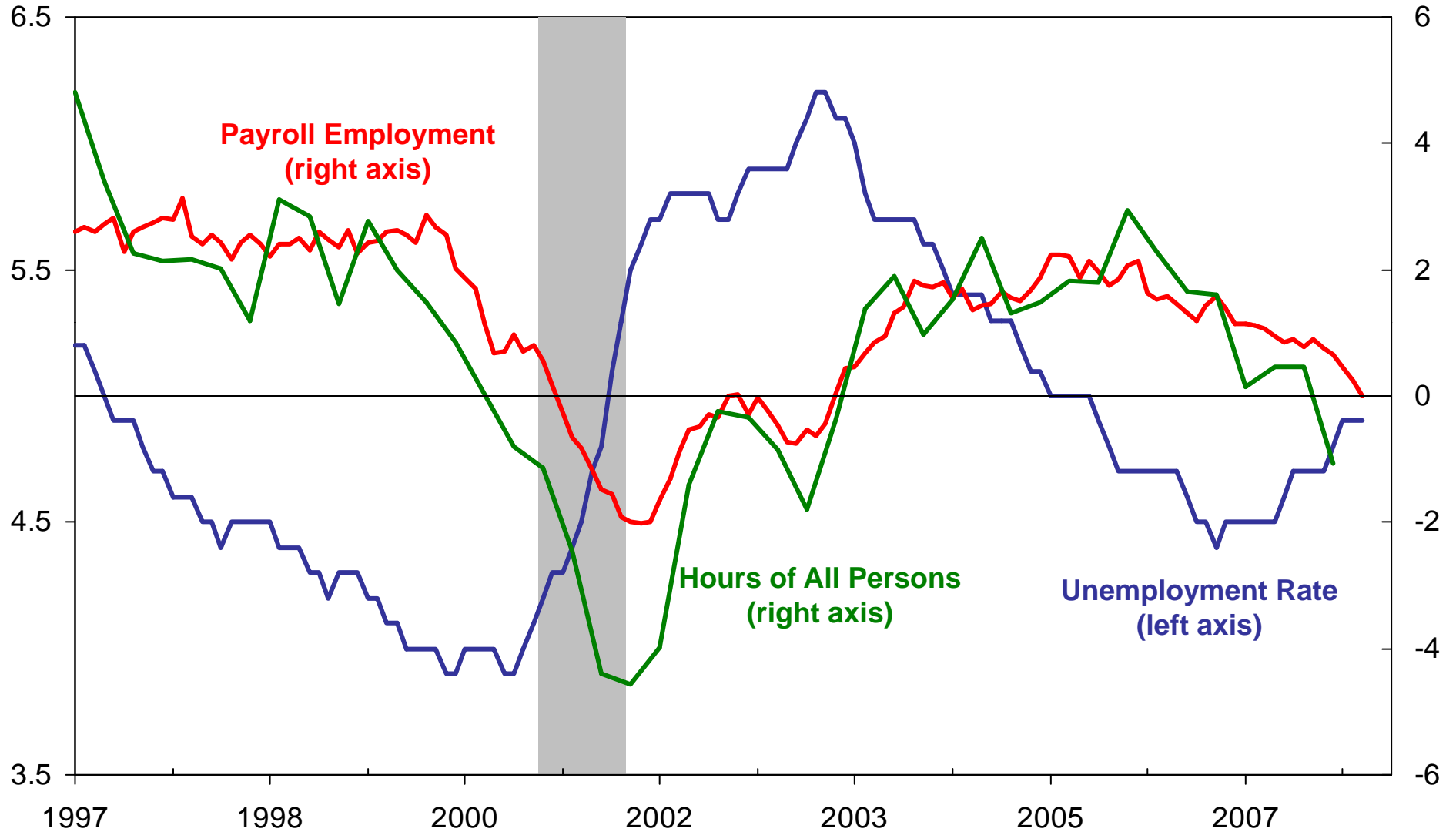
Go-round on monetary policy



# Labor Market Indicators

3-Month Moving Average

6-Month % Change (Annual Rate)



Source: Bureau of Labor Statistics

Note: Shading represents NBER recessions.

# FRBNY Forecast

	<u>2008H1</u>	<u>2008H2</u>	<u>2007</u>	<u>2008</u>		<u>2009</u>	
Real GDP	-0.8	2.8	2.5	1.0	(2.6)	3.0	(2.7)
Total PCE Deflator	3.4	2.0	3.4	2.7	(1.9)	1.7	(1.7)
Core PCE Deflator	2.0	1.8	2.1	1.9	(1.7)	1.8	(1.6)
Unemployment Rate*	5.6	6.0	4.8	6.0	(4.6)	5.6	(4.6)
<u>Growth Contributions</u>							
Final Sales to Domestic Purchasers	-0.4	1.8	2.0	0.7	(2.3)	2.8	(2.6)
Consumption	0.7	1.8	1.8	1.2	(1.9)	1.9	(1.8)
Residential Investment	-1.1	-0.6	-1.0	-0.9	(-0.4)	0.3	(0.1)
Business Fixed Investment	-0.2	0.4	0.7	0.1	(0.4)	0.4	(0.3)
Government	0.2	0.3	0.5	0.3	(0.4)	0.3	(0.3)
Inventory Investment	-0.7	0.6	-0.3	-0.1	(0.0)	0.3	(0.0)
Net Exports	0.4	0.4	0.8	0.4	(0.3)	-0.1	(0.1)

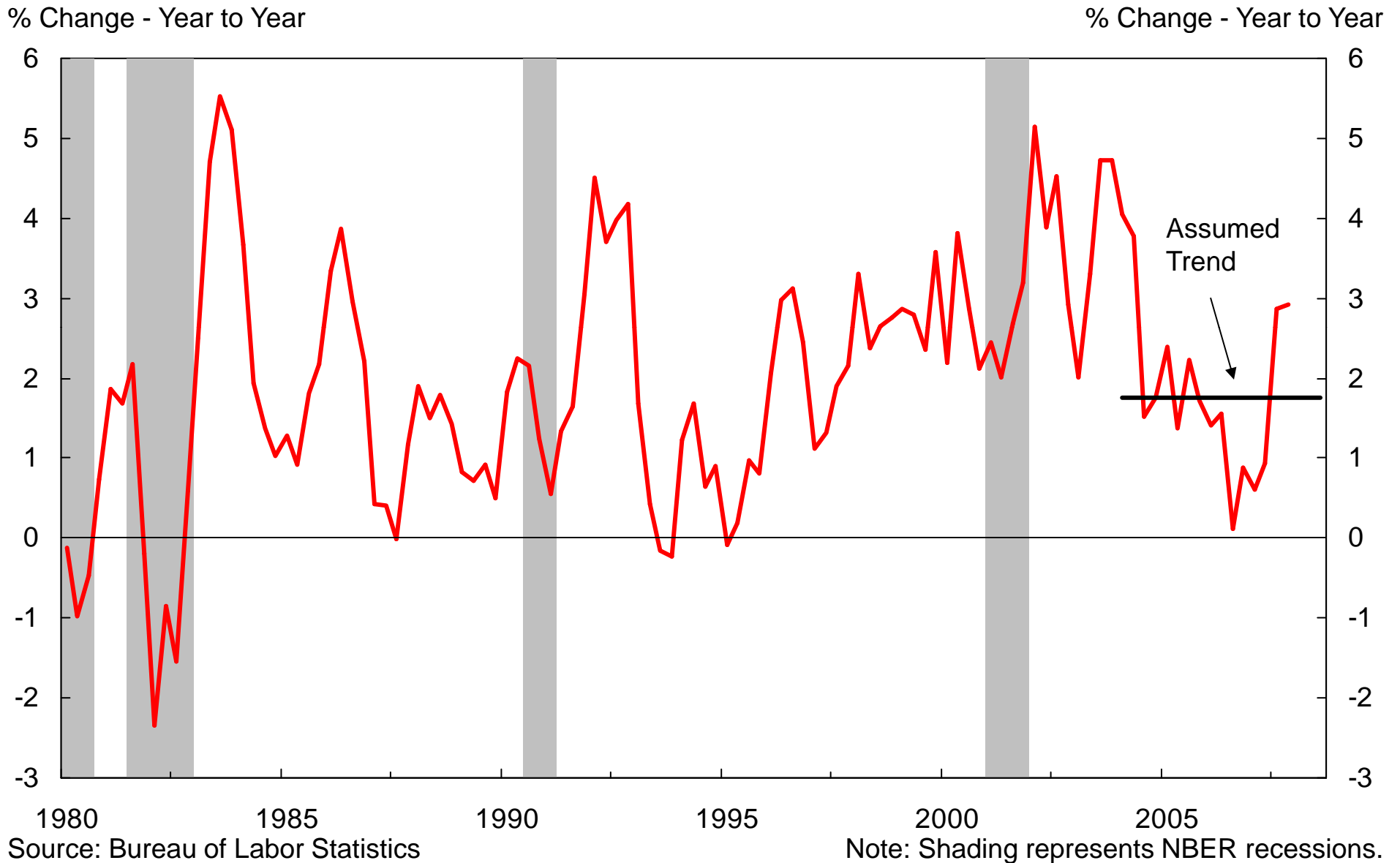
\* End of period level.

Note: Oct 2007 forecasts in parentheses

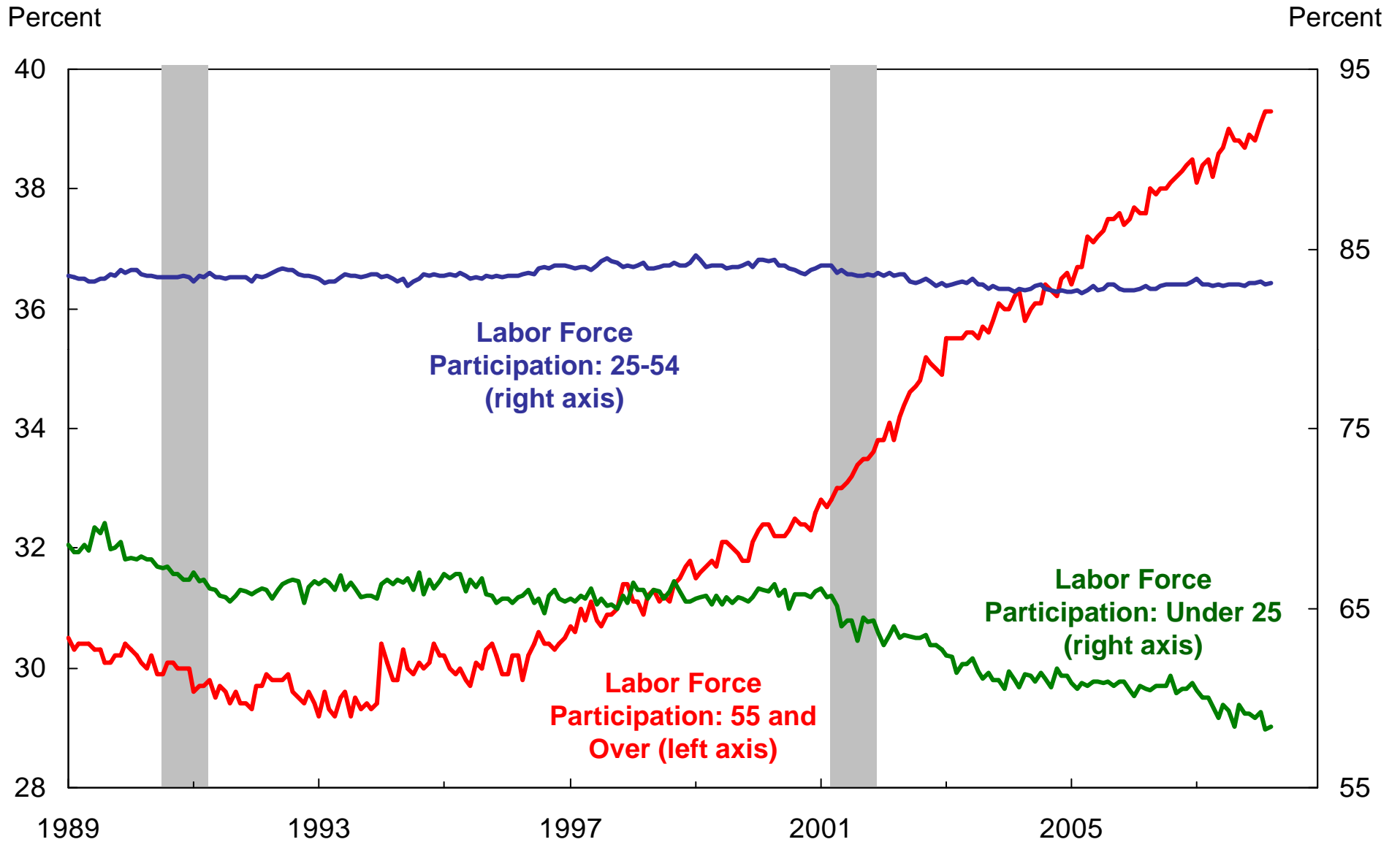
# Key Issues Underlying Forecast

- Potential GDP growth estimated at 2  $\frac{3}{4}$ %.
- Housing starts bottom out in second half of 2008.
- Home prices decline through 2009.
- Personal saving rate rises gradually over the forecast horizon.
- Export growth slows but remains a significant source of final demand.
- Inventories are near desired levels.
- Downturn relatively short and shallow due to aggressive policy response.

# Nonfarm Business Sector: Output per Hour/All Persons



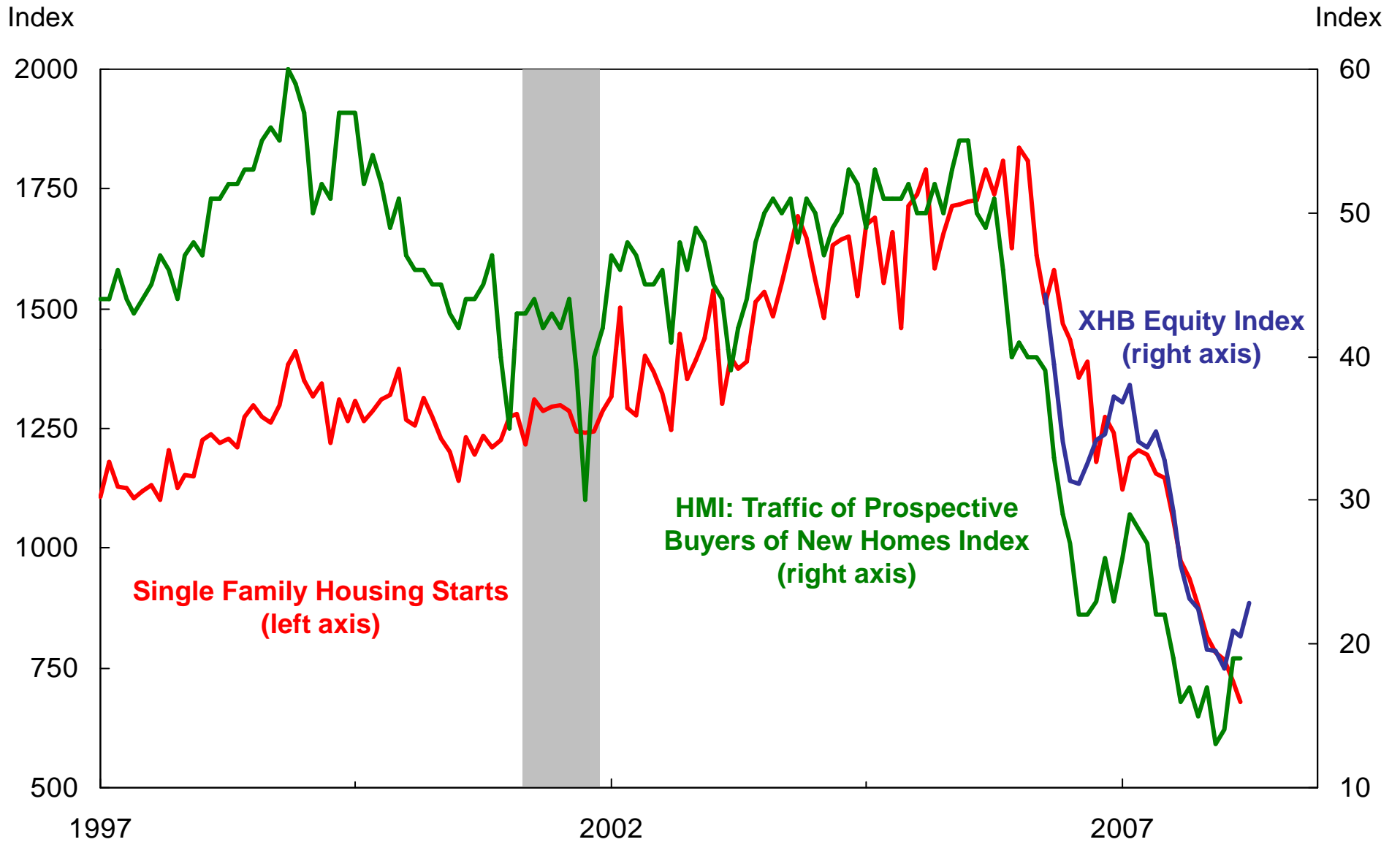
# Labor Force Participation



Source: Bureau of Labor Statistics

Note: Shading represents NBER recessions.

# Housing Market Indicators



Source: MBA, National Association of Home Builders

Note: Shading represents NBER recessions.

# Agency MBS Option-adjusted Spread

30-year

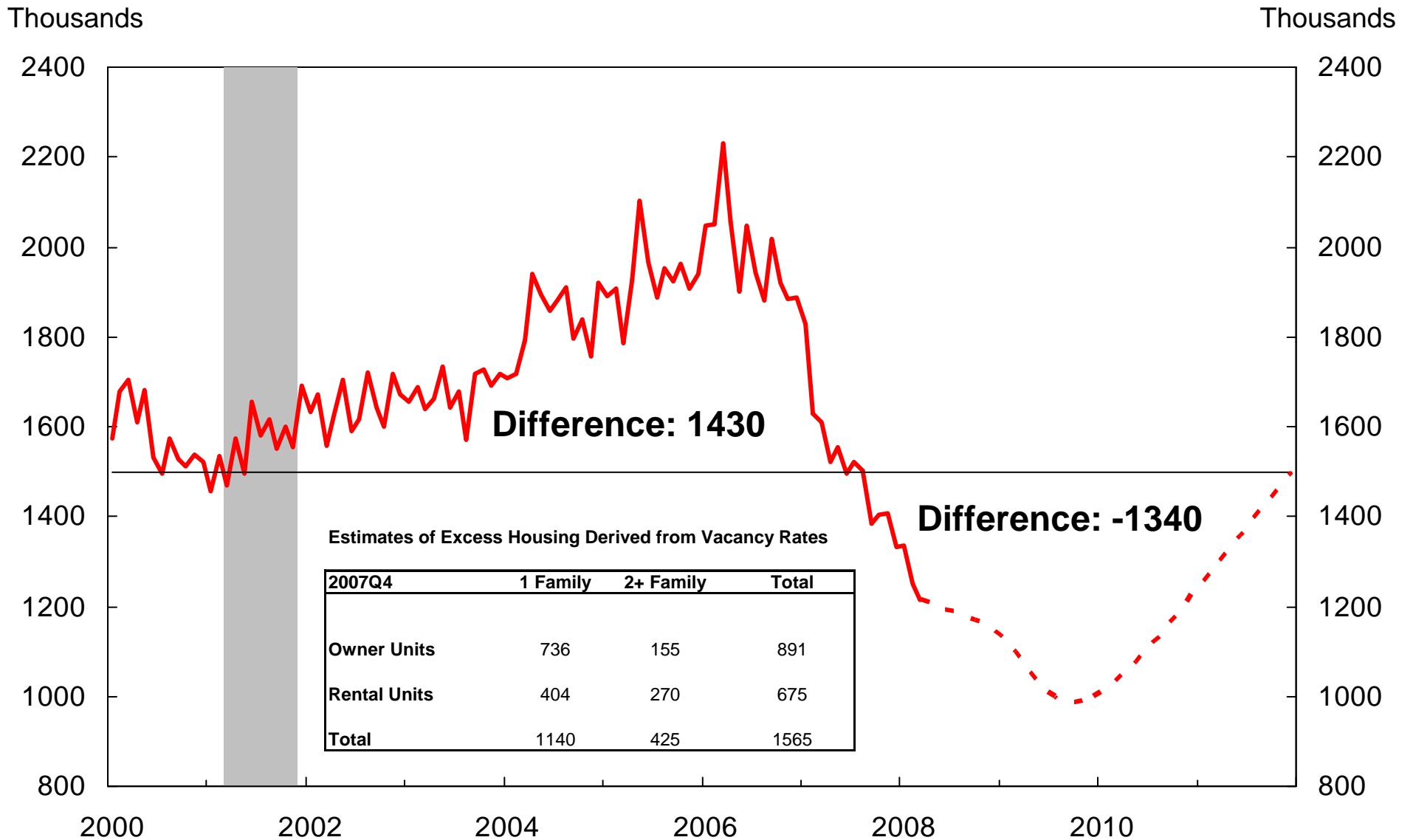
Basis Points

Basis Points





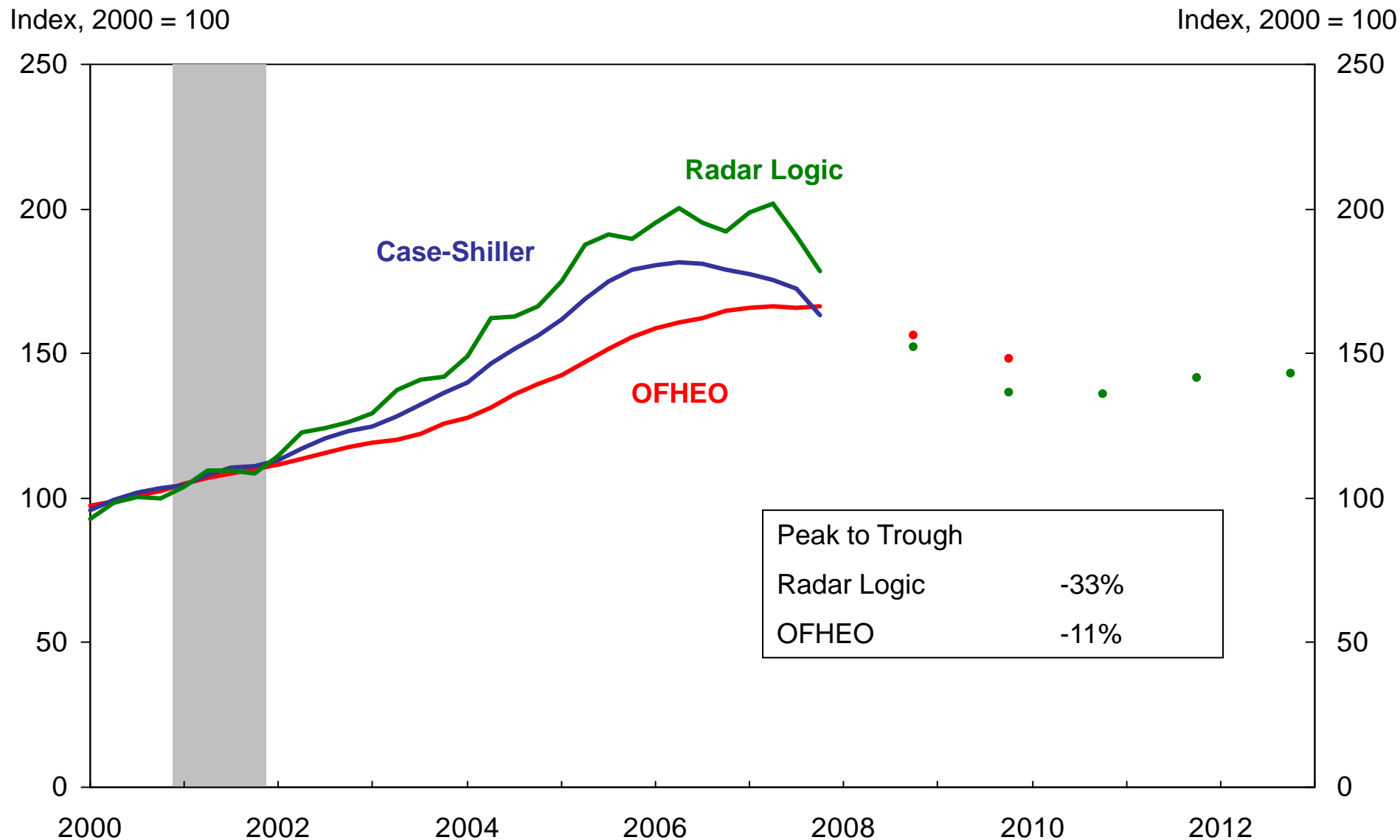
# Housing Completions



Source: Census Bureau

Note: Shading represents NBER recessions.

# Actual and Projected House Price Indices

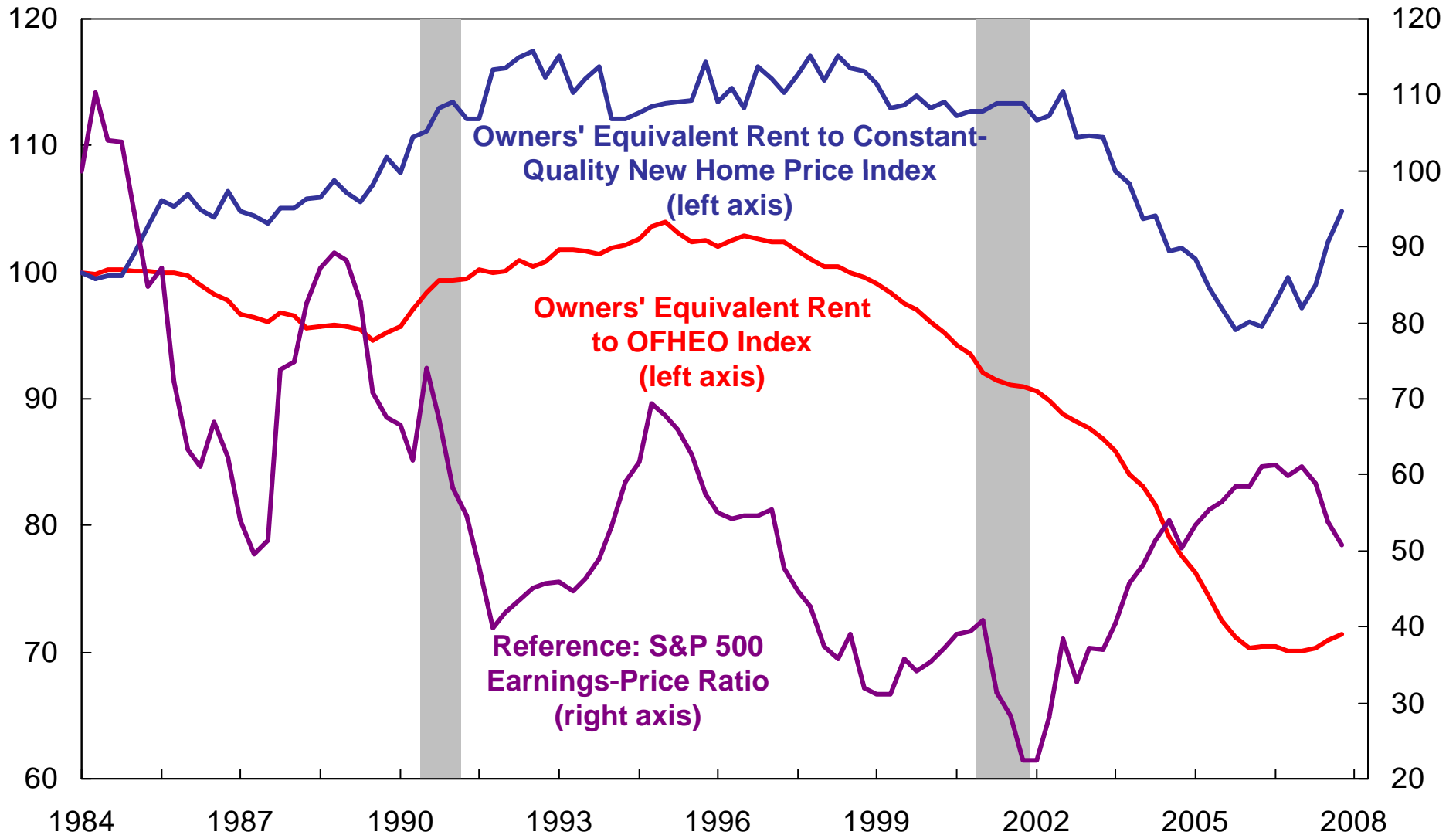


Source: OFHEO, S&P, RL

# Ratio of Owners' Equivalent Rent to Alternative Price Indexes

Index: 1984Q1=100

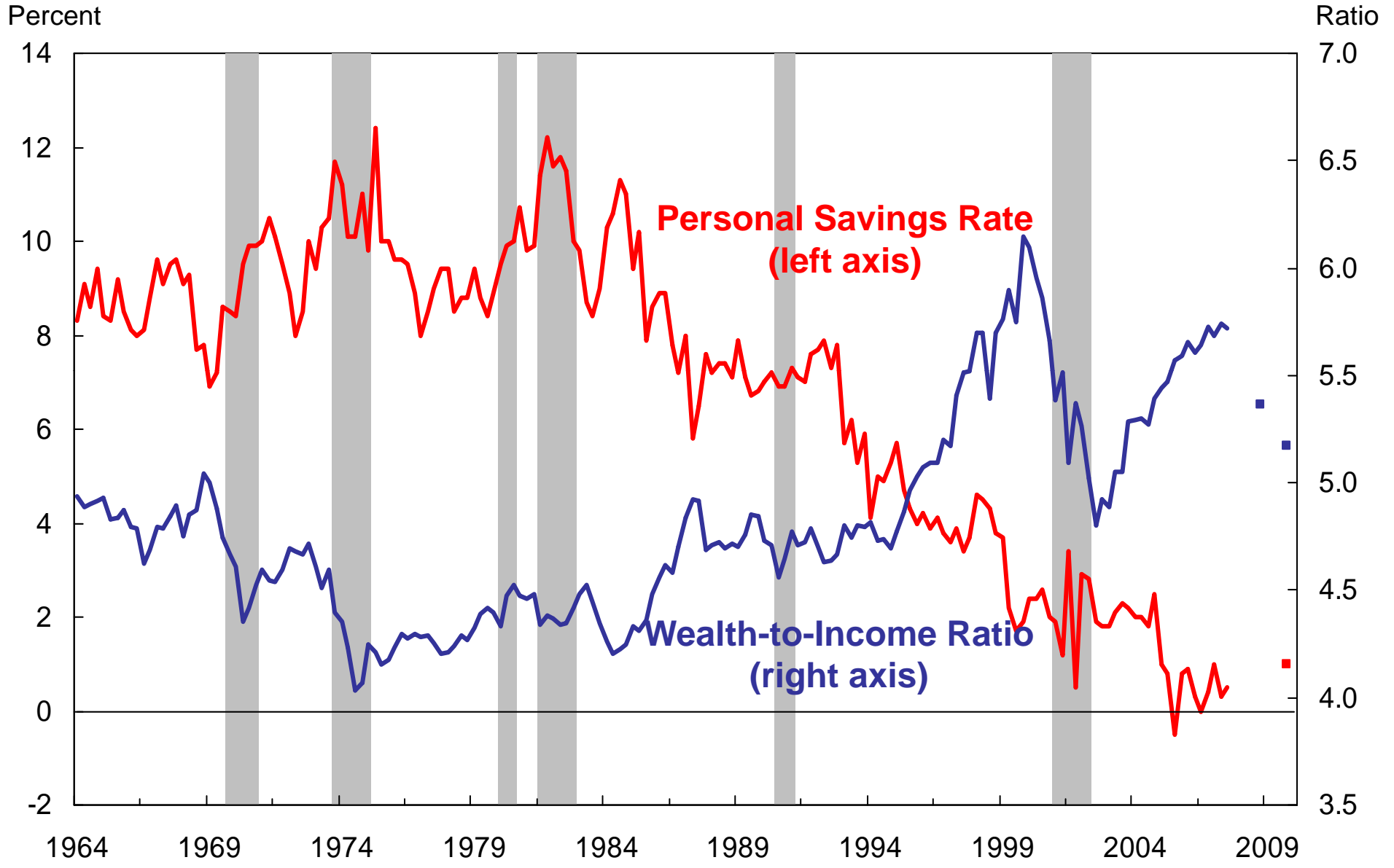
Index: 1984Q1=100



Source: BEA, OFHEO, Census Bureau and S&P

Note: Shading represents NBER recessions.

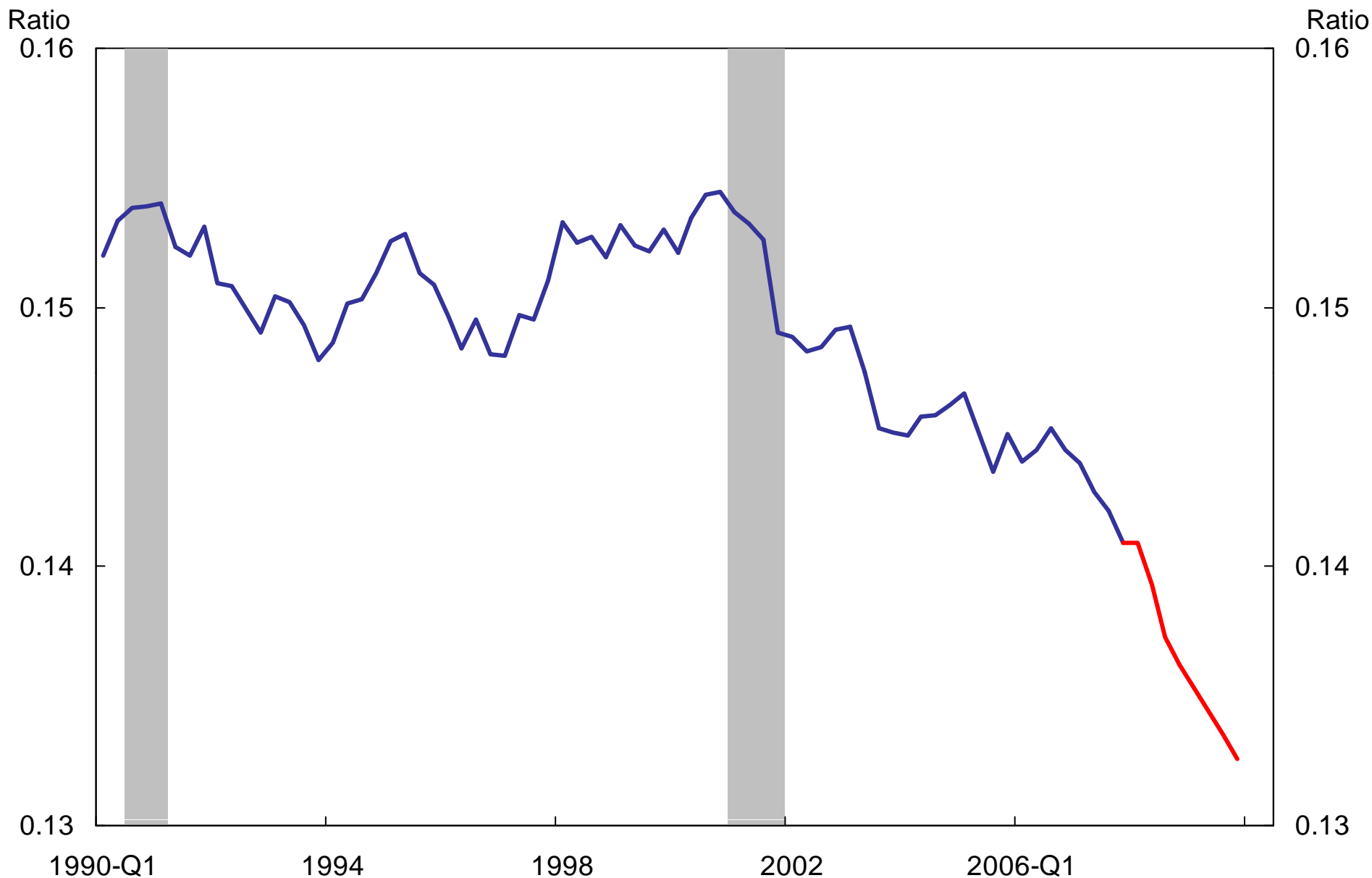
# Personal Savings Rate and Wealth-Income Ratio



Source: Bureau of Economic Analysis, Federal Reserve Board

Note: Shading represents NBER recessions.

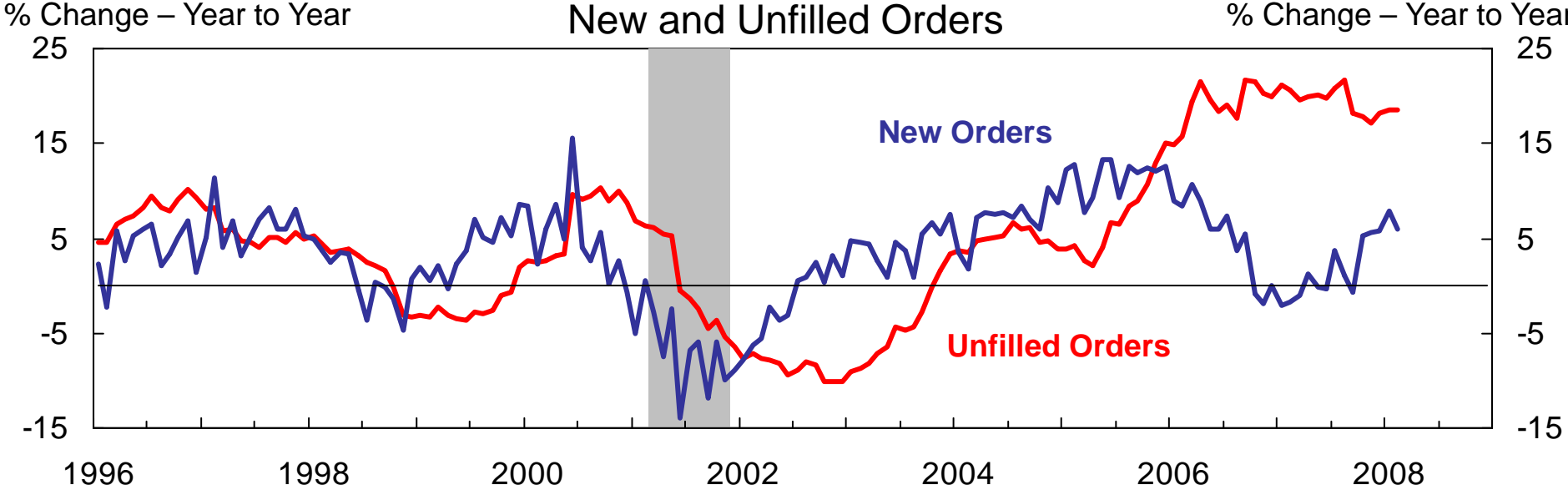
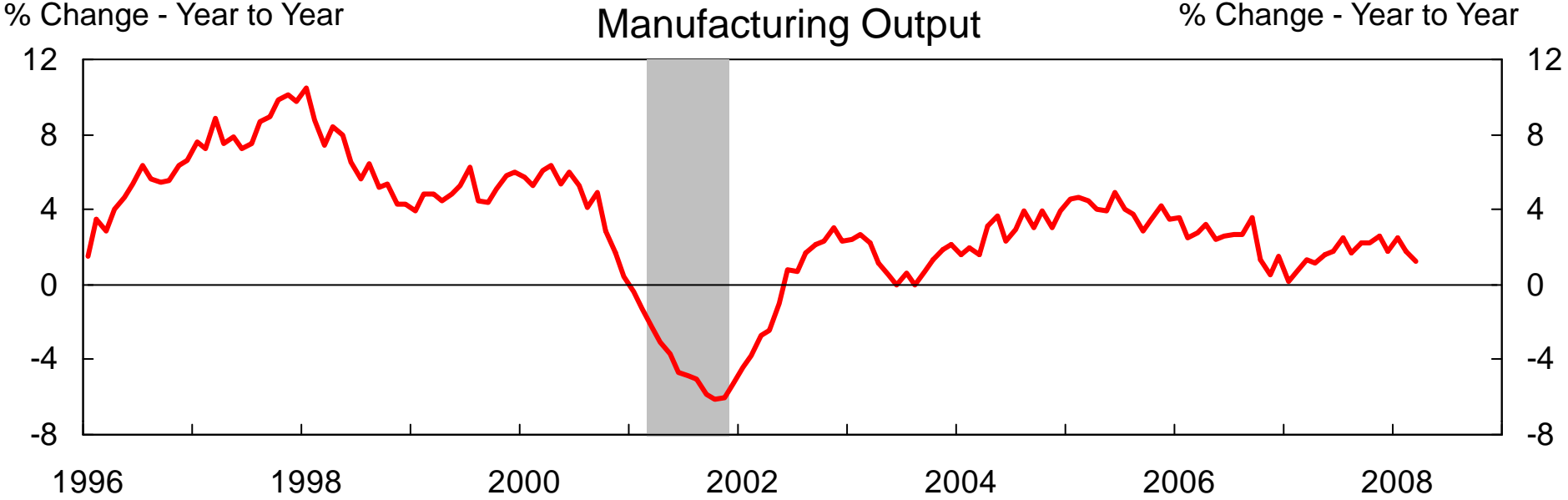
# Inventory-Final Sales of Domestic Product Ratio



Source: Bureau of Economic Analysis

Note: Red line indicates FRBNY forecast.

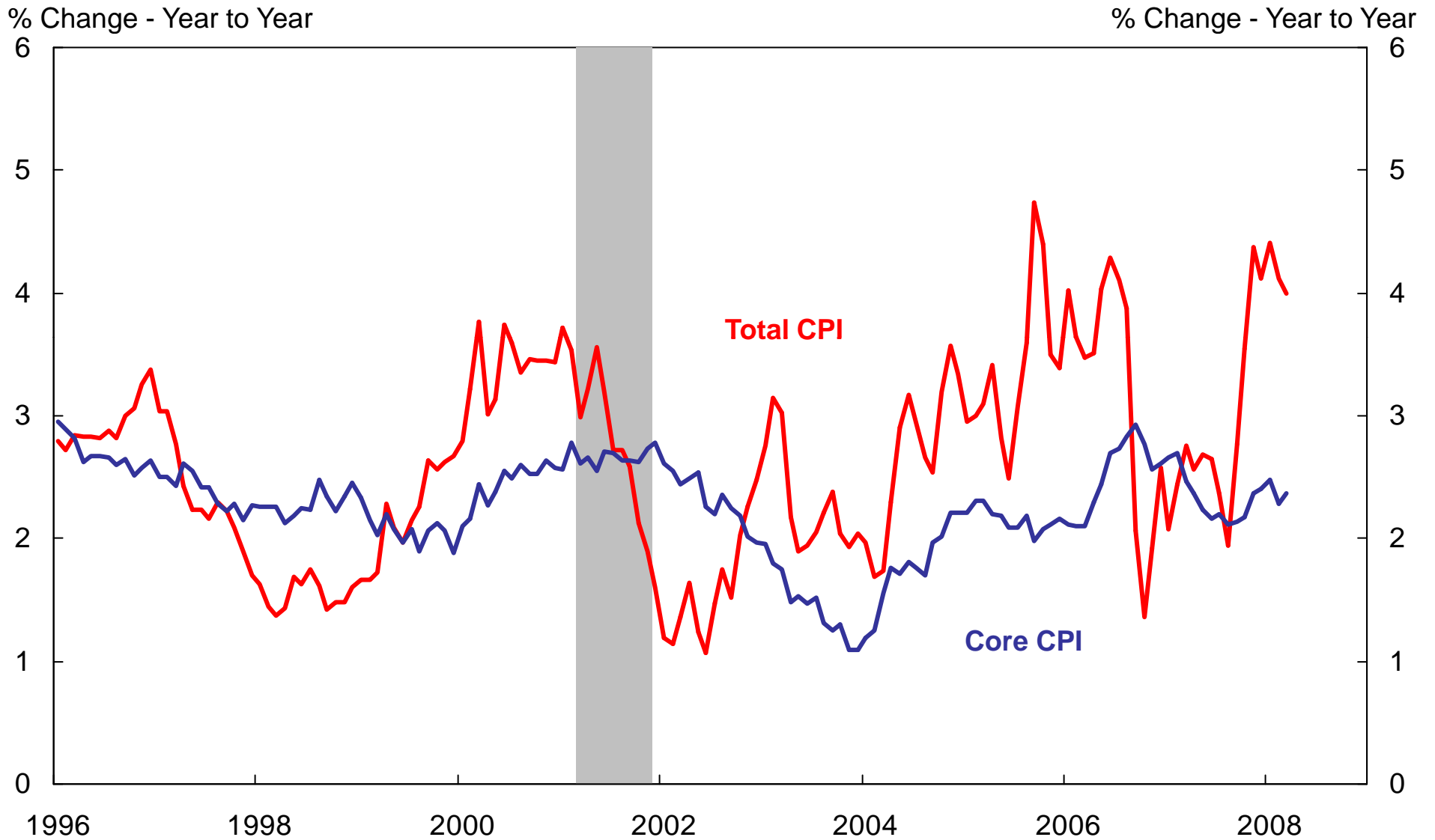
# Manufacturing Sector Overview



Source: Federal Reserve Board and Census Bureau

Note: Shading represents NBER recessions.

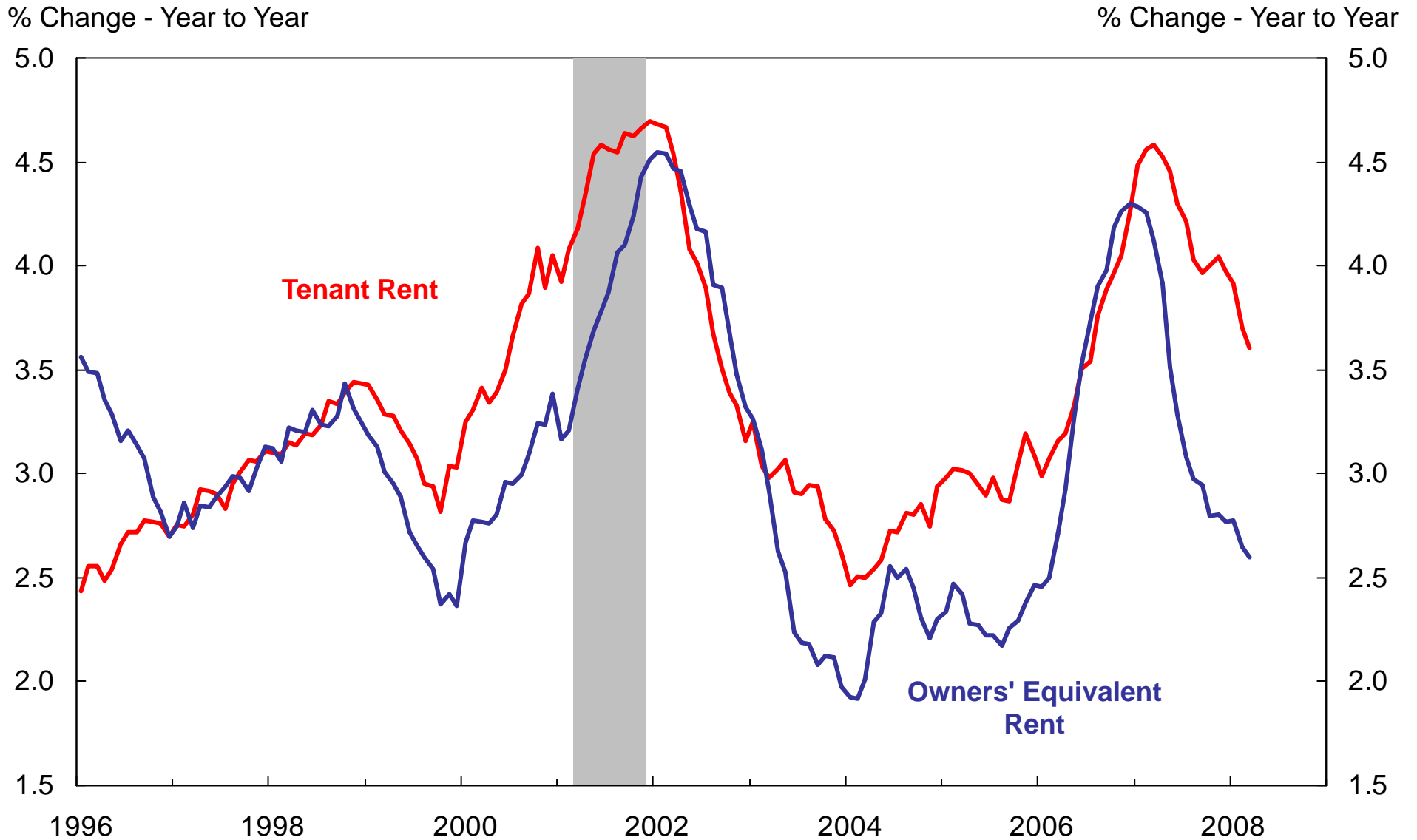
# Total and Core CPI Inflation



Source: Bureau of Labor Statistics

Note: Shading represents NBER recessions.

# Rent Inflation



Source: Bureau of Labor Statistics

Note: Shading represents NBER recessions.



# Overview of Policy Response to Date

- **Policy Actions to Stimulate Aggregate Demand**
  - Sharp reduction in the federal funds rate.
  - Fiscal stimulus (rebate checks, business investment incentives)
  
- **Policy Actions to Enhance Liquidity**
  - New Fed Lending Facilities
  
- **Policy Actions to Reduce Foreclosures**
  - Hope Now: voluntary loan modifications in the form of a freeze on adjustable rate mortgages for at-risk homeowners with subprime ARMs facing an interest rate reset.
  - Tax legislation enacted in late 2007 eliminates the implied taxable income from a write down.
  
- **Policy Actions to Increase the Supply of Mortgage Credit**
  - Increase in FHA loan limit in high cost areas.
  - Fannie Mae/Freddie Mac
    - OFHEO lowered capital surcharge from 1.3 to 1.2 times statutory capital requirement.
    - Temporary increase in conforming loan limit.
  
  - Federal Home Loan Banks
    - The Federal Home Loan Bank Board has temporarily lowered the capital requirements of the 12 Federal Home Loan Banks. Rather than 300 percent of equity capital, those banks can now hold mortgage securities up to 600 percent of equity capital.

# Economics of the Federal Reserve's New Lending Facilities

Jamie McAndrews



# Purpose of new lending facilities

The purpose of the new lending facilities is to address funding risks of financial intermediaries and to improve market efficiency in short-term money markets.

The exceptional circumstances of 2007-2008 interfered with the Open Market Desk's ability to implement monetary policy.

The new lending facilities are intended to strengthen the effectiveness of monetary policy.

## Problems addressed by new lending facilities

Term Auction Facility: illiquid term markets and the stigma that accompanies discount window borrowing.

Term Securities Lending Facility: illiquid functioning in repo funding markets—illustrated by abnormal rates and high haircuts.

Primary Dealer Credit Facility: the lack of market-based back-stop credit in repo markets.

## Liquidity: what is it?

The liquidity of money markets is not measured solely by the reserves in the U.S. banking system, or by the size of the Fed's balance sheet.

- Market liquidity is the ease with which an asset is traded.
- Funding liquidity is the ease with which a bank can obtain funding.

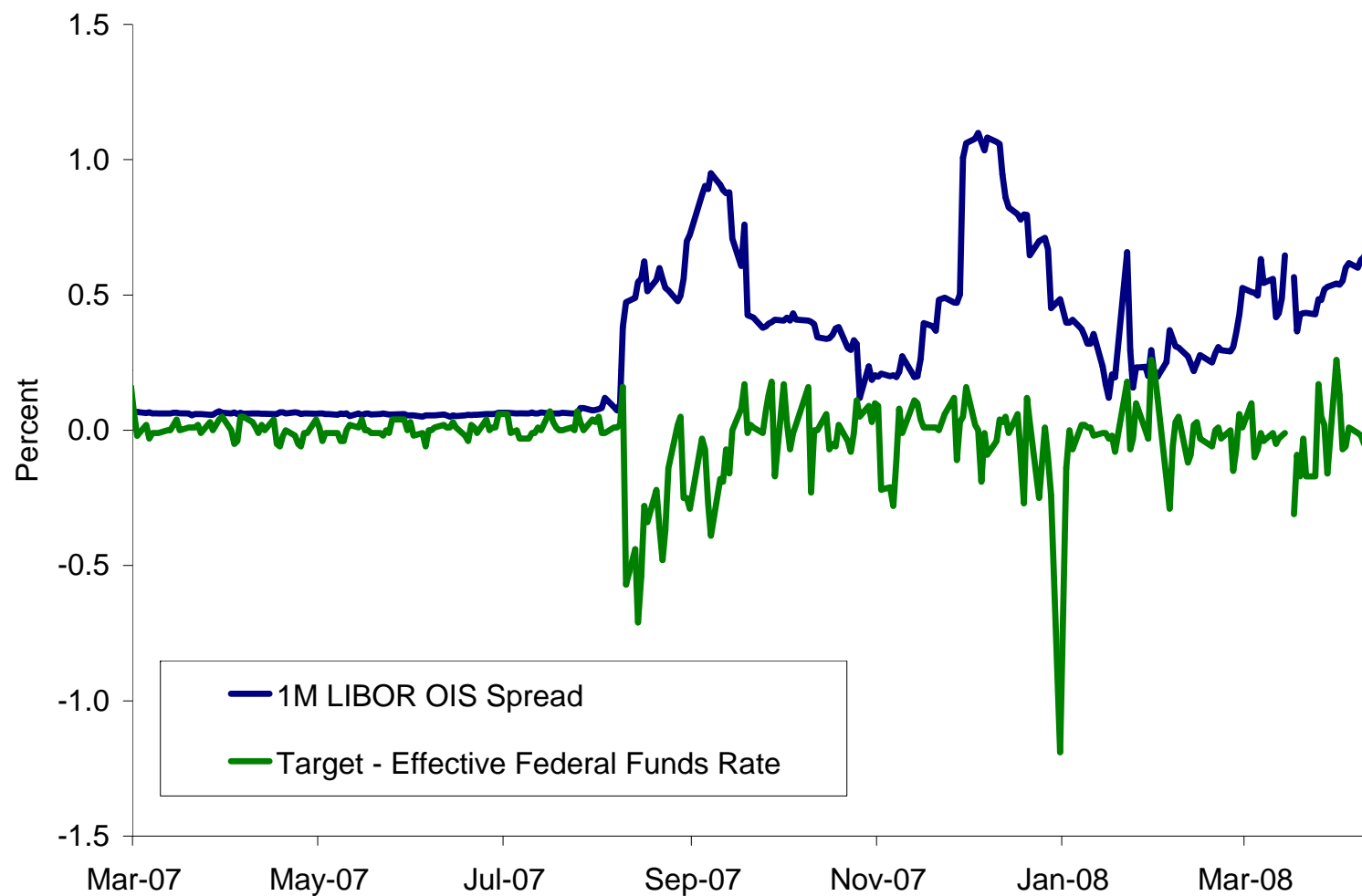
The composition of the Fed's balance sheet can influence both types of liquidity, as the Fed can lend to banks and use assets as collateral.

## Federal Reserve lending facilities

	Depository Institutions	Primary Dealers
Backstop Standing Facilities	<b>Primary Credit Program of the Discount Window</b>	<b>Primary Dealer Credit Facility (PDCF)</b>
Auction Facilities	<b>Term Auction Facility (TAF)</b>	<b>Term Securities Lending Facility (TSLF)</b>

# Term Auction Facility

## Illiquidity in interbank funding markets

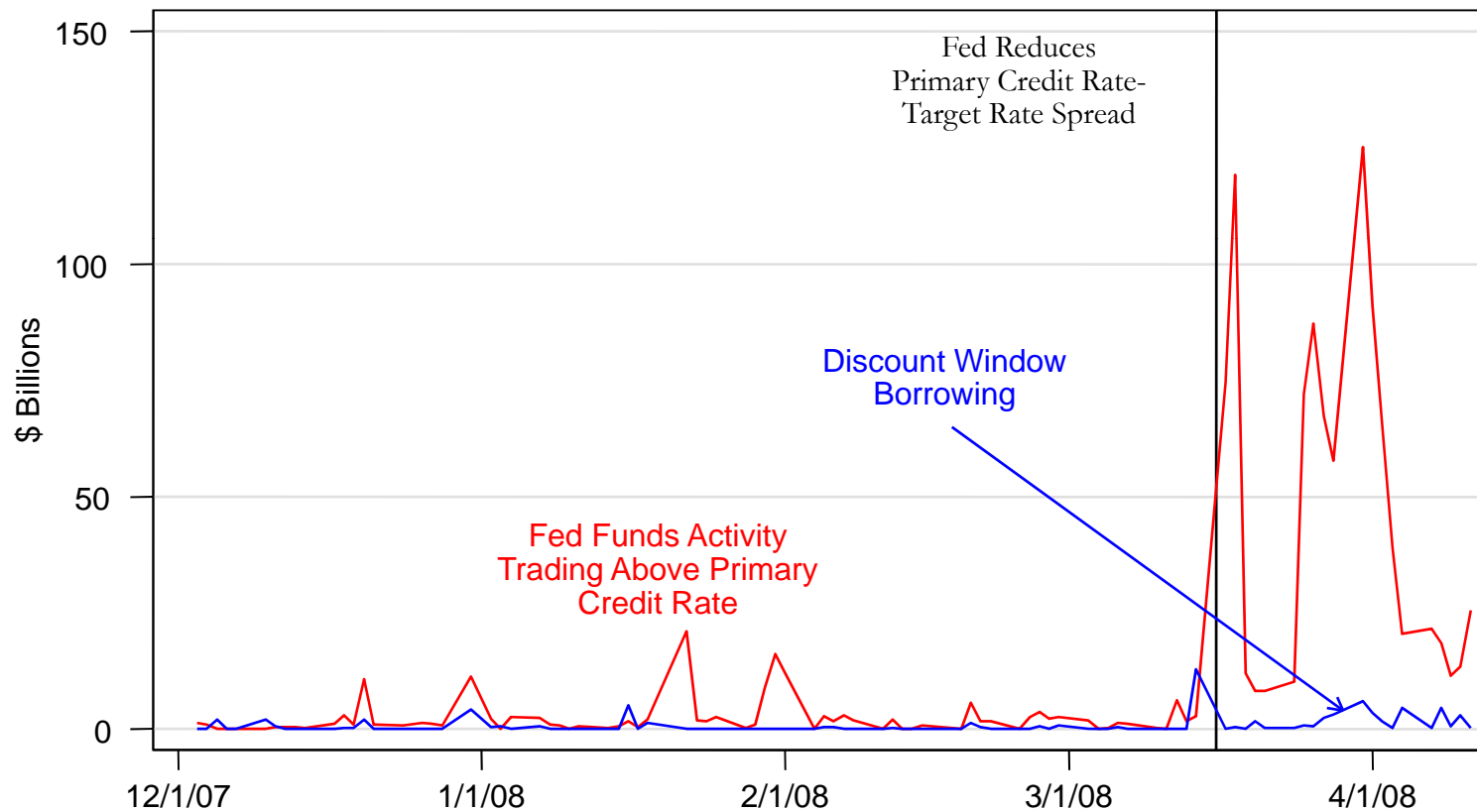


Source: Bloomberg, FRBNY



# Recent evidence of stigma in discount window borrowing

Amount of Fed Funds Activity Trading Above Primary Credit Rate  
Discount Window Borrowing and



Source: FRBNY

## TAF addresses the problems

### Illiquidity

The ability of banks to bid periodically for 28-day funding reduces their liquidity risks.

### Stigma

The auction format of the TAF reduces the chance of a borrower being identified.

The minimum bid rate in the auction is not a penalty rate.

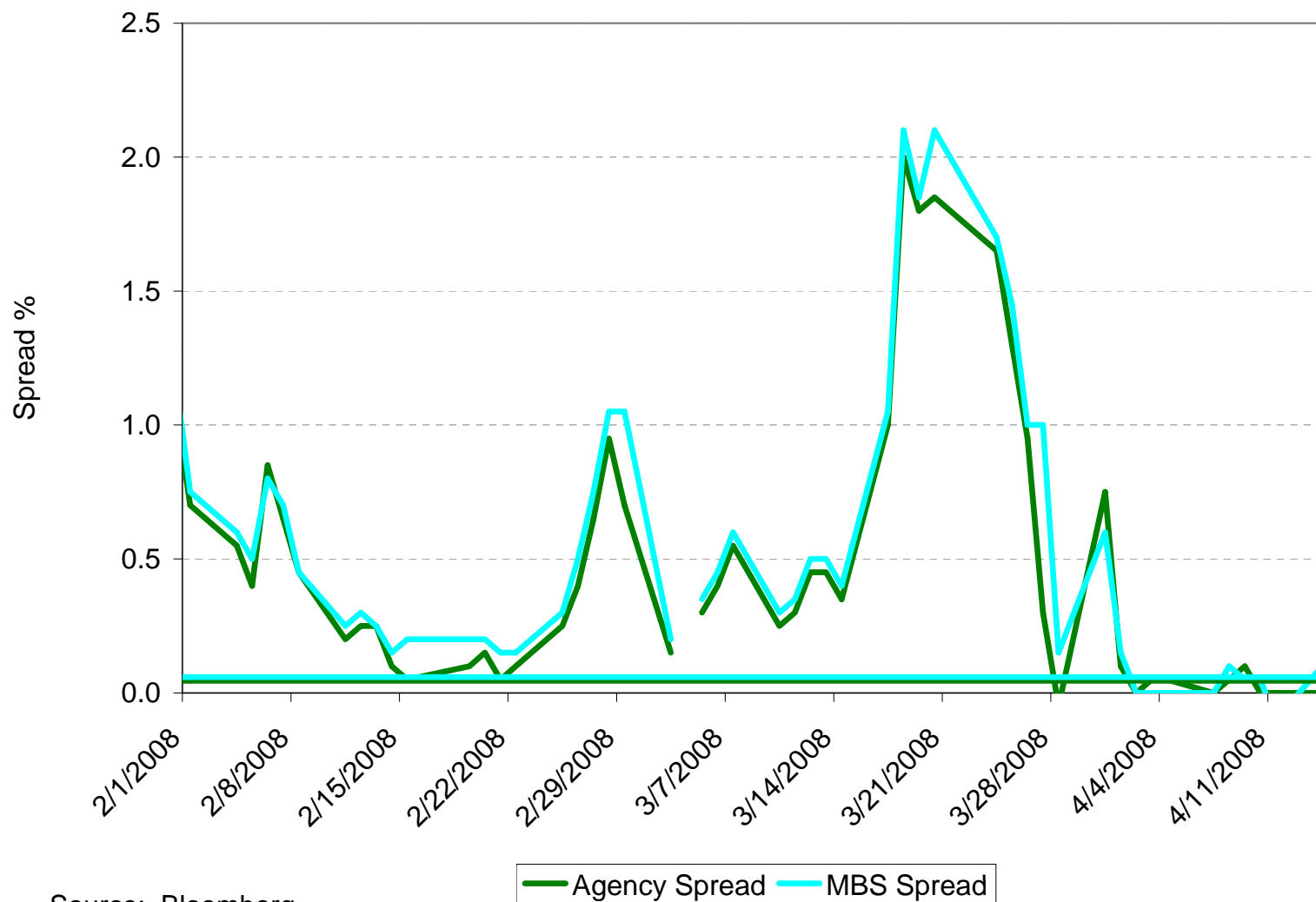
Nonetheless, current conditions are especially strained.

# Term Securities Lending Facility

## Illiquid repo markets

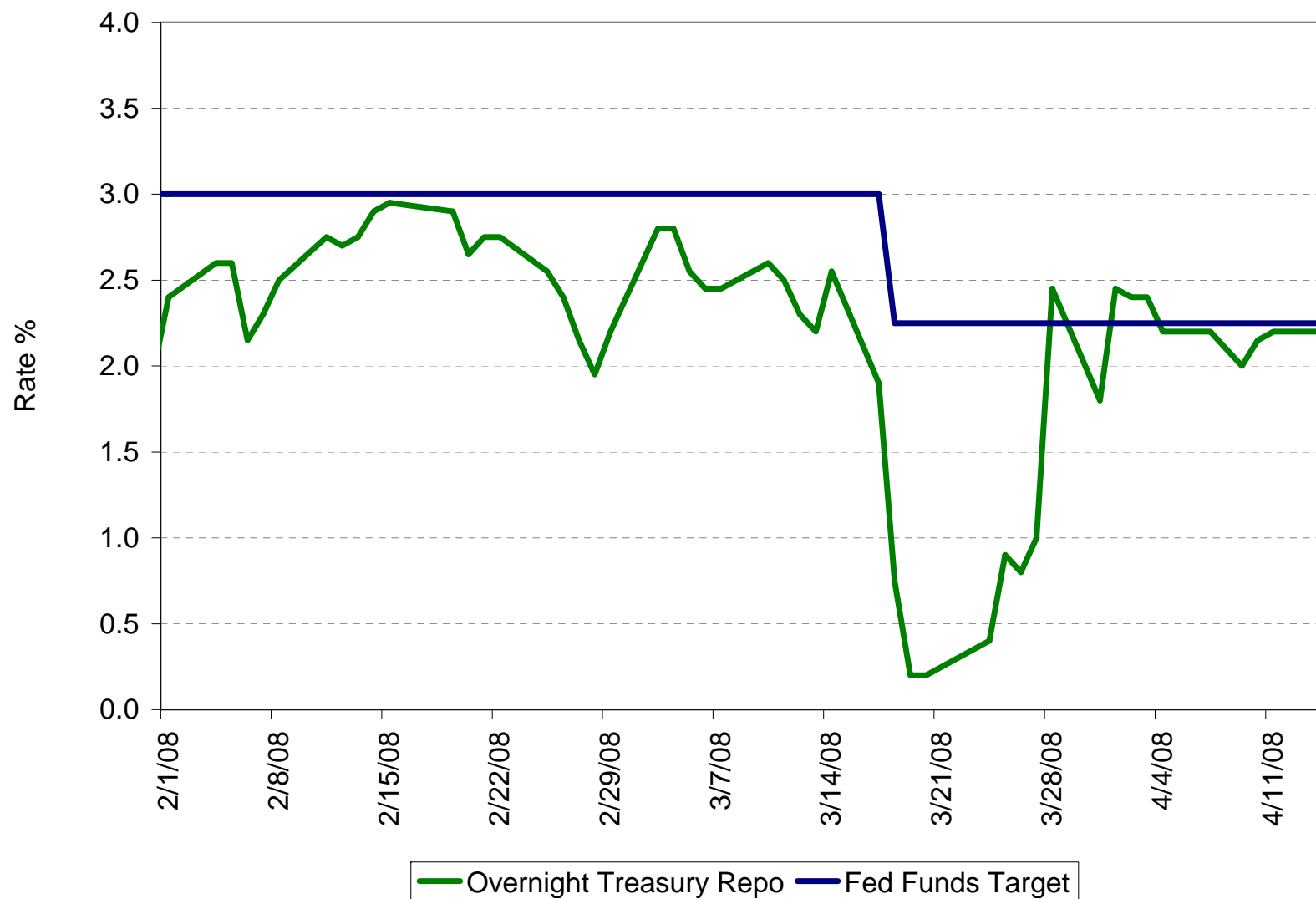
The TSLF addresses the illiquid functioning in various repo financing markets, including abnormal rates, wide bid-ask spreads, and large and increasing haircuts on collateral.

# High overnight agency and MBS spreads to Treasury



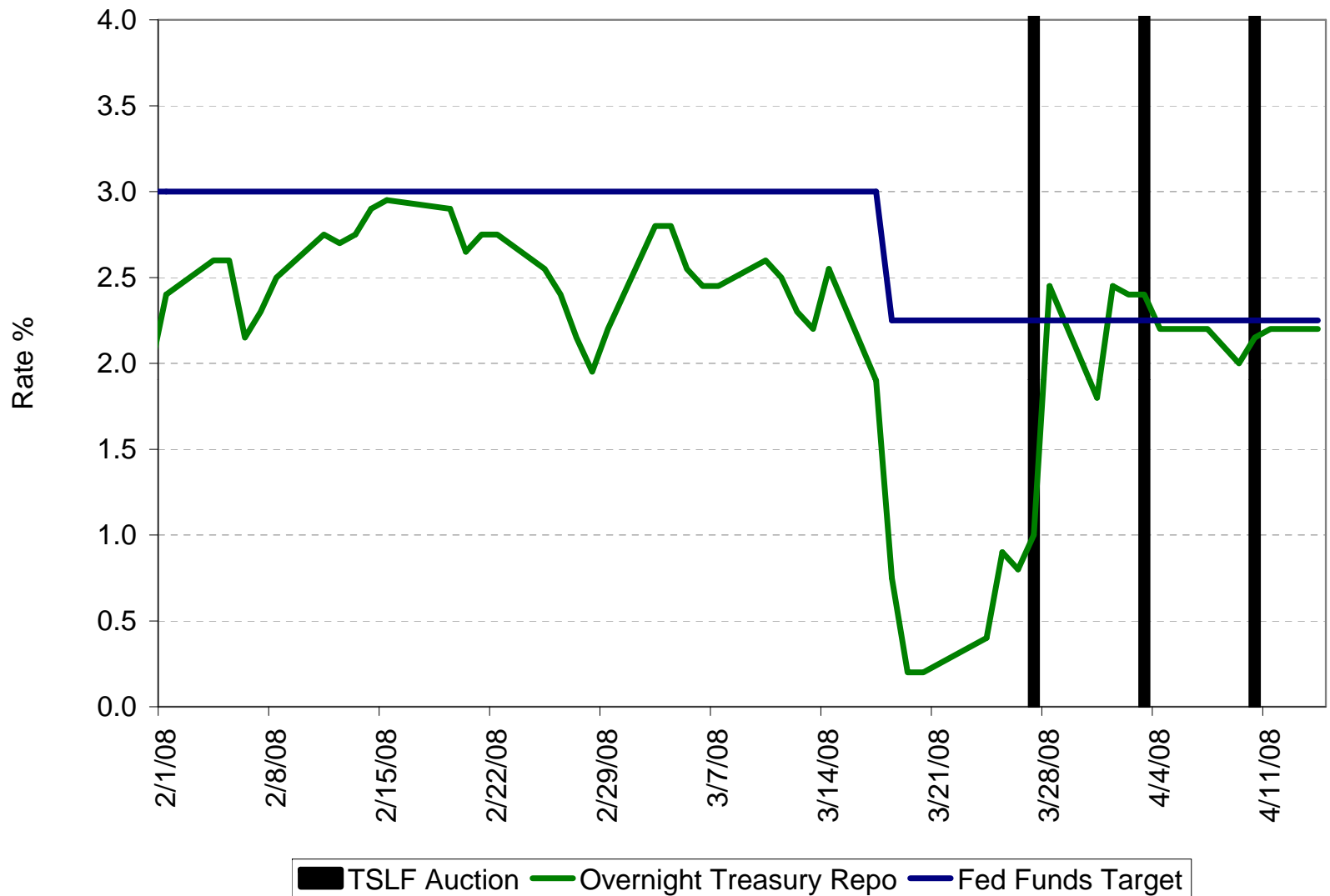
Source: Bloomberg

## Abnormally low overnight Treasury repo rates



Source: Bloomberg, FRBNY

# Abnormally low overnight Treasury repo rates



Source: Bloomberg, FRBNY

## TSLF addresses the problem

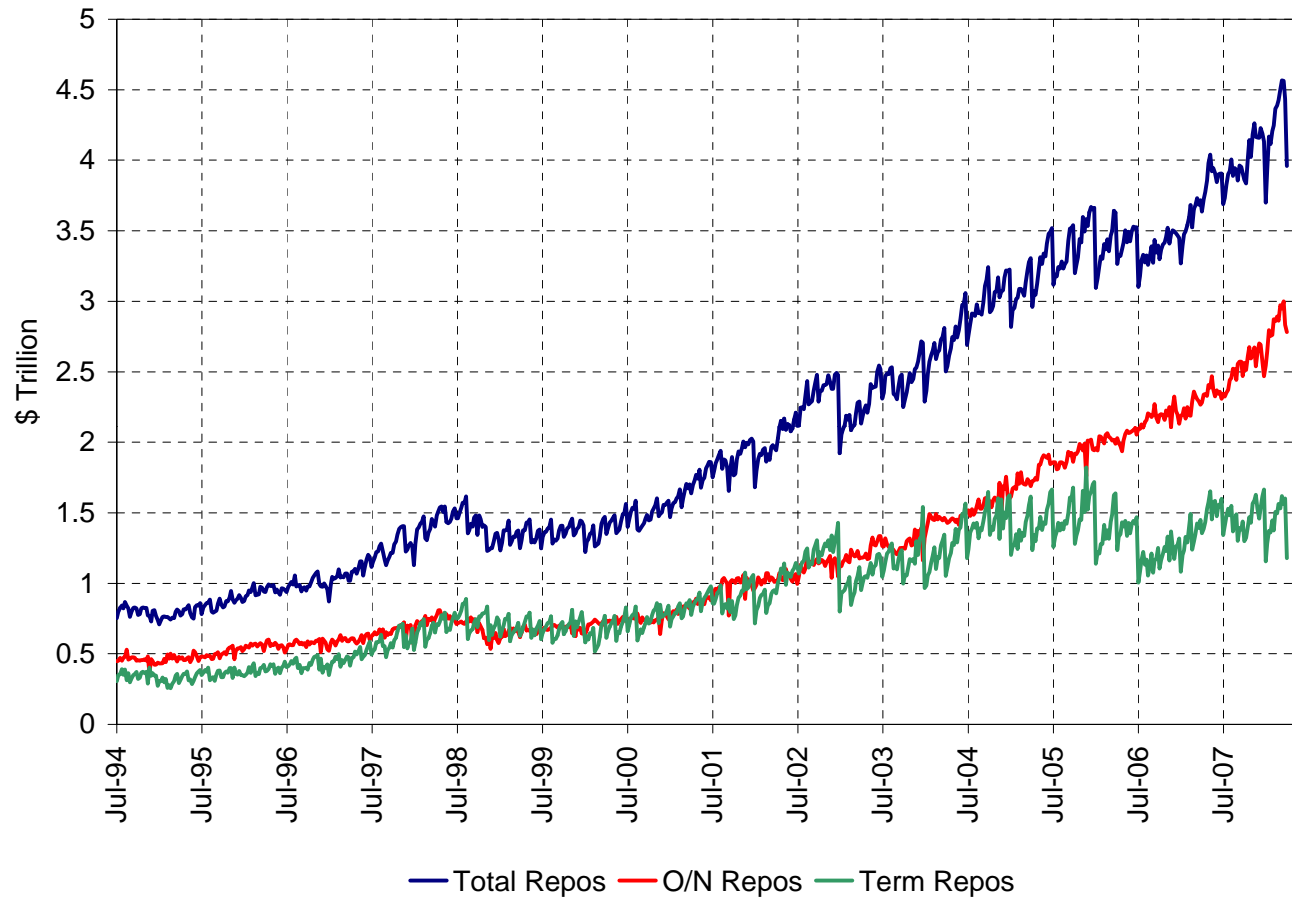
### The TSLF

- adds Treasuries to dealers' portfolios, reducing their scarcity in the repo market.
- reduces the roll-over risk for dealers in their financing of the alternative assets used as collateral.
- format assists in setting the right price for the Treasuries lent.
- avoids any reserve management problems.



# Primary Dealer Credit Facility

# Outstanding dealer repos



Reliance on overnight repo financing has been growing.

Source: FRBNY

## PDCF addresses the problem

The PDCF provides an alternative source of financing to a dealer that has difficulty financing a security in the market.

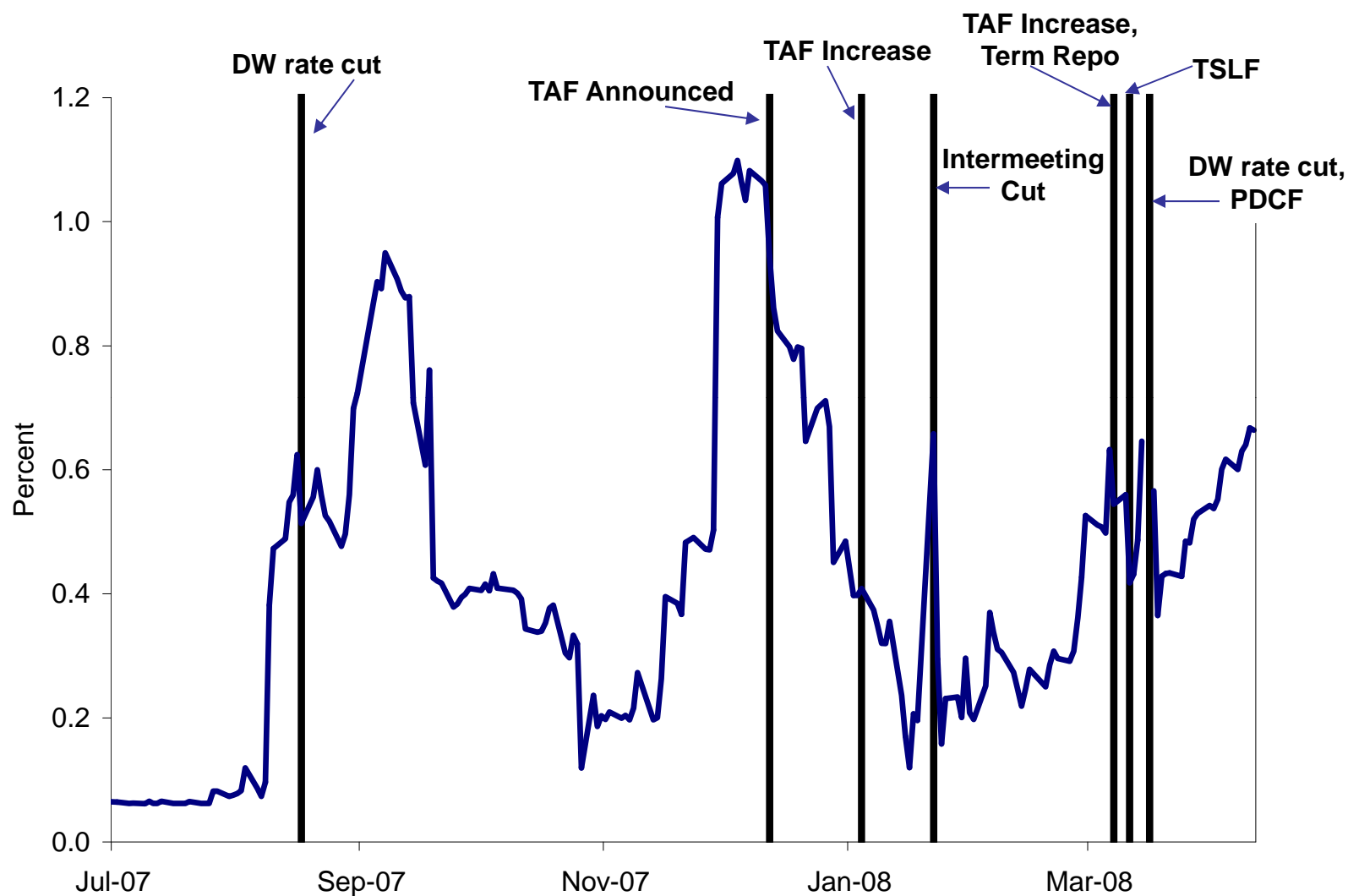
It was necessary to provide such an alternative in the unusual and exigent circumstances surrounding the near-failure of Bear Stearns.

## Future use of the facilities

Use of the auction facilities—the TAF and the TSLF—should decline as market conditions return to normal. The Federal Reserve will have the option to adjust many features of the auctions, including reducing their size based on market conditions.

The PDCF is an emergency facility, authorized for at least six months. Other alternatives for back-stop liquidity support for primary dealers can be explored during this time. The Federal Reserve has taken quick steps to monitor the condition of the primary dealers.

## LIBOR OIS spread, key Fed action dates



Source: Bloomberg, Board Of Governors

# Risks to Central Scenario

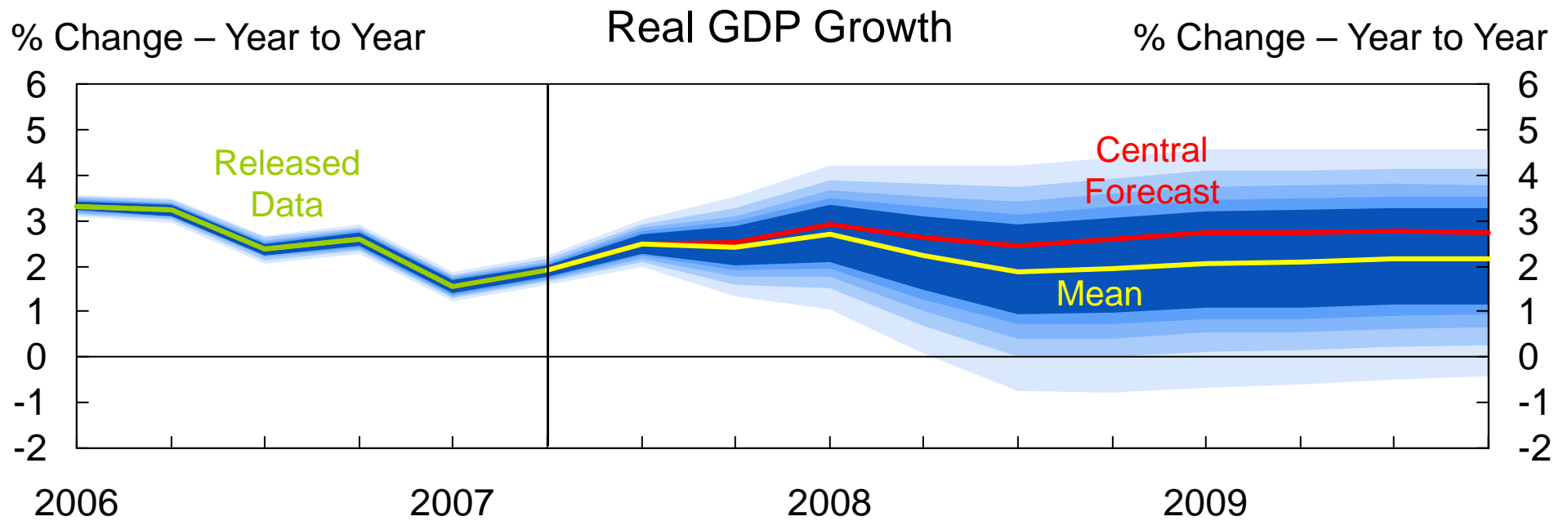
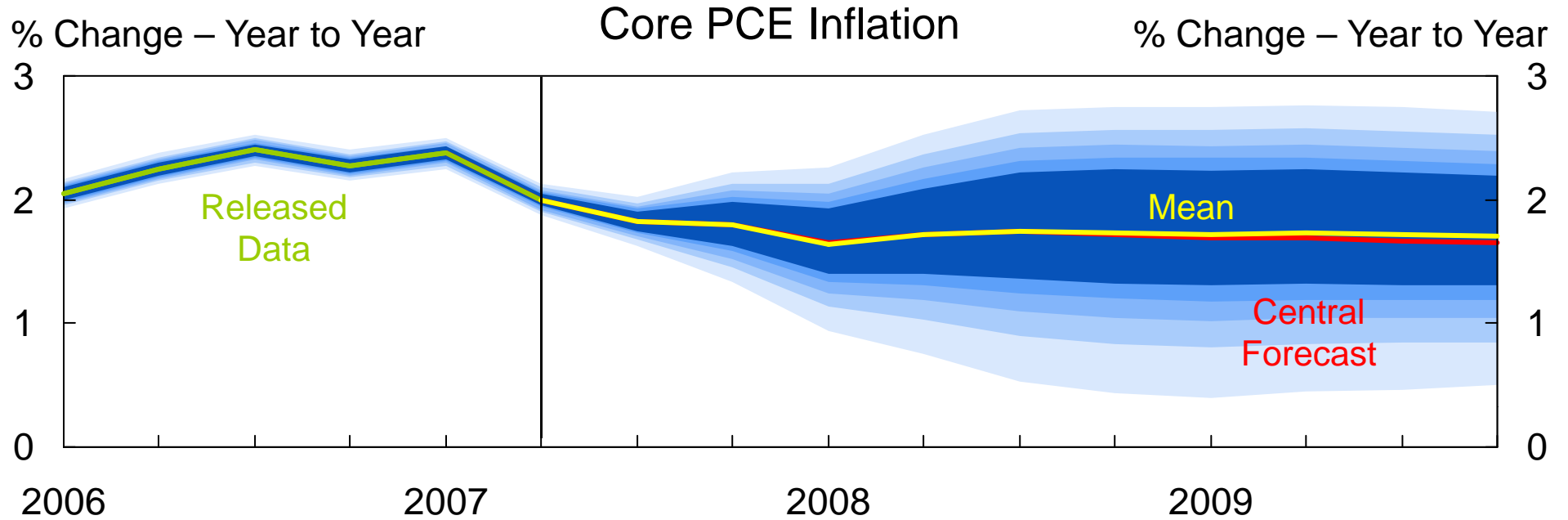
Simon Potter



# Main Risks to Central Scenario

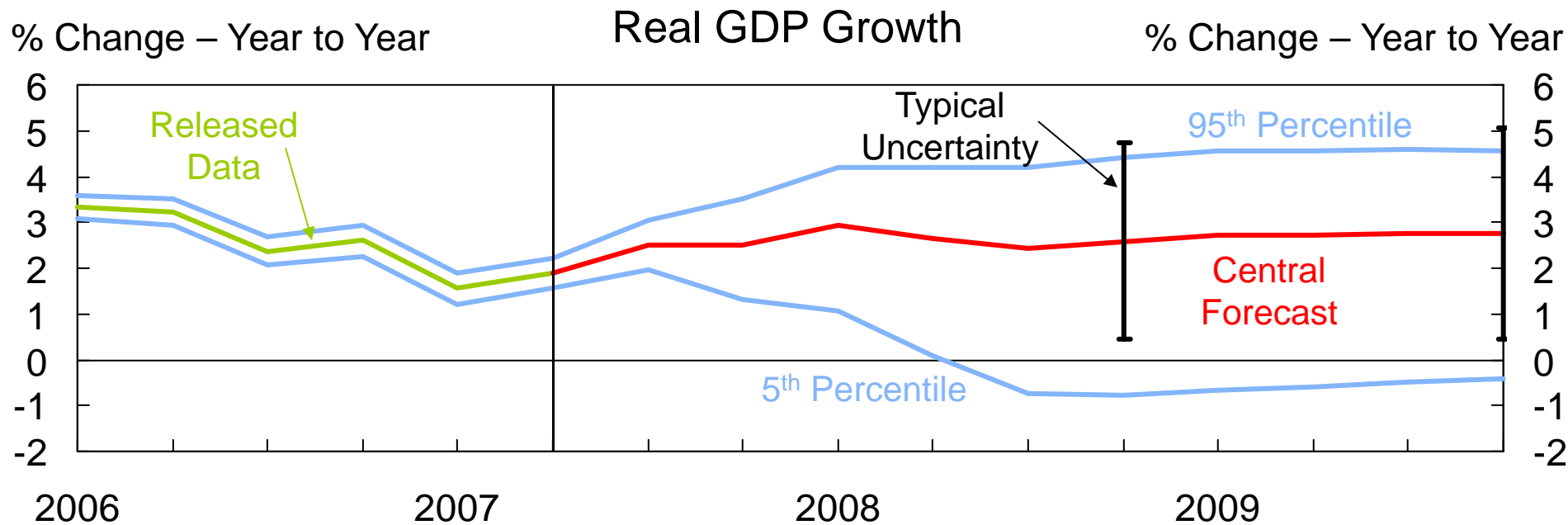
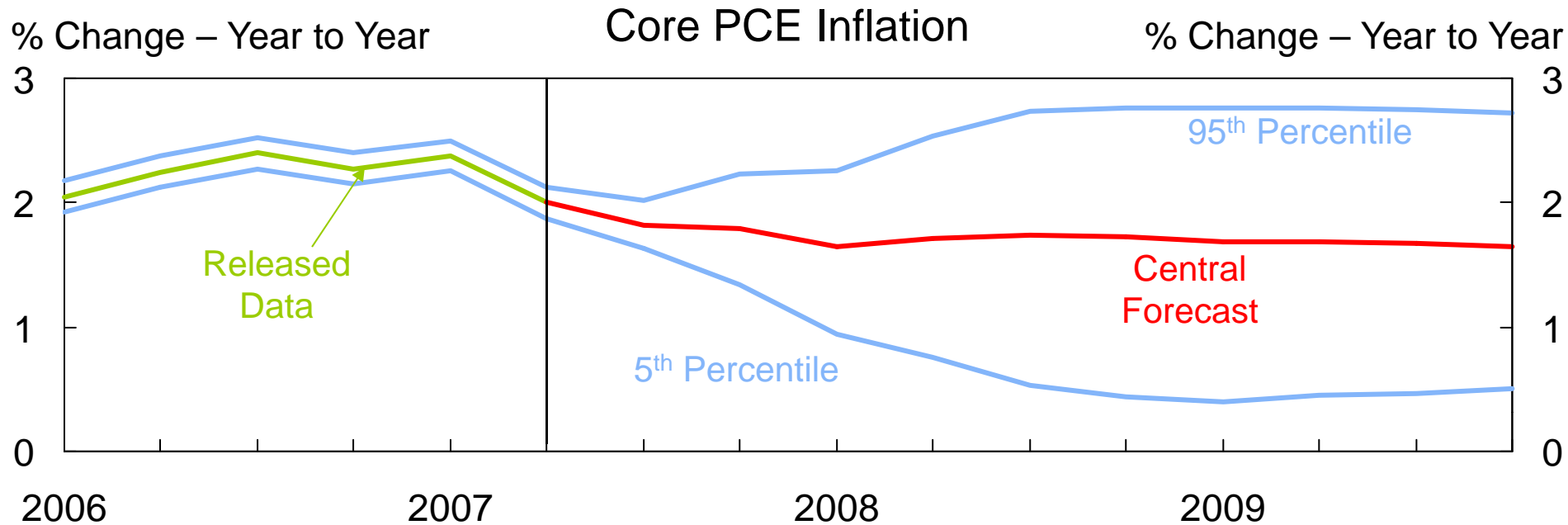
<b>Scenario</b>	<b>Evidence in Favor</b>	<b>Effect on Forecast</b>
<i>Credit Crunch (1)</i> <i>Temporary misallocation of resources</i>	Financial market turmoil, rebound in productivity in 2007	<b>Output:</b> Down <b>Inflation:</b> Down
<i>Credit Crunch (2)</i> <i>US Economy over consumed</i>	Current Account Low household savings	<b>Output:</b> Down <b>Inflation:</b> neutral/up
<i>Monetary Policy Stance too Accomodative</i>	Exchange Rate Commodity and Food Prices	<b>Output:</b> Up in short run, down in medium run <b>Inflation:</b> Up, potentially large

# Oct '07 Forecast Distributions

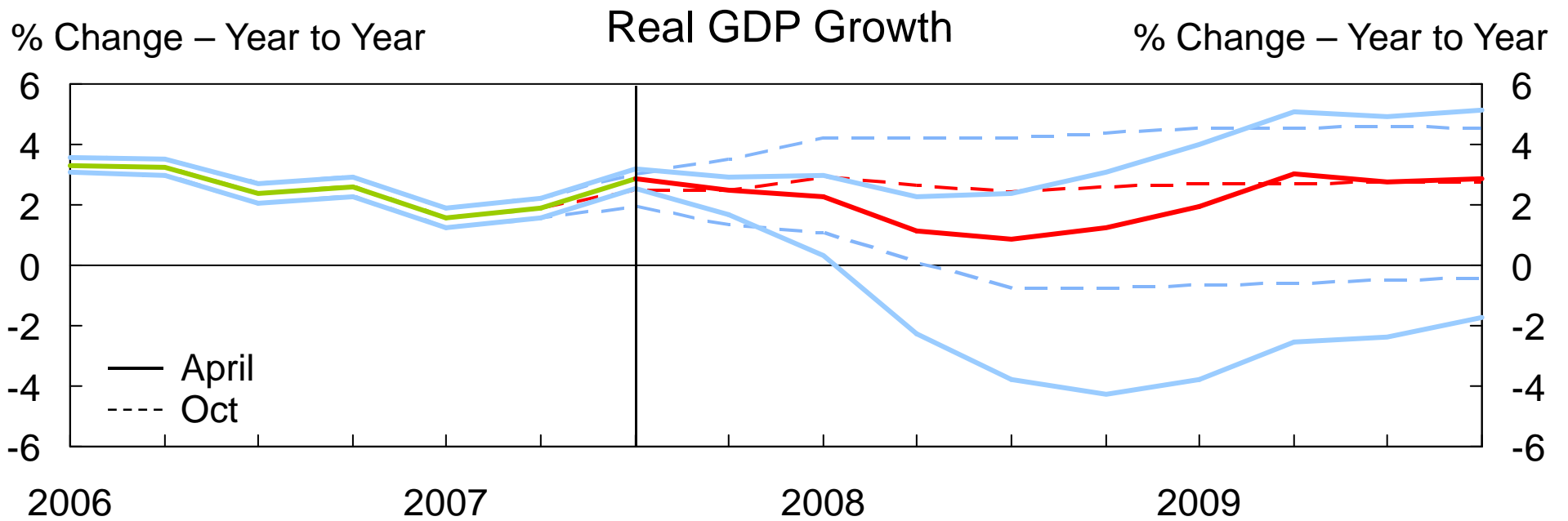
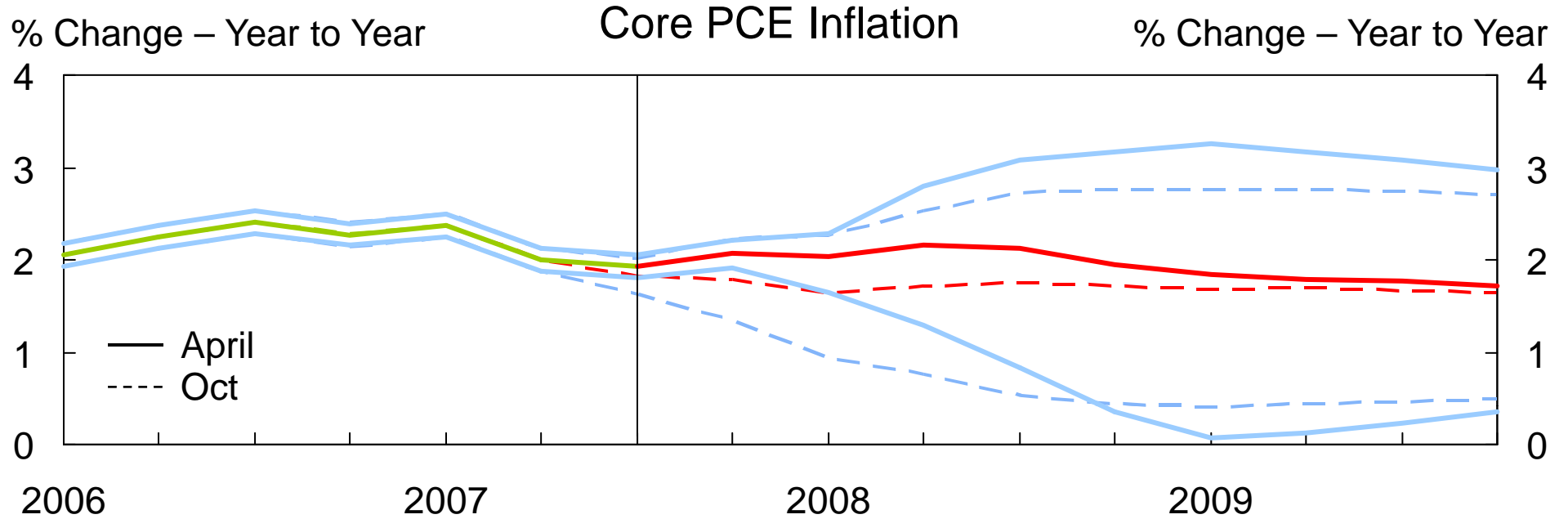




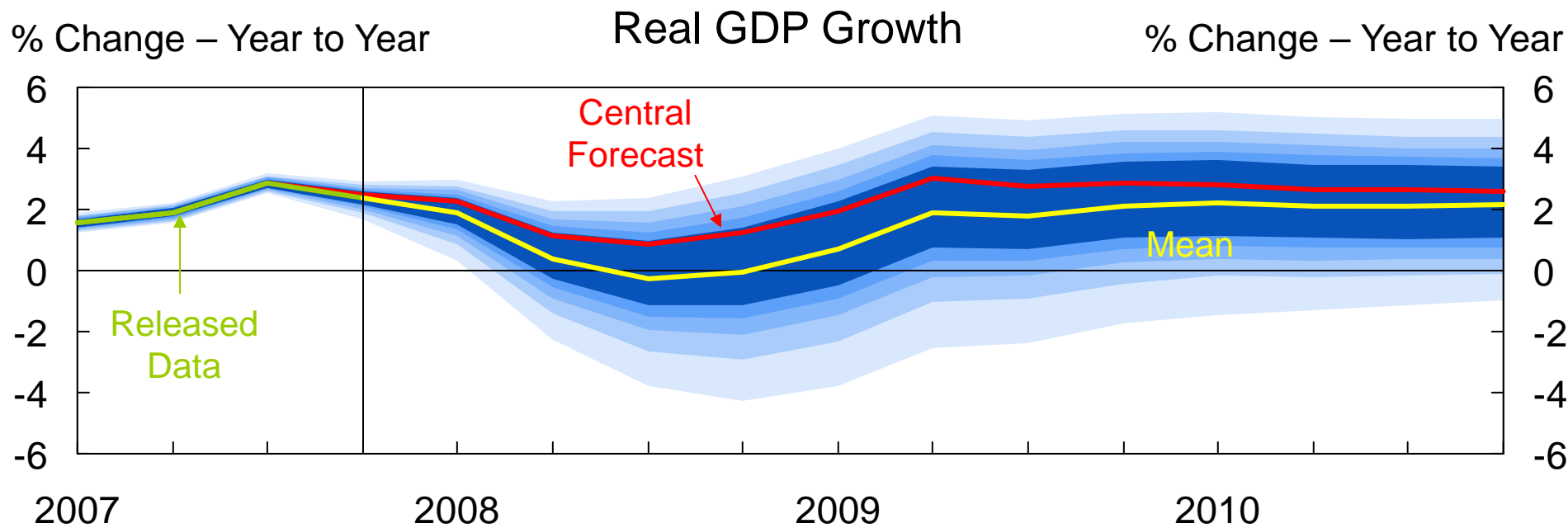
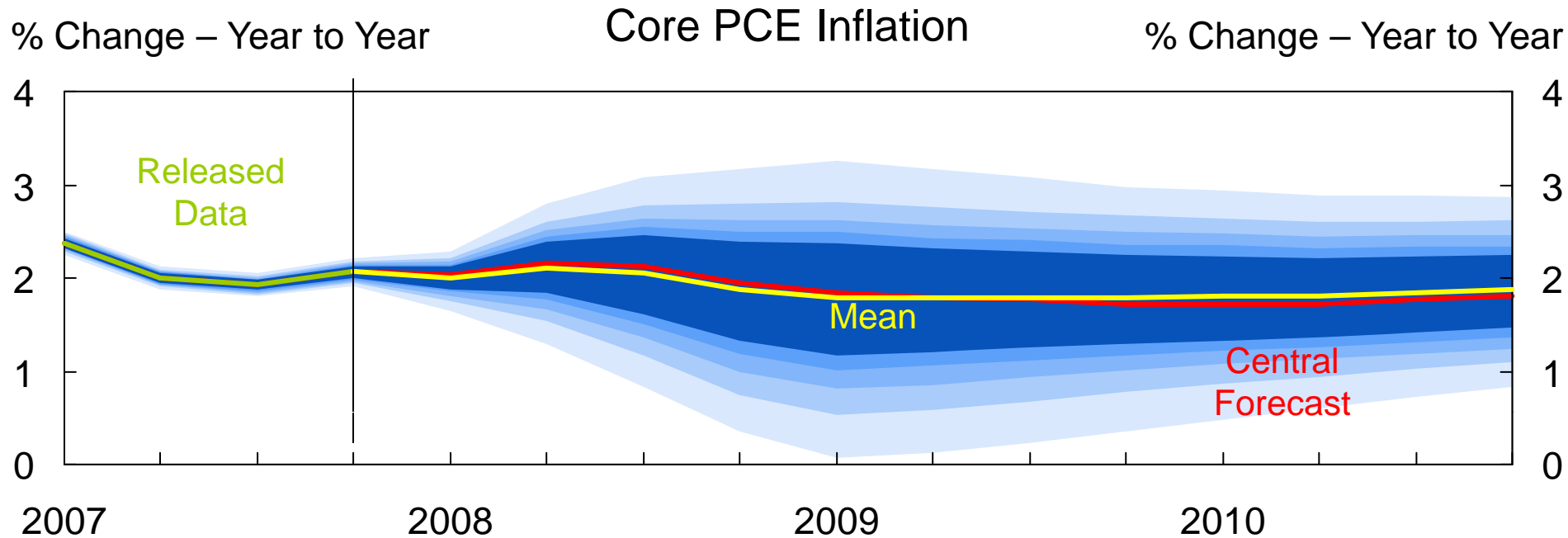
# Oct '07 Forecasts and 90% Probability Intervals



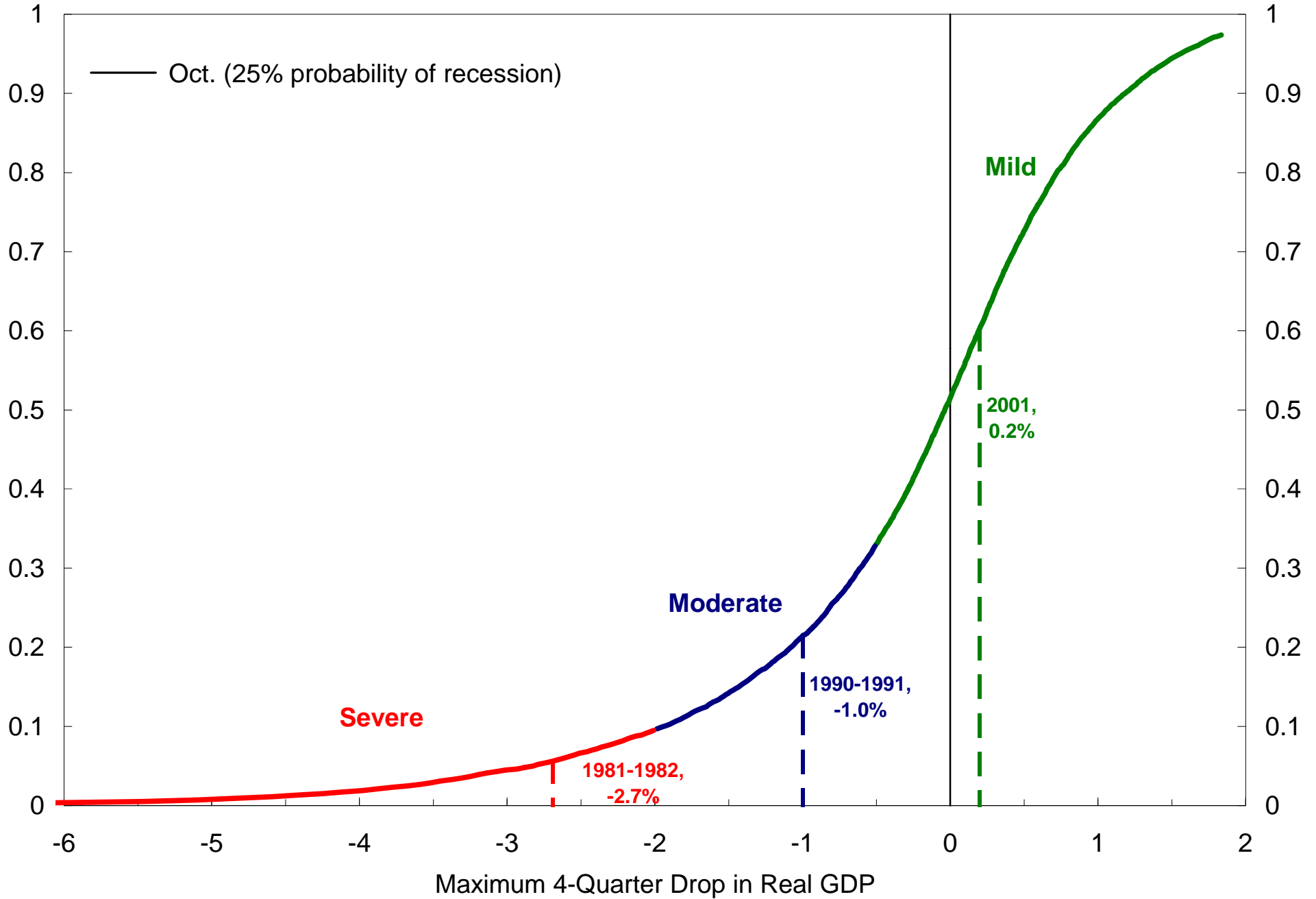
# Change from Oct '07 to April '08



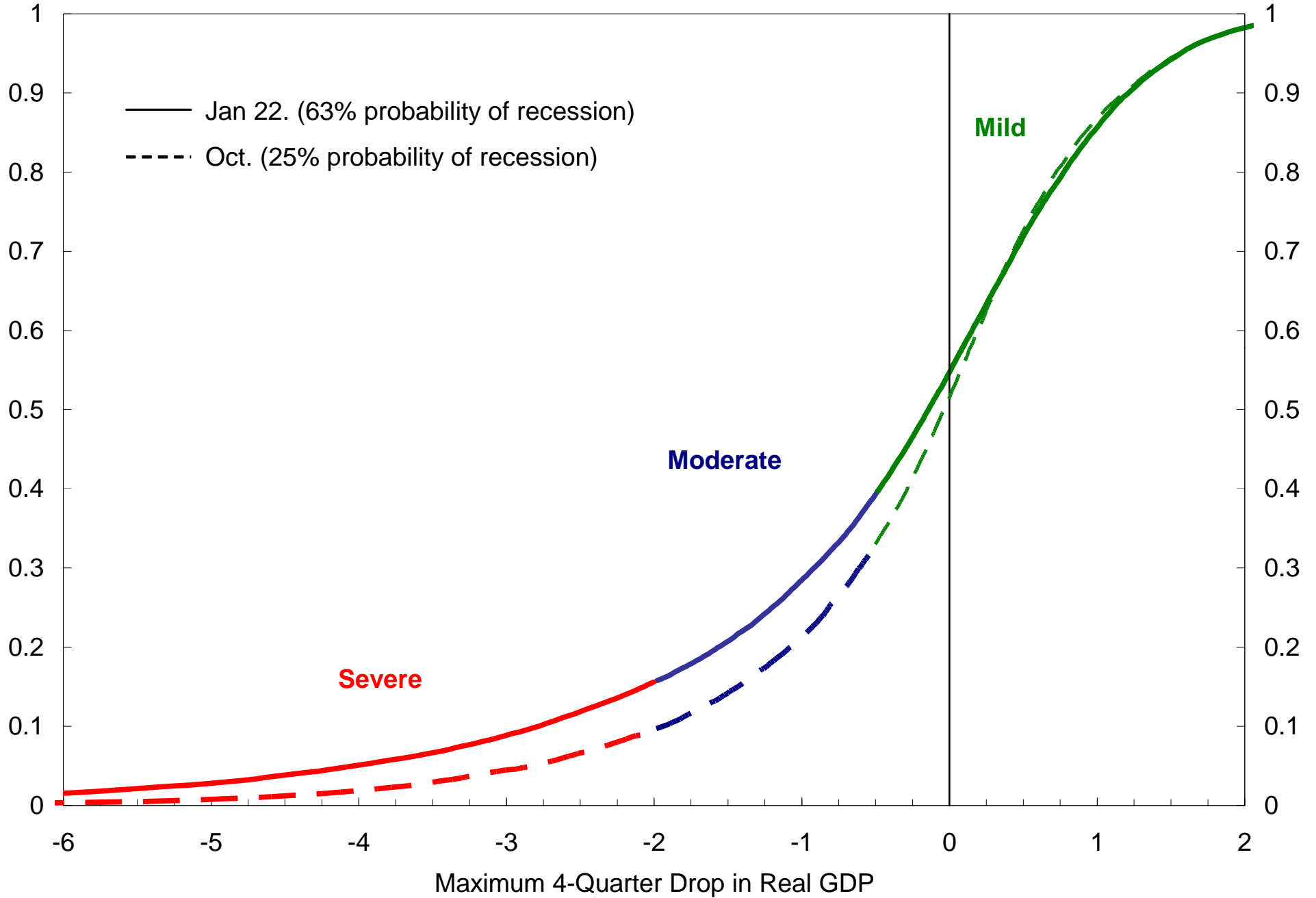
# April '08 Forecast Distributions



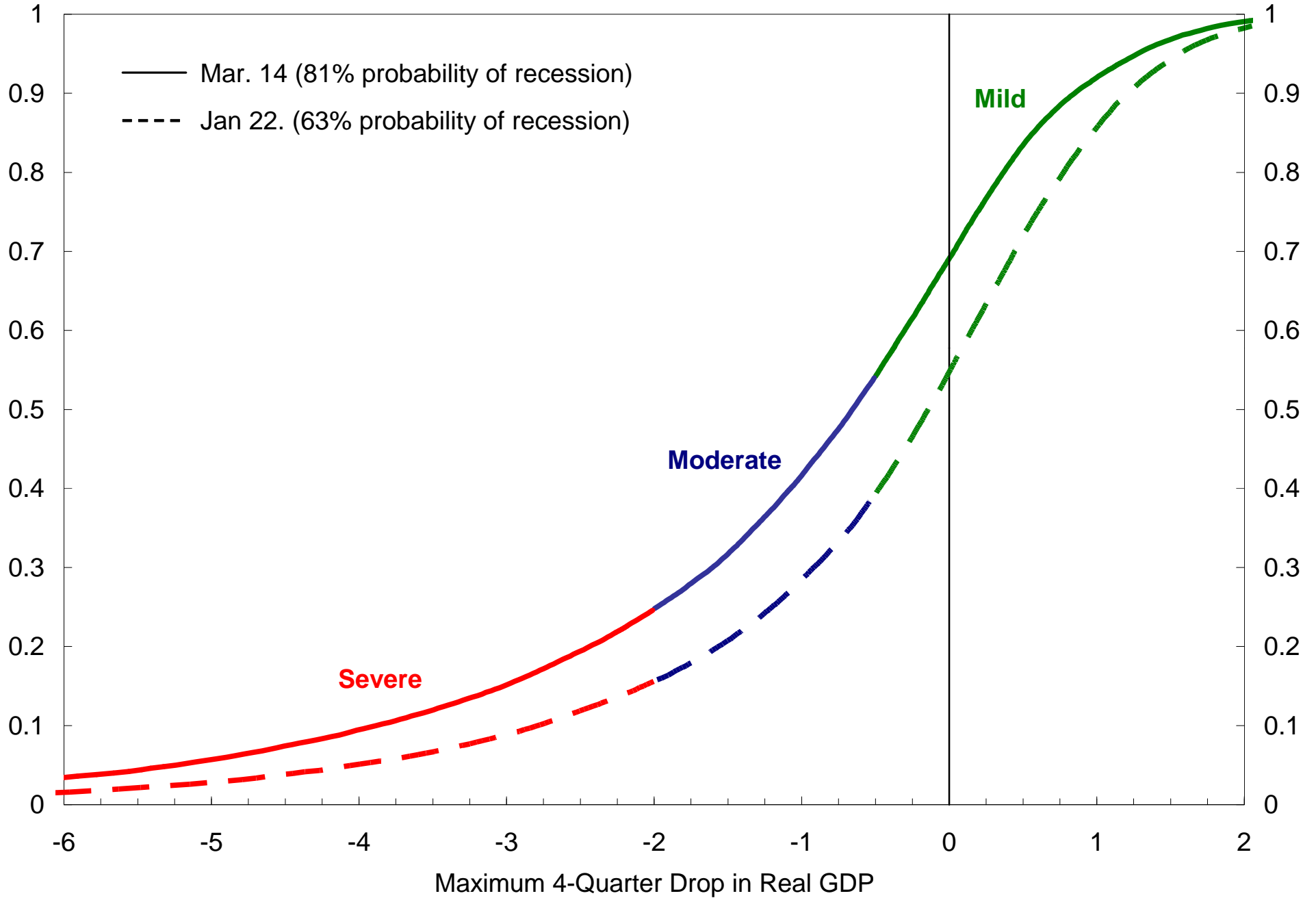
# Depth of Recession



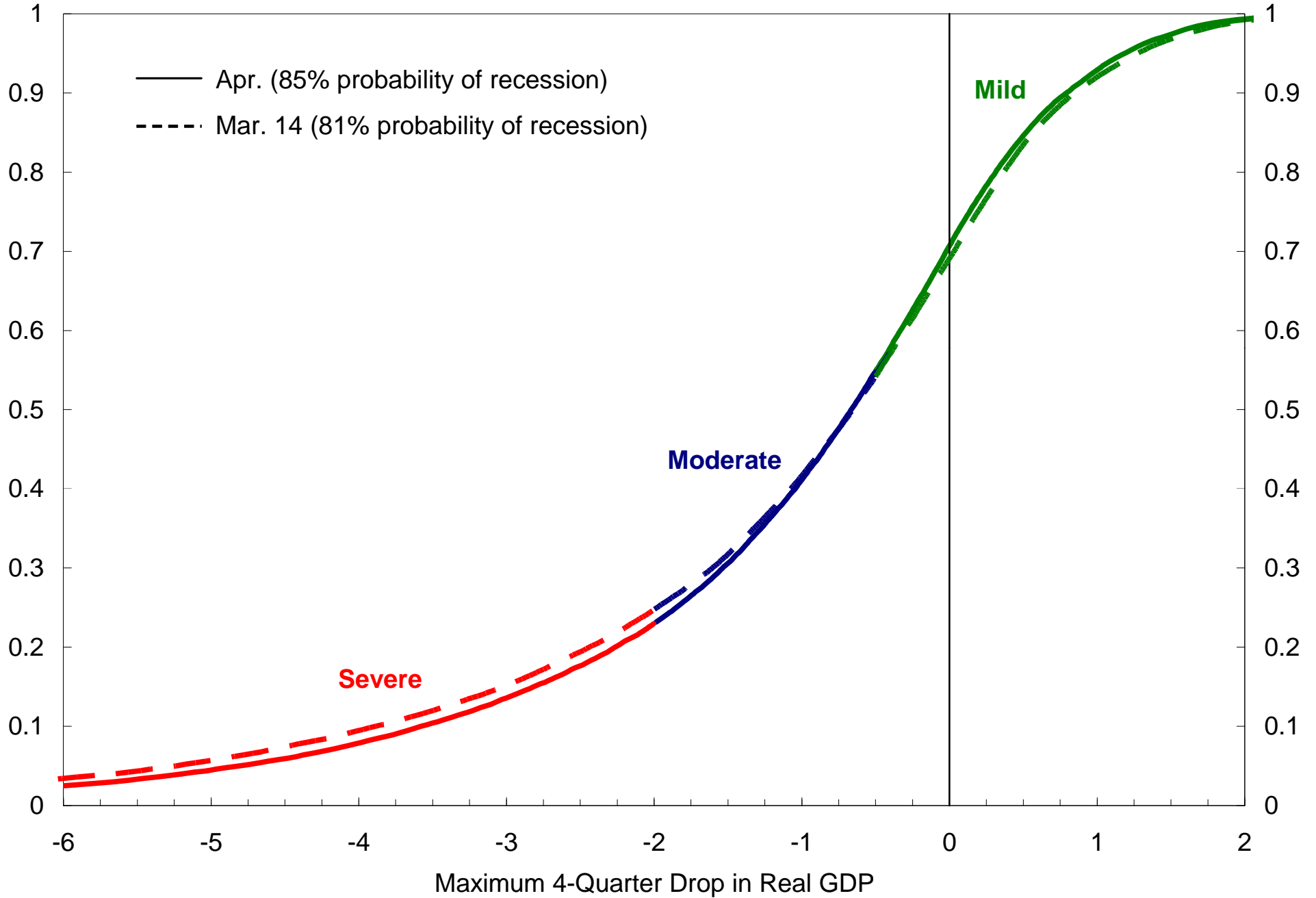
# Depth of Recession



# Depth of Recession



# Depth of Recession



# Some Measures of the Current Stance of Monetary Policy

<b>Policy Rule</b>	<b>Rate Prescription</b>
Contemporaneous Feedback	3.0-4.25
Forecast Based	2.0-3.25
Forecast Based with Risks	1.5-2.75
DSGE Var Counterfactual	2.0-3.5
DSGE Var Counterfactual with Credit Crunch scenario	1.25-2.6



# Reference