Monetary Policy

Academic year 2023-2024

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Course Material

- Lecture slides: will be made available to you. Lecture slides are primarily a support for teaching. They are not notes and will not be exhaustive in their treatment of any topic. Students are expected to take their own notes in class.
- Each topic has a list of readings recommended.
- Additional readings are specified in the program.

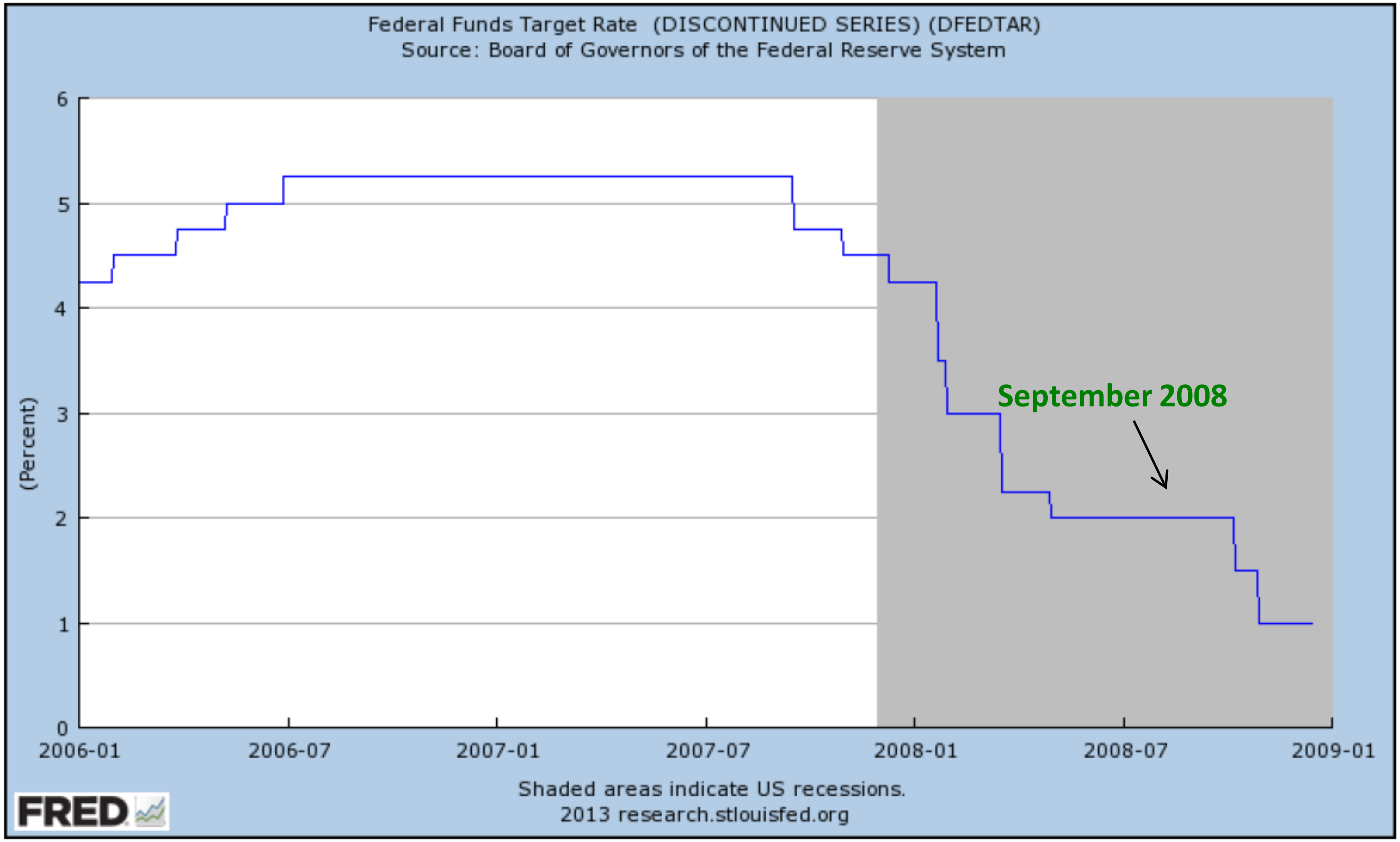
Grade

- Grade is through:
- A written partial exam (35%) and a general exam (65%) at the end of the course
- Class participation:
- You are expected to attend classes and participate in class discussions
- Active participation of the students during classes is highly encouraged

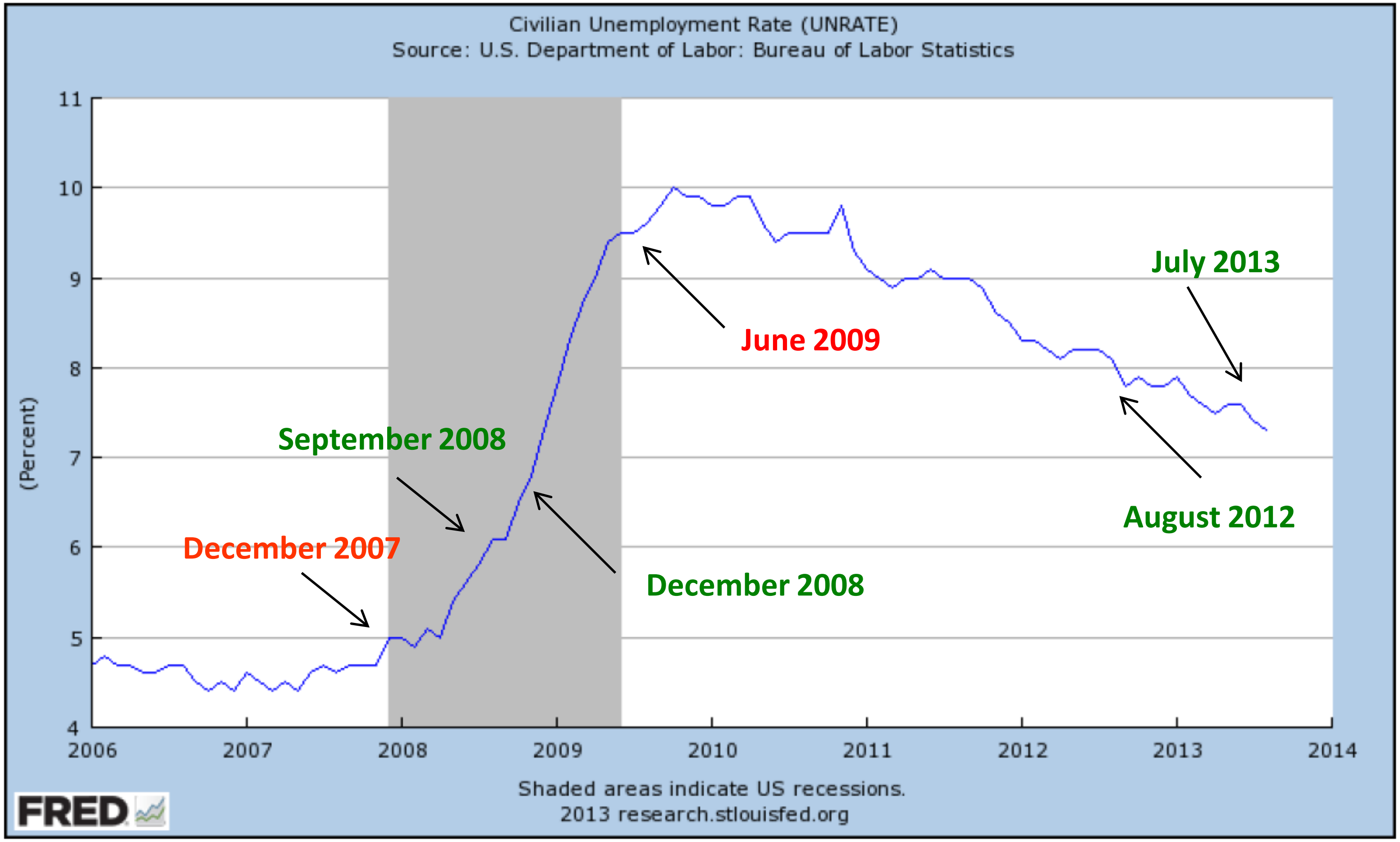
Prerequisites

- Macroeconomics
- Microeconomics
- Mathematics I and II
- Financial markets and institutions

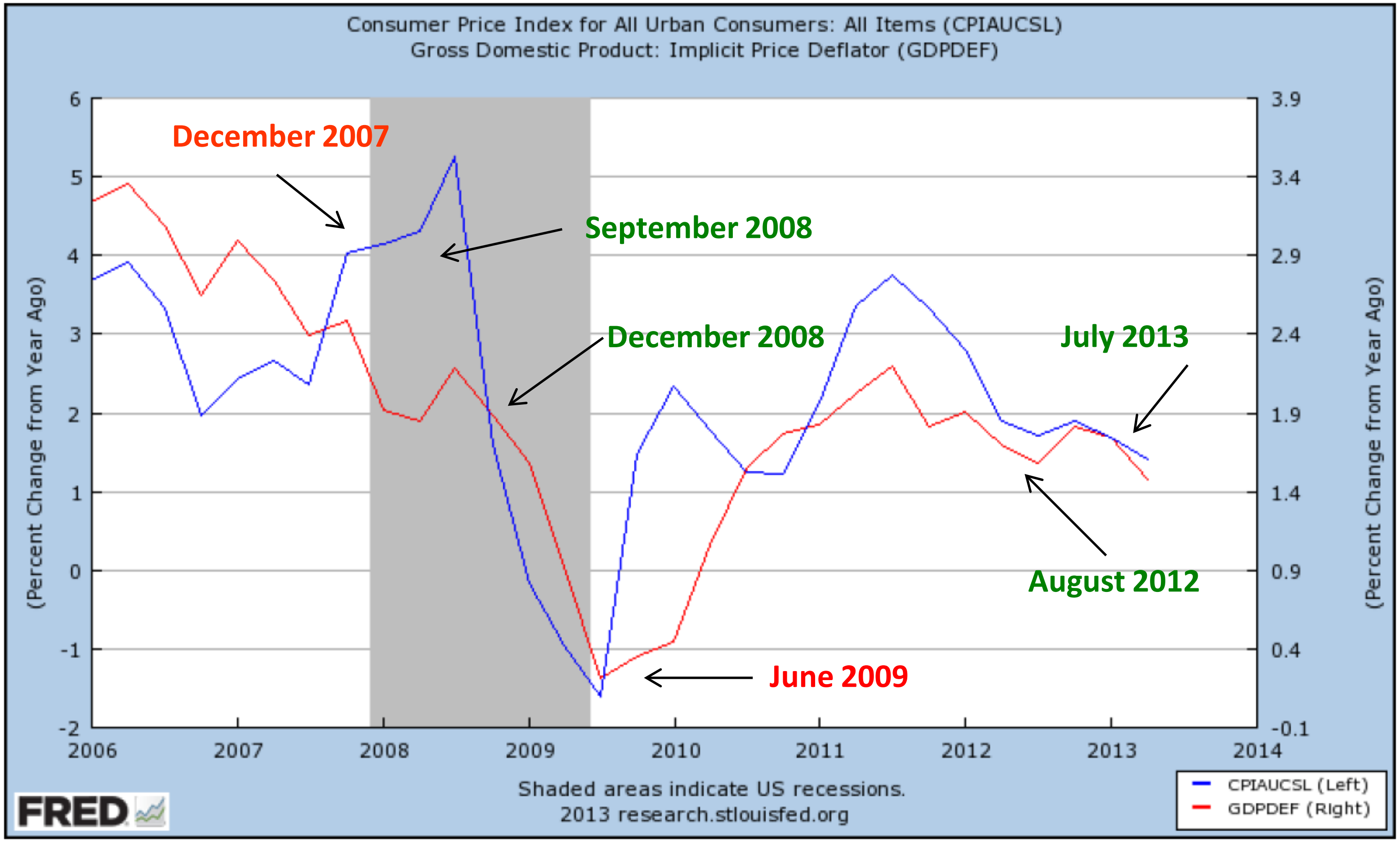
Federal Funds Target Rate, 2006-2008



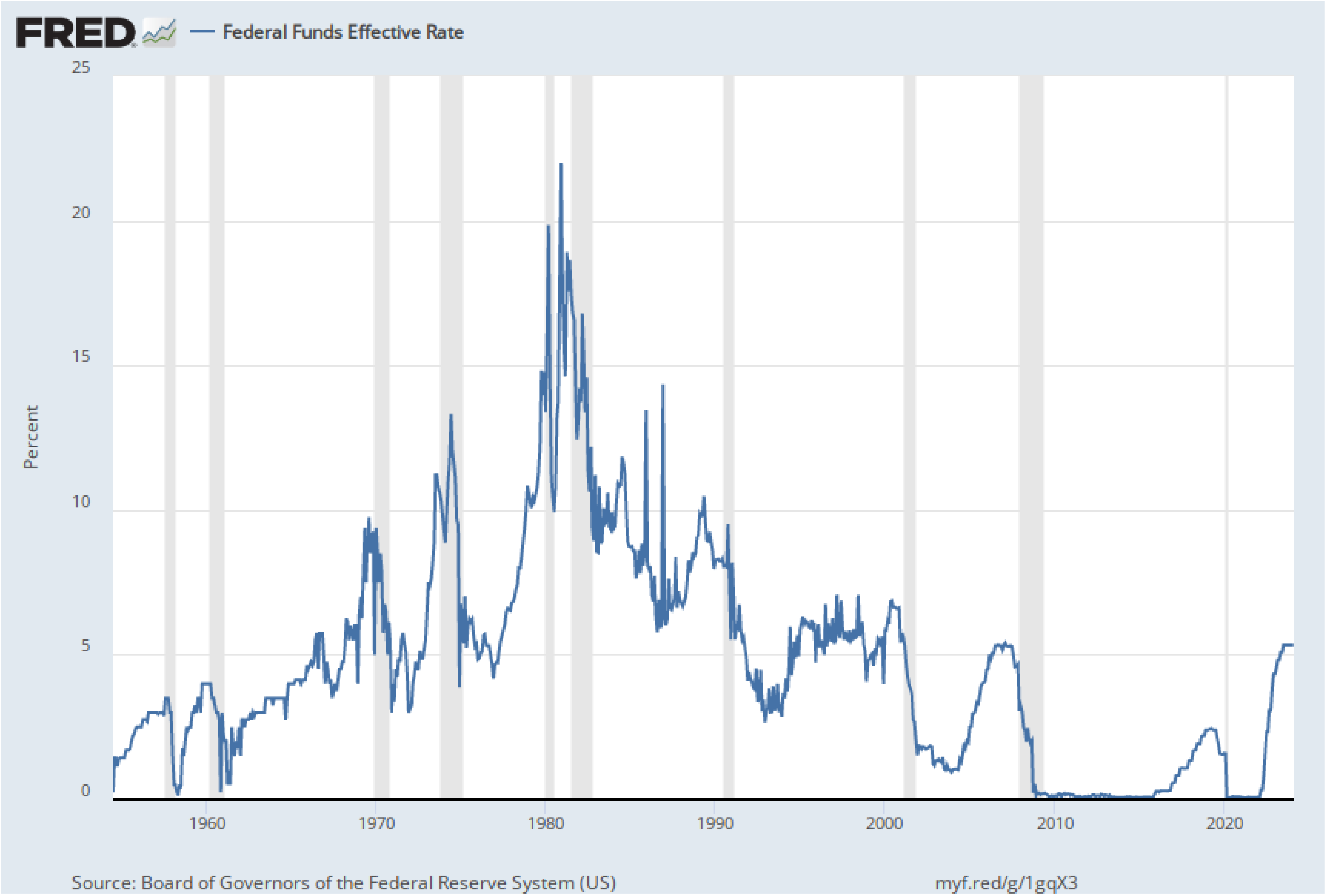
Unemployment rate, U.S. 2006-2013



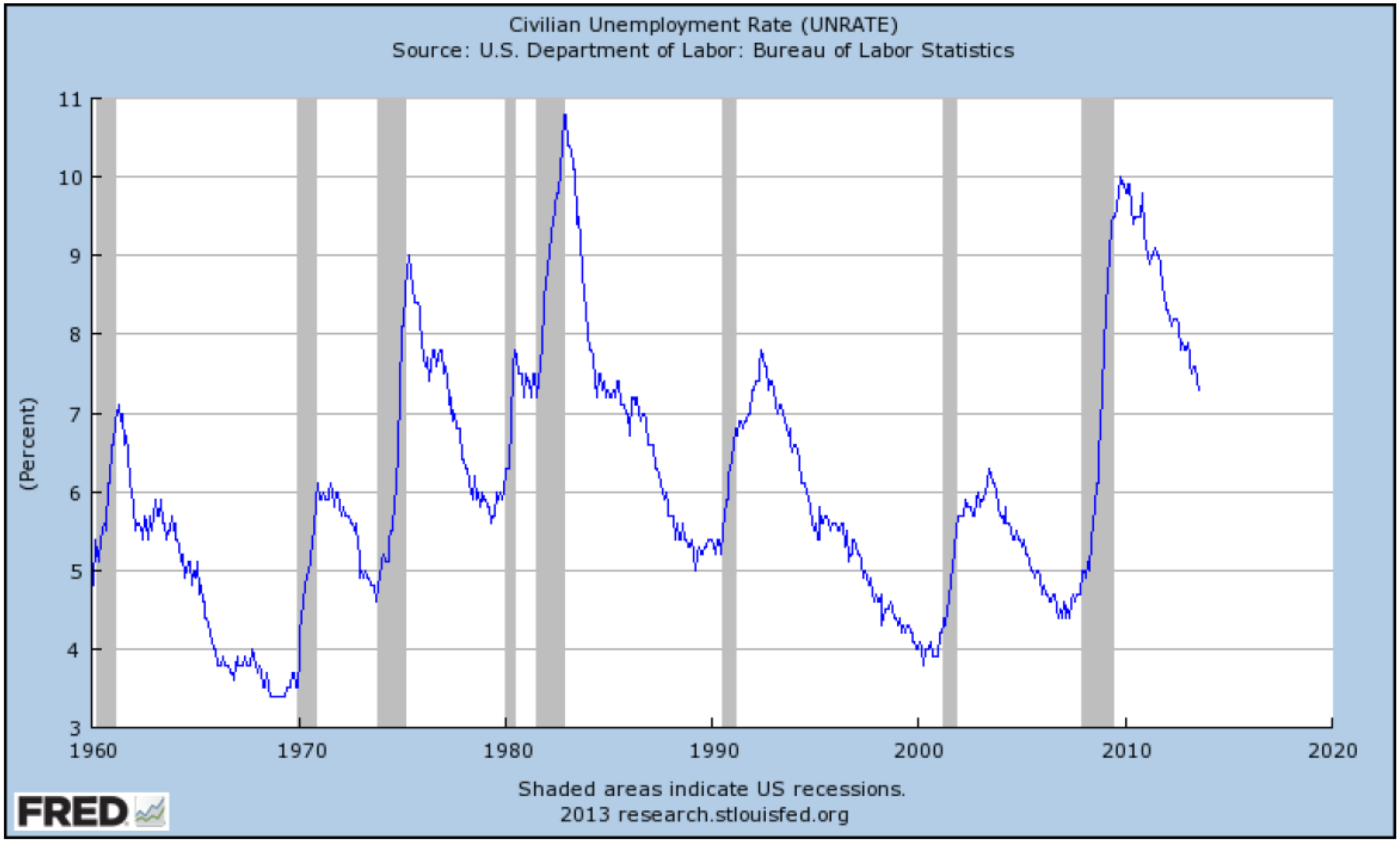
Inflation rate, U.S. 2006-2013



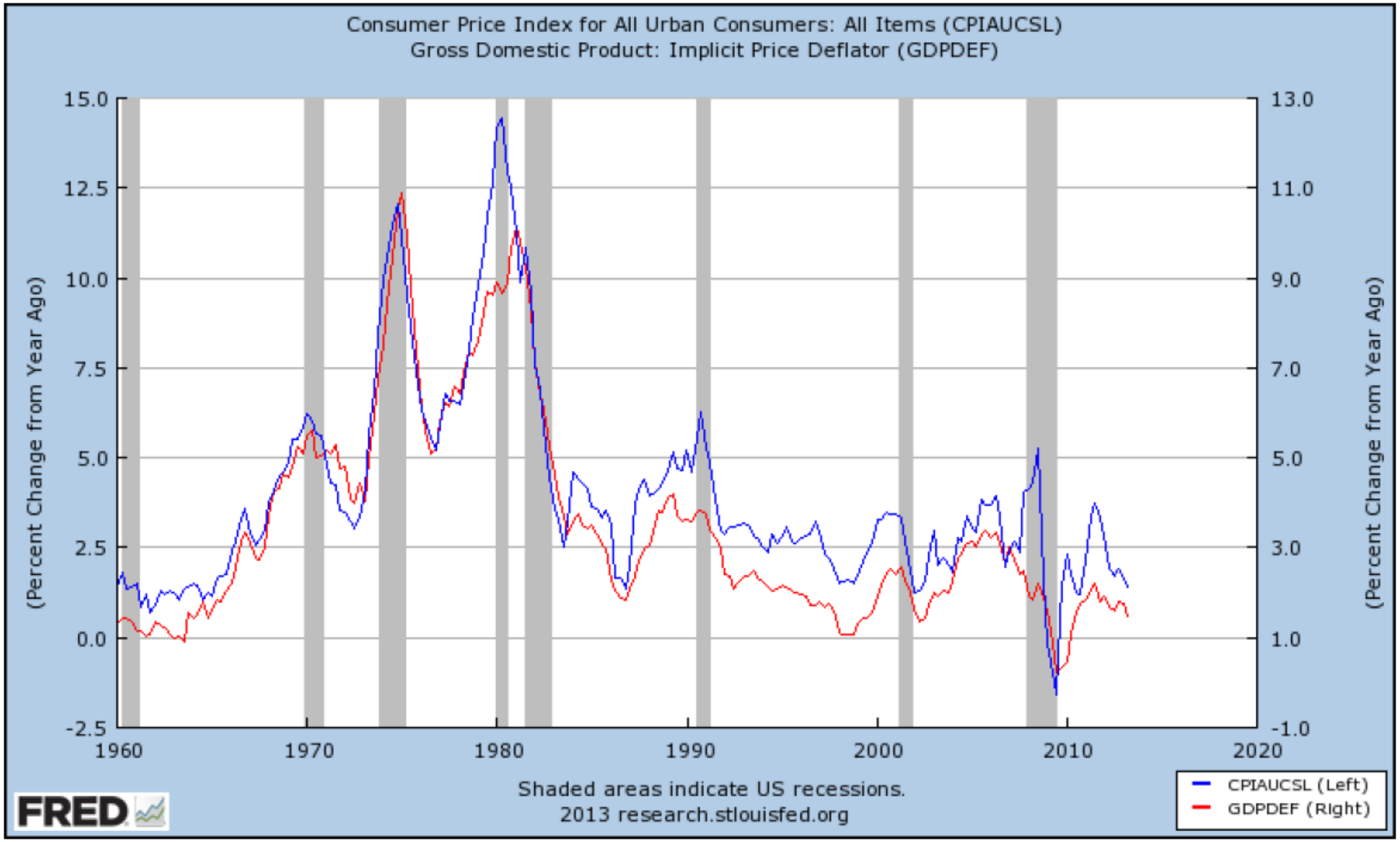
Federal Funds Effective Rate, 1954-2024



Unemployment rate, U.S. 1960-2013



Inflation rate, U.S. 1960-2013



FEDERAL RESERVE press release

Release Date: September 16, 2008

For immediate release

The Federal Open Market Committee decided today to keep its target for the federal funds rate at 2 percent.

Strains in financial markets have increased significantly and labor markets have weakened further. Economic growth appears to have slowed recently, partly reflecting a softening of household spending. Tight credit conditions, the ongoing housing contraction, and some slowing in export growth are likely to weigh on economic growth over the next few quarters. Over time, the substantial easing of monetary policy, combined with ongoing measures to foster market liquidity, should help to promote moderate economic growth.

Inflation has been high, spurred by the earlier increases in the prices of energy and some other commodities. The Committee expects inflation to moderate later this year and next year, but the inflation outlook remains highly uncertain.

The downside risks to growth and the upside risks to inflation are both of significant concern to the Committee. The Committee will monitor economic and financial developments carefully and will act as needed to promote sustainable economic growth and price stability.

Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; Christine M. Cumming; Elizabeth A. Duke; Richard W. Fisher; Donald L. Kohn; Randall S. Kroszner; Sandra Pianalto; Charles I. Plosser; Gary H. Stern; and Kevin M. Warsh. Ms. Cumming voted as the alternate for Timothy F. Geithner.

FEDERAL RESERVE press release

Release Date: December 16, 2008

For immediate release

The Federal Open Market Committee decided today to establish a target range for the federal funds rate of 0 to 1/4 percent.

Since the Committee's last meeting, labor market conditions have deteriorated, and the available data indicate that consumer spending, business investment, and industrial production have declined. Financial markets remain quite strained and credit conditions tight. Overall, the outlook for economic activity has weakened further.

Meanwhile, inflationary pressures have diminished appreciably. In light of the declines in the prices of energy and other commodities and the weaker prospects for economic activity, the Committee expects inflation to moderate further in coming quarters.

The Federal Reserve will employ all available tools to promote the resumption of sustainable economic growth and to preserve price stability. In particular, the Committee anticipates that weak economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time.

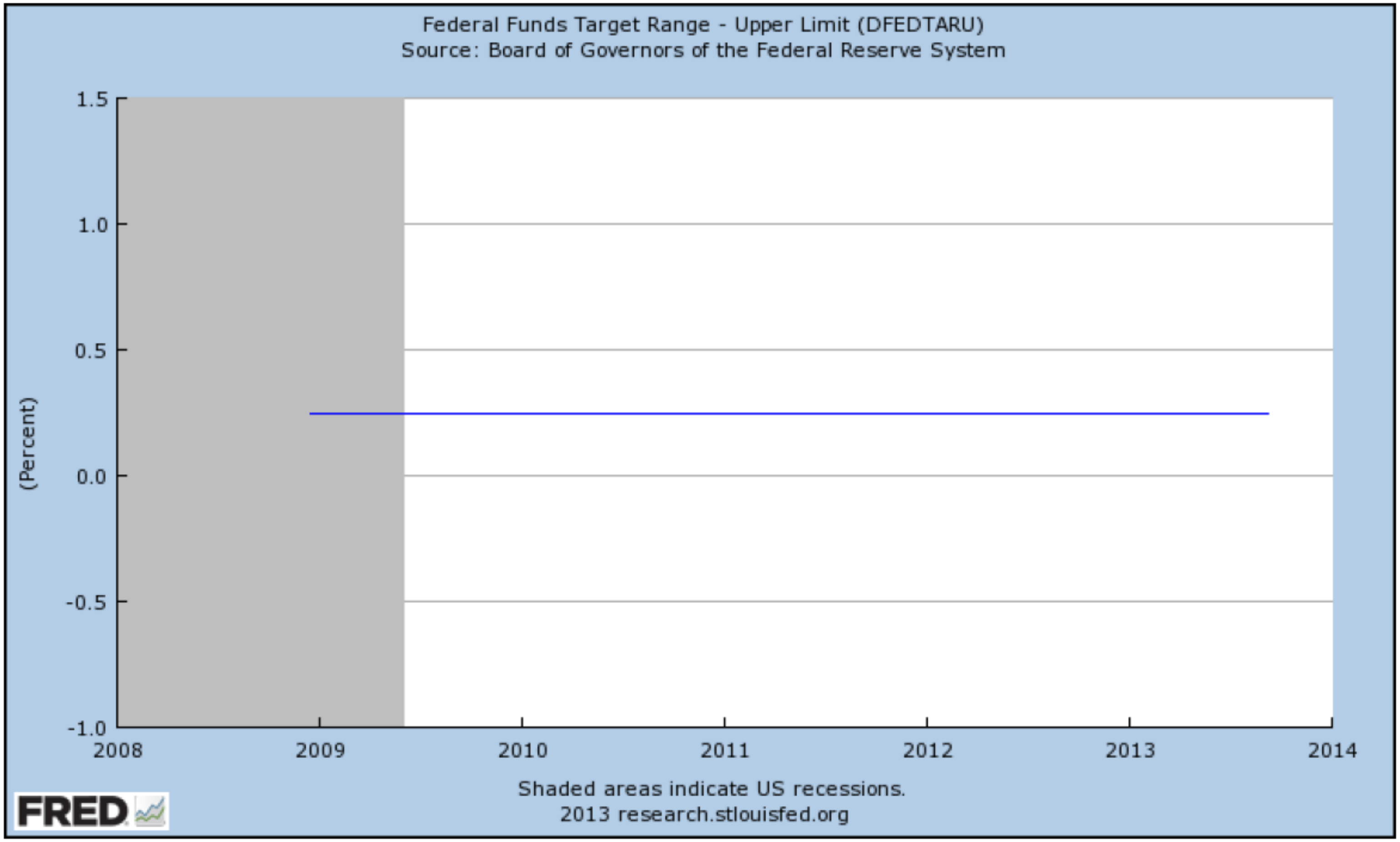
Cont.

The focus of the Committee's policy going forward will be to support the functioning of financial markets and stimulate the economy through open market operations and other measures that sustain the size of the Federal Reserve's balance sheet at a high level. As previously announced, over the next few quarters the Federal Reserve will purchase large quantities of agency debt and mortgage backed securities to provide support to the mortgage and housing markets, and it stands ready to expand its purchases of agency debt and mortgage-backed securities as conditions warrant. The Committee is also evaluating the potential benefits of purchasing longer-term Treasury securities. Early next year, the Federal Reserve will also implement the Term Asset-Backed Securities Loan Facility to facilitate the extension of credit to households and small businesses. The Federal Reserve will continue to consider ways of using its balance sheet to further support credit markets and economic activity.

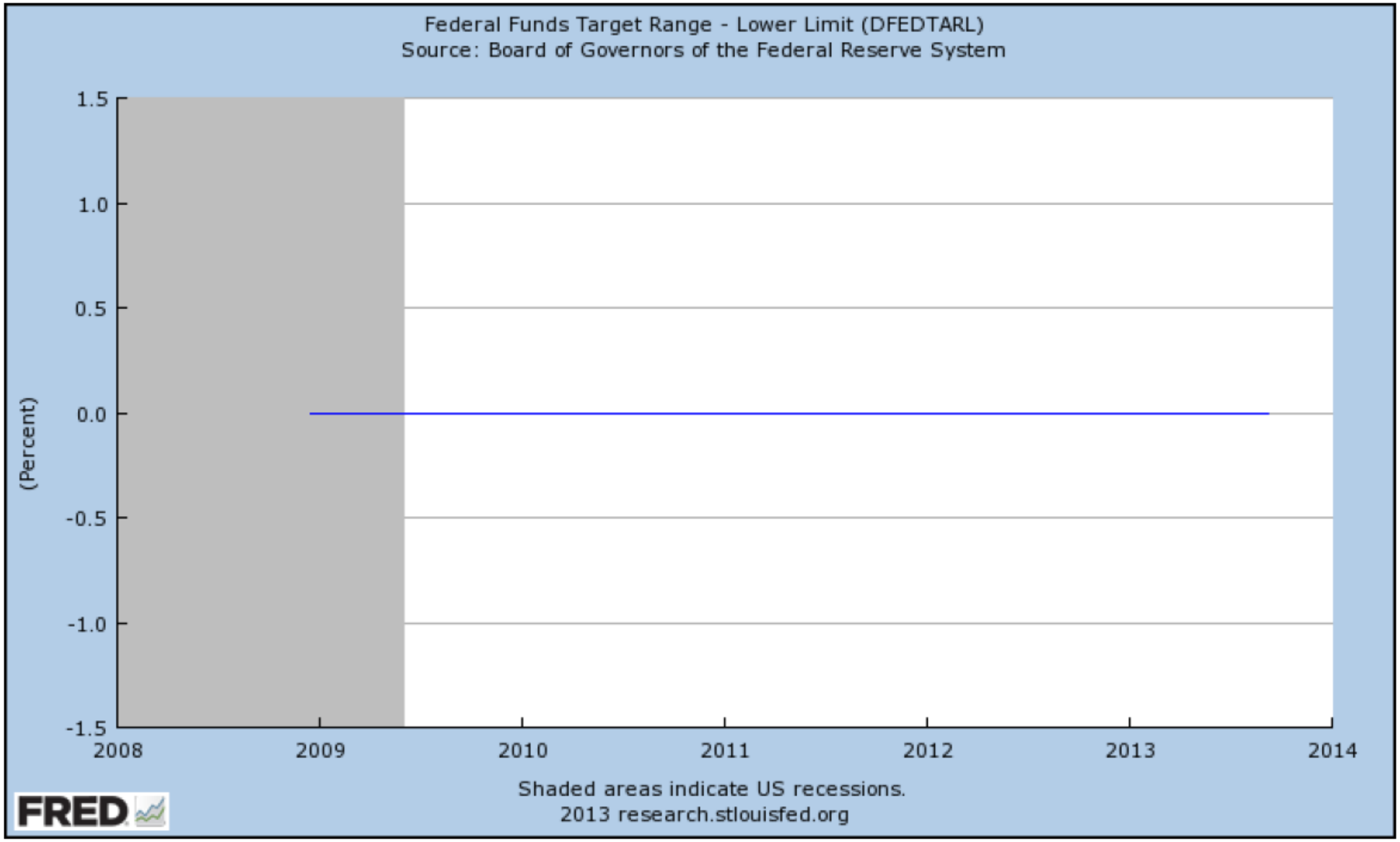
Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; Christine M. Cumming; Elizabeth A. Duke; Richard W. Fisher; Donald L. Kohn; Randall S. Kroszner; Sandra Pianalto; Charles I. Plosser; Gary H. Stern; and Kevin M. Warsh.

In a related action, the Board of Governors unanimously approved a 75-basis-point decrease in the discount rate to 1/2 percent. In taking this action, the Board approved the requests submitted by the Boards of Directors of the Federal Reserve Banks of New York, Cleveland, Richmond, Atlanta, Minneapolis, and San Francisco. The Board also established interest rates on required and excess reserve balances of 1/4 percent.

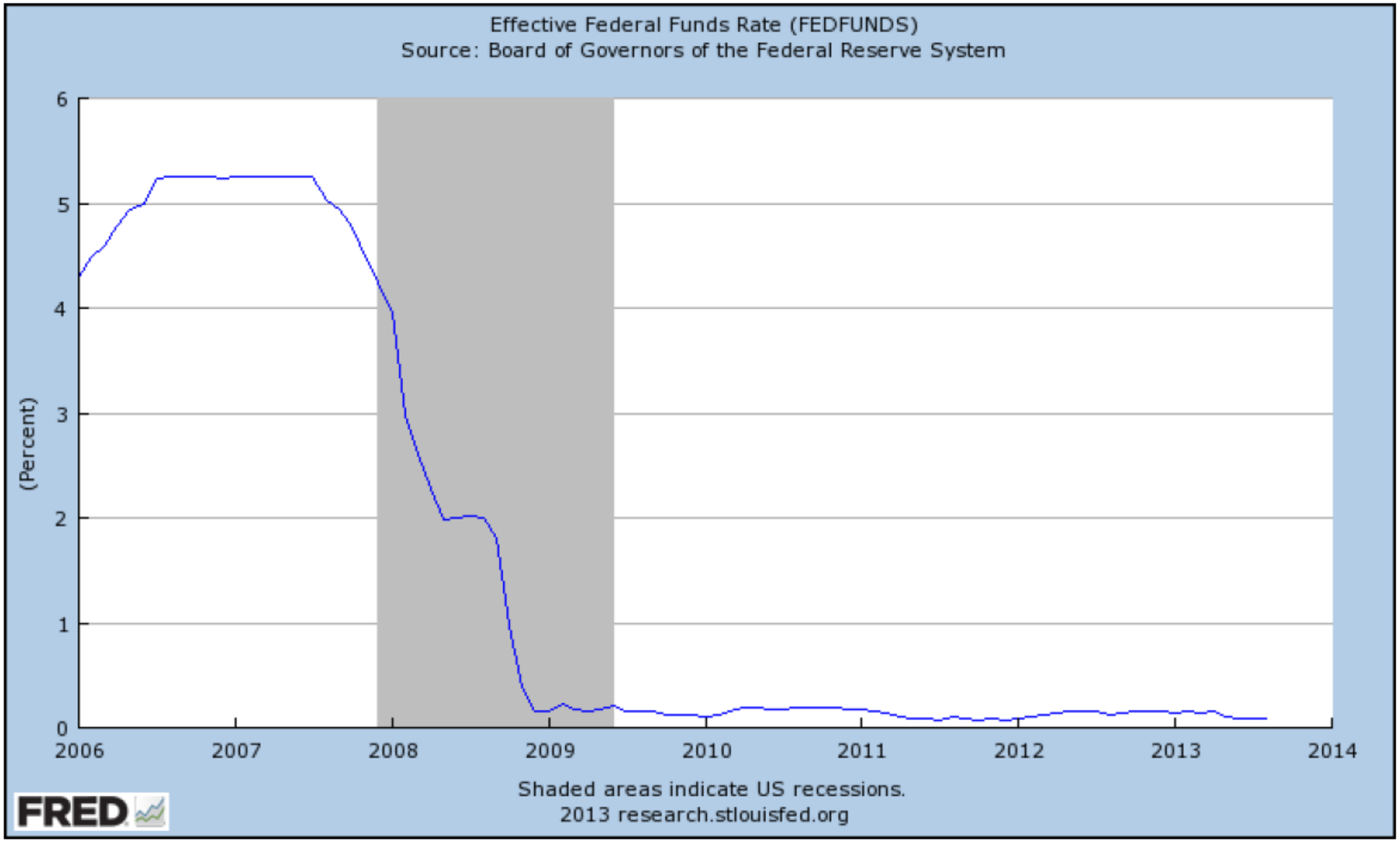
Federal Funds Target Range – Upper Limit, 2009-2013



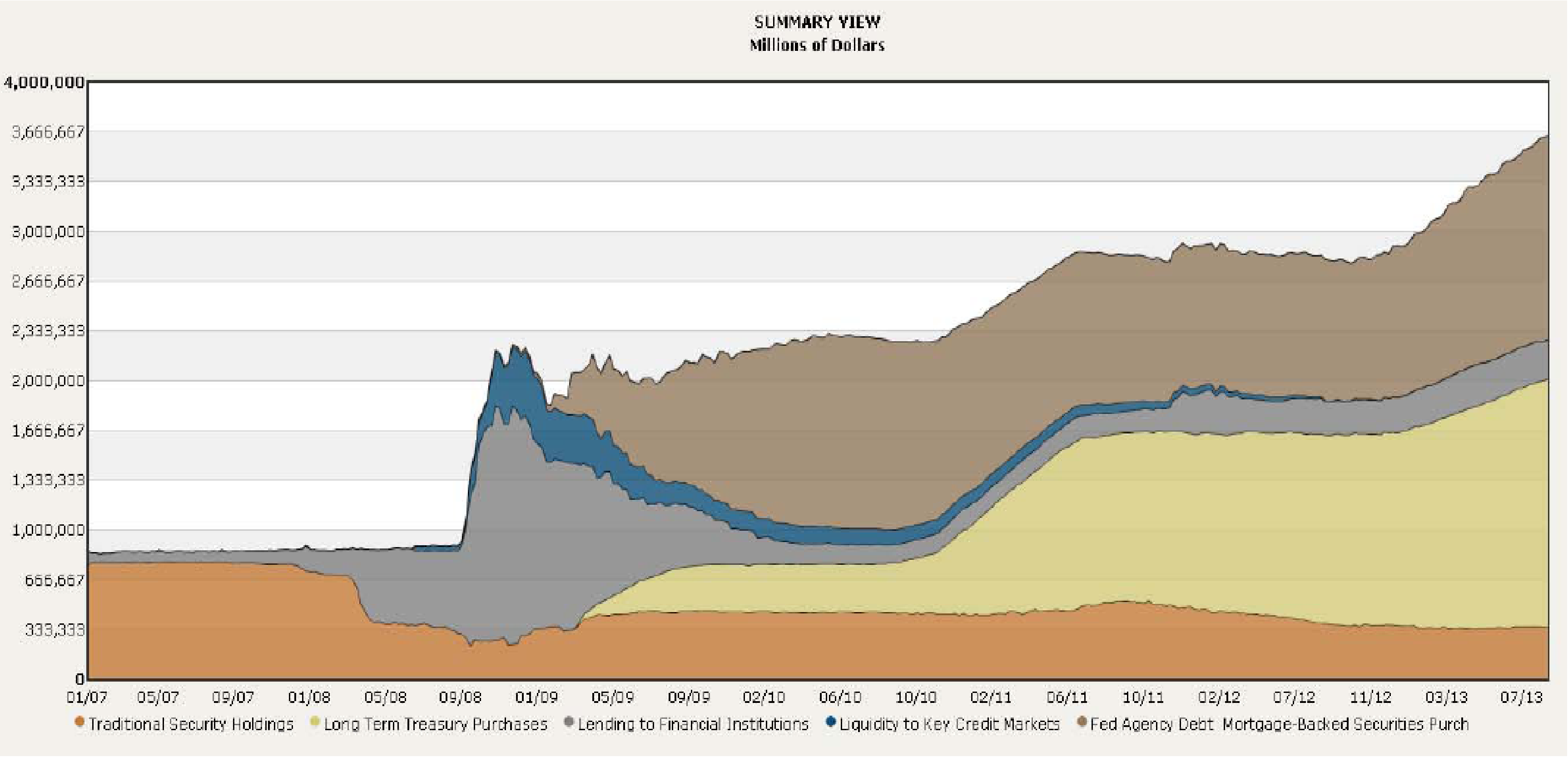
Federal Funds Target Range – Lower Limit, 2009-2013



Effective Federal Funds Rate, 2006-2013



Fed credit easing policy tools, 2007-2013



FEDERAL RESERVE press release

Release Date: August 1, 2012

For immediate release

Information received since the Federal Open Market Committee met in June suggests that economic activity decelerated somewhat over the first half of this year. Growth in employment has been slow in recent months, and the unemployment rate remains elevated. Business fixed investment has continued to advance. Household spending has been rising at a somewhat slower pace than earlier in the year. Despite some further signs of improvement, the housing sector remains depressed. Inflation has declined since earlier this year, mainly reflecting lower prices of crude oil and gasoline, and longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects economic growth to remain moderate over coming quarters and then to pick up very gradually. Consequently, the Committee anticipates that the unemployment rate will decline only slowly toward levels that it judges to be consistent with its dual mandate. Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee anticipates that inflation over the medium term will run at or below the rate that it judges most consistent with its dual mandate.

To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.

Cont.

The Committee also decided to continue through the end of the year its program to extend the average maturity of its holdings of securities as announced in June, and it is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. The Committee will closely monitor incoming information on economic and financial developments and will provide additional accommodation as needed to promote a stronger economic recovery and sustained improvement in labor market conditions in a context of price stability.

Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; William C. Dudley, Vice Chairman; Elizabeth A. Duke; Dennis P. Lockhart; Sandra Pianalto; Jerome H. Powell; Sarah Bloom Raskin; Jeremy C. Stein; Daniel K. Tarullo; John C. Williams; and Janet L. Yellen. Voting against the action was Jeffrey M. Lacker, who preferred to omit the description of the time period over which economic conditions are likely to warrant an exceptionally low level of the federal funds rate.

FEDERAL RESERVE press release

Release Date: July 31, 2013

For immediate release

Information received since the Federal Open Market Committee met in June suggests that economic activity expanded at a modest pace during the first half of the year. Labor market conditions have shown further improvement in recent months, on balance, but the unemployment rate remains elevated. Household spending and business fixed investment advanced, and the housing sector has been strengthening, but mortgage rates have risen somewhat and fiscal policy is restraining economic growth. Partly reflecting transitory influences, inflation has been running below the Committee's longer-run objective, but longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with appropriate policy accommodation, economic growth will pick up from its recent pace and the unemployment rate will gradually decline toward levels the Committee judges consistent with its dual mandate. The Committee sees the downside risks to the outlook for the economy and the labor market as having diminished since the fall. The Committee recognizes that inflation persistently below its 2 percent objective could pose risks to economic performance, but it anticipates that inflation will move back toward its objective over the medium term.

To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee decided to continue purchasing additional agency mortgage-backed securities at a pace of $40 billion per month and longer-term Treasury securities at a pace of $45 billion per month. The Committee is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. Taken together, these actions should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.

Cont.

The Committee will closely monitor incoming information on economic and financial developments in coming months. The Committee will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. The Committee is prepared to increase or reduce the pace of its purchases to maintain appropriate policy accommodation as the outlook for the labor market or inflation changes. In determining the size, pace, and composition of its asset purchases, the Committee will continue to take appropriate account of the likely efficacy and costs of such purchases as well as the extent of progress toward its economic objectives.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In particular, the Committee decided to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored. In determining how long to maintain a highly accommodative stance of monetary policy, the Committee will also consider other information, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. When the Committee decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent.

Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; William C. Dudley, Vice Chairman; James Bullard; Elizabeth A. Duke; Charles L. Evans; Jerome H. Powell; Sarah Bloom Raskin; Eric S. Rosengren; Jeremy C. Stein; Daniel K. Tarullo; and Janet L. Yellen. Voting against the action was Esther L. George, who was concerned that the continued high level of monetary accommodation increased the risks of future economic and financial imbalances and, over time, could cause an increase in long-term inflation expectations.

Introductory statement to the press conference
Mario Draghi, President of the ECB,
Vítor Constâncio, Vice-President of the ECB,
Frankfurt am Main, 6 September 2012

Ladies and gentlemen, the Vice-President and I are very pleased to welcome you to our press conference. We will now report on the outcome of today's meeting of the Governing Council, which was also attended by the President of the Eurogroup, Prime Minister Juncker, and by the Commission Vice-President, Mr Rehn.

Based on our regular economic and monetary analyses, we decided to keep the key ECB interest rates unchanged. Owing to high energy prices and increases in indirect taxes in some euro area countries, inflation rates are expected to remain above 2% throughout 2012, to fall below that level again in the course of next year and to remain in line with price stability over the policy-relevant horizon. Consistent with this picture, the underlying pace of monetary expansion remains subdued. Inflation expectations for the euro area economy continue to be firmly anchored in line with our aim of maintaining inflation rates below, but close to, 2% over the medium term.

Economic growth in the euro area is expected to remain weak, with the ongoing tensions in financial markets and heightened uncertainty weighing on confidence and sentiment. A renewed intensification of financial market tensions would have the potential to affect the balance of risks for both growth and inflation.

Introductory statement to the press conference Cont.

It is against this background that the Governing Council today decided on the modalities for undertaking Outright Monetary Transactions (OMTs) in secondary markets for sovereign bonds in the euro area. As we said a month ago, we need to be in the position to safeguard the monetary policy transmission mechanism in all countries of the euro area. We aim to preserve the singleness of our monetary policy and to ensure the proper transmission of our policy stance to the real economy throughout the area. OMTs will enable us to address severe distortions in government bond markets which originate from, in particular, unfounded fears on the part of investors of the reversibility of the euro. Hence, under appropriate conditions, we will have a fully effective backstop to avoid destructive scenarios with potentially severe challenges for price stability in the euro area. Let me repeat what I said last month: we act strictly within our mandate to maintain price stability over the medium term; we act independently in determining monetary policy; and the euro is irreversible.

In order to restore confidence, policy-makers in the euro area need to push ahead with great determination with fiscal consolidation, structural reforms to enhance competitiveness and European institution-building. At the same time, governments must stand ready to activate the EFSF/ESM in the bond market when exceptional financial market circumstances and risks to financial stability exist – with strict and effective conditionality in line with the established guidelines. The adherence of governments to their commitments and the fulfillment by the EFSF/ESM of their role are necessary conditions for our outright transactions to be conducted and to be effective.

Details of the Outright Monetary Transactions are described in a separate press release.

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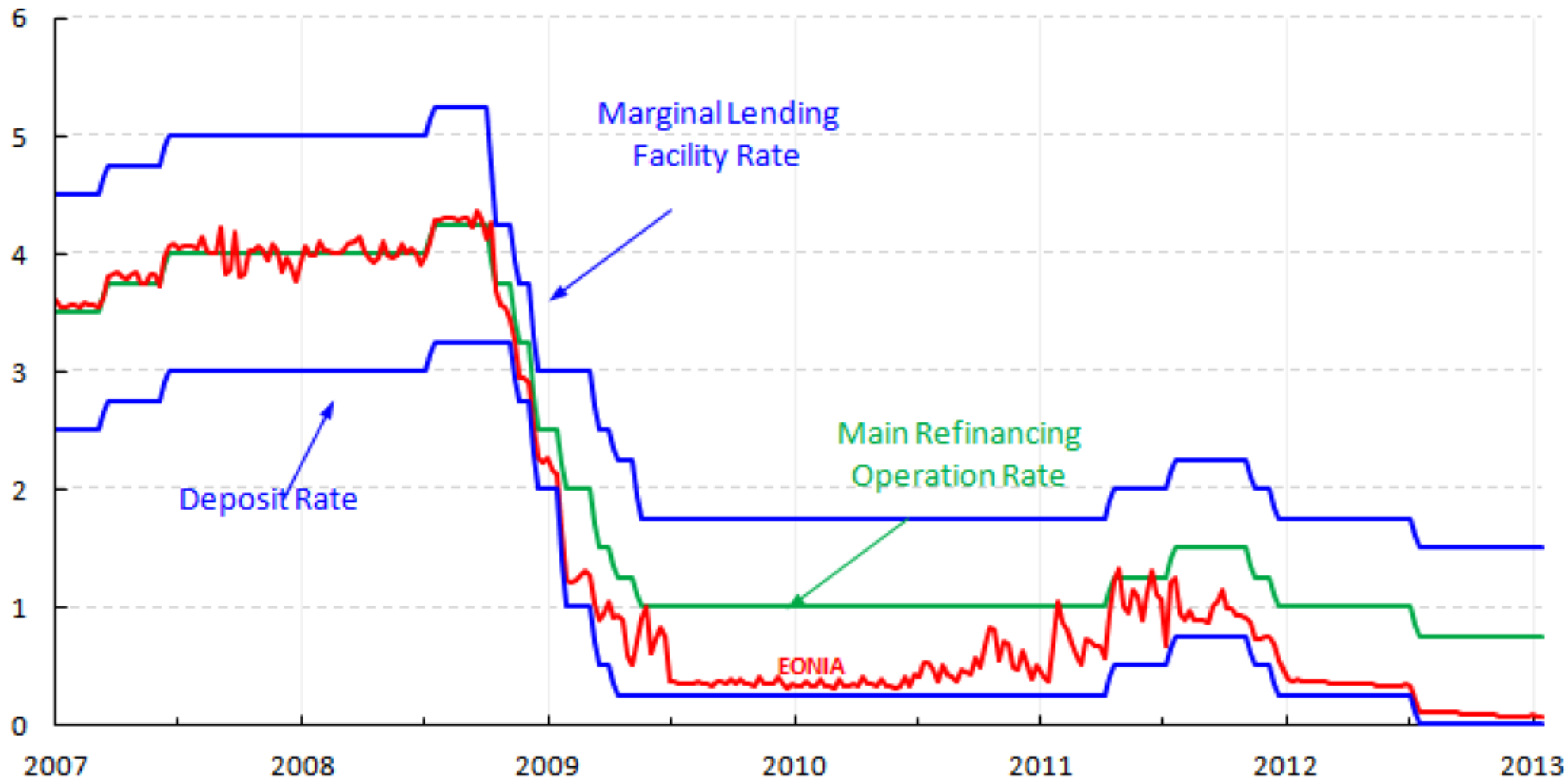
ECB policy rates and the overnight rate, 2007-2013



PRESS RELEASE
6 September 2012 -Technical features of Outright Monetary Transactions

As announced on 2 August 2012, the Governing Council of the European Central Bank (ECB) has today taken decisions on a number of technical features regarding the Eurosystem's outright transactions in secondary sovereign bond markets that aim at safeguarding an appropriate monetary policy transmission and the singleness of the monetary policy. These will be known as Outright Monetary Transactions (OMTs) and will be conducted within the following framework:

Conditionality

A necessary condition for Outright Monetary Transactions is strict and effective conditionality attached to an appropriate European Financial Stability Facility/European Stability Mechanism (EFSF/ESM) program. Such programs can take the form of a full EFSF/ESM macroeconomic adjustment program or a precautionary program (Enhanced Conditions Credit Line), provided that they include the possibility of EFSF/ESM primary market purchases. The involvement of the IMF shall also be sought for the design of the country-specific conditionality and the monitoring of such a program.

The Governing Council will consider Outright Monetary Transactions to the extent that they are warranted from a monetary policy perspective as long as program conditionality is fully respected, and terminate them once their objectives are achieved or when there is non-compliance with the macroeconomic adjustment or precautionary program.

Following a thorough assessment, the Governing Council will decide on the start, continuation and suspension of Outright Monetary Transactions in full discretion and acting in accordance with its monetary policy mandate.

Technical features of Outright Monetary Transactions Cont.

Coverage

Outright Monetary Transactions will be considered for future cases of EFSF/ESM macroeconomic adjustment programs or precautionary programs as specified above. They may also be considered for Member States currently under a macroeconomic adjustment program when they will be regaining bond market access.

Transactions will be focused on the shorter part of the yield curve, and in particular on sovereign bonds with a maturity of between one and three years.

No ex ante quantitative limits are set on the size of Outright Monetary Transactions.

Sterilisation

The liquidity created through Outright Monetary Transactions will be fully sterilized.

[…]

Program

1. Financial intermediation

  - Transform maturity of assets

  - Bank-run

  - Deposit insurance

Program, cont.

2. What is money?

- The functions of money
- The types of money
- The evolution of money
- The model of Kiyotaki-Wright

Program, cont.

3. The conduct of monetary policy

- The money supply process

* The deposit multiplier

* The determinants of money supply

- Central banking and tools of monetary policy

Program, cont.

4. The effects of monetary policy on the economy

- Empirical evidence on money and economic activity
- The transmission mechanisms of monetary policy
- Monetary policy, output and inflation in the short run

Program, cont.

5. The design of monetary policy

- Goals, strategies and tactics of monetary policy
- Inflation targeting
- Taylor interest rate rules
- Time inconsistency of monetary policy and inflationary bias
- Central bank independence and credibility of monetary policy
- Optimal response to shocks and stabilization bias
- Discretion and commitment in the conduct of monetary policy
- Inflation targeting in the PC-MPR model

Program, cont.

6. Financial and debt crises, monetary policy and unconventional monetary policy tools

- 2007-2009 financial crisis: causes and consequences
- Monetary policy during the financial crisis

* Monetary policy and the zero bound
* Unconventional monetary policy measures during the crisis

- The sovereign debt crisis in Europe and monetary policy

Program, cont.

6. Financial and debt crises, monetary policy and unconventional monetary policy tools

- 2007-2009 financial crisis: causes and consequences
- Monetary policy during the financial crisis

*Monetary policy and the zero bound

*Unconventional monetary policy measures duringthe crisis

- The sovereign debt crisis in Europe and monetary policy

Program, cont.

7. Controlling Inflation

- Determinacy
- Effectiveness
- Deviations in 2021-23

Program, cont.

8. Fiscal Support and Central Bank Independence

- The Fiscal Theory of the Price Level
- Fiscal interactions and the FTPL
- Quantitative easing