

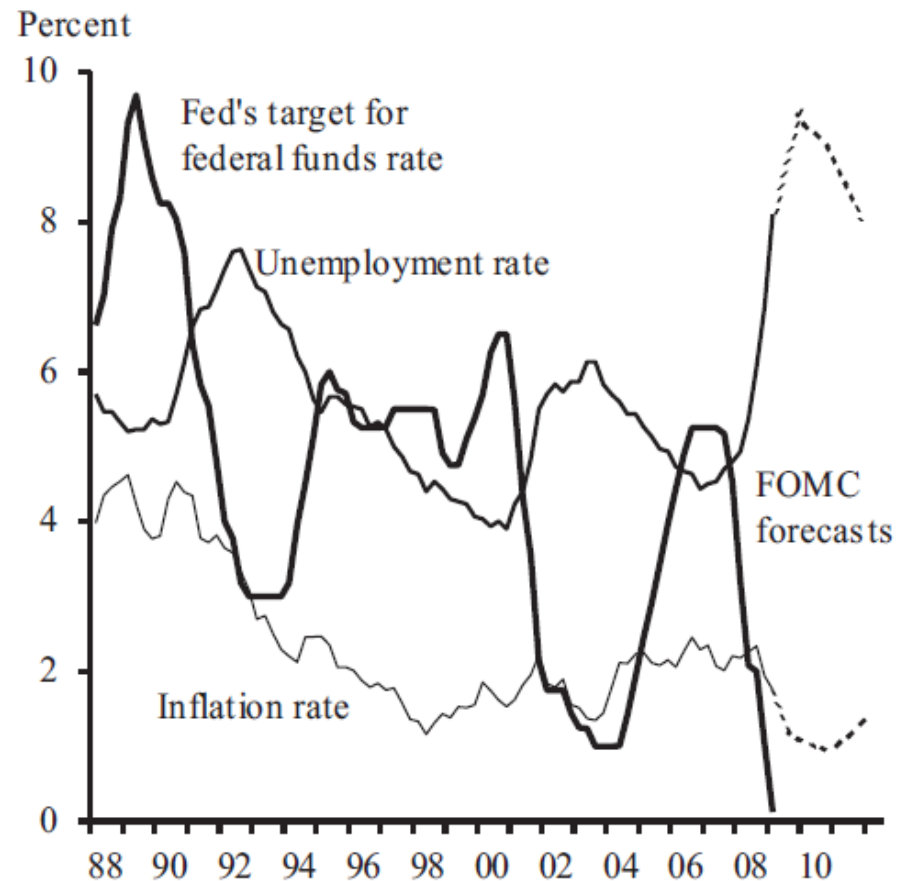
# Unconventional monetary policy

## Lecture 15

## Readings

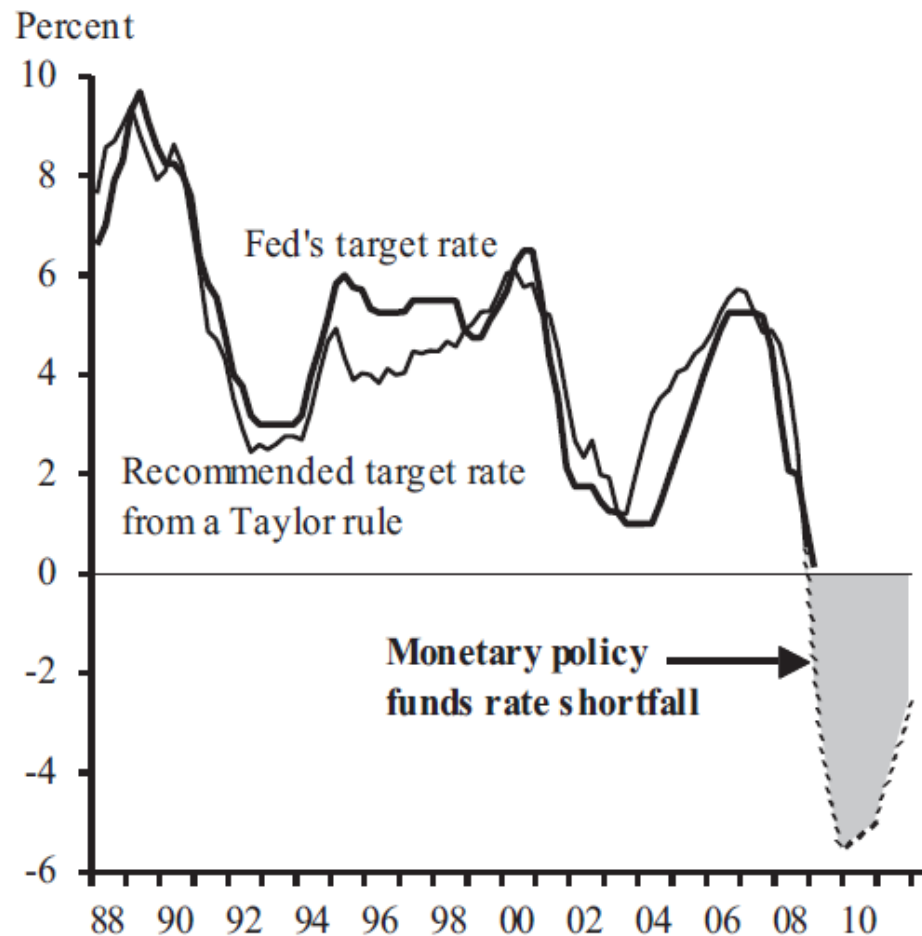
- Soderstrom and Westermarck (2009), “Monetary policy when the interest rate is zero”, Riksbank Economic Review
- Rudebusch (2009), “The Fed’s monetary policy response to the current crisis”, FRBSF Economic Letter
- Trichet (2009), “The ECB enhanced credit support”, Keynote address at the University of Munich
- Gonzales-Paramo (2011), “The ECB monetary policy during the crisis”, Closing speech at the Tenth Economic Policy Conference, Malaga
- Yellen (2011), “The Federal Reserve Asset Purchase Program”, The Brimmer Policy Forum, Allied Social Science Associations Annual Meeting, Denver
- Draghi (2012), “The monetary policy of the ECB and its transmission in the euro area”, Speech at Università Bocconi, Opening of the academic year 2012-2013, Milano

## Federal funds rate, unemployment and inflation rates



- During 2008 and two previous recessions (1991 and 2001) Fed responded to large jumps in unemployment with aggressive cuts in FFR
- Also lower inflation was generally associated with lower FFR

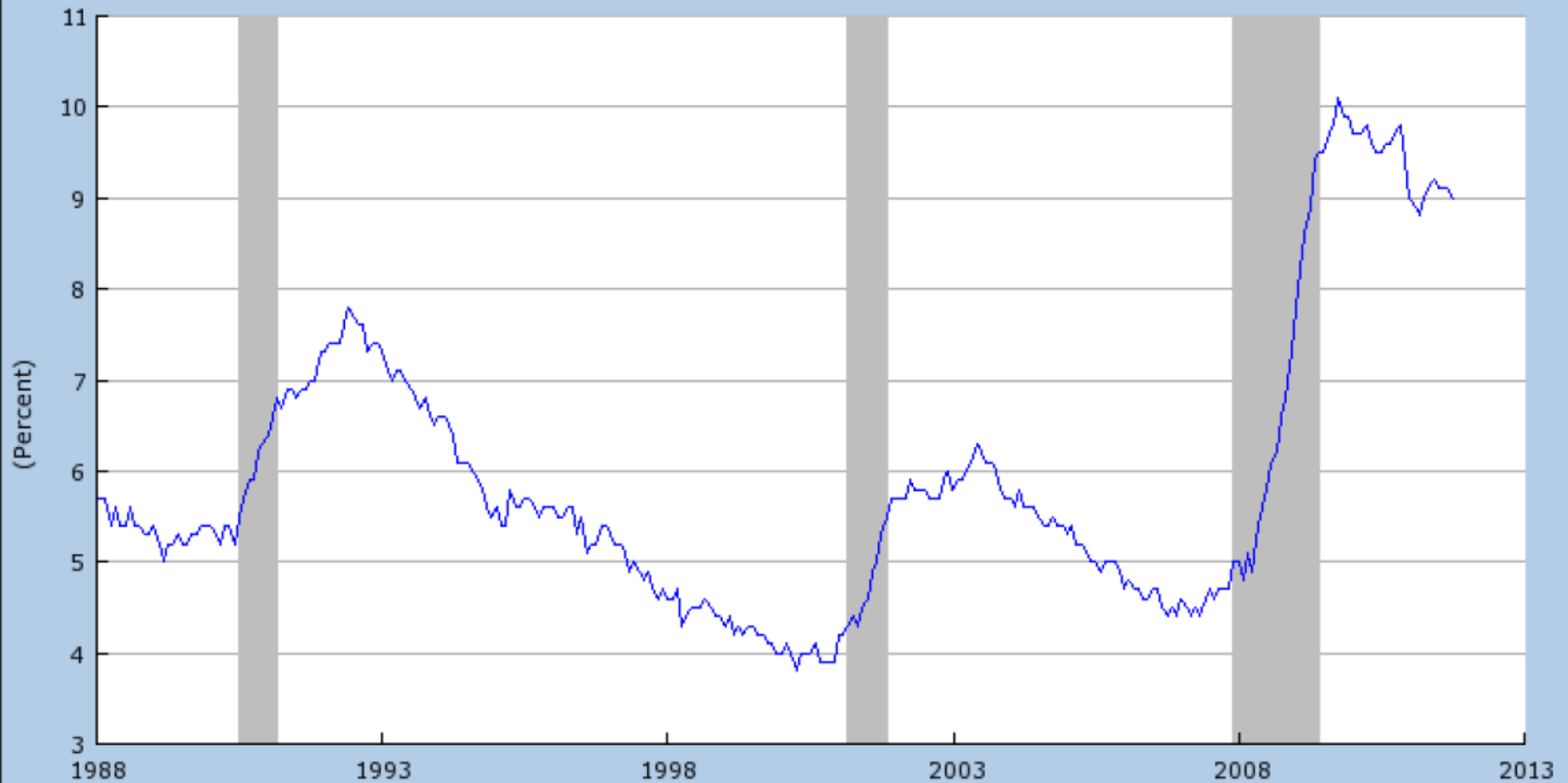
## Taylor rule, target rate and monetary policy shortfall



- Estimated Taylor rule broadly captures policy over the period [1988 to 2008]
- Taylor rule can also be used together with economic forecasts to provide rough benchmark for appropriate stance of monetary policy in the future
- FOMC would have had to reduce FFR to -5 percent at the end of 2009! Well below **lower bound of zero**!
- Large **size** and large **persistence** of the **monetary policy funds rate shortfall** (desired amount of monetary policy stimulus from a lower funds rate not available because of the lower bound)

# US unemployment rate

Civilian Unemployment Rate (UNRATE)  
Source: U.S. Department of Labor: Bureau of Labor Statistics



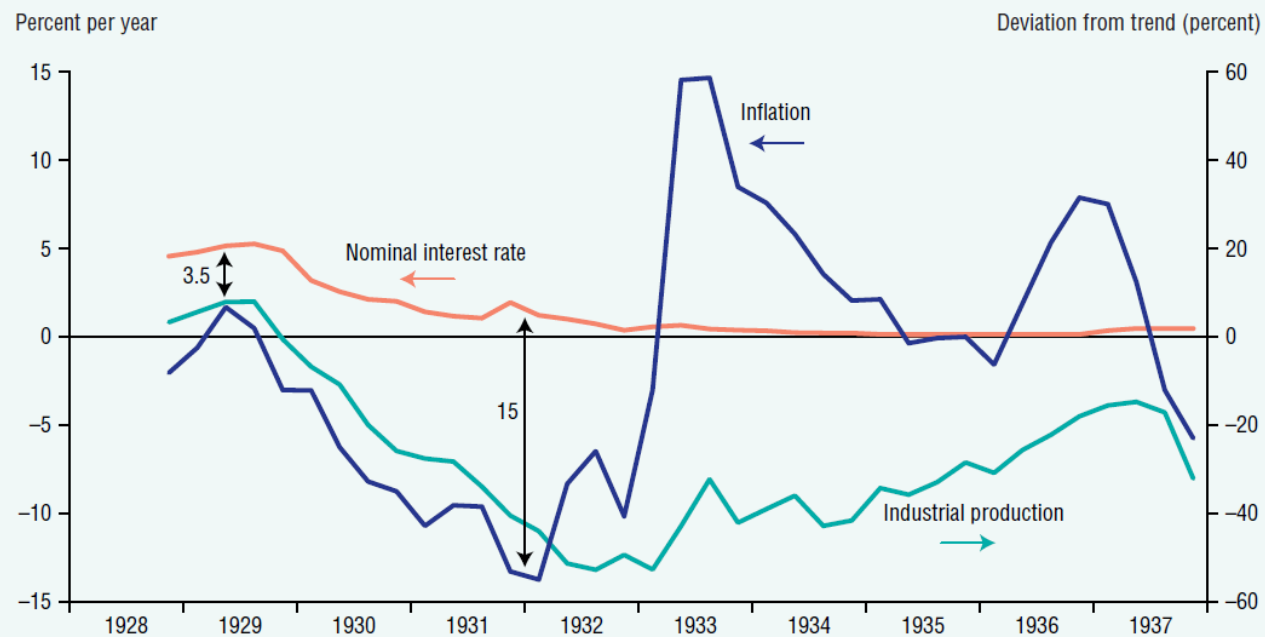
## Liquidity trap in history

- The term liquidity trap was originally coined by Keynes (1936) to describe the situation during the Great Depression and is defined as a situation in which the short-term nominal interest rate is zero
- Two main historical episodes of liquidity trap:
  - US during the Great Depression at the beginning of the 1930s
  - Japan during the Great Slump in the mid 1990s
- In both cases, the recession led to a deflation. A deflation combined with a nominal interest rate at the zero lower bound leads to high real rates which further tighten the economy and deepen the recession, cause further deflation....leading to a deflationary spiral

## Liquidity trap in history, cont.

Chart 3

### Worst-Case Scenario: Great Depression

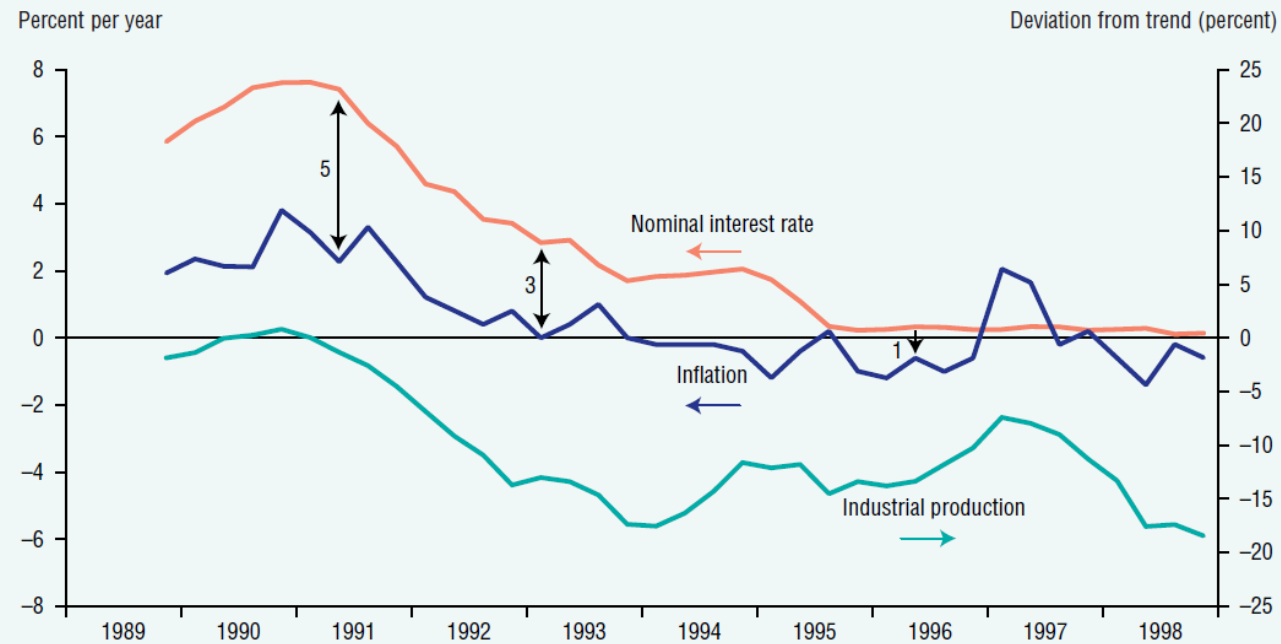


SOURCES: Federal Reserve Board; Census Bureau; Nathan S. Balke and Robert J. Gordon (1986), "Appendix B: Historical Data," in Robert J. Gordon (ed.), *The American Business Cycle: Continuity and Change* (Chicago: University of Chicago Press).

## Liquidity trap in history, cont.

Chart 4

### Japan Encounters the Zero Bound

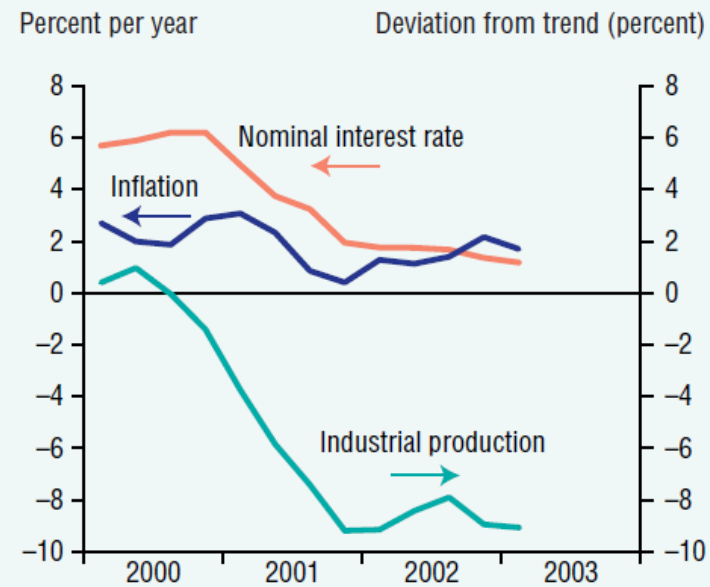


SOURCES: Association of Call and Discount Companies; Ministry of Economy, Trade and Industry; Economic and Social Research Institute.

## Almost in a liquidity trap

Chart 5

### Whither the U.S. Economy?



SOURCES: Federal Reserve Board; Bureau of Economic Analysis.

# Is monetary policy powerless when the interest rate is zero?

- Most central banks use a short-term nominal interest rate as the primary monetary policy instrument
- In normal times, changes in policy rates are
  - reflected into interbank overnight rates
  - from there, they are transmitted along the yield curve, also through the formation of expectations, to longer-term interest rates
  - furthermore, banks and other financial market participants pass on money market interest rates to households and businesses
- In a deep recession central banks may wish to cut substantially the policy rate to stimulate aggregate demand
- Interest rates cannot be negative: when the policy rate reaches zero, the central bank cannot cut it further
- But monetary policy is not powerless when policy rate is zero...let's see

## Monetary policy when the policy rate is zero or unconventional monetary policy

To stimulate the economy when the policy rate is zero central bank can:

- Influence **expectations** of i) **future inflation** and ii) **short-term policy rates**
- Influence directly **other interest rates** in the economy (those applying to households and businesses) by changing risk and term premia
- Facilitate the **credit flow** (to restore the link btw policy rate and other rates)
- Influence the **exchange rate**

## What is an expansionary is monetary policy?

- Monetary policy is typically described in terms of the **current level** of the **short-term policy rate**
- However, how contractionary or expansionary monetary policy can also be described in terms of
  - **low** short-term **real** interest rate
  - **low long-term** real interest rates in **various credit markets** (for example, interest rates on mortgages or company loans)
  - **weak** real **exchange rate**

## Extended aggregate demand equation

$$x_t = E_t x_{t+1} - \underbrace{[i_t - E_t \pi_{t+1} + \delta_t - r_t^n]}_{\text{real rate faced by households and firms}]$$

- $x_t$  is the output gap, and  $E_t x_{t+1}$  the expected output gap for next period
- $i_t$  is the short-term risk-free nominal interest rate (the monetary policy instrument)
- $\delta_t$  is an interest rate differential between the risk-free rate and the interest rate that firms and households face (risk/term premium)
- $E_t \pi_{t+1}$  is expected inflation for next period
- $r_t^n$  is the natural real rate of interest

## Aggregate demand and monetary policy

$$x_t = E_t x_{t+1} - \underbrace{[i_t - E_t \pi_{t+1} + \delta_t - r_t^n]}_{\text{real rate faced by households and firms]}$$

There are several ways to stimulate aggregate demand

- cut the short term policy rate,  $i_t$
- reduce interest rate differentials (risk/term premia),  $\delta_t$
- raise inflation expectations,  $E_t \pi_{t+1}$

## Aggregate demand and monetary policy, cont.

By repeatedly using the previous equation to eliminate future output gaps, get

$$x_t = -E_t \sum_{s=0}^{\infty} [i_{t+s} - \pi_{t+1+s} + \delta_{t+s} - r_{t+s}^n]$$

*Consumption smoothing → current demand depends on future expected real rates*

Aggregate demand can be raised by

- cutting expected future short term nominal rates  $E_t i_{t+s}$  (at the point in time where the zero-bound will no longer be binding)
- reducing expected future interest rate differentials (risk/term premia),  $E_t \delta_{t+s}$
- raise future inflation expectations further in the future,  $E_t \pi_{t+1+s}$

## Conventional and unconventional monetary policy

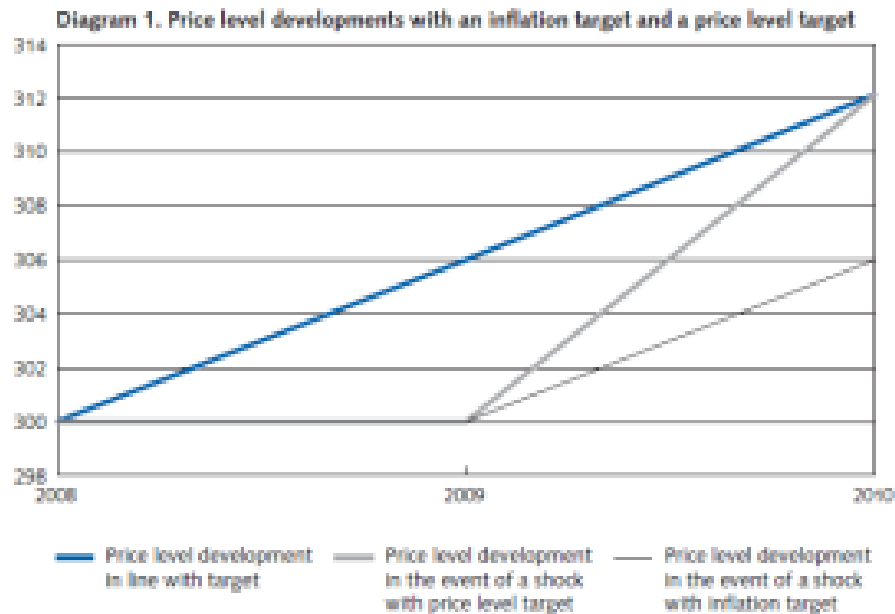
- Conventional monetary policy (normal times):

1. Temporary open-market operations directed at achieving a target level for the short-term interest rate in the interbank market
2. No outright purchases of government bonds or corporate debt and no direct lending to the government or the private sector

- Unconventional monetary policy:

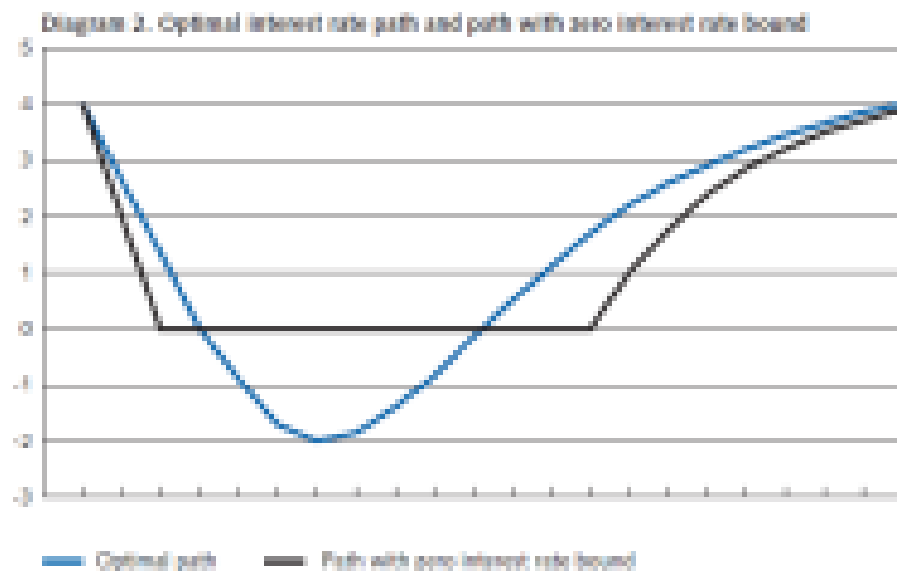
policies directly aimed at lowering the cost and increasing the availability of credit to households, banks and businesses

# Measures to influence inflation expectations



- **Inflation target** manages expectations: a **credible** inflation target leads to relatively stable inflation expectations and prevents situation in which low inflation expectations lead to excessively high real rates
- A **price level target** may work even better: differently from inflation targeting there is future compensation for shocks; it generates higher inflation expectations in face of deflationary shock; there is an overshooting in inflation because old shocks are not forgotten
- Importance of **credibility**: a price level target corresponds to allowing for an **overshooting of the target** after the crisis; problem of **time-inconsistency**

# Measures to influence nominal interest rates expectations



- If **ideal interest rate is negative**, central bank can cut the interest rate to zero and announce that the interest rate will **remain zero over a longer period of time**
- In addition interest rates should be cut at a **early stage**
- Sum of expected short term rates is the same under the two interest rate paths: aggregate effect is the same
- Importance of **credibility**: incentive to deviate from the announced policy once the economy emerges from the crisis; problem of **time-inconsistency**

# Quantitative easing

- In general, monetary policy can be regarded as central banks changing either money supply or the interest rate
- **Quantitative monetary policy**: policy aimed more directly at increasing the money supply; often described in terms of the **CB balance sheet effects on the asset side**
- Under normal circumstances central bank temporarily affects money supply by buying and selling **short-term government bonds**
- Resulting changes in interest rates (with close links among policy and other rates) affect aggregate demand (private consumption and investment)
- But when short-term nominal rate reaches the lower limit, interest rates and aggregate demand are not affected by changes in money supply: **liquidity trap**

## Quantitative easing, cont.

Why then increasing in money supply may still affect aggregate demand?

- Increases in money supply perceived as **lasting** may affect **expectations of future inflation**: if the economy is eventually expected to emerge from the liquidity trap, raises in money supply will affect future inflation; and consequently will affect inflation expectations; credibility of announcement of lasting increase in money supply is key (QE in Japan in early 2000s was interpreted as temporary and did not have large effects)
- Central banks, by buying securities, affect their **price**; central bank can **lower interest rates in the economy by buying other type of securities** than short-term government bonds (for example **long-term government bonds**); portfolio balance effects spread the effect of the CB purchase on other assets prices; **reduction in liquidity/term premia**
- By buying long-term government bonds, central banks can also affect long term interest rates consistently with announced short-term interest rate path, credibly **supporting** for example **announcement of low path for future policy rate**

## Quantitative easing, cont.

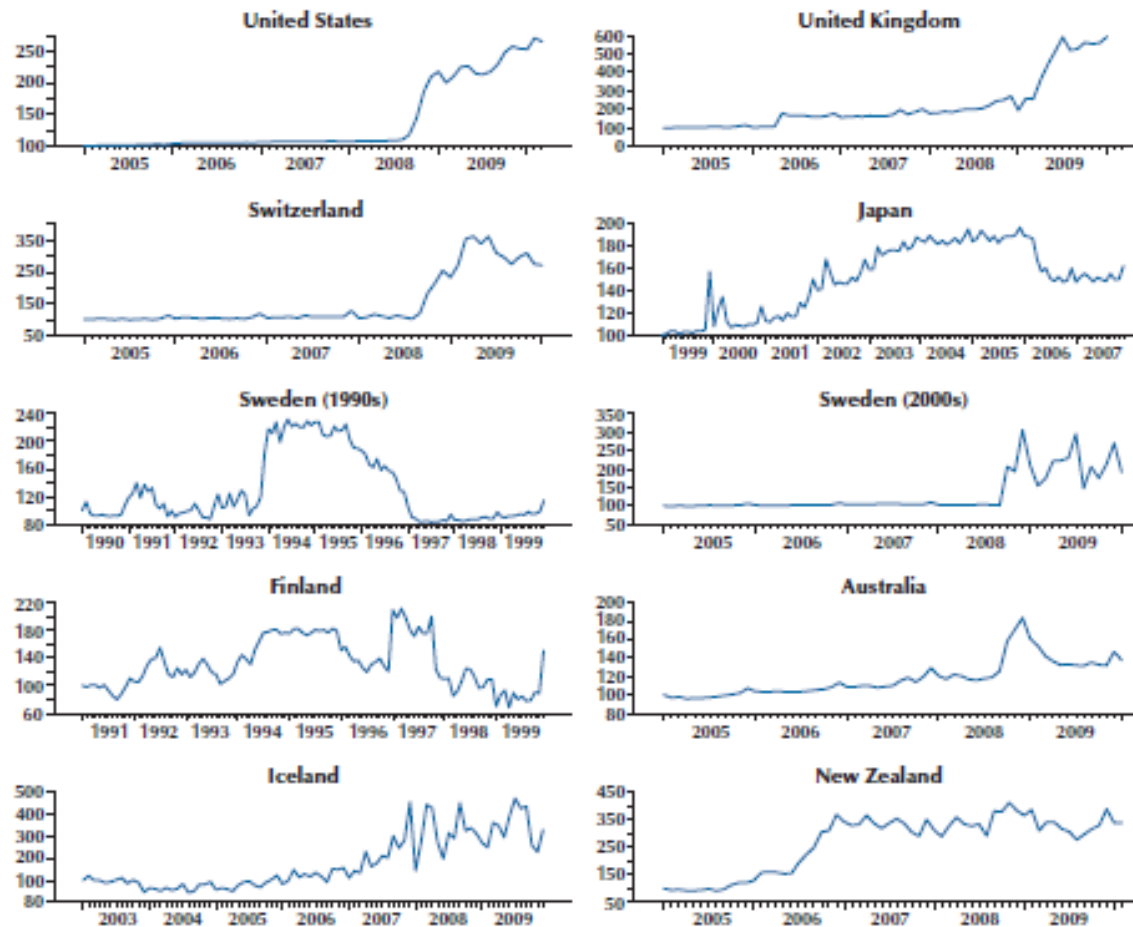
- Lower long-term real interest rates imply a reduced cost of credit for business and households, leading to lower savings and higher spending.
- Higher asset prices boost household wealth (wealth effect), raise firm's market to book value (Tobin's Q) and increase net worth (credit view) thus raising aggregate demand

## Quantitative easing, cont.

- The purchase of government bonds can be interpreted as **monetary financing of the government**: CB prints money that is then lent to the government
- Monetary financing has led to several episodes of **hyperinflation** (one of the latest is **Zimbabwe**, 2008-09)
- Monetary financing is banned by law in many countries:
  - CB not allowed to buy government bonds in primary market (directly from government)
  - CB subject to some restrictions on purchases of bonds in secondary market (from other investors)
- In a liquidity trap the CB buys government bonds to **avoid deflation** and the **risk of hyperinflation** is almost **non-existent**; recent international evidence is supportive of this, let's see...

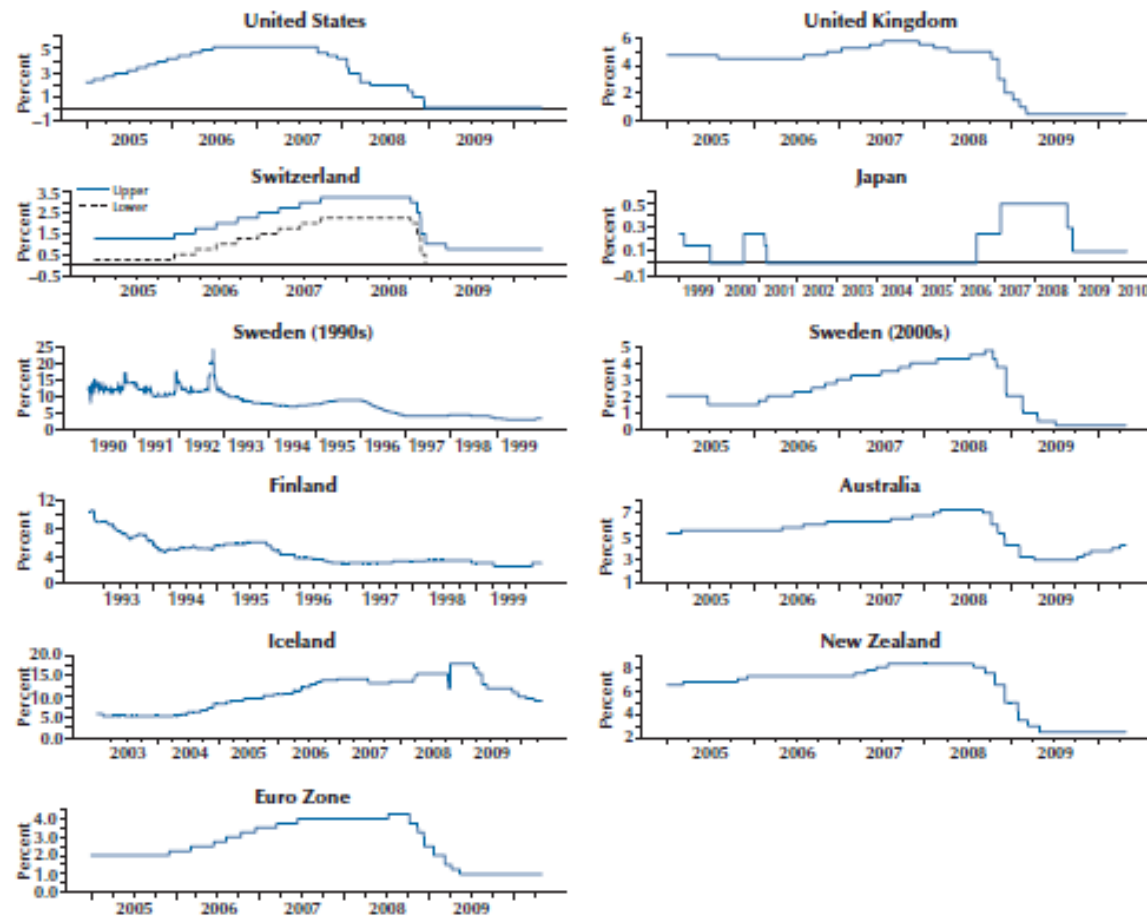
# Quantitative easing: international evidence

**Doubling of the Monetary Base in Selected Countries**



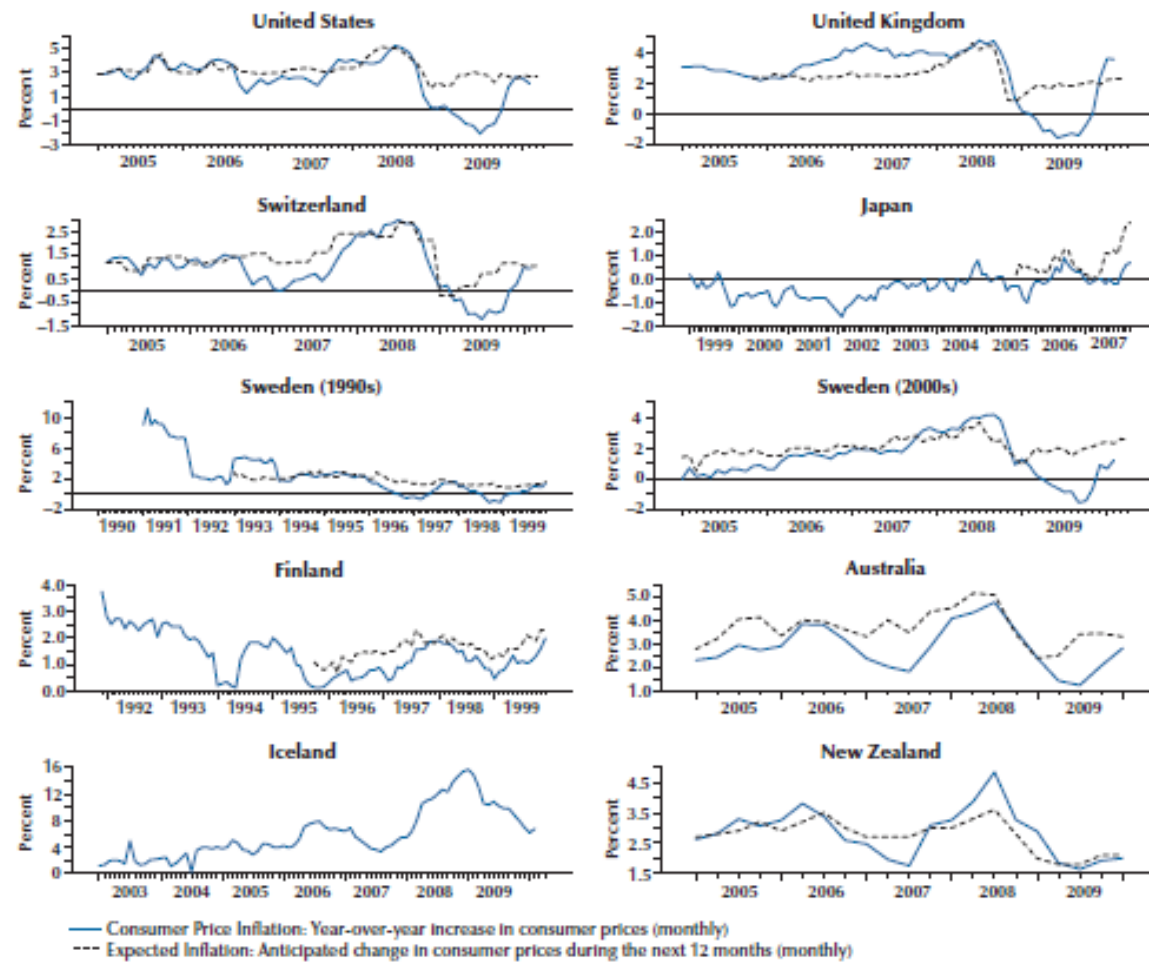
## Quantitative easing: international evidence, cont.

### Central Bank Policy Rates



## Quantitative easing: international evidence, cont.

Actual and Expected Inflation



## Quantitative easing: summing up

- Recent episodes suggest that large increases in CB balance sheets can be a viable monetary policy tool if CB has credibility for desiring low and stable inflation and if public understands the increase will be lasting enough, but temporary, that is, reversed at a later date
- Objective of QE is reducing risk and term premia, sustain inflation expectations and avoid deflationary spiral
- In all episodes, there is little evidence of raised inflation
- To sum up:
  - A large raise in a CB balance sheet over a short time can be stimulative
  - Reasons for action should be communicated; commitment to unwinding expansion should be clear; then inflation expectations remain anchored
  - When the crisis is over, the balance sheet should be unwound promptly

## Credit easing

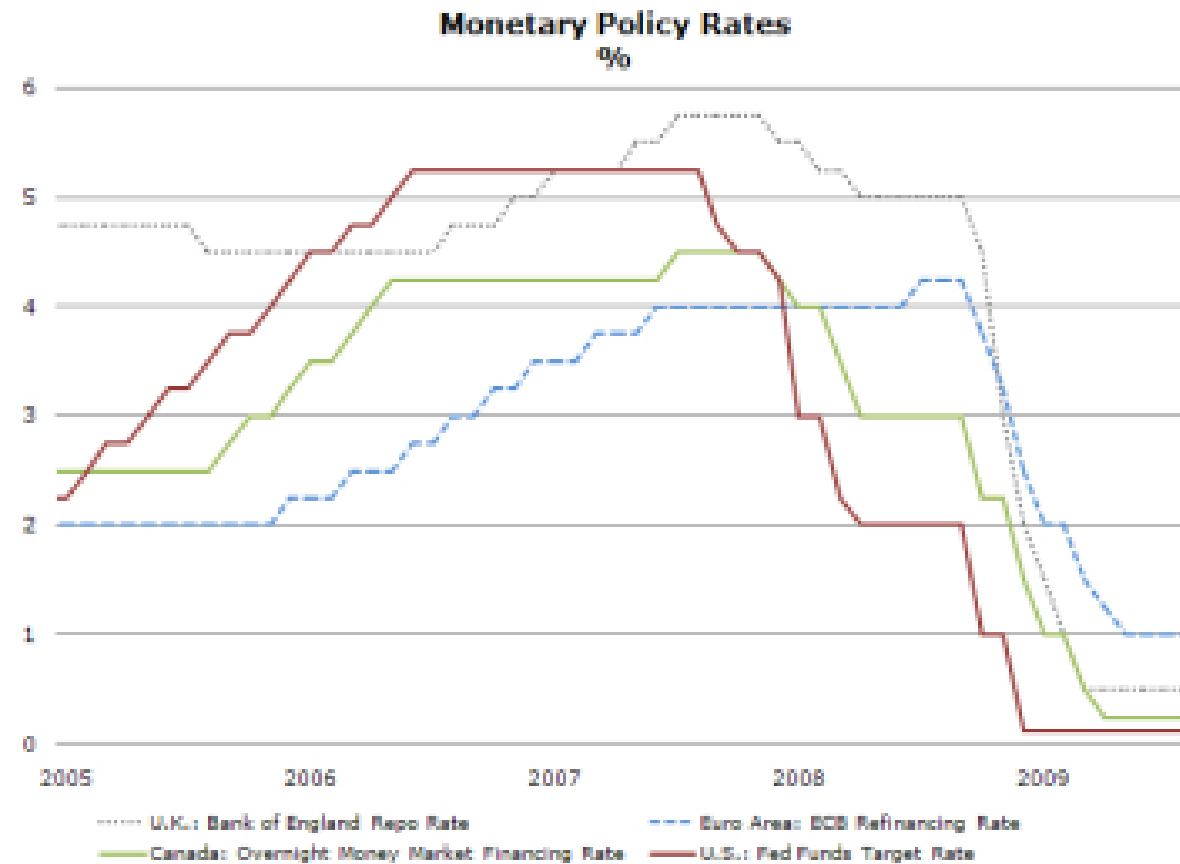
- With quantitative easing central bank focuses on increasing the money supply and liability side of its balance sheet; it is of secondary importance exactly what type of securities are bought and composition of asset side of balance sheet
- Credit easing: central bank can buy a certain type of security to
  - lower interest rates in specific credit markets
  - facilitate flow of credit in specific credit markets not working satisfactorily
  - reduce differentials between interest rates on various assets (i.e., commercial paper, corporate bonds and mortgages bonds) and government bonds
- Pure credit easing only involves changes in the composition, not the size of the CB balance sheet
- Involve also CB lending to financial and non-financial sector (households and companies)

# Monetary policy response to the 2007-08 sub-prime crisis

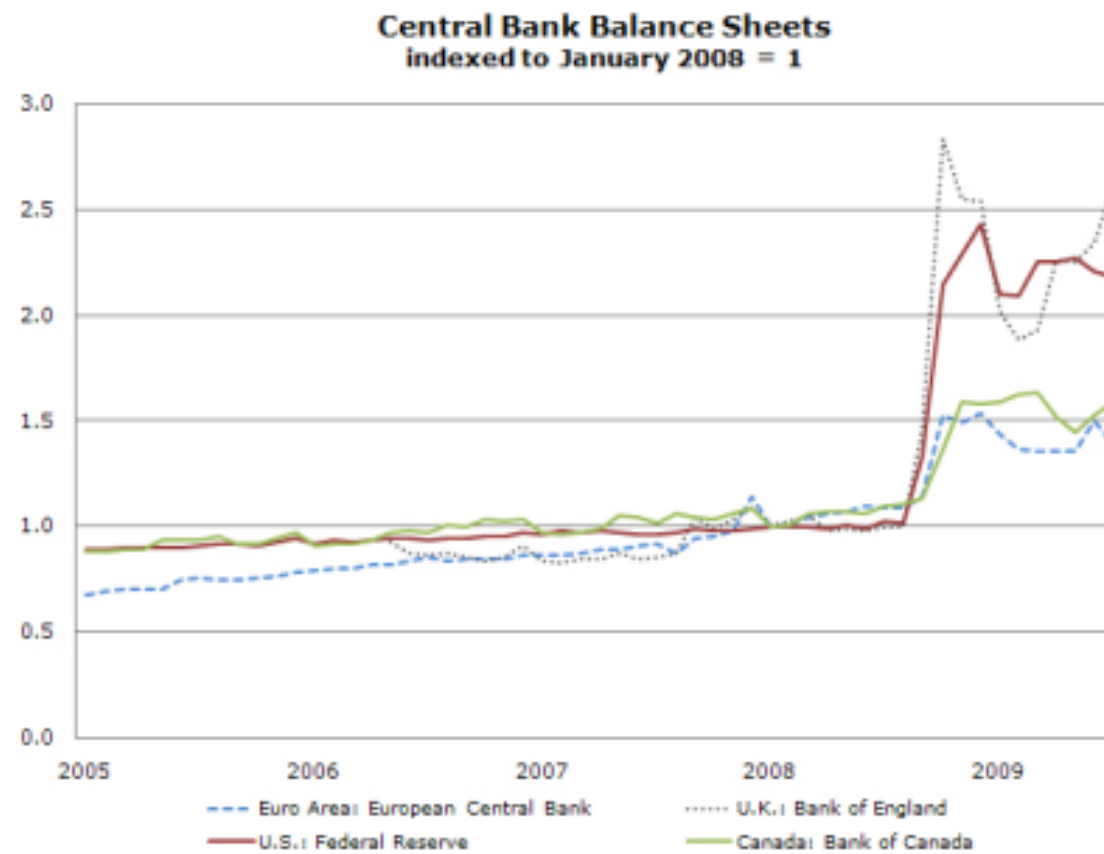
Three aspects:

- Rapid and large reduction in the policy rate – the usual monetary policy instrument – essentially to the zero lower bound
- Unconventional monetary policy tools altering the composition (first) and the size (then) of central banks' balance sheet
- Communication (central banks more explicit about expectations for the future course of monetary policy and the economy)

## Monetary policy target rates

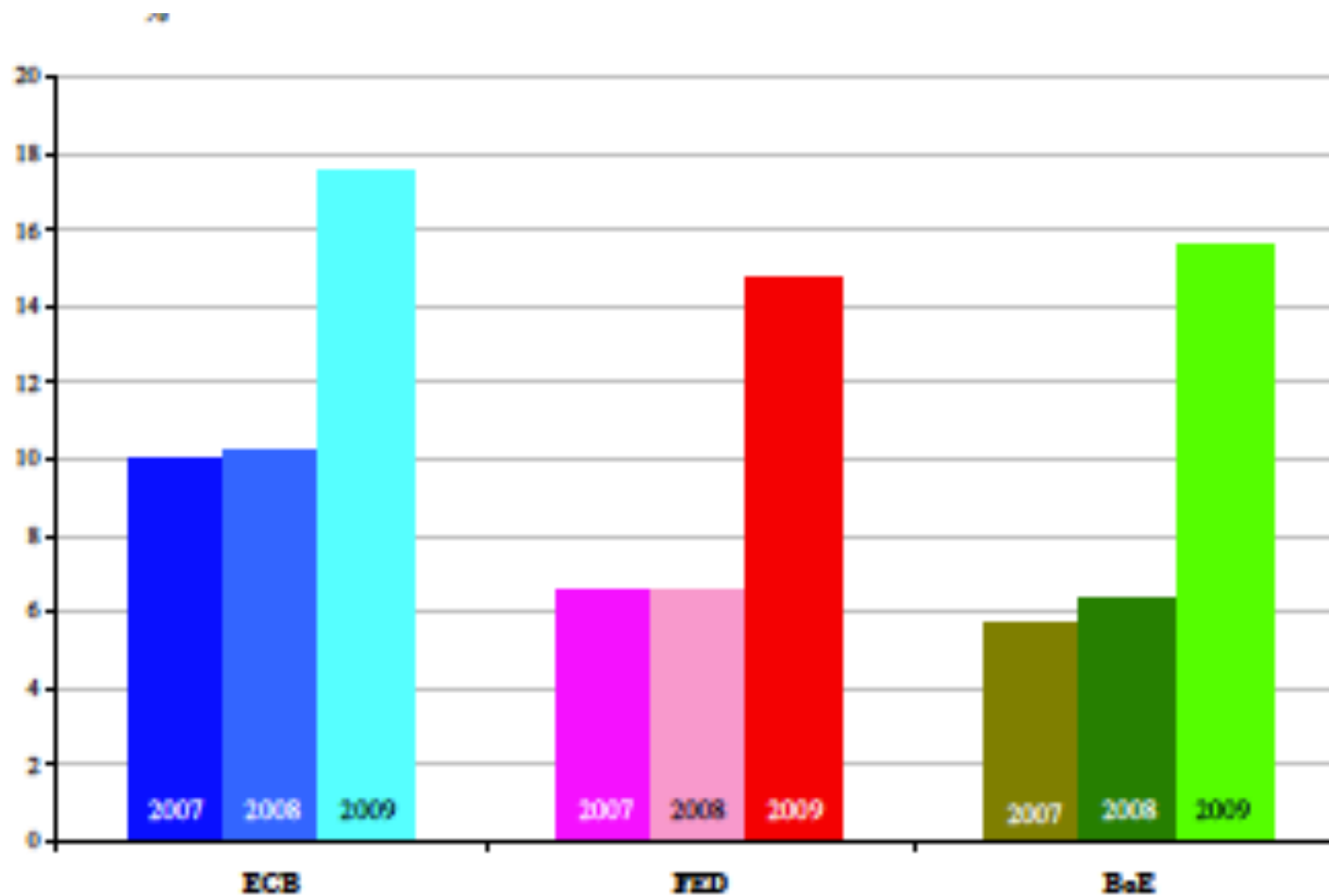


## Central banks balance sheets



Sources: BIS, Federal Reserve Board, Bank of England, and Bank of Canada

## Central banks balance sheets relative to GDP



## Fed unconventional monetary policy

Three broad tools:

- **Lending to financial institutions:** provision of short-term liquidity to banks and other financial institutions
- **Providing liquidity to key credit markets:** provision of liquidity directly to borrowers and investors in specific nonbank credit markets (money market mutual funds, commercial paper, asset-backed securities)
- **Purchasing longer-term securities:** agency securities, asset-backed securities (particularly, mortgage-backed securities) and government securities; Large Scale Asset Purchase (LSAP) program (QE1 in 2008, QE2 in 2010 and QE3 in 2012)

## Fed unconventional monetary policy, cont.

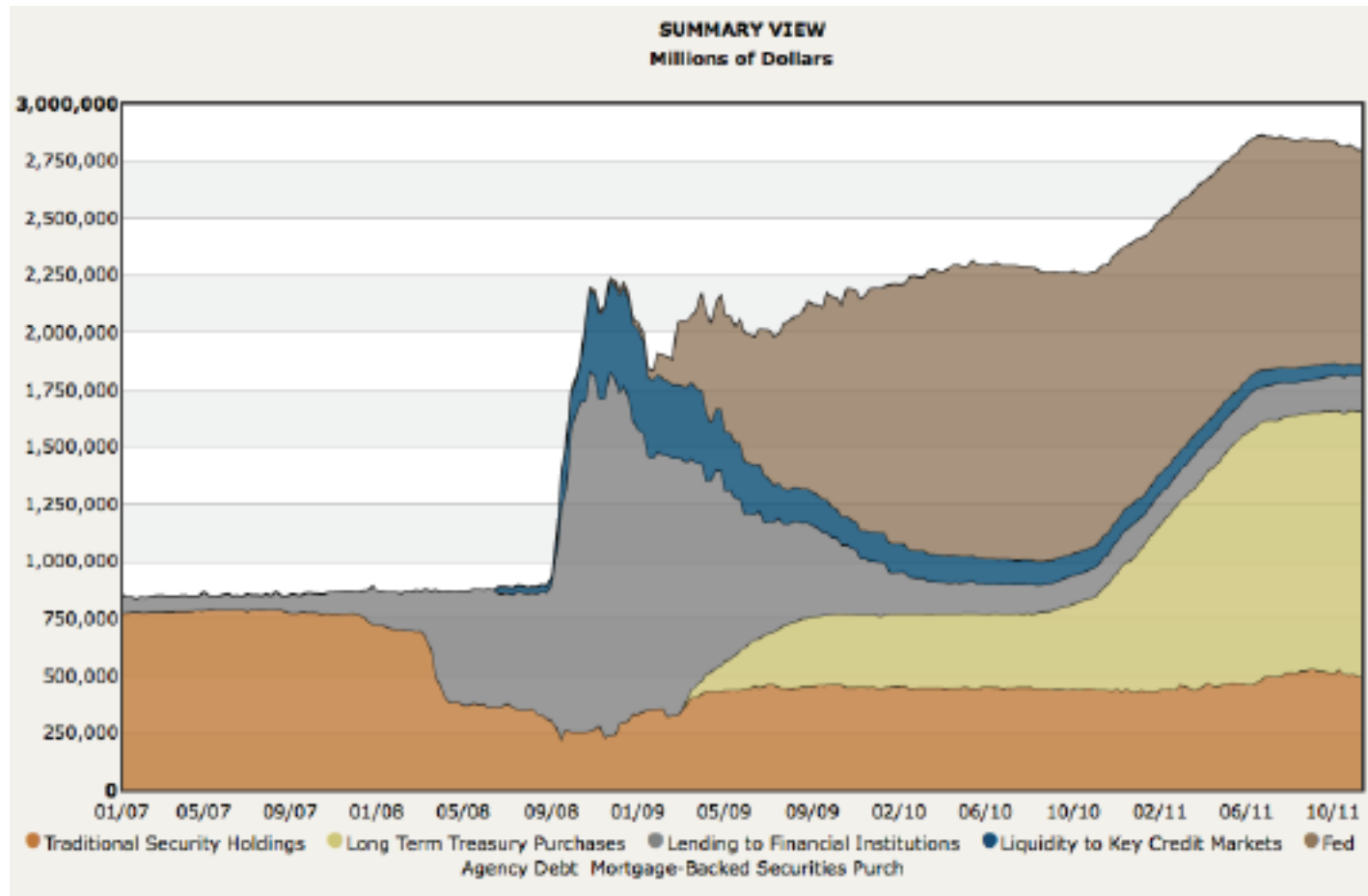
TRADITIONAL TOOLS OF MONETARY POLICY			
Open Market Operations	The buying and selling of U.S. Treasury and federal agency securities with the objective of attaining the FOMC's target for the federal funds rate.		
Discount Rate	The interest rate charged to commercial banks and other depository institutions on loans they receive from their regional Federal Reserve Bank.		
Reserve Requirements	The amount of funds that a depository institution must hold in reserve as vault cash or on deposit with Federal Reserve Banks against specified deposit liabilities.		
MONETARY POLICY TOOLS INITIATED DURING THE FINANCIAL CRISIS			
Lending to financial institutions: These tools provided short-term liquidity to banks and other financial institutions.		Announced	Closed
Term Auction Facility (TAF)	Provided one- and three-month loans to eligible depository institutions through an auction process	12/12/2007	Final auction was 3/8/2010
Term Securities Lending Facility (TSLF)*	Allowed primary dealers to borrow Treasury securities in exchange for less liquid assets	3/11/2008	2/1/2010
Primary Dealer Credit Facility (PDCF)*	Provided overnight loans to primary dealers	3/17/2008	2/1/2010
Lending directly to key credit markets: These tools provide liquidity directly to borrowers and investors.		Announced	Closed
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)*	Assisted money market mutual funds to sell high-quality asset-backed commercial paper (ABCP)	9/19/2008	2/1/2010
Commercial Paper Funding Facility (CPFF)*	Provided a liquidity backstop to U.S. issuers of commercial paper. Financed the purchase of highly rated unsecured and asset-backed commercial paper from eligible issuers via eligible primary dealers.	10/14/2008	2/1/2010
Money Market Investor Funding Facility (MMIFF)*	Supported a private-sector program to provide liquidity to money market mutual fund investors	10/21/2008	10/30/2009
Term Asset-Backed Securities Loan Facility (TALF)*	Supported the issuance of asset-backed securities (ABS) collateralized by consumer, small business, and various other types of loans	11/25/2008	Closed for new loan extensions on June 30, 2010.
Tools for managing the quantity of reserve balances held by depository institutions		Announced	
Interest on Required Balances and Excess Balances	Permits the Federal Reserve to control the aggregate amount of reserve balances held by depository institutions	10/6/2008	
Term Deposit Facility (TDF)	Removes funds from participating financial institutions for the life of the deposit, thereby draining reserves from the banking system	4/30/2010	

## Fed unconventional monetary policy, cont.

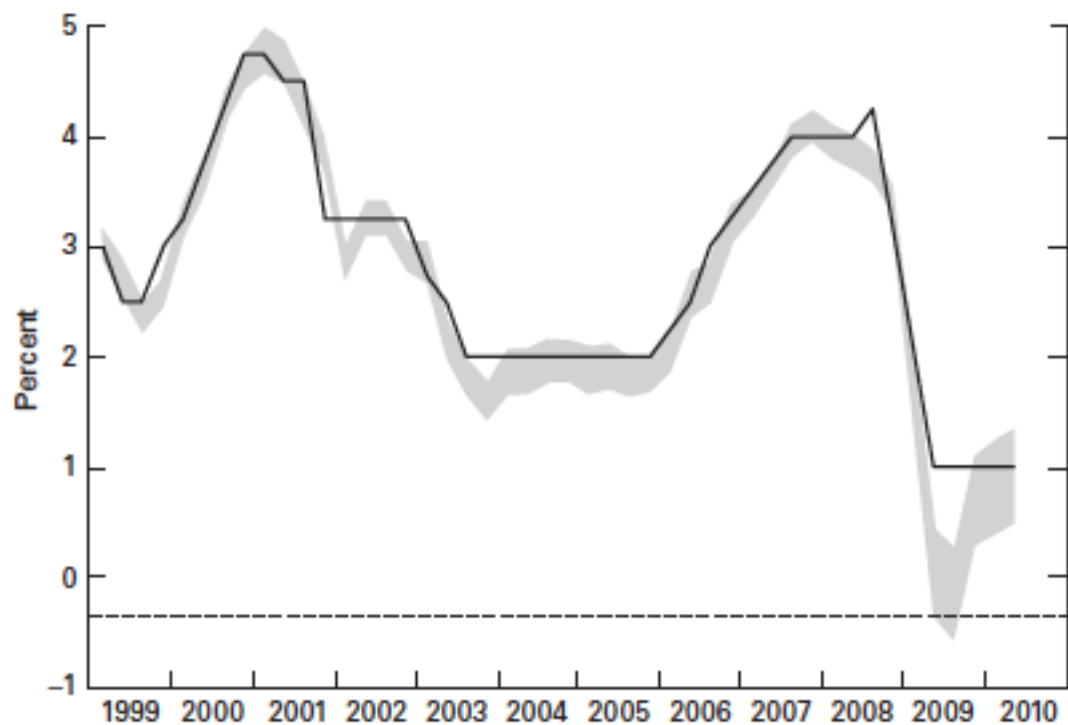
Large Scale Asset Purchase (LSAP) program:

- **QE1**: from November 2008 through March 2010, the Fed purchased \$1.75 trillion in long-term Treasuries, agency debt and agency-backed mortgage-backed securities (MBS)
- **QE2**: from November 2010 through June 2011, the Fed purchased \$600 billion in long-term Treasuries
- **QE3**: in September 2012, the Fed announced that it would purchase \$40 billion per month in long-term Treasuries and agency backed MBS until economic conditions improved substantially; amount raised to \$85 billion in December 2012

## Fed balance sheet



## Orphanides rule and target rate in the Euro area



The lower bound on interest rates may have been less binding in the euro area than in the United States or the United Kingdom

Note: the Orphanides rule is similar to a Taylor rule. The black line is ECB policy rate, the main refinancing rate (MRO), while the grey area is the path for the rate prescribed by the rule

# Motivations for unconventional MP

## 1. US: zero-lower bound

Unconventional monetary policy is a continuation of MP easing by “other means” once the lower bound on short term policy rates has been reached (unconventional MP substitute for conventional MP)

## 2. Euro area: monetary policy transmission mechanism

Unconventional monetary policy supports the transmission of monetary policy in the face of financial market malfunctioning, so as to ensure that the selected policy stance (as reflected in the settings of policy rates) passes through to the real economy (unconventional MP complement to conventional MP)

# The sub-prime and sovereign debt crises in Europe

## Chronology:

1. **Financial turmoil:** August 2007 to mid-September 2008

Tensions in interbank markets and asset-backed securities (ABS) markets

2. **Financial crisis:** mid-September 2008 to May 2010

Lehman Brothers failure

Seizing-up of interbank markets and significant disruption in other markets

3. **Sovereign debt crisis:** May 2010

Seizing-up of Greek sovereign debt market

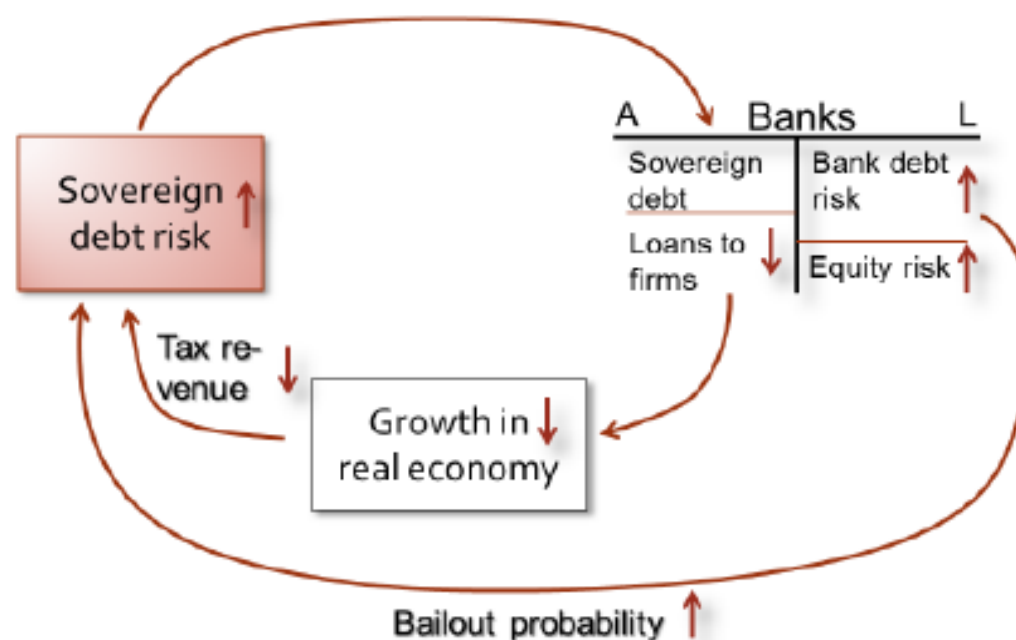
## The sub-prime and sovereign debt crises in Europe, cont.

Link between the two crises:

1. Sub-prime crisis **weakened banks balance sheets**, still under repair when sovereign debt crisis hit
2. **Fiscal support** given **to banking systems** and significant **spending packages** after the financial crisis **worsened public deficits and debts**
3. **Lehman** bankruptcy weakened **confidence** in the healthiness of financial system

## Negative loop between sovereign debt risk and banking debt risk

European banks hold a much higher share of their sovereign debt than US banks



- Losses on banks' sovereign portfolios weaken banks' balance sheets and increase their riskiness, with adverse effects on cost and availability of funds
- This in turn raises sovereign debt risk as it i) decrease tax revenues via recessionary effects of credit contraction and (ii) increases probability of government spending associated with bailouts of banks

## ECB unconventional monetary policy: phase I

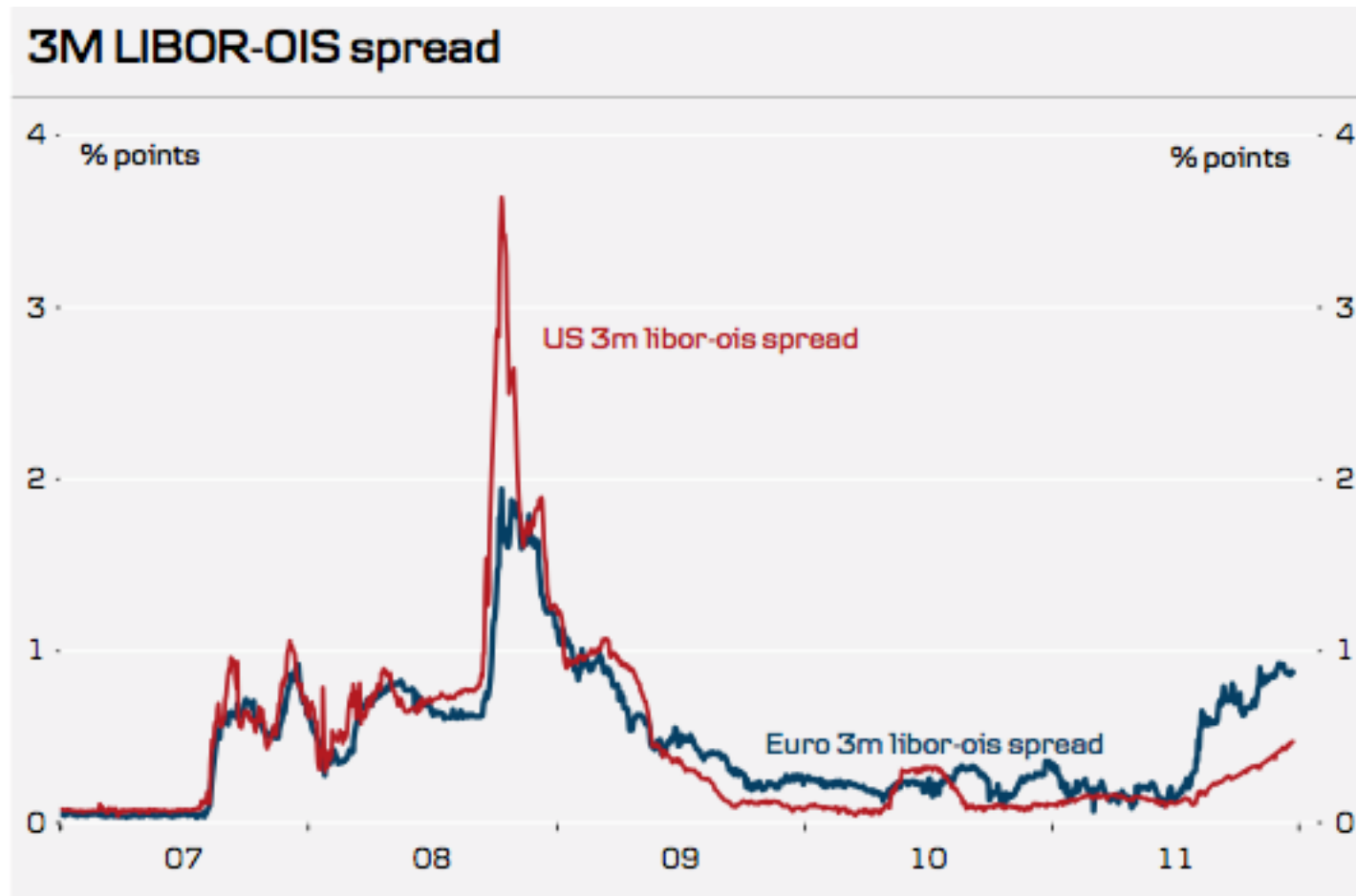
**Key disruption:** freeze of the interbank market; need for banks to obtain liquidity from other sources

- risk of hasty assets liquidation; via lower asset prices, spillovers to the whole banking system (“fire sale”)...
- ... and of a sharp reduction in credit (“credit crunch”)
- via a credit crunch, risk of a fall in aggregate demand and production; downward pressure on prices

**Key measures:** mainly targeted at **banking sector** (owing to its importance in the transmission of monetary policy and the financing of the economy in the euro area in comparison with the US); set of measures known as “**Enhanced credit support**”

## Risk premia in interbank markets

### US and Euro area three months spreads



## Aside on Libor/Euribor-OIS spread

- **Libor:** London interbank offered rate. Average interest rate estimated daily by lending banks in London that they would be charge if borrowing from other banks
- **Euribor:** Euro interbank offered rate. Similar reference rate only for Euro zone banks
- **Libor & Euribor:** primary benchmarks for short-term interest rates around the world
- **Interest rate swaps:** each counterparty agrees to pay either a fixed or a floating rate denominated in a particular currency to the other counterparty. Most common swap is one where one counterparty A pays a fixed rate to counterparty B, while receiving a floating rate indexed to a reference rate (such as the LIBOR or the EURIBOR). There are no exchange of the principal amounts

## Aside on Libor/Euribor-OIS spread, cont.

- **Overnight indexed swaps (OIS):** interest rate swaps where a fixed rate (the OIS rate) is exchanged against an overnight floating rate index (typically a central bank rate, such as the FFR)
- **Libor/Euribor versus OIS:**
  - OIS has little exposure to counterparty default risk, because there is no exchange of principal amounts, only exchanges of the net difference in interest rates; OIS accurately reflects expectations of effective policy rates
  - LIBOR/EURIBOR reflect expectations on future federal funds rate but also credit and liquidity risk
- **Libor/Euribor-OIS spread:** indicator of credit and liquidity risk in money markets

## Enhanced credit support

Bank-based measures to enhance flow of credit beyond standard interest rate channel

- **Fixed-rate full-allotment:** unlimited provision to central bank liquidity at a fixed rate (main refinancing rate)
- **Expansion of collateral:** list already very long before the crisis; differently from Fed, ECB already accepted private securities, not only government securities
- **Lengthening of maturities of refinancing operations (LTROs):** first six months, then one year, and finally three years; no outright purchases
- **Liquidity provision in foreign currencies:** provision of US dollars to euro area banks and provisions of euro to non-euro area banks, via swap lines among CBs
- **Financial market support through purchases of covered bonds:** outright purchases of debt securities issued by banks (similar to asset backed securities, but no transfer of credit risk to the investor); give banks access to longer term funding than the refinancing operations

## ECB unconventional monetary policy: phase II

**Key disruption:** persistently elevated sovereign bond yields in selected euro area Member States; partly driven by self-fulfilling expectations

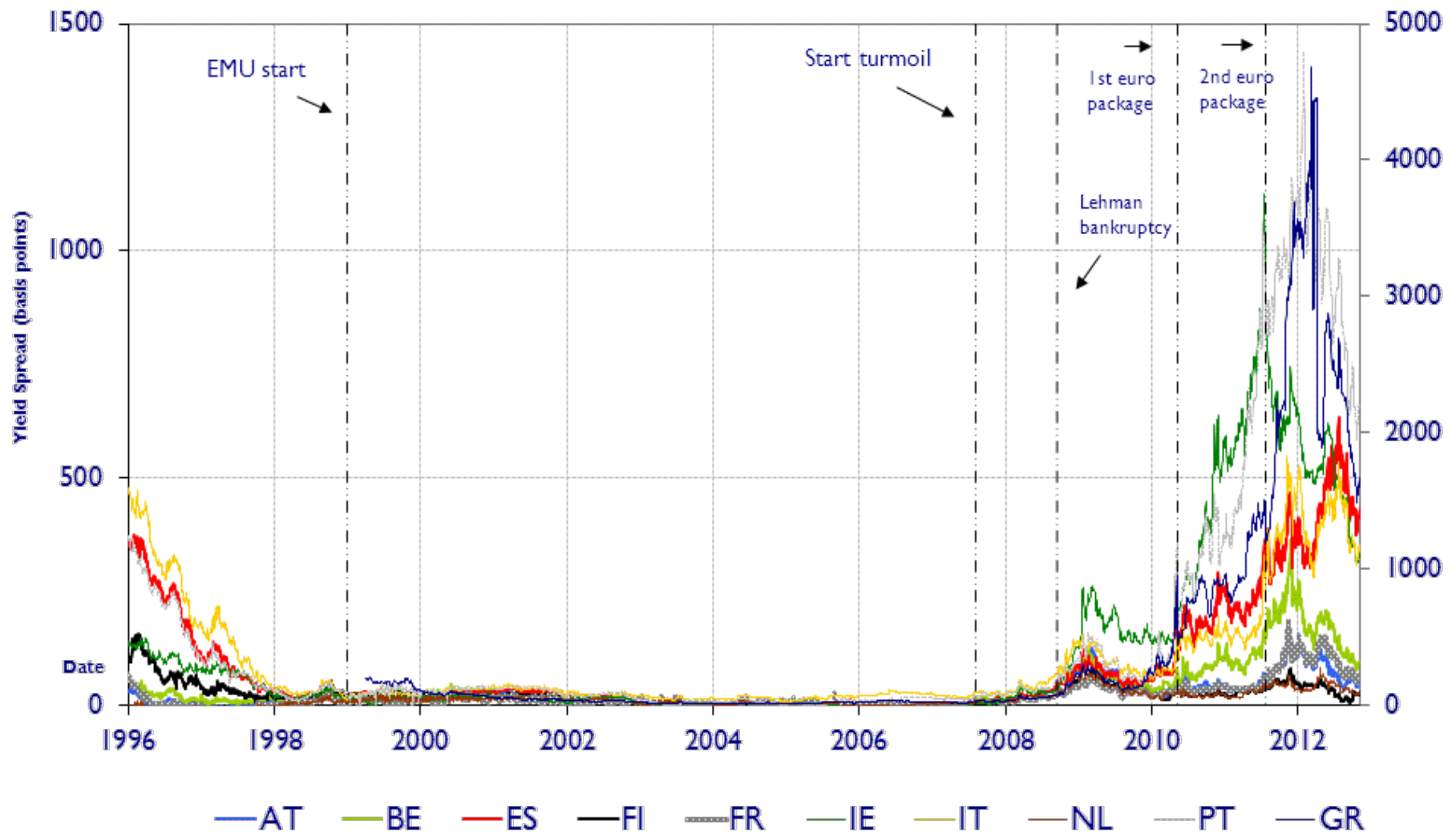
- pass-through of high sovereign yields to lending rates to firms and households, hence downward pressure on aggregate demand and prices and ...
- ... mutually reinforcing interaction with fragile banking systems and risk of financial fragmentation

**Key measures:** extended to include direct intervention in financial markets

- “Security Markets Programme” (SMP)
- “Outright Monetary Transactions” (OMT)

## Sovereign bond spreads

### 10-year (benchmark) sovereign bond yield spread Euro area

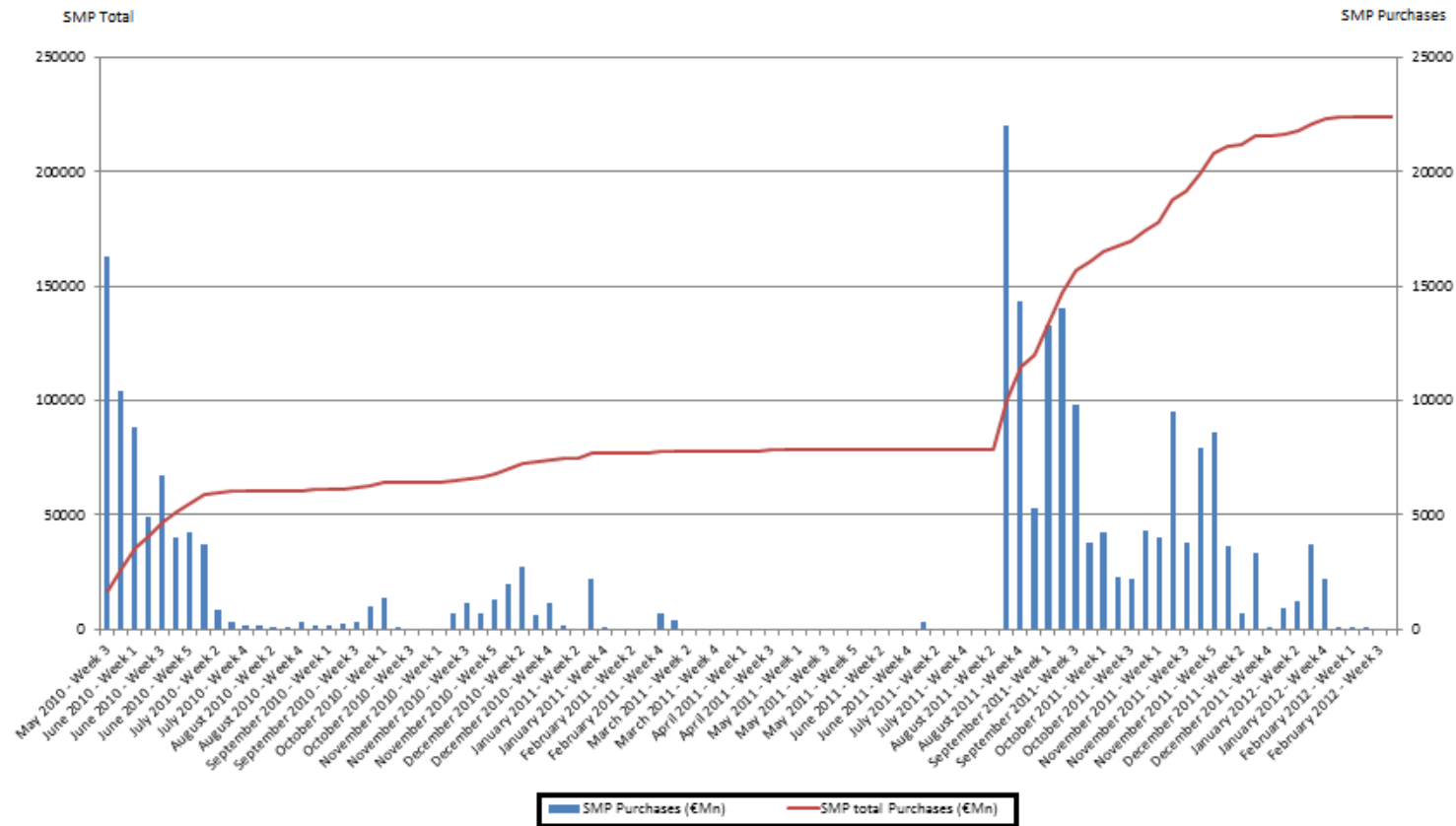


# Security Markets Programme (SMP)

- Introduced in [May 2010](#); closely related to the [Greek debt crisis](#)
- ECB purchases of government bonds in secondary markets
- **Objective:** ensure depth and liquidity in dysfunctional government debt markets; provide liquidity to alleviate pressures from sovereign debt risk on balance sheet of financial institutions; restore an appropriate monetary policy transmission mechanism
- **Sterilization:** to limit the inflationary effects of purchases, ECB “sterilizes” them by auctioning [fixed term deposits at the ECB](#); this re-absorbs liquidity and ensures that monetary policy stance is not affected (extra liquidity of the SMP is held in deposits/reserves rather than going into loans)
- But the CB [balance sheet raises](#); “sterilization” only changes composition
- SMP substituted by OMT in September 2012

# SMP main interventions

SMP Purchases and Total



SMP was used to buy Portuguese and Greek debt in May 2010 and Spanish and Italian debt in August 2012

# Outright Monetary Transactions (OMT)

- Introduced in [September 2012](#); extends the SMP in a number of directions
- Objective: preserve monetary transmission mechanism and [singleness of monetary policy](#) by addressing distortions in sovereign bond markets, originating in particular from reversibility fears
- Textbook “bad expectational equilibrium” and solution:
  - a country suffering from temporary illiquidity may be forced to default because each would-be lender fears that the others will no longer lend to the country; as a consequence the expectation becomes self-fulfilling and the country cannot roll over its debt any longer
  - textbook solution is an announcement that the CB stands ready to purchase an unlimited amount of government debt
  - in theory such an announcement by itself should eliminate the bad expectational equilibrium, without any actual need of intervention by the CB

## Outright Monetary Transactions (OMT), cont.

- Features:
  - Necessary condition: strict and effective **conditionality** attached to appropriate European Stability Mechanism **(ESM) programme**
  - Focus on shorter segment of yield curve (up to 3 years)
  - No ex-ante quantitative limits on size
  - Full sterilisation

## Why conditionality (1)

### Managing credit risk on the Eurosystem balance sheet

- Any ECB operation involves risks and need to minimize those risks
- For standard monetary policy operations, protection comes from lending to supervised, solvent Monetary Financial Institutions (MFIs) against good collateral
- In the context of OMT, conditionality on an ESM program is necessary to mitigate our risk exposure
- Recall: national corporate solvency rules protect credit to private institutions, whereas sovereigns escape a solvency law; conditionality serves to put solvency constraints on sovereigns

## Why conditionality (2)

### Incentive effects and moral hazard

- OMTs do not weaken fiscal discipline:
  - Conditionality on an ESM programme preserves incentives to conduct prudent fiscal policy and ensures collective peer pressure
- OMTs leave market discipline intact:
  - Private lenders should continue screening sovereign borrowers
  - OMTs only a backstop to avoid non fundamental self-fulfilling dynamics
  - Focus on 1 to 3-year maturities only

## Why conditionality (3)

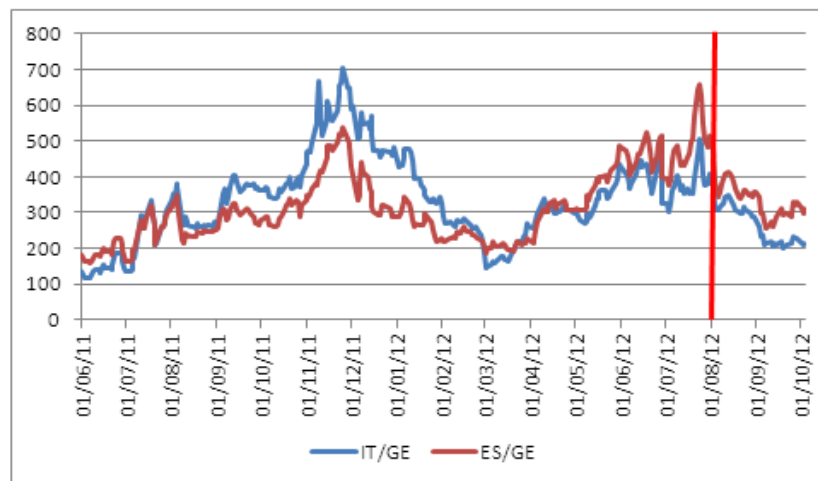
### Avoiding fiscal dominance

Conditionality ensures consistency of OMTs with our price stability objective: monetary dominance is preserved

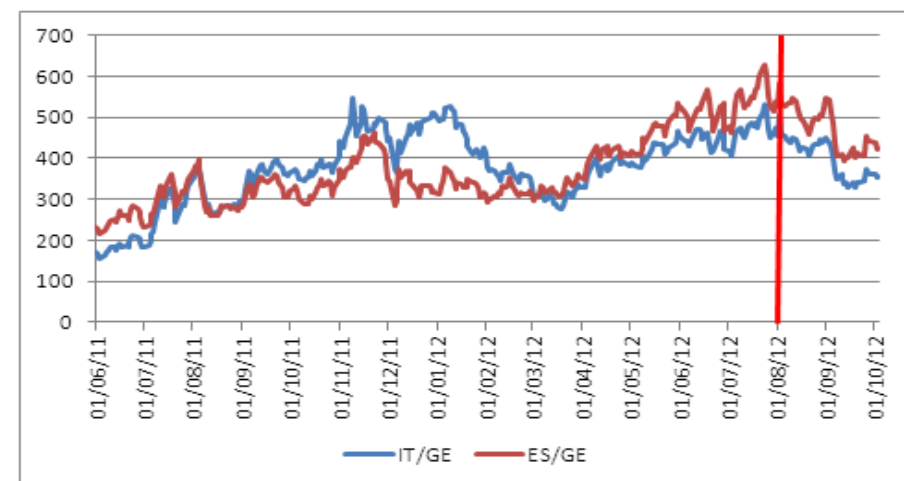
- The ECB is not ready to purchase any amount of sovereign bonds
- Fiscal authorities must remain in charge of balancing their budgets and ensuring debt sustainability
- The ECB remains free to set interest rates at the level required to ensure the maintenance of price stability over the medium term

# OMT announcement effect: impact on government bond markets

2-year yield spreads of Italy and Spain versus Germany  
(vertical red bar: OMT announcement)



10-year yield spreads of Italy and Spain versus Germany  
(vertical red bar: OMT announcement)



## Monetary and fiscal dominance

1. **Monetary dominance**: the monetary authorities are entirely focused on controlling inflation; whereas the fiscal authorities adjust fiscal policy to stay solvent conditional on an exogenous flow of seigniorage
2. **Fiscal dominance**: monetary policy subject to the constraint of providing enough seigniorage to the government to ensure solvency, via debt monetization

## Two views about sovereign spreads

(Olivier Jeanne, “Fiscal challenges to monetary dominance in the Euro area”, Banque de France Financial Stability Report No. 16, April 2012)

1. Interest rate spreads associated with the threat of default may be a normal and even desirable feature, to the extent that they give euro area governments incentives to keep their fiscal house in order. This view is defended by the Bundesbank and the German government.
2. Spreads are harmful, and that their presence in the euro area (and not elsewhere) comes from the ECB's failure to play its role of “lender of last resort” (De Grauwe, 2011). According to that view, the spreads reflect a vicious circle in government debt dynamics and market expectations—with high spreads leading to exploding debts, which in turn justifies the expectation of a default. By standing ready to buy government debt at the right price, the ECB could ensure that the economy stays in the good equilibrium with low interest rates. And like in the Diamond-Dybvig model, the commitment to lend would imply that lending-in-last-resort is not necessary in equilibrium

## Two views about sovereign spreads

(Olivier Jeanne, “Fiscal challenges to monetary dominance in the Euro area”, Banque de France Financial Stability Report No. 16, April 2012)

Those two views are a bit too simple

1. On the one hand, the proponents of the second view make their lives too easy by simply assuming that government solvency would be ensured by low spreads. It is true that, other things equal, lowering spreads to zero would reduce the probability of default, but this does not mean that the probability of default would be reduced to zero. And a positive residual probability of default implies that the monetary authorities might be called to “lend in last resort” to an insolvent government in equilibrium. Debt monetization, thus, is not a purely notional out-of-equilibrium risk, it is a real risk that has to be weighted against the benefits from low spreads.
2. On the other hand, it is not obvious either that high spreads necessarily provide the appropriate incentives for fiscal adjustment. They could as well discourage fiscal adjustment by making the dynamics of debt unsustainable and reducing the probability that fiscal efforts eventually pay off. By reducing the likelihood of a successful fiscal adjustment, high spreads might actually make inflation more (not less) likely.