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Quantitative Easing: Jekyll or Hyde?

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2011 Management Forum

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About EPRINC

Energy Policy Research Foundation Inc. (EPRINC), ***formerly the Petroleum Industry Research Foundation Inc. (PIRINC)***

Founded in NY in 1944

- Moved to Washington from NYC in Feb 2007
- EPRINC brings policy analysis and industry economics to bear on current energy issues

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What is Quantitative Easing?

- *"quantitative easing refers to changes in the composition and/or size of a central bank's balance sheet that are designed to ease liquidity and/or credit conditions" –St. Louis Fed*
  - We are currently in the midst of the second tranche of quantitative easing: "QE2"

- There is much debate among economists regarding the effectiveness of QE2
  - Some believe it should be ended early, others want QE3

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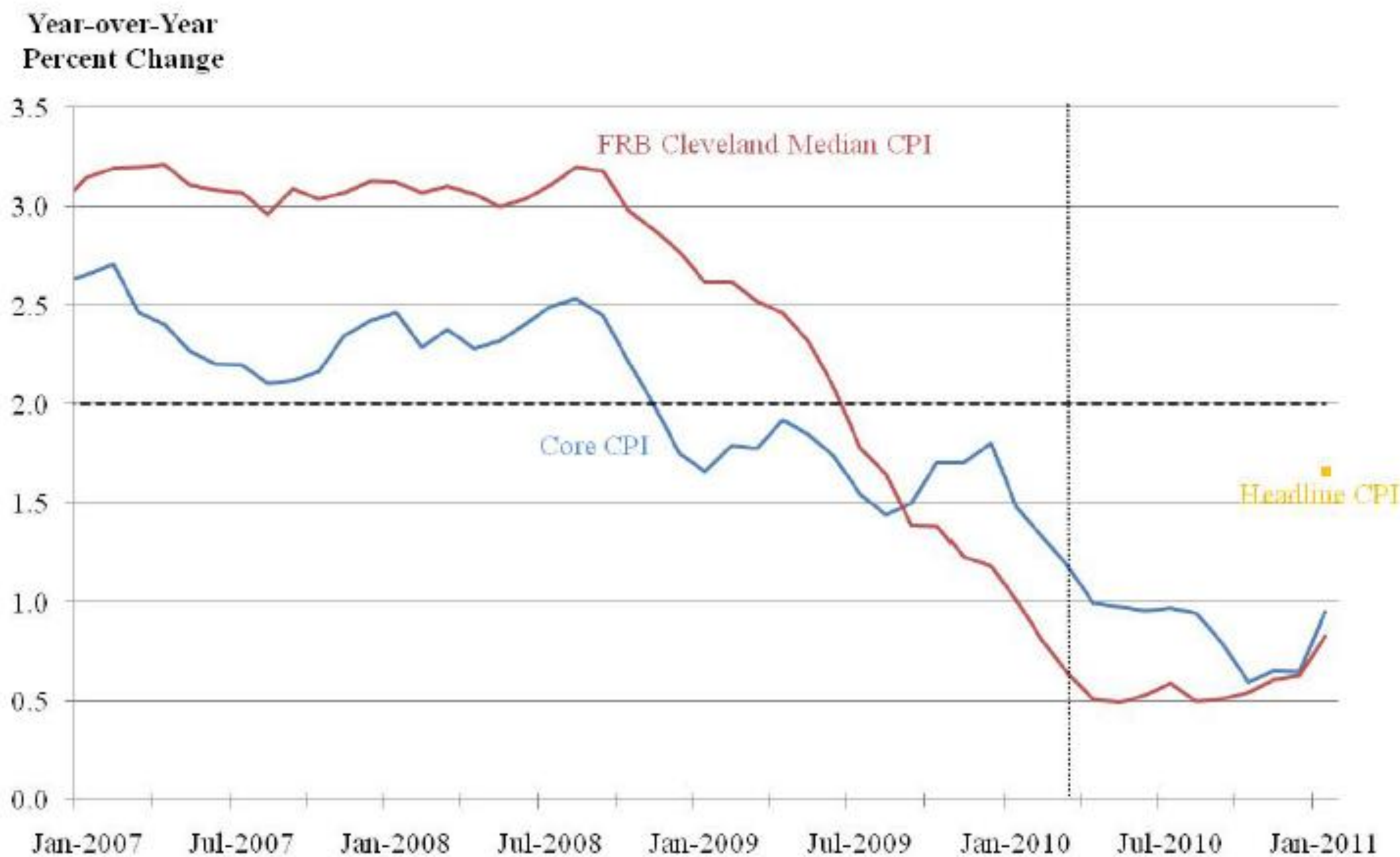
What is it responding to? Mostly Deflation



Source: BLS, FRB Cleveland via FRB St. Louis

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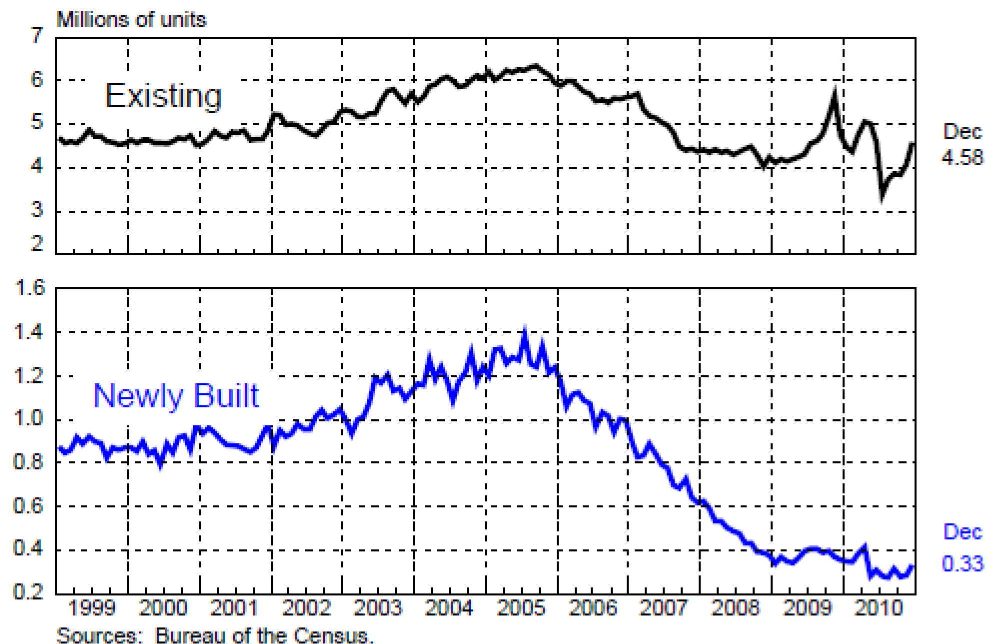
Deflation an Economy Killer

- Disincentivizes borrowing and investment
- Increases real debt burdens
- Reduces wages and employment
- Japan has been through this and attempted to use QE to fix it
- We can see deflationary signals and slow economic growth in several indicators…

Home Sales Have Declined



Source: NY Fed

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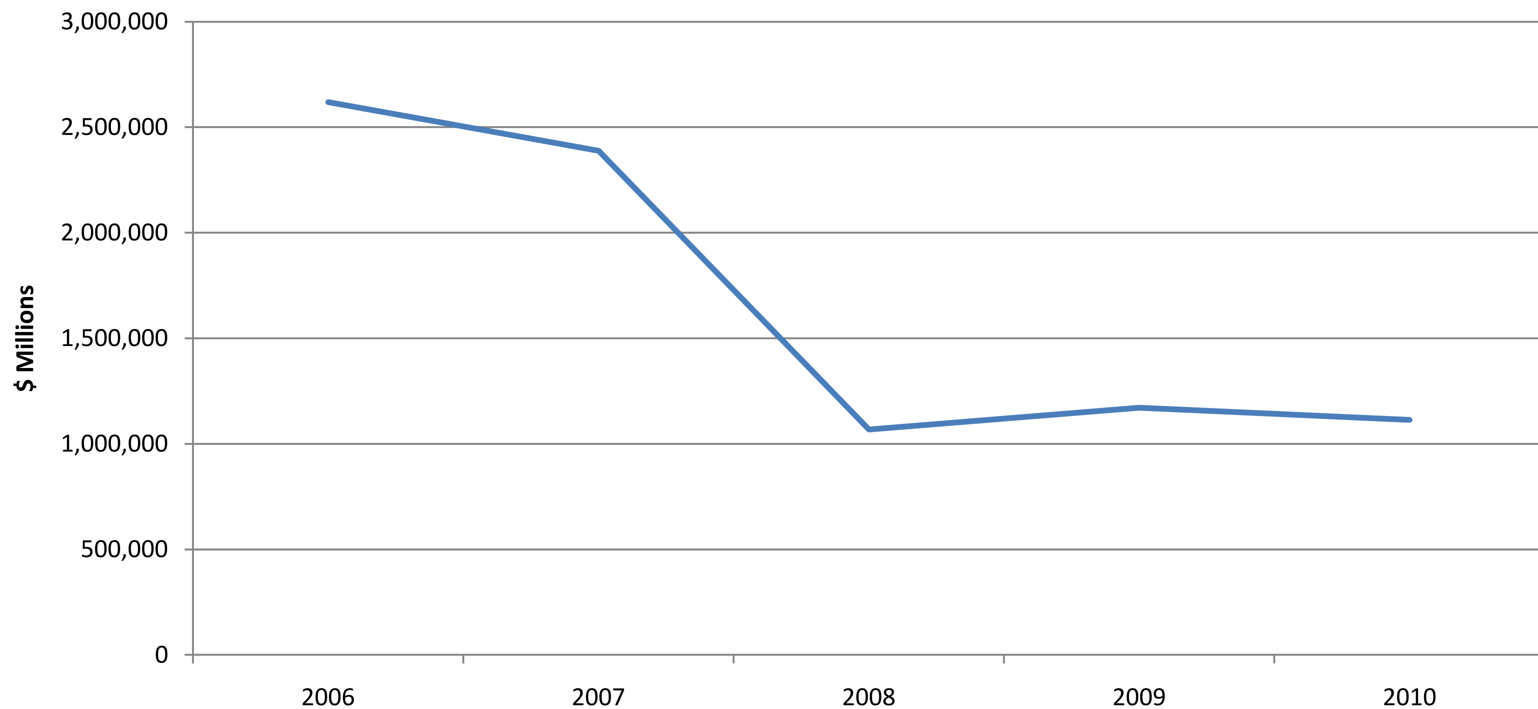
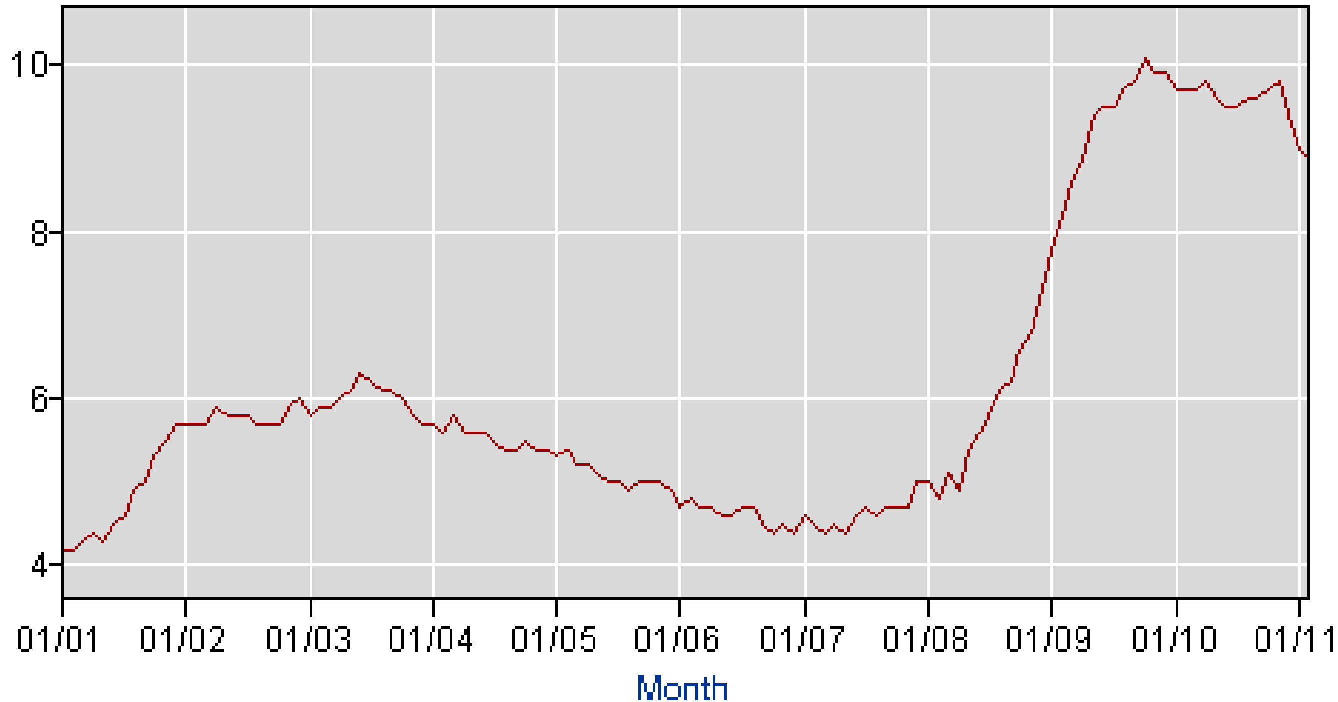
Corporate Debt Issues Have Dropped Dramatically



Source: NY Fed

Unemployment Stubbornly High



Source: BLS

But Rates are Low

- The previous indicators suggest that the economy bottomed in 2008/2009…..and that it has plateaued for the most part
- This despite record low interest rates and the $800 billion stimulus package
- Economy was and is too dire to be fixed simply by interest rates drops

Interest Rates Low, But Money Not Moving

- The Federal Funds Rate (i.e. the interest rate) is the Fed's conventional tool for implementing monetary policy.
  - In a normal environment lowering the rate encourages banks to lend as access to reserves is made cheaper
- Interest rates throughout the economy are highly influenced by the Fed Funds Rate and makes it cheaper for banks to lend, so lowering it should increase demand for loans and stimulate growth

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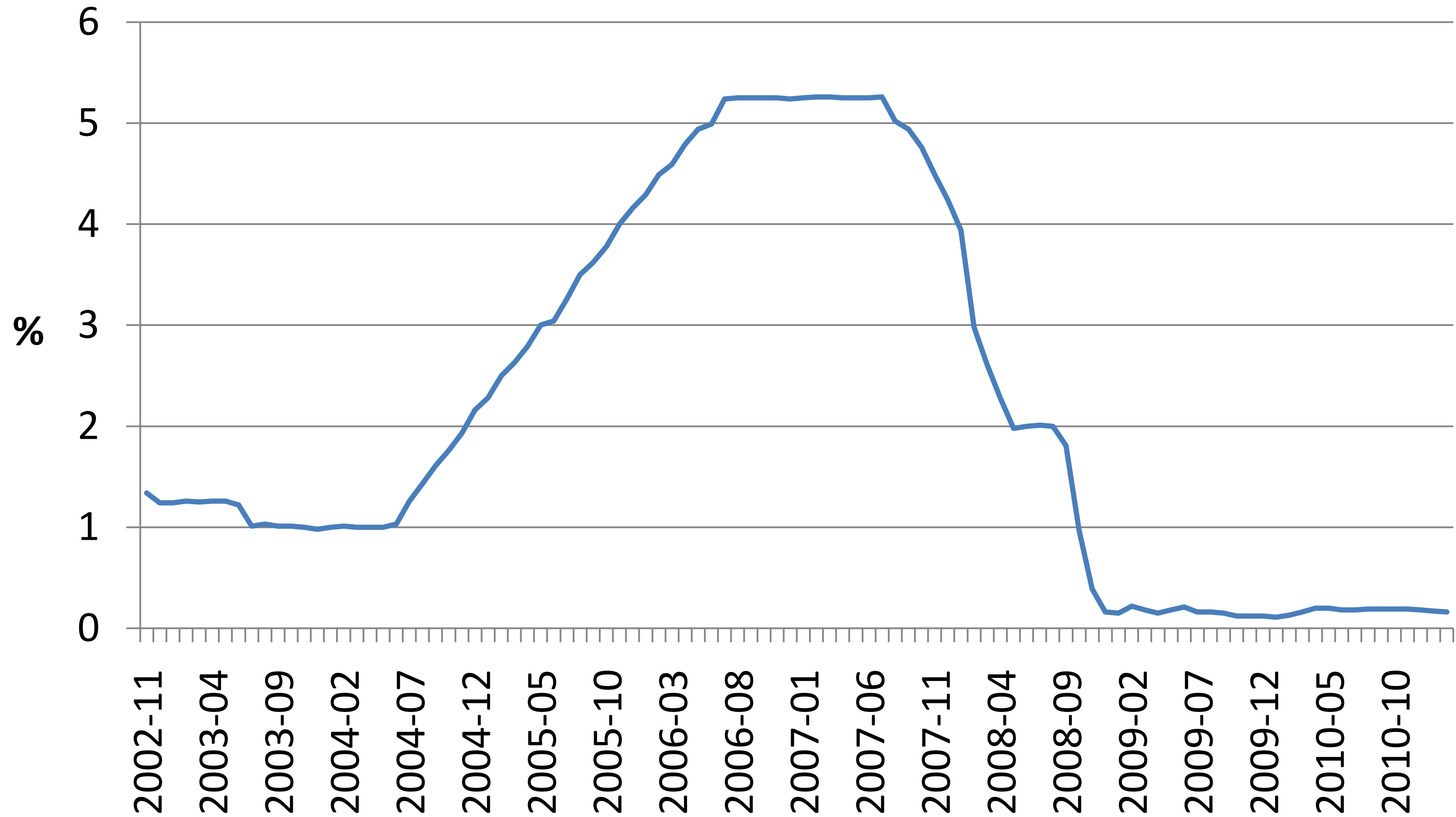
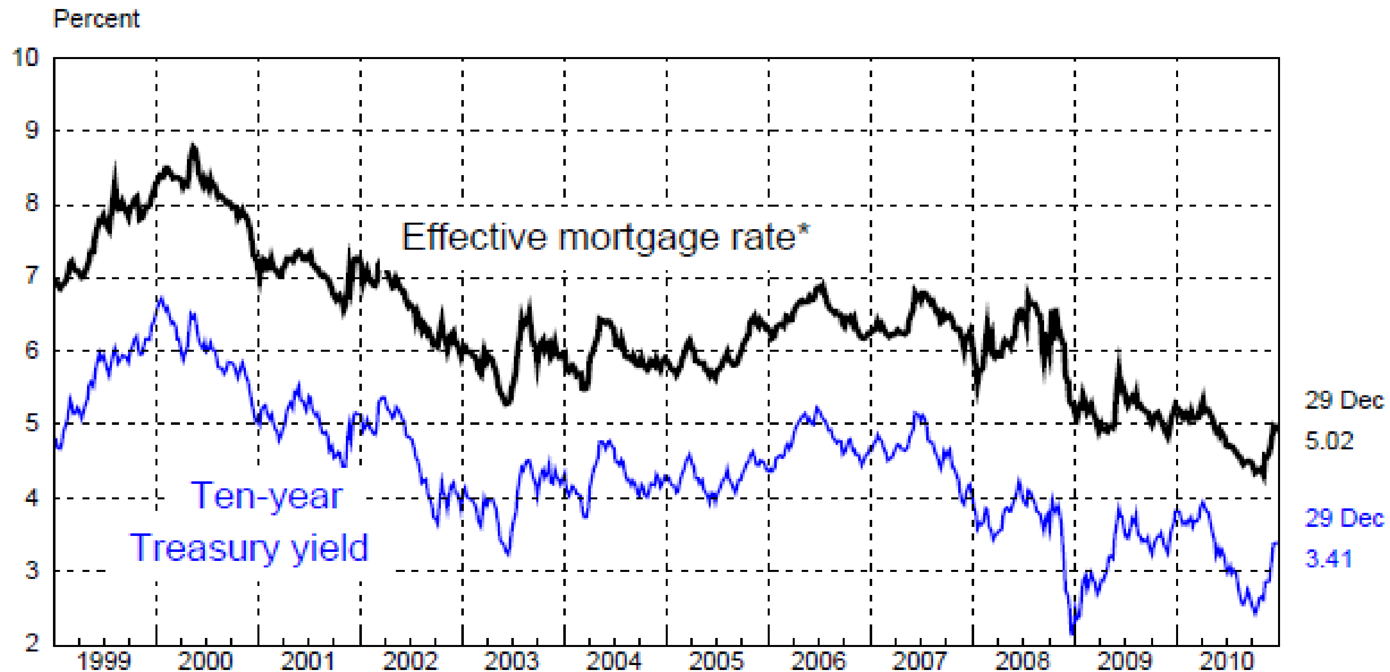
Federal Funds Effective Rate



Source: The Fed

Treasuries and Mortgage Rates Closely Linked



Source: NY Fed

…But This Has Not Been Enough to Stimulate Lending and Demand

- Despite record low rates people are still having trouble getting mortgages and housing prices continue to decline
  - QE1 attempts to address this directly with “open market operations”
- Lenders are risk averse - consumer credit delinquencies of all types are historically high
- With simple rate reductions unable to break credit gridlock, the Fed decided to actively intervene in the markets via quantitative easing.

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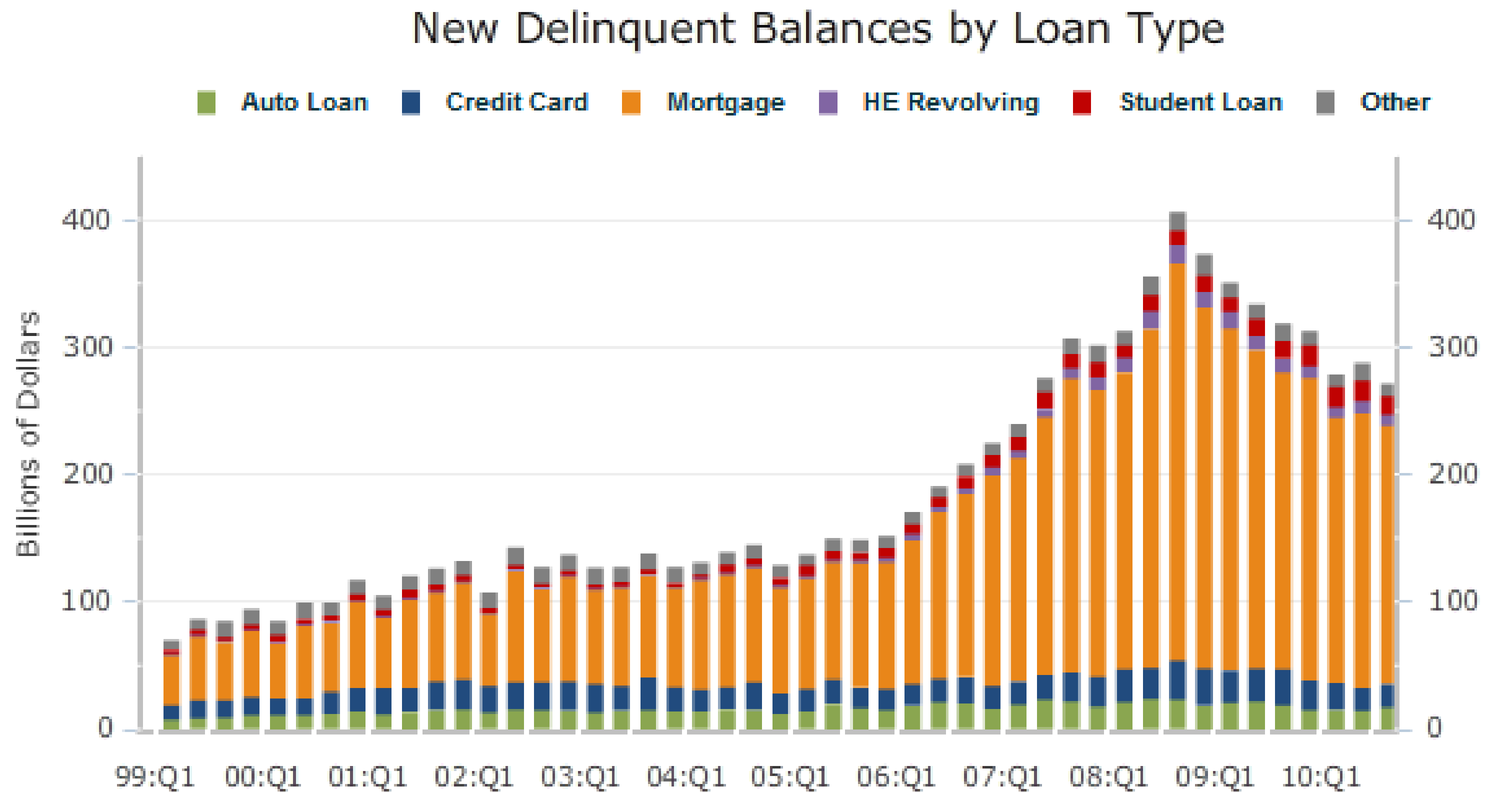
New Delinquencies – Risk Remains

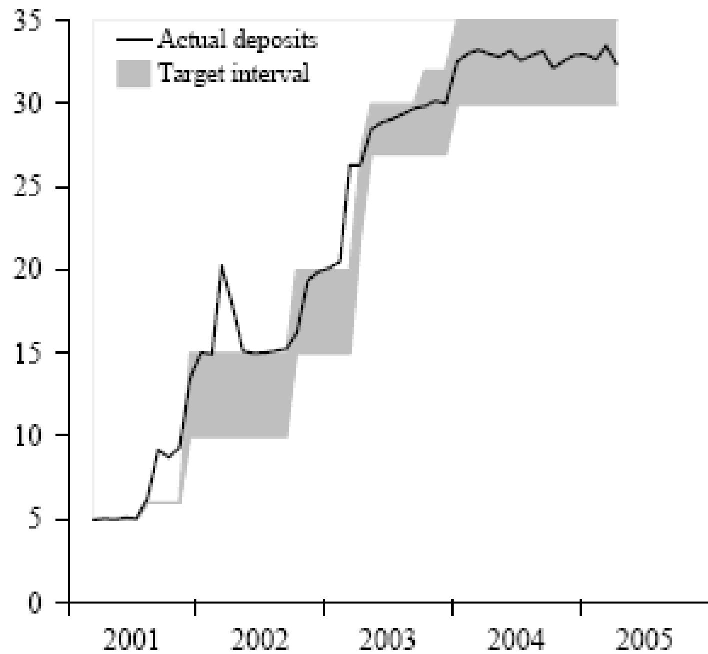


Source: NY Fed

Invented in Japan

- QE was first used by the Bank of Japan (Japan’s Central Bank) during 2001-2006
  - To combat deflation and negative economic growth
  - Sought 1 year of positive growth
- BOJ raised commercial bank reserve requirements to drop overnight rates (similar to the Fed Funds Rate)
  - A low overnight rate should in theory make it easier for banks to lend
- It also purchased large volumes of Gov’t bonds
- Debate over results

Japanese QE and GDP



Source: The Fed, World Bank Data

The U.S. Fed's Options

- The Fed had two options to lower rates and spur growth, in addition to targeting a 0% overnight rate:
- 1: Reduce the risk premium – effectively QE1
  - Private debt is considered risky compared to public debt
- When the market sees perceives increasing risk, as it did after Lehman, rates go up and lending ceases
  - The Fed's response was programs like TARP – the open market purchase of troubled/toxic assets such as mortgaged back securities – the Fed was absorbing risk from highly leveraged banks when no one else wanted it so that rates would drop and private lending could resume

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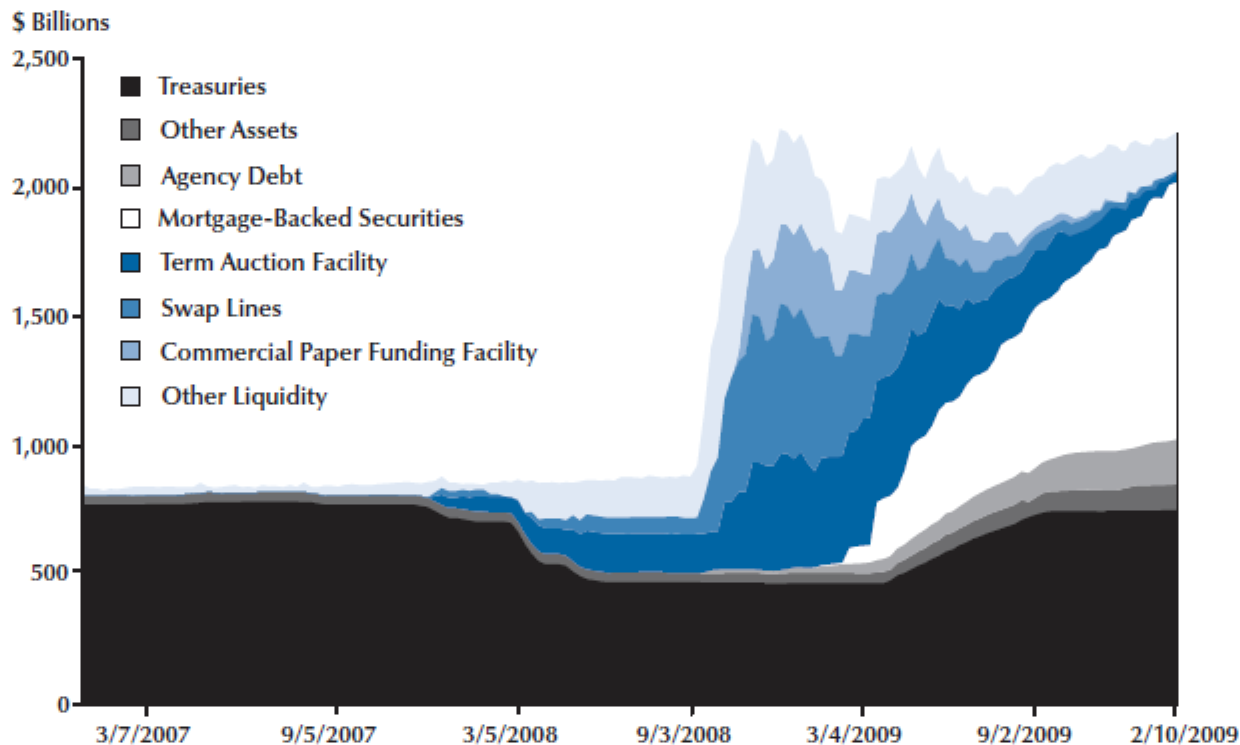
The Fed's New Balance Sheet



Source: via Blinder

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Stock Market's Response (Dow)

Source: Google Finance Chart

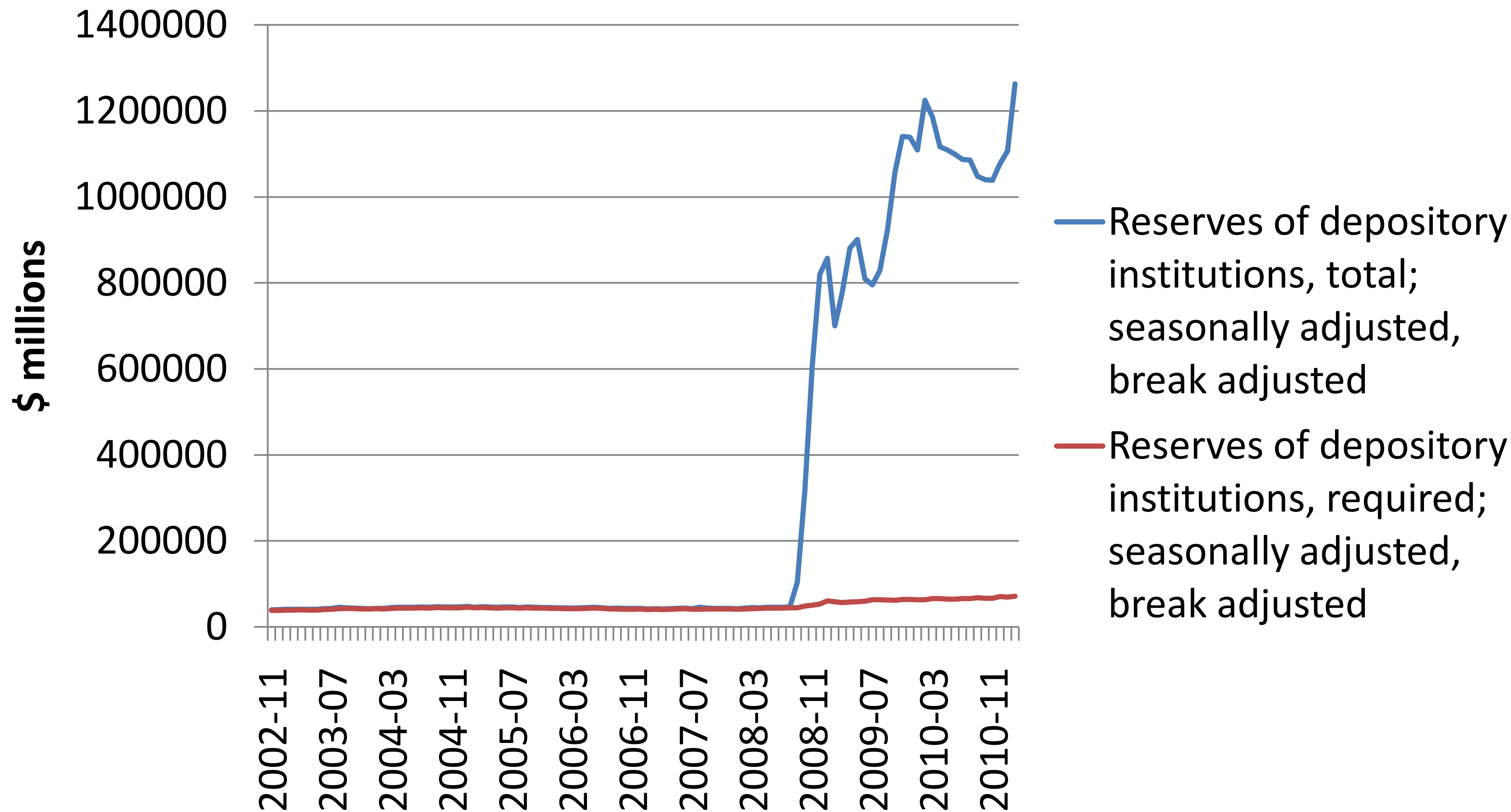
Market Asking for More QE

- Bad economic data led the Fed to initiate a second round of easing
  - $600 bn of long-term treasuries to be purchased between Nov. 2010 and June 2011
    - About $75 bn/month
- First announced in August, 2010
- QE2 represents the Fed's second (and perhaps its last) option for lowering rates…..

QE1 Targeted Risk, QE2 Goes After Treasuries

- Central banks usually purchase short-term gov't debt to maintain overnight rates…but private lending rates are usually based on longer-term treasuries
  - (Think chart showing correlation between 10 year Treasuries and mortgage rates)
- In QE2 the Fed is purchasing longer-term Treasuries so that private rates which are tied to these bonds decrease
  - Funds were created electronically at the Fed (keyboard + computer = virtual printing press)
  - No wheelbarrows will be needed to haul worthless cash around!

Bank Cash Reserves

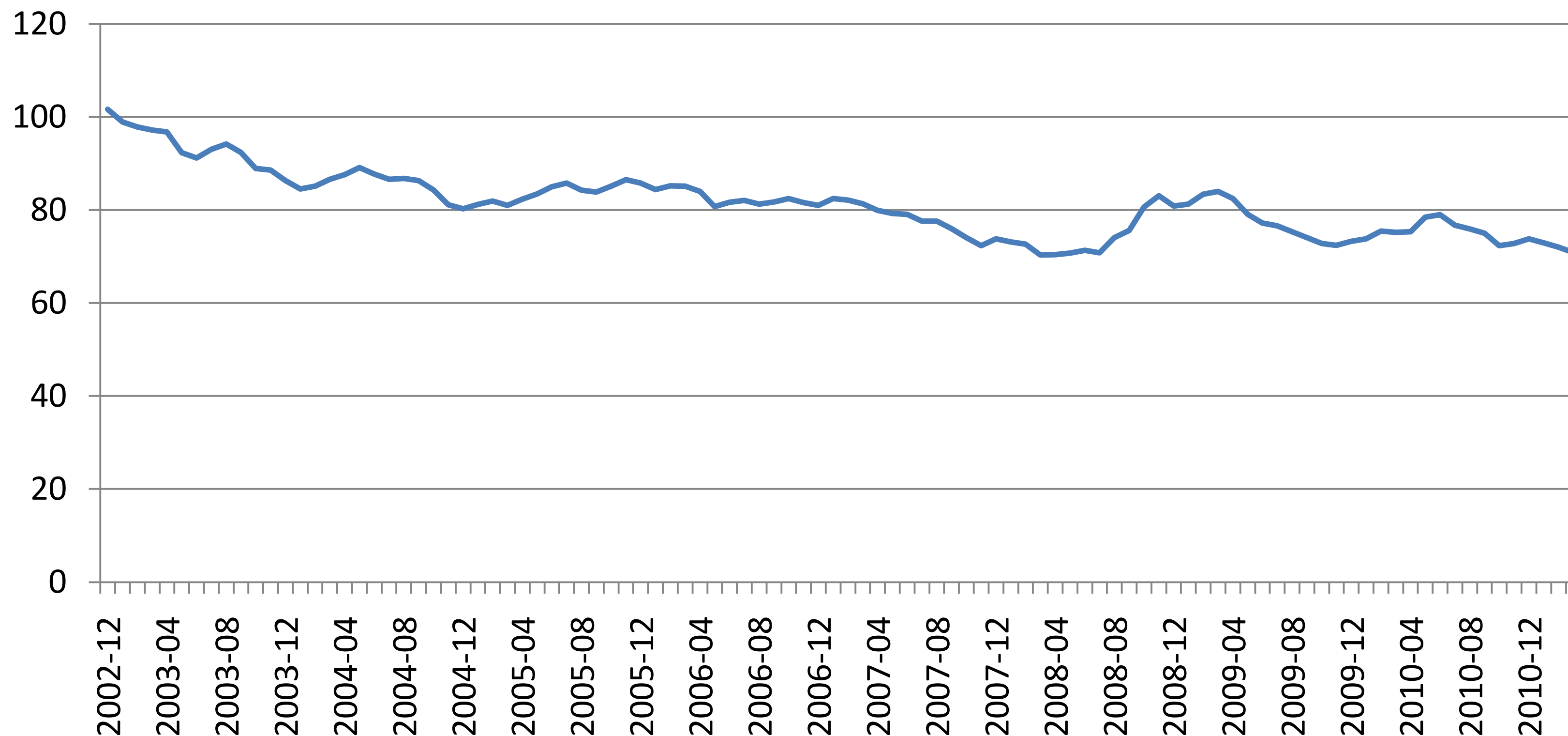


Source: Fed data

Few Options Remain for the Fed

- The overnight rate is near zero
  - In normal times this is enough to boost economy
- QE1 reduced the risk premium through toxic asset purchases and open intervention – essentially helped to end panic
- QE2 has used long term Treasury purchases to lower lending rates
  - This has been largely successful as rates are historically low despite record deficits! This is because the Fed is using "printed money" to maintain high demand for Treasury sales
- The results are…..not in….

The Dollar Has Been Devalued…..



Source: Fed data

But Devaluation is Part of The Plan

- The intended result of QE2 is to devalue the dollar
  - Boost exports, reduce trade deficit and grow the economy
  - Deflate the dollar, inflate the economy

"Reductions in American interest rates make domestic assets less attractive, reducing the demand for dollars and lowering the currency's value in foreign exchange markets. This tends to decrease our imports and increase our exports, raising domestic production and employment."

- Christina Romer, *Chairwoman of the Council of Economic Advisers, 2009-2010*

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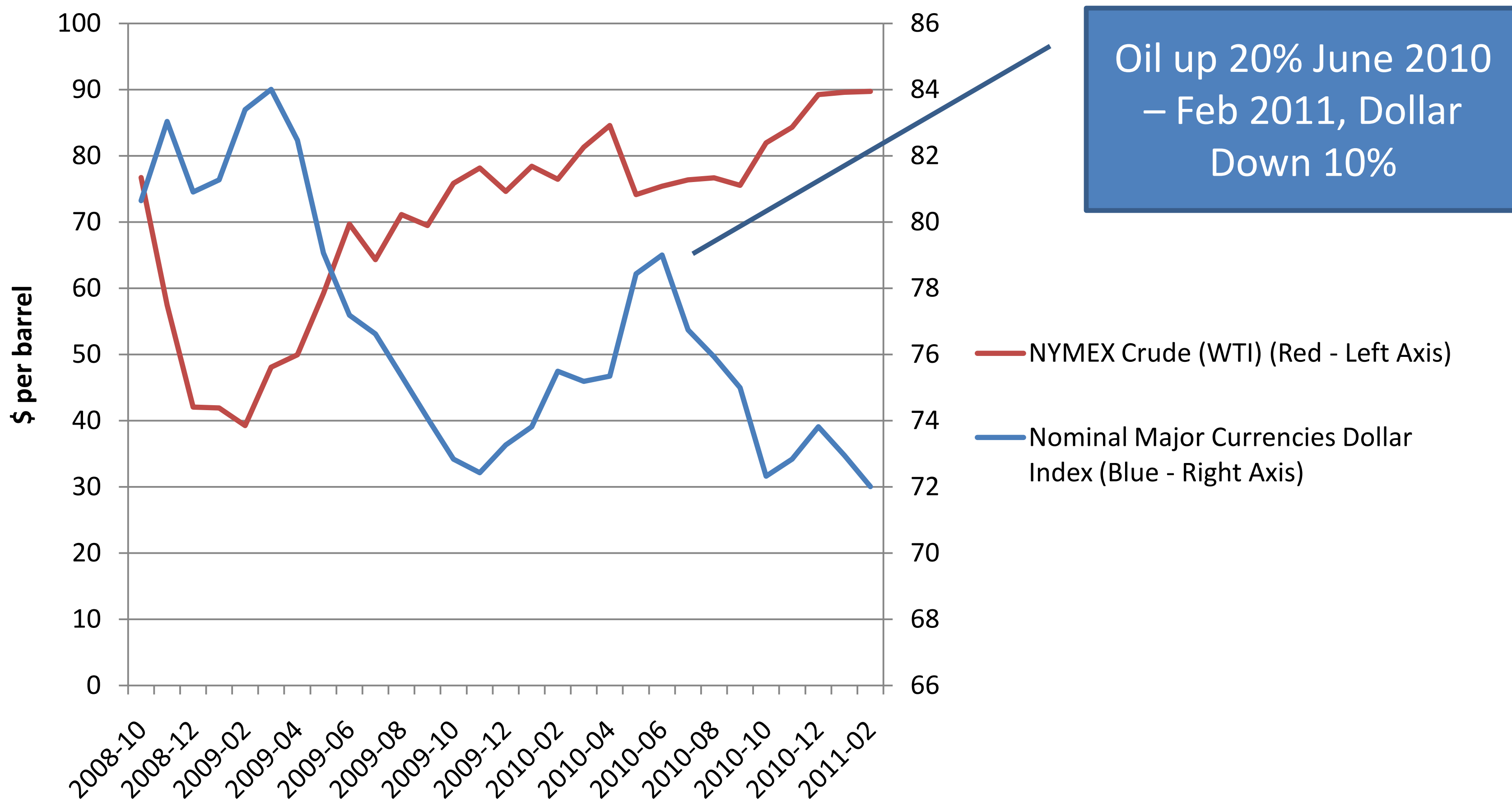
Recent Crude Rally and Dollar Decline



Is It working?

- We don’t know
  - The Japanese eased for five years ending in 2006 and experts still cannot agree on its impact
- Some economists want to end QE2 early due to inflationary fears….commodities, endless deficits/printing
- Others want QE3 as economic growth struggles
  - We raised interest rates too early during the Great Depression
  - The Japanese probably should have continued easing, but maybe with different tactics
  - The stock markets and economic indicators fell after QE1 ended

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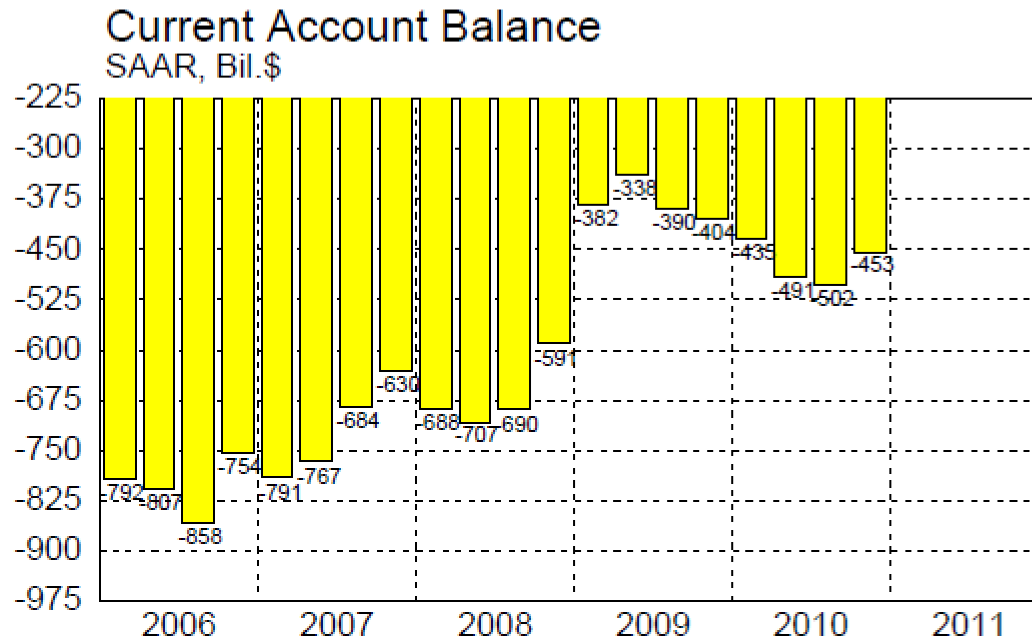
Perhaps Both Sides Are Correct

- We are seeing inflation in imported goods such as oil and globally traded grains (so is the rest of the world though)
  - But the trade deficit has benefited



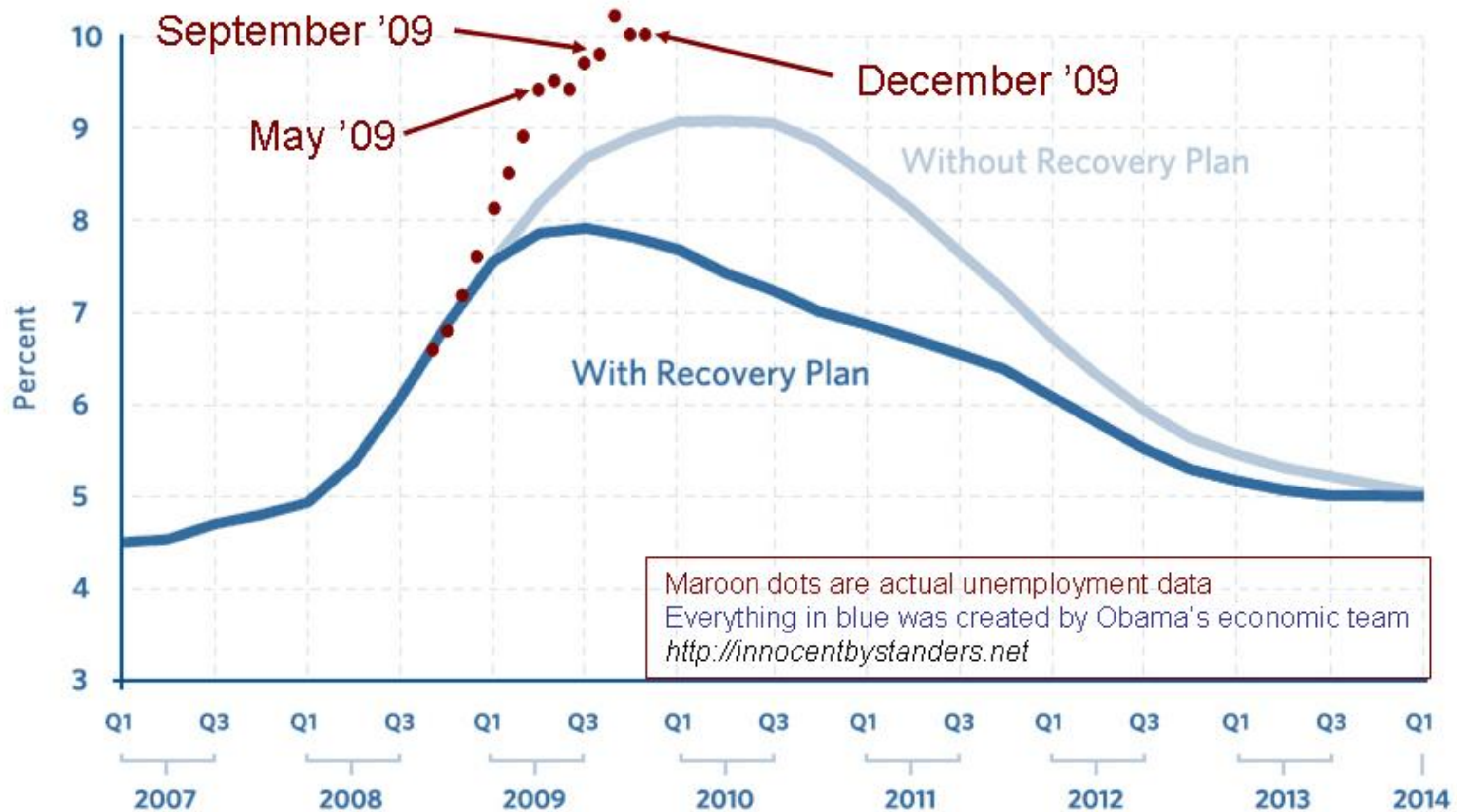
The Economy is Not Ready

- Economic indicators crucial to the recovery such as employment, home sales and GDP growth have stabilized, but are well below levels needed to get the economy back on track
- Core inflation (inflation minus energy and food ;) remains low
  - Many suggest that this is a better long-term indicator
- Withdrawing could be damaging to the economy

The Role of Expectations

- Corporate cash stockpiles are near their 45 year high and banks are not lending. Why?
- Markets price in expectations for the future today
  - Oil example: There is ample supply today and record Cushing inventories, yet prices are over $105/bbl because of fears of spreading Middle East unrest.
- Inflationary fears reduce current lending
  - Who would sell a mortgage at 5% if they think they might get 10% in a year+? Deficits/$printing are a problem here.
  - Lenders also have fundamental fears: unemployment is high and hiring slow – defaults still problematic. It might still be too risky to lend.

Remember the Stimulus?



Fiscal and Economic Policy Failure

- The White House and Congress have been unable to create jobs
  - The stimulus package failed to meet expectation yet cost $800 billion
- The White House does not like to make economy wide supply side incentives
  - Instead it picks and chooses the industries it will support
  - Proposes taxes on productive sectors, subsidies on unproductive sectors (the Portuguese model?)
- DC has created an uncertain regulatory environment – this scares away investment

Examples of Uncertainty and Lost Opportunities

- Waxman-Markey limited refiners' access to the free carbon allowance pool relative to other industries (many less subject to competition abroad)
  - Now refiners and other industries face EPA tailoring rules which will require "best available" emission control technologies on new equipment – not a great way to incentivize investment. (This alone will have negligible impact on global CO_2 emissions)
- U.S. corporations have billions of dollars overseas
  - Cannot bring to U.S. without paying taxes on them
- Delay in approving the Keystone XL pipeline
- E15
- Foreclosure aid barely took off

(http://www.nytimes.com/2011/03/30/business/30foreclose.html?ref=politics)

What comes next?

- We will probably see further quantitative easing – it's the only game in town.
  - But it might not be called QE3
- Congress and the White House are too gridlocked to put together a meaningful job growth solution
  - And where's the 2011 budget???
- The Fed acts somewhat unilaterally – therefore they are the only available substitute for a lack of good economic policy
  - Are doing about all they can to preserve a fragile recovery, but without solid econ/fiscal policy it may be counterproductive…stagflation

Self Defeating Policy

- Stagflation – slow to no economic growth but with inflation.
  - The Fed is doing its job – this should be a good thing
- But with little economic growth, we might simply devalue/inflate
- Long-term deficits pose a problem and puts the Fed in a bind
  - The Fed can keep printing $ to buy Treasuries, but this increases the $ supply and devalues the $
  - If Fed stops buying, demand for debt will subside and rates (Treasuries and therefore mortgage, etc) will increase – killing growth