



## *Two Key Questions about the Economic Recovery*

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hosted by the Connecticut Mortgage Bankers  
Association and The Warren Group*

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I'd like to thank the conference organizers for inviting me to speak with you today. The beginning of a new year is a good time to discuss the outlook for the economy. I will also try to answer a couple of the key questions that most everyone seems to be asking about, in relation to this recovery.\*

As I'm sure you know, over the past several weeks we have been getting economic data consistent with a somewhat happier new year. A recovery that has been anemic for the past year

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\* *Of course, the views I express today are my own, not necessarily those of my colleagues on the Board of Governors or the Federal Open Market Committee (the FOMC).*

and a half looks to be increasingly supported by private spending as 2011 begins. The Blue Chip forecast for 2011 has increased 4 tenths over the previous month, to 3.3 percent.

And I am slightly more optimistic than the Blue Chip; my own forecast is for growth of 3.5 to 4.0 percent over 2011. This is certainly an improvement, but – soberingly – would still leave the unemployment rate close to 9 percent at the end of this year, a rate far above anyone’s estimate of full employment.

Given the evidence of substantial excess capacity and a quite low core inflation rate, it is absolutely appropriate that monetary policy – and indeed fiscal policy – have been deployed in a way that encourages a more robust recovery. Going forward, it is my view that monetary policy must continue to focus on addressing both elements of the Fed’s mandate – price stability, and growth supporting a return to full employment in the medium term.

Today I am going to focus on two questions that seem to be at the forefront of most discussions of the recovery.

The first question is, *what role will housing play in the recovery?* As the most interest-sensitive component of gross domestic product (GDP), housing has traditionally been an important sector of the economy for generating recovery. I will be highlighting the fact that, despite some improvement in factors fundamental to a housing recovery, I expect housing will not provide as much support to this recovery as it has in previous ones. My sense is that residential investment, consumer durables, and services related to housing will be less robust than is usual in many recoveries, thus playing a role in what I think will be only a gradual improvement in the economy and employment.

To put it plainly, these housing-related headwinds are part of why I do not expect growth greater than 4 percent this year. And while 4 percent is not terrible, at that rate it will still take a very long time to get back to full employment.

The second key question is, *how concerned should we all be about a flare-up in inflation – and aren't the measures the Fed has taken inflationary?* Many have expressed concern that Federal Reserve policy actions that expanded our balance sheet dramatically will cause inflation. I firmly believe that in the short run inflation is likely to remain quite low – and that in the longer term we have the tools, and the steadfast commitment, to address inflationary pressures.

Indeed, while monetary policy works with lags, I would note that it has been more than two years since the Fed's balance sheet expanded dramatically. Since that time, core inflation has *fallen* and core inflation measures using the CPI or PCE indexes are at something like 50 year lows.

Today I will briefly address the role of the low inflation rate for the economy and policymaking. In doing so, I will discuss why inflation concerns have not materialized to date, and why I expect core inflation to remain below 2 percent over the next several years.

### **Question 1: Housing and the Economic Recovery**

The economic recovery officially began in the third quarter of 2009, according to the organization responsible for dating our recessions – the National Bureau of Economic Research (NBER). Despite being a year and a half into the official recovery, the recovery period has been so tepid that there has been very little improvement in the percentage of the population employed

(see **Figure 1**). The percent of the population employed in December was 58.3, close to the low of this cycle and below the 59.3 percent employed in July of 2009, when the recovery officially started. For context, the number was around 63 percent when the recession began. The recent stability of the employment-to-population ratio reflects the poor labor market performance of the current recovery. We are simply not generating enough jobs to reduce the number of unemployed persons. Nor are we, by the way, providing job opportunities for the so-called “discouraged workers” who have given up looking for work.

What we call final sales – growth in GDP excluding inventory replenishment – has grown quite slowly over the past year and a half. **Figure 2** shows that the growth to date has been substantially slower than during the 1982 recovery, and is tracking quite closely to the weak recovery experienced in the early 2000s. As many economists anticipated, the recovery has been tepid given the fact that it comes in the wake of a collapse in a housing bubble with resulting financial market turmoil and disruption.

The largest GDP component is consumption, and consumption has not grown very quickly. As **Figure 3** shows, in the current recovery, growth in consumption has been much slower than in the 1982 recovery and has, unfortunately, tracked the anemic initial recovery from the 2001 recession. While the 2001 recession damaged many a household’s finances, through an abrupt decline in stock-market wealth, the current recovery has been hampered by households trying to rebuild their finances given sharply diminished *housing* wealth in addition to declines in the value of their other investments.

While there have been concerns about business fixed investment, **Figure 4** shows that this component of GDP has grown quite well relative to the last two recoveries – although

somewhat slower than the 1982 recovery. Despite the concern over economic uncertainty voiced by many businesses, investment has been growing.

The real laggard in this recovery has been housing. While housing is a relatively small component of GDP, it can be quite volatile – and often grows rapidly during an economic recovery. In addition, purchases of appliances, home furnishings, and housing-related services are impacted by slowed housing activity. Given the problems that flow from the bursting of the housing bubble, **Figure 5** shows that residential fixed investment is roughly where it was at the trough of the recession – and thus not providing its more usual contribution to growth in the early stages of a recovery.

Just how moribund the housing market has been is shown in **Figure 6**. Both housing starts and building permits have leveled off, but are showing no signs of a significant recovery yet.

Interest rates are quite low by historical standards, while the equity component of household net worth is improving, as shown in **Figure 7**. And we have seen some positive improvement in real disposable income. Given all that, one would normally anticipate that housing would be improving.

However, lower interest rates are only helpful if credit is available. **Figure 8** shows that the number of purchase loans to prime borrowers has been declining, while the subprime market is dormant.<sup>1</sup> The left side of **Figure 9** shows the distribution of all home-purchase loans by credit score in 2006 (before the financial crisis) and in 2010.<sup>2</sup> It is striking how the distribution of purchase mortgages has changed. Credit standards have tightened, as evidenced by a shift to borrowers with higher credit scores. Given what has happened to housing prices, and

unemployment, lenders are presumably more cautious in lending. Far fewer loans are going to borrowers with credit scores below 625, and many more purchase loans are going to borrowers with credit scores above 750. In 2006, about 15 percent of the purchase loans were to borrowers with credit scores below 625, but by 2010, this fraction had fallen to only 3.5 percent.

The decline in loans to borrowers with sub-625 scores has not completely resulted from the decline in *subprime* lending. The right side of the figure shows the credit-score distributions among *prime* loans, and a similar rightward shift in the distribution is apparent. From 2006 to 2010, the share of prime purchase loans going to borrowers with sub-625 credit scores fell from 8.5 to 3.5 percent. At the same time, the share of prime purchase loans going to borrowers with scores above 750 rose from about 35 percent to about 41 percent.

While I am certainly not advocating going back to the loose lending standards of, say, 2006, I think we should be aware of how changes in the distribution have implications for the housing recovery. In particular, I would suggest that current lending standards are another reason the housing sector's role in the recovery is likely to be weaker than usual.

In addition to the challenge of availability of credit to borrowers with low credit ratings, housing has another issue. Both the homeowner and rental vacancy rates are quite high, as shown in **Figure 10** – although there has been recent improvement in these rates, and hopefully the trend is now downward. High vacancy rates, of course, place downward pressure on home prices and rental rates, and serve as another headwind to a housing recovery.

So again, all in all and despite some improvement in factors fundamental to a housing recovery, I expect that housing will not provide as much support to this recovery as it has in previous ones.

But now I'd like to turn to the second question, and perhaps leave you feeling a bit less discouraged when we're through.

## **Question 2: Inflation, Policy, and the Economic Recovery**

A second key question involves the concerns about Fed actions stoking inflation. This question is not a distinct and separate issue from the one we just discussed – the strength of the recovery. In fact they are crucially related. If housing-related growth is not going to boost the recovery this time around, we may need policy – particularly monetary policy – to continue playing a stimulative role.

But it is important to look at possible costs of stimulative policy, as well as benefits. If inflation were to become a problem that would certainly fall in the costs column. But if analysis suggests that inflation is not likely to be a problem, then we can more comfortably align policy to continue supporting the recovery.

Some observers and analysts have voiced great concern that the nascent economic recovery, combined with the actions of the Federal Reserve that have expanded its balance sheet, will lead to significant inflation. However, **Figure 11** provides a variety of different measures of core inflation; core CPI, core PCE, trimmed core CPI and trimmed core PCE. It is striking how much all four series have declined. In fact many of these series are at their historical lows.

**Figure 12** shows the different measures of core inflation in the top panel, and the Federal Reserve's balance sheet in the bottom panel. In the fall of 2008, the Federal Reserve's balance sheet expanded significantly – but that period also corresponds to the emergence of disinflation

(a reduction in the inflation rate) in the U.S. While monetary policy works with lags, why has the unprecedented increase in the Federal Reserve's balance sheet corresponded with continued significant disinflation? The answer is that both have been reacting to an unprecedented financial shock, which resulted in significant excess capacity in the economy.

When the Federal Reserve purchases assets and expands its balance sheet, it necessarily injects more reserves into the banking system. The key question is what banks do with those reserves. Reserves held by the banking system that are not used to provide credit to businesses will have little bearing on either real spending or inflation. The 2009 line in **Figure 13** shows that the expansion of bank reserves has *not* generated increases in lending. As with the 1991 recovery, where a credit crunch impeded expansion of bank lending, there has not been an expansion of lending during this recovery. This is particularly noticeable if we look at business lending, in **Figure 14**. Commercial and industrial loans are substantially lower than at the recession trough.

Of course, those who worry about the inflationary consequences of our balance sheet may be looking to the future. As the economy improves, banks may use their reserves to rapidly expand business lending – increasing economic activity and putting upward pressure on inflation. But as Chairman Bernanke has emphasized, the Federal Reserve has at its disposal a variety of tools that will allow it to remove reserves from the banking system once economic conditions get closer to normal. Thus the fear that our large balance sheet and the large stock of reserves in the banking system will cause inflation – either now or down the road – seems misplaced to me.

While we have been experiencing disinflation generally, it is not the case for all prices. As **Figure 15** shows, some prices have risen rapidly. Energy prices in particular have been rising, in response to robust growth in emerging markets. But outside of energy prices, most prices have shown little increase, and in fact a number of the major categories in the CPI index have experienced declines in prices.

To be clear, the Fed certainly cares about increases in energy prices, for two reasons. First, higher energy prices could potentially bring about long-lasting increases in the overall inflation rate. The Fed therefore monitors energy prices closely, given our mandate to keep overall inflation low and stable. Second, rising energy prices act as a tax on households and businesses, who often find it difficult to reduce their consumption of energy in the short run.<sup>3</sup>

With regard to the first concern, our research suggests that the lasting effect of energy prices on overall inflation has been surprisingly small in recent years. For evidence, consider the enormous surges in oil prices in mid-2008, which were followed by significant *declines* in core inflation, as I mentioned earlier.

The second concern remains, however. In sum, my primary concern about rising energy prices is not so much that they will lead to higher inflation, but that they will subtract from household income and thus weaken the economy.

Financial markets are also not expecting sharply higher rates of inflation. The difference between the 10 year Treasury rate and the 10 year inflation-protected Treasury security (TIPS) rate provides a measure of the expected average inflation rate over the next decade. As shown in **Figure 16**, the average expected inflation rate by this measure is still below what the markets expected prior to the recession and the necessary expansion of the Fed's balance sheet.

## Concluding Observations

Thankfully, we are seeing signs that the economy is experiencing a more self-sustaining recovery. However, it is important not to lose sight of how much excess capacity remains. It is likely to take at least four years to return to full employment from the current unemployment rate of 9.4 percent. It is also likely that measures of core inflation will remain well below 2 percent over the same period. This suggests that the signs of improvement we have seen so far are not worrisome, but are most welcome. A sustained period of the economy growing well above its potential – not just for a few quarters – is exactly what we need.

The current level of accommodation from monetary and fiscal policy is appropriate. However, once the economy has significantly improved, both fiscal and monetary policy will need to be much less accommodative. Getting this balance right will be one of the main policy challenges over the next several years. I am confident that the Fed's Federal Open Market Committee (FOMC) will meet the challenge.

Finally, I'd like to note that even with some early signs of economic improvement, a number of risks remain. As I have highlighted today, the housing market remains fragile and is not likely to contribute to economic recovery in its traditional way – and this is part of why I do not expect growth to exceed 4 percent in 2011. Furthermore, in many areas of the country the impaired balance sheets of borrowers, high foreclosures, and high vacancy rates imply a long time before local housing markets normalize. State and local governments remain significantly challenged by the aftershocks of the financial crisis and recession. And many state and local governments continue to have both short-run and long-run fiscal challenges.

Finally, the large fiscal deficits of many governments accrued during the recession will need to be addressed. And as **Figure 17** shows, financial markets are concerned that many countries will be forced to make very painful fiscal choices – in economies with already significant challenges – or risk default.

Yet while risks like these remain, the economy is in a much better place than it was one or two years ago. Fiscal and monetary policy responded aggressively, and in my view appropriately, to avoid what would have been a much more severe outcome, absent action.

There will be a time when these aggressive actions need to be reversed, but first we need to get the economy on a much more solid footing. Even with a relatively robust recovery, it will take several years before we attain full employment and an inflation rate close to a long-run expectation of 2 percent. Taken together there has been clear room for – and indeed an imperative for – policy actions like those the Federal Reserve has been pursuing.<sup>4</sup> Going forward our focus must be on policies that return the economy to a place that meets both elements of the Fed’s mandate.

Thank you.

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**NOTES:**

<sup>1</sup> Figures 8 and 9 are based on data from McDash Analytics LLC, a subsidiary of Lender Processing Services, Inc. The McDash data contain loan-level data from mortgage servicers, and cover more than half of all outstanding mortgages in the United States. The number of servicers contributing to the McDash dataset is growing over time, so the decline in purchase loans depicted in Figure 8 probably understates the true decline in lending to a small extent. The 2010 distributions reflect data through November 2010.

<sup>2</sup> The share of subprime loans in the McDash data is generally smaller than the true subprime share of U.S. mortgages. To create Figure 9, subprime loans in the McDash data were “upweighted,” so that the adjusted

subprime share matches the true subprime share in a benchmark year (2006). The benchmark figure used for the weighting is based on the top panel of Figure 1B in Mayer and Pence (2008): “Subprime Mortgages: What, Where and to Whom?” Finance and Economics Discussion Series Paper No. 2008-29, Board of Governors of the Federal Reserve System – available on the Board of Governors website at <http://www.federalreserve.gov/PUBS/FEDS/2008/200829/200829pap.pdf>

<sup>3</sup> The first effect would lead Fed policy to be slightly less accommodative while the latter effect would lead it to be slightly more accommodative.

<sup>4</sup> For additional perspective, see Vice Chair Janet Yellen’s remarks of January 10, where she discusses the rationale, design, and effectiveness of the Federal Reserve’s asset-purchase program; and concerns about inflation or adverse imbalances resulting. The text is available on the Board of Governors website at <http://www.federalreserve.gov/newsevents/speech/yellen20110108a.htm>

# Two Key Questions about the Economic Recovery

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Eric S. Rosengren

President & CEO

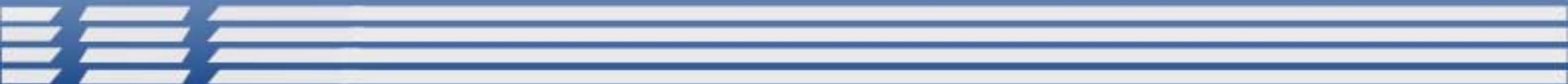
Federal Reserve Bank of Boston

The New England Mortgage Expo

January 14, 2011

# Slow Recovery but Expect Gradual Improvement in 2011

- Holiday sales indicate better Q4 than many expected
- Consumption needs to be healthy to get much of a recovery
- Housing is experiencing continuing headwinds that prevent it from providing usual support to recovery

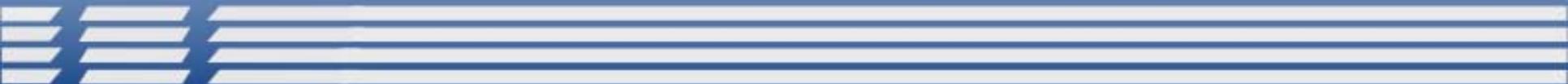


# *1. What role will housing play in the recovery?*

- Not as much support as in previous ones

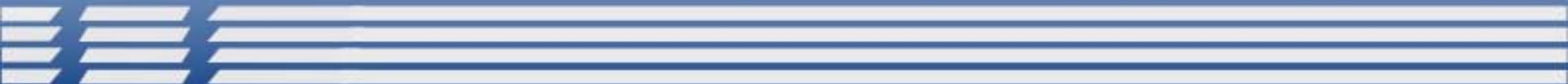
# *2. How concerned should we be about an inflation flare-up?*

- Short run, low inflation
- Long run, we have tools and commitment
- Fed balance sheet grew, but core inflation fell
- Allows policy to continue to be accommodative



# **Question 1:**

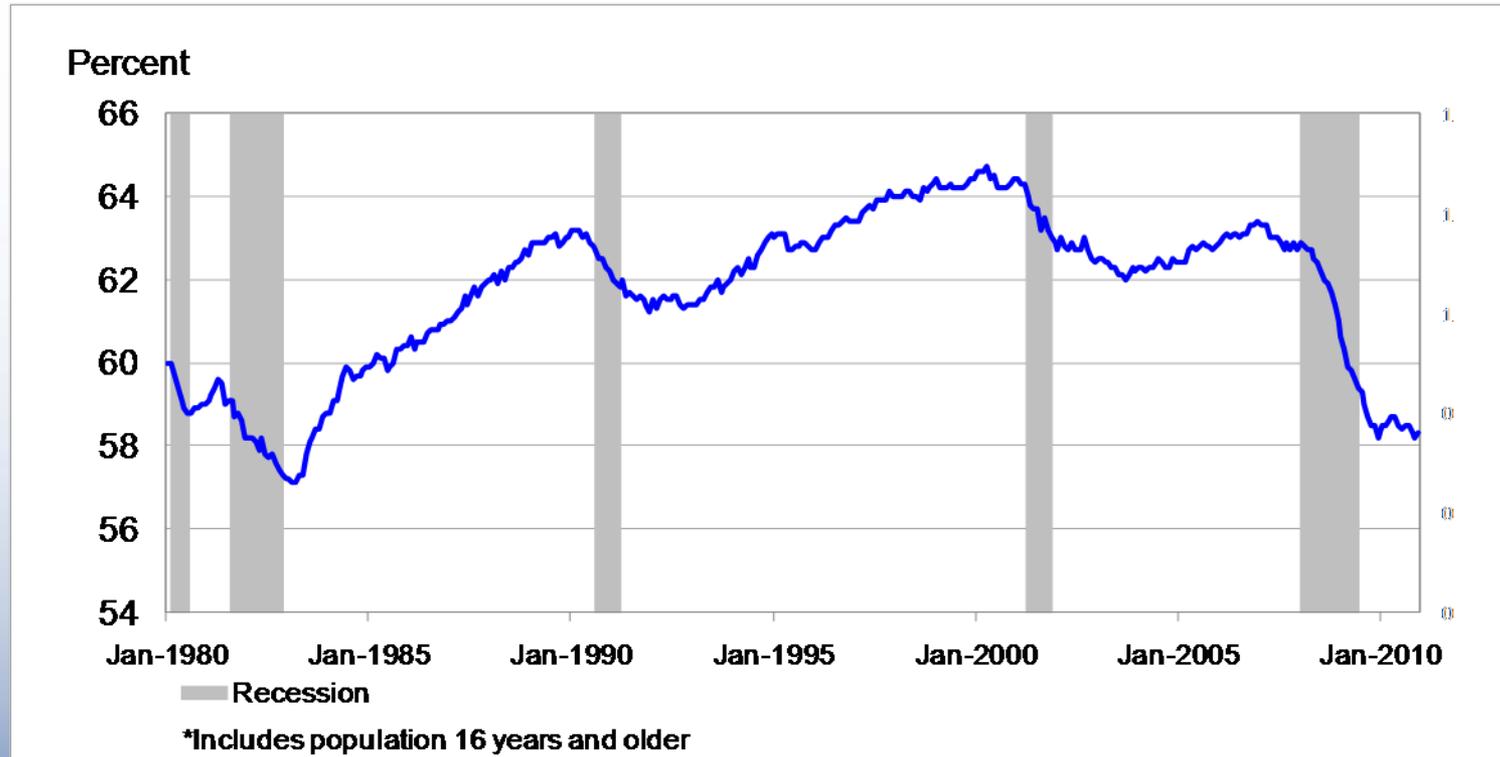
***Housing and the  
economic recovery...***



# Figure 1

## Civilian Employment / Population Ratio\*

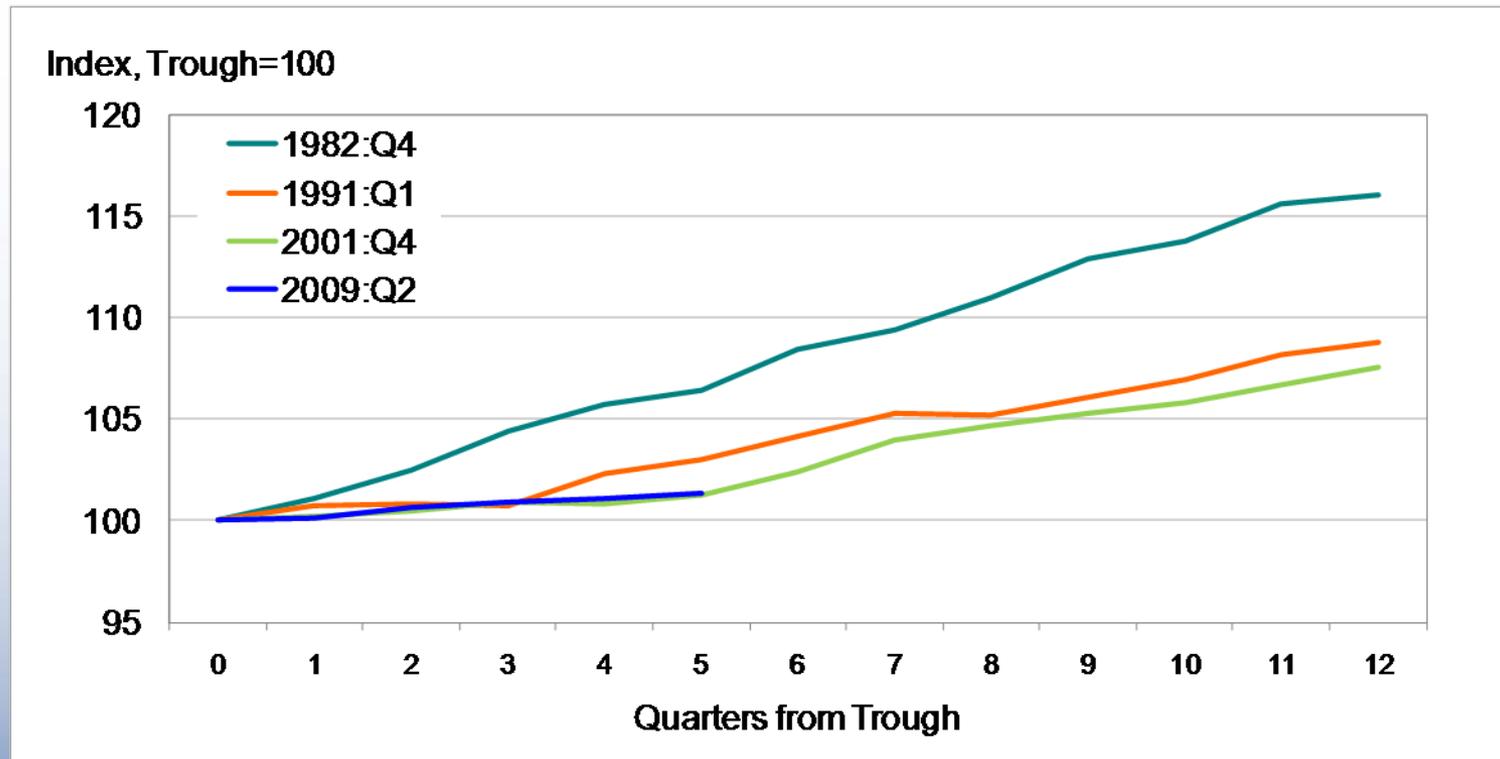
January 1980 - December 2010



Source: BLS, NBER / Haver Analytics

# Figure 2

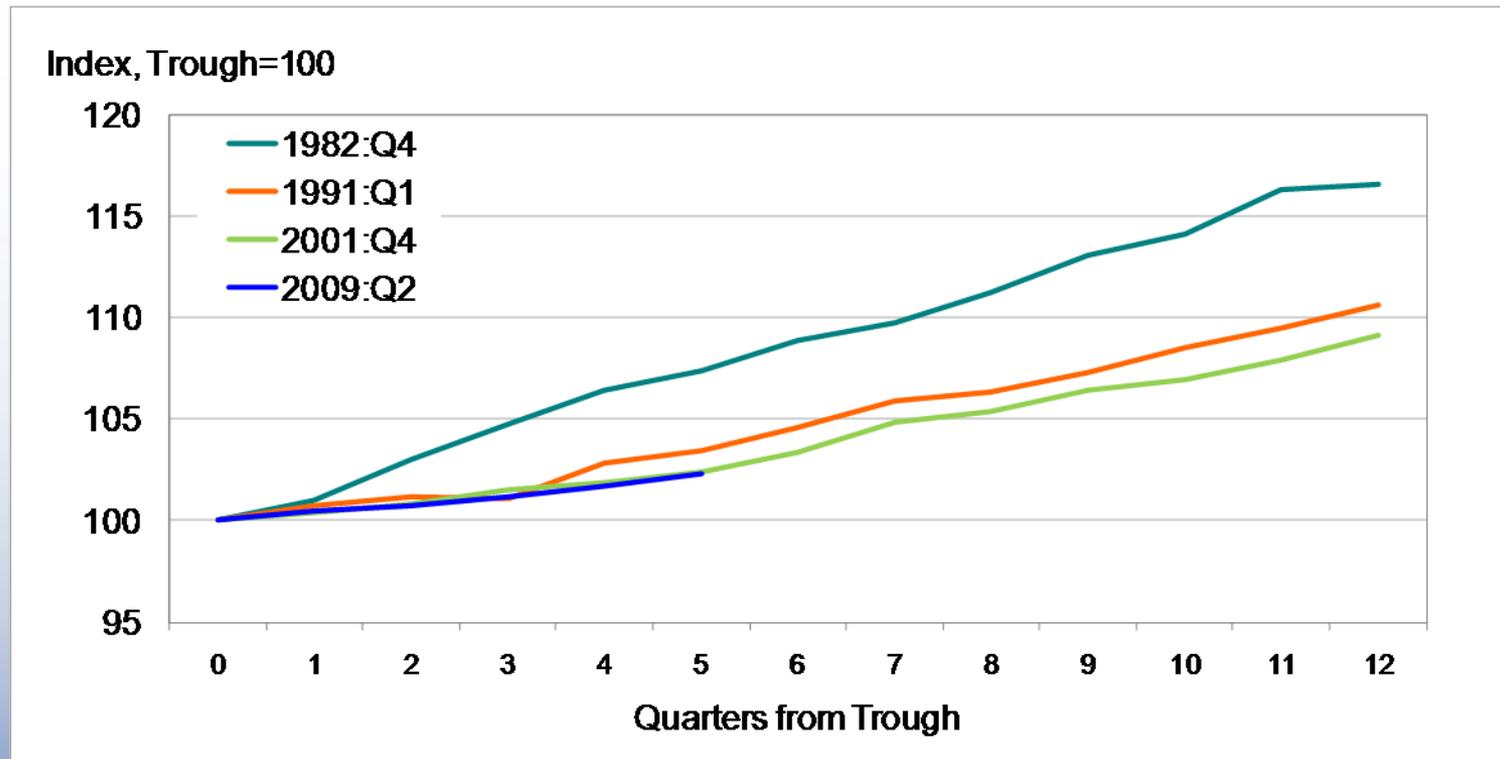
## Real Growth in Final Sales from Trough of Last Four Recessions



Source: BEA, NBER / Haver Analytics

# Figure 3

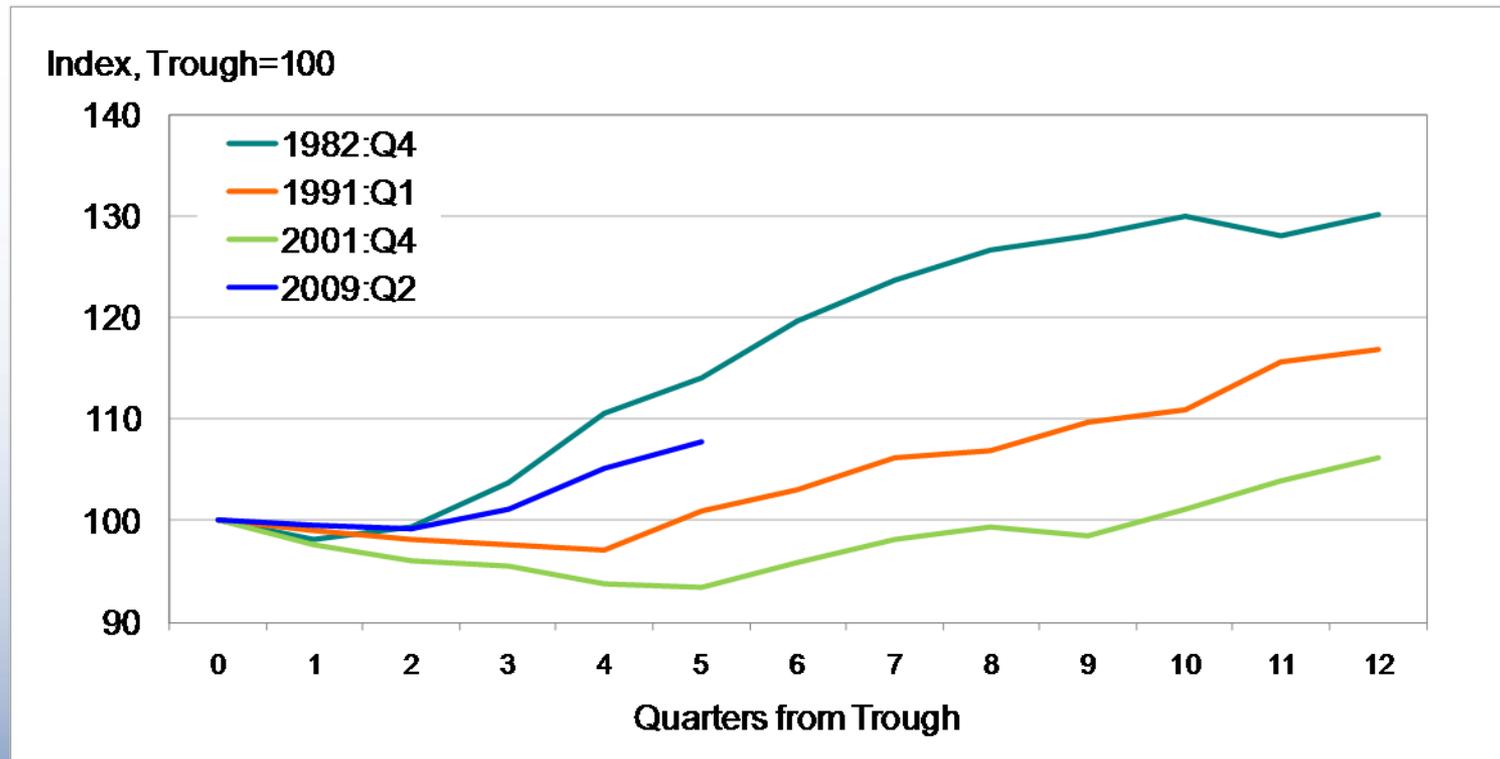
## Real Growth in Consumption from Trough of Last Four Recessions



Source: BEA, NBER / Haver Analytics

# Figure 4

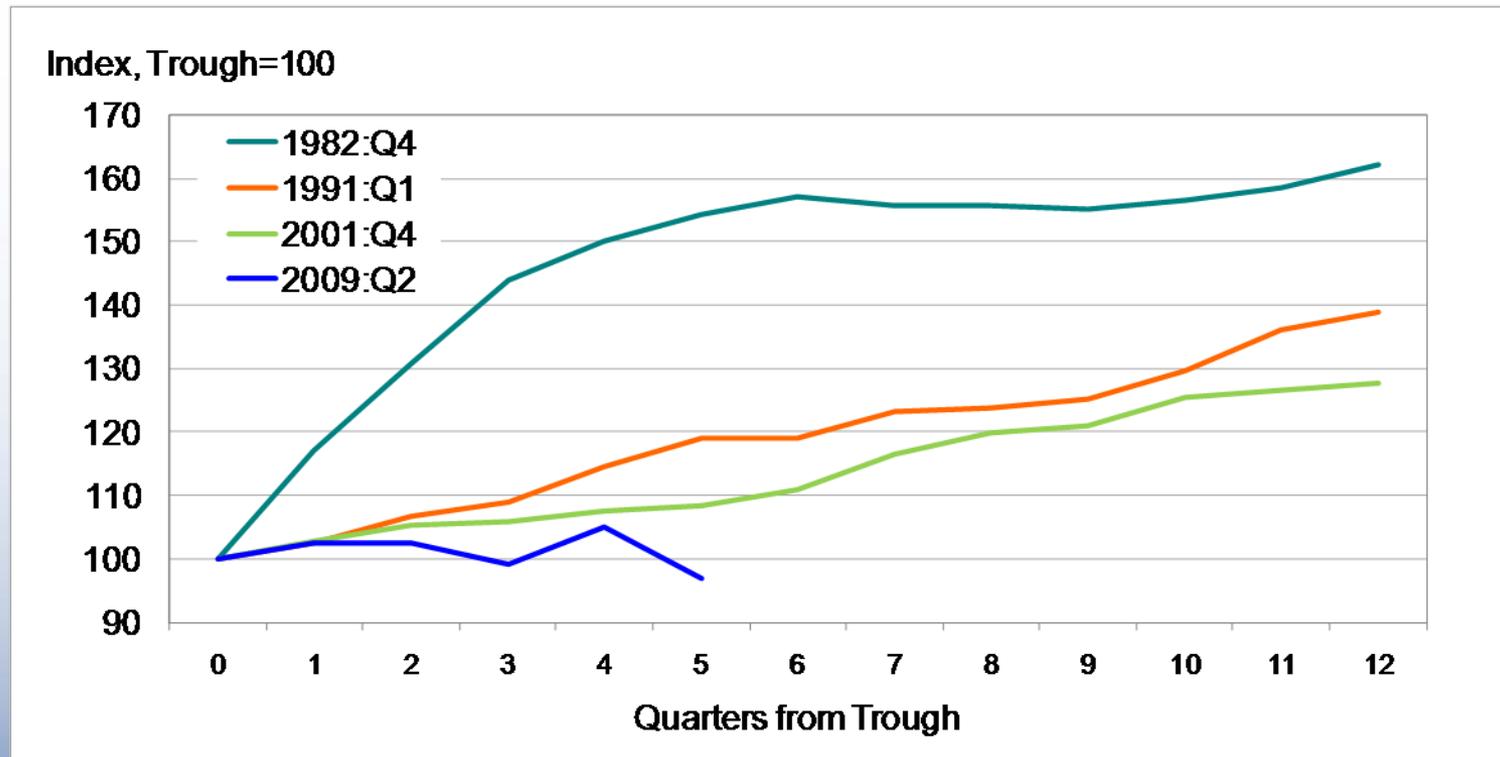
## Real Growth in Business Fixed Investment from Trough of Last Four Recessions



Source: BEA, NBER / Haver Analytics

# Figure 5

## Real Growth in Residential Fixed Investment from Trough of Last Four Recessions

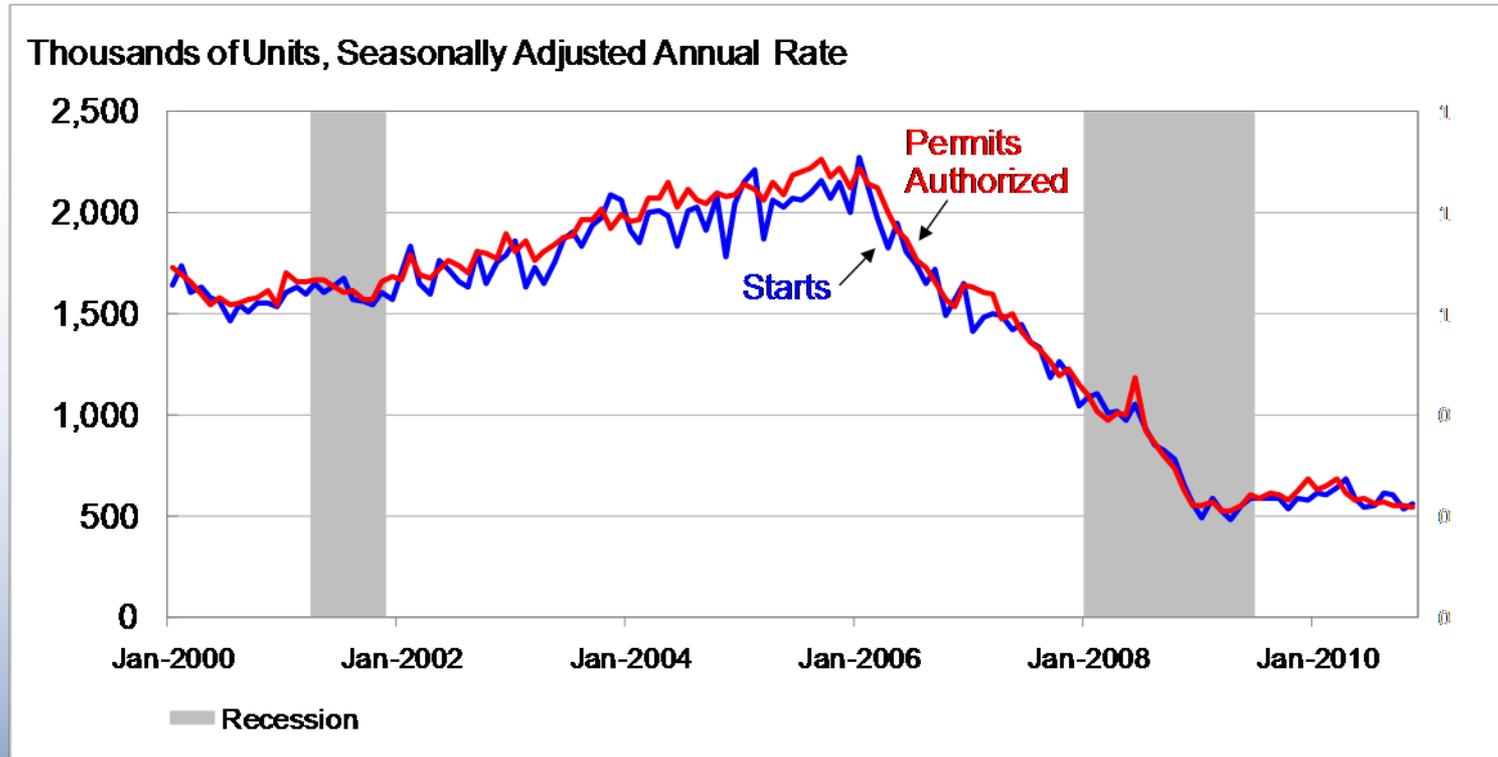


Source: BEA, NBER / Haver Analytics

# Figure 6

## Housing Starts and Permits Authorized

January 2000 - November 2010

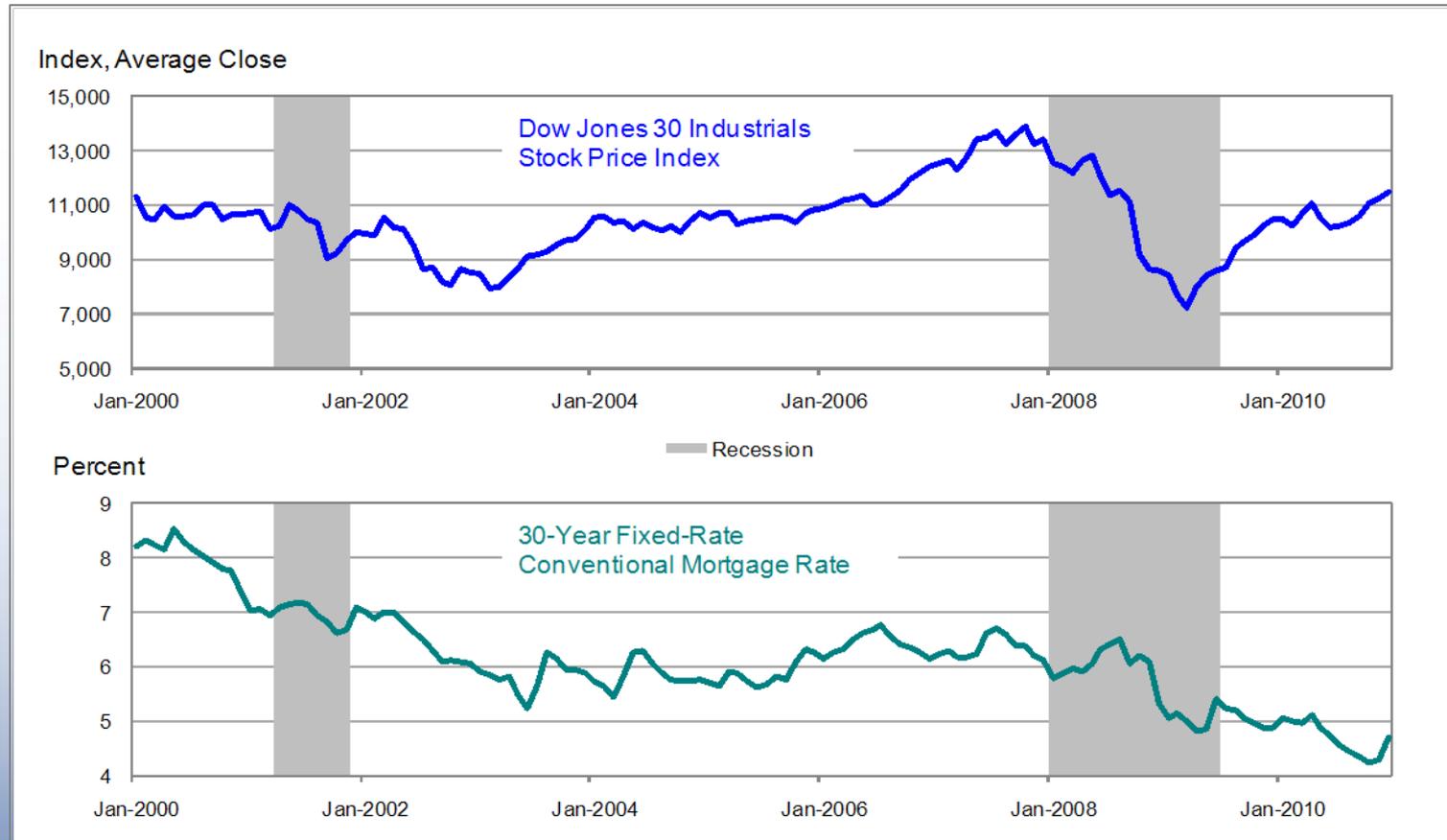


Source: Bureau of the Census, NBER / Haver Analytics

# Figure 7

## Stock Price Index and Mortgage Rates

January 2000 - December 2010

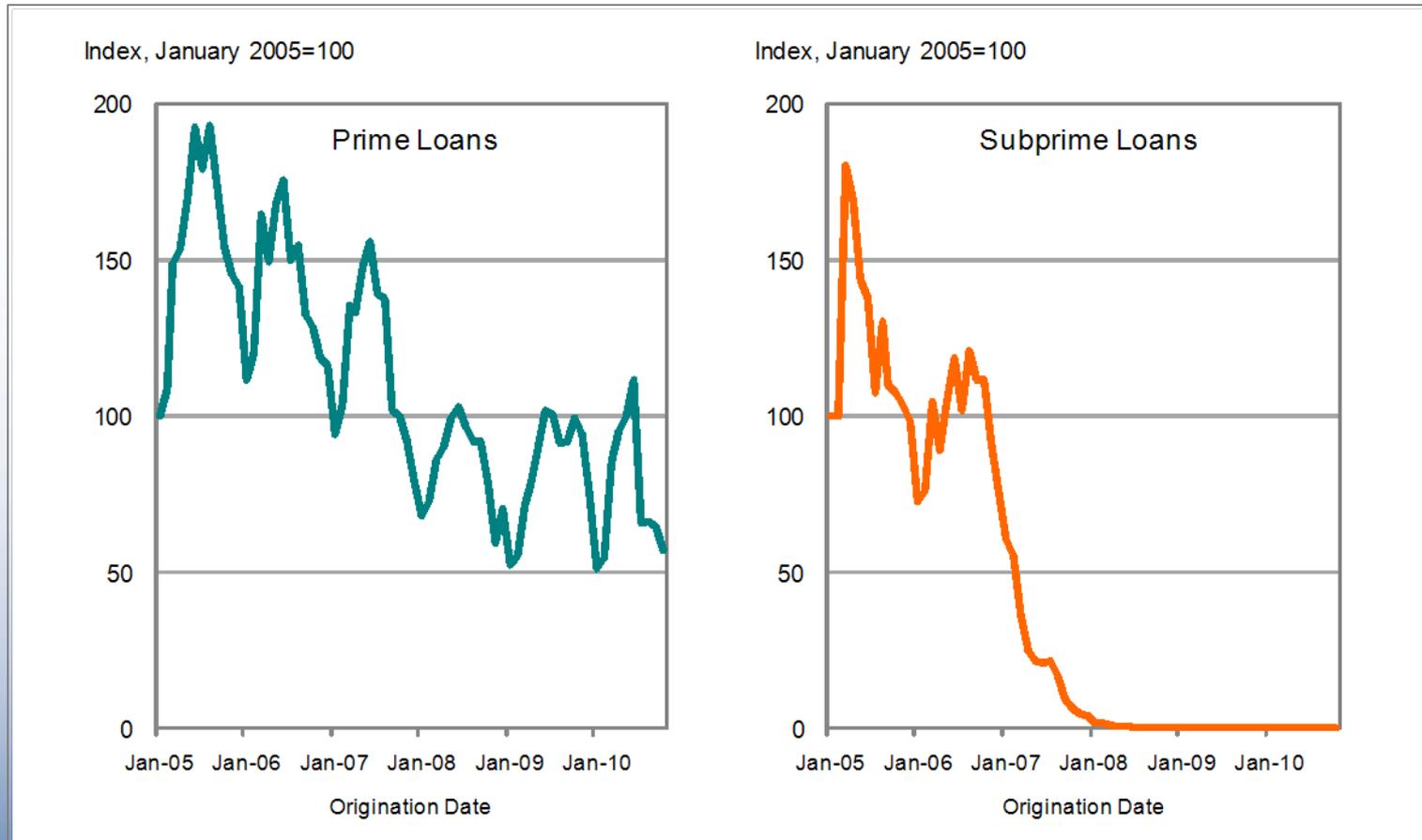


Source: Dow Jones, FHLMC, NBER / Haver Analytics

# Figure 8

## Trends in Purchase Mortgage Originations

January 2005 - October 2010

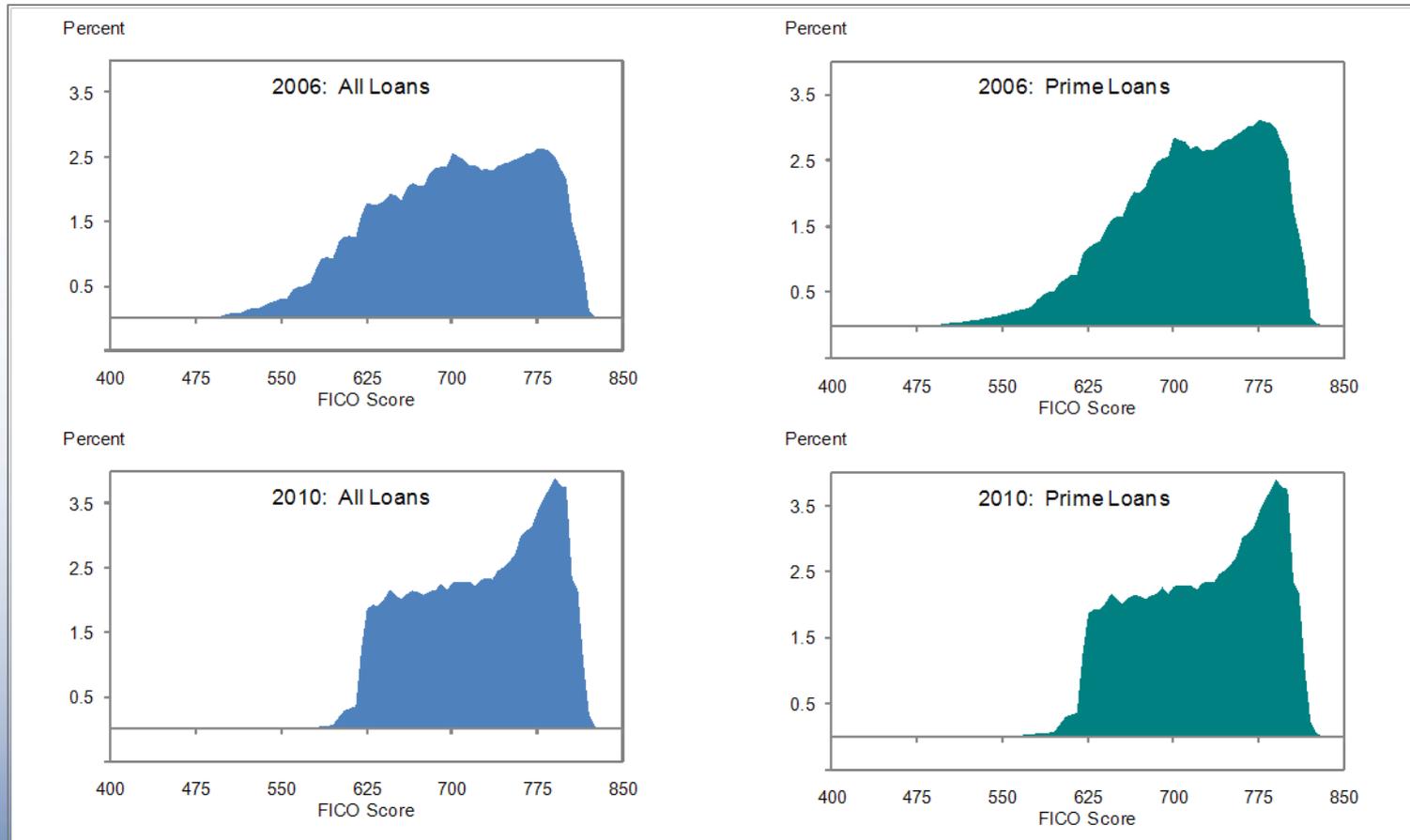


Source: Calculations based on data from McDash Analytics, LLC, a subsidiary of Lender Processing Services, Inc.

# Figure 9

## Credit Score Distribution for Purchase Loans

2006 and 2010

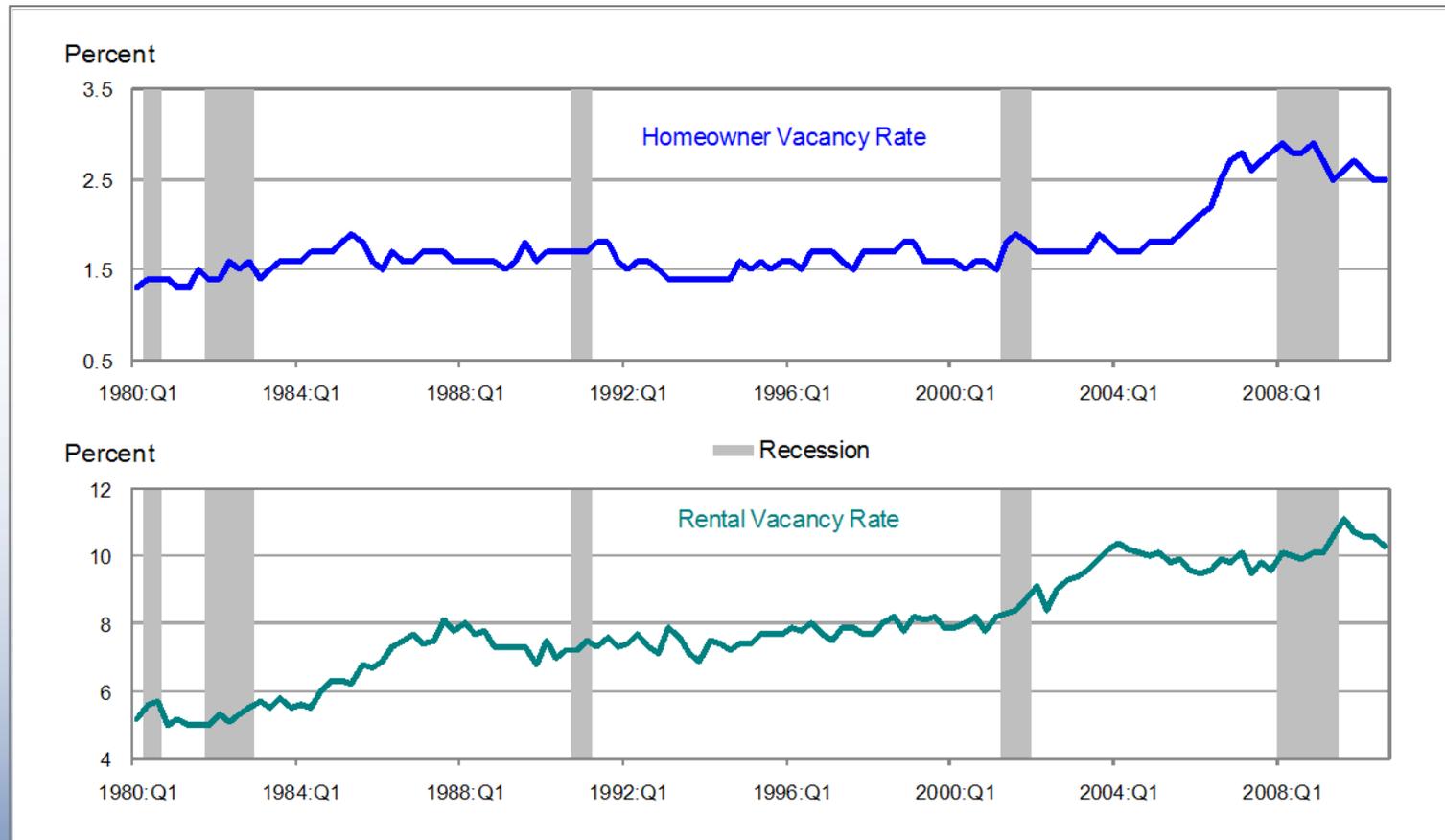


Source: Calculations based on data from McDash Analytics, LLC, a subsidiary of Lender Processing Services, Inc.

# Figure 10

## Homeowner and Rental Vacancy Rates

1980:Q1 - 2010:Q3



Source: Bureau of the Census, NBER / Haver Analytics

## **Question 2:**

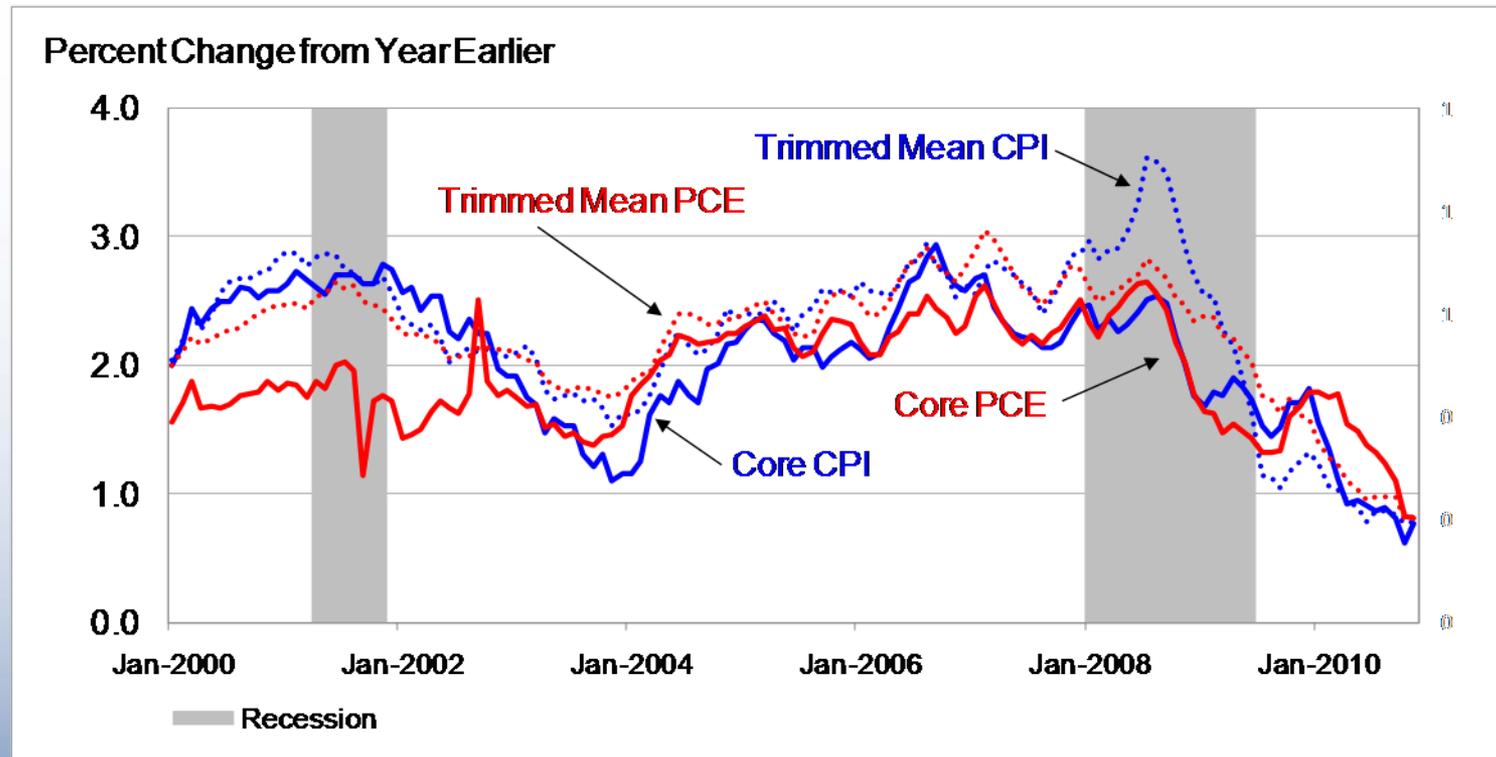
***Inflation, policy, and the  
economic recovery...***



# Figure 11

## Inflation Rate: Changes in Core and Trimmed Mean CPI and PCE Indexes

January 2000 - November 2010

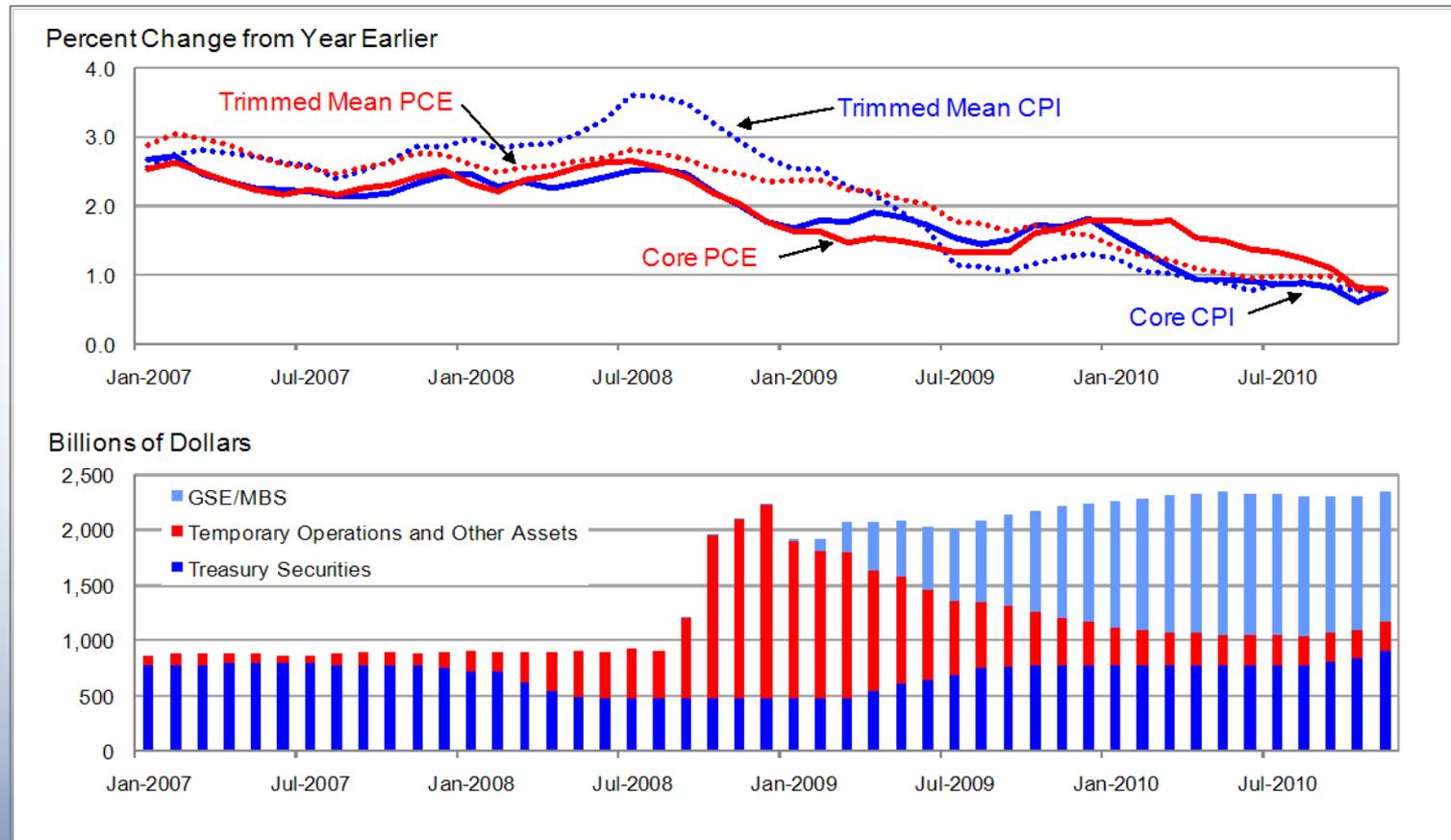


Source: BEA, BLS, Federal Reserve Bank of Cleveland, Federal Reserve Bank of Dallas, NBER / Haver Analytics

# Figure 12

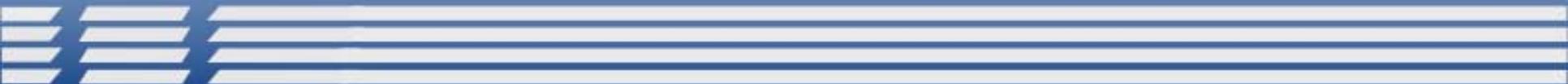
## Inflation Rates and Federal Reserve System Assets

January 2007 - November 2010



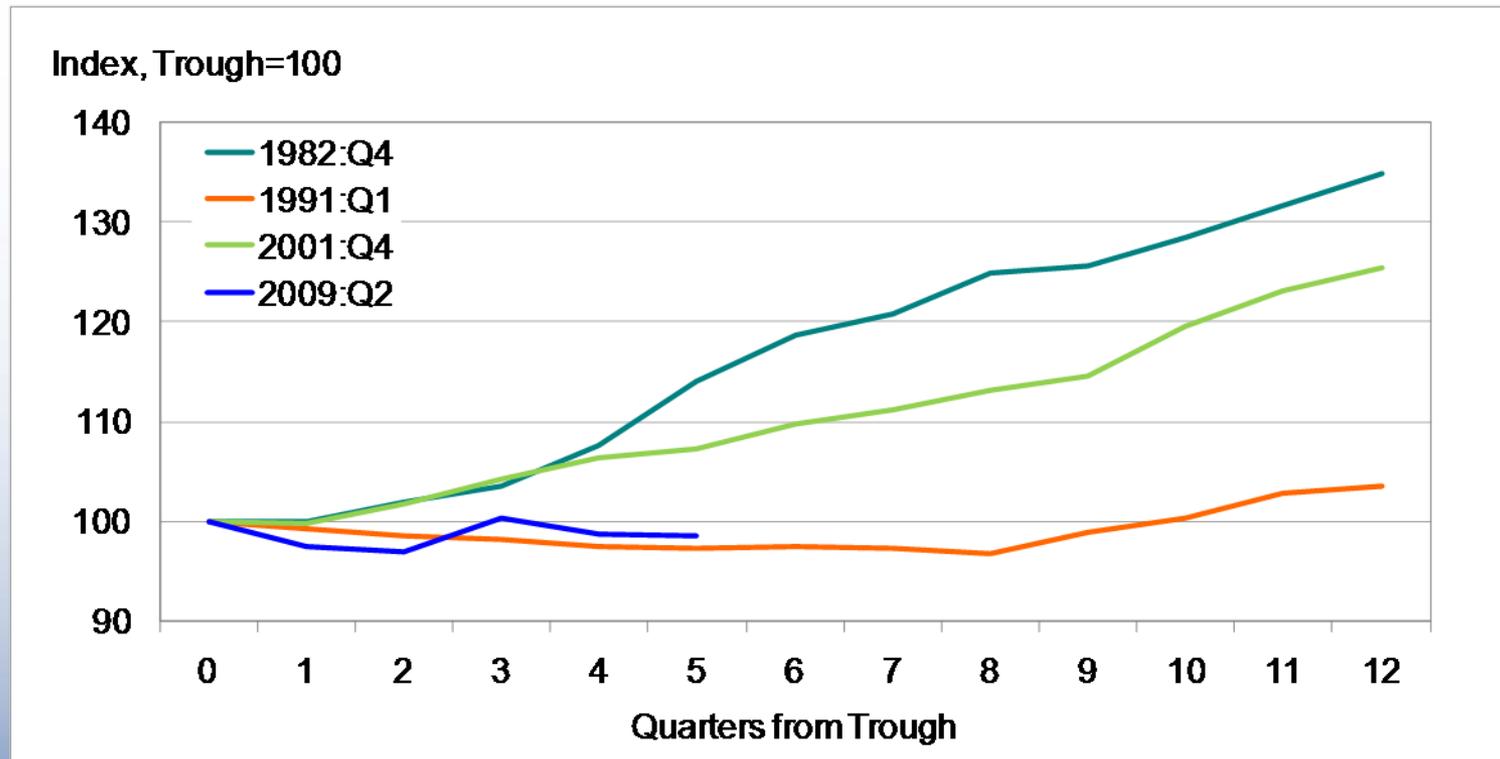
Source: BEA, BLS, Federal Reserve Banks of Cleveland and Dallas, Federal Reserve Board / Haver Analytics

- Fed purchases inject reserves into the banking system
- But we do not expect them to be inflationary
- The key is how rapidly banks expand lending
- Bank and business lending are well below where they were prior to the recession – and even lower than they were at the trough



# Figure 13

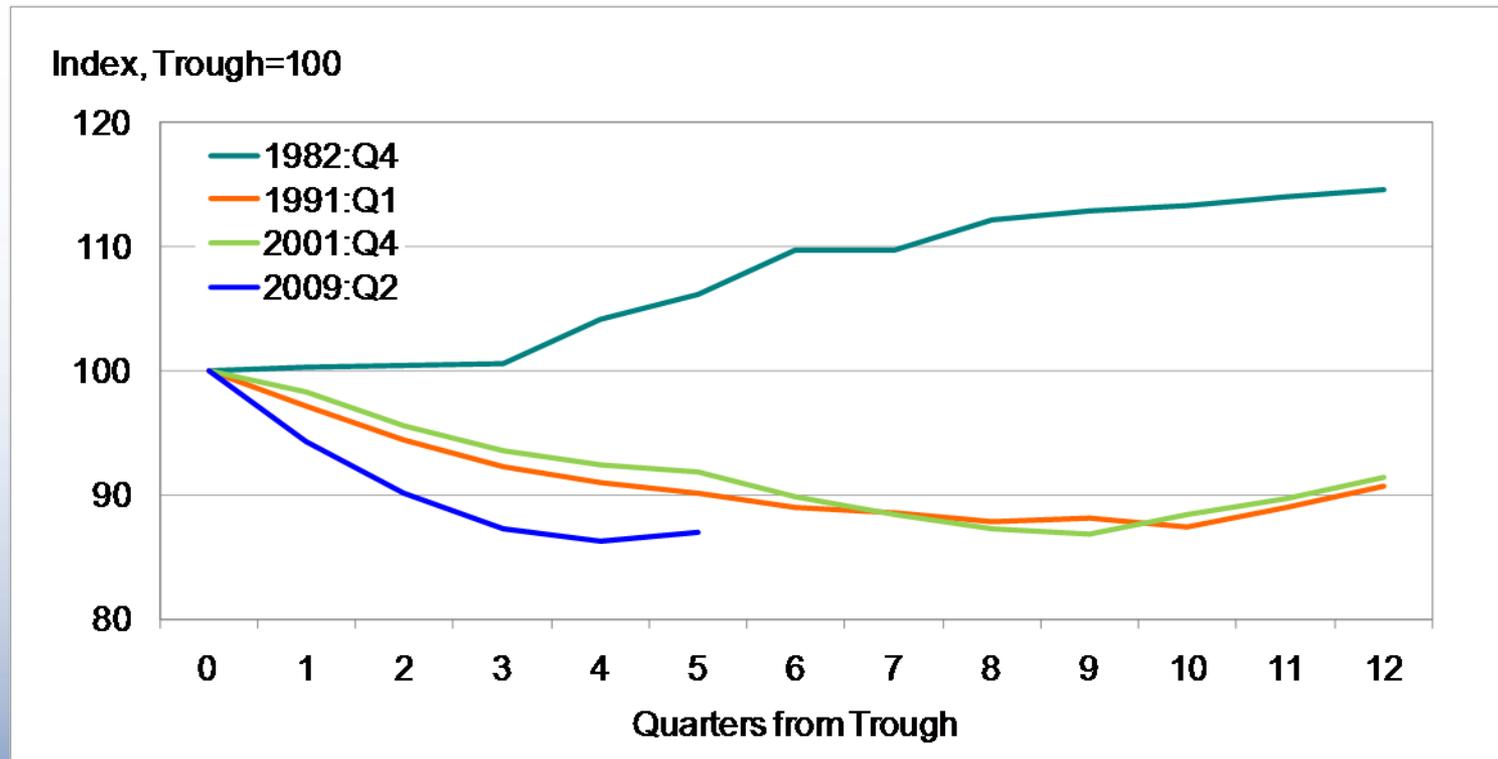
## Growth in Bank Lending (Total Loans) from Trough of Last Four Recessions



Source: Commercial Bank Call Reports, NBER / Haver Analytics

# Figure 14

## Growth in Bank Business Lending (C&I Loans) from Trough of Last Four Recessions

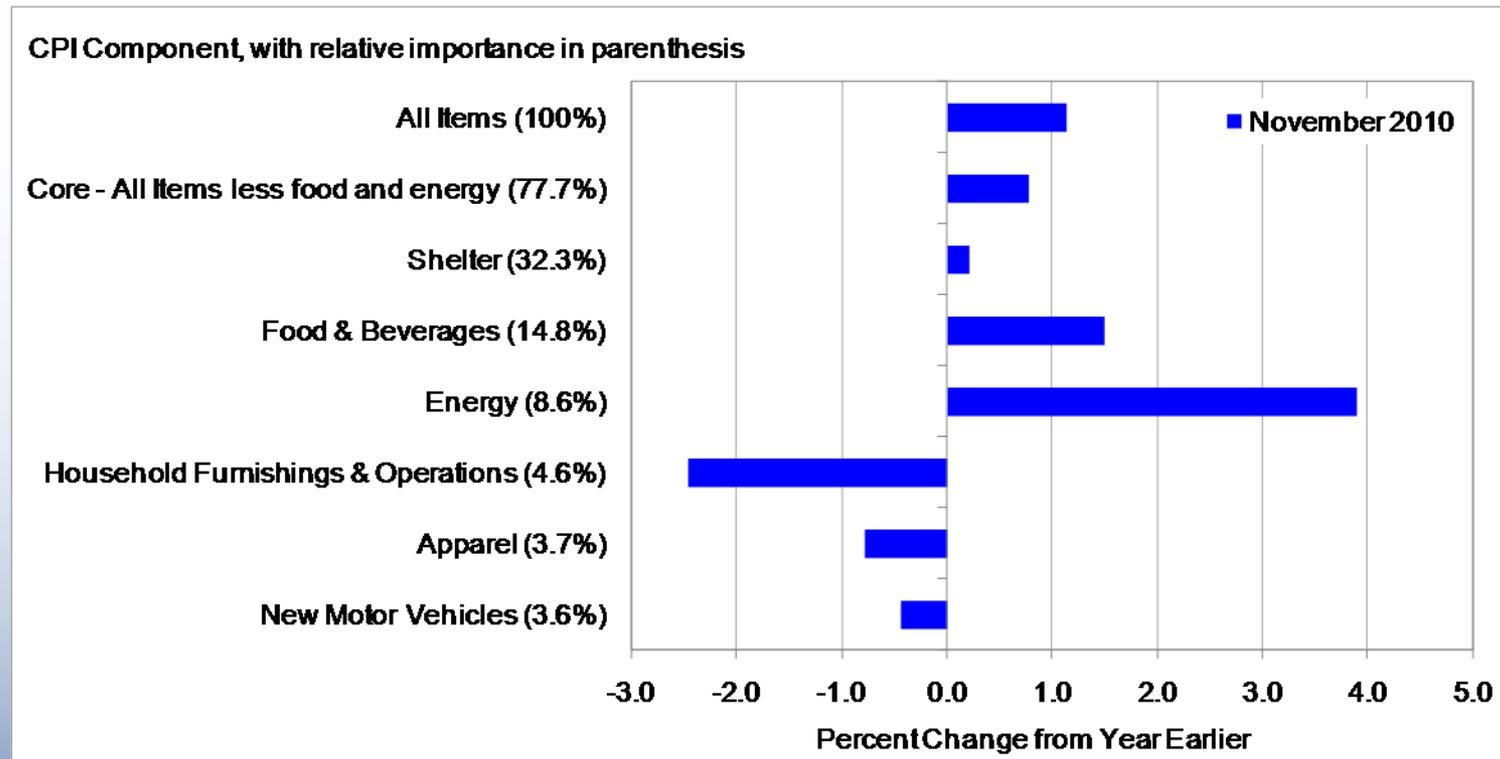


Source: Commercial Bank Call Reports, NBER / Haver Analytics

# Figure 15

## Inflation Components: Growth over the Past Year

November 2010\*



\*Chart was prepared prior to the January 14 release of the data for December 2010.

Source: BLS / Haver Analytics

# Figure 16

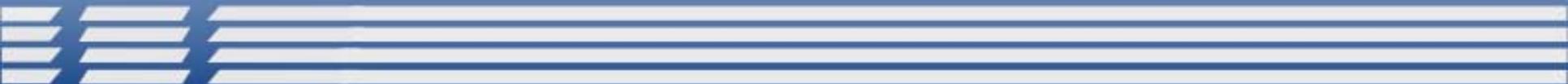
## Ten-Year Treasury Yield\* Minus Ten-Year Inflation-Indexed Treasury Yield\*

January 3, 2005 - December 31, 2010



Source: Federal Reserve Board / Haver Analytics

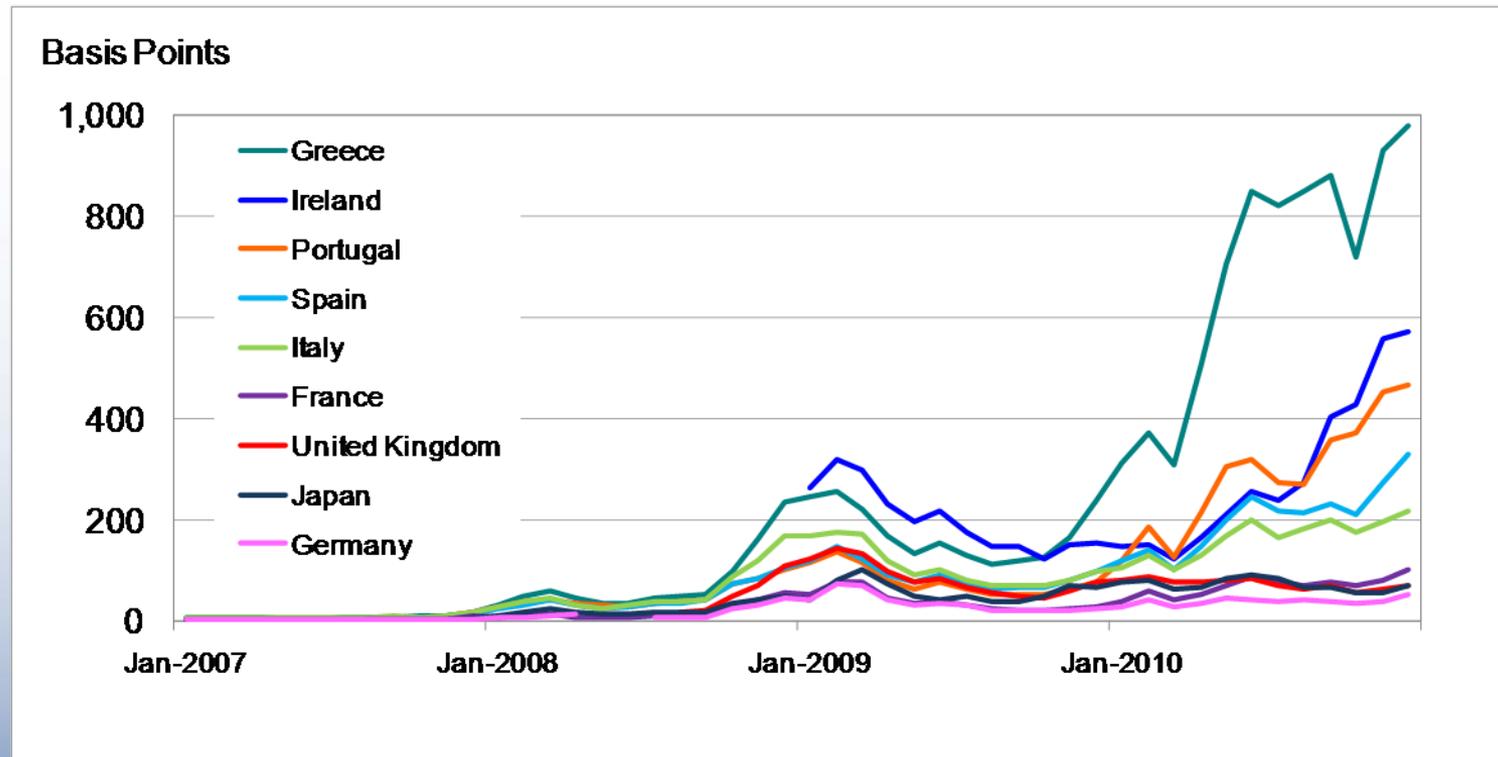
- A number of risks remain:
  - Housing
  - State and local fiscal challenges
  - Concern over countries' fiscal challenges...



# Figure 17

## Selected Sovereign CDS Spreads

January 2007 - December 2010



Source: Bloomberg

# Concluding Observations

- Much excess capacity remains in labor markets
- It is likely to be 4 years to reach full employment
- Core inflation will likely be below 2% over that period
- The current level of accommodation from monetary and fiscal policy is appropriate