

Creating a Forecast

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All views expressed are those of the author only and not necessarily those of the Federal Reserve Bank of New York or the Federal Reserve System.

The Role of Forecasts in Monetary Policy

- To make good policy decisions, the FOMC needs to have
 - A good sense of where the economy stands
 - A good sense of where it is likely to go
 - If it's not going to a desirable end (as determined by employment and inflation), the FOMC is likely to change policy

Your Task

- Give reasoned views on the current state of the economy.
- Given the current state of the economy, and the current stance of policy (both monetary and fiscal), present a reasoned view of where the economy is likely to go.
- Then discuss possible changes in policy.

Assessing Where the Economy Currently Stands

- Review the latest major indicators
 - Real GDP (and its components)
 - Labor market series (payroll employment, hours worked, earnings, unemployment, labor force).
 - Inflation measures (CPI and PCE most central; with emphasis on “core” measures)

- All the series *may* reflect both supply and demand factors.

Assessing Where the Economy Currently Stands

■ GDP

- Rapid real GDP growth is usually connected with job growth and declining unemployment.
- A high level of real GDP relative to “potential GDP” is usually associated with higher inflation.
- But real GDP growth was rapid in 2009:Q4, while employment fell and inflation stayed low. Why?
 - Any number of possible answers
 - Maybe there was still a large “output gap” holding down inflation.
 - Maybe aggregate supply grew a lot because of rapid productivity growth
 - Suggests potential GDP increased a lot, boosting the output gap.
 - Rapid productivity suggests little need to hire more workers).
 - Maybe some of the numbers were incorrect and will be revised.
 - Maybe the relationships are not perfect in the short run.

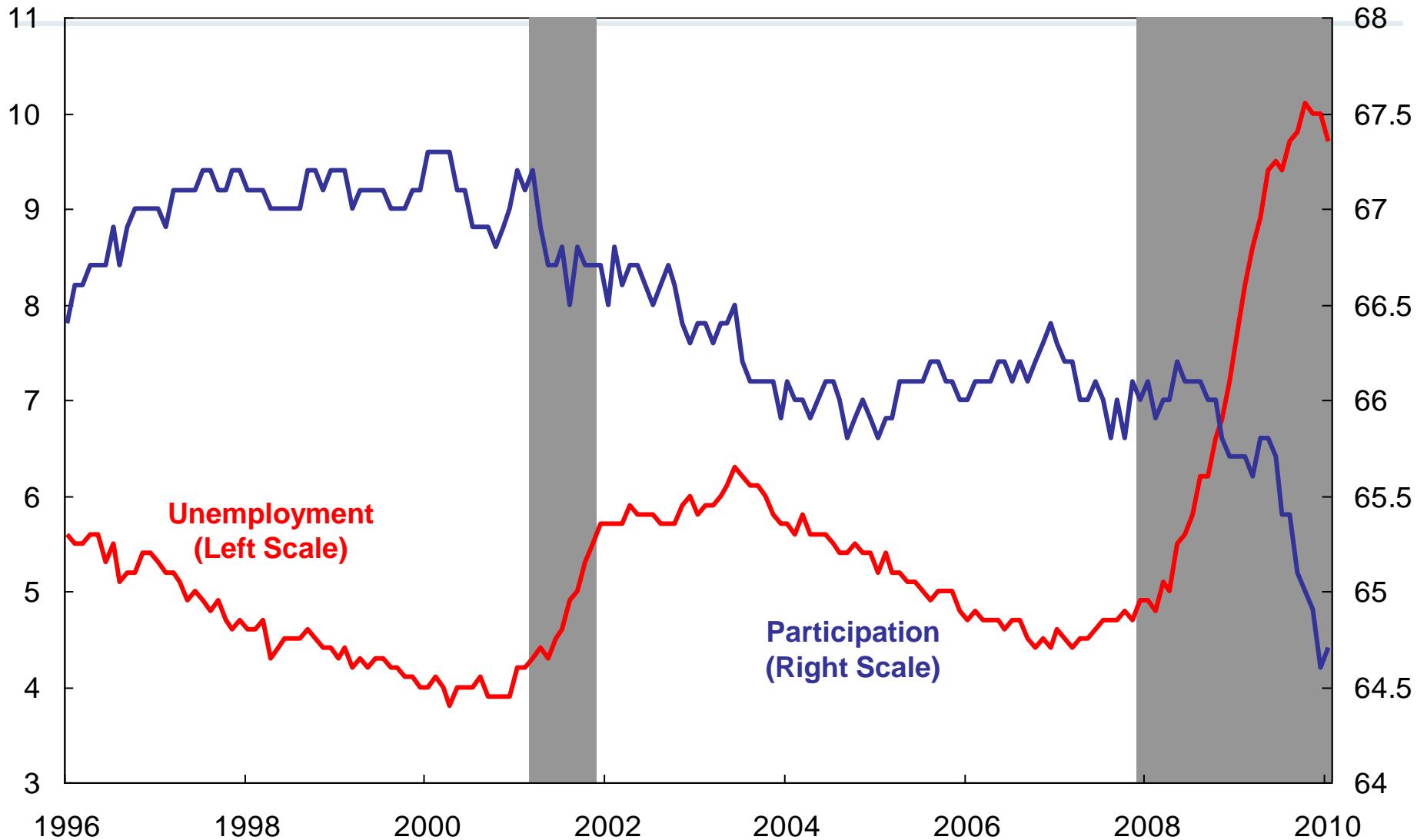
Assessing Where the Economy Currently Stands

- A “strong” labor market report is a good sign that the economy was growing in that month.
 - Strength means more jobs created or more hours worked (and greater weekly earnings), not necessarily lower unemployment.
 - Was the January report strong or not?
 - Unemployment did fall, and hours worked increased, but employers continued to shed workers.

Unemployment and Labor Force Participation Rates

Percent

Percent

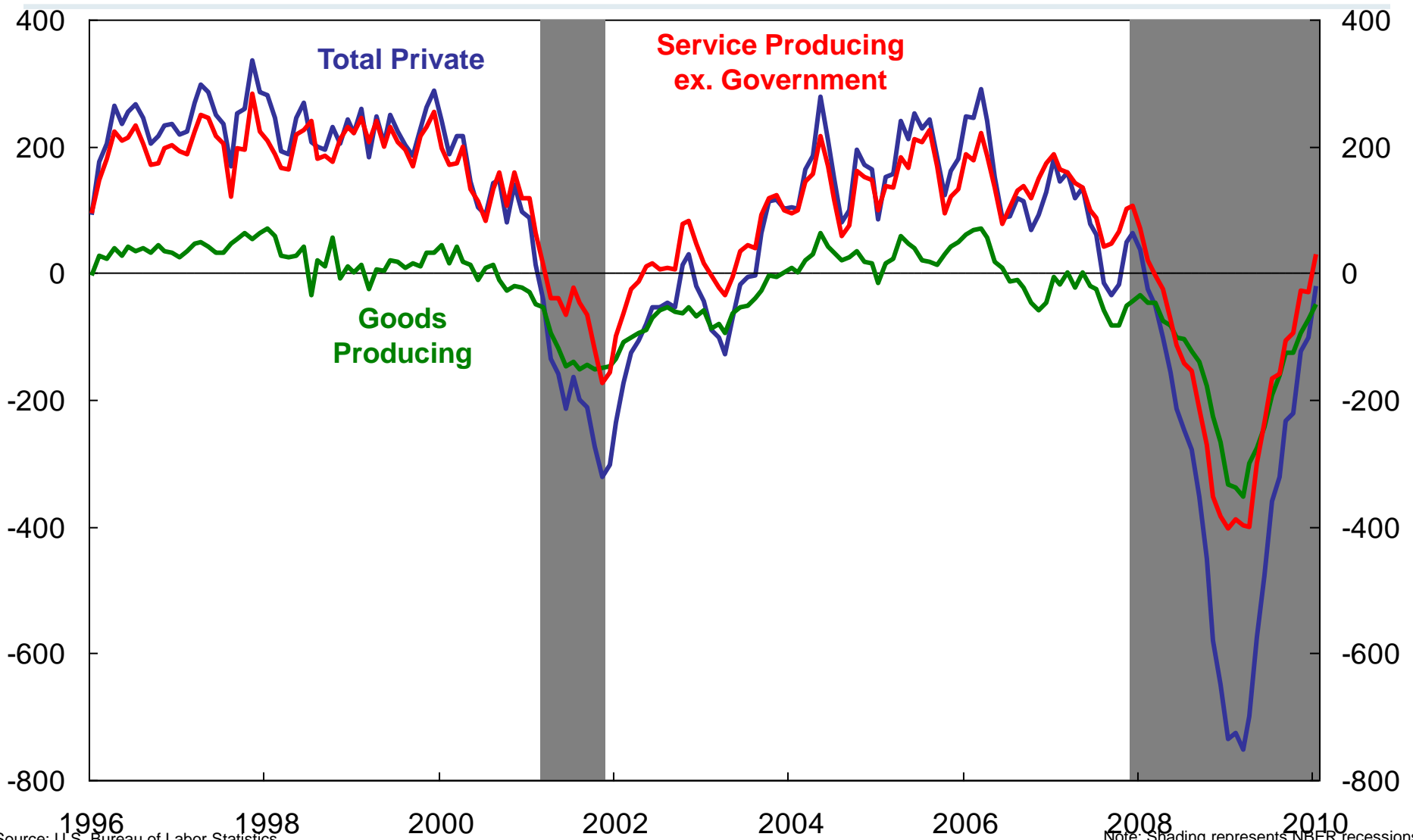


Sources: U.S. Bureau of Labor Statistics

Note: Shading represents NBER recessions

Growth in Private Nonfarm Payroll Employment

Thousands (3-Month Moving Average)



Source: U.S. Bureau of Labor Statistics

Note: Shading represents NBER recessions

Assessing Where the Economy Currently Stands

- Was the Q4 strength in GDP sustainable in Q1?
 - Rapid growth does generate higher incomes, possibly helping spending going forward.
 - But the actual Q4 spending numbers were lackluster, suggesting that consumers and business are reluctant to boost spending.
 - The GDP increase was centered in inventory investment.
- To assess near-term momentum we need to look at the monthly spending indicators.
 - Major ones include consumer spending (mainly reflecting retail and auto sales), housing starts, construction spending, the trade balance, manufacturing orders and shipments (there are many others).
 - Special factors (Toyota, the blizzards) will sometimes need to be discussed.
 - Good understanding of a few indicators is better than a quick pass at many.

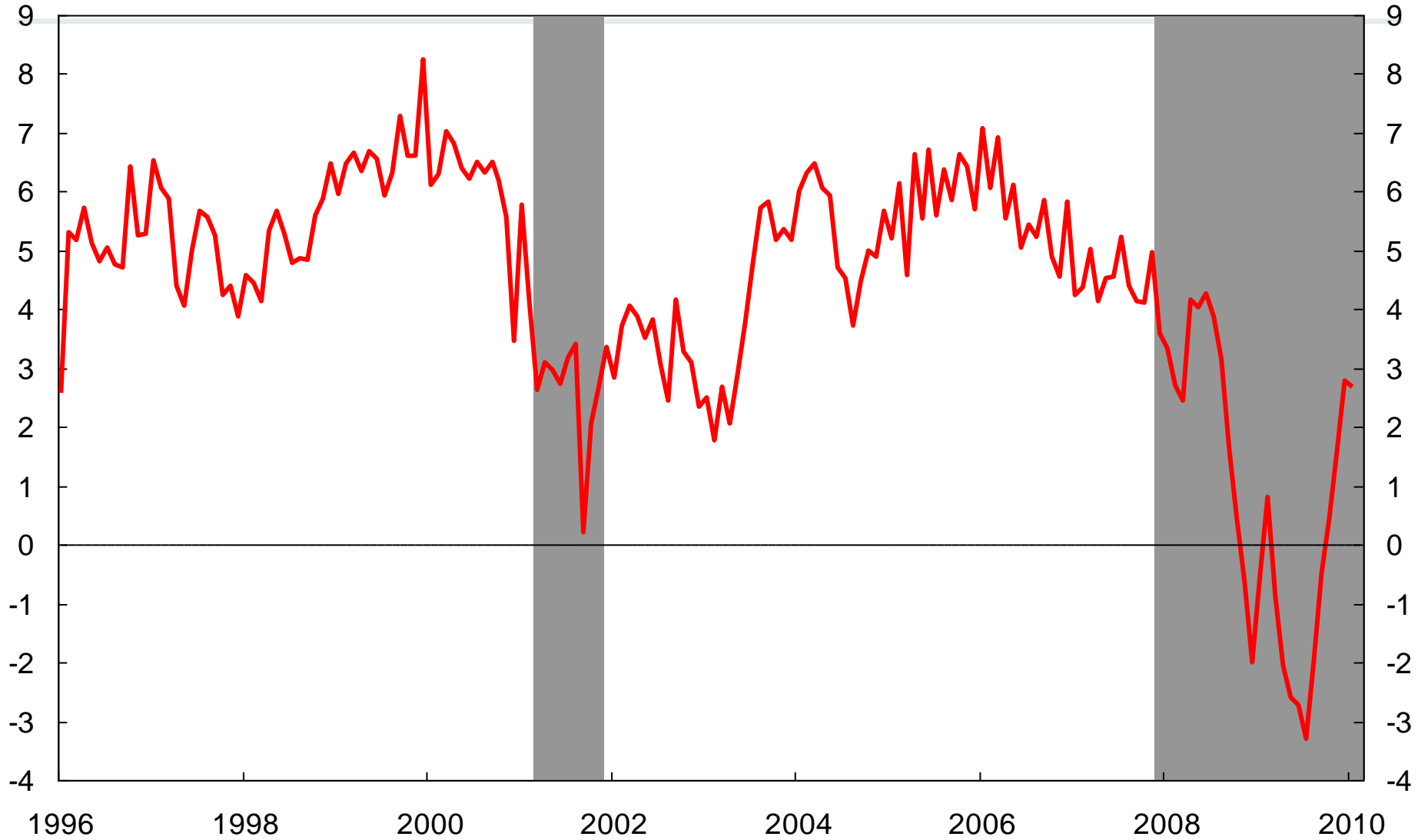
Assessing Where the Economy Currently Stands

- A “strong” labor market report is a good sign that the economy was growing in that month.
- Spending indicators cross-check the labor market information
 - Forecasters use the spending indicators and price data to produce an estimate of the next GDP number (predicting the revision for 2009:Q4 and the first estimate for 2010:Q1).

Retail Sales ex Autos, Building Supplies, and Gasoline

% Change- Year to Year

%Change- Year to Year



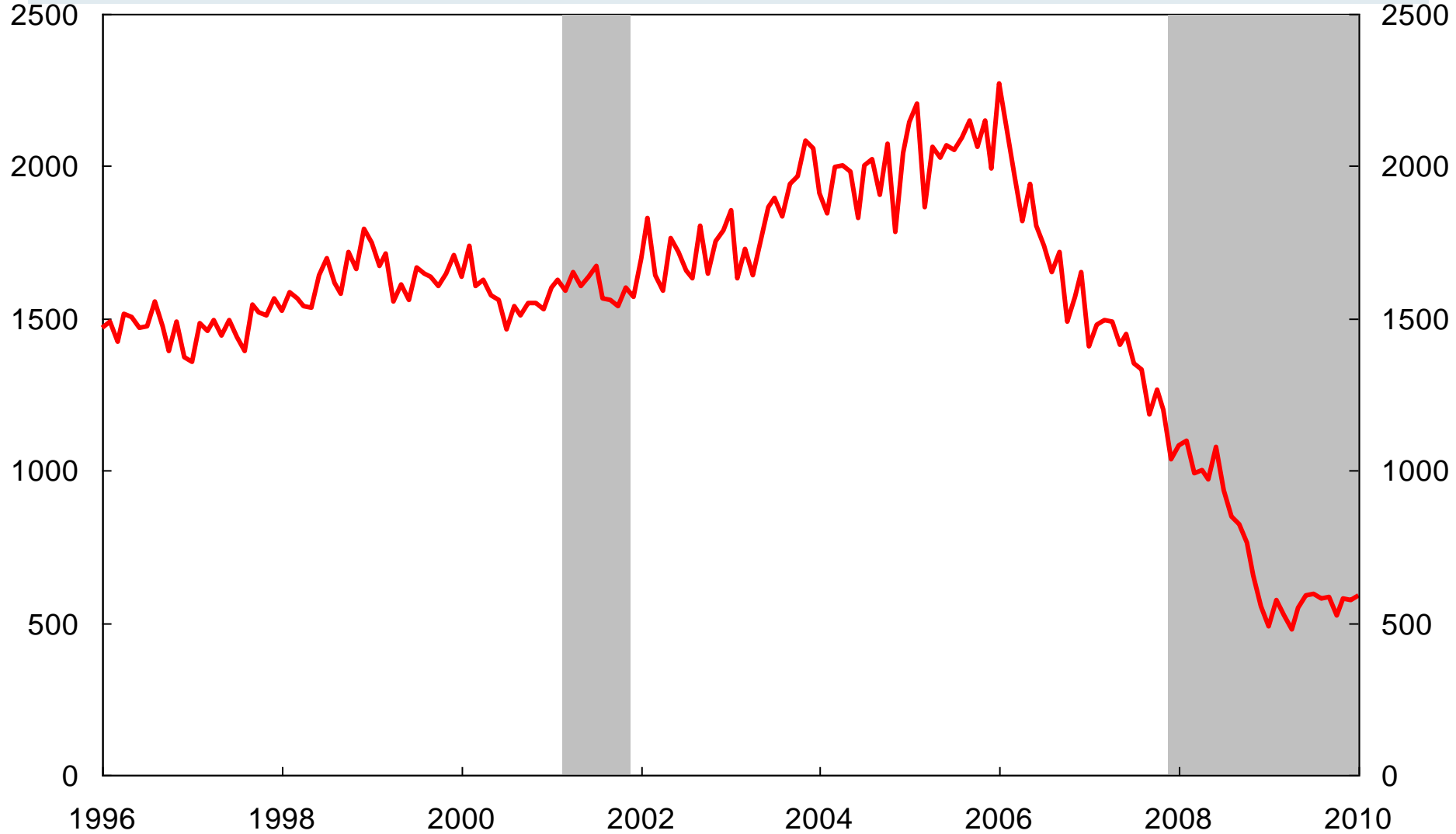
Sources: U.S. Census Bureau

Note: Shading represents NBER recessions

Housing Starts

Thousands

Thousands

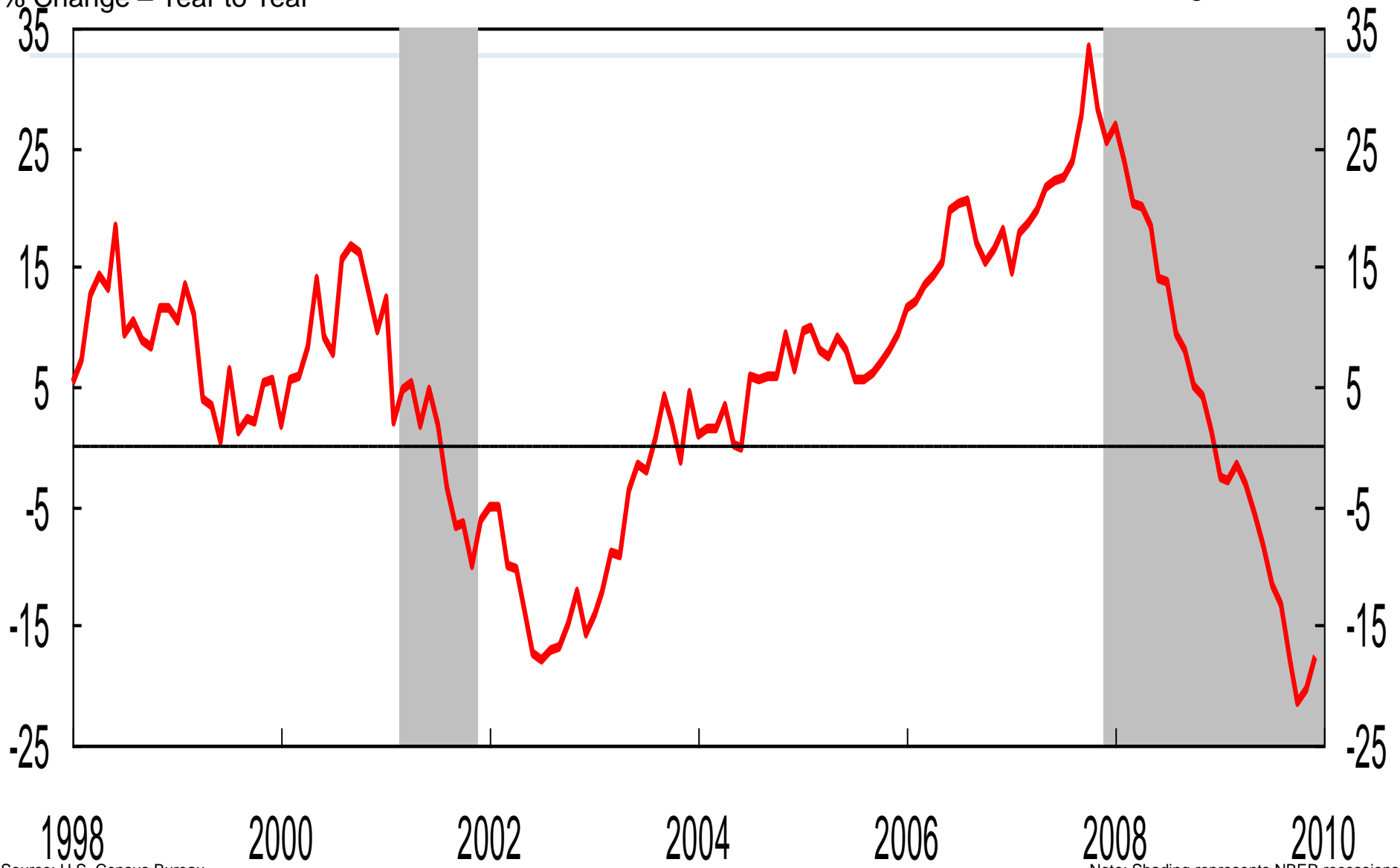


Source: U.S. Census Bureau

Private Nonresidential Structures Put in Place

% Change – Year to Year

% Change – Year to Year



Source: U.S. Census Bureau

Note: Shading represents NBER recessions

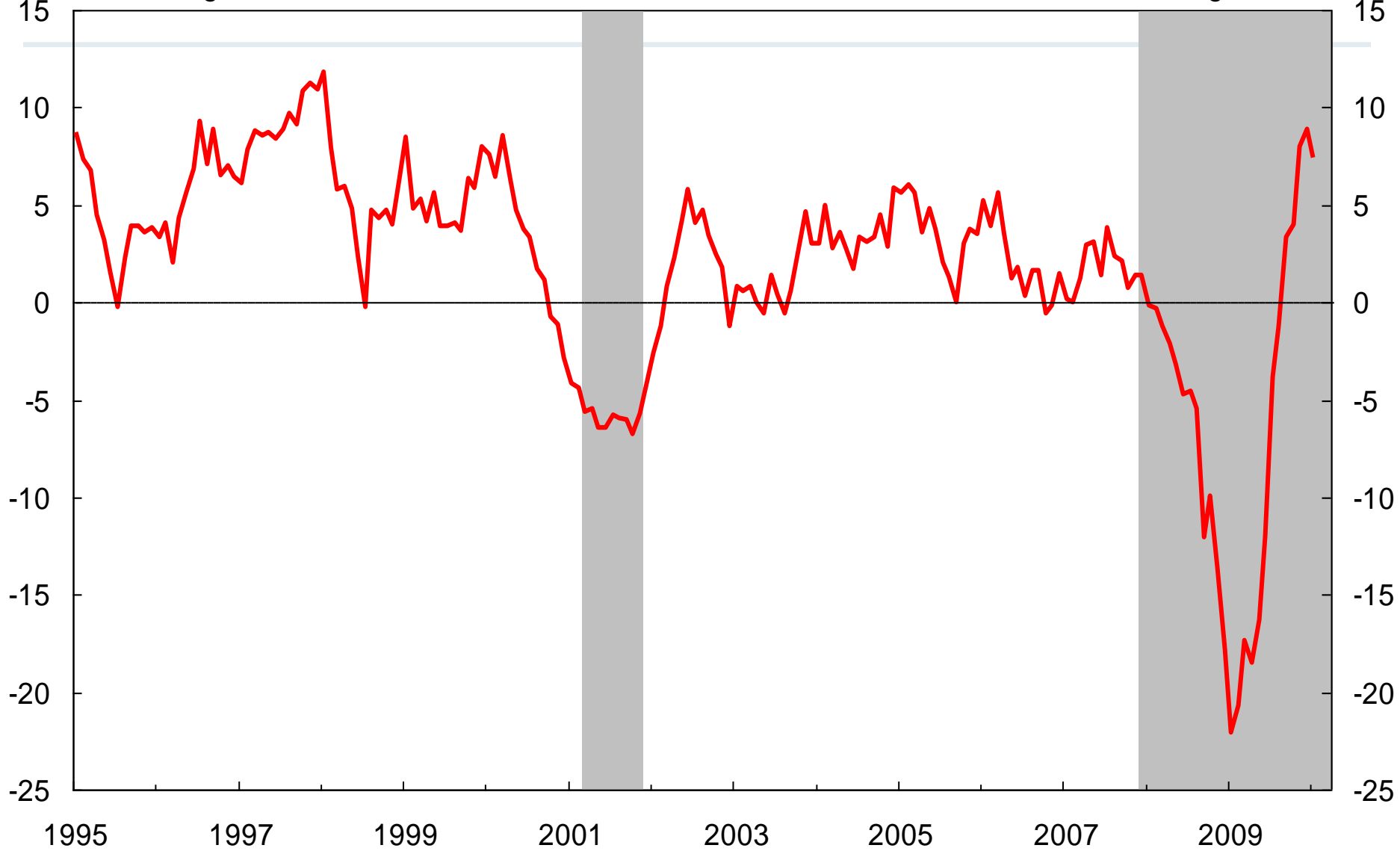
Assessing Where the Economy Currently Stands

- Forecasters use the spending indicators and price data to produce an estimate of GDP.
 - Other information (for instance, business and household surveys, personal income, industrial production) used to refine the estimate.
 - Looking at a few major indicators is probably more useful than reviewing a great number.

Manufacturing Production

6-Month % Change - Annualized

6-Month % Change - Annualized



Source: Federal Reserve Board

Note: Shading represents NBER recessions

Looking at Aggregate Supply

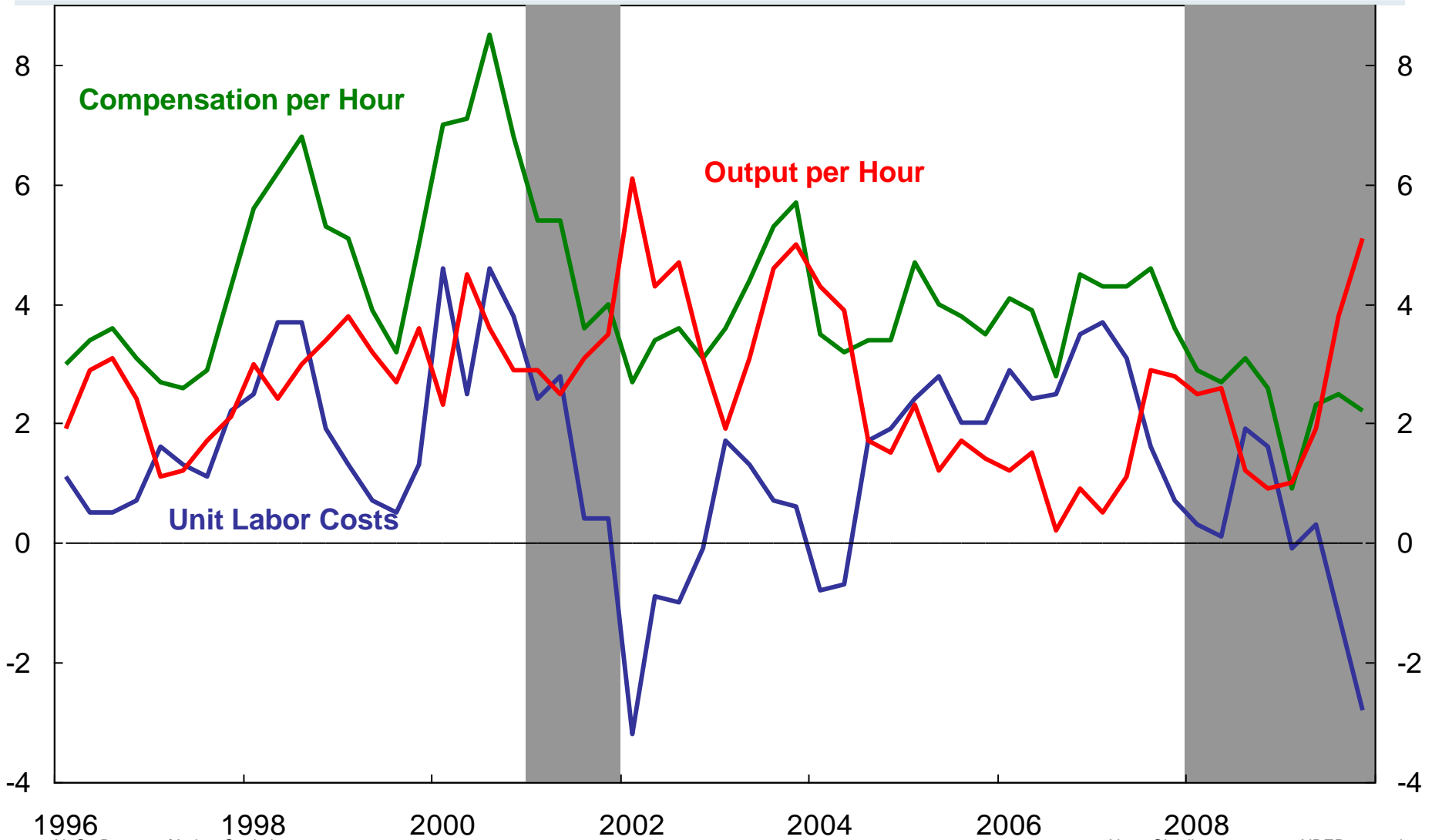
- Short term (quarterly or even annual) moves in employment and real GDP are believed to be dominated by shifts in aggregate demand.
- Some variables that may indicate shifts in supply trends:
 - Productivity
 - Labor force growth
 - Energy prices

Productivity, Compensation, and Unit Labor Costs

Nonfarm Business Sector

% Change – Year to Year

% Change – Year to Year



Sources: U. S. Bureau of Labor Statistics

Note: Shading represents NBER recessions.

Developing the Outlook

- Are there developments temporarily boosting or depressing activity?
 - Aftereffects of Toyota and the blizzards could be significant.
- Major issue is the assessment of the business cycle.
 - There are standard patterns to expansions.
 - Household spending (consumption, homebuilding) usually leads the advance, along with inventory investment.
 - Capital spending follows, while the trade gap usually widens.
 - GDP and productivity growth are both usually rapid early in an expansion.
 - Employment growth may be sluggish at the start.
 - Unemployment often rises early in an expansion.

Developing the Outlook: Policy Effects

- The current settings of monetary and fiscal policy will have major influences on the outlook for real GDP, employment, and inflation.
- Analysts need to measure policy effects and decide how policy is influencing demand and supply.
 - Tax cuts can expand both supply (people will want to work more) and demand (people will have more money to spend).
 - The federal deficit may be large because taxes have been cut or spending boosted or because the economy is weak (reducing incomes and tax payments).
 - Interest rates may be low because monetary policy is expansionary, increasing the supply of credit, or the economy is weak, reducing the demand for credit.

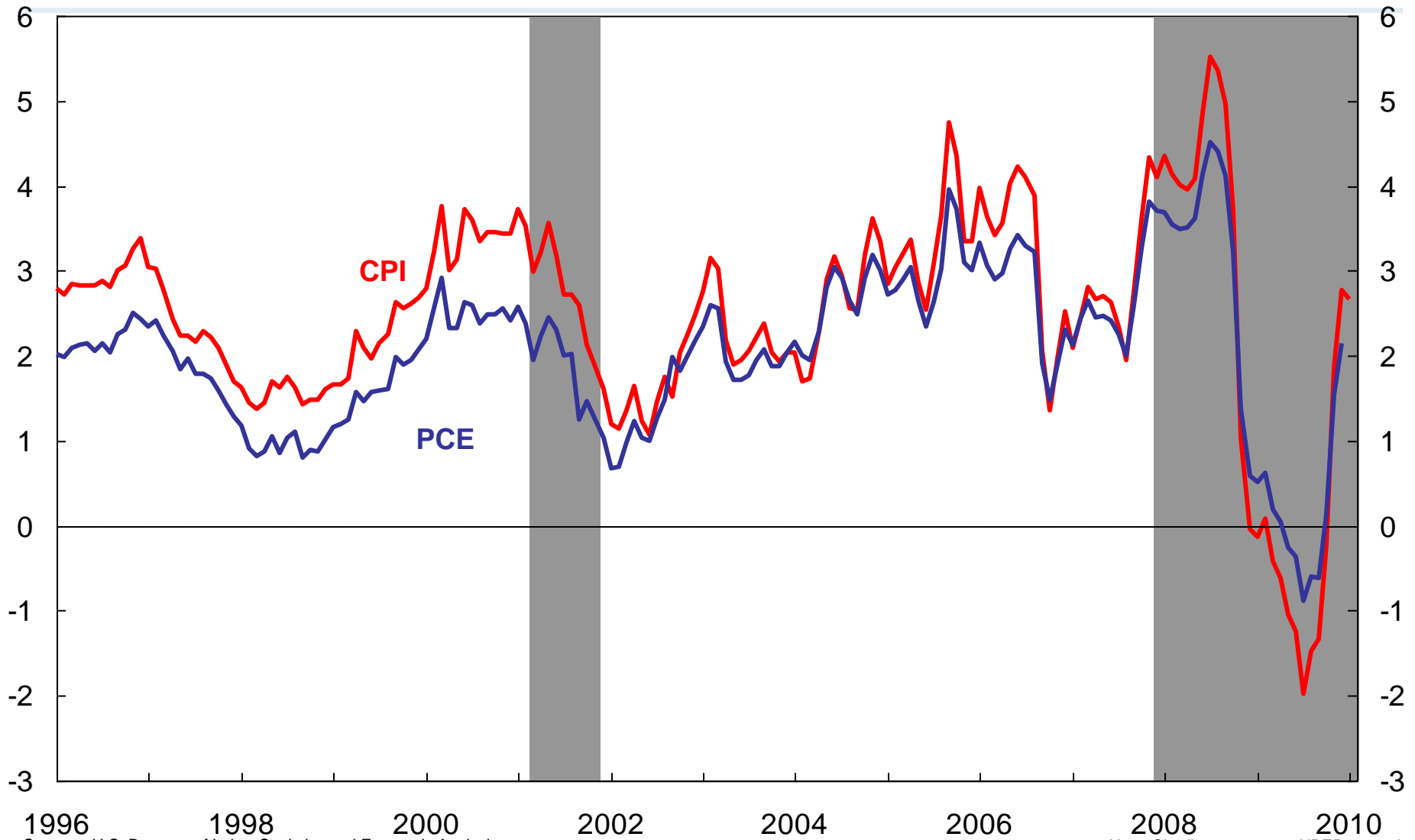
Developing the Outlook: Inflation

- Overall inflation can fluctuate a lot.
- Core inflation usually changes only gradually.

CPI and PCE

% Change - Year to Year

% Change - Year to Year



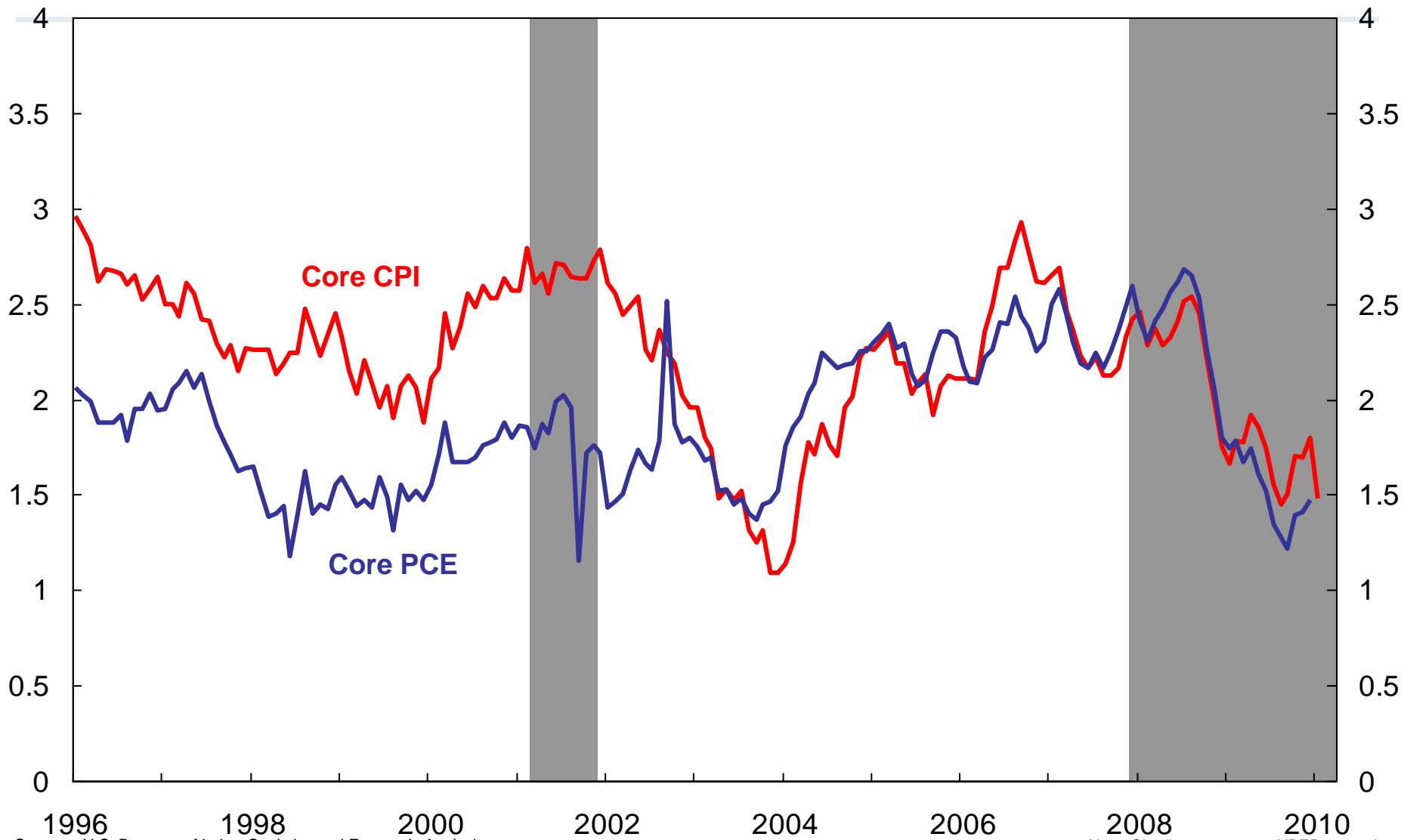
Sources: U.S. Bureau of Labor Statistics and Economic Analysis

Note: Shading represents NBER recessions.

Core CPI and Core PCE

% Change - Year to Year

% Change - Year to Year



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Note: Shading represents NBER recessions.

Developing the Outlook: Inflation

- Core inflation usually changes only gradually.
- A key factor for forecasting such changes is the magnitude of the output gap: Real GDP relative to potential GDP.
 - The output gap is related to the gap between the unemployment rate and the “Nairu.”
 - If real GDP is less than potential, inflation—especially core inflation--will come under downward pressure.
- Supply factors are key to the evolution of potential GDP.
 - A rule of thumb is potential GDP growth is about 2 ½%, which corresponds to about 100,000 to 150,000 jobs created a month.
 - This rule, though, is very rough, and does not tell us about the current size of the gap.

Things to Keep in Mind

- Are we really in the first part of an ongoing expansion?
- What special factors could make this expansion differ from those of the past? In what ways (GDP growth, employment, inflation...)?
- How are monetary and fiscal policy affecting the outlook? How would you measure these policies?
- How will aggregate supply change?
 - Has the Nairu increased?
- How will the rest of the world develop, and how will this affect U.S. output and inflation?