FOMC Statement  
(October 29, 2008)

• The pace of economic activity appears to have slowed markedly, owing importantly to a decline in consumer expenditures.

• Business equipment spending and industrial production have weakened in recent months, and slowing economic activity in many foreign economies is damping the prospects for U.S. exports.

• Moreover, the intensification of financial market turmoil is likely to exert additional restraint on spending, partly by further reducing the ability of households and businesses to obtain credit.

• 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 in coming quarters to levels consistent with price stability.
Today’s Outline

• Housing: The Correction Continues
• Financial Market: A Classic Run on Banks
• Commodity Prices: The Supply Shock Eases
• The Outlook: What Will Spark a Rebound?
The Housing Boom Goes Bust.

Home Starts, Sales and Inventories

Month’s supply

Index (Jan-00=100)

Jan-00 Jan-01 Jan-02 Jan-03 Jan-04 Jan-05 Jan-06 Jan-07 Jan-08

Month’s Supply of New Homes
(Left Scale)

Existing Home Sales (Right Scale)

Housing Starts (Right Scale)

Source: Dept. of Commerce, National Association of Realtors
Percent of Loans in Foreclosure
(Started during the Second Quarter 2008)

Source: Mortgage Bankers Association
Home Price Appreciation since 2006
(Existing Single-Family Homes)

Source: OFHEO
Today’s Outline

• Housing: The Correction Continues
• Financial Market: A Classic Run on Banks
Financial Markets Remain Volatile.

Commercial Paper Rates and Fed Funds Rate

Source: Federal Reserve Board of Governors
Investors Turned to Treasury Securities.

Daily Treasury Yield Curve Rates

Source: Federal Reserve Board of Governors
Falling Asset Prices and High Debt Levels are a Recipe for Bankruptcy.

Domestic Business Debt Outstanding

Source: Federal Reserve Board of Governors
Today’s Outline

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• Commodity Prices: The Supply Shock Eases
The Commodity Price Boom Ends.

Oil and Natural Gas Prices

- Dollars per barrel
- Dollars per BTU

U.S. Crop Prices

- Dollars per bushel

Source: Bloomberg

Source: Wall Street Journal
World Oil Demand has Fallen with Weaker Growth.

Source: Energy Information Administration
Economic Weakness Spreads Globally.

World GDP Growth

Annual percent change

Source: International Monetary Fund, October 2008
Inflation is expected to ease.

GDP Price Index

Annualized percent change from previous quarter

Source: Bureau of Economic Analysis and Blue Chip

Blue Chip Forecast (November 2008)
Energy Costs are Driving Housing and Transportation Inflation.

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent</th>
<th>June ‘08 to July ’08</th>
<th>July ‘08 to August ‘08</th>
<th>August ‘08 to September ‘08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>42.4</td>
<td>0.6</td>
<td>-0.1</td>
<td>-0.1</td>
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<tr>
<td>Shelter</td>
<td>32.5</td>
<td>0.2</td>
<td>0.1</td>
<td>0.3</td>
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<tr>
<td>Furnishings</td>
<td>4.7</td>
<td>0.4</td>
<td>0.2</td>
<td>0.5</td>
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<tr>
<td>Household Fuel</td>
<td>5.1</td>
<td>3.3</td>
<td>-1.1</td>
<td>-2.8</td>
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<tr>
<td>Transportation</td>
<td>17.7</td>
<td>1.7</td>
<td>-1.5</td>
<td>-0.6</td>
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<tr>
<td>Motor Vehicles</td>
<td>7.2</td>
<td>0.2</td>
<td>-0.4</td>
<td>-0.9</td>
</tr>
<tr>
<td>Motor Fuel</td>
<td>5.5</td>
<td>4.1</td>
<td>-4.2</td>
<td>-0.8</td>
</tr>
</tbody>
</table>

Source: Bureau of Labor Statistics
Today’s Outline

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• Commodity Prices: The Supply Shock Eases
• The Outlook: What Will Spark a Rebound?
Economic growth is expected to weaken.

Real Gross Domestic Product Growth

Annualized percent change from previous quarter

Source: Bureau of Economic Analysis and Blue Chip Forecast
### Length of U.S. Recessions

<table>
<thead>
<tr>
<th>Start</th>
<th>End</th>
<th>Length (Months)</th>
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</thead>
<tbody>
<tr>
<td>Nov. 1973</td>
<td>Mar. 1975</td>
<td>16</td>
</tr>
<tr>
<td>Jul. 1981</td>
<td>Nov. 1982</td>
<td>16</td>
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<tr>
<td>Mar. 2001</td>
<td>Nov. 2001</td>
<td>8</td>
</tr>
</tbody>
</table>

**Average since World War II**: 10
What will Santa Bring This Year?

Lumps of Coal or Renewed Growth

Consumer Spending

Annualized percent change

Source: Blue Chip Economic Indicators
Consumer Spending

• Will weaker job markets and income growth limit spending?

U.S. Non-farm Job Growth and Unemployment Rates

Source: BLS
Consumer Spending

- Will weaker job markets and income growth limit spending?
- Will loss of wealth from lower home values and stock prices limit spending?

Dow Jones Industrial Average and U.S. Home Price Appreciation

Source: Wall Street Journal and OFHEO
Consumer Spending

- Will weaker job markets and income growth limit spending?
- Will loss of wealth from lower home values and stock prices limit spending?
- Will high consumer debt levels limit spending?

Source: Federal Reserve Board of Governors
Consumer Spending

- Will weaker job markets and income growth limit spending?
- Will loss of wealth from lower home values and stock prices limit spending?
- Will high consumer debt levels limit spending?
- Will lower gasoline and home heating costs boost Christmas shopping?
Will Business Investment Be the Spark?

Industrial Production

Annualized percent change

Source: Blue Chip Economic Indicators
Business Investment

- Will profit margins rebound to spur business investment?

Corporate Profits
Percent change from year-ago

Source: BEA
Business Investment

- Will profit margins rebound to spur business investment?
- When will credit standards ease?

Credit Standards for Commercial and Industrial Loans

Percent of Bankers Tightening Standards

Source: Federal Reserve Board of Governors
Business Investment

- Will profit margins rebound to spur business investment?
- When will credit standards ease?
- Will leaner inventories support a turnaround?

Private Inventory to Final Sales

Source: The Conference Board
Business Investment

- Will profit margins rebound to spur business investment?
- When will credit standards ease?
- Will leaner inventories support a turnaround?
- When will business confidence rebound and will it spur business investment?

Source: The Conference Board
Will Deficit Spending Spark a Rebound?

U.S. Federal Budget Deficit Projections

Source: Congressional Budget Office
Government Spending

- Will deficit spending spark a rebound?
- Will slower state and local tax revenues contribute to slower growth?

![Graph showing Total State and Local Tax Revenues from 1996 to 2008.](Source: U.S. Census Bureau)
Can Rising Export Activity Spur a Rebound?

Real Net Exports

Source: Blue Chip Economic Indicators
Export Activity

- Will the value of the dollar continue to strengthen?

Source: Federal Reserve Board of Governors
Export Activity

- Will the value of the dollar continue to strengthen?
- Will world economic growth rebound as expected?
Export Activity

- Will the value of the dollar continue to strengthen?
- Will world economic growth rebound as expected?
- Will the rising middle class in China continue to demand quality of life improvements?

Economic Growth in China

Source: IMF and China Statistical Yearbook
Conclusion

• Housing risks fueled financial market volatility – when will they stabilize?
• Commodity prices have dropped with weaker global demand.
• Weak economic activity is expected to dampen inflationary pressures.
• What will spark the economic rebound?