Show Me the Money: Unlocking the Mysteries of the Economy
Mysteries of the Economy

- Housing and the Financial Crisis
- The Recession and Recovery
- Monetary Policy and the Federal Reserve
- Inflation or Deflation
- The Basis of Economic Growth
Home Foreclosures Rise, Especially for Sub-prime and Adjustable Rate Mortgages.

U.S. Foreclosure Rates by Mortgage Type

**Prime Loans**

- Percent of loans serviced
- Fixed Rate Mortgage
- Adjustable Rate Mortgage

Source: Mortgage Bankers Association

**Sub-prime Loans**

- Percent of loans serviced
- Adjustable Rate Mortgage
- Fixed Rate Mortgage
Financial Market Stress has Eased, But Markets Remain Fragile.

Commercial Paper Rates Spreads
(Difference from Nonfinancial Commercial Paper)

Source: Federal Reserve Board of Governors
Will Commercial Real Estate Foreclosures Strain Financial Markets?

Delinquency Rates and Charge-offs on Commercial Real Estate Loans at Commercial Banks

Source: Federal Reserve Board of Governors
Mysteries of the Economy

- Housing and the Financial Crisis
- The Recession and Recovery
If Forecasts Hold, the Bottom is Near.

Real GDP Growth

Annualized percent change from previous quarter

Source: Bureau of Economic Analysis and Blue Chip Economic Indicators
A Modest Recovery is Expected.

Annual GDP Growth the Year After the Recession

Calculations based on NBER and BEA.
Manufacturers Have Low Inventories.

U.S. Manufacturing Inventories

Index (net percent reporting higher inventories)

Source: Institute of Supply Management
Consumer Spending is Beginning to Stabilize.

U.S. Monthly Retail and Food Sales

Billion dollars

Source: U.S. Census Bureau
Rising Unemployment Will Limit Income and Spending Gains.

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

Source: Bureau of Labor Statistics
How Will Consumption Patterns Change? Will We Live Within Our Means?

Personal Savings as a Percent of Disposable Income

Source: Bureau of Economic Analysis
U.S. Trade Balance Improves Dramatically.

U.S. Exports and Imports of Goods and Services

Source: Bureau of Economic Analysis
Will Emerging Countries Lead the Recovery?

GDP Growth

Annual Percent Change, constant dollars

Source: International Monetary Fund, April 2009
The Bulk of the Stimulus Package is Scheduled for 2010.

Estimated Budget Impact of American Recovery and Reinvestment Act (ARRA) of 2009

Billion Dollars

Source: Congressional Budget Office, February 13, 2009

- Revenues (Tax Cuts)
- Outlays (Spending)
Mysteries of the Economy

- Housing and the Financial Crisis
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What Happens to Monetary Policy at the Zero Bound?

Fed Funds Rate

Source: Federal Reserve Board of Governors
Monetary Policy Transmission Mechanisms

1. Short-term interest rates
2. Bank Reserves
3. Long-term interest rates

The Fed Has Expanded its Balance Sheet.

Federal Reserve Balance Sheet: Assets

- Billion Dollars
- Short-term Lending to Financial Firms
- Rescue Operations
- Operations Focused on Broader Credit Conditions
- Other Assets
- Treasury Portfolio

Source: Federal Reserve Board of Governors
Mysteries of the Economy

- Housing and the Financial Crisis
- The Recession and Recovery
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- Inflation or Deflation
Has the Concern Switched from Deflation to Inflation?

- **Deflation:** A *decline in general price levels*,
  - often caused by a *reduction in the supply of money or credit*.
  - brought about by *direct contractions in spending*, either in the form of a reduction in government spending, personal spending or investment spending.

- “In light of increasing economic slack here and abroad, the Committee expects that inflation will remain subdued. Moreover, the Committee sees some risk that inflation could persist for a time below rates that best foster economic growth and price stability in the longer term.”

  *FOMC Statement*
  *April 29, 2009*

- The prices of energy and other commodities have risen of late. However, substantial resource slack is likely to dampen cost pressures, and the Committee expects that inflation will remain subdued for some time.

  *FOMC Statement*
  *June 24, 2009*
Are Commodity Prices a Leading Indicator?

Index

Jan-90 Jan-93 Jan-96 Jan-99 Jan-02 Jan-05 Jan-08

Spot Commodity Price Index: CRB (Left Scale)
Industrial Price Index: JOC (Right Scale)

Source: Journal of Commerce and Commodity Research Bureau
Long-term Inflation Expectations are Well-anchored.

Average Annual Inflation Expectations: Consumer Price Index

Source: Survey of Professional Forecasters
Mysteries of the Economy

- Housing and the Financial Crisis
- The Recession and Recovery
- Monetary Policy and the Federal Reserve
- Inflation or Deflation
- The Basis of Future Economic Growth
The Foundations of Economic Growth

- Economic growth is based on people.
  - The number of people in the country,
  - How many of them work, and
  - How productive they are when they work.
Working Age Population Growth Slows with Aging Populations.

Civilian Population Aged 16 and older

1953:Q2 to 1973:Q4 1.6
1973:Q4 to 1995:Q2 1.4
1995:Q2 to 2001:Q1 1.2
2001:Q1 to 2008:Q3 1.0
2008:Q3 to 2014:Q4 0.8

Source: Economic Report of the President, 2009

Labor Force Participation Rates

1953:Q2 to 1973:Q4 0.4
1973:Q4 to 1995:Q2 0.2
1995:Q2 to 2001:Q1 0.1
2001:Q1 to 2008:Q3 -0.1
2008:Q3 to 2014:Q4 -0.3

Percent
Economic Prosperity Depends on Productivity Gains.

U.S. Labor Productivity Growth

Source: Economic Report of the President, 2009
Conclusions

- The recession appears to be coming to an end.
  - Signs of economic stabilization are emerging.
  - Stress in financial markets has eased.

- Setting the foundations for recovery.
  - Who will lead the recovery: U.S. or foreign consumers?
  - How strong will the recovery be?

- As the economy strengthens, the focus will turn from growth to inflation.

- In the long-run, economic prosperity will shaped by labor productivity gains and skill attainment.