



# Unit 1

Why Study Money, Banking, and  
Financial Markets?



# Why Study Money, Banking, and Financial Markets

- To examine how financial markets such as bond, stock and foreign exchange markets work
- To examine how financial institutions such as banks and insurance companies work
- To examine the role of money in the economy



# Main Topics

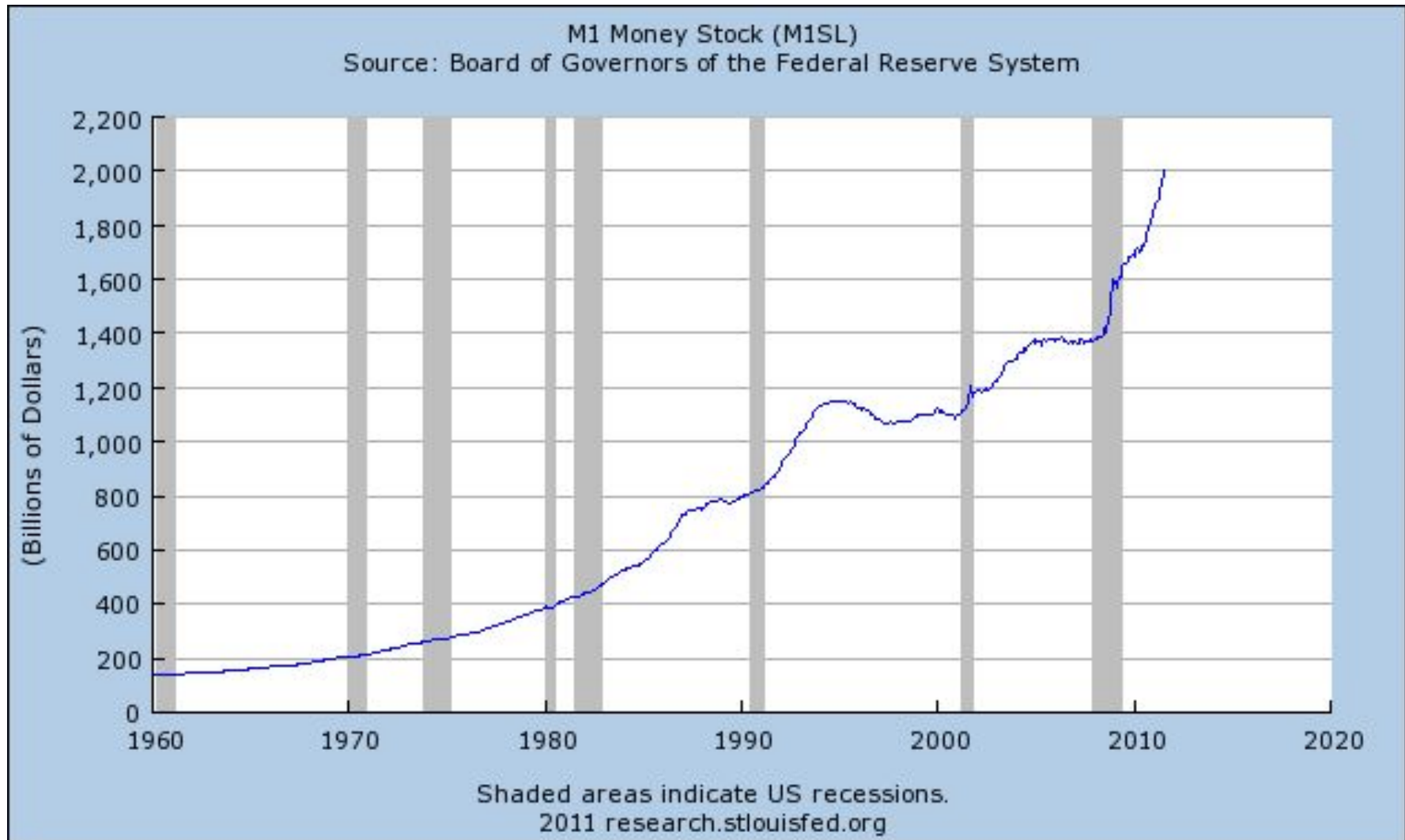
- What is money?
- Who controls the money supply?
- Why is money important?
- Why is inflation a problem?
- How do banks make “money” (profits)?
- Why are banks important?
- How does the government regulate banks and why?
- Financial Markets and financial instruments
- What is monetary policy?
- How does the Fed conduct monetary policy?
- How are interest rates determined?



# Money

- Money is the stock of items widely used to make payment for goods and services.
- **Money**, or the **money supply**, includes:
  - currency and coins in circulation,
  - checking accounts in depository institutions, and
  - other items, such as Certificates of Deposit (CDs), when measured more broadly.

# Figure 1-1





# What Determines The Money Supply?

- The **central bank** is responsible for the *trend* or *long-run* behavior of the money supply.
- Banks and non-bank public also play important roles in determining the aggregate money supply.
- In the United States, the central bank is the **Federal Reserve System** (the **Fed**).
- The Fed conducts **monetary policy**.
- **Monetary Policy** refers to the management of money supply and interest rates.



# Money, Inflation, and Deflation

- When the money supply increases more rapidly than the output of goods and services, **inflation** occurs.
- Why is Inflation a problem?
- **Deflation** is a continuing *decline* in prices and is more damaging to a nation's economic health than inflation.
- Why is deflation a problem?
- **Inflation targeting** occurs when a central bank announces an explicit inflation range it pledges to maintain and enforces policies consistent with that goal.



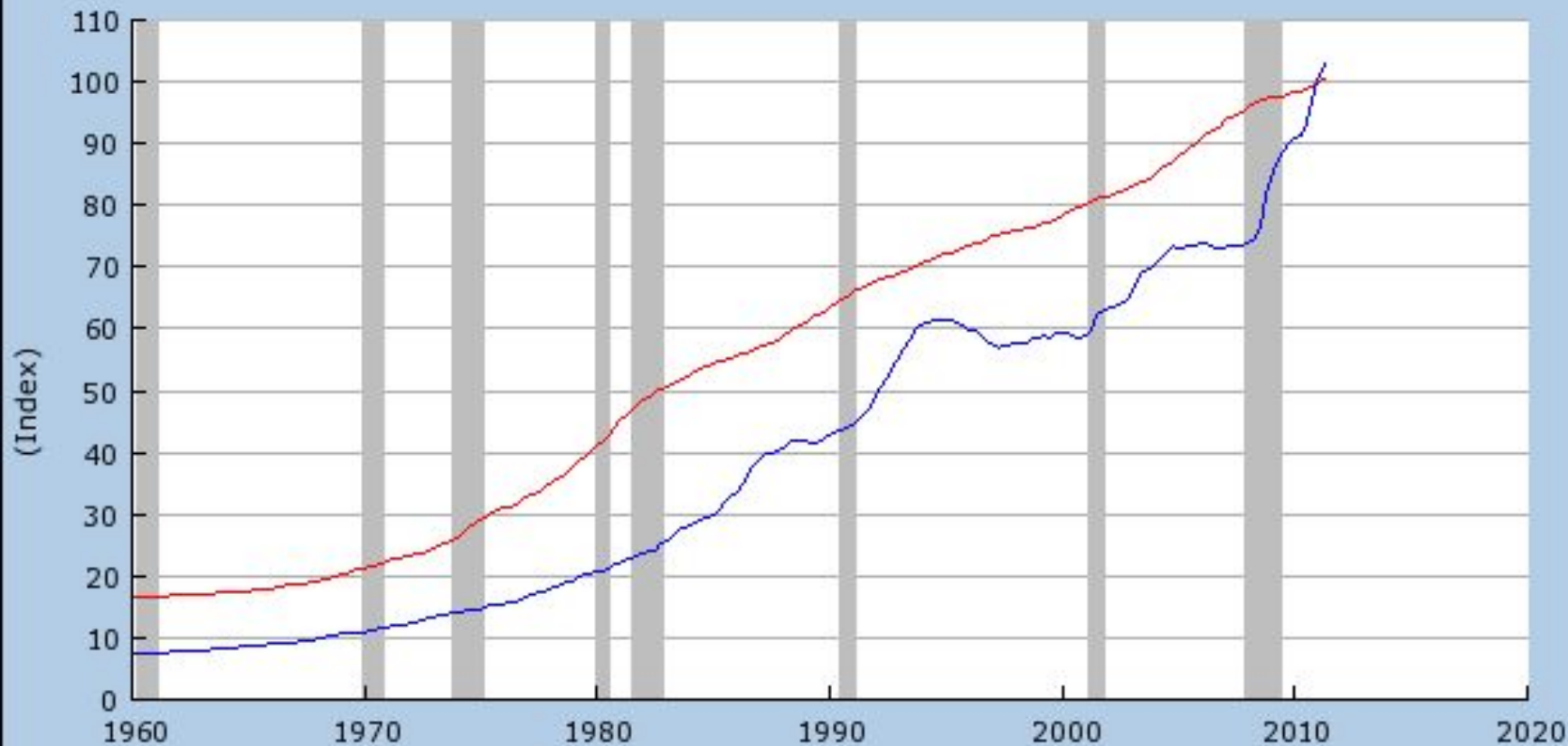
# Money and Business Cycles

- Evidence suggests that money plays an important role in generating business cycles
- Recessions (unemployment) and booms (inflation) affect all of us
- Monetary Theory ties changes in the money supply to changes in aggregate economic activity and the price level





### M1 Money Stock (M1SL) Gross Domestic Product: Implicit Price Deflator (GDPDEF)

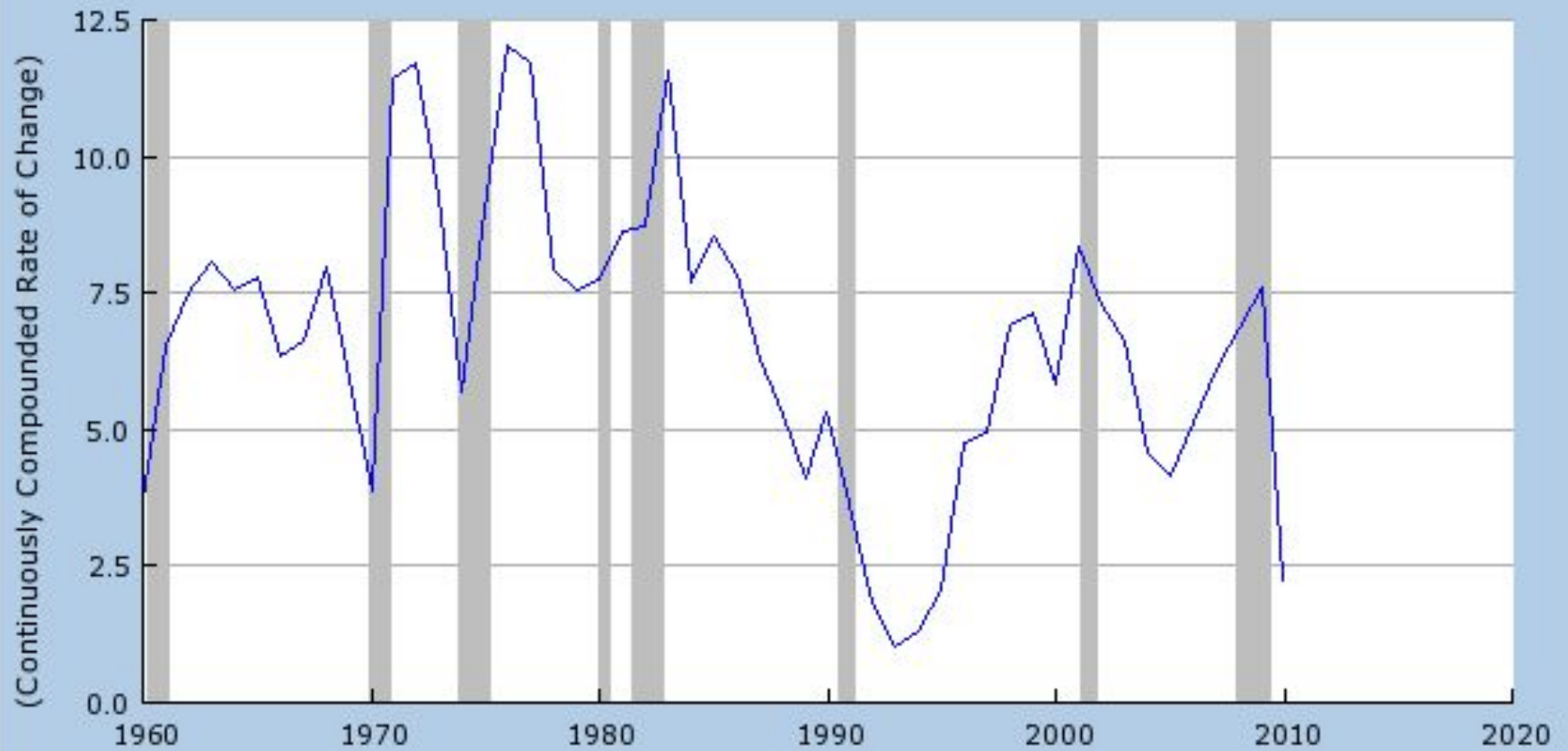


Shaded areas indicate US recessions.  
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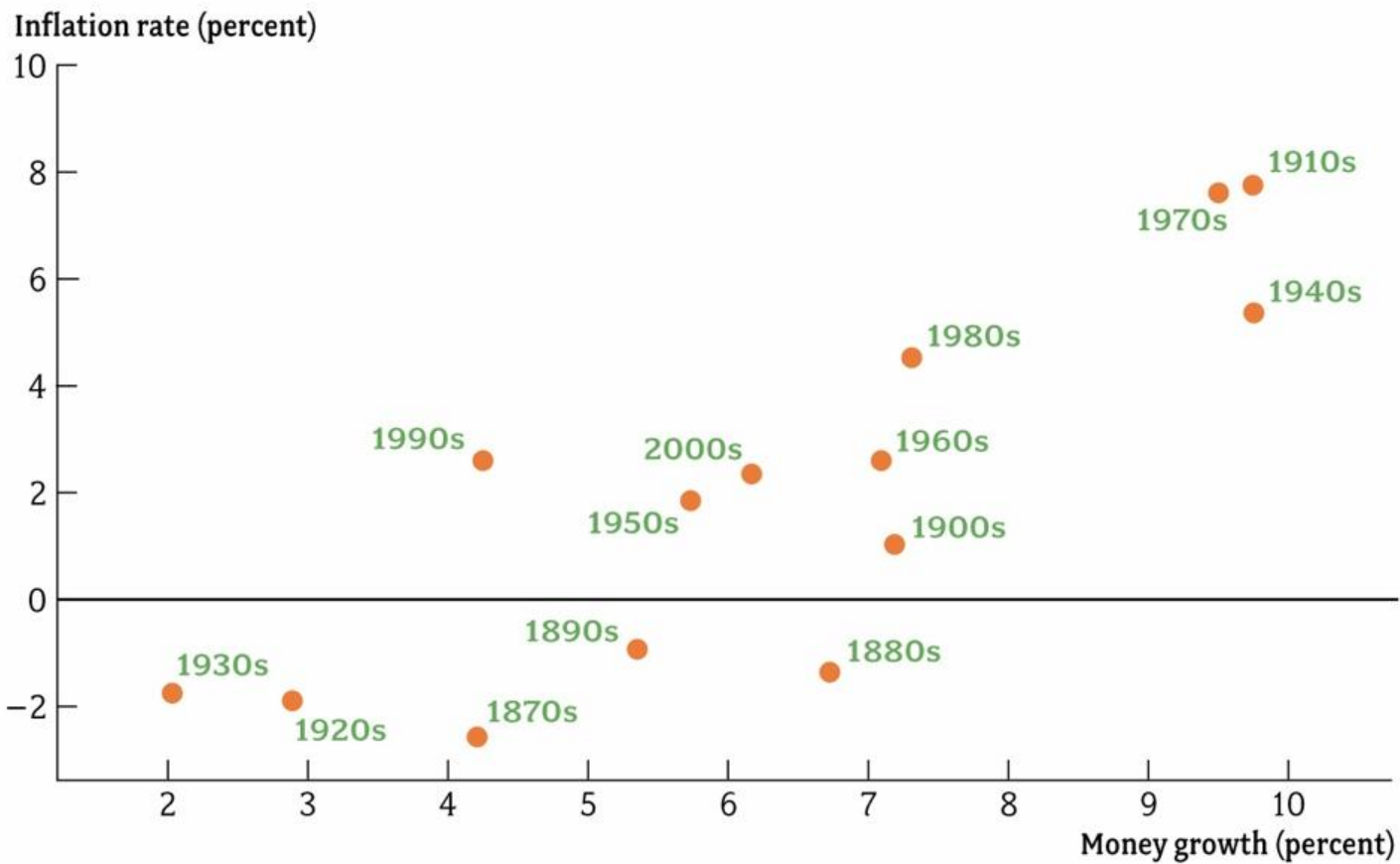
— M1SL, 2011:Q1=100  
— GDPDEF, 2011:Q1=100



M2 Money Stock (M2SL)  
Source: Board of Governors of the Federal Reserve System



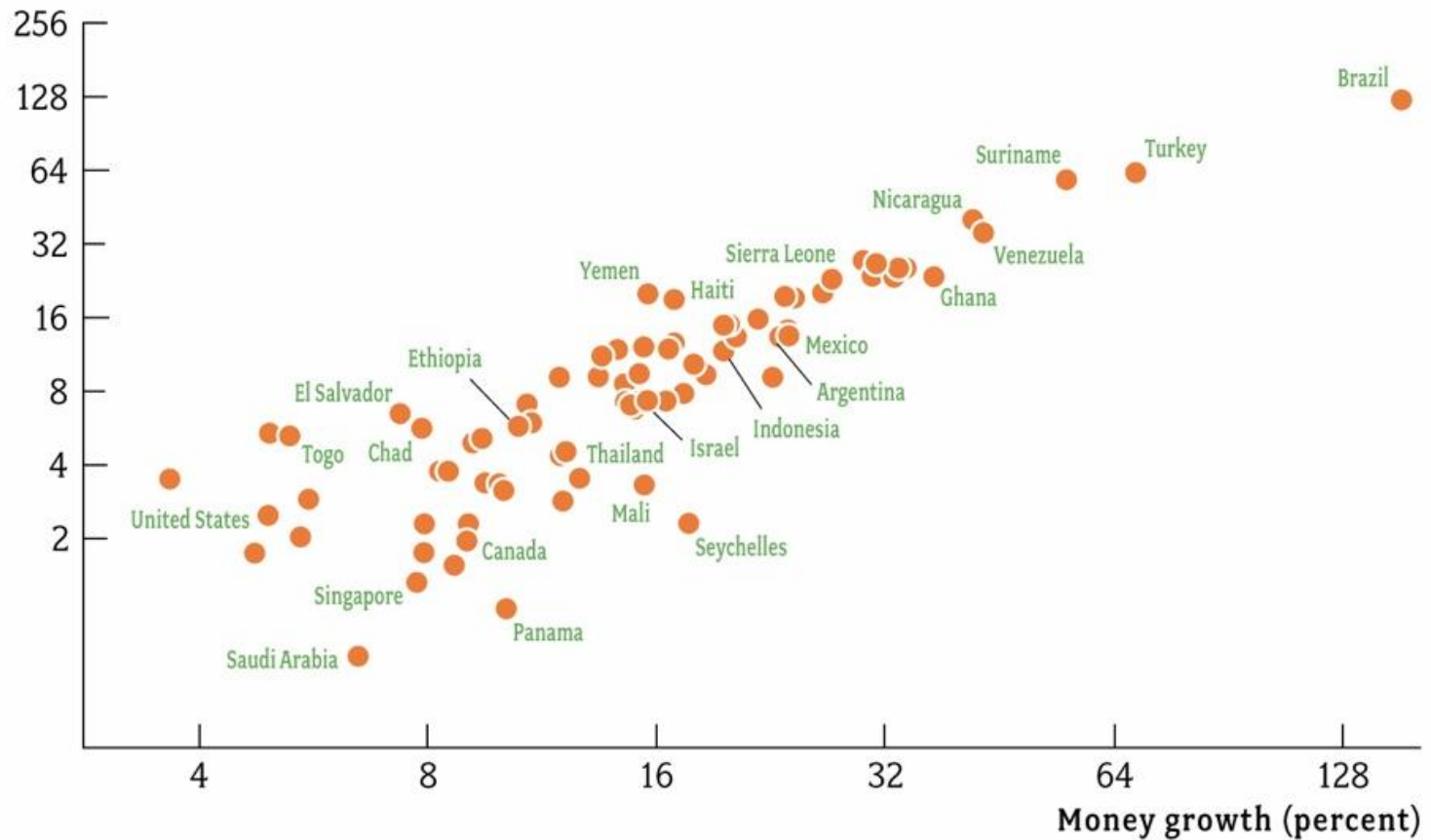
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**FIGURE 8.2** Money Growth and Inflation in the United States, 1870–2005

*Macroeconomics*, Charles I. Jones  
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### Inflation rate (percent)



**FIGURE 8.3** Money Growth and Inflation around the World, 1990–2003

Macroeconomics, Charles I. Jones  
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# Key Financial Markets

- Markets in which funds are transferred from people who have an excess of available funds to people who have a shortage of funds
- The stock market
- The bond market
- The foreign exchange (ForEx) market



# The Bond Market and Interest Rates

- A security (financial instrument) is a claim on the issuer's future income or assets
- A bond is a debt security that promises to make payments periodically for a specified period of time
- Bondholders are *lenders*; stockholders are *owners*.
- An interest rate (or yield) is the cost of borrowing or the price paid for the rental of funds and are determined by market forces of supply and demand.

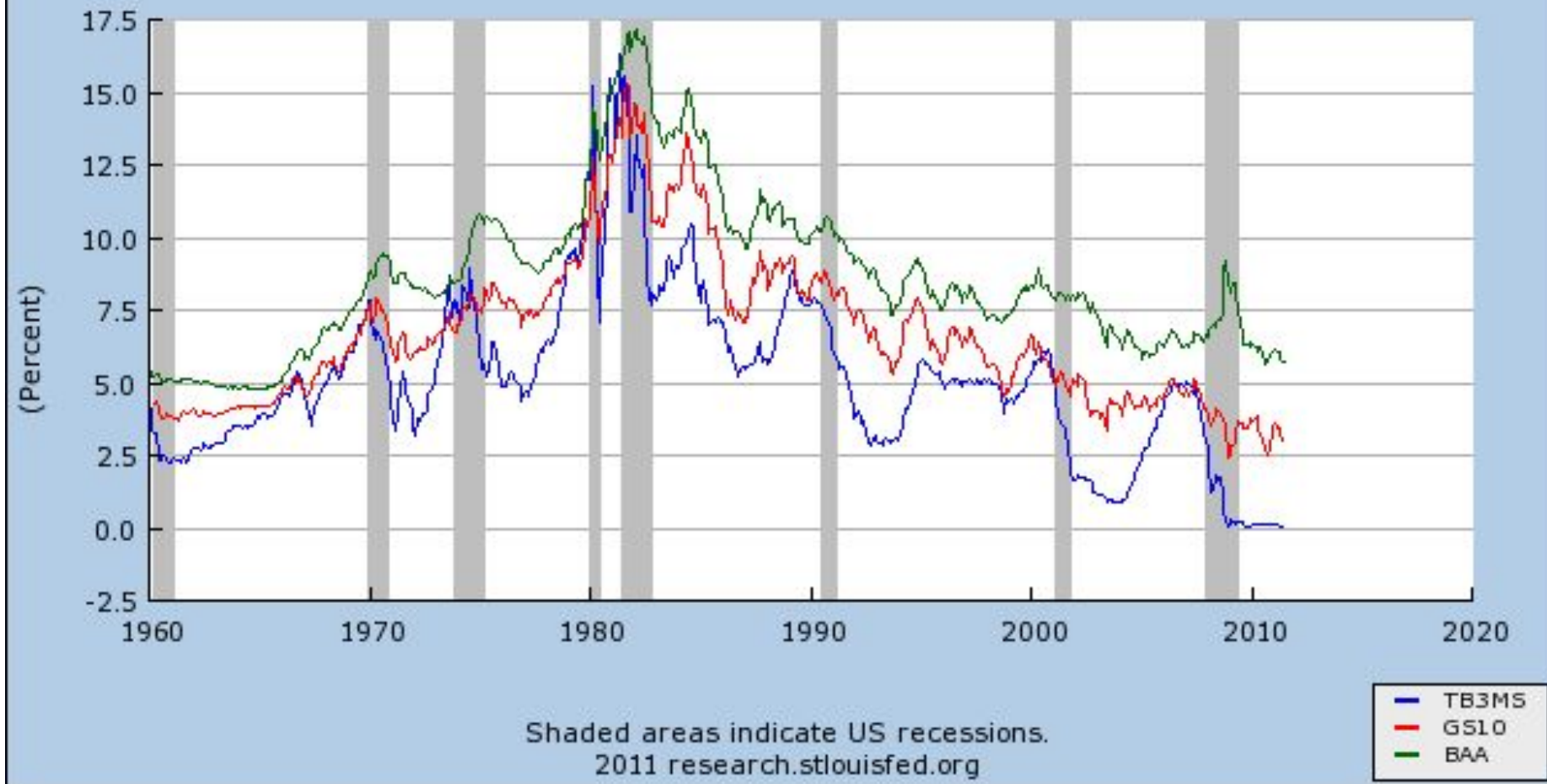


# Facts about interest rates

- There are many different interest rates.
- Interest rates tend to move together.
- Sometimes we ignore the differences among interest rates and focus on the interest rate level.
- The interest rate level is determined in the bond market or loanable funds market.
- There are intimate relationships among different interest rates.



3-Month Treasury Bill: Secondary Market Rate (TB3MS)  
10-Year Treasury Constant Maturity Rate (GS10)  
Moody's Seasoned Baa Corporate Bond Yield (BAA)







# The Stock Market

- Common stock represents a share of ownership in a corporation
- A share of stock is a claim on the earnings and assets of the corporation
- A company's stock share price reflects the opinion of the market about the company's economic value, which ultimately depends on its future profitability.
- Major indexes reflect changing sentiment about the nation's economic prospects.
  - Dow-Jones Industrials Average (DJIA)
  - Standard and Poor's 500 Average (S&P 500)



Dow Jones Industrial Average (DJIA)  
Source: Dow Jones & Company



Shaded areas indicate US recessions.  
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S&P 500 Index (SP500)  
Source: Standard and Poor's



Shaded areas indicate US recessions.  
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# The Foreign Exchange Market

- The foreign exchange market is where funds are converted from one currency into another
- The foreign exchange rate is the price of one currency in terms of another currency
- The foreign exchange market determines the foreign exchange rate



# Foreign Exchange and Trade

- **Appreciation** is an increase in the value of one nation's currency relative to another nation's currency.
- Depreciation is the opposite.
- Appreciation causes:
  - higher prices to foreign buyers of exports,
  - lower prices to domestic consumers of imports, and
  - a **trade deficit** (or a reduction in the trade surplus).
- Depreciation causes:
  - lower prices to foreign buyers of exports,
  - higher prices to domestic consumers of imports, and
  - a **trade surplus** (or a reduction in the trade deficit.)



U.S. / Euro Foreign Exchange Rate (DEXUSEU)  
Source: Board of Governors of the Federal Reserve System



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# Banking and Financial Institutions

- Financial Intermediaries—institutions that borrow funds from people who have saved and make loans to other people
- Banks—institutions that accept deposits and make loans
- Other Financial Institutions—insurance companies, finance companies, pension funds, mutual funds and investment banks
- Financial Innovation—in particular, the advent of the information age and e-finance



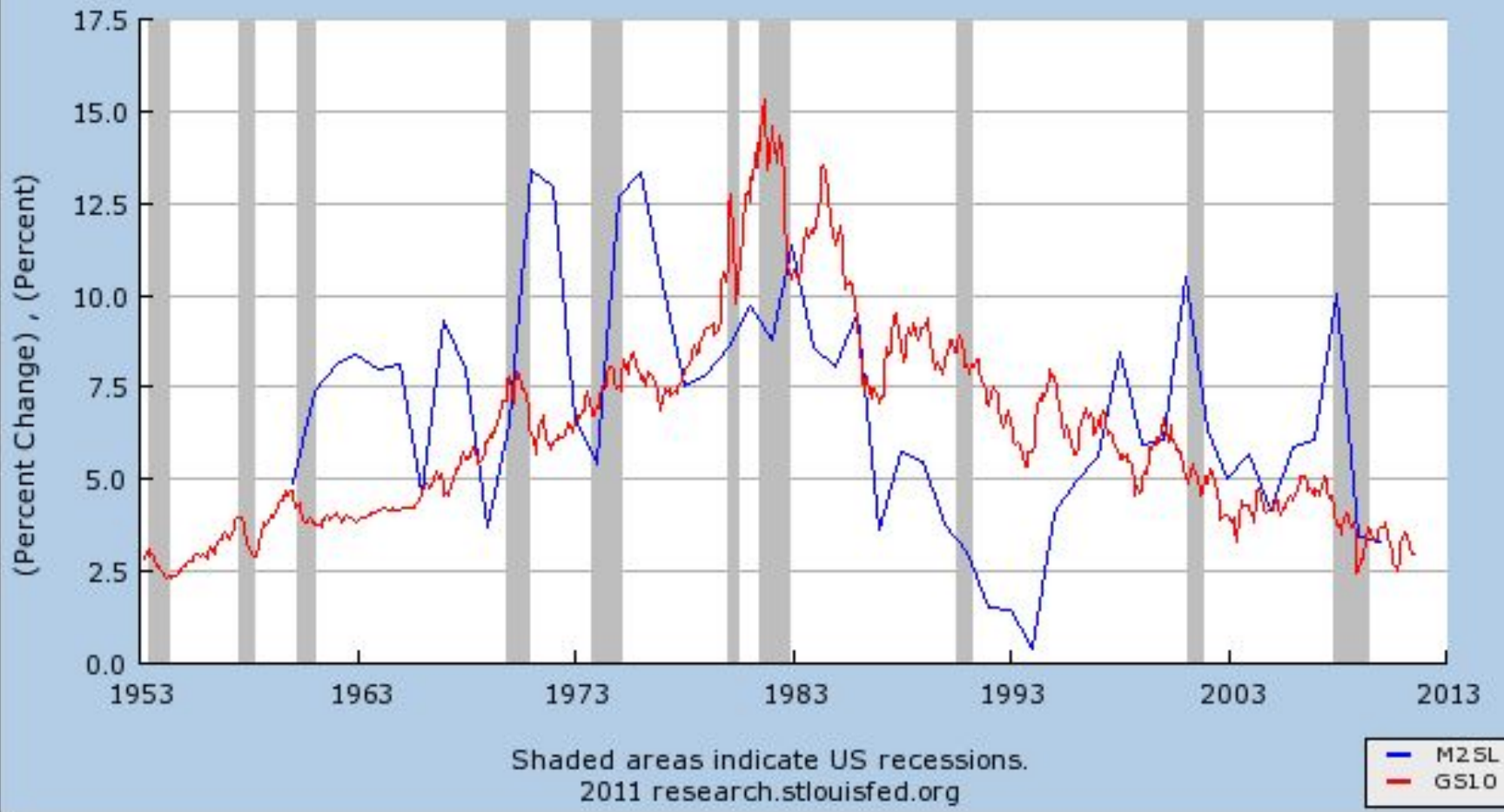
# Money and Interest Rates

- Interest rates are the price of money
- Prior to 1980, the rate of money growth and the interest rate on long-term Treasury bonds were closely tied
- Since then, the relationship is less clear but still an important determinant of interest rates





M2 Money Stock (M2SL)  
10-Year Treasury Constant Maturity Rate (GS10)





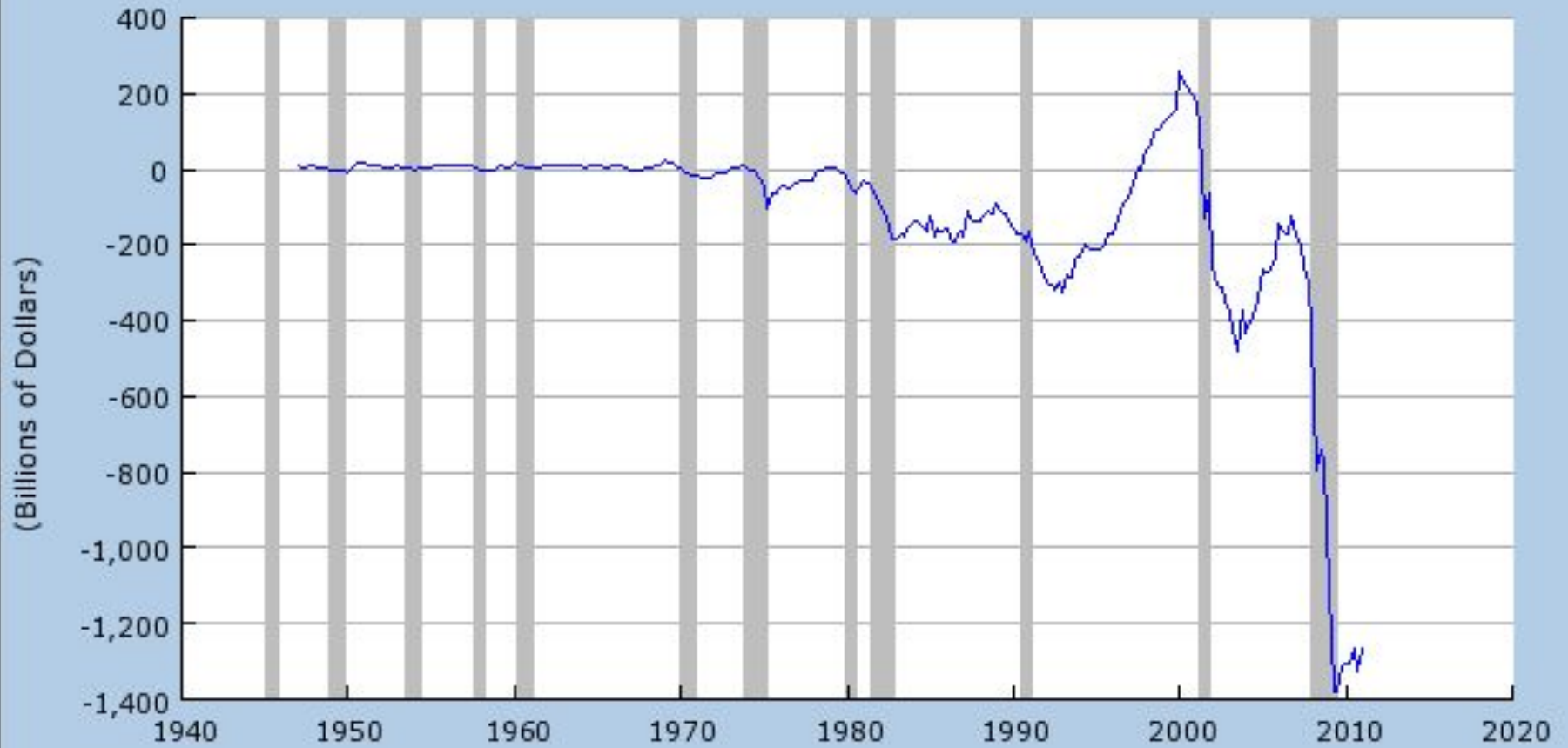
# Monetary and Fiscal Policy

- Monetary policy is the management of the money supply and interest rates
  - Conducted in the U.S. by the Federal Reserve Bank (Fed)
- Fiscal policy is government spending and taxation
  - Budget deficit is the excess of expenditures over revenues for a particular year
  - Budget surplus is the excess of revenues over expenditures for a particular year
  - Any deficit must be financed by borrowing



### Net Government Saving (TGDEF)

Source: U.S. Department of Commerce: Bureau of Economic Analysis



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