

# Ch 1. The Science of Macroeconomics

Macroeconomics, 7<sup>th</sup> ed.

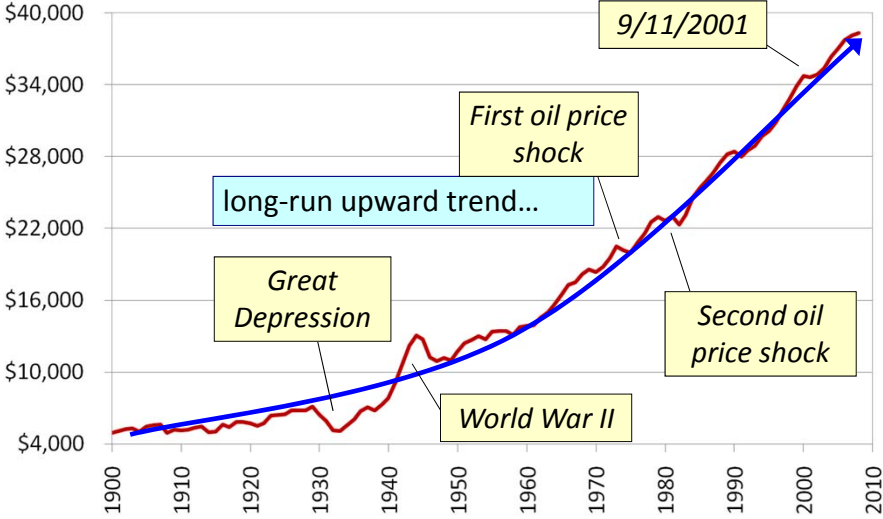
N. Gregory Mankiw

## Key Macroeconomic Variables

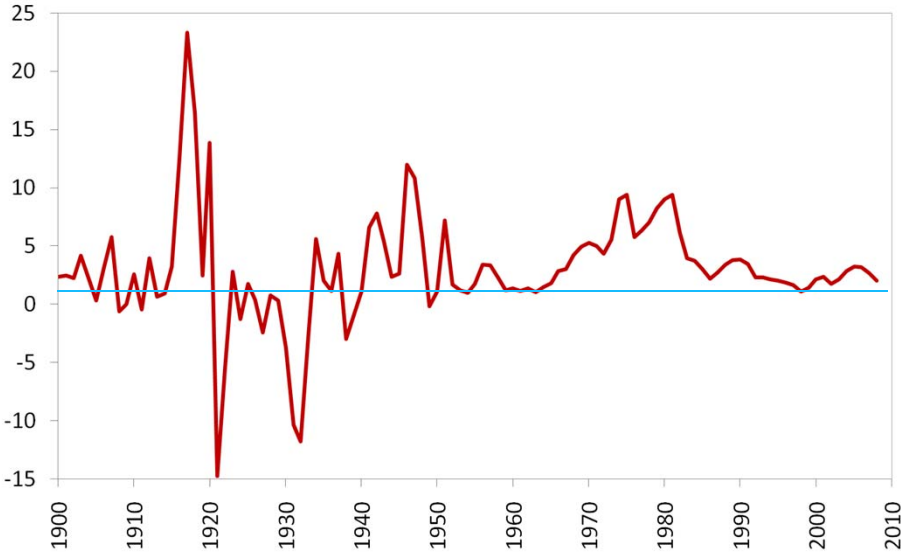
List of important variables whose behavior we study in this course.

- Real GDP: Figure 1-1
- Inflation: Figure 1-2
- Unemployment rate: Figure 1-3
- Interest rates: Figure 4-3
- Budget deficit and government debt: Figure 15-1
- Trade balance: Figure 5-6

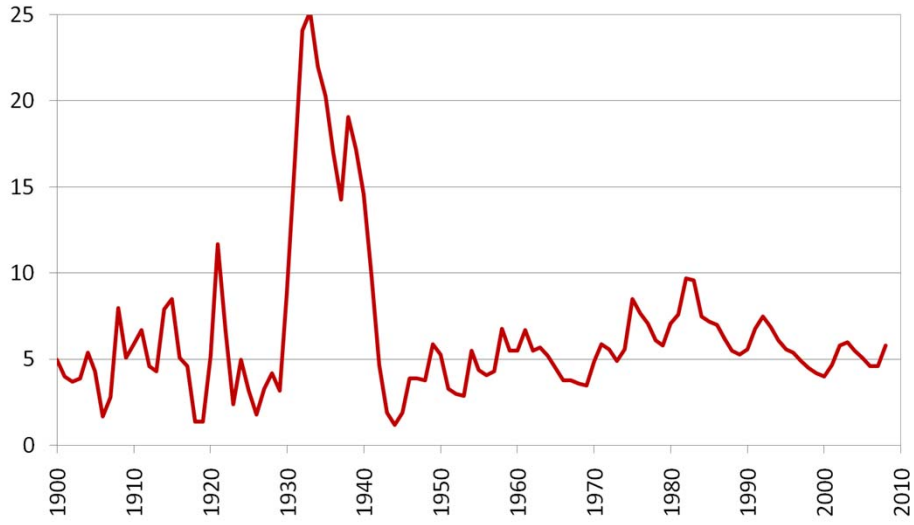
### U.S. Real GDP per capita (2000 dollars)



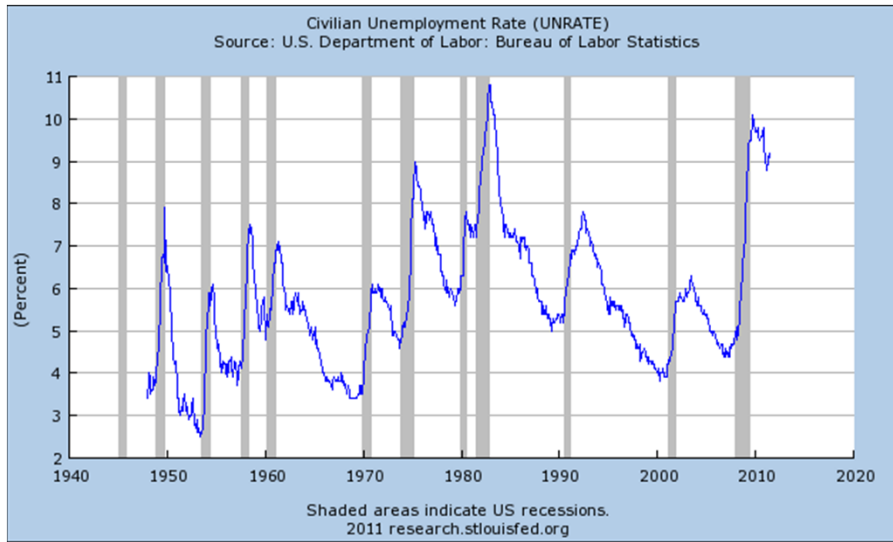
### U.S. Inflation Rate (% per year)



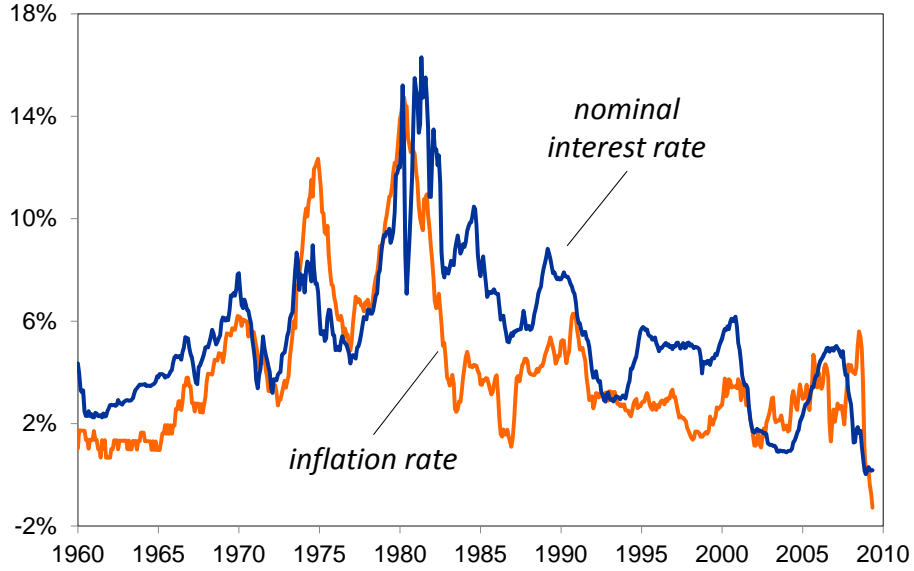
### U.S. Unemployment Rate (% of labor force)



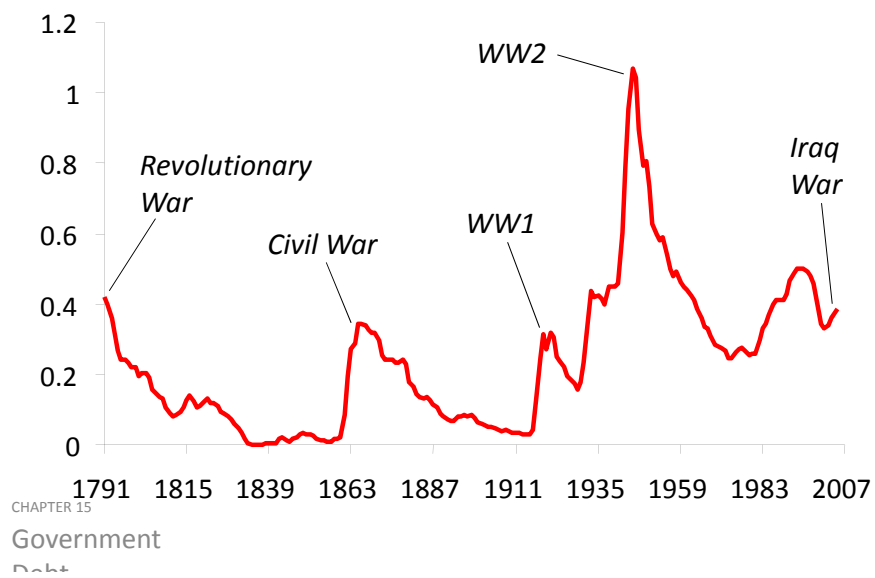
### U.S. Unemployment Rate



U.S. inflation and nominal interest rates, 1960-2009

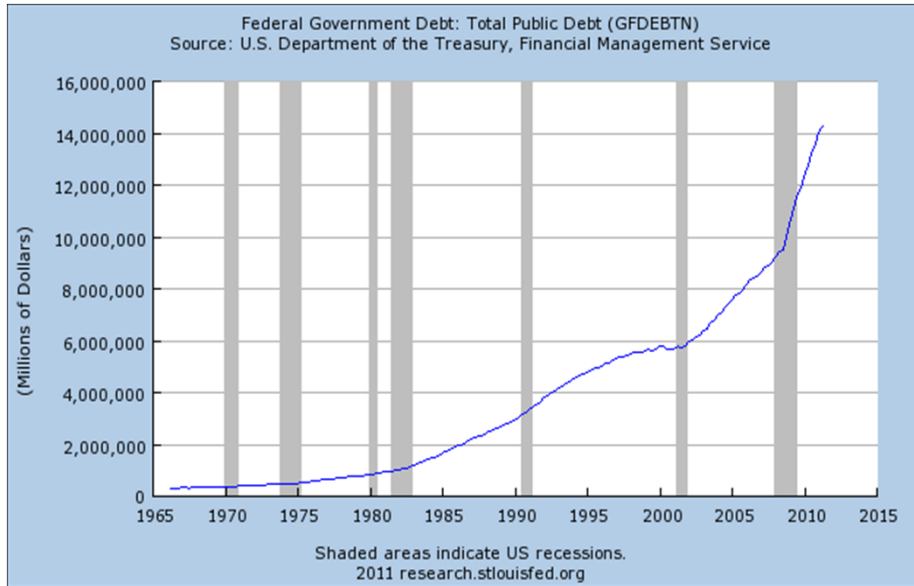


Ratio of U.S. govt debt to GDP

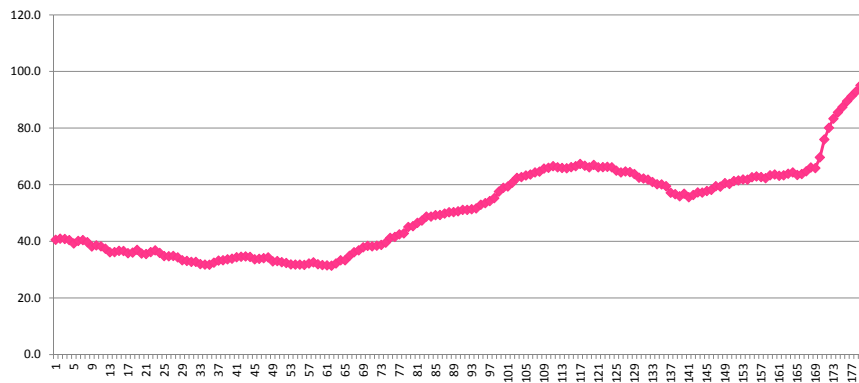


CHAPTER 15  
Government  
Debt

## U.S. Federal Government Debt

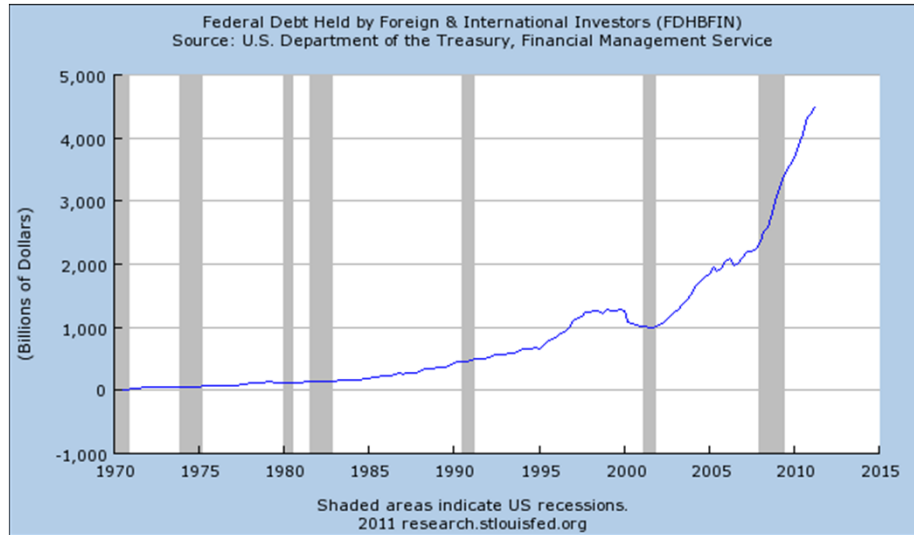


## U.S. Federal Government Debt / GDP



1966:Q1 – 2010:Q4

## U.S. Federal Government Debt held by Foreign Investors



## Indebtedness of the world's governments

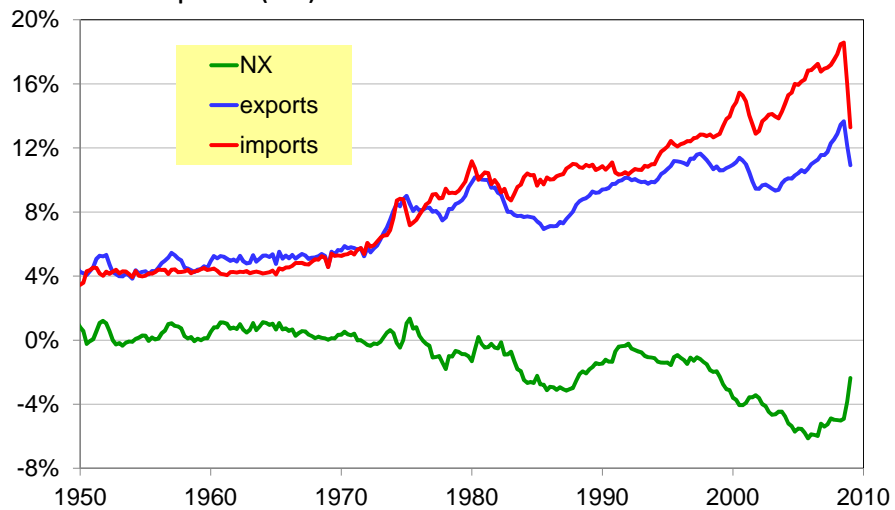
<b>Country</b>	<b>Gov Debt</b> (% of GDP)	<b>Country</b>	<b>Gov Debt</b> (% of GDP)
Japan	159	<b>U.S.A.</b>	<b>64</b>
Italy	125	Sweden	62
Greece	108	Finland	53
Belgium	99	Norway	52
France	77	Denmark	50
Portugal	77	Spain	49
Germany	70	U.K.	47
Austria	69	Ireland	30
Canada	69	Korea	20
Netherlands	64	Australia	15

## The Global Debt Clock

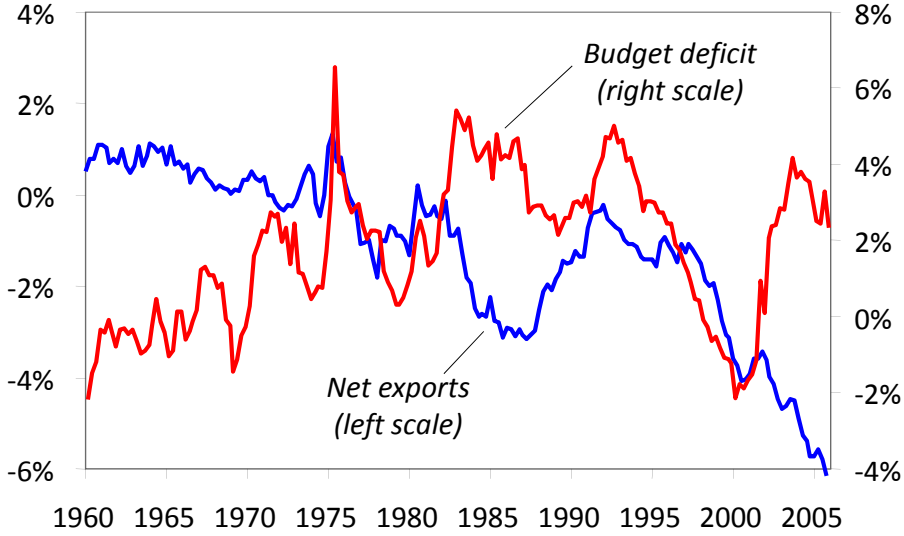
- By Economist
- [http://www.economist.com/content/global\\_debt\\_clock](http://www.economist.com/content/global_debt_clock)

### Net Exports: $NX = EX - IM$

- def: the value of total exports (EX) minus the value of total imports (IM)



### NX and the federal budget deficit (% of GDP), 1960-2006



slide 15

### US NXP/GDP Ratio



## S & P downgrades the US

Rating	
AAA	Switzerland, Hong Kong, Sweden, Germany, Canada, Denmark, Britain, Netherlands, Finland, Norway, Austria, France, Australia
AA+	United States, Belgium, New Zealand
AA	Slovenia, Spain
AA-	Japan, China
A+	Slovak Republic, Italy
A	Czech Republic, S. Korea, Israel
A-	Malaysia, Poland

## Current macroeconomic issues

- The global financial crisis and recession
  - Double dip?
- The financial markets and the macroeconomic management
- The euro issues
  - Currency union
  - Debt and financial crises
- The Chinese Renminbi issue

## Sources of US data

- Economic Report of the President  
<http://w3.access.gpo.gov/eop/index.html>
- St. Louis Fed FRED Database  
<http://research.stlouisfed.org/fred/index.html>
- Bureau of Economic Analysis, Commerce Dept  
<http://www.bea.doc.gov/>

## Three questions



1. How long will it take for the economy's wounds to heal?
2. How long will inflation expectations remain anchored?
3. How long will the bond market trust the United States?

## Other Important Terms

- **Endogenous vs. Exogenous variables**
- **Macroeconomic models**
  - The AD-AS model
  - Distinguish short-run and long-run models
  - Fixed-price models and Flexible-price models