# EC 202: Principles of Macroeconomics
# Week 2: Macroeconomic Goals

I. Economic Growth

II. Low Unemployment

III. Stable Prices (Next Week)

# I. Economic Growth

- Measured by annual percent growth in real GDP.
- What is a "good" rate of economic growth?
- GDP per capita
  - GDP per person = GDP/population
  - If GDP grows at the same rate as population, then per capita GDP stays the same. i.e. individuals are no better off.
  - If GDP grows at a faster rate than the population, then per capita GDP will increase, i.e. there will be more goods and services available for each person in the population.

# I. Economic Growth

- Per Capita GDP example:
  - US population growth = 0.8% per year
  - If real GDP grows 3% per year, then per capita GDP will grow 2.2%

Per capita GDP = GDP/population

Per capita GDP growth = real GDP growth – pop. growth.

- Another example.
  - Population growth in Nigeria is 2.45%
  - If real GDP grows 3% per year, then per capita GDP will grow 0.55%
- Conclusion: A "good" growth rate is one that is faster than the growth rate of the population.

# I. Economic Growth

- Rule of 70
  - A “rule of thumb” used in Finance based on logarithms. (No, we are not going to talk about logarithms).
  - Used to estimate how long it will take to double your money. Assumes a steady growth rate.

    70/annual growth rate = years to double.
- Example:
  - Invest money in an account that pays 2% year. You can double your money in 70/2 = 35 years.
  - Invest money in an account that pays 5% year. You can expect to double your money in 70/5 = 14 years.
- Small differences in growth rates can make a BIG difference.

# I. Economic Growth

- US economic growth measured on a quarterly basis is **very volatile** (changes really a lot from 1 quarter to the next)
- US economic growth measured on an annual basis is still **volatile**.
- Economic growth over the long term tends to ignore short-term fluctuations. The point is to see the overall economic development of a country.

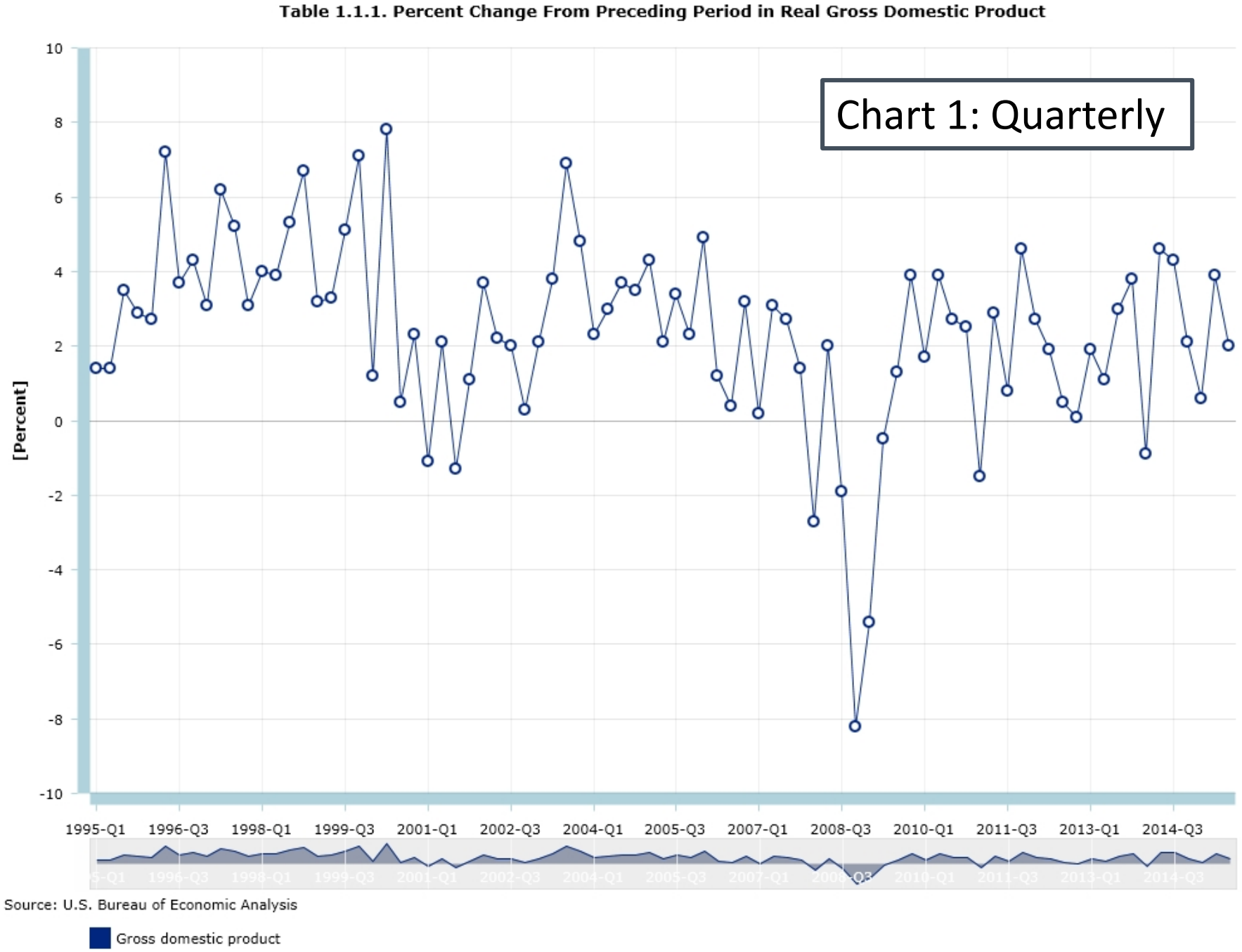
Table 1.1.1. Percent Change From Preceding Period in Real Gross Domestic Product
Chart 1: Quarterly
[Percent]
10
8
6
4
2
0
-2
-4
-6
-8
-10
1995-Q1
1996-Q3
1998-Q1
1999-Q3
2001-Q1
2002-Q3
2004-Q1
2005-Q3
2007-Q1
2008-Q3
2010-Q1
2011-Q3
2013-Q1
2014-Q3
Source: U.S. Bureau of Economic Analysis
Gross domestic product

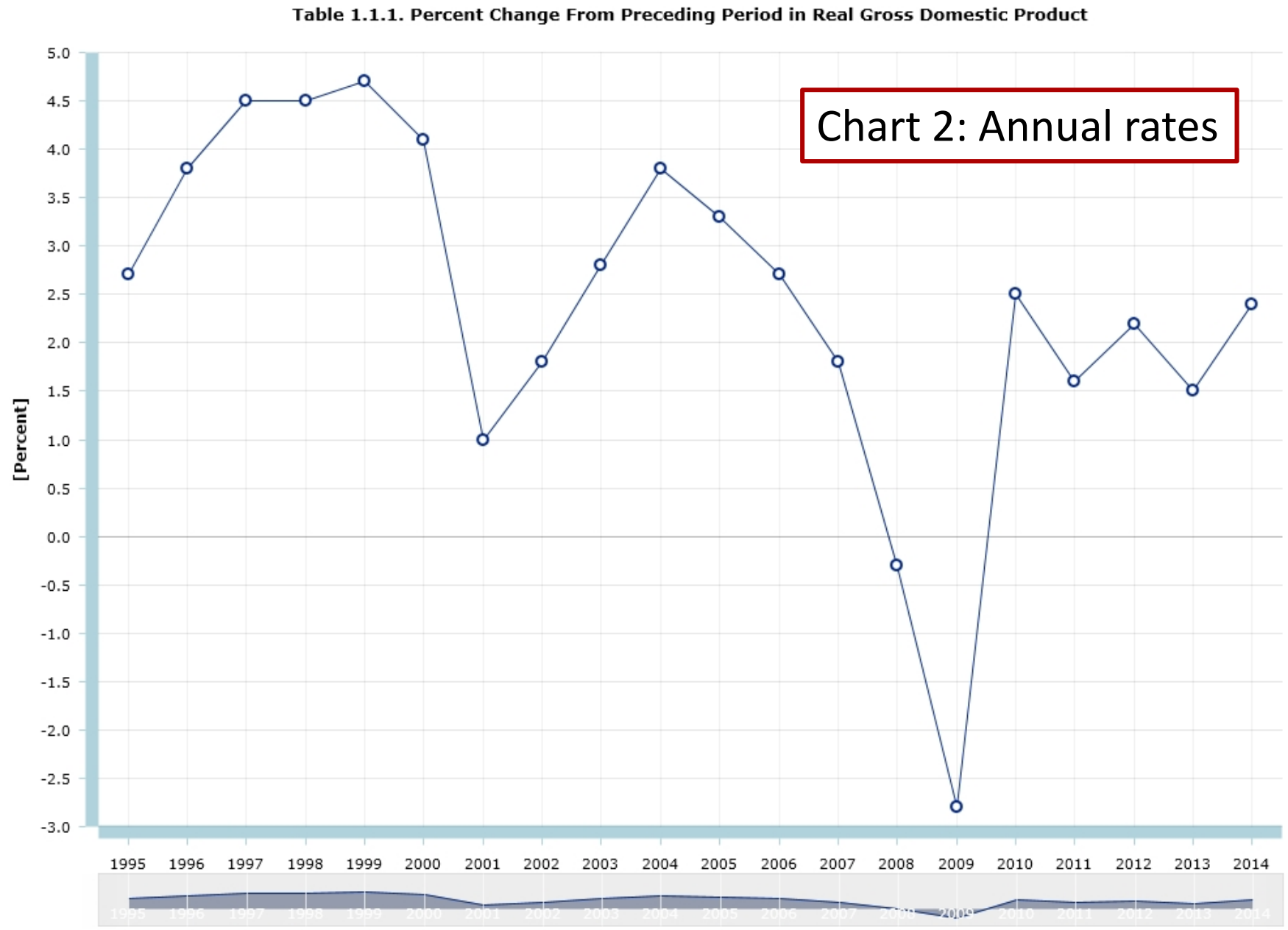
Table 1.1.1. Percent Change From Preceding Period in Real Gross Domestic Product
Chart 2: Annual rates
[Percent]
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014
Source: U.S. Bureau of Economic Analysis
Gross domestic product

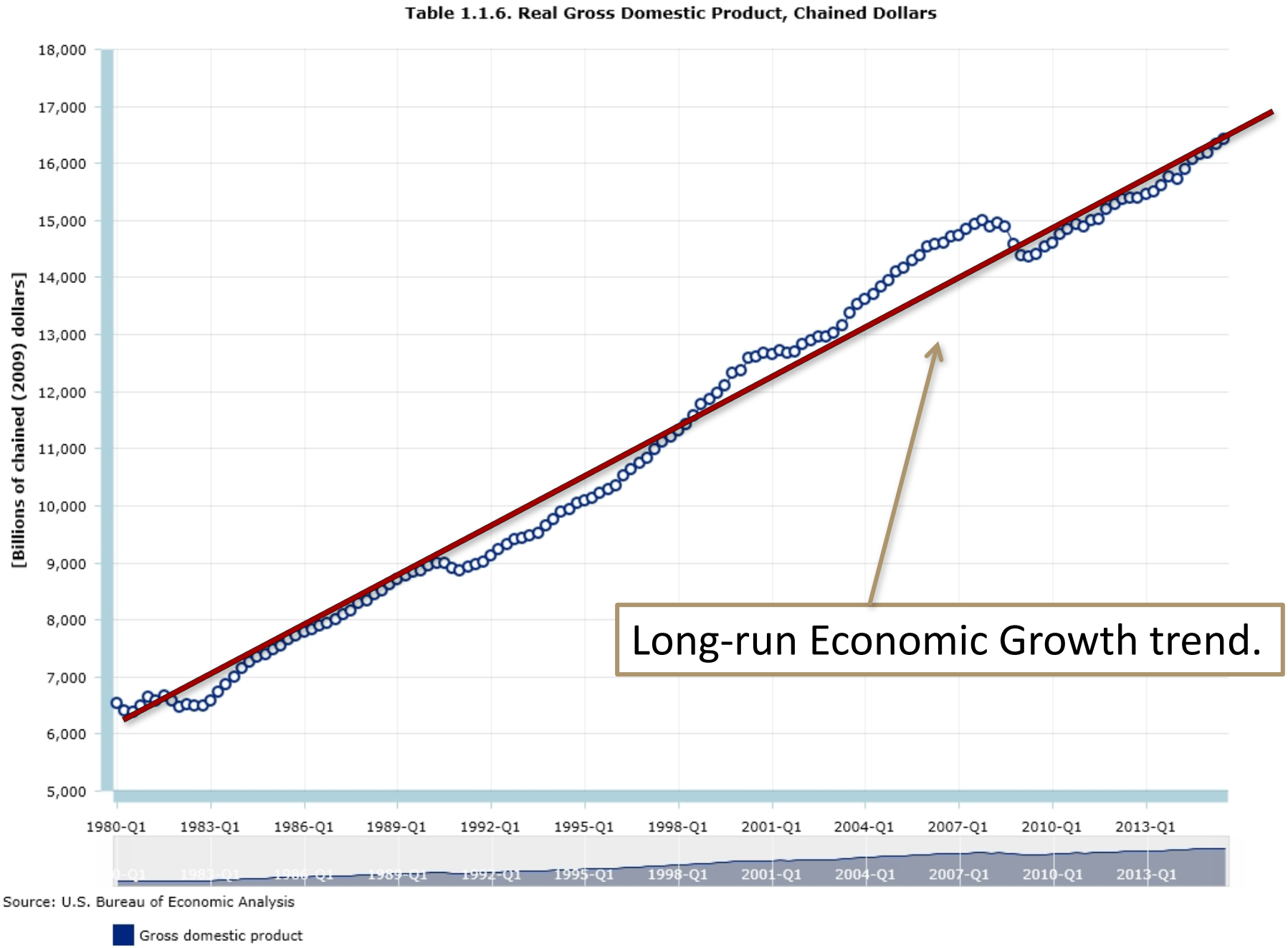
Table 1.1.6. Real Gross Domestic Product, Chained Dollars
[Billions of chained (2009) dollars]
18,000
17,000
16,000
15,000
14,000
13,000
12,000
11,000
10,000
9,000
8,000
7,000
6,000
5,000
1980-Q1
1983-Q1
1986-Q1
1989-Q1
1992-Q1
1995-Q1
1998-Q1
2001-Q1
2004-Q1
2007-Q1
2010-Q1
2013-Q1
Long-run Economic Growth trend.
Source: U.S. Bureau of Economic Analysis
Gross domestic product

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# II. Unemployment

- A very important economic indicator is the "unemployment rate."
- Other labor market indicators include:
  - Number of new jobs created
  - Number of Job openings
  - Labor force participation rate
  - Employment population ratio.

# II. Unemployment

- The US Department of Labor, Bureau of Labor Statistics, calculates unemployment based on a monthly survey of households.
- Individuals are asked a series of questions and then placed into 1 of 3 categories:
  - Employed
  - Unemployed
  - Not in the Labor Force

# II. Unemployment

- Employed
  - All persons who
    - did *any work* for pay during the survey reference week. *(1 hour or more)*
    - did at least 15 hours during the week of *unpaid work* in a family-operated enterprise.
    - were *temporarily absent* from their regular jobs because of illness, vacation, bad weather, industrial dispute, or various personal reasons.

Source: US Bureau of Labor Statistics

# II. Unemployment

- Unemployed
  - All persons who
    - were not classified as employed during the survey reference week,
    - made specific active efforts to find a job during the prior 4 weeks, and
    - were available for work.
    - were waiting to be called back to a job from which they had been temporarily laid off.



Source: US Bureau of Labor Statistics

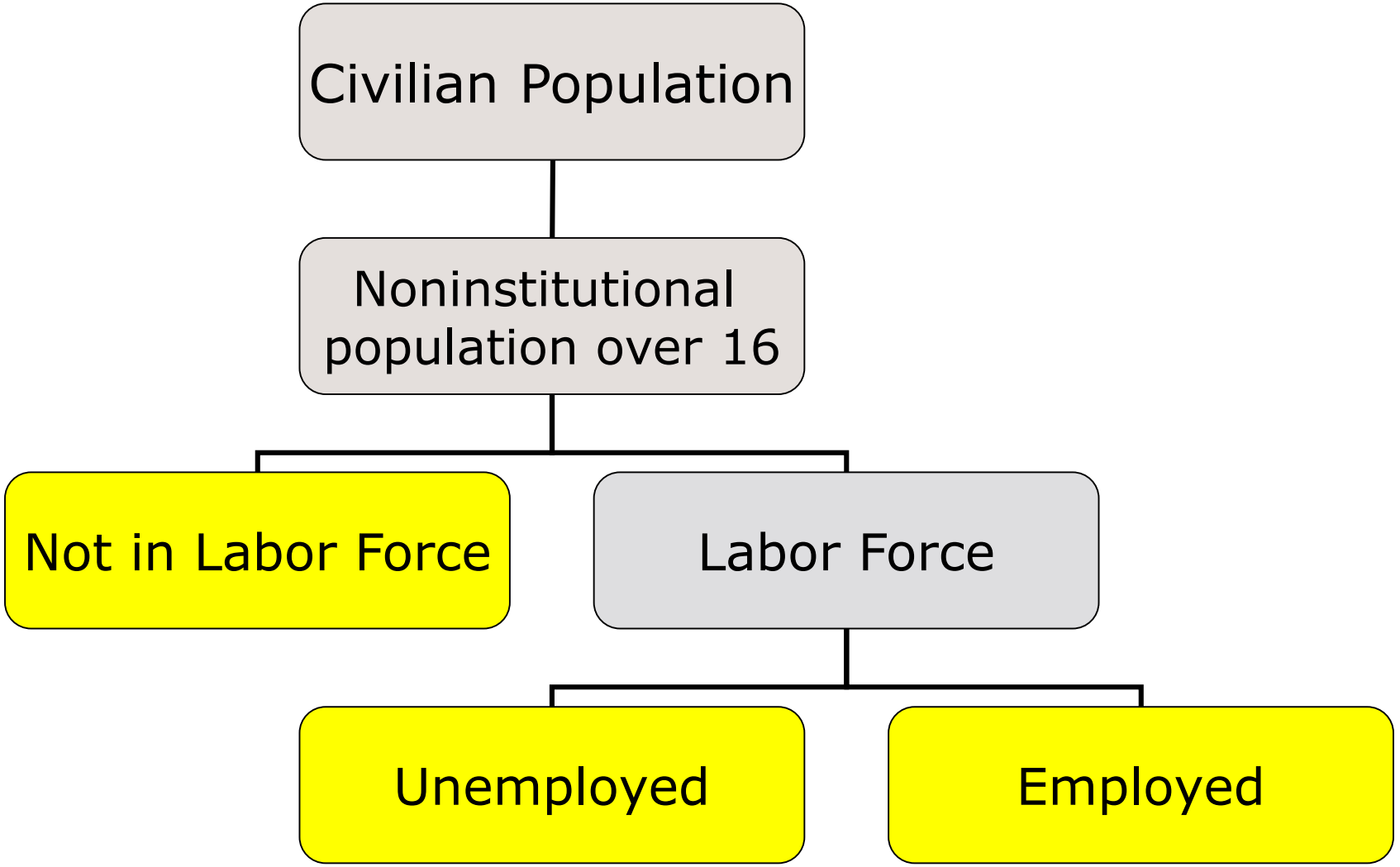
# II. Unemployment

- Persons not in the labor force are:
  - those who not classified as employed or unemployed during the survey reference week.



Source: US Bureau of Labor Statistics

# Unemployment Rate



# Unemployment Rate

- The "Labor Force" = Employed + Unemployed

$$\text{The official unemployment rate} = \frac{\text{Unemployed}}{\text{Labor Force}}$$

- Note that the official unemployment rate does not include anyone classified as "not in the labor force."
- Some of these individuals do not want to work or are unable to work. On the other hand, some of these individuals do want to work. They may have given up looking or just did not look for work during the "reference survey week."
- For this reason, the Bureau of Labor Statistics (BLS) calculates "alternative measures of unemployment that include some individuals in the "not in the labor force" category.

# Types of Unemployment

- Seasonal Unemployment
  - Due to nature of some jobs. ..
- Frictional unemployment
  - Due to turnover in the labor force…
  - Individuals voluntarily quitting one job, looking for another, etc.
- Cyclical unemployment
  - Due to downturn in the economy (recession)
  - Considered “involuntary” unemployment
- Structural unemployment
  - Unemployment due to mismatch between job skills of worker and those currently needed in the economy.
  - Considered “problem” unemployment, since it requires retraining, re-education, etc.

# Unemployment as Government's Problem

- In the Employment Act of 1946, the U.S. government took responsibility for unemployment.
- Full employment – an economic climate where nearly everyone who wants a job has one.
  - No "Cyclical" unemployment
  - Seasonal, Frictional and Structural unemployment will occur even at "Full employment."

# Unemployment Rate