Introduction

Chapter #1

What Is Macroeconomics?

- Macroeconomics is the study of the behavior of the economy as a whole and the policy measures that the government uses to influence it
  - Utilizes measures including total output, rates of unemployment and inflation, and exchange rates
- Examines the economy in the short and long run
  - Short run: movements in the business cycle
  - Long run: economic growth

What Is Macroeconomics?

- Macroeconomics: aggregates individual markets → look at markets as a whole
  - AD and AS
  - Issues include unemployment, economic growth

- Microeconomics: examines behavior of individual economic units (households, firms)
  - Issues include product and input price determination

Macroeconomics In Three Models

- Study of macroeconomics is grounded in three models, each appropriate for a particular time period
  1. Very Long Run Model: domain of growth theory → focuses on growth of the production capacity of the economy
  2. Long Run Model: a snapshot of the very long run model, in which capital and technology are largely fixed
     - Level of capital & technology determine level of potential output
     - Output is fixed, but prices determined by changes in AD
  3. Short Run Model: business cycle theories
     - Changes in AD determine how much of the productive capacity

       is used and the level of output and unemployment
     - Prices are fixed in this period, but output is variable

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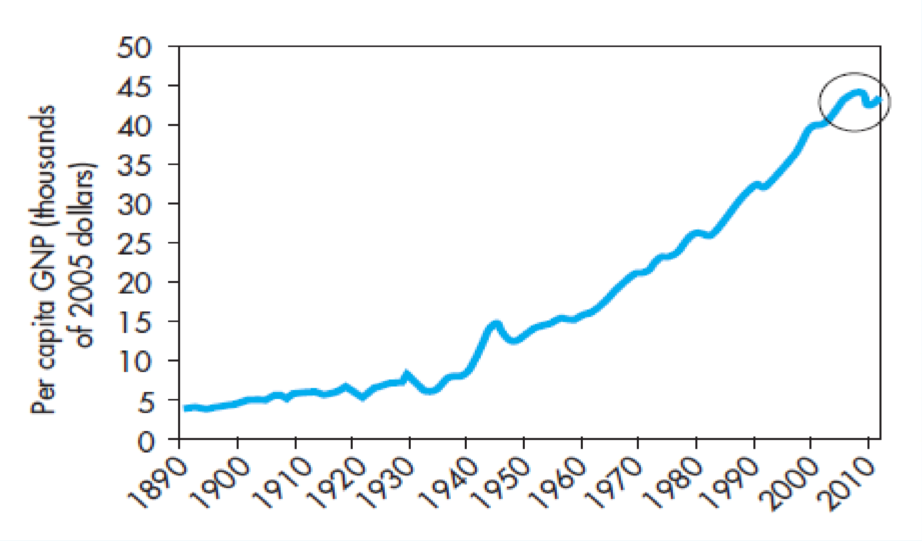
Very Long Run Growth

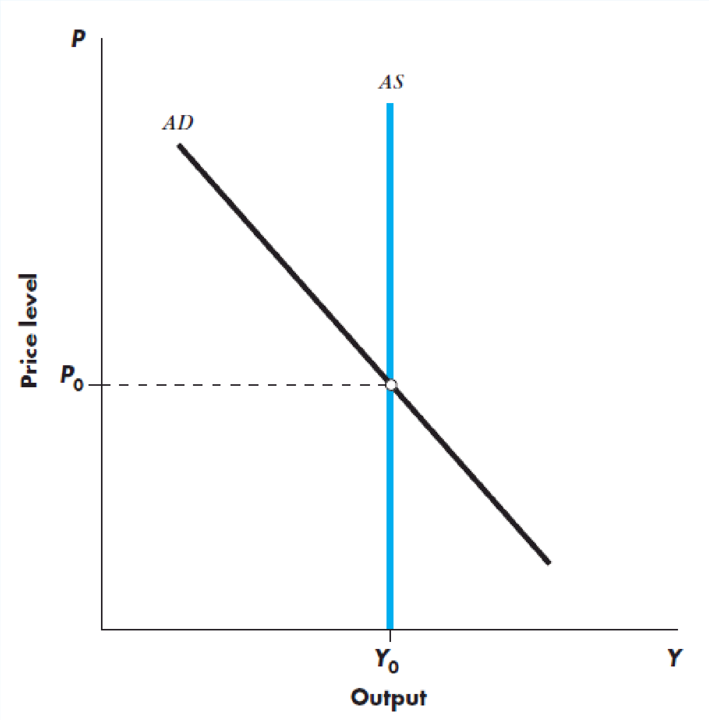
- Figure 1-1a illustrates growth of income per person in the U.S. over last century → growth of 2-3% per year
- Growth theory examines how the accumulation of inputs and improvements in technology lead to increased standards of living
- Rate of saving is a significant determinant of future well being and economic growth.



The Long Run Model

- In the long run, the AS curve is vertical and pegged at the potential level of output
  - Output is determined by the supply side of the economy and its productive capacity
  - The price level is determined by the level of demand relative to the productive capacity of the economy

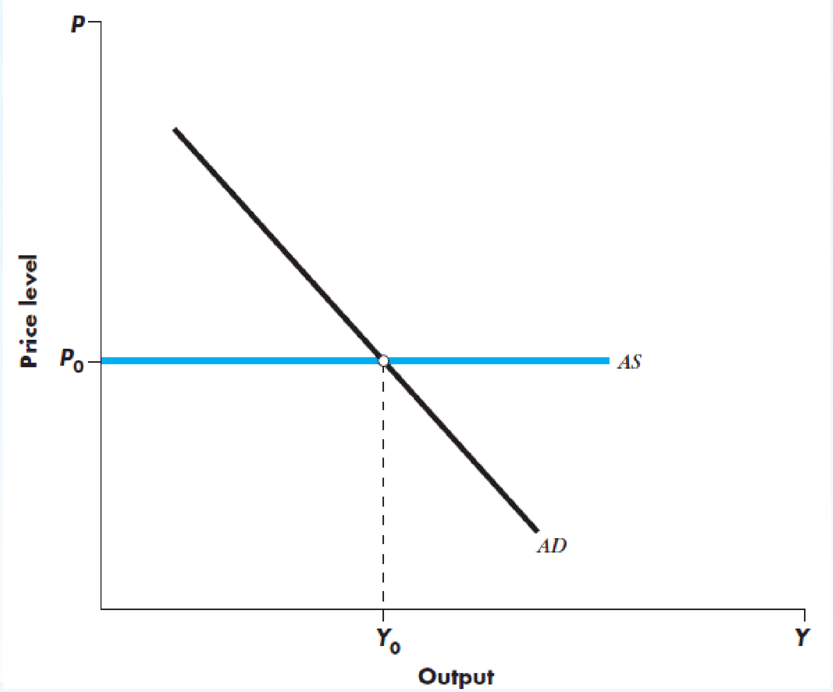
- <u>Conclusion</u>: high rates of inflation are always due to changes in AD in the long run



The Short Run Model

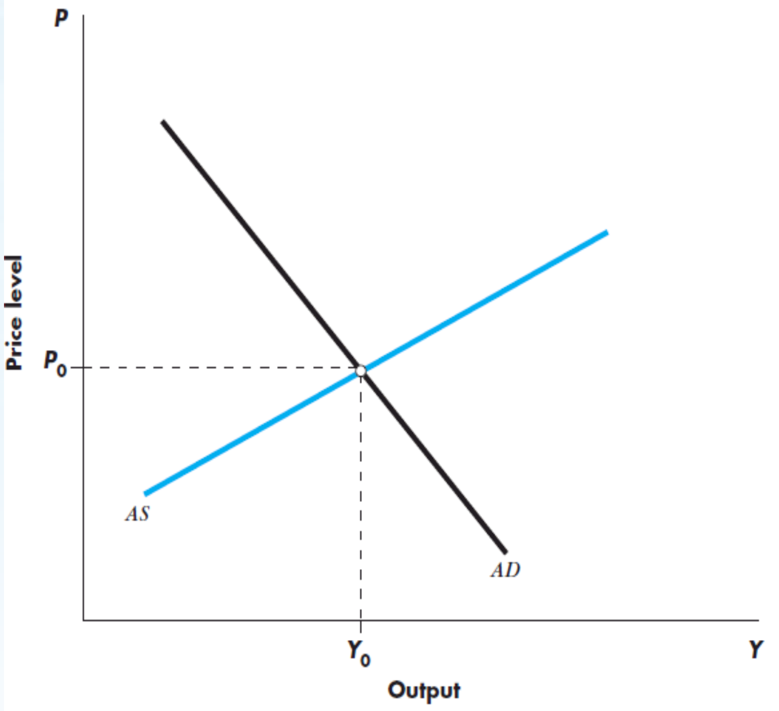
- Short run fluctuations in output are largely due to changes in AD
  - The AS curve is flat in the short run due to fixed/rigid prices, so changes in output are due to changes in AD

- Changes in AD in the short run constitute phases of the business cycle
  - In the short run, AD determines output, and thus unemployment



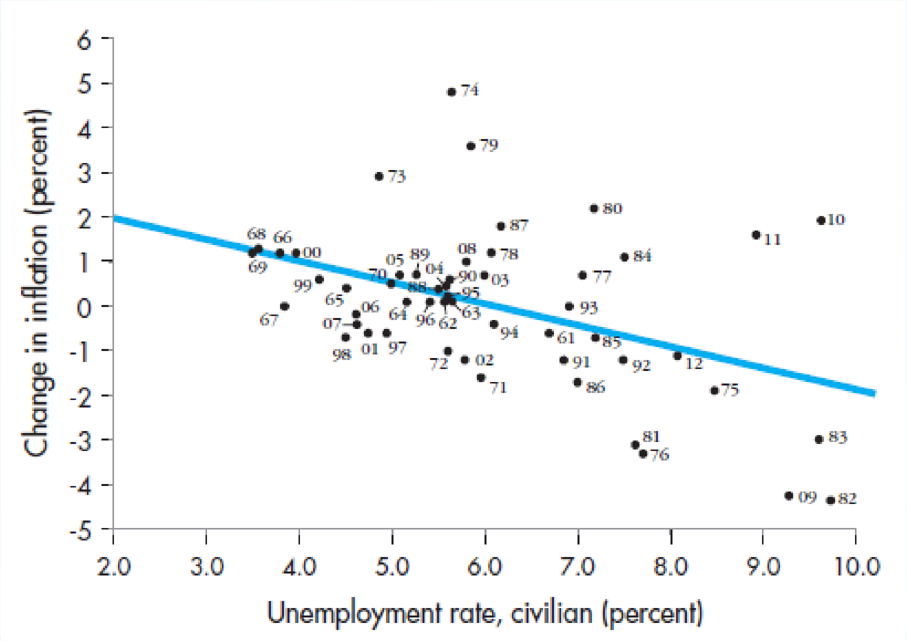
The Medium Run

- How do we get from the horizontal short run AS curve to the vertical long run AS curve?
- The medium run AS curve is tilting upwards towards the long run AS curve position
  - When AD pushes output above the sustainable level, firms increase prices
  - As prices increase, the AS curve is no longer pegged at a particular price level



The Phillips Curve

- Prices tend to adjust slowly → AD drives the economy in the meantime
- The speed of price adjustment is illustrated by the Phillips curve, which plots the inflation rate against the unemployment rate
- In the short run, AS curve is relatively flat, and movements in AD drive changes in prices, output, and unemployment



Growth and GDP

- The growth rate of the economy is the rate at which GDP is increasing
  - Most developed economies grow at a rate of a few percentage points per year
    - For example, the US real GDP grew at an average rate of 3.1 percent per year from 1960 to 2012

- Growth in GDP is caused by:
  1. Increases in available resources (labor and capital)
  2. Increases in the productivity of those resources

Growth and GDP

- Table 1-1 compares the growth rates of real per capita income across various countries
  - Why do countries like Argentina grow very slowly?
  - Why do countries like China grow very quickly?
  - What policies can raise average growth rates over long periods of time?

TABLE 1-1 Per Capita Real GDP Growth Rates, 1965–2010
(Average Annual Per Capita Growth Rate, Percent)

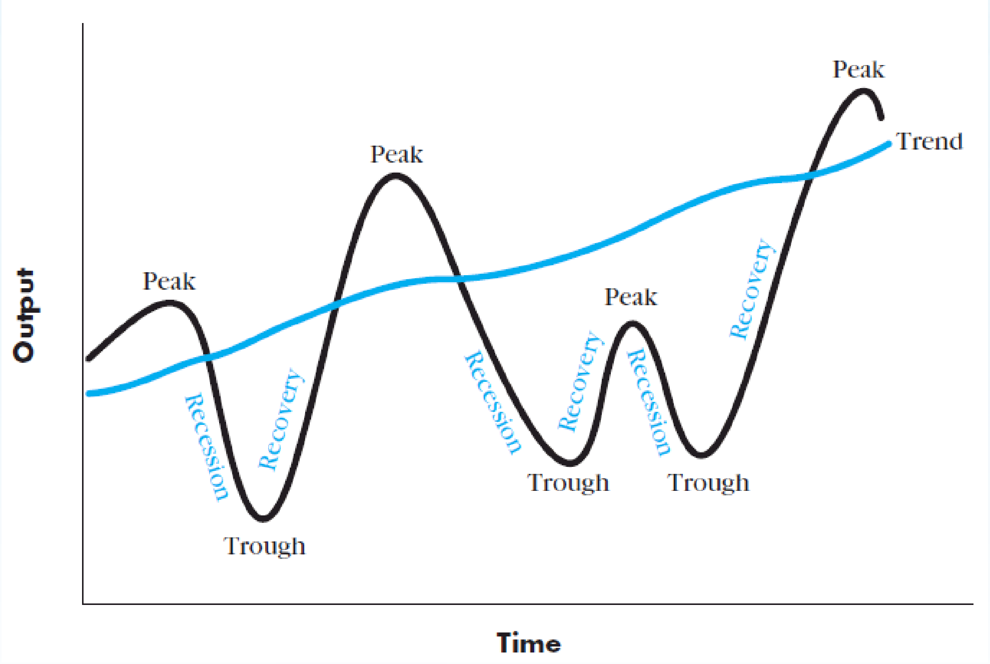
COUNTRY	GROWTH RATE	COUNTRY	GROWTH RATE
Argentina	1.6	Rep. of Korea	6.0
Brazil	2.4	Norway	2.8
China	7.4	Spain	2.5
France	2.1	United Kingdom	2.3
India	3.3	United States	1.9
Japan	3.1	Zimbabwe	0.1

Source: *World Development Indicators*, World Bank; Alan Heston, Robert Summers, and Bettina Aten, *Penn World Table Version 7.1*, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, November 2012.

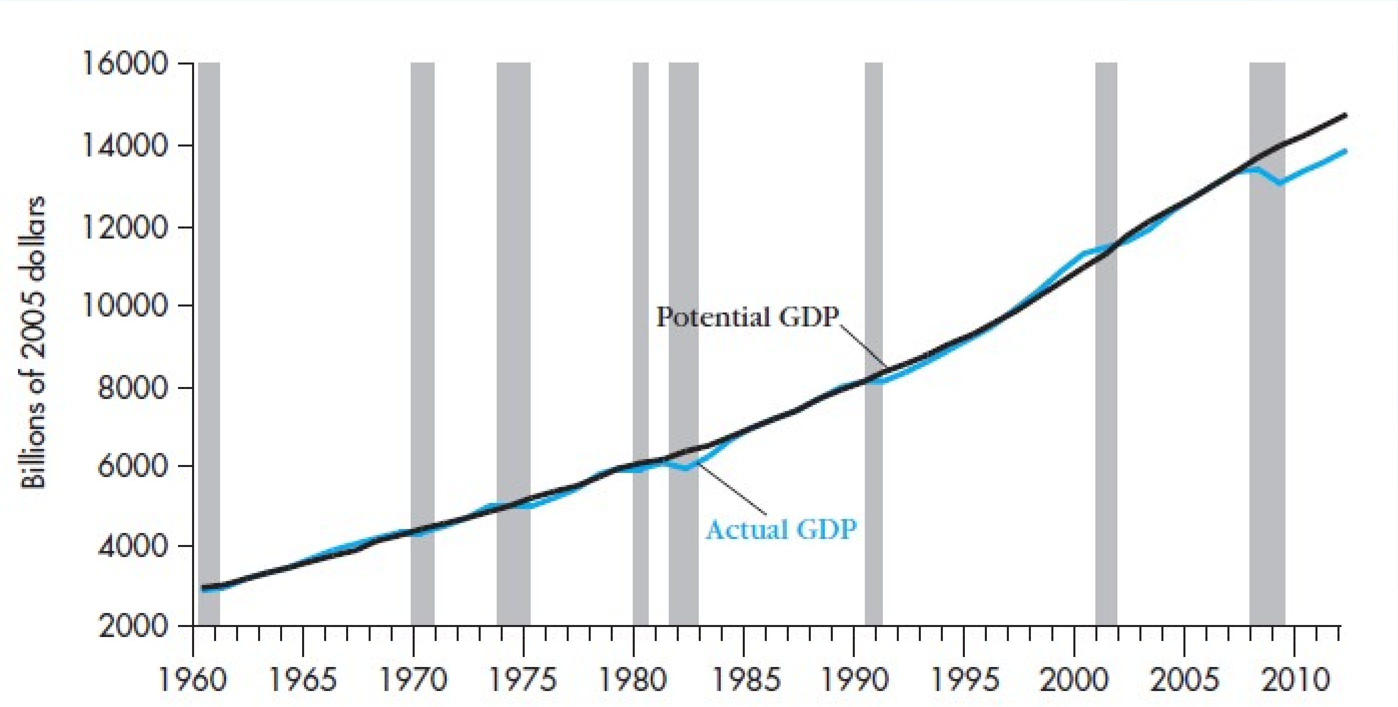
The Business Cycle and the Output Gap

- Business cycle: pattern of expansion and contraction in economic activity about the path of trend growth
  - Trend path of GDP is the path GDP *would* take if factors of production were fully utilized

- Deviation of output from the trend is referred to as the <u>output gap</u>
  - Output gap = actual output – potential output
  - Output gap measures the magnitude of cyclical deviations of output from the potential level

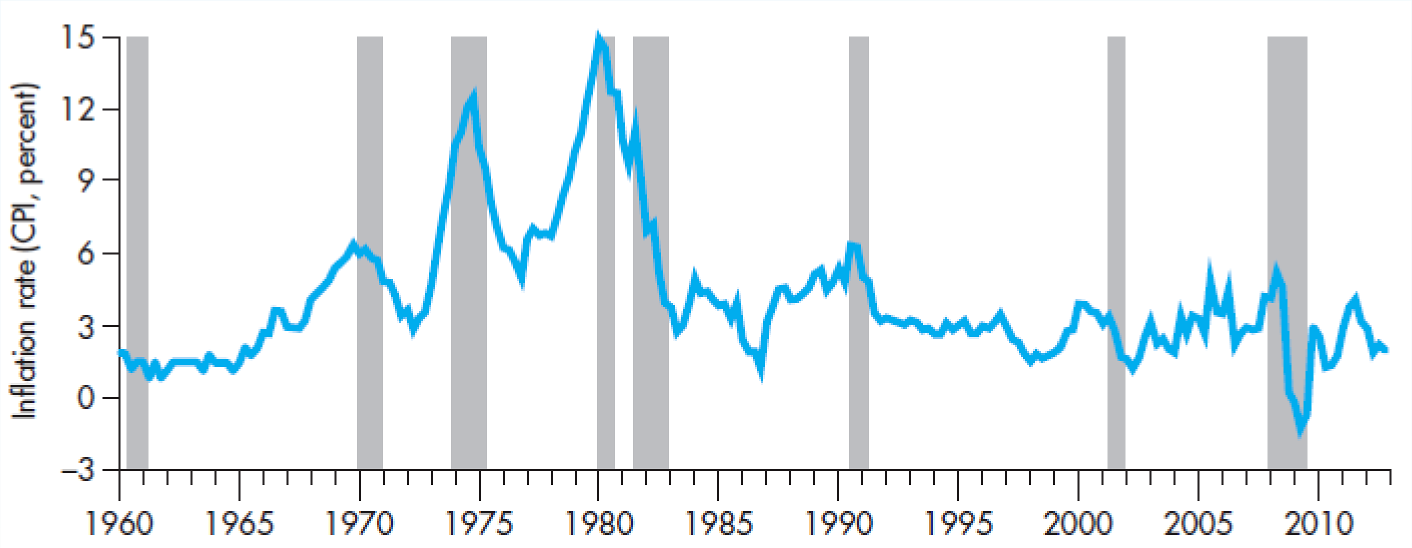


Actual and Potential Output, 1960-2012



Inflation and the Business Cycle

- The inflation rate can be estimated by the percentage change in the consumer price index (CPI)
  - CPI is a price index that measures the cost of a given basket of goods bought by the average household
- If AD is driving the economy, periods of growth are accompanied by increases in prices and inflation, while periods of contraction associated with reduced prices and negative inflation rates



Inflation and the Business Cycle

- Inflation of 1960s and 1970s → large increases in price level
- Price level more than septupled over the 1960-2009 period
  - *On average*, something that cost $1 in 1960 cost $7.76 by 2012
  - Most of the price increase occurred during the 1970s