

ECO 212 – Macroeconomics

Yellow Pages

ANSWERS

Unit 2

Mark Healy
William Rainey Harper College
E-Mail: mhealy@harpercollege.edu
Office: J-262
Phone: 847-925-6352

Kitchen sink economics

http://money.cnn.com/2003/06/27/news/economy/secondhalf_economy/index.htm

Policy makers have thrown all but the kitchen sink at the economy. Will it help in the second half?

July 3, 2003: 10:23 AM EDT

By [Mark Gongloff](#), CNN/Money Staff Writer

NEW YORK (CNN/Money) - Will the "kitchen sink" approach really fix the economy?

Policy makers in the federal government and the Federal Reserve have thrown everything but the kitchen sink at the **ailing economy**, and most economists are saying their efforts will spur relatively robust economic growth in the second half.

After growing at a paltry 1.4 percent rate in the first quarter and probably not much better in the second, gross domestic product (GDP) is expected to grow at a rate of 3.4 percent in both the third and fourth quarters, according to the Philadelphia Fed's latest survey of professional forecasters.

Of course, economic forecasters have often been overly optimistic since early 2001, when a recession/jobless recovery cycle began, and have been forced many times to ratchet down their expectations.

"All the good growth is in the forecasts, in the idea that financial conditions have eased," said Rory Robertson, interest-rate strategist at Macquarie Equities (USA). "But we've seen that doesn't always turn into actual good growth."

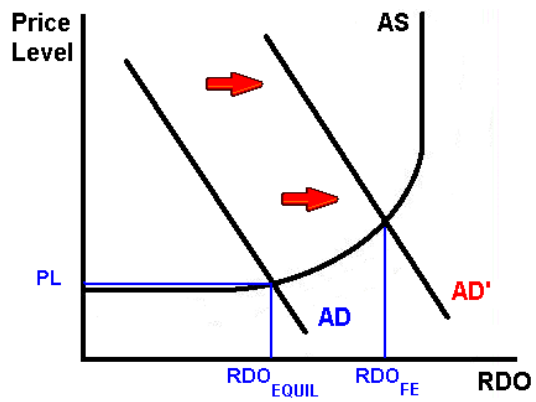
Still, Robertson and other economists have a little more reason to hope that this time might be different, thanks to a combination of:

- the recently-signed **tax-cut plan**, which will give rebate checks to families with children in late summer, right in time for back-to-school spending;
- **improving consumer confidence** -- critical, since consumer spending makes up more than two-thirds of the economy;
- **the Fed's 13th rate cut** of the cycle, taking the fed funds rate to 45-year lows;
- **a weakened dollar**, which should help make U.S. exports more competitive overseas; and a healthier stock market, making consumers feel wealthier.

PROBLEM: the economy is has slow growth and probably some unemployment

Determinants mentioned in the article:

- **Decrease taxes to increase AD**
- **Improving consumer confidence will increase consumption and increase AD**
- **The Fed is increasing the money supply (MS) which will decrease interest rates which will increase investment (I) and increase AD**
- **A weak dollar will increase exports (X) and increase AD**



If AD increases then real domestic output will increase resulting in economic growth (achieving the potential) and decreasing unemployment.

But a higher price level will create more inflation.

German economy stalls

<http://money.cnn.com/2001/08/23/europe/germany/index.htm>

August 23, 2001: 10:37 a.m. ET

Europe's biggest economy grinds to a halt in Q2; ECB may cut rates

LONDON (CNN) - Confirmation that German economic growth has stalled could give euro-zone monetary chiefs the excuse to cut interest rates next week.

Growth in Europe's biggest economy ground to a halt in the second quarter, official figures from Germany's Federal Statistics Office showed on Thursday, as most economists had predicted.

The numbers reflect output and investment cutbacks by companies suffering from excess stock amid a global economic slowdown. The construction industry came under pressure as building work on factories and offices dwindled.

German Finance Minister Hans Eichel refused to be downcast, however, telling ZDF television there was "no reason for pessimism." Referring to tax cuts that came into force in January, Eichel forecast an upturn in demand later in 2001.

"We see that the inflation rate is going down, so that there is a chance that tax reform with its enormous relief in the second half of the year will begin to work," Eichel said.

But that isn't likely to deliver a revival in the economy until the end of the year, economists warned

PROBLEM: the economy is has slow growth and probably some unemployment

Determinants mentioned in the article:

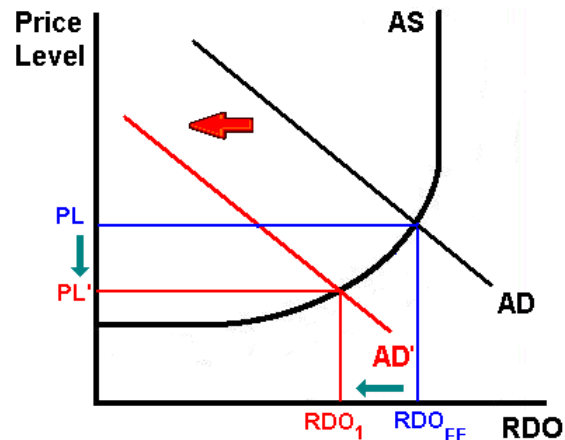
Why did the economy slow? Investment decreased causing AD to decrease.

Result:

lower RDO and therefore higher unemployment and less economic growth.

Also a lower price level indicates less inflation

Graph:



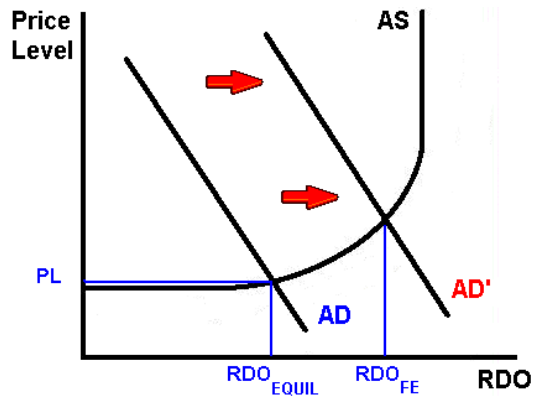
Government reaction:

Monetary chiefs may increase the money supply causing lower interest rates and therefore more investment. This will increase AD.

Also, tax cuts will increase consumption and increase AD

The results of this government action will be an increase in RDO and therefore less unemployment and more economic growth, but an increase in the price level may cause some inflation.

Graph:



The economy's big surprise

Some analysts think 3Q GDP grew at the strongest pace in four years -- but jobs may stay scarce.

October 16, 2003: 5:42 PM EDT

By Mark Gongloff, CNN/Money Staff Writer

<http://money.cnn.com/2003/10/16/news/economy/gdp/index.htm>

NEW YORK (CNN/Money) - Economists have been jacking up their forecasts for third-quarter economic growth, and many now say it may be the strongest number in nearly four years.

The problem is that might not translate into strong jobs growth anytime soon.

Economists, on average, think gross domestic product (GDP) grew at a 5 percent rate in the quarter, according to the latest surveys by Blue Chip Economic Indicators and the *Wall Street Journal*. Such a rate would be pretty decent -- the fastest pace since the first quarter of 2002, in fact.

But recent reports on international trade and consumer spending have many economists looking for something even faster -- say 6 percent, or maybe even 7 percent, strength not seen since GDP grew at a 7.1 percent pace in the fourth quarter of 1999. GDP is the broadest measure of the nation's economy.

"We are looking at a growth rate somewhere in between 6.5 percent and 7 percent at this point," said Oscar Gonzalez, economist at John Hancock Financial Services in Boston. "I think it's really going to be up there."

The Commerce Department's report last week of a surprising August improvement in the international trade balance was the first report to send economists scrambling for their calculators. Since the trade gap subtracts from overall GDP, the surprise narrowing of that gap in August should help third-quarter GDP.

The department helped out again this week, when it revised upward retail sales figures for July and August. Since consumer spending makes up more than two-thirds of total GDP, the revised data had many economists more firmly convinced third-quarter GDP could be big.

"Seven percent is not an unreasonable estimate for GDP growth," said Kevin Logan, chief market economist at Dresdner Kleinwort Wasserstein. "Retail sales were strong, especially with the revisions. Consumer spending possibly grew 12 percent at an annual rate. That's really charging right along."

What is happening?

Economic growth is increasing,

Determinants mentioned that caused this:

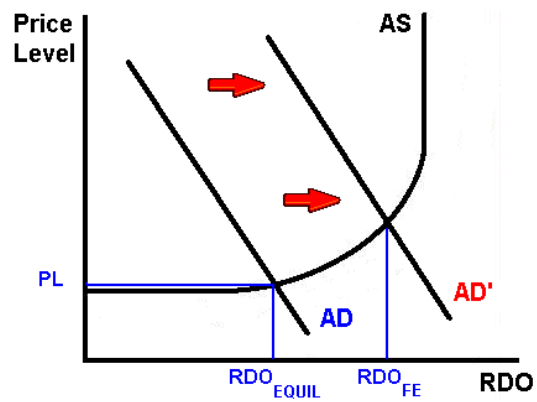
improvement in the international trade balance is an increase in net exports that will increase AD

upward retail sales is an increase in consumption which will increase AD

Graph and results:

The result will be an increase in RDO and therefore less unemployment and more economic growth, but an increase in the price level may cause some inflation.

Graph:



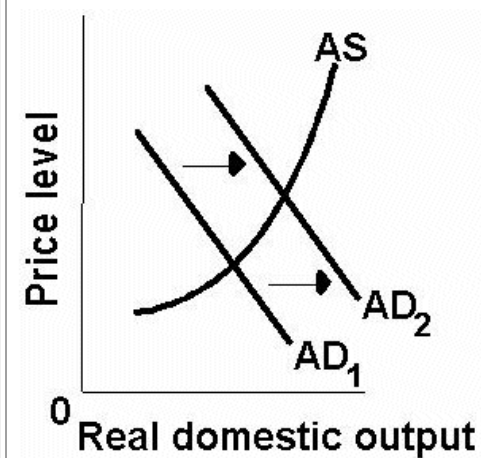
Macroeconomics: AD / AS REVIEW -- ANSWERS

Use the graphs and the other information provided to answer the questions. BEFORE answering the questions DRAW the appropriate shifts on the graphs and use the graphs to FIND the answers.

1. Assume that there is an **increase in government spending**

Which determinant? G

Δ AD or Δ AS? \uparrow AD



What happens to:

Real GDP \uparrow

Unemployment \downarrow

Price Level \uparrow

Inflation \uparrow

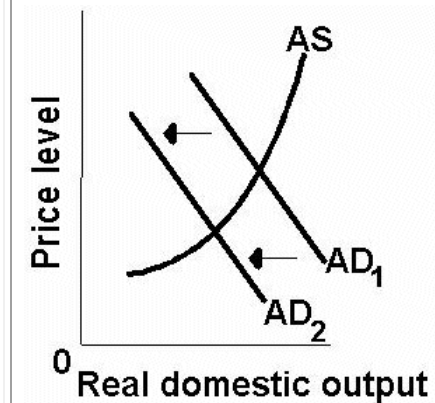
Economic Growth \uparrow

[Δ GDP or Δ potential GDP ?] Δ GDP

2. Assume that there is an **increase in taxes**

Which determinant? TAXES

Δ AD or Δ AS? \downarrow AD



What happens to:

Real GDP \downarrow

Unemployment \uparrow

Price Level \downarrow

Inflation \downarrow (RATCHET EFFECT)

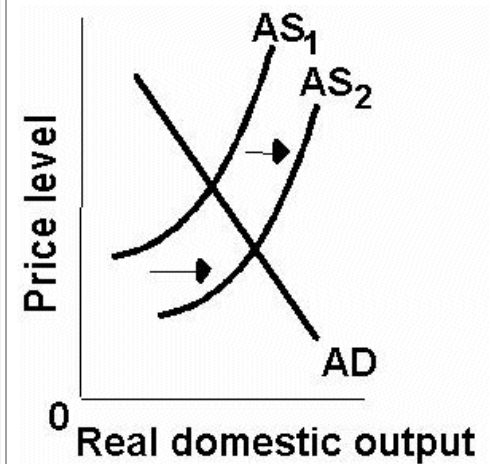
Economic Growth \downarrow

[Δ GDP or Δ potential GDP ?]

3. Assume that there is **reduced gov't red tape**

Which determinant? _RED TAPE_

Δ AD or Δ AS? \uparrow **AS**



What happens to:

Real GDP \uparrow _____

Unemployment \downarrow _____

Price Level \downarrow _____

Inflation \downarrow _____

Economic Growth \uparrow _____

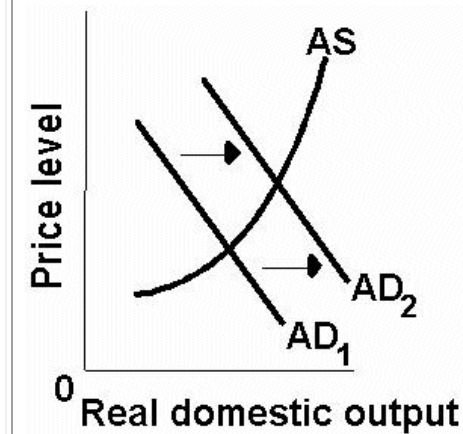
[Δ GDP or Δ potential GDP ?]

Δ **potential GDP**

4. Assume that there is an **increase in business investment**

Which determinant? _____I_____

Δ AD or Δ AS? \uparrow **AD**



What happens to:

Real GDP \uparrow _____

Unemployment \downarrow _____

Price Level \uparrow _____

Inflation \uparrow _____

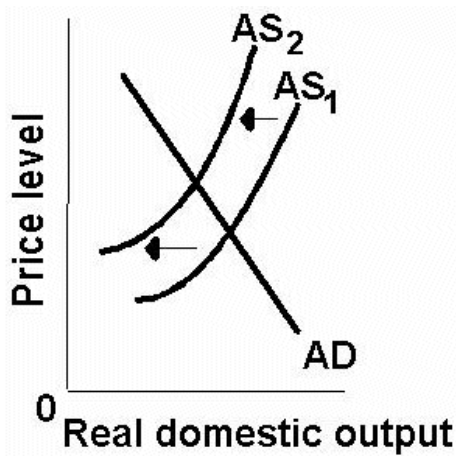
Economic Growth \uparrow _____

[Δ GDP or Δ potential GDP?] Δ **GDP**

5. Assume that there is an **increase in oil prices due to war**

Which determinant? **PRICE OF RESOURCES**

Δ AD or Δ AS? \downarrow AS



What happens to:

Real GDP \downarrow

Unemployment \uparrow

Price Level \uparrow

Inflation \uparrow

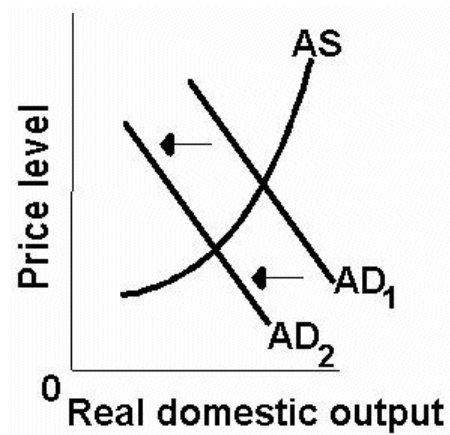
Economic Growth \downarrow

[Δ GDP or Δ potential GDP ?]

6. Assume that **the Fed decreases the money supply**

Which determinant? MS

Δ AD or Δ AS? \downarrow AD



What happens to:

Real GDP \downarrow

Unemployment \uparrow

Price Level \downarrow (RATCHET EFFECT)

Inflation \downarrow

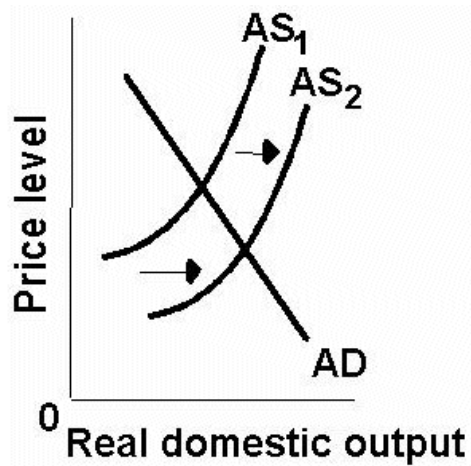
Economic Growth \downarrow

[Δ GDP or Δ potential GDP ?]

7. Assume that there is **new technology that reduces electricity costs**

Which determinant? **PRICE OF RESOURCES**

AD or Δ AS? \uparrow AS



What happens to:

Real GDP \uparrow _____

Unemployment \downarrow _____

Price Level \downarrow _____

Inflation \downarrow _____

Economic Growth \uparrow _____

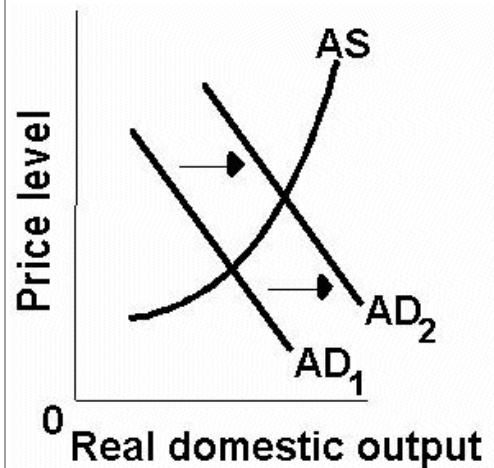
[Δ GDP or Δ potential GDP ?]

Δ potential GDP

8. Assume that **exports increase**

Which determinant? Xn

Δ AD or Δ AS? \uparrow AD



What happens to:

Real GDP \uparrow _____

Unemployment \downarrow _____

Price Level \uparrow _____

Inflation \uparrow _____

Economic Growth \uparrow _____

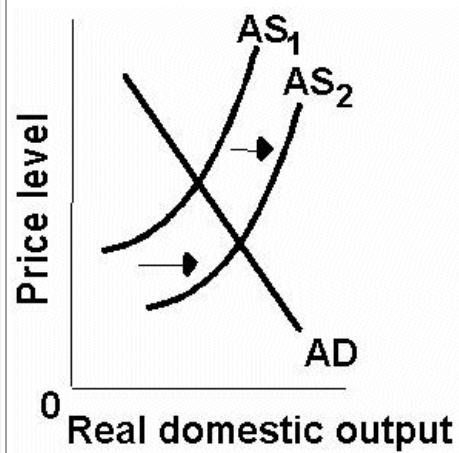
[Δ GDP or Δ potential GDP ?]

Δ GDP

9. Assume that there is a **decrease in marginal tax rates which increases labor productivity**

Which determinant? **_PRODUCTIVITY_**

Δ AD or Δ AS? **\uparrow AS**



What happens to:

Real GDP **\uparrow**

Unemployment **\downarrow**

Price Level **\downarrow**

Inflation **\downarrow**

Economic Growth **\uparrow**

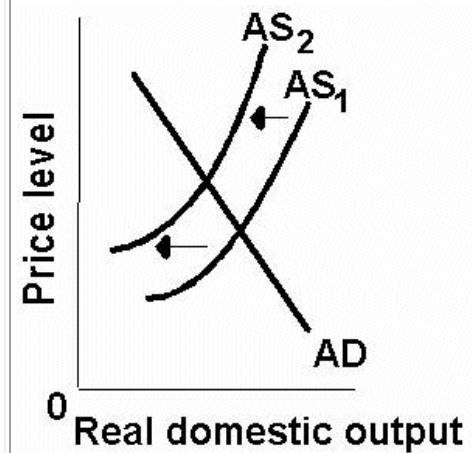
[Δ GDP or Δ potential GDP ?]

Δ potential GDP

10. Assume that there is an **poor harvests world wide which increases resource prices**

Which determinant? **_PRICE OF RESOURCES_**

Δ AD or Δ AS? **\downarrow AS**



What happens to:

Real GDP **\downarrow**

Unemployment **\uparrow**

Price Level **\uparrow**

Inflation **\uparrow**

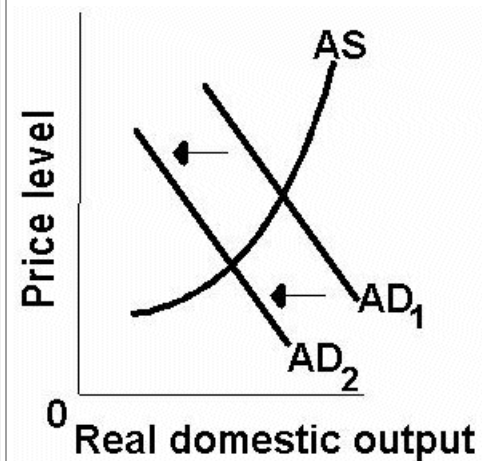
Economic Growth **\downarrow**

[Δ GDP or Δ potential GDP ?]

11. Assume that there is a **rise in the foreign exchange value of the dollar**

Which determinant? **Xn**

Δ AD or Δ AS? **\downarrow AD**



What happens to:

Real GDP **\downarrow**

Unemployment **\uparrow**

Price Level **\downarrow**

Inflation **\downarrow**

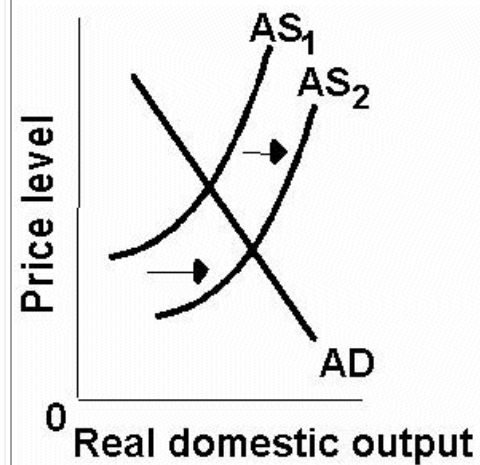
Economic Growth **\downarrow**

[Δ GDP or Δ potential GDP ?]

12. Assume that there is an **increase in labor training and education**

Which determinant? **PRODUCTIVITY**

Δ AD or Δ AS? **\uparrow AS**



What happens to:

Real GDP **\uparrow**

Unemployment **\downarrow**

Price Level **\downarrow**

Inflation **\downarrow**

Economic Growth **\uparrow**

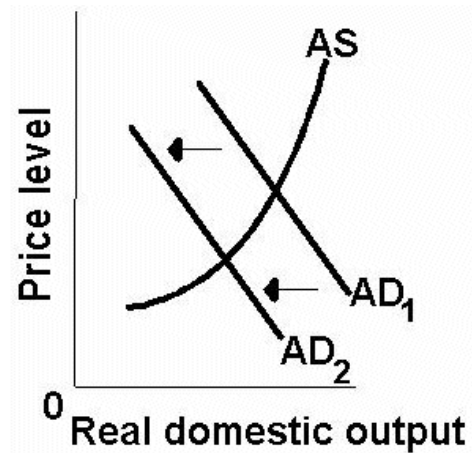
[Δ GDP or Δ potential GDP ?]

Δ potential GDP

13. Assume that there is an **increase in consumer debt**

Which determinant? $\downarrow C$

ΔAD or ΔAS ? $\downarrow AD$



What happens to:

Real GDP \downarrow

Unemployment \uparrow

Price Level \downarrow (RATCHET EFFECT)

Inflation \downarrow

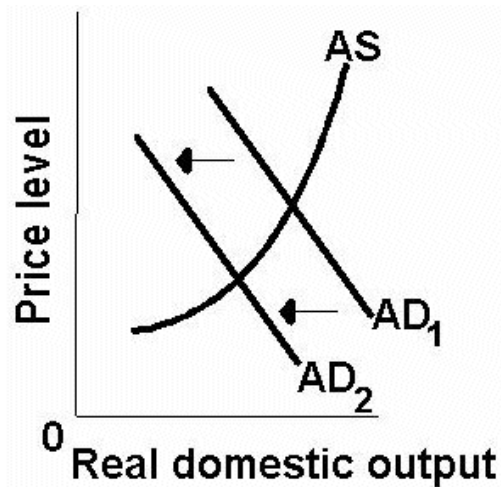
Economic Growth \downarrow

[ΔGDP or Δ potential GDP ?]

14. Assume that there is a **decrease in consumer confidence**

Which determinant? $\downarrow C$

ΔAD or ΔAS ? $\downarrow AD$



What happens to:

Real GDP \downarrow

Unemployment \uparrow

Price Level \downarrow (RATCHET EFFECT)

Inflation \downarrow

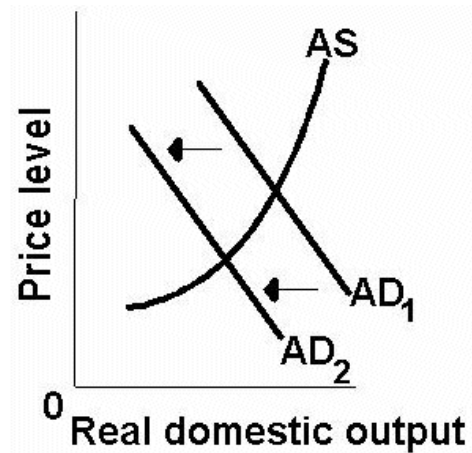
Economic Growth \downarrow

[ΔGDP or Δ potential GDP ?]

15. Assume that there is an **recessions in Europe, Japan, and Canada**

Which determinant? $\downarrow X_n$

ΔAD or ΔAS ? $\downarrow AD$



What happens to:

Real GDP \downarrow

Unemployment \uparrow

Price Level \downarrow (RATCHET EFFECT)

Inflation \downarrow

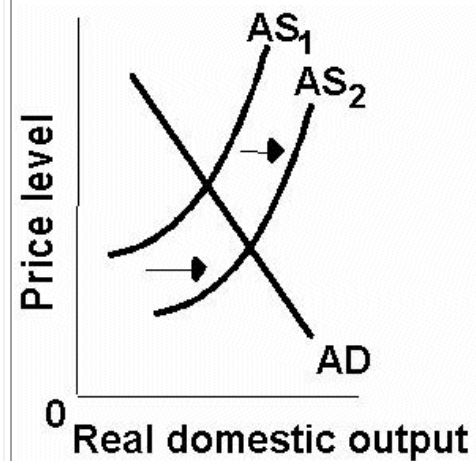
Economic Growth \downarrow

[ΔGDP or Δ potential GDP ?]

16. Assume that there are **discoveries of new oil fields**

Which determinant? **_PRICE OF RES_**

ΔAD or ΔAS ? $\uparrow AS$



What happens to:

Real GDP \uparrow

Unemployment \downarrow

Price Level \downarrow

Inflation \downarrow

Economic Growth \uparrow

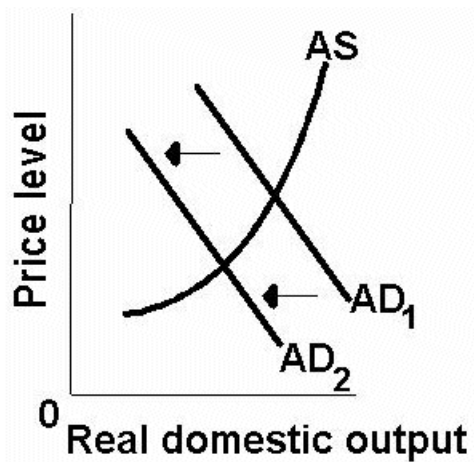
[ΔGDP or Δ potential GDP ?]

Δ potential GDP

17. Assume that there is an **increase in interest rates not caused by price level changes**

Which determinant? $\downarrow MS$

ΔAD or ΔAS ? $\downarrow AD$



What happens to:

Real GDP \downarrow

Unemployment \uparrow

Price Level \downarrow (RATCHET EFFECT)

Inflation \downarrow

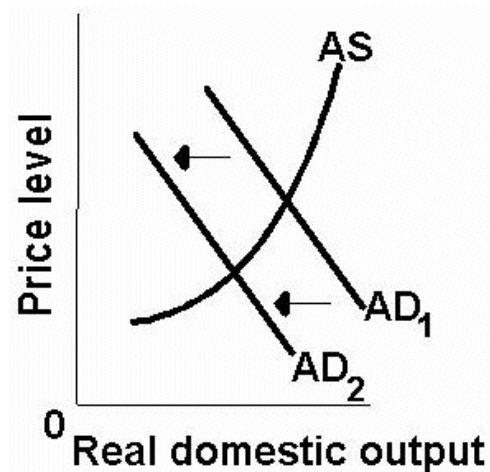
Economic Growth \downarrow

[ΔGDP or Δ potential GDP ?]

18. Assume that there is a **decrease in the amount of money in circulation**

Which determinant? $\downarrow MS$

ΔAD or ΔAS ? $\downarrow AD$



What happens to:

Real GDP \downarrow

Unemployment \uparrow

Price Level \downarrow (RATCHET EFFECT)

Inflation \downarrow

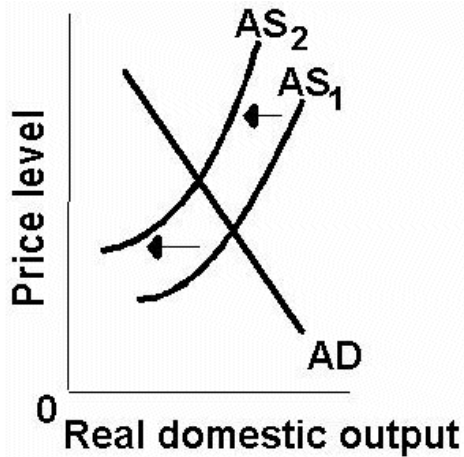
Economic Growth \downarrow

[ΔGDP or Δ potential GDP ?]

19. Assume that there is an **international agreement to make businesses reduce pollution**

Which determinant? **_more government regulation (red tape)_**

Δ AD or Δ AS? **\downarrow AS**



What happens to:

Real GDP **\downarrow**

Unemployment **\uparrow**

Price Level **\uparrow**

Inflation **\uparrow**

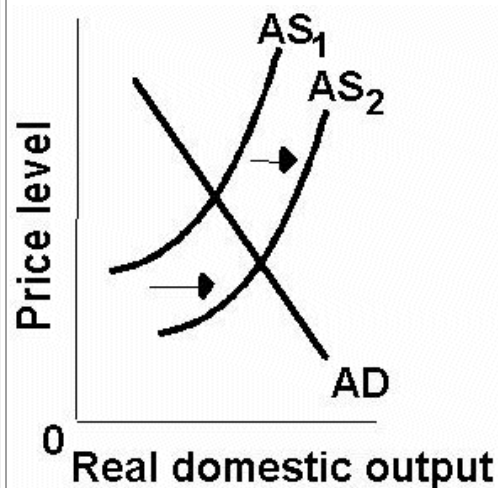
Economic Growth **\downarrow**

[Δ GDP or Δ potential GDP ?]

20. Assume that there is an **more competition due to fewer trade restrictions**

Which determinant? **_increase in productivity_**

Δ AD or Δ AS? **\uparrow AS**



What happens to:

Real GDP **\uparrow**

Unemployment **\downarrow**

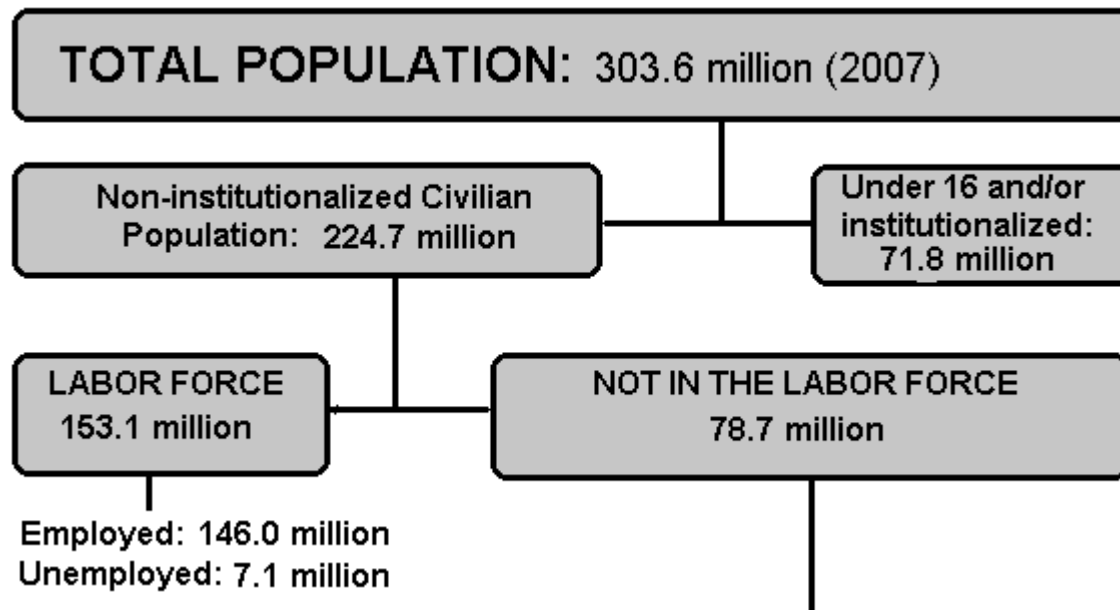
Price Level **\downarrow**

Inflation **\downarrow**

Economic Growth **\uparrow**

[Δ GDP or Δ potential GDP ?]

Δ potential GDP



"Employed" includes:

- part-time (at least 1 hour a week for pay)
- underemployed

Not in the labor force:

- Students - not working or looking
- Retired - not working or looking
- Institutionalized
- Homemakers - "working" and not looking
- Underground economy - working but not counted
- Discouraged workers

In the table below are statistics showing the labor force and total employment during year 1 and year 5. Make the computations necessary to complete the table. (Number of persons is in thousands.)

	<u>Year 1</u>	<u>Year 5</u>
Labor force	95,450	108,250
Employed	90,325	100,830
Unemployed	<u>5125</u>	<u>7420</u>
Unemployment rate	5.37%	6.85%

- (a) How is it possible that *both* employment and unemployment increased?

The labor force increased more than employment increased.

- (b) Would you say that year 5 was a year of full employment?

No, the unemployment rate of 6.8% is greater than the full employment rate of 5–5.5%.

- (c) Why is the task of maintaining full employment over the years more than just a problem of finding jobs for those who happen to be unemployed at any given time?

The number of people looking for work expands.

Use the following data to calculate:

(a) the size of the labor force and

(b) the official unemployment rate.

Total population = **1,500**;

population under age 16 and institutionalized = **360**;

not in labor force = **450**;

unemployed = **69**;

workers with part-time jobs who are looking for full-time jobs = **30**.

$$\text{labor force} = 1500 - (360 + 450) = 690$$

$$\text{UE rate} = 69 / 690 = 10\%$$

What are two criticisms of the unemployment rate? How do these criticisms relate to the overstating or understating of the unemployment rate?

Part-time workers are counted as employed. This will UNDERSTATE the actual unemployment.

Discouraged workers are not included in the labor force. This will UNDERSTATE the actual

QUICK QUIZ - What Is Full Employment?

1. Kevin has lost his job in an automobile plant because of the use of robots for welding on the assembly line. Kevin plans to go to technical school to learn how to repair microcomputers. The type of unemployment Kevin is faced with is:
 - ☐ A. cyclical.
 - ☐ B. frictional.
 - ☒ C. structural.
 - ☐ D. natural.
2. At the full-employment unemployment rate there is only:
 - ☐ A. cyclical and frictional unemployment.
 - ☒ B. frictional and structural unemployment.
 - ☐ C. demand-deficient unemployment.
 - ☐ D. "discouraged workers" unemployment.
3. The full-employment rate of unemployment is also called the:
 - ☐ A. potential rate of unemployment.
 - ☐ B. cyclical rate of unemployment.
 - ☐ C. frictional rate of unemployment.
 - ☒ D. natural rate of unemployment.
4. One reason why economists argue that the full-employment unemployment rate was higher in the 1980s than in the 1960s is that:
 - ☐ A. smaller numbers of women and young workers entered the labor force in the 1980s.
 - ☐ B. larger numbers of white male workers have entered the labor force in the 1980s.
 - ☒ C. unemployment compensation was increased in terms of the number of workers covered and the size of benefits over this time period.
 - ☐ D. substantial decreases occurred in the minimum wage over this time period.

QUICK QUIZ - What Is Unemployment?

1. A nation has a population of 260 million people. Of these, 50 million are retired, in the military, or in institutions. There are 188 million who are employed and 12 million who are unemployed. What is the unemployment rate?
 - ☐ A. 4 percent
 - ☒ B. 6 percent
 - ☐ C. 9 percent
 - ☐ D. 27 percent
2. In calculating the unemployment rate, "discouraged" workers who are not actively seeking employment are:
 - ☒ A. excluded.
 - ☐ B. included.
 - ☐ C. treated the same as part-time workers.
 - ☐ D. used to determine the size of the labor force.
3. In calculating the unemployment rate, part-time workers are:
 - ☐ A. counted as unemployed.
 - ☒ B. counted as employed.
 - ☐ C. used to determine the size of the labor force, but not the unemployment rate.
 - ☐ D. treated the same as "discouraged" workers who are not actively seeking employment.
4. Official unemployment rate statistics may:
 - ☐ A. overstate the amount of unemployment by including part-time workers in the calculations.
 - ☐ B. understate the amount of unemployment by excluding part-time workers in the calculations.
 - ☐ C. overstate the amount of unemployment because of the presence of "discouraged" workers who are not actively seeking employment.
 - ☒ D. understate the amount of unemployment because of the presence of "discouraged" workers who are not actively seeking employment.

ANSWERS:

1. Which of the following are included and which are excluded in calculating this year's GDP? Explain in each instance.

- (a) A monthly scholarship check received by an economics student
- (b) The purchase of a new truck by a trucking company
- (c) Government purchase of missiles from a private business
- (d) The purchase of a used tractor by a farmer
- (e) The value of the purchase of shares of Microsoft by an individual
- (f) Social Security checks received by a retired person
- (g) An increase in business inventories
- (h) The income of a tax accountant working for a business
- (i) Income received from interest on a corporate bond
- (j) The cashing in of a U.S. savings bond

(a) Scholarships are not included in GDP. They are viewed as financial transactions and would be either a public or private transfer payment depending on the source of funds. They are awards for past performance and would not be included in current production. They don't represent income earned by providing a productive resource as defined in the GDP accounts.

(b) The truck is included because it represents investment. It is a final good that was produced in the current year.

(c) The missile purchase is included as part of government spending on goods and services.

(d) The used tractor is not included because it was counted when it was new.

(e) The value of a stock purchase is not included because it is just a swap of paper assets.

(f) A Social Security payment is not included because it is a transfer payment, not payment for current productive services.

(g) An increase in business inventories is included as part of business investment.

(h) The accountant's income is included because it is payment for productive services (accounting).

(i) The income from a corporate bond is included because it is payment for use of capital resources during that year.

(j) Cashing a savings bond is not included because it represents a financial transaction only.

2. GDP is often used as a measure of Economic Well-Being in a country

1. non-market transactions are not included in GDP

Therefore does GDP **UNDERSTATE** or **OVERSTATE** society's actual economic well-being?

2. leisure increases the standard of living but it isn't counted

Therefore does GDP **UNDERSTATE** or **OVERSTATE** society's actual economic well-being?

3. improved product quality often isn't accounted for in GDP

Therefore does GDP **UNDERSTATE** or **OVERSTATE** society's actual economic well-being?

4. GDP does not account for the composition output

Therefore does GDP **UNDERSTATE** or **OVERSTATE** society's actual economic well-being?

GDP overstates society's well-being if "bad" things are produced (switchblades and handguns)

5. GDP does not account for the distribution of output

Therefore does GDP **UNDERSTATE** or **OVERSTATE** society's actual economic well-being?

GDP overstates society's well-being in countries that have a very unequal distribution of income.

6. increases in GDP may harm the environment

Therefore does GDP **UNDERSTATE** or **OVERSTATE** society's actual economic well-being?

7. the underground economy produces goods and services but they are not included in GDP

Therefore does GDP **UNDERSTATE** or **OVERSTATE** society's actual economic well-being?

8. GDP does not account for a possible future decline in output due to resource depletion.

Therefore does GDP **UNDERSTATE** or **OVERSTATE** society's actual economic well-being?

9. Noneconomic Sources of Well-Being like courtesy, crime reduction, etc., are not covered in GDP.

Therefore does GDP **UNDERSTATE** or **OVERSTATE** society's actual economic well-being?

10. We must use per capita GDP to compare the living standards of different countries.

Therefore does GDP **UNDERSTATE** or **OVERSTATE** society's actual economic well-being?

Total GDP figures would **overstate** well-being in countries with large populations (like India) and **understate** well-being in countries with low populations (like Switzerland)

3. Which country has a higher GDP, Switzerland or India? Which has a higher level of economic well-being? Why?

Switzerland, because it has a much higher GDP per capita. Therefore Switzerland probably has a higher standard of living.

Switzerland:

GDP: \$239.3 billion (2003)

Population: 7,450,867 (July 2003)

GDP per capita = GDP/population

GDP per capita: \$32,700

India:

GDP: 1,065,070,607 (July 2003)

Population: \$3.033 trillion (2003)

GDP per capita = GDP/population

GDP per capita: \$2,900

4. Below is a list of domestic output and national income figures for a given year. All figures are in billions. The ensuing questions ask you to determine the major national income measures by both the expenditure and income methods. Answers derived by each approach should be the same.

a. Using the data below, determine GDP and NDP by the expenditure method.

b. Calculate National Income (NI).

Personal consumption expenditures	245
Net foreign factor income earned	4
Transfer payments	12
Rents	14
Consumption of fixed capital = depreciation	27
Social security contributions	20
Interest	13
Proprietors' income	33
Net exports	11
Dividends (part of corporate profits)	16
Compensation of employees	223
Indirect business taxes	18
Undistributed corporate profits (part of profits)	21
Personal taxes	26
Corporate income taxes (part of corporate profits)	19
Corporate profits	56
Government purchases	72
Net private domestic investment	33
Personal saving	20

a. Using the above data, determine GDP and NDP by the expenditure method.

$$\text{GDP} = \$388$$

$$\text{GDP} = C + I_{\text{gross}} + G + X_{\text{net}}$$

$$I_{\text{gross}} = I_{\text{net}} + \text{depreciation} = 33 + 27 = 60$$

$$\text{GDP} = 245 + 60 + 72 + 11 = 388$$

$$\text{NDP} = \$361$$

$$\text{NDP} = C + I_{\text{net}} + G + X_{\text{net}}$$

$$\text{NDP} = 245 + 33 + 72 + 11 = 361$$

or

$$\text{NDP} = \text{GDP} - \text{depreciation}$$

$$\text{NDP} = 388 - 27 = 361$$

b. calculate National Income (NI) by the income method.

$$\text{NI} = \$339$$

$$\text{NI} = \text{wages} + \text{rents} + \text{interest} + \text{profits}$$

$$\text{profits} = \text{corporate profits} + \text{proprietor's income}$$

$$\text{profits} = 56 + 33 = 89$$

$$\text{NI} = 223 + 14 + 13 + 89 = 339$$

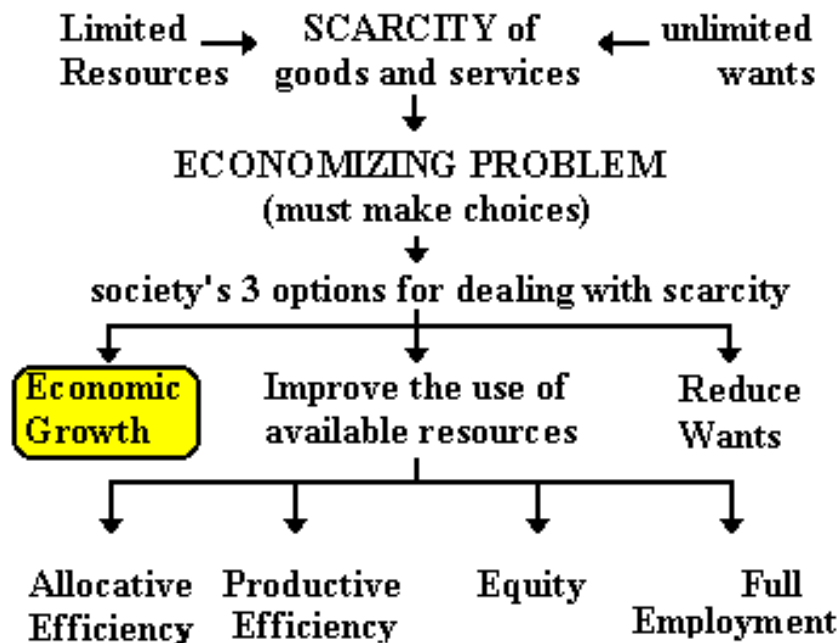
5. The following data show nominal GDP and the appropriate price index for several years.

Compute real GDP for each year. In which year(s) was there a recession (decline in real GDP)? All GDP are in billions.

Year	Nominal GDP	Price level index	Real GDP
1	\$117	120	_____
2	124	104	_____
3	143	85	_____
4	149	96	_____
5	178	112	_____
6	220	143	_____

Year	Nominal GDP	Price level index	Real GDP
1	\$117	120	\$ 98
2	124	104	119
3	143	85	168
4	149	96	155
5	178	112	159
6	220	143	154

1. Use the diagram below to answer this question.



a. Define ECONOMIC GROWTH as shown in the diagram:

This type of economic growth is an increase in the ability to produce goods and services

b. What CAUSES this type of economic growth?

This will occur if society gets:

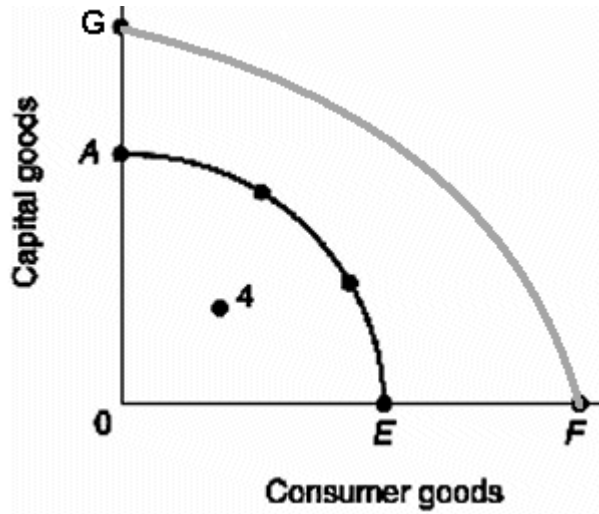
- **more resources**
- **better resources**
- **better technology**

c. Is this type of economic growth an increase in POTENTIAL GDP or ACHIEVING the potential?

This is an increase in the POTENTIAL GDP

2. Use the diagram below to answer the questions.

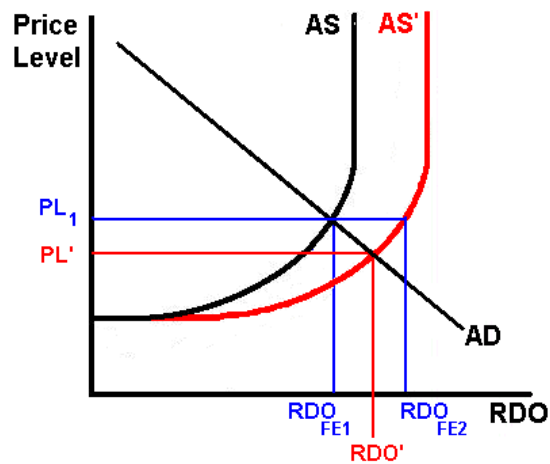
a. If the economy's production possibilities curve is shown by curve AE , then draw in a new curve which indicates positive economic growth according to the 5 Es model.



b. Is this type of economic growth (1) INCREASING the potential GDP or (2) ACHIEVING the potential?

This would be INCREASING the potential.

3. Use the diagram below to answer this question.



a. What would cause the AS curve to shift to the right?

- A decrease in input (resource) prices
- An increase in the productivity of resources
- A change in the legal-institutional environment that encourages business to produce more like a decrease in business taxes or a decrease in business regulation (less red tape)

b. Is this type of economic growth an INCREASE in potential GDP or ACHIEVING the potential?

This would be INCREASING the potential.

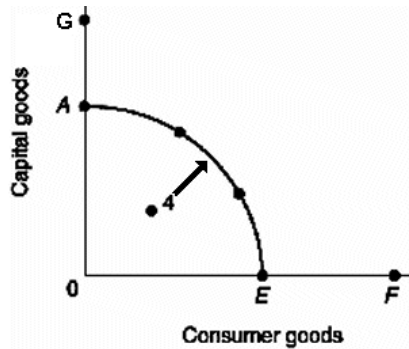
4. Use the diagram below to answer this question.



a. If the economy illustrated by production possibilities curve AE is producing at point 4, what economic problem does this represent for this economy?

At point 4 this economy is producing less than its potential so it must have unemployment or productive inefficiency

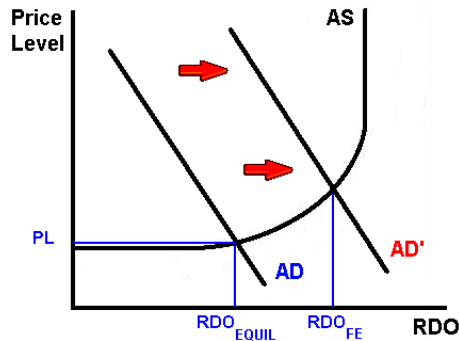
b. Assume that the economy moves from point 4 to a point on the curve. Draw an arrow to show the change.



c. Is this type of economic growth an INCREASE in potential GDP or ACHIEVING the potential?

This would be ACHIEVING the potential.

5. Use the diagram below to answer this question.



a. What would cause the AD curve to increase from AD to AD' as shown in the graph above?

An increase in AD would be caused by:

- **An increase in Consumption (C) or a decrease in Saving (S) will increase AD**
 - **If consumer wealth increases consumption can**
 - **If consumers expect higher incomes in the future it will increase consumption today**
 - **A decrease in taxes will increase consumption**
 - **If consumer debt is low consumption can increase**
- **An increase in Investment (I) will increase AD**
 - **If money supply increase (MS) it will cause Interest rates to fall and investment will increase**
 - **If business expect profits to increase in the future it will increase investment today**
 - **If business taxes decrease profit expectations on investment projects will increase and investment will increase technology**
 - **If businesses have little excess capacity investment should increase**
- **An increase in government purchases (G) will increase AD**
- **An increase in net exports (Xn) will increase AD**
 - **If incomes in foreign countries increase it will increase our export**
 - **If the value of the dollar depreciates (like a “weak dollar”) then foreigners will buy more of our products and we will buy less of theirs and our net exports will increase**

b. Is this type of economic growth an INCREASE in potential GDP or ACHIEVING the potential?

This would be ACHIEVING the potential.

6. What are the two (three) definitions of economic growth used in class? State which definition is an INCREASE in potential GDP and which is ACHIEVING the potential?

1. Increasing the ABILITY to produce = increasing our potential

2. Increasing Real GDP = producing more = achieving our potential

3. Increasing GDP per capita = increasing output PER PERSON

7. Suppose an economy's real GDP is \$125 billion in year one and \$130 billion in year two. What is the growth rate of its GDP?

EG rate = (GDP this year – GDP last year) / GDP last year times 100

EG rate = $(130 - 125) / 125 = .04 \times 100 = 4\%$ growth rate

From the textbook: Characteristics of Developing countries (DVCs / LDCs):

Role of agriculture: important in LDCs

Literacy rates: low in LDCs

Unemployment: high in LDCs

population growth rate: high in LDCs

Type of exports: in LDCs most exports are raw materials, natural resources, and agricultural

Amount of capital equipment: little in LDCs

production technologies: low tech in LDCs

productivity: low in LDCs

Mark's List: Characteristics of Less Developed Countries (LDCs):

1. GDP per capita: low in LDCs
2. Population Growth rates: high in LDCs
3. Occupational Structure of the Labor Force: high percent in primary industries (agriculture) in LDCs
4. Urbanization: low in LDCs
5. Consumption per capita: low in LDCs
6. Infrastructure: poorly developed in LDCs
7. Social Conditions
 - literacy rates: low in LDCs
 - life expectancy: low in LDCs
 - health care: lacking in LDCs
 - caloric intake: low in LDCs
 - infant mortality: high in LDCs

The absolute income gap between rich and poor nations has been widening.

For example,

LDC: if per capita income is \$400 per and there is a 2% growth rate, by how much will income increase?

$$\text{\$400} \times 0.2 = \text{\$80}$$

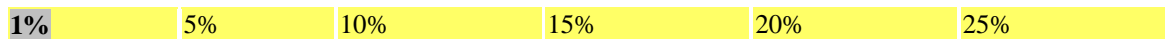
IAC: Where per capita income is \$20,000 per and there is a 2% growth rate, by how much will income increase?

$$\text{\$20,000} \times 0.2 = \text{\$4000}$$

So, if a rich country and a poor country are growing at the same rate the absolute gap between the rich and poor gets wider

AID QUIZ

What fraction of the U. S. federal government's budget is spent on FOREIGN AID?

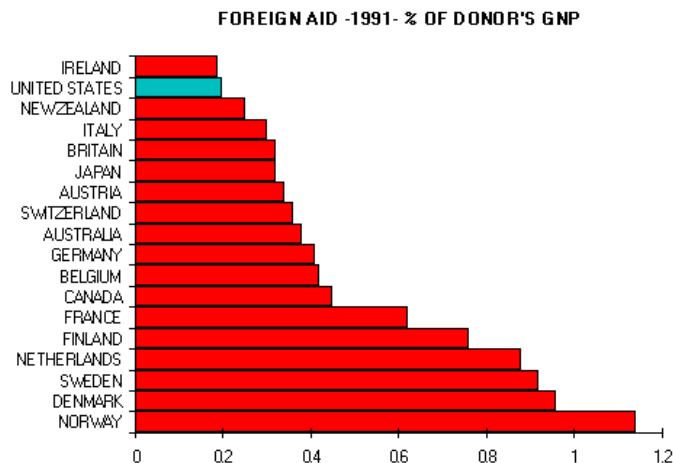


The figure is about 1 percent of the Federal budget. Total foreign aid -- military and non-military combined -- is now about \$13 billion a year. About half that, devoted largely to human-development programs relating to health, family planning and economic self-help, is administered by the United States Agency for International Development.

HOW MUCH AID DO WE GIVE as a % of our GDP (income)?



In terms of absolute amounts, the United States is second only to Japan as a leading provider of development assistance to the LDCs (DVCs). But many other industrialized nations contribute a larger percentage of their incomes to foreign aid than does the United States where about 0.18 % of the GDP is devoted to foreign aid.



REVIEW: Indicators Of The Level Of Economic Development

NOTE: Do not confuse “indicator” with “cause”

<u>INDICATOR</u>	<u>IAC / MDC</u>	<u>DVC /LDC</u>
Role of agriculture	less	more
Level of industrialization:	high	low
Literacy rates:	high	low
Unemployment:	low	high
Population growth rate:	low	high
Type of exports:	manufactured	raw materials
Amount of capital equipment:	high	low
Production technologies:	high tech	low tech
Productivity:	high	low
GDP (income) per capita:	high	low
Structure of the Labor Force:	tertiary activities	primary and secondary activities
Urbanization:	high	low
Consumption per capita:	high	low
Infrastructure:	well developed	poorly developed
literacy rates:	high	low
life expectancy:	high	low
caloric intake:	high	low
infant mortality:	low	high
birth rates:	low	high