

Economic content of macroeconomic indicators

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Topics:


1. What Are Economic Indicators?
2. Interpreting Economic Indicators
3. Economic Indicators and Measurements


References:

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- , Mercantilist and Postdevelopmentalist,
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1. What Are Economic Indicators?

- An economic indicator is a metric used to assess, measure, and evaluate the overall state of health of the macroeconomy. Economic indicators are often collected by a government agency or private business intelligence organization in the form of a census or survey, which is then analyzed further to generate an economic indicator.

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- Leading indicators, such as the yield curve, consumer durables, net business formations, and share prices, are used to predict the future movements of an economy. The numbers or data on these financial guideposts will move or change before the economy, thus their category's name. Consideration of the information from these indicators must be taken with a grain of salt, as they can be incorrect.

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- Coincident indicators, which include such things as GDP, employment levels and retail sales, are seen with the occurrence of specific economic activities. This class of metrics shows the activity of a particular area or region. Many policymakers and economist follow this real-time data.
 - Lagging indicators, such as gross national product (GNP), CPI, unemployment rates and interest rates, are only seen after a specific economic activity occurs. As the name implies, these data sets show information after the event has happened. This trailing indicator is a technical indicator that comes after large economic shifts.


- Economic indicators can be divided into categories or groups. Most of these economic indicators have a specific schedule for release, allowing investors to prepare for and plan on seeing certain information at certain times of the month and year.

- Financial analysts and investors keep track of macroeconomic indicators because the economy is a source of systematic risk that affects growth or decline all industries and companies.
- **Which is the Primary Economic Indicator?**
- **Gross Domestic Product (GDP)**
- The GDP is widely accepted as the primary indicator of macroeconomic performance. The GDP, as an absolute value, shows the overall size of an economy while changes in the GDP, often measured as real growth in GDP, shows the overall health of the economy.

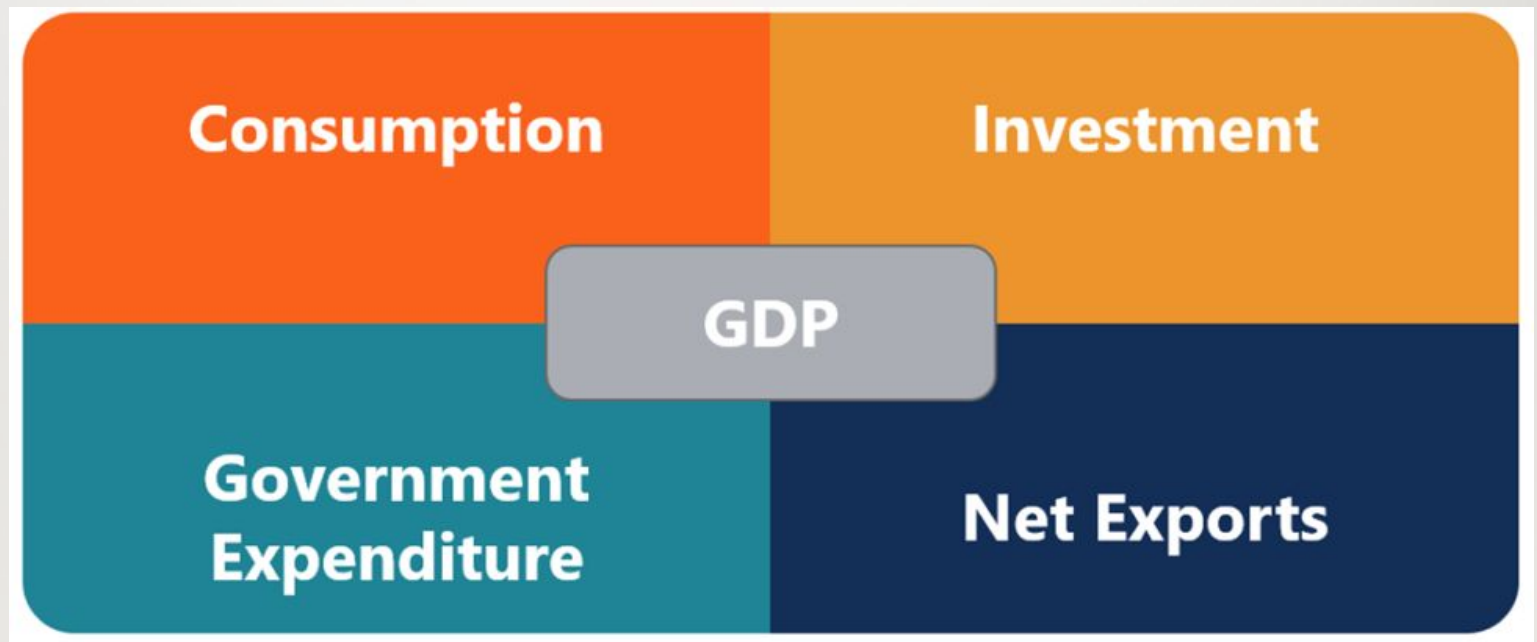
KEY TAKEAWAYS

- An economic indicator is a piece of economic data, usually of macroeconomic scale, that is used by analysts to interpret current or future investment possibilities.
- Indicators also help to judge the overall health of an economy.
- Economic indicators can be anything the investor chooses, but specific pieces of data released by the government and non-profit organizations have become widely followed.
- Indicators can be leading—before events, lagging—after events, or coincident—real-time data sets.

- Interpreting Economic Indicators
- An economic indicator is only useful if one interprets it correctly. History has shown strong correlations between economic growth, as measured by GDP, and corporate profit growth. However, determining whether a specific company may grow its earnings based on one indicator of GDP is nearly impossible.

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- Indicators provide signs along the road, but the best investors utilize many economic indicators, combining them to glean insight into patterns and verifications within multiple sets of data.
 - There is no denying the objective importance of interest rates, gross domestic product, and existing home sales or other indexes. Why objectively important? Because what you're really measuring is the cost of money, spending, investment, and the activity level of a major portion of the overall economy.

The GDP consists of four components:



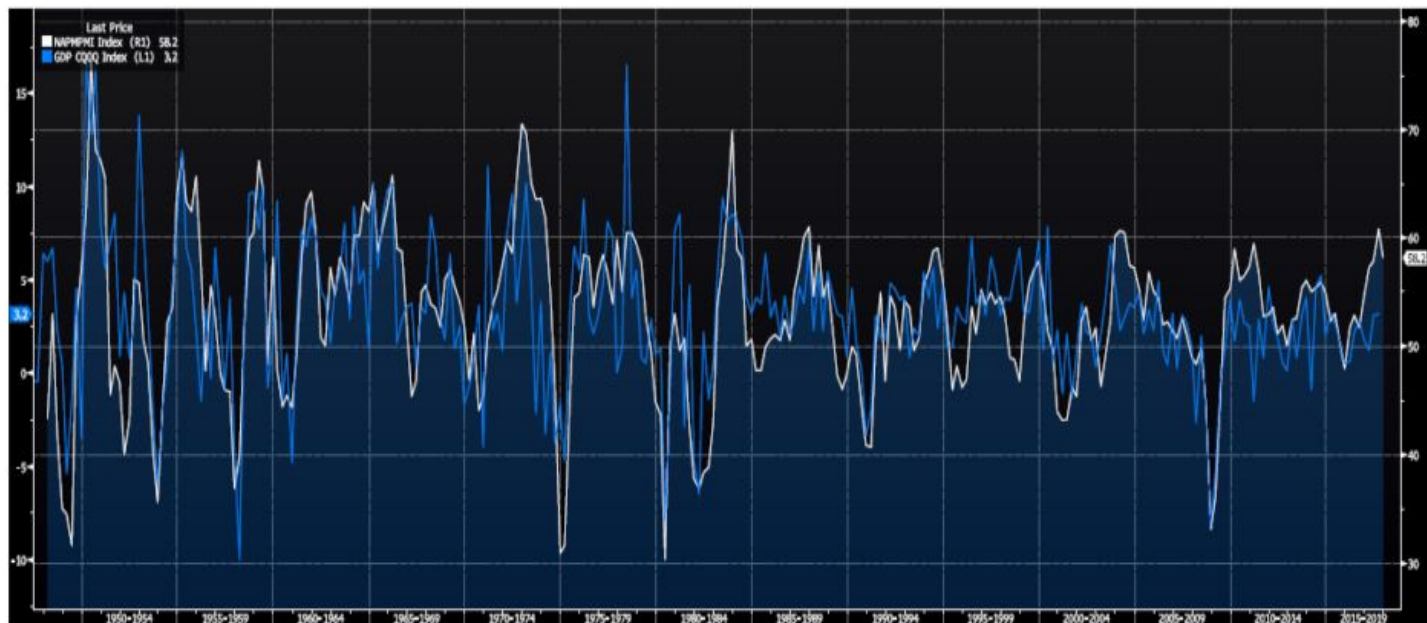
- As of this writing, the only country to not use GDP as an economic measure is the Kingdom of Bhutan, which uses the Gross National Happiness index as an alternative.
- However, for all its uses, GDP is not a perfect measure of the economy. It is because GDP can vary by political definition even if there is no change in the economy. For instance, the EU imposed a rule on indebtedness that a country should maintain a deficit within 3% of its GDP. By estimating and including the black market in its GDP calculations, Italy boosted its economy by 1.3% in its first year. It gave the Italian government more freedom in budgetary spending.


- Another issue relating to reliance on GDP as an economic indicator is that it is released every three months. In order to make timely decisions, alternative economic indicators that are released more frequently are used. The indicators, which are selected based on a high predictive value in relation to GDP, are used to forecast the overall state of the economy.

- **What are Other Economic Indicators?**
- **Purchasing Manager's Index (PMI)**
- In the US, one of the most followed economic indicators is the Institute of Supply Management's Purchasing Manager's Index or PMI for short. The ISM's PMI is a survey sent to businesses that span across all North American Industry Classification System (NAICS) categories to collect information on production levels, new orders, inventories, deliveries, backlog, and employment. The information collected can be used to forecast the overall business confidence within the economy and helps determine if it shows an expansionary or contractionary outlook.

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- One of the reasons why PMI is one of the most followed economic indicators is because of its strong correlation with GDP while being one of the first economic indicators to be released monthly. The component GDP that the PMI most closely relates to is the Investment component.

NAPMPMI Index (ISM Manufacturing PMI SA)
 GDP CQOQ Index (GDP US Chained 2009 Dollars QoQ SAAR)



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- **Consumer Purchasing Index (CPI)**
 - While not directly related to the GDP, inflation is a key indicator for financial analysts, because of its significant effect on company and asset performance. Inflation erodes the nominal value of an asset, which leads to a higher discount rate. Based on the fundamental principle of the Time Value of Money (TVM), it means that future cash flows are worth less in present terms.

- To measure inflation, one of the most followed indicators is the CPI. The measure of CPI is the change of prices of a basket of goods, relative to a base year. The formula is as follows:

$$\text{CPI} = \frac{\text{Basket Price}_T}{\text{Basket Price}_0} \times 100$$

- A basket is aggregated by the most consumed consumer goods or services. The price of the basket is then measured against the same basket in the base year. CPI includes several variants.
- Core CPI is the CPI excluding prices from energy and food-related products. It is because energy and commodity food markets experience high volatility in prices. Removing the two items provides a more stable measure of CPI.

- **List of Economic Indicators**


(Here is a list of the most common leading and lagging economic indicators):

- **Leading Indicators**

- Stock Market Performance
- Retail Sales Figures
- Building Permits and Housing Starts
- Level of Manufacturing Activity
- Inventory Balances

- **Lagging Indicators**

- GDP Growth
- Income and Wage Growth/Decline
- Unemployment Rate
- CPI (Inflation)
- Interest Rates (rising/falling)
- Corporate Profits

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- **Video Explanation of Economic Indicators**
 - Watch this short video to quickly understand the main concepts covered in this guide, including what economic indicators are, primary and other economic indicators, and the leading and lagging indicators.



Class Confession

- We the Senior Class of 2017 will complete ALL of our assignments to the best of our abilities and behave appropriately in class.
- We will respect all faculty, staff, substitutes, classmates, especially Mr. Wilcox.
- We will graduate on time May 19, 2017 and become productive citizens in society.

Scaffold understanding of the standard(s) and/or element(s). *Paraphrase the standard(s) and/or element(s). Rewrite the standard including synonyms or brief definitions in parentheses and in a different color following the key terms found in step 1.*

•SSEMA1b

- The student will illustrate (**draw**) the means by which economic activity is measured (**dignified**).
b. Define GDP (**Gross Domestic Product**), as the sum of Consumer Spending, Investment, Government Spending, and Net Exports (output expenditure model).
- <https://www.usdebtclock.org/world-debt-clock.html>



US Debt Clock.org



Get the iPhone App



USA

POPULATION 330,049,019

NATIONAL DEBT

\$23,070,429,857,878

GDP•GROSS DOMESTIC PRODUCT

\$21,635,663,553,087

PUBLIC DEBT TO GDP RATIO

66.25%

EXTERNAL DEBT TO GDP RATIO

85.81%



CHINA

POPULATION 1,410,126,950

NATIONAL DEBT

\$9,788,880,891,316

GDP•GROSS DOMESTIC PRODUCT

\$15,322,810,541,228

PUBLIC DEBT TO GDP RATIO

63.88%

EXTERNAL DEBT TO GDP RATIO

12.44%



JAPAN

POPULATION 126,380,373

NATIONAL DEBT

\$12,156,491,134,904

GDP•GROSS DOMESTIC PRODUCT

\$4,590,386,181,237

PUBLIC DEBT TO GDP RATIO

264.83%

EXTERNAL DEBT TO GDP RATIO

109.13%



GERMANY

POPULATION 80,319,752

NATIONAL DEBT

\$2,257,505,021,290

GDP•GROSS DOMESTIC PRODUCT

\$3,846,335,226,769

PUBLIC DEBT TO GDP RATIO

58.70%

EXTERNAL DEBT TO GDP RATIO

147.08%



U K

POPULATION 67,094,683

NATIONAL DEBT

\$3,609,133,786,103

GDP•GROSS DOMESTIC PRODUCT

\$3,616,512,226,502

PUBLIC DEBT TO GDP RATIO

99.80%

EXTERNAL DEBT TO GDP RATIO

183.49%



FRANCE

POPULATION 68,240,640

NATIONAL DEBT

\$3,038,717,224,823

GDP•GROSS DOMESTIC PRODUCT

\$2,801,297,681,371

PUBLIC DEBT TO GDP RATIO

108.48%

EXTERNAL DEBT TO GDP RATIO

202.77%



INDIA

POPULATION 1,424,466,848

NATIONAL DEBT

\$2,958,377,495,944

GDP•GROSS DOMESTIC PRODUCT

\$3,131,764,317,032

PUBLIC DEBT TO GDP RATIO

94.46%

EXTERNAL DEBT TO GDP RATIO

20.20%



ITALY

POPULATION 60,779,380

NATIONAL DEBT

\$2,949,541,625,769

GDP•GROSS DOMESTIC PRODUCT

\$2,061,171,636,106

PUBLIC DEBT TO GDP RATIO

143.10%

EXTERNAL DEBT TO GDP RATIO

139.01%



BRAZIL

POPULATION 214,327,842

NATIONAL DEBT

\$2,180,744,057,838

GDP•GROSS DOMESTIC PRODUCT

\$1,953,262,817,518

PUBLIC DEBT TO GDP RATIO

111.65%

EXTERNAL DEBT TO GDP RATIO

27.87%



CANADA

POPULATION 37,751,714

NATIONAL DEBT

\$1,820,176,022,916

GDP•GROSS DOMESTIC PRODUCT

\$1,860,230,636,017

PUBLIC DEBT TO GDP RATIO

97.85%

EXTERNAL DEBT TO GDP RATIO

95.48%



ARGENTINA

NATIONAL DEBT

\$424,274,948,343

GDP•GROSS DOMESTIC PRODUCT







\$617,037,545,398














PUBLIC DEBT TO GDP RATIO

68.76%

EXTERNAL DEBT TO GDP RATIO

46.46%

	ARGENTINA POPULATION 45,375,619	NATIONAL DEBT \$424,274,980,482	GDP•GROSS DOMESTIC PRODUCT \$617,037,564,349	PUBLIC DEBT TO GDP RATIO 68.76%	EXTERNAL DEBT TO GDP RATIO 46.46%
	AUSTRALIA POPULATION 25,475,808	NATIONAL DEBT \$668,557,312,877	GDP•GROSS DOMESTIC PRODUCT \$1,442,163,673,234	PUBLIC DEBT TO GDP RATIO 46.36%	EXTERNAL DEBT TO GDP RATIO 152.47%
	BELGIUM POPULATION 11,042,063	NATIONAL DEBT \$617,544,012,835	GDP•GROSS DOMESTIC PRODUCT \$531,053,663,357	PUBLIC DEBT TO GDP RATIO 116.29%	EXTERNAL DEBT TO GDP RATIO 277.65%
	GREECE POPULATION 10,763,122	NATIONAL DEBT \$451,209,452,644	GDP•GROSS DOMESTIC PRODUCT \$222,029,514,845	PUBLIC DEBT TO GDP RATIO 203.22%	EXTERNAL DEBT TO GDP RATIO 278.33%
	INDONESIA POPULATION 273,028,863	NATIONAL DEBT \$400,992,619,428	GDP•GROSS DOMESTIC PRODUCT \$1,103,220,019,763	PUBLIC DEBT TO GDP RATIO 36.35%	EXTERNAL DEBT TO GDP RATIO 34.26%
	IRELAND POPULATION 4,884,217	NATIONAL DEBT \$177,086,012,841	GDP•GROSS DOMESTIC PRODUCT \$280,032,198,013	PUBLIC DEBT TO GDP RATIO 63.24%	EXTERNAL DEBT TO GDP RATIO 1006.16%
	KOREA POPULATION 52,227,527	NATIONAL DEBT \$807,894,075,555	GDP•GROSS DOMESTIC PRODUCT \$1,763,305,881,127	PUBLIC DEBT TO GDP RATIO 45.82%	EXTERNAL DEBT TO GDP RATIO 21.87%
	MEXICO POPULATION 133,659,908	NATIONAL DEBT \$796,137,938,653	GDP•GROSS DOMESTIC PRODUCT \$1,405,220,019,758	PUBLIC DEBT TO GDP RATIO 56.66%	EXTERNAL DEBT TO GDP RATIO 30.54%
	NETHERLANDS POPULATION 17,032,589	NATIONAL DEBT \$447,766,298,624	GDP•GROSS DOMESTIC PRODUCT \$893,101,960,378	PUBLIC DEBT TO GDP RATIO 50.14%	EXTERNAL DEBT TO GDP RATIO 457.47%
	NIGERIA POPULATION 205,451,206	NATIONAL DEBT \$176,861,704,019	GDP•GROSS DOMESTIC PRODUCT \$565,083,178,203	PUBLIC DEBT TO GDP RATIO 31.30%	EXTERNAL DEBT TO GDP RATIO 9.68%
	NORWAY POPULATION 5,297,325	NATIONAL DEBT \$184,612,621,658	GDP•GROSS DOMESTIC PRODUCT \$453,045,613,853	PUBLIC DEBT TO GDP RATIO 40.75%	EXTERNAL DEBT TO GDP RATIO 40.74%
	POLAND POPULATION 36,763,049	NATIONAL DEBT \$310,658,501,322	GDP•GROSS DOMESTIC PRODUCT \$617,107,326,714	PUBLIC DEBT TO GDP RATIO 50.34%	EXTERNAL DEBT TO GDP RATIO 29.97%
	PORTUGAL POPULATION 10 298 973	NATIONAL DEBT \$262,972,532,289	GDP•GROSS DOMESTIC PRODUCT \$222,707,244,553	PUBLIC DEBT TO GDP RATIO 118.08%	EXTERNAL DEBT TO GDP RATIO 204.63%

 MEXICO POPULATION 133,659,911	NATIONAL DEBT \$796,137,960,065	GDP • GROSS DOMESTIC PRODUCT \$1,405,220,173,084	PUBLIC DEBT TO GDP RATIO 56.66%	EXTERNAL DEBT TO GDP RATIO 30.54%
 NETHERLANDS POPULATION 17,032,589	NATIONAL DEBT \$447,766,262,032	GDP • GROSS DOMESTIC PRODUCT \$893,102,031,430	PUBLIC DEBT TO GDP RATIO 50.14%	EXTERNAL DEBT TO GDP RATIO 457.47%
 NIGERIA POPULATION 205,451,216	NATIONAL DEBT \$176,861,738,622	GDP • GROSS DOMESTIC PRODUCT \$565,083,236,167	PUBLIC DEBT TO GDP RATIO 31.30%	EXTERNAL DEBT TO GDP RATIO 9.68%
 NORWAY POPULATION 5,297,325	NATIONAL DEBT \$184,612,634,075	GDP • GROSS DOMESTIC PRODUCT \$453,045,645,640	PUBLIC DEBT TO GDP RATIO 40.75%	EXTERNAL DEBT TO GDP RATIO 40.74%
 POLAND POPULATION 36,763,048	NATIONAL DEBT \$310,658,500,327	GDP • GROSS DOMESTIC PRODUCT \$617,107,401,506	PUBLIC DEBT TO GDP RATIO 50.34%	EXTERNAL DEBT TO GDP RATIO 29.97%
 PORTUGAL POPULATION 10,298,973	NATIONAL DEBT \$262,972,521,358	GDP • GROSS DOMESTIC PRODUCT \$222,707,249,602	PUBLIC DEBT TO GDP RATIO 118.08%	EXTERNAL DEBT TO GDP RATIO 204.63%
 RUSSIA POPULATION 137,535,856	NATIONAL DEBT \$299,476,621,096	GDP • GROSS DOMESTIC PRODUCT \$1,613,445,716,243	PUBLIC DEBT TO GDP RATIO 18.56%	EXTERNAL DEBT TO GDP RATIO 52.18%
 SAUDI ARABIA POPULATION 33,501,825	NATIONAL DEBT \$251,475,798,198	GDP • GROSS DOMESTIC PRODUCT \$799,134,251,880	PUBLIC DEBT TO GDP RATIO 31.47%	EXTERNAL DEBT TO GDP RATIO 31.54%
 SPAIN POPULATION 46,977,360	NATIONAL DEBT \$1,592,975,318,273	GDP • GROSS DOMESTIC PRODUCT \$1,427,147,677,068	PUBLIC DEBT TO GDP RATIO 111.62%	EXTERNAL DEBT TO GDP RATIO 173.34%
 SWEDEN POPULATION 10,154,623	NATIONAL DEBT \$230,610,295,774	GDP • GROSS DOMESTIC PRODUCT \$562,056,385,790	PUBLIC DEBT TO GDP RATIO 41.03%	EXTERNAL DEBT TO GDP RATIO 172.45%
 SWITZERLAND POPULATION 8,588,813	NATIONAL DEBT \$334,870,245,117	GDP • GROSS DOMESTIC PRODUCT \$746,051,015,715	PUBLIC DEBT TO GDP RATIO 44.89%	EXTERNAL DEBT TO GDP RATIO 223.43%
 TAIWAN POPULATION 25,495,565	NATIONAL DEBT \$240,018,390,628	GDP • GROSS DOMESTIC PRODUCT \$618,072,496,016	PUBLIC DEBT TO GDP RATIO 38.83%	EXTERNAL DEBT TO GDP RATIO 33.84%
 TURKEY POPULATION 83,556,201	NATIONAL DEBT \$279,423,393,138	GDP • GROSS DOMESTIC PRODUCT \$851,126,196,769	PUBLIC DEBT TO GDP RATIO 32.83%	EXTERNAL DEBT TO GDP RATIO 68.92%

2.Economic Indicators and Measurements

GDP

THE STUDENTS WILL ILLUSTRATE THE MEANS BY WHICH ECONOMIC ACTIVITY IS MEASURED. DEFINE GDP (GROSS DOMESTIC PRODUCT) , AS THE SUM OF CONSUMER SPENDING, INVESTMENT, GOVERNMENT SPENDING, AND NET EXPORTS (OUTPUT EXPENDITURE MODEL).

Key Economic Indicators

1. Gross Domestic Product (GDP)
2. The Business Cycle
3. The Unemployment Rate
4. Inflation
5. Consumer Price Index (CPI)



Economic Indicators and Measurements

- KEY CONCEPT
 - National income accounting uses statistical measures of income, spending, and output to help people understand what is happening to a country's economy.
- WHY THE CONCEPT MATTERS
 - The economic decisions of millions of individuals determine the fate of the nation's economy. Understanding the country's economy will help you make better personal economic decisions.

What is GDP?

- **Microeconomics** examines actions of individuals and single markets
- **Macroeconomics** examines the economy as a whole and how healthy the economy is.
- Macroeconomists use **national income accounting**:
 - statistical measures that track nation's income, spending, output
 - **Gross Domestic Product** (GDP) is most important investors measure

What is GDP?

- The Components of GDP

- **GDP**

- market value of **final goods & services** produced in a set time period (usually quarterly)

- To be included in **GDP**, product must fulfill three requirements:
 - 1. must be **final**, not intermediate product
 - 2. must be produced during the **time period**, regardless of when sold
 - 3. must be produced within **nation's borders**

What is GDP?

- Calculating GDP

- **Output Expenditures Model**

- often used to measure GDP; tracks **four** sectors
 - **1. Consumer Spending**— **household** spending on durable, nondurable goods, services
 - **2. Investment**— measures what **businesses** spend on capital goods, inventory
 - **3. Government Spending**— federal, state, local; not transfer payments
 - **4. Net Exports**— value of **exports** minus value of **imports**

*Subtracting imports because it takes money out of our country

- $GDP = C + I + G + X - M$

- (C) Consumer Spending +
- (I) Gross Domestic Investment +
 - (G) Government Purchasing of Goods & Services +
- (X) Exports – (M) Imports (X-M)
 - *Subtracting imports because it takes money out of our country.

What is GDP?

- Two Types of GDP
 - When GDP grows, economy creates more jobs and business opportunities
- 1. Nominal GDP—price levels for the year in which GDP is measured
 - states GDP in terms of current value of goods and services
- 2. Real GDP—GDP adjusted for changes in prices
 - estimate of GDP if prices were to remain constant

What GDP Does Not Measure?

- KEY CONCEPTS

- GDP does not measure all output, such as
 1. Nonmarket activities—free services with potential economic value
 2. Underground economy—unreported market activities
- GDP also does not measure:
 3. Quality of life- has standard of living

What GDP Does Not Measure?

- Nonmarket Activities
 - Some productive activities outside of economic markets and do not involve money.
 - Examples: performing own home repairs, volunteer work
 - Biggest nonmarket activity is homemaking

What GDP Does Not Measure

- Underground Economy
 - Illegal activities are unreported
 - when goods are rationed or restricted, black market arises
 - Legal activities paid for in cash not always declared
 - Estimates suggest underground economy 8 to 10 percent of U.S. GDP

What GDP Does Not Measure?

- Quality of Life

- Countries with high GDPs have high living standards
- GDP does not show how goods and services are distributed
- GDP does not show what goods are being made or services offered

Review

- Gross Domestic Product (GDP)
- The most important measure of an economy is the Gross Domestic Product (GDP), the market value of all goods and services produced within a nation in a given time period. GDP includes spending by households, on durable and nondurable goods and on services; business investment, both fixed investment in capital goods and inventory investment in unsold goods; government spending; and net exports, the value of all exports minus the cost of all imports. Nominal GDP is GDP expressed in prices for the year it was measured. Real GDP is GDP adjusted for changes in the value of currency over time. GDP fails to measure some important things, though. It cannot track nonmarket activities, such as that provided by homemakers, underground economy, and it does not measure quality of life.

Closure Activity #26

- Using the formula $C + I + G + (X - M) = \text{GDP}$
 - Calculate each nation's gross domestic product (GDP) and answer which one has the greatest GDP for Q1 (Quarter 1)?
1. U.S.- $C = 11.2\text{B}$, $I = 2.9\text{B}$, $G = 5\text{B}$, $X = 2.2\text{B}$, $M = 2.8\text{B}$
 2. U.K.- $C = 3\text{B}$, $I = 2\text{B}$, $G = 2\text{B}$, $X = 1\text{B}$, $M = 3\text{B}$
 3. China- $C = 241\text{B}$, $I = 1\text{B}$, $G = 1\text{B}$, $X = 1.9\text{B}$, $M = 1.3\text{B}$
 4. Japan- $C = 308\text{B}$, $I = 17\text{B}$, $G = 102\text{B}$, $X = 5.7\text{B}$, $M = 5.9\text{B}$

Closure Activity #26

1. U.S. 18.5 Billion
2. U.K. 5 Billion
3. China 243.6 Billion
4. Japan 426.8 Billion

Economic Indicators and Measurements

- Business Cycle

- SSEMA1f

- Define the stages of the business cycle, include peak, contraction, trough, recovery, expansion as well as recession and depression.

What Is the Business Cycle?

- KEY CONCEPTS

- Changes in the **economy** often follow a broad **pattern**:
- **Business cycle**—series of periods of expanding and contracting activity
 - Measured by increases or decreases in real GDP
- Has **four** phases:
 - 1. **Expansion**
 - 2. Peak
 - 3. **Contraction**
 - 4. Trough (length can vary)



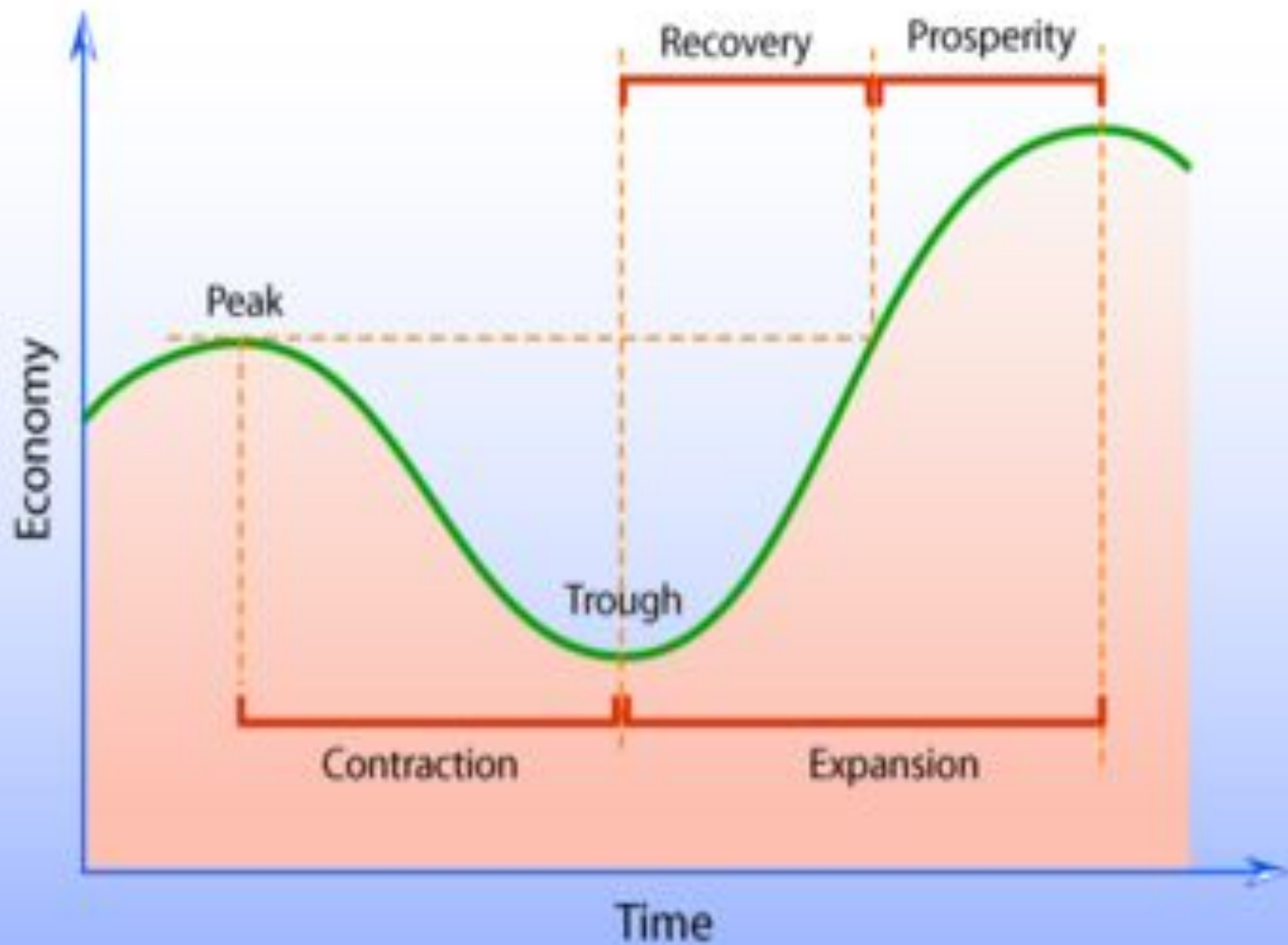
What Is the Business Cycle?

- Stage 1: Expansion/Recovery
 - Expansion is a period of **Economic Growth**—increase in real GDP
 - real GDP **grows** from a low point, or trough
 - During an expansion
 - **Jobs** easier to find; unemployment drops
 - More **resources** needed to keep up with spending demand
 - as resources become scarce, their **prices rise**



What Is the Business Cycle?

- Stage 2: Peak
 - Peak is point at which real GDP is highest
 - As prices rise and resources tighten, businesses become less profitable
 - businesses cut back production and real GDP drops



What Is the Business Cycle?

- Stage 3: Contraction
 - During **contraction**, producers cut back and **unemployment increases**
 - resources become less scarce, so prices tend to stabilize or fall
 - **Recession**—contraction lasting two or more quarters
 - Depression—long period of high unemployment and limited business activity
 - **Stagflation**—stagnation in business activity with inflation of prices



What Is the Business Cycle?

- Stage 4: Trough
 - Trough is point at which real GDP and employment stop declining
- A business cycle is complete when it has gone through all four phases

Recession versus Depression

- So what's the difference?

- **Recession**

- Is an economic downturn that usually lasts for six to eight months. i.e. Great Recession 2008-2013

- **Depression**

- Is an extended period in which a nation's economy slows severely, **causing hardship for households, businesses and the government.**
i.e. Great Depression 1929-1939

Review of Business Cycles

- The economy goes through somewhat predictable business cycles of expansion (when GDP increases), peak (the highest level of GDP), contraction (declining real GDP and employment), and trough (the lowest level of GDP and employment). Then the cycle begins again.

Show What You Know!



- Georgia Milestone Questions
- During the contraction phase of the
- business cycle
- Prices rise
- Resources become less scarce
- ~~Resources become more scarce~~
- Unemployment declines

Show What You Know!



- Georgia Milestone Questions
- A recession is different from a depression
- because depressions
- Increases employment
- Causes severe hardships for households, businesses and the government
- Negative economic growth for 6 months or two quarters
- Increases expansions

Show What You Know!



- Georgia Milestone Questions
- Which of the following is a microeconomic calculation?
- Calculating the GDP
- Calculating the unemployment rate
- Calculating the interest due on a loan
- Calculating the consumer price index

Show What You Know!



- Georgia Milestone Questions
- GDP is an especially good estimate of
- Nonmarket activities
- Quality of life
- The economy's performance
- Underground economy

Warm Up #33

BASED ON THINGS THAT ARE CURRENTLY GOING ON ARE WE STILL IN THE GREAT RECESSION, IF SO WHICH PART OF THE BUSINESS CYCLE DO YOU BELIEVE WE ARE IN? EXPLAIN.

5 MINUTES

Class Confession

- We the Senior Class of 2017 will complete ALL of our assignments to the best of our abilities and behave appropriately in class.
- We will respect all faculty, staff, substitutes, classmates, especially Mr. Wilcox.
- We will graduate on time May 19, 2017 and become productive citizens in society.

Scaffold understanding of the standard(s) and/or element(s). *Paraphrase the standard(s) and/or element(s). Rewrite the standard including synonyms or brief definitions in parentheses and in a different color following the key terms found in step 1.*

- SSEMA1c

- C. Define unemployment rate, Consumer Price Index (CPI), inflation (increase in prices), real GDP, aggregate (cumulative) supply and aggregate (cumulative) demand and explain how each is used to evaluate the macroeconomic goals from SSEMA1a.

Economic Indicators and Measurements

- Aggregate Demand & Aggregate Supply
 - SSEMA1c
- Define...aggregate supply and aggregate demand and explain how each is used to evaluate the macroeconomic goals from SSEMA1a.

Now to further understand the Business Cycle,
we need to look at changes in a nation's
Aggregate Demand and Aggregate Supply.

AGGREGATE DEMAND

&

AGGREGATE SUPPLY

Aggregate Demand and Aggregate Supply

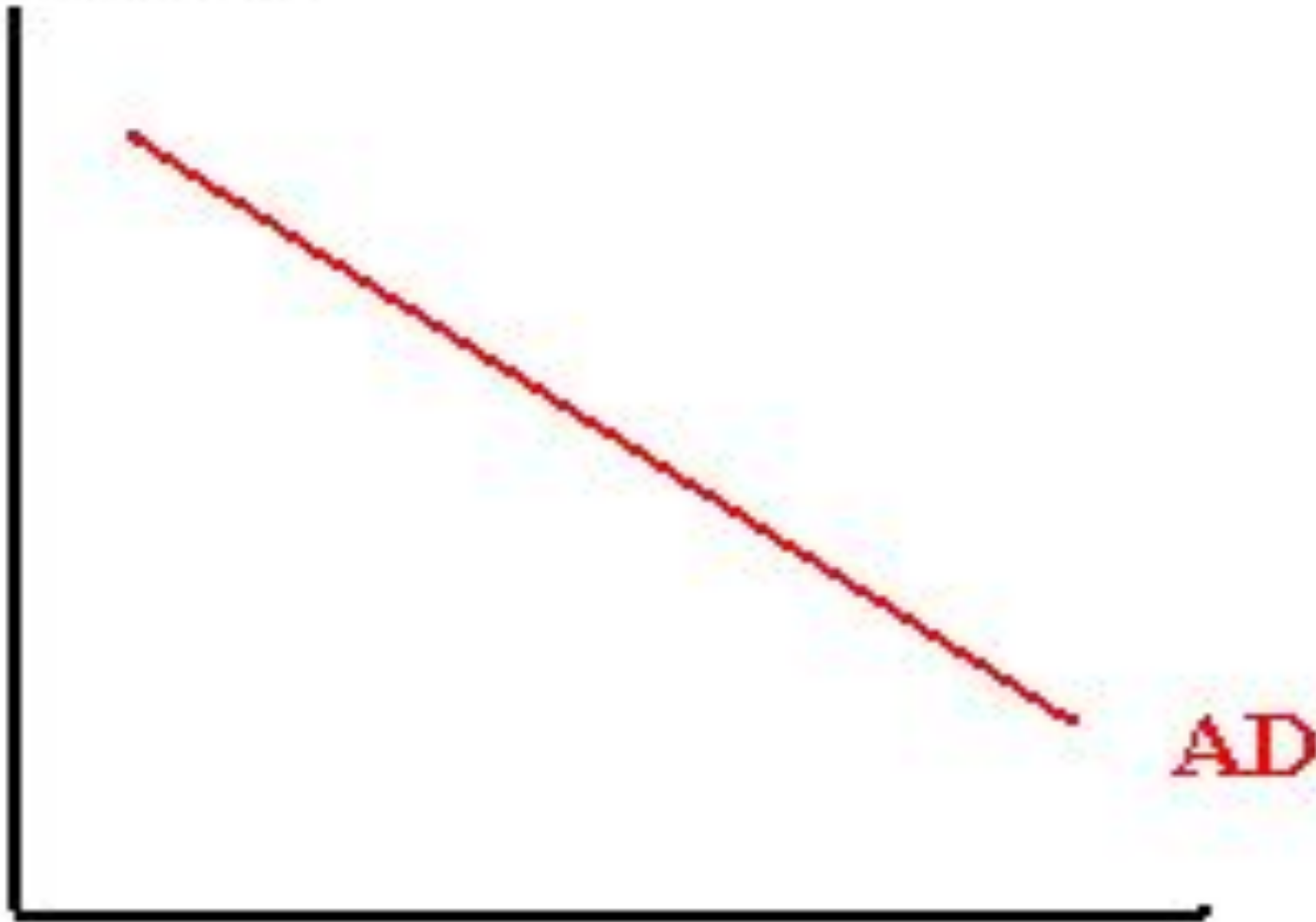
- KEY CONCEPTS

- Business **cycles** can be explained through concept of **supply** and **demand**
- Apply concept to the economy as a **whole**

Aggregate Demand and Supply p. 360

- Aggregate demand—is the total amount of goods and services that households, businesses, government, and foreign purchasers will buy at each and every price level
 - includes all goods and services, all purchasers
 - Aggregate demand curve is downward sloping
 - vertical axis shows average price of all goods and services
 - horizontal axis shows the economy's total output

Price level



(Output) real GDP

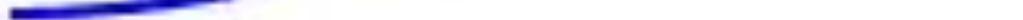
Aggregate Demand and Supply p. 360

- Aggregate supply— is the total of all goods and services that producers will provide at every price level
 - Aggregate supply curve almost horizontal when real GDP is low
 - Businesses do not raise prices when economy is weak
 - Curve slopes upward as prices increase with rise in real GDP
 - Curve almost vertical with inflation—no rise in real GDP

Price
Level

AS_1

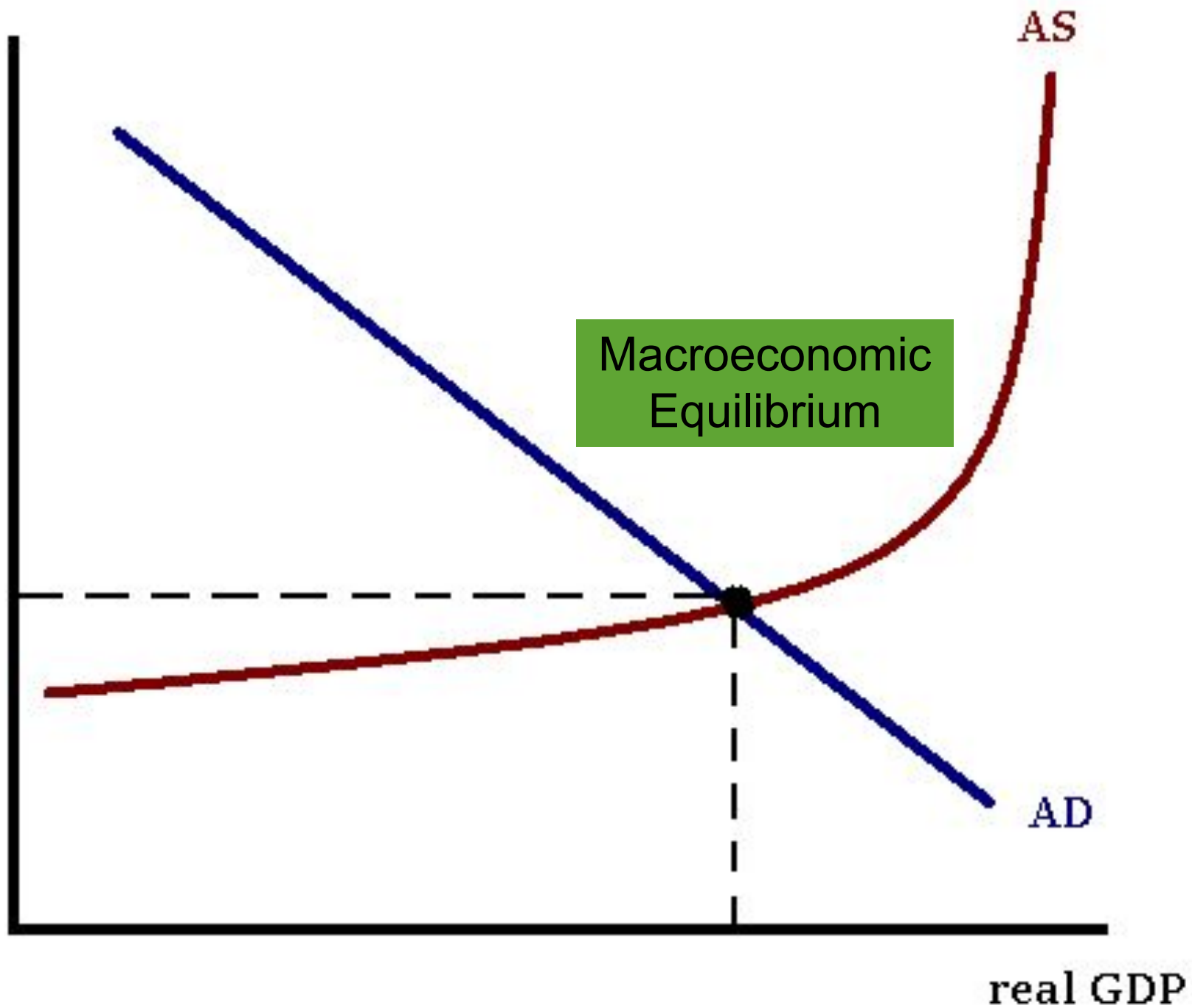
Real GDP



Aggregate Demand and Supply p. 361

- Macroeconomic Equilibrium
 - **Macroeconomic equilibrium**— aggregate demand **equals** aggregate supply
 - aggregate demand curve intersects aggregate supply curve
 - Figures 12.9, 12.10: P1 is equilibrium price level; Q1 equilibrium real GDP
 - **increase in aggregate demand** shifts AD curve to right (recovery or expansion)
 - **decrease in aggregate supply** shifts AS curve to left (contraction)

price
level





Review for

Aggregate Demand and Aggregate Supply

- Changes in aggregate demand

and supply can be brought on by business decisions, changes in the interest rate, consumer expectations, and external issues, such as natural disasters.

Closure Activity #27

- Figure 12.7 & 12.8 Aggregate Demand and Supply Curves p.360

1. Analyze Graphs 1 & 2

**Figure 12.9 & 12.10 Aggregate Demand and Supply Curves
and Application Analyzing Cause and Effect p. 361**

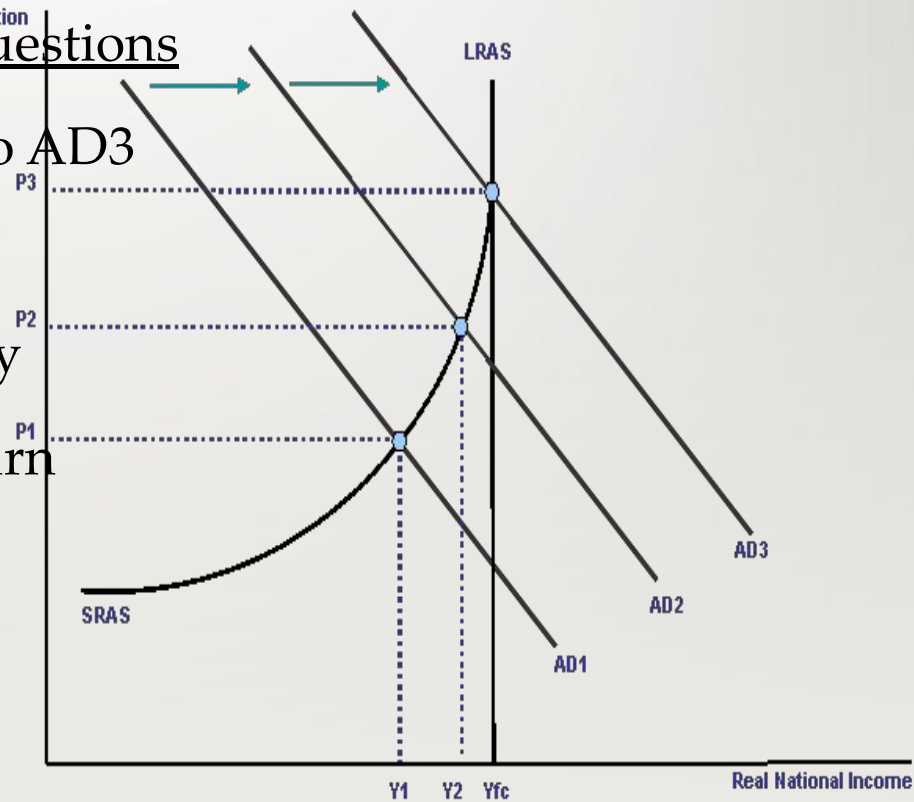
1. Analyze Graphs 1 & 2

2. Application Analyzing Cause and Effect B

Show What You Know!

Georgia Milestone Questions

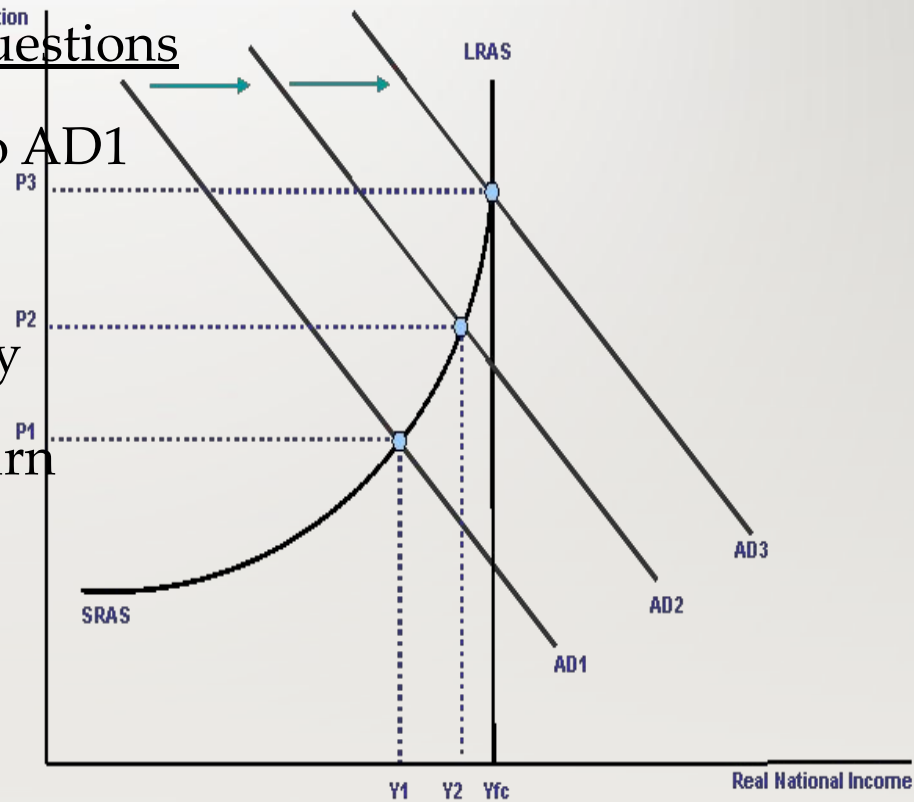
- The Shift from AD2 to AD3
- signals
- An economic recovery
- An economic downturn
- A period of inflation
- A period of deflation



Show What You Know!



- Georgia Milestone Questions
- The shift from AD2 to AD1
- signals
- An economic recovery
- An economic downturn
- A period of inflation
- A period of deflation



Class Confession

- We the Senior Class of 2017 will complete ALL of our assignments to the best of our abilities and behave appropriately in class.
- We will respect all faculty, staff, substitutes, classmates, especially Mr. Wilcox.
- We will graduate on time May 19, 2017 and become productive citizens in society.

Scaffold understanding of the standard(s) and/or element(s). *Paraphrase the standard(s) and/or element(s). Rewrite the standard including synonyms or brief definitions in parentheses and in a different color following the key terms found in step 1.*

- SSEMA1a

- a. Identify (**classify**) and describe (**explain**) the macroeconomic goals of steady Economic Growth, stable prices, and full employment.

Economic Indicators and Measurements

ECONOMIC GROWTH

SSEMA1A

IDENTIFY AND DESCRIBE THE
MACROECONOMIC GOALS OF STEADY
ECONOMIC GROWTH, STABLE PRICES,
AND FULL EMPLOYMENT.

Stimulating Economic Growth

- KEY CONCEPTS

- Business cycle is pattern of expansion and contraction in economy
- Economic growth can be measured by changes in real GDP

What Is Economic Growth?

- Gauging Economic Growth

- Early theories held that economic growth resulted from:
 - collecting high taxes from growing population
 - exporting more than importing
Adam Smith argued “wealth of nations” came from productive capacities
- But really the BEST measure of growth is increase in real GDP
 - rate of real GDP change is good indicator of how well resources used

Class Assignment

- Do page 369 Figure 12.13 U.S. Real GDP
 - Per Capita
 - Analyze Graphs

1. _____

2. _____

What Is Economic Growth?

- Population and Economic Growth
 - Population influences economic growth
 - if population grows faster than real GDP, growth may mean more workers
 - Real GDP per capita—real GDP divided by total population
 - Real GDP per capita is a measure of standard of living
 - everyone does not actually have that amount; does not measure quality of life

What Determines Economic Growth?

- KEY CONCEPTS

- Four factors influence **Economic Growth**:

- 1. **Natural resources**
 - 2. Human resources
 - 3. Capital
 - 4. **Technology** and Innovation

What Determines Economic Growth?

- Factor 1: Natural Resources
 - Access to natural resources is important
 - arable land, water, forests, oil, mineral resources
- Resources not enough; also need free market, effective government
 - Nigeria has oil but low GDP per capita, widespread poverty
 - Japan has few resources but high GDP per capita from industry and trade

What Determines Economic Growth?

- Factor 2: Human Resources
 - Labor input—size of labor force multiplied by length of work week
 - Population growth made up for shorter work week since early 1900s
 - More important than size of labor force is its level of human capital

What Determines Economic Growth?

- Factor 3: Capital
 - More and better capital goods increase output
 - more and better machines can produce more goods
 - Capital deepening—increase in the capital to labor ratio
 - providing more and better equipment to each worker increases production

What Determines Economic Growth?

- Factor 4: Technology and Innovation
 - Technology, innovation make efficient use of resources, raise output
 - Innovations can increase economic growth
 - examples: *reduce time needed to complete task;*
improve customer service
 - Information technology has had strong impact on economic growth
 - *advances in production lower prices, make capital deepening cheaper (Wal-Mart self checkout)*

Review for Economic Growth

- Economic growth takes place from year to year if the real GDP rises. Factors affecting economic growth include natural and human resources, a relatively high capital to labor ratio, and technology and innovation. An increase in productivity leads to an increase in GDP. Economic growth sometimes comes with a cost, especially pollution

Closure Activity #28

- Do Figure 12.15 on page 373
 - Analyze Graphs

1. _____

• _____

• 2. _____

• _____

Show What You Know!

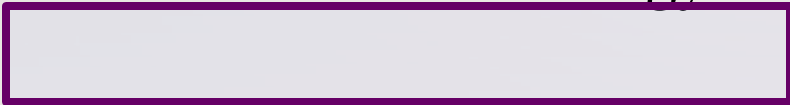


- Georgia Milestone Questions
- Economic growth depends on
- Building up the national treasury
- Efficient and productive use of resources
- Exporting more than importing
- Growing populations

Show What You Know!



- Georgia Milestone Questions
- Which of the following factors may NOT be essential for economic growth?
- Capital deepening
- Human capital
- Natural resources
- Technology and innovation



Show What You Know!



- Georgia Milestone Questions
- Which of the following is MOST important for economic growth?
- Efficient use of resources
- Ample tax revenues
- Availability of resources
- A large labor force

Chapter 12 Tomorrow Definitions and TEST!

- GDP
- Nominal GDP
- Real GDP
- Economic growth
- Aggregate supply
- Aggregate demand
- Business cycle
- Peak
- Contraction
- Trough
- Expansion
- Productivity
- Macroeconomics
- Macroeconomic equilibrium
- Capital deepening
- Human capital
- National income accounting
- Consumption
- Investment
- Government spending
- Net exports
- Nonmarket activity
- Underground economy
- Quality of life
- Output Expenditure Model

