### Gross Domestic Product and Economic Growth

What is Gross Domestic Product?



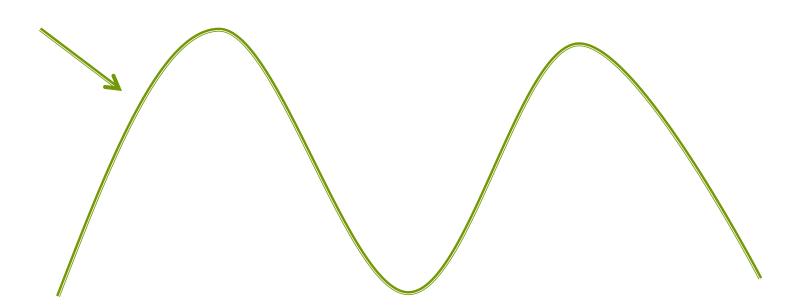
#### Vocabulary:

<u>Aggregate Supply</u> – The total amount of goods and services in the economy available at all possible price levels <u>Aggregate Demand</u> – the amount of goods and services in the economy that will be purchased at all possible price levels

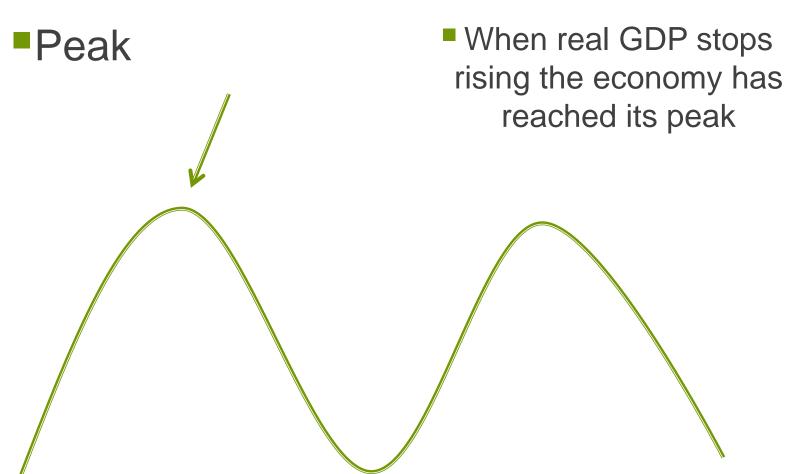


Expansion

 a period of economic growth as measured by a rise in real GDP



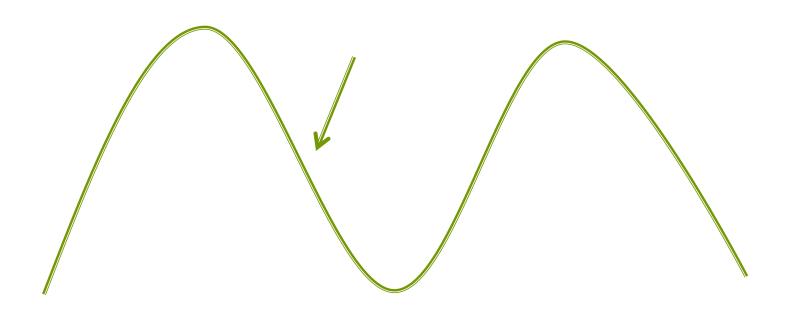






Contraction

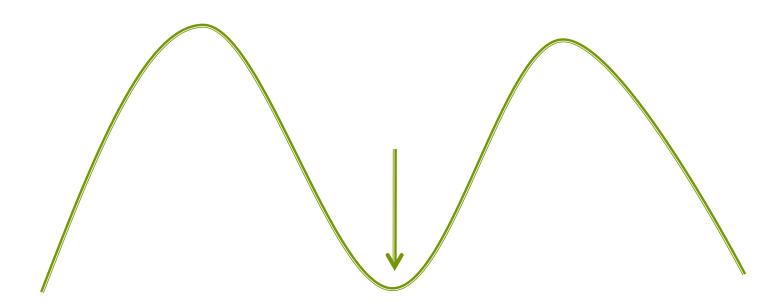
an economic decline marked by falling real GDP





Trough

When the economy has "bottomed out"





BusinessInvestment

When the economy is expanding, firms expect sales and profits to keep rising. Therefore they may invest in the expansion of old plants in order to increase the plants' productive capacity.



- Interest Rates and Credit
  - People use credit to buy things
  - The cost of credit is the interest rate financial institutions charge
  - When interest rates are low companies will borrow money to make investments creating jobs
- When interest rates are high there is less output and less need for more workers



- ConsumerExpectations
  - If people fear the economy is weakening then they will begin to save for a rainy day and stop spending.
  - This stoppage of spending can lead to a contraction
    - The opposite can also happen. If people start spending then that will push up the GDP and lead to expansion



#### External Shocks

- External shocks can dramatically affect an economy's aggregate supply.
- Negative external shocks could include disruptions of the oil supply, war, droughts, etc. decreasing supply and raising prices.
- Positive external shocks could also happen like large deposits of oil being found. This will increase supply and lower prices.

### Cycle Indicators



Stock Market

Typically the stock market turns sharply downward before an recession begins.

### Cycle Indicators



#### Interest Rates

- The lower the interest rates the more business will borrow to invest creating more jobs
- The higher the interest rates the less they can borrow and spend

### Cycle Indicators



Manufacturers' new orders of capital goods

If businesses are spending, then they are hiring.

### **Business Cycles**



Phases	Contributing Factors	Cycle Indicators
1. Expansion –	1. Business Investment	1. Stock Market -
2. Peak –	2.Interest Rates and Credit -	2. Interest Rates -
3. Contraction –	3.Consumer Expectations -	3. Manufacturers' new orders of capital goods-
4.Trough –	4.External Shocks	



### What happens to consumer and business spending when the interest rates go up?

Both types of spending will decrease



### What are the leading economic indicators supposed to predict?

Business cycles



### What finally brought the U.S. out of the Great Depression?

World War II



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World War II



### What was the major change in the U.S. economy in the 1990s?

A heavier reliance on services





### Capital deepening is an important source of growth in modern economies.



How does capital deepening increase output per worker?

How is human capital deepened?

 With more capital, workers can be more efficient and productive and produce more output per hour of work Through training programs and onthe-job experience of workers

### The rate of saving and investment affects the economy.



### What happens when saving rises?

How does increased investment help the economy?

- More investment funds become available to business firms and these firms then spend more on capital
- Businesses spend the extra money on capital investment, to expand the stock of capital in the business sector

### Population, government, and trade all directly affect the economy



What happens when population grows and capital remains constant?

The amount of capital per worker shrinks, leading to lower living standards How do government taxation for consumption spending and importing goods for short-term consumption affect economic growth??

Consumption spending decreases the amount of investment. Importing goods for short-term consumption will not make the economy grow any faster, and will leave the country without additional GDP to pay back debts

### Technological progress is a key source of economic growth



How do economists measure the impact of technological progress on economic growth?

How does the government aid technological innovation?

- They determine how much growth in output comes from increases in capital and increases in labor; any remaining comes from technological progress.
- It issues patents and sponsors basic research.



### How does an economist compare the standard of living in two different countries?



By comparing real GDP per capita

### What is the difference between real and nominal GDP



Values for real GDP are adjusted for differences in price levels, while figures for nominal GDP are not. If the government uses tax money to pay for long-term investments such as roads or other infrastructure, what happens to the economy?



Investment increases

## What is one way to measure technological progress?



Total growth minus increases in capital and labor

### What is labor productivity?



The amount of output produced per worker

# How can a trade deficit actually increase the productivity of an economy?



 By importing funds used for capital deepening, the process of increasing the amount of capital per worker

### What's next?



- You have until Wednesday to finish the Review Guide and to also finish any of the vocabulary that we did not go over.
- There will be a quiz on GDP and economic growth on Thursday.