## Economics

- Microeconomics study of individuals and the economy
- Macroeconomics - study of large organizations and countries and the economy

UNITED STATES OF AMERICA


- Finance - study of investment and credit



## Why does Macro matter?

- Besides an A and a 5 ...
- All of our decisions determine the fate of the nation's economy.
- Can you afford to buy a new car?
- Is now a good time to change jobs?
- Should you take a risk in the stock market or keep your money safe in the bank?
- Understanding macroeconomics helps you make better economic decisions!


## Gross Domestic Product

- A measure of a country's economy in a given time (usually a year or quarter)



## 2007 Top 10 World Economies

Gross domestic product (current prices) in millions of US dollars | 2007

RANK COUNTRY/ECONOMY
1 United States ............ 1
2 Japan
3 Germany $y$. HARD DATA
$13,843,825$
.4,383,762
$.3,322,147$
4 China ........................... $3,250,827$
5 United Kingdom .........2,772,570
6 France ........................ $2,560,255$
7 Italy
$.2,104,666$
8 Spain .......................... $1,438,959$
9 Canada ....................... $1,432,140$
10 Brazil ........................... 1,313,590

GDP by Region/Country, World Markets: 2009

(Source: C/A, Warid Factbook)

| World's Largest Economies in 2010 |  |  |
| :--- | :--- | :---: |
| Rank | Country | GDP, \$Billion |
| 1 | United States | 14,552 |
| 2 | China | 5,878 |
| 3 | Japan | 5,458 |
| 4 | Germany | 3,315 |
| 5 | France | 2,582 |
| 6 | United Kingdom | 2,247 |
| 7 | Brazil | 2,090 |
| 8 | Italy | 2,055 |
| 9 | Canada | 1,574 |
| 10 | India | 1,537 |
| 11 | Russia | 1,465 |
| 12 | Spain | 1,409 |
| 13 | Australia | 1,235 |
| 14 | Texas | 1,207 |
| 15 | Mexico | 1,039 |
| 16 | South Korea | 1,007 |
| Sources: International Monetary Fund and U.S. |  |  |
| Bureau of Economic Analysis |  |  |

## Changing economies - top 10

(\$ trillion, GDP in current U.S.\$)


Markets constantly evolving ... growth markets $\sim 50 \%$ of GDP by 2025

## Agree: Stand up

# US economy is growing 

## Disagree: Stay seated

Gross Domestic Product (GDP)
Source: U.S. Department of Commerce: Bureau of Economic Analysis


FRED
2014 research.stlouisfed.org

## Agree: Stand up

# Mexico's economy 

# is bigger than Canada's 

## Disagree: Stay seated

Gross Domestic Product ?


Data from World Bank Last updated: Sep 7, 2013

## What is GDP?

- GDP is the market value of all final goods and services produced within a nation in a given time period.
- Must be final rather than intermediate.
- Must be produced during the time period, regardless of when it is sold.
- Must be produced within the nation's borders.


## How do we calculate GDP？ <br> Gross Domestic Product ？



Data from World Bank Last updated：Mar 30， 2012
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## Where Does the Money Go? <br> The Department of Labor's latest survey provides a detailed look into how the

 average U.S. consumer unit spends their annual paycheck.
## U.S.CONSUMER UNIT EXPENDITURES

Average annual expenditures and percent of total:


ENTERTAINMENT
$\$ 2,698$


## Parts of GDP

- All investment within a country in a certain year, month or quarter

- In other words: business spending money on capital goods



## Parts of GDP

- All government spending in a country in a certain year, month or quarter
- Examples: education, military, roads, healthcare, etc


## Where Did Your Tax Dollar Go?

In 2012, Washington collected $\$ 2.4$ trillion in taxes, more than $\$ 20,000$ for every American household. Yet Washington actually spent \$3.5 trillion, or nearly \$30,000 per household, adding $\$ 1.1$ trillion to the debt.


* Includes federal employee retirement and disability, unemployment compensation, food and housing assistance, and other federal income security programs.
Notes: Figures have been rounded. Defense spending includes overseas contingency operations.
Source: White House Office of Management and Budget.


## Parts of GDP

- All net exports from a country in a certain year, month or quarter
- Exports = good shipped to other countries
- Imports = good brought into a ce from another co

- USA? Mexico?


## Agree: Stand up

# USA imports more <br> than it exports 

## Disagree: Stay seated

## Net Exports of Goods \& Services (NETEXP)

Source: U.S. Department of Commerce: Bureau of Economic Analysis


## Net Exporters



## Net Importers



## GDP Calculation

$\mathrm{Y}=\mathrm{C}+\mathrm{I}+\mathrm{G}+\mathrm{X}_{\mathrm{n}}$
where
Y = GDP
C = Consumer Spending
| = Investment

## G = Government Spending

$\mathrm{X}_{\mathrm{n}}=$ Exports - Imports

## $\begin{array}{ll}\text { United States GDP } 2003 \\ \text { I }+\mathrm{G}+\mathrm{X}_{\mathrm{n}} & \end{array}$

$\mathrm{Y}=\mathrm{C}+\mathrm{I}+\mathrm{G}+\mathrm{X}_{\mathrm{n}}$ \$\$ in Billions
Consumer Spending = \$7605
Investment = \$1606
Government Spending = \$2017
Exports = \$1021
Imports = \$1508 $\$ 7605+1606+2017+(1021-1508)=\$ 10,741(2003)$

## GDP

- What economic activity did I leave out?
- Ways GDP might be misleading?


## What GDP does not count

- Nonmarket activities (home childcare or performing one's own home repairs)
- Underground economy (market activities that go unreported because they are illegal or because those involved want to avoid taxation)
- Quality of life (what are we spending our money on?)


## $G D P=C+I+G+(X-M)$

Assuming everything else stays equal, what happens if...

## US consumers spend 5\% more in 2013, than 2012 for the Winter Holidays.



$$
G D P=C+I+G+(X-M)
$$

Assuming everything else stays equal, what happens if...

## US government passes $\$ 800$ billion healthcare reform bill



## $G D P=C+I+G+(X-M)$

Assuming everything else stays equal, what happens if... US Students learn about the benefits of saving money


$$
\mathrm{GDP}=\mathrm{C}+\mathrm{I}+\mathrm{G}+(\mathrm{X}-\mathrm{M})
$$

Assuming everything else stays equal, what happens if...

## Bank business lending increases

$$
\text { by 7\% in } 2013
$$

## CHASE

## WHLLS FARGO

## Bank of America.

$$
G D P=C+I+G+(X-M)
$$

Assuming everything else stays equal, what happens if...

## Mexican citizens demand 15 \% fewer US-made cars



$$
G D P=C+I+G+(X-M)
$$

Assuming everything else stays equal, what happens if...

The internet is created


$$
G D P=C+I+G+(X-M)
$$

Assuming everything else stays equal, what happens if...

## Americans demand 50\% more Mexican baked goods



## $G D P=C+I+G+(X-M)$

Assuming everything else stays equal, what happens if...
NBA plays a in China, and afterwards Chinese demand US-made basketballs


## $G D P=C+I+G+(X-M)$

Assuming everything else stays equal, what happens if...

## US government cuts

 income tax rates by 2 \%
## $G D P=C+I+G+(X-M)$

Assuming everything else stays equal, what happens if...

## World demand for American timber

 increases


## $G D P=C+I+G+(X-M)$

Assuming everything else stays equal, what happens if... US military invades Iran


