Wednesday, Sept. 28 | Thursday, Sept. 29

- Warm-up: TTYN about how you think the U.S. economy is doing right now. What evidence do you have to support your claim?
- *Learning target: I can define GDP (Gross Domestic Product) and explain the formula for GDP. I can explain the difference between the expenditures and income approaches to calculating GDP. I can explain the categories of goods and services that are excluded from GDP.*
- The following folks need to make up the Unit 1 test today or Thursday after school:
  - A-1: Darion, Erin
  - B-1: Kennedy
  - B-2: Josiah, Bennett (FRQ only)
- **HW 2a due Tuesday, Oct. 4 (A) or Wednesday, Oct. 5 (B)**

Get help with FAFSA!!

- Join a Teams call with Ms. Beavers this Thursday night, Sept. 29 at 6:00
- Topics will include HOPE & Zell Miller Grants & Scholarships FAFSA, Federal Grants, Student Loans, Award Letter Review, Family Contributions, & More!
- Scan this code for TEAMS link to join call on Thursday:

REGION 2 VIRTUAL FINANCIAL AID NIGHT

FINANCIAL AID 101

September 29th | 6:00PM | Microsoft Teams
Topics Include:
HOPE and Zell Miller Grants and Scholarships
FAFSA
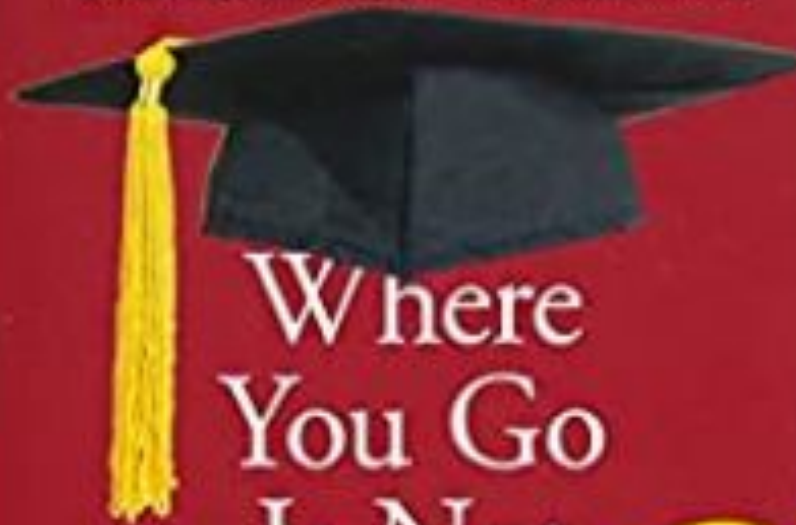Federal Grants
Student Loans
Award Letter Review
Family Contributions
and More!

DeKalb County
School District
Student
Advancement

https://tinyurl.com/region2fa101

"A humane, measured book . . . . In its authentic humanity, it has lessons for a very wide audience indeed." — *THE WASHINGTON POST*

Where You Go Is Not Who You'll Be

UPDATED & EXPANDED, PLUS NEW AFTERWORD

AN ANTIDOTE TO THE COLLEGE ADMISSIONS MANIA

FRANK BRUNI

THE *NEW YORK TIMES* BESTSELLER

"My wife really wanted to go to the University of Virginia and didn't get in. I really wanted to go to Georgetown and didn't get in. So we both ended up at [the University of] Delaware. It was a place where all of us felt that if we worked hard, we could do well. I never felt like the school wasn't going to give me the tools to be successful."
-Chris Christie, Governor of New Jersey and 2016 presidential candidate

Source: Bruni, Frank. *Where You Go Is Not Who You'll Be: An Antidote to the College Admissions Mania.* New York, Hachette Book Group, 2016.

Microeconomics	Macroeconomics
Individual markets	Whole economy (GDP)
Effect on price of a good	Inflation (general price level)
Individual labour market	Employment/unemployment
Individual consumer behaviour	Aggregate demand (AD)
Supply of good	Productive capacity of economy

The Circular Flow and GDP

Required Course Content

ENDURING UNDERSTANDING

MEA-1

An economy's performance can be measured by different indicators such as gross domestic product (GDP), the inflation rate, and the unemployment rate.

LEARNING OBJECTIVE

MEA-1.A

a. Define (using the circular flow diagram as appropriate) how GDP is measured and its components.

b. Calculate nominal GDP.

ESSENTIAL KNOWLEDGE

MEA-1.A.1

GDP is a measure of final output of the economy.

MEA-1.A.2

GDP as a total flow of income and expenditure can be represented by the circular flow diagram.

MEA-1.A.3

There are three ways of measuring GDP: the expenditures approach, the income approach, and the value-added approach.
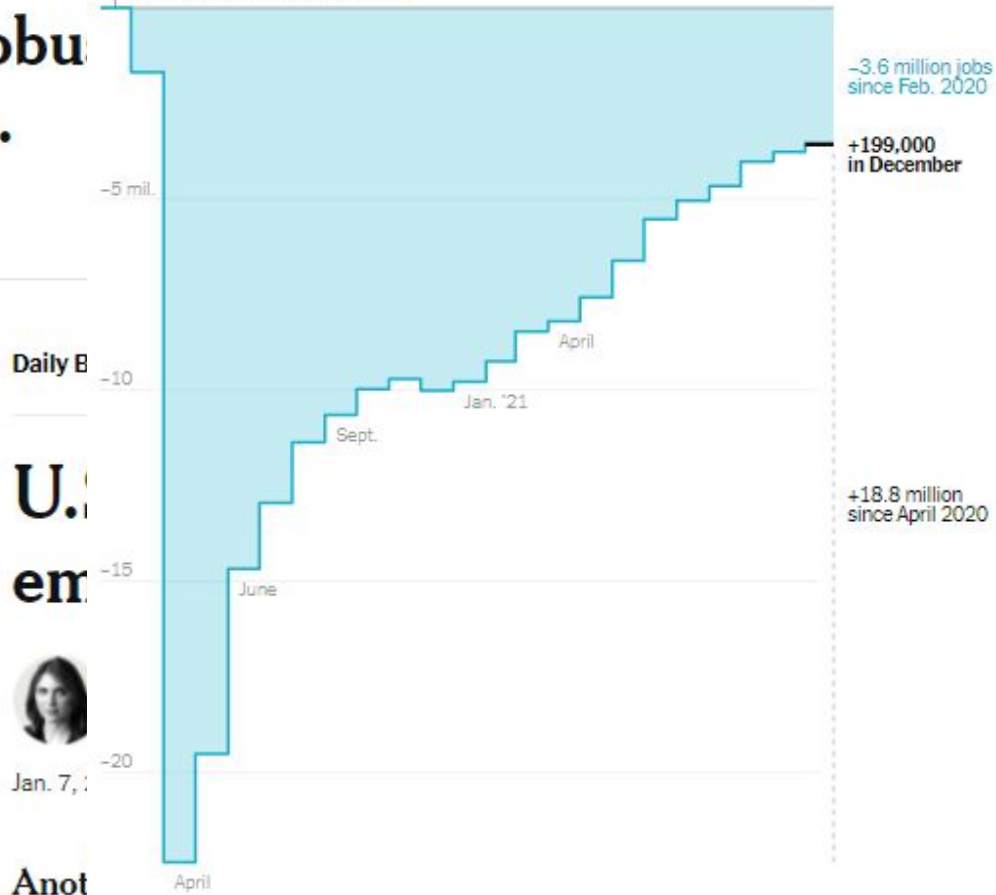
Retail sales fell in D[...] again in
slowdown in a robu[...] ow over the
shopping season.

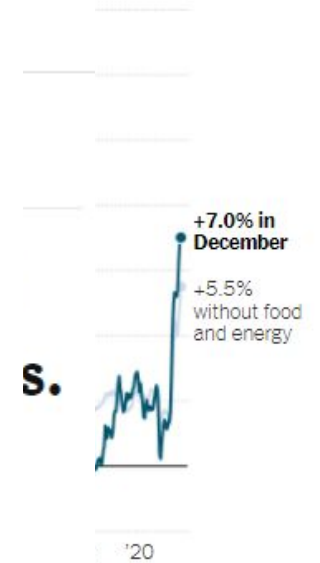
Daily B[...]

U.[...]

em[...] s.

Jan. 7, [...]

Anot[...]

Another month of slow job gains.

Cumulative change in jobs since before the pandemic

152.5 million jobs in February 2020

−3.6 million jobs
since Feb. 2020

+199,000
in December

−5 mil.

−10

April

Jan. '21

Sept.

+18.8 million
since April 2020

−15

June

−20

April

Data is seasonally adjusted.   •   Source: Bureau of Labor Statistics   •   By Ella Koeze

---

+7.0% in
December

+5.5%
without food
and energy

'20

For all countries there are three major economic goals:

1. Promote Economic Growth
2. Limit Unemployment
3. Keep Prices Stable (Limit Inflation)

In this unit we will analyze how each of these is measured.

Goal #1
Promote Economic Growth

How does a country measure economic growth?

The most important measure of economic growth is GDP.

Gross Domestic Product (GDP) is the **dollar value** of all **final goods, services and structures** produced within a country's borders in **one year.**

Calculating GDP

Two Ways of calculating GDP:

   1. <u>Expenditures Approach</u> -Add up all the spending on final goods and services produced in a given year.

   2. <u>Income Approach</u> -Add up all the income that resulted from selling all final goods and services produced in a given year.

Adding up how much was spent on goods and services and how much income was earned should generate the same number.
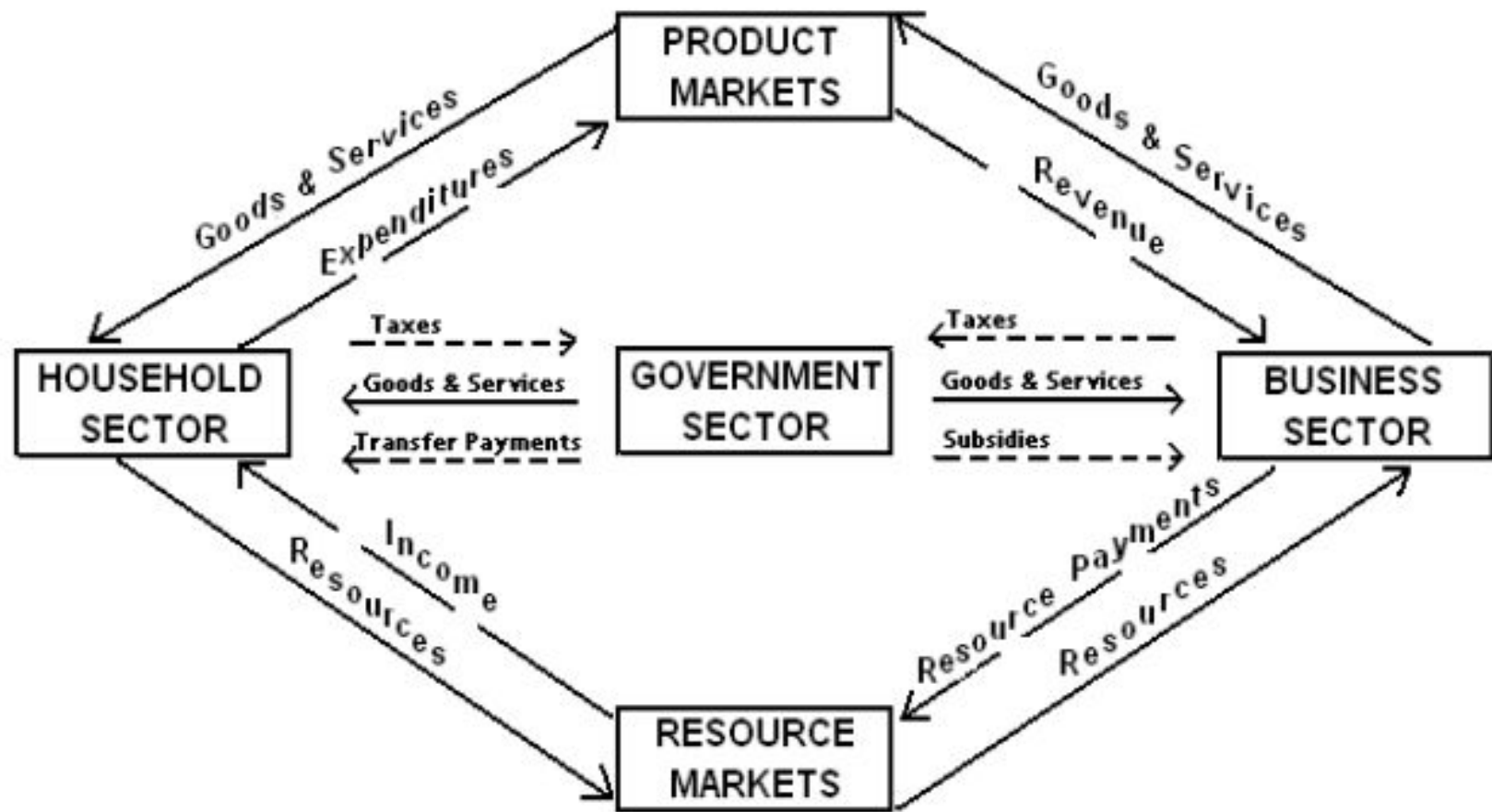
Income Approach

The income approach adds up all the income earned from producing goods and services. **These are called FACTOR PAYMENTS:**

1. Labor Income - Wages earned from performing work (labor).

2. Rental Income ("rent")- Income earned from property owned by individuals (land).

3. Interest Income- Interest earned from loaning money to businesses (capital).

4. Profit - Money businesses have after paying all their costs (entrepreneurship).

GDP formula Expenditures Method:

GDP (Y) = C+ I + G + (X-M)

- C = <u>household</u> or consumer spending

The following affect how much income households can use for consumption:

- 1. **Personal taxes:** Government increases or decreases

- 2. **Savings:** (bank accounts, savings, insurance...)

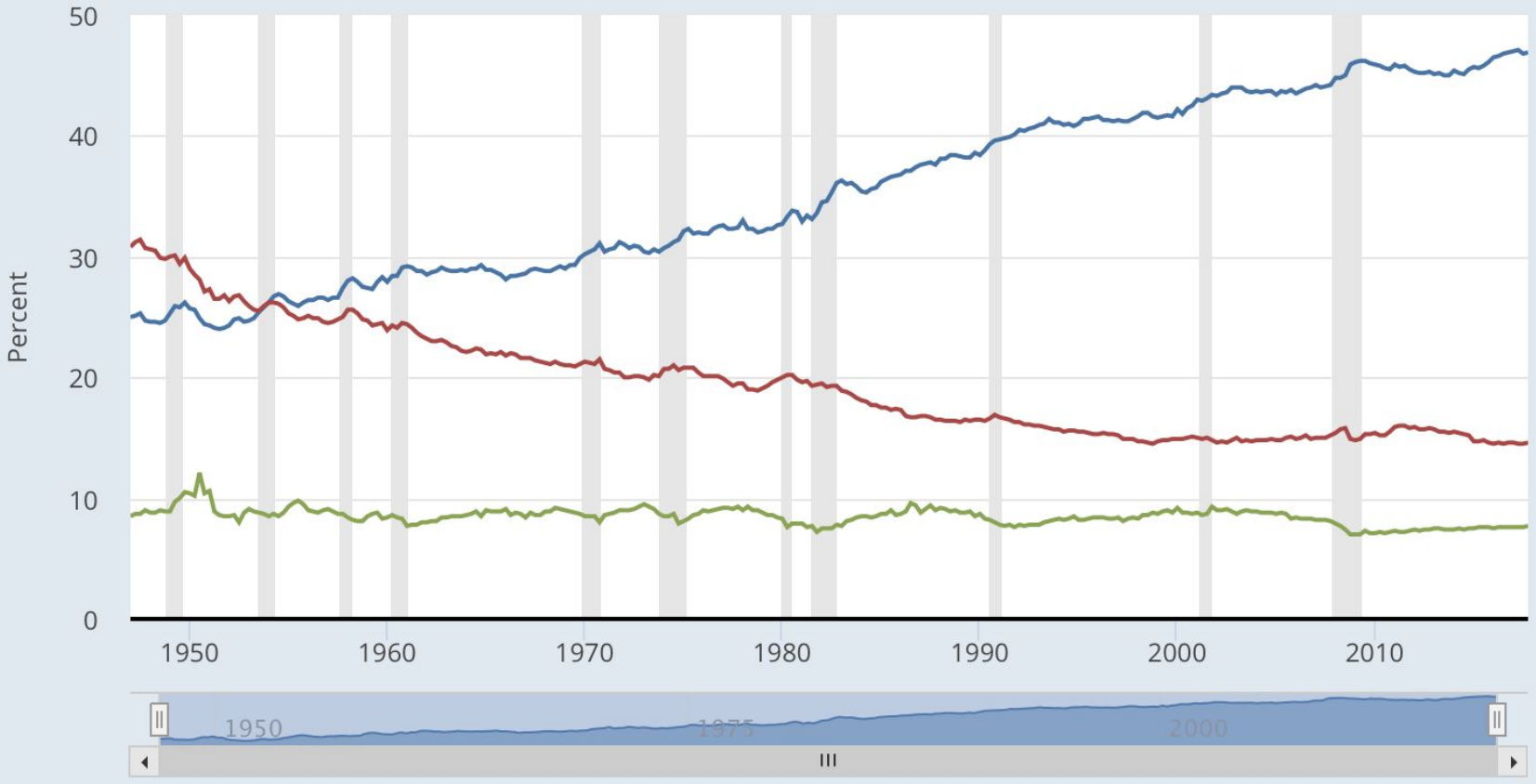- 3. **Dissavings**: servicing debt can lead to lower future consumption

Categories of Consumption:

- **<u>Durables</u>**: expected to last over 1 year (cars, appliances, etc.)

- **<u>Non-durables</u>**: expected to last less than a year (food, clothing, etc.)

- **Service**: (over ½ of our income goes to services)

How has the US economy changed over time?

U.S. GDP, Sliced And Diced (2nd Quarter 2012)

Consumption

Furniture, etc.

Other Durable Goods

Cars & Car Parts

Clothes & Shoes

Transport

Foood & Drink From Stores

Other Non-Durable Goods

Gas, etc.

Recreation (Goods)

Health Care

Housing & Utilities

Financial Services & Insurance

Other Services

Restaurants, Hotels, etc.

Recreation (Services)

Other Consumption
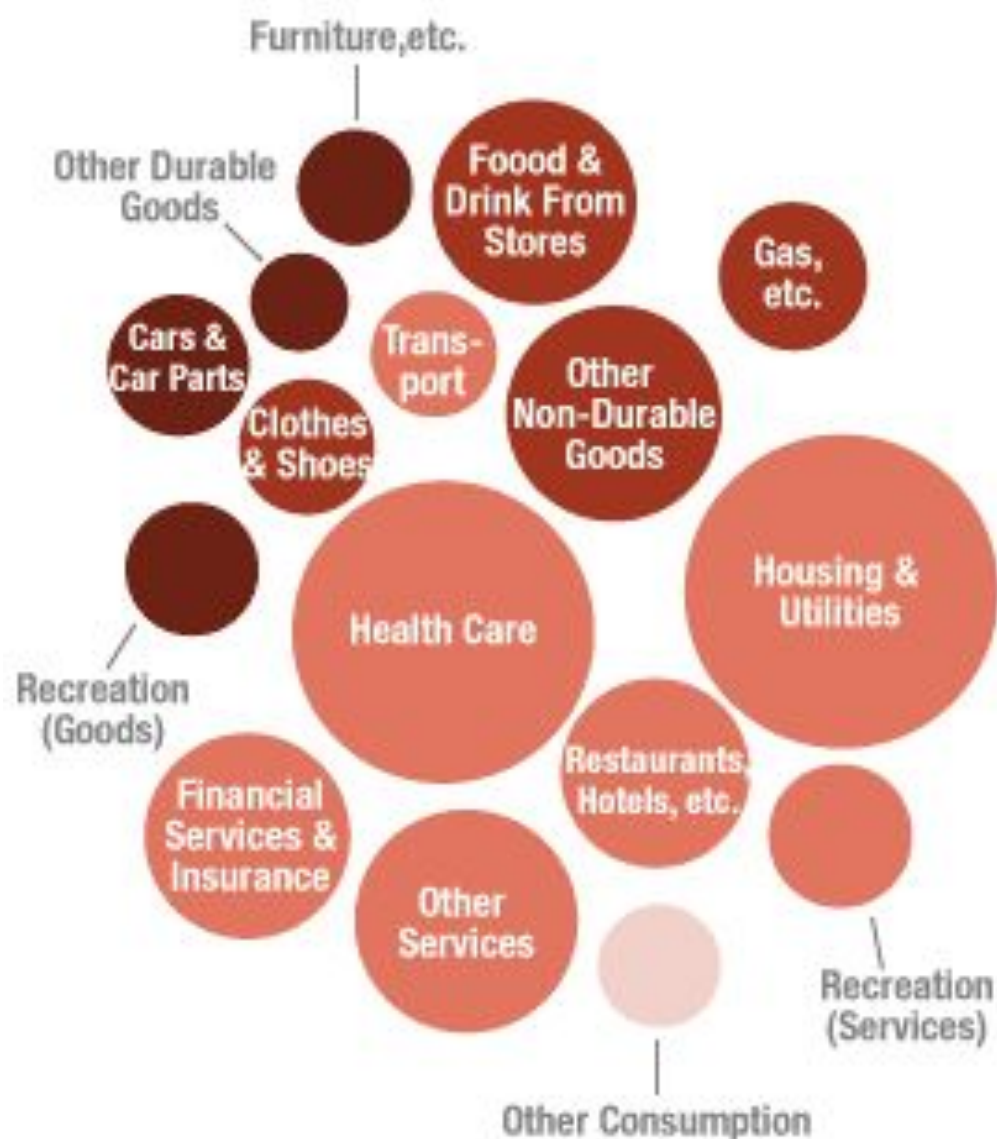
Durable Goods
Cars & car parts.................$395 billion
Furniture, etc.....................$263 billion
Recreational goods, etc......$350 billion
Other durable goods..........$190 billion

Nondurable Goods
Food & Drink
From Stores......................$828 billion
Clothing & Shoes...............$363 billion
Gasoline, etc.....................$434 billion
Other nondurable goods....$923 billion

Services
Housing & Utlities..............$2.0 trillion
Health Care.......................$1.8 trillion
Transport...........................$311 billion
Recreation.........................$407 billion
Restaurants, Hotels, etc......$709 billion
Financial Services &
Insurance...........................$839 billion
Other Services...................$986 billion

Other Consumption
Other Consumption............$298 billion

Investments

Exception for Consumer Spending:

New home sales are counted as business investment!

GDP (Y)= C+ I + G + (X-M)

- I = <u>business investment</u> spending on capital investments, production processes, new employees, inventories remaining at the end of the year

What if a business produces something one year, but doesn't sell it until the next year?

Inventories- Goods produced and held in storage in anticipation of later sales.

Inventories are counted in the year they are produced, not the year they are sold. The change in inventories is a valuable economic indicator.

What can a drastic change in inventories mean?

GDP (Y) = C+ I + G + (X-M)

- G = <u>government</u> spending on goods and services (includes <mark>national, state and local</mark> governments)

Government (G) Explained
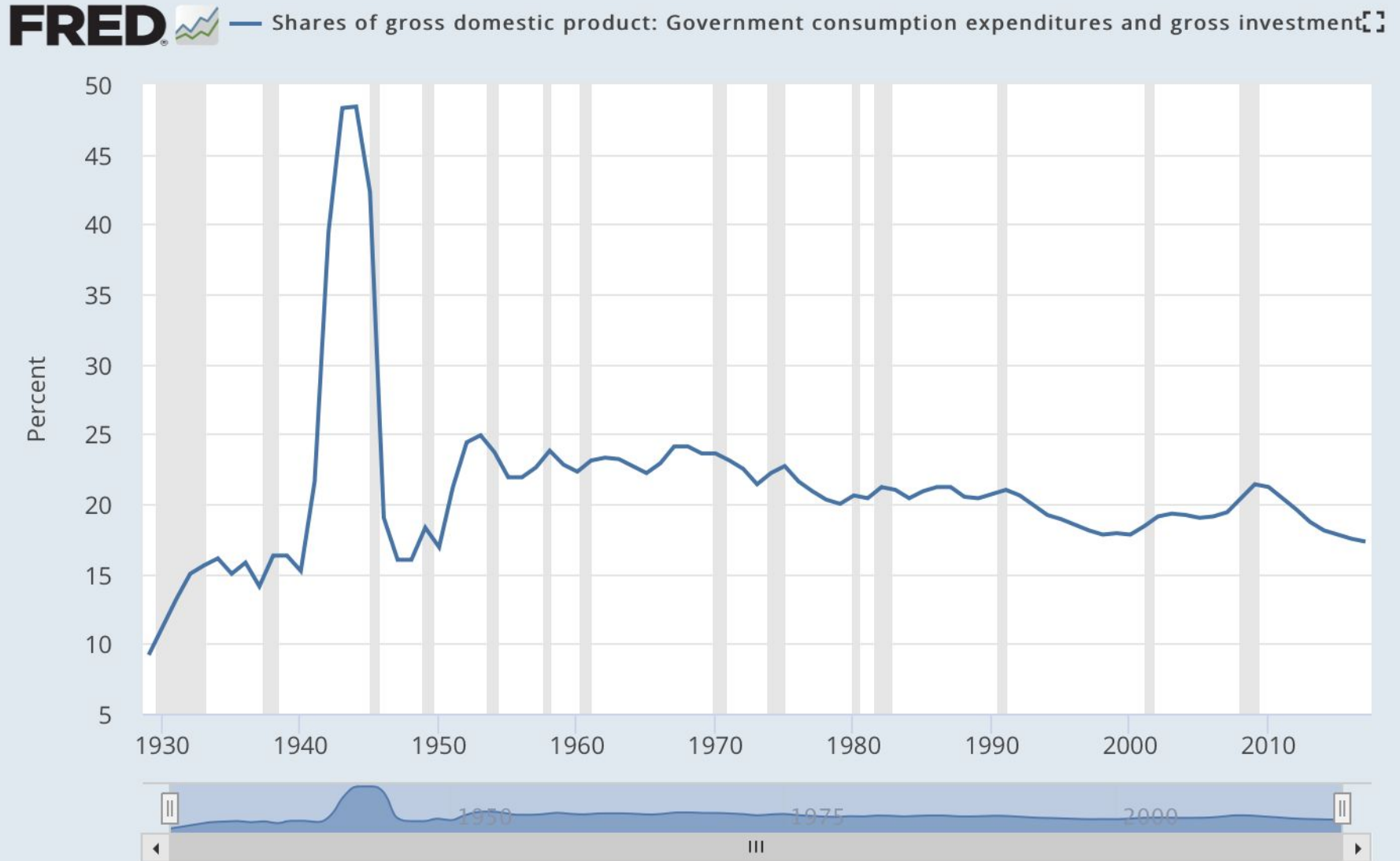
Government expenditures tracks the spending made in the "public sector".

-It does not include money spent on transfer payments like welfare, social security, and subsidies.

-It also does not include interest payments on the national debt.

What percent of the US GDP is made up of government spending?

U.S. government's percent share of GDP

Source: U.S. Bureau of Economic Analysis

GDP (Y) = C+ I + G + (X-M)

- X-M = <u>net exports</u> also shown as Xn;
  - net exports = e**X**ports – i**M**ports

U.S. Imports & Exports

IMPORTS $3.1 trillion

$128 billion

CAPITAL GOODS $693 billion

$129 billion

CONSUMER GOODS $648 billion

$134 billion

$134 billion

INDUSTRIAL GOODS $576 billion

$215 billion

AUTOMOTIVE $372 billion

FOODS, FEEDS & BEVERAGES $147 billion

the balance

EXPORTS $2.5 trillion

CAPITAL GOODS $562 billion

$60 billion

$130 billion

$37 billion

$48 billion

INDUSTRIAL GOODS $539 billion

$62 billion

$111 billion

$42 billion

$38 billion

CONSUMER GOODS $206 billion

$27 billion

$55 billion

$22 billion

AUTOMOTIVE $159 billion

FOODS, FEEDS & BEVERAGES $133 billion

$18 billion

$20 billion
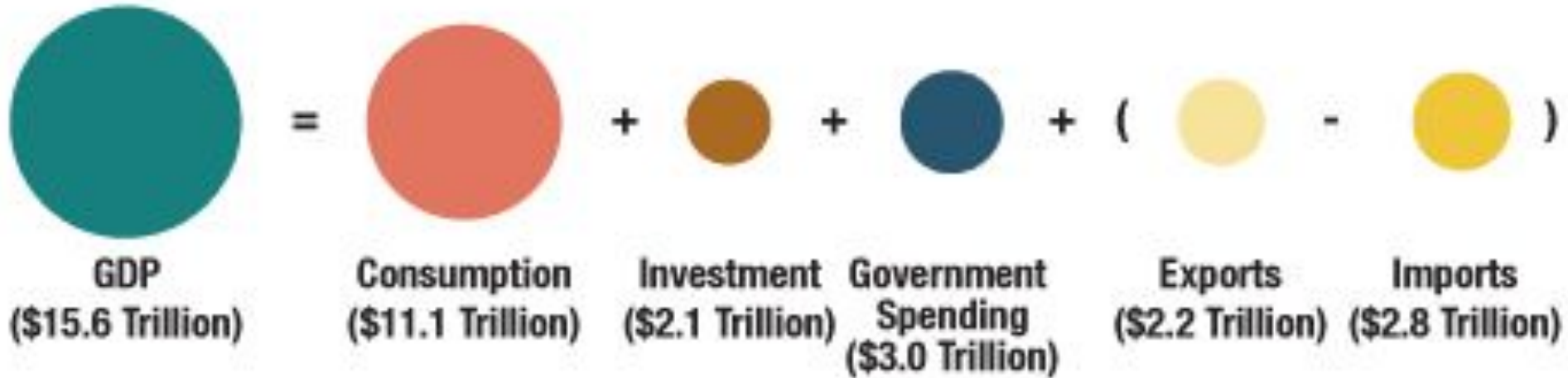
$14 billion

Image by © The Balance 2019

Of the four categories of GDP, which one do you think is the biggest?

Calculating U.S. GDP (2nd Quarter 2012)

GDP
($15.6 Trillion)

=

Consumption
($11.1 Trillion)

+

Investment
($2.1 Trillion)

+

Government
Spending
($3.0 Trillion)

+ (

Exports
($2.2 Trillion)

-

Imports
($2.8 Trillion)

)

U.S. GDP in 2019 ~ $21.43 Trillion
U.S. GDP in 2020 ~ $20.94 Trillion

From www.npr.org and Bureau of Economic Analysis

LET'S CALCULATE OUR CLASS GDP

- C   70%: Running shoes, pizzas, wireless headphones
- I   15%: Factories, forklifts
- G   20%: Libraries, police cars
- X-M -5%: Corn (exports); oil (imports)

	2018	2019	2020
Running shoes	@$110	@$100	@$125
Pizzas	@$12	@$12	@$18
Headphones	@$600	@$700	@$850
Factories	@$1M	@$1.3M	@$1.5M
Forklifts	@$500k	@$500k	@$520k
Libraries	@$770k	@$780k	@$780k
Police cars	@$67k	@$70k	@$80k
Corn (X)	@$30/bushel	@$28/bushel	@$25/bushel
Oil (M)	@$75/barrel	@$60/barrel	@$100/barrel

Frankly Friday, September 30
Moderately Monday, October 3

- Warm up: Quiz your neighbor about the definition of GDP and the formula to calculate GDP. Also, please find your GDP data from our class production.
- *Learning targets: I can explain the categories of goods and services that are excluded from GDP. I can define real and nominal GDP.*
- The following folks need to make up Unit 1 test ASAP:
  - A-1: Darion
- Agenda: test corrections

Test Corrections
Due Oct. 10 (A) or Oct. 11 (B)

How test corrections work

1. Look at the "strip report" to see what questions you got wrong and your incorrect answer.
2. Work with your group to understand the content of the question that you got wrong. (Remember, you'll never see these same test Qs again, so focus more on the subject of the question than the question itself.)
3. Complete a thorough entry on the test correction sheet for each question you got wrong.
4. For each thorough entry that you provide, you will earn back half a point. If your entries are weak or not substantive, you will receive no credit.
5. Complete the Google form reflection questions that is part of the test correction assignment in Canvas.
6. Do not change your answers
7. Do not write on your answer sheet
8. Do not take pictures of the test or your answer sheet
9. When you finish, do GDP practice posted in Canvas

Test correction "prove that you now know" that will not earn points:

- "The CPI is increasing by 25%."
- "I did not get this and I added up incorrectly."
- "When you calculate the GDP from each year and then see the percent increase."
- 200/50=4
- "I was off in my calculations by 5%."
- "For this question, I was between 2 and ended up choosing the wrong one."

This is NOT okay and will get you NO credit:

- Q: Changes in technology and changes in consumer tastes can cause (a) frictional unemployment because this is a type of frictional unemployment.

- Q: The Federal Reserve wants to increase the money supply in the U.S. What is the Fed likely to do to accomplish this? (a) reduce the discount rate. This is true because this will happen.

Notes on FRQ

- FRQ was total of 8 points a = 1, b = 2, c = 2, d = 2, e = 1
- Use numbers!! E.g., opportunity cost is lower (2 < 5) or Country A's opp cost for one pizza is 2 cabbages while Country B's opp cost for one pizza is 5 cabbages
- Use our vocabulary:
  - comparative advantage b/c <u>lower opportunity cost</u>
  - absolute advantage b/c they can <u>produce more with same resources</u> not b/c they "have more"

Tuesday, Oct. 4 and Wednesday, Oct. 5

Sub day: we worked on homework and test corrections in class.

Thursday, Oct. 6 | Tuesday, Oct. 11

Warm up: TTYN re. GDP definition, formula, and what is excluded from GDP.

Learning targets: I can explain the categories of goods and services that are excluded from GDP. I can define real and nominal GDP. I can calculate real GDP using base year prices.

HW 2a was due this week (A day can show it to me now); 2b is due next week.

No school tomorrow (Friday) or Monday for kids.
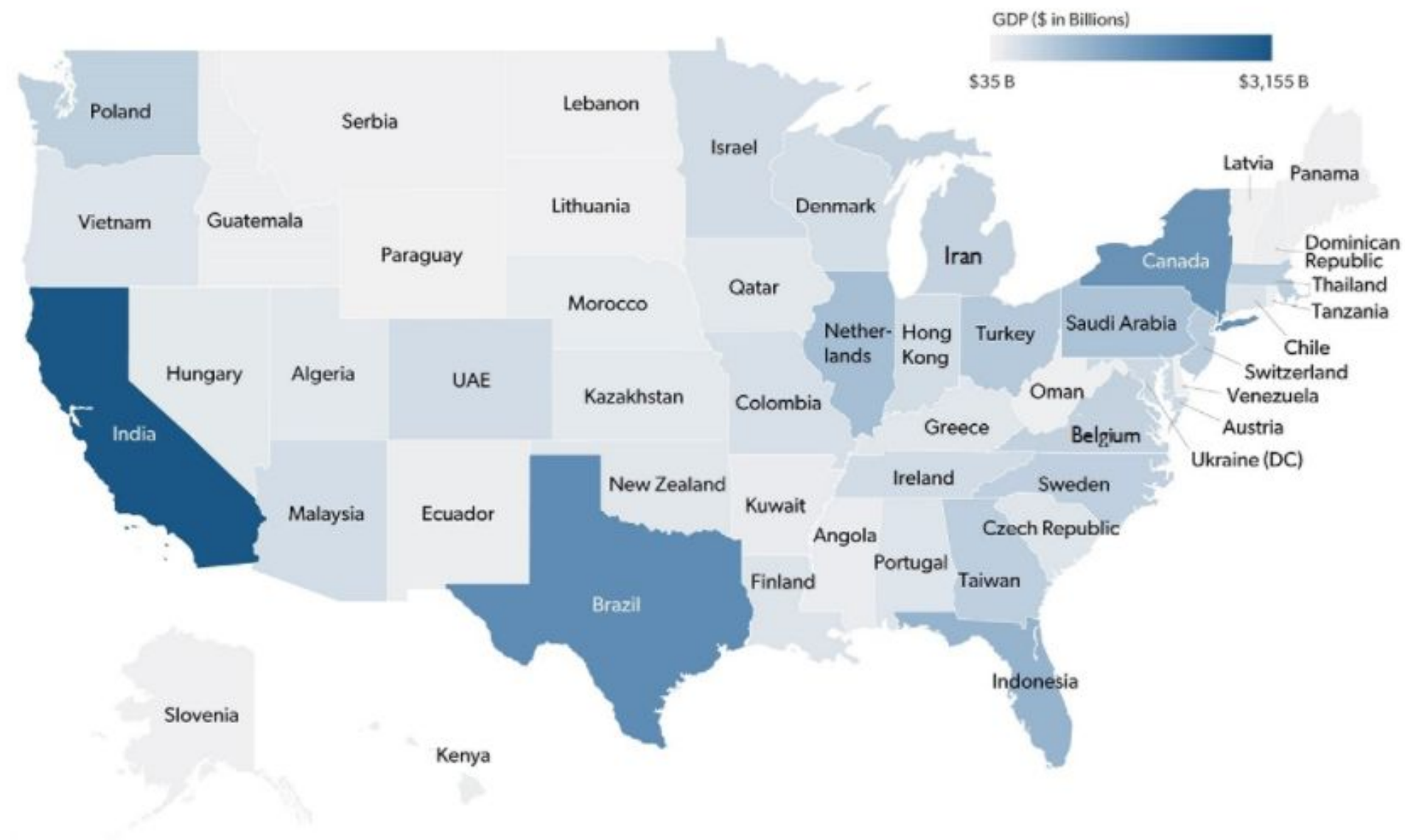
How do we measure growth from year to year?

% change in GDP = $\dfrac{\text{Year 2 - Year 1}}{\text{Year 1}}$ X100

- 2017
- 2018:
- 2019:

What Countries Have the Biggest GDP?

- Rank by nominal GDP
- Rank by % growth of real GDP
- How do China and the US compare in GDP growth?

US States Renamed for Countries with Similar GDPs (2019)

GDP ($ in Billions)

$35 B — $3,155 B

Poland
Serbia
Lebanon
Israel
Latvia
Panama
Vietnam
Guatemala
Lithuania
Denmark
Dominican Republic
Paraguay
Iran
Canada
Thailand
Tanzania
Qatar
Morocco
Netherlands
Hong Kong
Turkey
Saudi Arabia
Chile
Hungary
Algeria
UAE
Switzerland
Venezuela
India
Kazakhstan
Colombia
Oman
Greece
Belgium
Austria
Ukraine (DC)
New Zealand
Ireland
Sweden
Malaysia
Ecuador
Kuwait
Czech Republic
Angola
Portugal
Brazil
Finland
Taiwan
Indonesia
Slovenia
Kenya

Carpe Diem AEI

Why do some countries have higher GDPs?

Why do some countries have higher GDPs?

1. Economic System- Capitalism promotes innovation and provides incentives to improve productivity.
2. Rule of Law- Countries with solid institutions and political stability have historically had more economic growth.
3. Capital Stock- Countries that have more machines and tools are more productive.
   Example#1: India has a relatively low GDP because they have a lot of labor but not very much capital.
   Example#2: Japan has few natural resources but a high GDP.
4. Human Capital- Countries that have better education and training are more productive.
5. Natural Resources- In general, countries that have access to more natural resources are more productive.
   It all boils down to productivity!

Make a Prediction

Now that you know what countries have the biggest GDP, make a prediction about what countries have [large GDP per capita](#).

How Money Flows Through the Economy
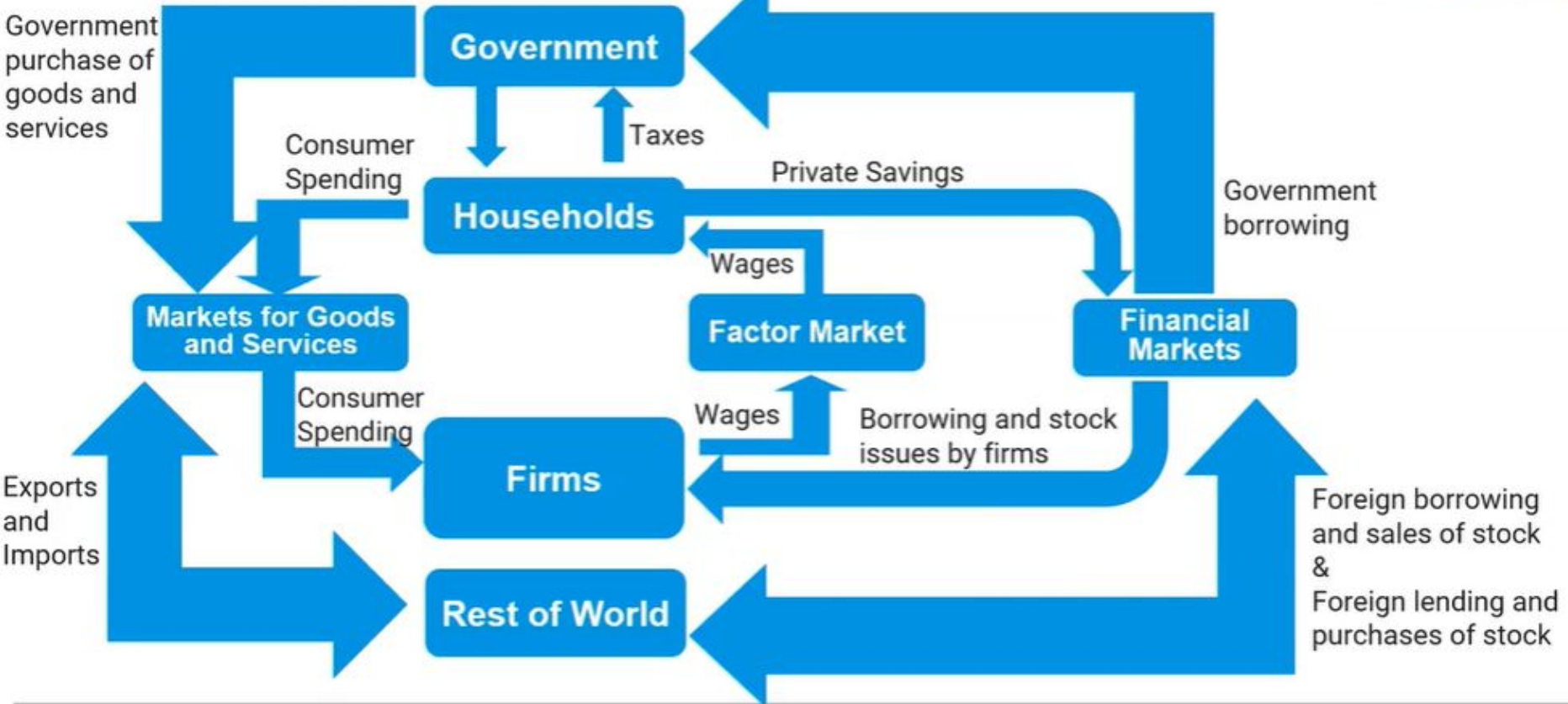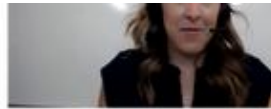
NOT INCLUDED IN GDP:

1. Second-hand sales (e.g., a used car)

2. Intermediate products (like the new tires that a car company has to purchase to put on its cars)

3. Non-market transactions (e.g., cleaning your own house; babysitting b/c very difficult to capture)

4. Financial transactions (e.g., buying or selling stock; transfer payments or subsidies because nothing is produced!)

5. Underground economy (e.g., gambling, illegal drugs)

Gross Domestic Product (GDP) Is…

…the market value of all <u>final</u> goods & services produced within a country in a given period of time.

Final goods: intended for the end user

Intermediate Goods

- Cost of cotton for a t-shirt: intermediate good (NOT COUNTED)
- Cost of T-shirt: COUNTED

- Cost of flour for a baker: Intermediate (NOT COUNTED)
  - Cost of cake: COUNTED

Problems with GDP:

1. May overstate growth because:
   a. Fails to take externalities into consideration. (e.g., Counts rebuilding of destroyed capital.)
2. May mislead about well-being if growth results in lower quality of life.
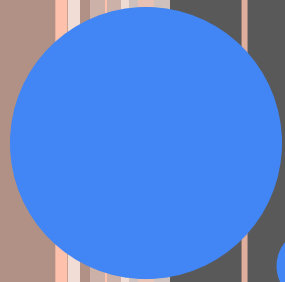3. May understate economic activity by ignoring underground market value.

What are some problems with using GDP to measure the nation's standard of living?

Robert Kennedy [Speech on GDP](#)

Robert Kennedy at a Democratic fund-raising dinner at the Plaza Hotel in New York in 1967. Larry C. Morris/The New York Times

Practice GDP Problems:

What does GDP tell us?

Just like calculating your own income, GDP measures how well the U.S. is doing financially.

How do we use GDP?
1. Compare to previous years (Is there growth?)
2. Compare policy changes (Did a new policy work?)
3. Compare to other countries (Are we better off?)

What do you think?

Which 15 countries have the highest GDP?

Nominal GDP vs. Real GDP

What was the growth rate in GDP in our classroom production experiment?

What changed from year-to-year in our experiment? What is definition of GDP and purpose of GDP?

A Problem with GDP

- If a country's GDP increased from $4 Billion to $5 Billion in one year, is the country experiencing economic growth?

- Did the country definitely produce 25% more products?

What is inflation . . . ?

A Problem with GDP, continued

- **EX: If apples are the only thing being produced**

- **Year 1: 10 apples at $1 each; GDP = $10**

- **Year 2: 10 apples at $1.25; GDP = $12.50**

- **GDP is rising, but the country is worse off! How?**

Real vs. Nominal GDP

- **<u>Nominal GDP</u>** is measured in terms of the actual market prices at which goods are sold; called "current prices." It does not account for inflation from year to year.
- Reflects prices <u>and</u> quantities produced.
- **E.g., My ticket to *Star Wars* in 1977 was $2.00 in 1977 dollars which would be $9.97 in 2022 dollars.**

Real vs. Nominal GDP

Real GDP is GDP expressed in "constant," or unchanging, dollars. Real GDP adjusts for inflation.

Let's calculate real GDP for our class data using 2018 as the base year