Unit 2
The Data of Macroeconomics

Instructor: Nguyen Tai Vuong
School of Economics and Management
Hanoi University of Science and Technology

In this unit, look for

…the meaning and measurement of the most important macroeconomic statistics:

- Gross Domestic Product (GDP)
- The Consumer Price Index (CPI)
- The unemployment rate

Measuring National Income/Expenditure

- **Gross Domestic Product (GDP)** measures total income of everyone in the economy.
- GDP also measures total expenditure on the economy's output of g&s.

For the economy as a whole,
income equals expenditure
because every dollar a buyer spends
is a dollar of income for the seller.

The Circular-Flow Diagram

- a simple depiction of the macroeconomy
- illustrates GDP as spending, revenue, factor payments, and income
- Preliminaries:
  - **Factors of production** are inputs like labor, land, capital, and natural resources.
  - **Factor payments** are payments to the factors of production (*e.g.*, wages, rent).

The Circular-Flow Diagram

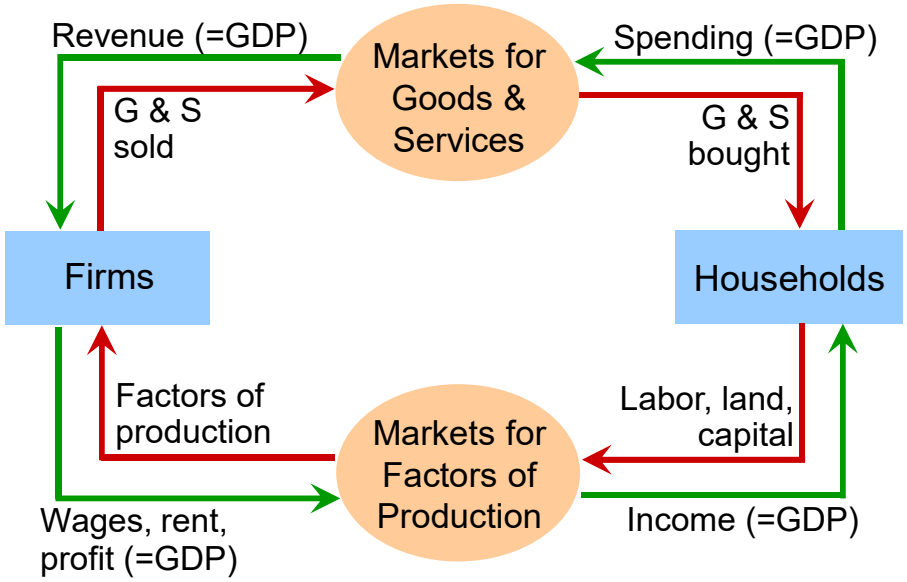
Households:
- own the factors of production, sell/rent them to firms for income
- buy and consume goods & services

Firms

Households

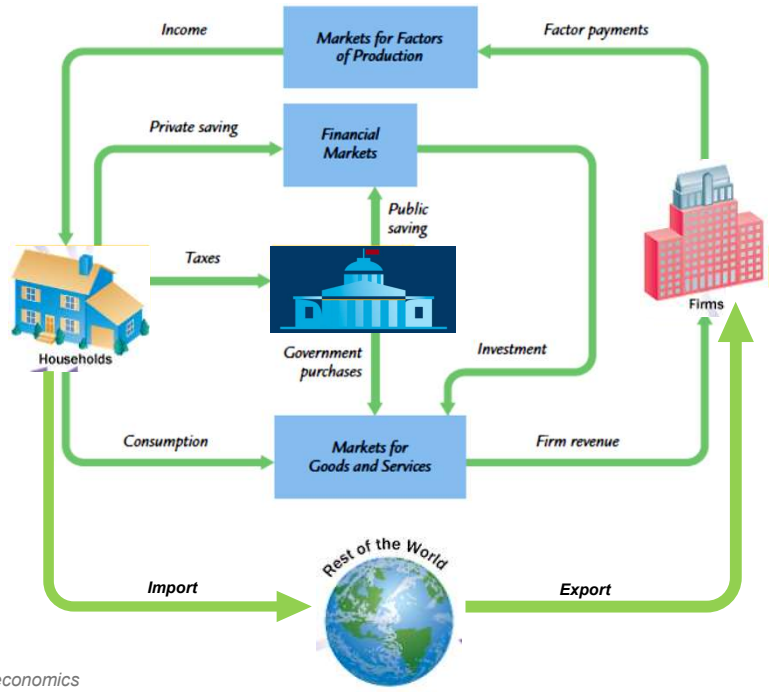
Firms:
- buy/hire factors of production, use them to produce goods and services
- sell goods & services

The Circular-Flow Diagram



What This Diagram Omits

- The government
  - collects taxes, buys g&s
- The financial system
  - matches savers' supply of funds with borrowers' demand for loans
- The foreign sector
  - trades g&s, financial assets, and currencies with the country's residents



Gross Domestic Product (GDP) is…

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

Goods are valued at their market prices, so:

- *All goods measured in the same units (e.g., dollars in the U.S.)*
- *Things that don't have a market value are excluded, e.g., housework you do for yourself.*

Gross Domestic Product (GDP) Is…

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

***Final goods**: intended for the end user*

***Intermediate goods**: used as components or ingredients in the production of other goods*

GDP only includes final goods – they already embody the value of the intermediate goods used in their production.

Gross Domestic Product (GDP) Is…

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

GDP includes tangible goods (like DVDs, mountain bikes, beer)

and intangible services (dry cleaning, concerts, cell phone service).

Gross Domestic Product (GDP) Is…

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

GDP includes currently produced goods, not goods produced in the past.

Gross Domestic Product (GDP) Is…

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

GDP measures the value of production that occurs within a country's borders, whether done by its own citizens or by foreigners located there.

Gross Domestic Product (GDP) Is…

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

Usually a year or a quarter (3 months)

Calculating GDP

- **Expenditure approach** A method of computing GDP that measures the total amount spent on all final goods and services during a given period.
- **Income approach** A method of computing GDP that measures the income—wages, rents, interest, and profits—received by all factors of production in producing final goods and services.
- **Value added approach** A method of computing GDP that sums of value added at all stages of production.

Expenditure Method

- Recall: GDP is total spending.
- Four components:
  - Consumption (**C**)
  - Investment (**I**)
  - Government Purchases (**G**)
  - Net Exports (**NX**)
- These components add up to GDP (denoted **Y**):

$$Y = C + I + G + NX$$

Consumption (C)

definition: The value of all goods and services bought by households. Includes:

- ***durable goods***
  last a long time
  ex: cars, home appliances
- ***nondurable goods***
  last a short time
  ex: food, clothing
- ***services***
  work done for consumers
  ex: dry cleaning, air travel.

Consumption (C)

- Note on housing costs:
  - For renters,
    consumption includes rent payments.
  - For homeowners,
    consumption includes the imputed rental value of the house, but not the purchase price or mortgage payments.

Investment (I)

- is total spending on goods that will be used in the future to produce more goods.
- includes spending on
  - **business fixed investment**
    Spending on plant and equipment that firms will use to produce other goods & services.
  - **residential fixed investment**
    Spending on housing units by consumers and landlords.
  - **inventory investment**
    The change in the value of all firms' inventories.

*Note: **"Investment"** does not mean the purchase of financial assets like stocks and bonds.*

Investment vs. Capital

Note: Investment is spending on new capital.

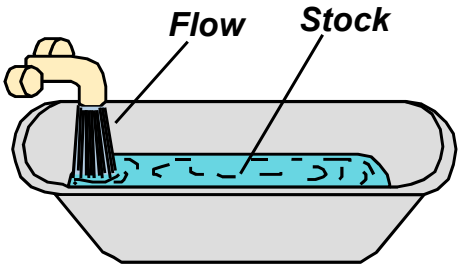
Example *(assumes no depreciation)*:

- 1/1/2021:
  economy has $500b worth of capital
- during 2021:
  investment = $60b
- 1/1/2022:
  economy will have $560b worth of capital

Stocks vs. Flows

A **stock** is a quantity measured at a point in time.

E.g., "The U.S. capital stock was $26 trillion on January 1, 2016."



A **flow** is a quantity measured per unit of time.
E.g., "U.S. investment was $2.5 trillion during 2016."

Government Purchases (G)

- is all spending on the g&s purchased by govt at the federal, state, and local levels.
- **G** excludes **transfer payments**, such as Social Security or unemployment insurance benefits. They are not purchases of g&s.

Net Exports (NX)

- **NX** = exports – imports
- Exports represent foreign spending on the economy's g&s.
- Imports are the portions of **C**, **I**, and **G** that are spent on g&s produced abroad.
- Adding up all the components of GDP gives:

$$Y = C + I + G + NX$$

U.S. GDP and Its Components, 2018

	billions	*% of GDP*	*per capita*
Y	$20,501	100.0	$62,609
C	13,952	68.0	42,609
I	3,652	18.0	11,154
G	3,523	17.0	10,758
NX	–626	–3.0	–1,911

ACTIVE LEARNING 1

GDP and its components

In each of the following cases, determine how much GDP and each of its components is affected (if at all).

A. Debbie spends $200 to buy her husband dinner at the finest restaurant in Boston.

B. Sarah spends $1800 on a new laptop to use in her publishing business. The laptop was built in China.

C. Jane spends $1200 on a computer to use in her editing business. She got last year's model on sale for a great price from a local manufacturer.

D. General Motors builds $500 million worth of cars, but consumers only buy $470 million worth of them.

ACTIVE LEARNING 1

Answers

A. Debbie spends $200 to buy her husband dinner at the finest restaurant in Boston.

Consumption and GDP rise by $200.

B. Sarah spends $1800 on a new laptop to use in her publishing business. The laptop was built in China.

Investment rises by $1800, net exports fall by $1800, GDP is unchanged.

ACTIVE LEARNING 1

Answers

C. Jane spends $1200 on a computer to use in her editing business. She got last year's model on sale for a great price from a local manufacturer.

Current GDP and investment do not change, because the computer was built last year.

D. General Motors builds $500 million worth of cars, but consumers only buy $470 million of them.

Consumption rises by $470 million, inventory investment rises by $30 million, and GDP rises by $500 million.

The Income Approach

- **National income** The total income earned by the factors of production owned by a country's citizens.
  - **compensation of employees** Includes wages, salaries, and various supplements—employer contributions to social insurance and pension funds, for example—paid to households by firms and by the government.
  - **proprietors' income** The income of unincorporated businesses.
  - **rental income** The income received by property owners in the form of rent.
  - **corporate profits** The income of corporations.
  - **net interest** The interest paid by business.
  - **indirect taxes minus subsidies** Taxes such as sales taxes, customs duties, and license fees less subsidies that the government pays for which it receives no goods or services in return.
  - **net business transfer payments** Net transfer payments by businesses to others.
  - **surplus of government enterprises** Income of government enterprises.

Value added Approach

- A firm's value added is
  the value of its output
  minus
  the value of the intermediate goods
  the firm used to produce that output.
- **GDP = sum of value added at all stages of production.**
  - The value of the final goods already includes the value of the intermediate goods,
    so including intermediate and final goods in GDP would be double-counting.

Exercise:

- A farmer grows a bushel of wheat and sells it to a miller for $1.00.
- The miller turns the wheat into flour and sells it to a baker for $3.00.
- The baker uses the flour to make a loaf of bread and sells it to an engineer for $6.00.
- The engineer eats the bread.

Compute & compare
value added at each stage of production
and GDP

Real versus Nominal GDP

- Inflation can distort economic variables like GDP, so we have two versions of GDP:
  One is corrected for inflation, the other is not.
- **Nominal GDP** values output using current prices.
  It is not corrected for inflation.

$$GDP_{(t)} = \sum_{i=1}^{n} P_{i(t)} \times Q_{i(t)}$$

- **Real GDP** values output using the prices of a ***base year***.
  Real GDP is corrected for inflation.

$$GDP_{(t)} = \sum_{i=1}^{n} P_{i(0)} \times Q_{i(t)}$$

EXAMPLE:

	Pizza		Latte	
year	***P***	***Q***	***P***	***Q***
2017	$10	400	$2.00	1000
2018	$11	500	$2.50	1100
2019	$12	600	$3.00	1200

Compute nominal GDP in each year:

Increase:

2017: $10 x 400 + $2 x 1000 = $6,000

2018: $11 x 500 + $2.50 x 1100 = $8,250 — 37.5%

2019: $12 x 600 + $3 x 1200 = $10,800 — 30.9%

EXAMPLE:

	Pizza		Latte	
year	***P***	***Q***	***P***	***Q***
2017	$10	400	$2.00	1000
2018	$11	500	$2.50	1100
2019	$12	600	$3.00	1200

Compute real GDP in each year,
using 2017 as the base year:

Increase:

2017: $10 x 400 + $2 x 1000 = $6,000

2018: $10 x 500 + $2 x 1100 = $7,200 — 20.0%

2019: $10 x 600 + $2 x 1200 = $8,400 — 16.7%

EXAMPLE:

year	*Nominal GDP*	*Real GDP*
2017	$6000	$6000
2018	$8250	$7200
2019	$10,800	$8400

In each year,

- nominal GDP is measured using the (then) current prices.
- real GDP is measured using constant prices from the base year (2017 in this example).

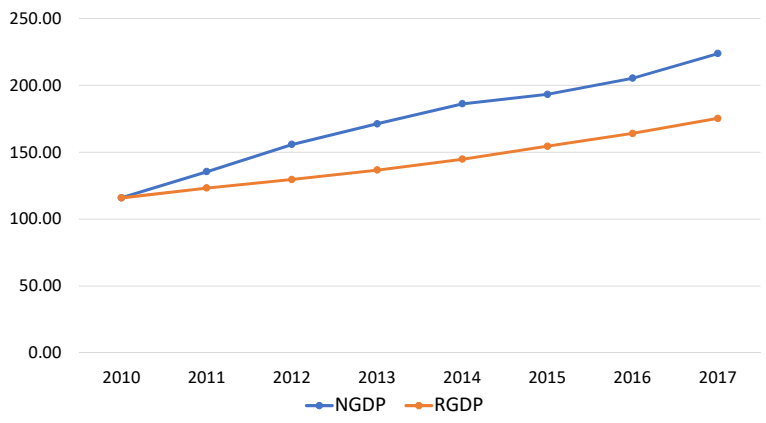
EXAMPLE:

year	*Nominal GDP*		*Real GDP*	
2017	$6000		$6000	
		37.5%		20.0%
2018	$8250		$7200	
		30.9%		16.7%
2019	$10,800		$8400	

- The change in nominal GDP reflects both prices and quantities.
- The change in real GDP is the amount that GDP would change if prices were constant (*i.e.,* if zero inflation).

Hence, real GDP is corrected for inflation.

Viet Nam Nominal and Real GDP



The GDP Deflator

- The GDP deflator is a measure of the overall level of prices.
- Definition:

$$\text{GDP deflator} = 100 \times \frac{\text{nominal GDP}}{\text{real GDP}}$$

- One way to measure the economy's **inflation rate** is to compute the percentage increase in the GDP deflator from one year to the next.

EXAMPLE:

year	*Nominal GDP*	*Real GDP*	*GDP Deflator*	
2017	$6000	$6000	100.0	
2018	$8250	$7200	114.6	14.6%
2019	$10,800	$8400	128.6	12.2%

Compute the GDP deflator in each year:

2017: 100 x (6000/6000) = 100.0

2018: 100 x (8250/7200) = 114.6

2019: 100 x (10,800/8400) = 128.6

ACTIVE LEARNING 2

Computing GDP

	2017 (base yr)		2018		2019	
	P	*Q*	*P*	*Q*	*P*	*Q*
Good A	$30	900	$31	1,000	$36	1050
Good B	$100	192	$102	200	$100	205

Use the above data to solve these problems:

A. Compute nominal GDP in 2017.

B. Compute real GDP in 2018.

C. Compute the GDP deflator in 2019.

ACTIVE LEARNING 2

Answers

	2017 (base yr)		2018		2019	
	P	*Q*	*P*	*Q*	*P*	*Q*
Good A	$30	900	$31	1,000	$36	1050
Good B	$100	192	$102	200	$100	205

A. Compute nominal GDP in 2017.

$30 x 900 + $100 x 192 = $46,200

B. Compute real GDP in 2018.

$30 x 1000 + $100 x 200 = $50,000

ACTIVE LEARNING 2

Answers

	2017 (base yr)		2018		2019	
	P	*Q*	*P*	*Q*	*P*	*Q*
Good A	$30	900	$31	1,000	$36	1050
Good B	$100	192	$102	200	$100	205

C. Compute the GDP deflator in 2019.

Nom GDP = $36 x 1050 + $100 x 205 = $58,300

Real GDP = $30 x 1050 + $100 x 205 = $52,000

GDP deflator = 100 x (Nom GDP)/(Real GDP)

= 100 x ($58,300)/($52,000) = 112.1

GDP and Economic Well-Being

- ***Real GDP per capita is the main indicator of the average person's standard of living.***
- But GDP is not a perfect measure of well-being.
- Robert Kennedy issued a very eloquent yet harsh criticism of GDP:

Gross Domestic Product…

"… does not allow for the health of our children, the quality of their education, or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials.
It measures neither our courage, nor our wisdom, nor our devotion to our country.
It measures everything, in short, except that which makes life worthwhile, and it can tell us everything about America except why we are proud that we are Americans."

- Senator Robert Kennedy, 1968

GDP Does Not Value:

- the quality of the environment
- leisure time
- non-market activity, such as the child care a parent provides his or her child at home
- an equitable distribution of income

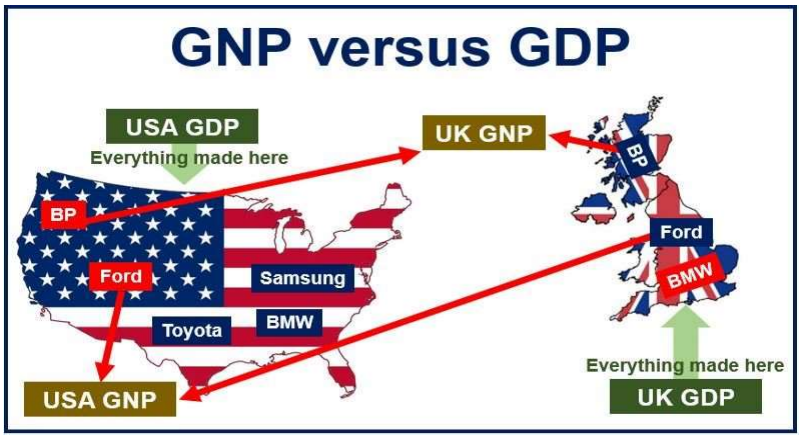
Then Why Do We Care About GDP?

- Having a large GDP enables a country to afford better schools, a cleaner environment, health care, etc.
- Many indicators of the quality of life are positively correlated with GDP. For example…

GNP/GNI vs. GDP

- **Gross National Product (GNP):**
  - The total market value of all final goods and services produced within a given period by factors of production *owned by a country's citizens*, regardless of where the output is produced.
  - Total income earned by the nation's factors of production, regardless of where located.
- **Gross National Income (GNI)**
  - GNP converted into dollars using an average of currency exchange rates over several years adjusted for rates of inflation.
- **Gross Domestic Product (GDP):**
  - Total income earned by domestically-located factors of production, regardless of nationality.

GNI/GNP vs. GDP



(GNP – GDP) = (factor payments from abroad)

– (factor payments to abroad)

Discussion question:

In Viet Nam,
which would you want
to be bigger, GDP, or GNP?

Why?

GNP and GDP

selected countries, 2017 in billion USD

	GNP	GDP
Australia	1367.56	1322.42
Cambodia	20.76	22.16
China	12203.85	12237.7
France	2646.48	2582.5
Germany	3770.89	3693.2
Indonesia	983.43	1015.42
Japan	5043.38	4872.41
Malaysia	306.25	314.71
Singapore	312.38	323.91
Thailand	434.17	455.3
United States	19872.23	19485.39
Viet Nam	212.29	223.78

Other Measures of Income

- Net national product (NNP)
  NNP = GNP – Depreciation
- National income (NI)
  NI = NNP - Statistical Discrepancy
- Personal income (PI)
  PI = NI - Indirect Business Taxes
  - Corporate Profits
  - Social Insurance Contributions
  - Net Interest
  + Dividends
  + Government Transfers to Individuals
  + Personal Interest Income

Other measures of income

- **Disposable personal income or after-tax income**

  Personal income minus personal income taxes.

  The amount that households have to spend or save.

- **Personal saving**

  The amount of disposable income that is left after total personal spending in a given period.

Measuring the Cost of Living

- Inflation refers to a situation in which the economy's overall price level is rising.
- The inflation rate is the percentage change in the price level from the previous period.

$$\text{Inflation Rate in Year 2} = \frac{\text{CPI in Year 2} - \text{CPI in Year 1}}{\text{CPI in Year 1}} \times 100$$

Consumer Price Index (CPI)

- A measure of the overall level of prices
- Published by the Government Statistics Office (GSO)
- Uses:
  - tracks changes in the typical household's cost of living
  - adjusts many contracts for inflation ("COLAs")
  - allows comparisons of dollar amounts over time

How the GSO constructs the CPI

1. Survey consumers to determine composition of the typical consumer's "basket" of goods.
2. Every month, collect data on prices of all items in the basket; compute cost of basket
3. CPI in any month equals

$$100 \times \frac{\text{Cost of basket in that month}}{\text{Cost of basket in base period}}$$

$$CPI = \frac{\sum_i^n p_{it} \times q_{i0}}{\sum_i^n p_{i0} \times q_{i0}} x100$$

Exercise: *Compute the CPI*

Basket contains 20 pizzas and 10 compact discs.

prices:		
	pizza	CDs
2012	$10	$15
2013	$11	$15
2014	$12	$16
2015	$13	$15

For each year, compute

- the cost of the basket
- the CPI (use 2012 as the base year)
- the inflation rate from the preceding year

Answers:

	Cost of basket	CPI	Inflation rate
2012	$350	100.0	*n.a.*
2013	370	105.7	5.7%
2014	400	114.3	8.1%
2015	410	117.1	2.5%

The composition of the CPI's "basket"

Figure 3: CPI weighting for product groups	Weight
CPI	
1. Food and foodstuff	39.93%
2. Beverage and cigarette	4.03%
3. Garment, footwear, hat	7.28%
4. Housing and construction materials	10.01%
5. Household appliances and goods	8.65%
6. Medicine and health care	5.61%
7. Traffic	8.87%
8. Postal services and Telecommunication	2.73%
9. Education	5.72%
10. Culture. entertainment and tourism	3.83%
11. Other goods and services	3.34%

Source: GSO

Laspeyres index vs Paasche index

- Laspeyres index
  - price index with a fixed basket of goods

$$P_L = \frac{\sum_{i=1}^{n} p_i^1 \cdot q_i^0}{\sum_{i=1}^{n} p_i^0 \cdot q_i^0}$$

- Paasche index
  - price index with a changing basket of goods

$$P_P = \frac{\sum_{i=1}^{n} p_i^1 \cdot q_i^1}{\sum_{i=1}^{n} p_i^0 \cdot q_i^1}$$

Exercise:

Year	Car		Bread	
	Price ($)	Quantity	Price ($)	Quantity
2010	50,000	100	10	500,000
2011	60,000	120	20	400,000

Requirement:
- compute Laspeyres price index
- compute Paasche price index

Reasons why the CPI may overstate inflation

- **Substitution bias**: The CPI uses fixed weights, so it cannot reflect consumers' ability to substitute toward goods whose relative prices have fallen.
- **Introduction of new goods**: The introduction of new goods makes consumers better off and, in effect, increases the real value of the dollar. But it does not reduce the CPI, because the CPI uses fixed weights.
- **Unmeasured changes in quality**: Quality improvements increase the value of the dollar, but are often not fully measured.

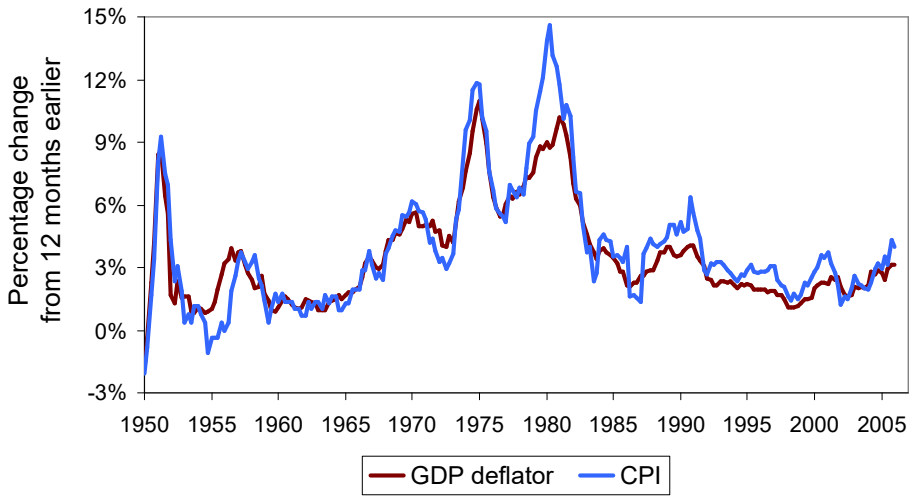
CPI vs. GDP Deflator

prices of capital goods
- included in GDP deflator (if produced domestically)
- excluded from CPI

prices of imported consumer goods
- included in CPI
- excluded from GDP deflator

the basket of goods
- CPI: fixed
- GDP deflator: changes every year

Two measures of inflation in the U.S.



The Costs of Inflation

- During inflations, most prices—including input prices like wages—tend to rise together, and input prices determine both the incomes of workers and the incomes of owners of capital and land.
- So inflation by itself does not *necessarily* reduce ones purchasing power.

Inflation May Change the Distribution of Income

- One way of thinking about the effects of inflation on the distribution of income is to distinguish between *anticipated* and *unanticipated* inflation.
- The effects of anticipated inflation on the distribution of income are likely to be fairly small, since people and institutions will adjust to the anticipated inflation.
- Unanticipated inflation, on the other hand, may have large effects, depending, among other things, on how much indexing to inflation there is.
- **real interest rate** The difference between the interest rate on a loan and the inflation rate.

Administrative Costs and Inefficiencies

- There may be costs associated even with anticipated inflation, such as the administrative cost associated with simply keeping up.
- Interest rates tend to rise with anticipated inflation. When interest rates are high, the opportunity costs of holding cash outside of banks is high.

Public Enemy Number One?

- Economists have debated the seriousness of the costs of inflation for decades.
- No matter what its real economic cost, it makes us uneasy and unhappy.
- In 1974, President Ford verbalized some of this discomfort when he said,

  "Our inflation, our public enemy number one, will unless whipped destroy our country, our homes, our liberties, our property, and finally our national pride, as surely as any well-armed wartime enemy."
- In this belief, our elected leaders have vigorously pursued policies designed to stop inflation.

Public Enemy Number One?

The macroeconomy affects politics.

Unemployment & inflation in election years

year	*U rate*	*inflation rate*	*elec. outcome*
1976	7.7%	5.8%	Carter (D)
1980	7.1%	13.5%	Reagan (R)
1984	7.5%	4.3%	Reagan (R)
1988	5.5%	4.1%	Bush I (R)
1992	7.5%	3.0%	Clinton (D)
1996	5.4%	3.3%	Clinton (D)
2000	4.0%	3.4%	Bush II (R)
2004	5.5%	3.3%	Bush II (R)

Measuring Joblessness: The Unemployment Rate

- The unemployment rate is the statistic that measures the percentage of those people wanting to work who do not have jobs.
- Organization in charge:
  - MOLISA
  - GSO

Categories of the population

- **employed**
  working at a paid job
- **unemployed**
  not employed but looking for a job
- **labor force**
  the amount of labor available for producing goods and services; all employed plus unemployed persons
- **not in the labor force**
  not employed, not looking for work

Employment

- The US statistics
  - If a household member 16 years of age or older worked 1 hour or more as a paid employee, either for someone else or in his or her own business or farm, the person is classified as employed. A household member is also considered employed if he or she worked 15 hours or more without pay in a family enterprise. Finally, a household member is counted as employed if the person held a job from which he or she was temporarily absent because of illness, bad weather, vacation, labor-management disputes, or personal reasons, regardless of whether he or she was paid.
- Vietnam Statistics
  - Employed population are all persons 15 years of age or older who, during the reference period, work (any job not prohibited by the law) 1 hour or more to produce goods or service for the purpose of generating income for themselves and their families.

Two important labor force concepts

- **unemployment rate**
  percentage of the labor force that is unemployed

$$\text{Unemployment Rate} = \frac{\text{Number of Unemployed}}{\text{Labor Force}} \times 100.$$

- **labor force participation rate**
  the fraction of the adult population that "participates" in the labor force

$$\text{Labor-Force Participation Rate} = \frac{\text{Labor Force}}{\text{Adult Population}} \times 100.$$

Exercise:
Compute labor force statistics

U.S. adult population by group, June 2020		
Number employed	=	144.4 million
Number unemployed	=	7.0 million
Adult population	=	228.8 million

Use the above data to calculate

- the labor force
- the number of people not in the labor force
- the unemployment rate
- the labor force participation rate

Answers:

- data: ***E*** = 144.4, ***U*** = 7.0, ***POP*** = 228.8
- labor force
  L = ***E*** +***U*** = 144.4 + 7 = <u>151.4</u>
- not in labor force
  NILF = ***POP*** – ***L*** = 228.8 – 151.4 = <u>77.4</u>
- unemployment rate
  U/L x 100% = (7/151.4) x 100% = <u>4.6%</u>
- labor force participation rate
  L/POP x 100% = (151.4/228.8) x 100% = <u>66.2%</u>

ECONOMICS IN PRACTICE

A Quiet Revolution: Women Join the Labor Force

In 1955, the labor force participation rate of women was 36 percent. In 1996, the labor force participation rate was 60 percent for all women.

By comparison, the participation rate for men declined over this period—from 85 percent in 1955 to 75 percent in 1996.

No doubt, some men dropped out to assume more traditional women's roles, such as child care.

THINKING PRACTICALLY

1. When a household decides to hire someone else to clean their house and uses their extra time to watch television, the wages paid to that household worker increase GDP. Is economic output in fact larger?

Discouraged-Worker Effects

- The decline in the measured unemployment rate that results when people who want to work but cannot find jobs grow discouraged and stop looking, thus dropping out of the ranks of the unemployed and the labor force.
  - The BLS survey provides some evidence on the size of the discouraged-worker effect.
  - Respondents who indicate that they have stopped searching for work are asked why they stopped. If the respondent cites inability to find employment as the sole reason for not searching, that person might be classified as a discouraged worker.
  - Some economists argue that adding the number of discouraged workers to the number who are now classified as unemployed gives a better picture of the unemployment situation.

The Costs of Unemployment

- Some Unemployment Is Inevitable
- When we consider the various costs of unemployment, it is useful to categorize unemployment into three types:
  - Frictional unemployment
  - Structural unemployment
  - Cyclical unemployment

Classification of Unemployment

- **frictional unemployment** The portion of unemployment that is due to the normal turnover in the labor market; used to denote short-run job/skill-matching problems.
- **structural unemployment** The portion of unemployment that is due to changes in the structure of the economy that result in a significant loss of jobs in certain industries.
- **natural rate of unemployment** The unemployment rate that occurs as a normal part of the functioning of the economy. Sometimes taken as the sum of the frictional unemployment rate and the structural unemployment rate.
- **cyclical unemployment** Unemployment that is above frictional plus structural unemployment.

Social Consequences

- The costs of unemployment are neither evenly distributed across the population nor easily quantified.
- The social consequences of the Depression of the 1930s are perhaps the hardest to comprehend. Few emerged from this period unscathed.
- At the bottom were the poor and the fully unemployed, about 25 percent of the labor force. Even those who kept their jobs found themselves working part-time.
- Many people lost all or part of their savings as the stock market crashed and thousands of banks failed.

Ngoài ra, những trường hợp cụ thể sau đây cũng được coi là người có việc làm:

a. Người làm việc để nhận tiền lương, tiền công hay lợi nhuận nhưng đang tham gia các hoạt động tập huấn, đào tạo hoặc các hoạt động nâng cao kỹ năng do yêu cầu của công việc trong đơn vị;

b. Người học việc, tập sự (kể cả bác sỹ thực tập) làm việc và có nhận được tiền lương, tiền công;

c. Người làm việc trong các hộ/cơ sở kinh tế của chính họ để sản xuất ra các sản phẩm hàng hóa và cung cấp dịch vụ;

d. Sinh viên/học sinh/người nghỉ hưu trong thời kỳ tham chiếu có làm một công việc từ 1 giờ trở lên để tạo thu nhập;

e. Người đang tìm kiếm việc làm nhưng trong thời kỳ tham chiếu có làm một công việc từ 1 giờ trở lên để tạo thu nhập;

f. Người đăng ký hoặc người nhận bảo hiểm thất nghiệp nhưng trong thời kỳ tham chiếu có làm một công việc từ 1 giờ trở lên để tạo thu nhập;

g. Người làm việc vì mục đích tiền công, tiền lương hoặc lợi nhuận nhưng các khoản tiền lương, tiền công và lợi nhuận đó có thể không trả trực tiếp cho họ mà được tích lũy vào thu nhập chung của gia đình họ. Những người này gồm:

- Người làm việc trong các đơn vị kinh doanh được tổ chức bởi một thành viên gia đình đang sống cùng hộ hoặc khác hộ;
- Người thực hiện các phần việc, nhiệm vụ của một công việc làm công ăn lương được tổ chức bởi một thành viên gia đình đang sống cùng hộ hoặc khác hộ.