

Econ. 1A. Chapter 2 **The US and Global Economies**

1. Economic activity arises from **scarcity**, i.e., the available resources are insufficient to meet all wants. Economics studies the choices people make to cope with scarcity. These choices determine (1) *what* goods and services get produced, (2) *how* they are produced, and (3) *for whom* they are produced.
2. **What?** Economists divide the goods and services produced into 4 categories.
  - (1) **Consumption goods and services (C)**: goods and services that are bought by individuals and used to provide personal enjoyment and contribute to a person's quality of life.
  - (2) **Capital goods (K)**: goods that are bought by businesses to increase their productive resources.
  - (3) **Government goods and services (G)**: goods and services that are bought by government.
  - (4) **Exports of goods and services (X)**: goods and services produced in one and sold in other countries.

US: In 2011, the share of C, I, G and X in Y

C	K	G	X	Y (total production)
61%	11%	17%	11%	100%

3. The broad categories of goods and services

<b>Services</b>		<b>Goods</b>	
Health	17%	Construction	5.0%
Real Estate	13%	Utilities	2.0%
Education	7%	Food	1.8%
Retail trades	7%	Chemicals	1.8%
Wholesales trades	6%		
Transportation & storage	6%		..

**Note:** Services production greatly exceeds goods production and is growing faster.

4. **How ?**

Goods and services are produced by using productive resources (factor of production): Labor (L), Capital (K), Land (N) and Entrepreneurship (E).

$Q = f(L, K, N, E)$  where  $Q$  = goods or services.

A **production function** shows the relationship between the **output** of good or service ( $Q$ ) and the combinations of factors of production (L, K, N and E).

## 5. For whom?

- (1) Who gets the goods and services that are produced depends upon the incomes that people earn and the goods and services that they choose to buy.
- (2) People earn their incomes by selling the services of the factor of production they own.
- (3) There are four different types of incomes

**Rent:** income paid for the use of land (N).

**Wages:** income paid for the services of labor (L).

**Interest:** income paid for the use of capital (K).

**Profit (or loss):** income earned by an entrepreneur for running a business (E).

6. **Functional distribution of income:** the % distribution of income among the factors of production.

In 2010, US's functional distribution of income

<u>Wages</u>	<u>Rent, interest and profit</u>	<u>Total income</u>
69%	31%	100%

7. **Personal distribution of income:** the percentage distribution of income among households.

<b>Poorest 20%</b>	3%
<b>2<sup>nd</sup> 20%</b>	9%
<b>3<sup>th</sup> 20%</b>	14%
<b>4<sup>th</sup> 20%</b>	23%
<b>Richest 20%</b>	51%

**Note:** In US, the richest 20% of households earn 51% of total income, and 80% of households earn 49% of total income.

8. The modern macroeconomics emerged with the publication of 1936 of John Maynard Keynes' **The General Theory of Employment, Interest, and Money.**

## 9. The global economy

### (1) The people

[June 5, 2010] US: 312 millions. The world: 6,923 millions.

The US adds one person every 12 seconds. The world adds 30 people in 12 seconds.

### (2) The countries: 6.9 billion people live in 176 countries.

(a) *Advanced economies* are the richest 29 countries (or areas). 1 billion people.(15% of world population). Average income (RGDP per person) > \$15,000.

U.S., Japan, Italy, Germany, France, UK, Canada, Hong Kong, South Korea, Singapore, Taiwan, Australia, New Zealand, the most of Western Europe

Countries.

- (b) *Emerging market economies* are the 28 countries in Central and Eastern Europe and Asia that were, until early 1990, part of the Soviet Union or one of its satellites. 500 million people live in these countries.  $\$15,000 > \text{average income} > \$6,000$ .

**These countries are emerging from a system of state-owned production, central economic planning, and heavily regulated markets to a system of free enterprise and unregulated markets.**

- (c) *Developing economies* are the 119 countries in Africa, Asia, and the Middle East, Europe, and Central and South America that include China, India, Indonesia and Brazil.. 5 billion people live in these countries. Average income  $< \$6,000$ .

## 10. What in the Global economy?

- (1) What in the global economy in 2010

US	20%
Other advanced economies	18%
Euro area	15%
China	13%
Other Asian developing countries	10%
Western Hemisphere	9%
Emerging market economies	8%
Africa and the Middle East	7%

- (i) In advanced economies, agricultural is the small percentage, manufacturing is a decreasing percentage, and services are the largest percentage of total production.
- (ii) In developing countries, agricultural is the largest percentage, manufacturing is an increasing percentage, and services are important but a small percentage of total production.

## 11. How in the global economy?

Goods and services are produced by using land (N), labor (L), capital (K) and entrepreneurial resources (E) and the combination of these resources used are chosen to produce at the lowest possible cost. That is, producing  $Q = f(N, L, K, E)$  at the lowest cost.

**Example:** Energy: The ability to work.

### (1) Energy uses

Electricity	80%
Transportation	29%

**(2) How to produce electricity**

Coal	33%
Natural gas	29%
Oil	21%
Hydroelectric	8%
Nuclear	8%
Wind and Sun	1%

**(3) How to produce transportation**

Oil	98%
Ethanol	2%

- (i) Production in the advanced economies uses more capital (both physical capital and human capital).
- (ii) Production in the developing countries uses more labor.

Put in another way, factories in the advanced economies are more capital intensive compared with only some in the developing economies.

**12. For whom in the global economy?**

(1) The average income per person per day (2012).

US	\$129
Canada	\$126
Japan	\$116
Euro area	\$100
UK	\$ 99
Newly industrialized Asia	\$ 63
Russia	\$ 29
Latin America & Caribbean	\$ 24
Middle East	\$ 15
China	\$ 12
Africa	\$ 4
India	\$ 3

- (2) The global distribution of income is more unequal than the U.S. distribution  
Poverty has fallen in Asia but has increased in Africa.

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What, How and For Whom in the global economy.

Economic activity arises from **scarcity**, i.e., the available resources are insufficient to meet all wants. Economics studies the choices people make to cope with scarcity. These choices determine (1) *what* goods and services get produced, (2) *how* they are produced, and (3) *for whom* they are produced.

**Example:** Who makes the iPhone?

Apple designed and markets the iPhone but it doesn't make it. Apple wants to get the iPhone manufactured at **the lowest possible cost**. It achieves this goal by assigning the task to more than 30 companies on 3 continents who in turn employ thousands of workers. The table identifies some of the companies and the cost of components they make. [Please see EYE on the iPHONE, B&M p. 41]

Apple and the 30-plus firms make decisions (choices) and pay their workers, investors and raw material suppliers to play their parts in influencing **what, how and for whom** goods and services are produced

Item	Cost	Producer (incomplete list)	Country
Processing chips	31.40	Taiwan Semiconductor	Taiwan
		United Microelectronics Corp	Taiwan
		Samsung	Korea
		Marvell	United States
		Micron	United States
Memory chips	45.80	Intel, SST	United States
Bluetooth	19.10	Cambridge Silicon Radio	United Kingdom
Printed circuit board	36.05	Cheng Uei, Entery	Taiwan
		Cyntec	Taiwan
Phone interface	19.25	Infineon Technology	Germany
Camera module	11.00	Largan Precision	Taiwan
		Altus-Tech, Primax, Lite On	Taiwan
		National Semiconductor	United States
Display	33.50	Novatek	Taiwan
		Sanyo Epson, Sharp, TMD	Japan
		Balda	Germany
Touch screen controller	1.15	Broadcom	United States
		Delta Electronics	Taiwan
Battery and power management	8.60	Catcher, Foxconn Tech	Taiwan
Case	8.50	Foxconn? Quanta?	Taiwan
Assembly	15.50		
Royalties	15.98		
<b>Total cost</b>	<b>245.83</b>		

13. **The Circular Flow Model:** A model of the economy that shows the circular flow of expenditure and income in a given time period that result from decision maker's choices and the way those interact to determine *what, how* and *for whom* goods and services are produced.

*Assumptions:*

- (a) Two sectors: Households and Firms. (b) Two markets: Goods and Factor markets.
- (c) Government does not exist. (d) A given time period.

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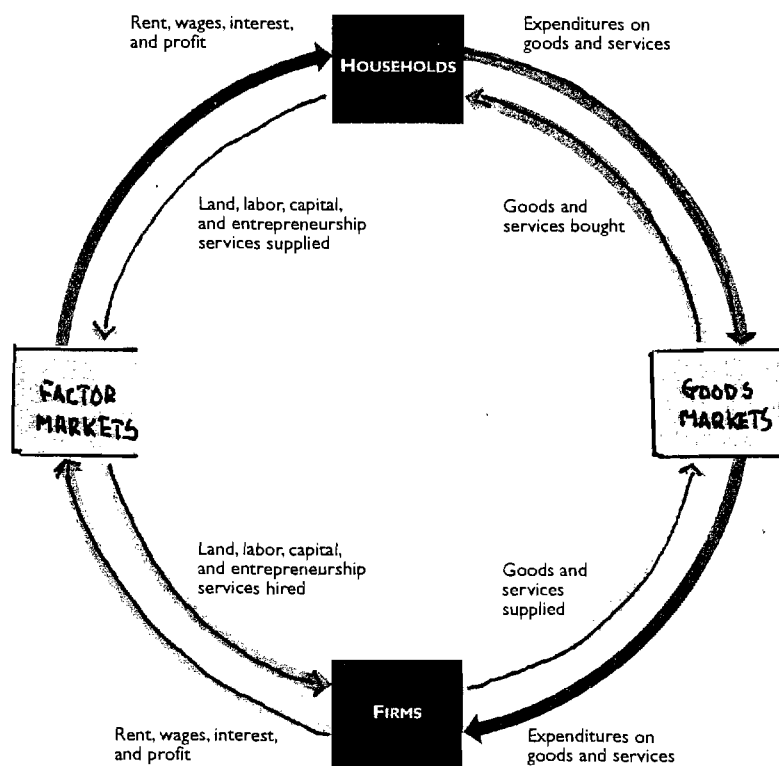
- (1) **Households:** Individuals or groups of people living together as a decision unit. They own the factors of production – L, K, N, E –and choose the quantities of these resources to offer to firms. They also choose the quantities of goods and services to buy.
- (2) **Firms:** The institutions that organize the production of goods and services. They choose the quantities of the factors of production – L, K, N, E – to hire and the quantities of goods and services to produce.
- (3) **Market:** Any arrangement that brings buyers and sellers together and enables them to get information, make rational decision, and do business together.
- (4) **Goods markets:** Markets in which goods and services are bought and sold.
- (5) **Factor markets:** Markets in which factors of production are bought and sold.

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14. The **real flows** are the flows of the factors of production –L, K, N, E- that go from households through factor markets to firms and the goods and services that go from firms through goods markets to households.

15. The **money flows** are **the payments** made in exchange for factors of production and expenditures on goods and service.

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**16. The Circular Flow Model with Government**

*Assumptions:*

- (a) Three sectors: Households, Firms and Government..
- (b) Two markets: Goods market and Factor market.
- (c) A given time period.

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17. In U.S., the government sector consists of (1) **Federal Government**, and (2) **State and Local Government**.

18. Federal government

**Expenditures:**

- (1) Public goods and services: (i) legal system protects property and enforces contracts; (ii) national defense.
- (2) Social security and welfare payments: (i) income for retired people; (ii) Medicare and Medicaid. [These are **transfer payments**, i.e., payments made by a government to individuals, for which the individual performs no current service in return.]
- (3) Transfers to state and local governments.

**Revenue:** (1) Personal income taxes. (2) Corporate income taxes.  
(3) Social security taxes.

<u>Expenditures</u>		<u>Revenue</u>	
National defense & homeland security	20%	Personal income taxes	41%
Social security benefit	20%	Social security taxes	40%
Medicare & Medicaid	24%	Corporate taxes	9%
Other transfers to persons	21%	Other taxes	10%
Interest on national debts	6%		
Others	9%		
<b>Total</b>	<b>100%</b>	<b>Total</b>	<b>100%</b>

19. **Federal Government budget** = Revenue – Expenditure (= 0, Balance budget), (> 0, budget surplus), (< 0, budget deficit).

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**National debts:** the total of government obligations in the form of bonds and short-term borrowings to run a government budget deficits.

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20. State and Local Government

**Expenditure:**

- (1) Local public goods and services: State courts, and polices, schools, roads, garbage collection and disposal, water supplies and sewage management.
- (2) Welfare benefits: Unemployment benefits and other aid to low-income families..

**Revenue:** (1) Sales taxes. (2) Property taxes. (3) State income taxes.

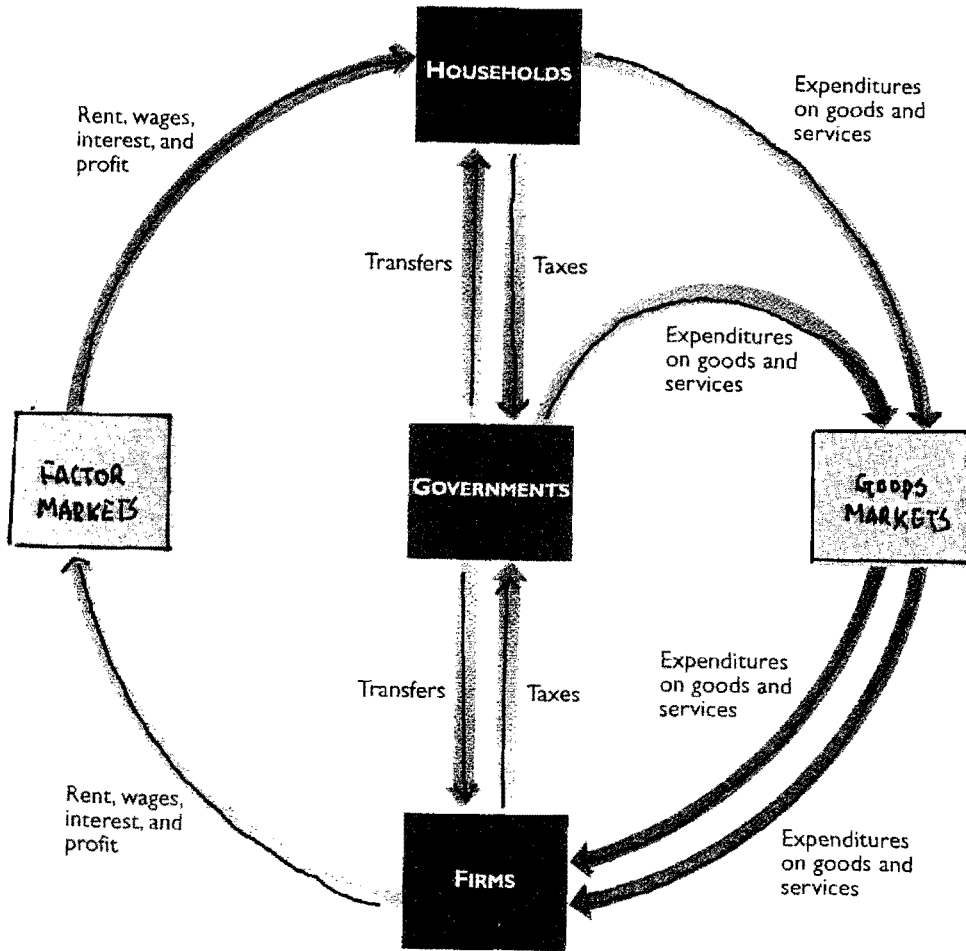
21. **Expenditure**

Highway	6%
Education	34%
Public welfare benefit	17%
All others	43%
<b>Total</b>	<b>100%</b>

**Revenue**

Sales taxes	18%
Property Taxes	17%
Individual income taxes	13%
Corporate income taxes	2%
Transfer from Fed Gover't	20%
All others	30%
<b>Total</b>	<b>100%</b>

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## 22. A Circular Flow Model for U.S. and the Rest of the World.

*Assumptions:*

- (a) Two economies: U.S. and Rest of World.
- (b) Two markets: Goods market and Financial market.
- (c) A given time period.

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23:

**International trade** is exchange of goods, and services across international borders or territories.

**International finance** is exchange of financial capital (currencies, stocks and bonds) across international borders and territories.

24. The circular flow model of the global economy shows the flows of U.S. exports and imports and international finance flows that result from lending to and borrowing from other countries.

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**Imports:** the goods and services that households and firms in one country buy from firms in other countries.

**Exports:** the goods and services that firms in one country sell to households and firms in other countries.

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