

Introduction to Macroeconomics

Session 1

Overview

- Economic theory is composed of microeconomics and macroeconomics.
- In a market-based economy, prices will be fixed by the law of supply and demand.
- Two main economic systems: capitalism and soviet style socialism.

Summary

1. Economics and Economic Reasoning
2. Supply and Demand
3. The Economic Organization of Society
4. Introduction to the World Economy
5. Key Aspects to Have in Mind

Introduction to Macroeconomics

1. ECONOMICS AND ECONOMIC REASONING

1. Economics and Economic Reasoning

- « When an artist looks at the world, he sees color. When a musician looks at the world, she hears music. When an economist looks at the world, she sees a symphony of costs and benefits. »

David C. Colander, « Economics », 2nd edition, 1995

1. Economics and Economic Reasoning

- 5 things to learn in economics:
 - Economic reasoning
 - Economic terminology
 - Economic insights
 - Economic institutions
 - Economic policy options

1. Economics and Economic Reasoning

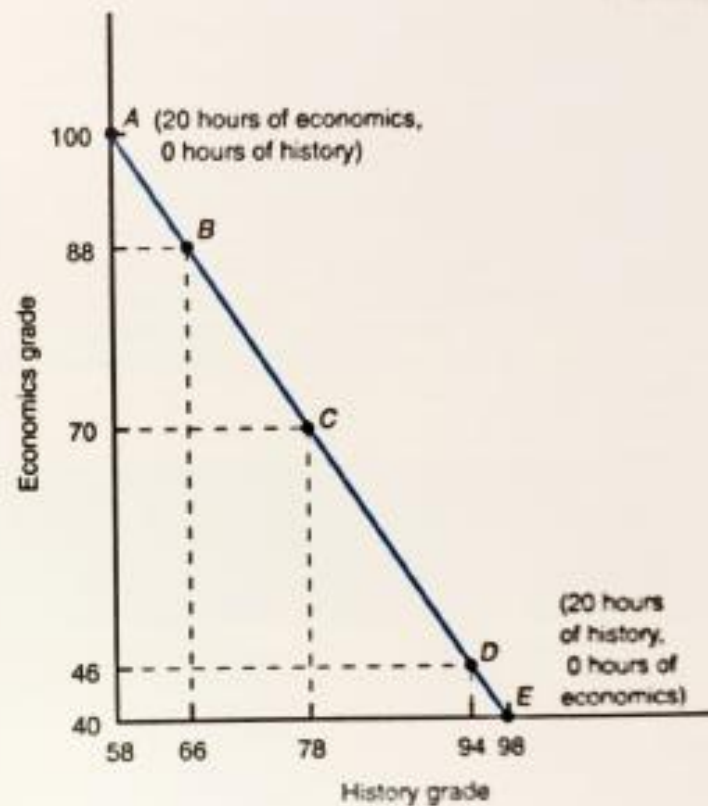
- Economic reasoning:
 - How to think like an economist ? (costs and benefits)
 - Economic decision rules: « *If the (marginal) benefits of doing something exceed the (marginal) costs, do it. If the (marginal) costs of doing something exceed the (marginal) benefits don't do it. »*

1. Economics and Economic Reasoning

- Economic reasoning:
 - Production possibility table and curve (P35 Chapter 2)

Hours of study in history	Grade in history	Hours of study in economics	Grade in economics
20	98	0	40
19	96	1	43
18	94	2	46
17	92	3	49
16	90	4	52
15	88	5	55
14	86	6	58
13	84	7	61
12	82	8	64
11	80	9	67
10	78	10	70
9	76	11	73
8	74	12	76
7	72	13	79
6	70	14	82
5	68	15	85
4	66	16	88
3	64	17	91
2	62	18	94
1	60	19	97
0	58	20	100

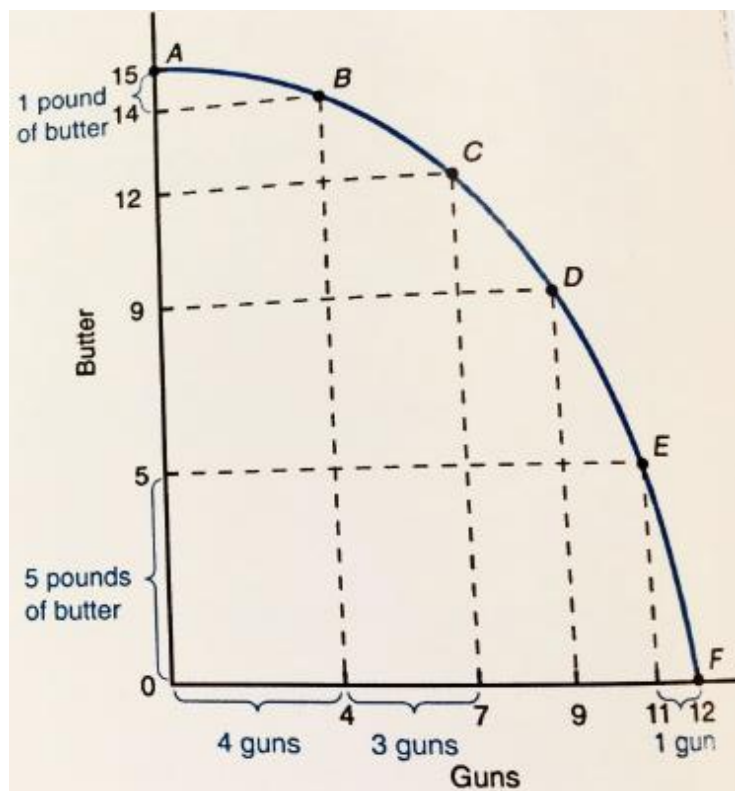
(a) Production possibility table



(b) Production possibility curve

1. Economics and Economic Reasoning

- Economic reasoning:
 - Production possibility curve (P36 Chapter 2)

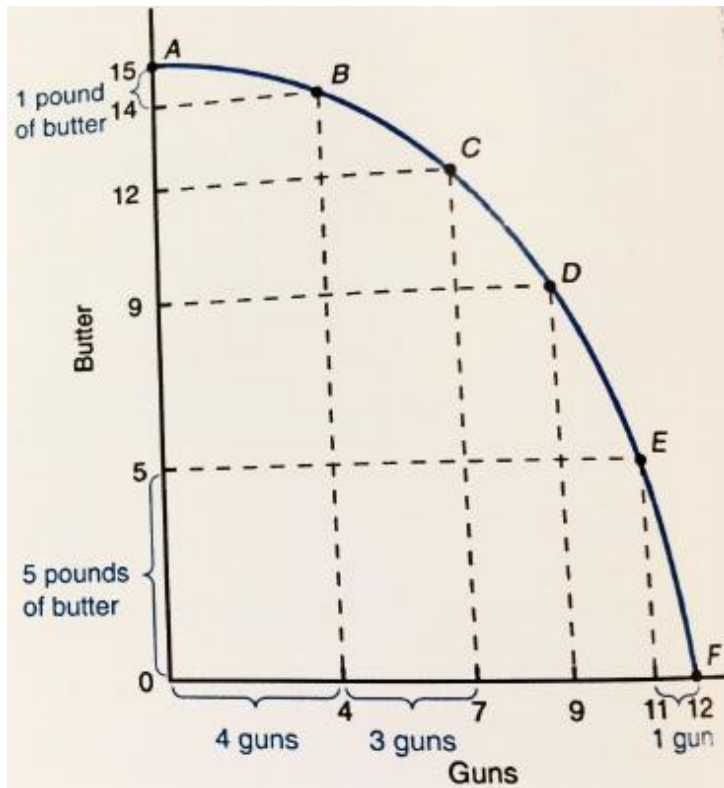


Concepts related:

- Opportunity cost
- Marginal opportunity cost
- Competitive advantage
- Efficiency
- Technological change

1. Economics and Economic Reasoning

- Economic reasoning:
 - Opportunity cost



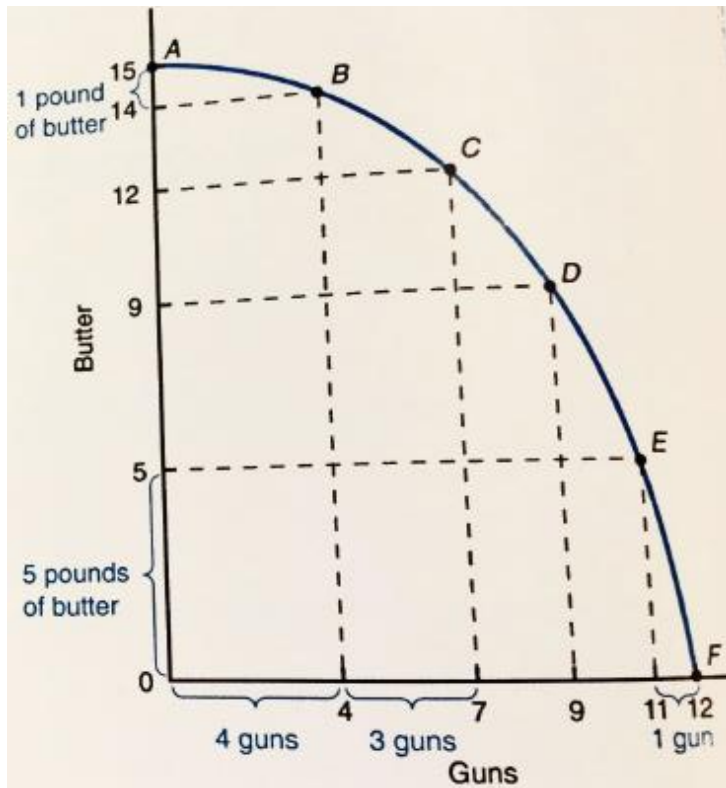
Definition: *The opportunity cost is the benefit forgone by undertaking an activity.*

..or simply:

How much X quantity of butter I have to give up in order to get Y quantity of guns produced ?

1. Economics and Economic Reasoning

- Economic reasoning:
 - Marginal opportunity costs



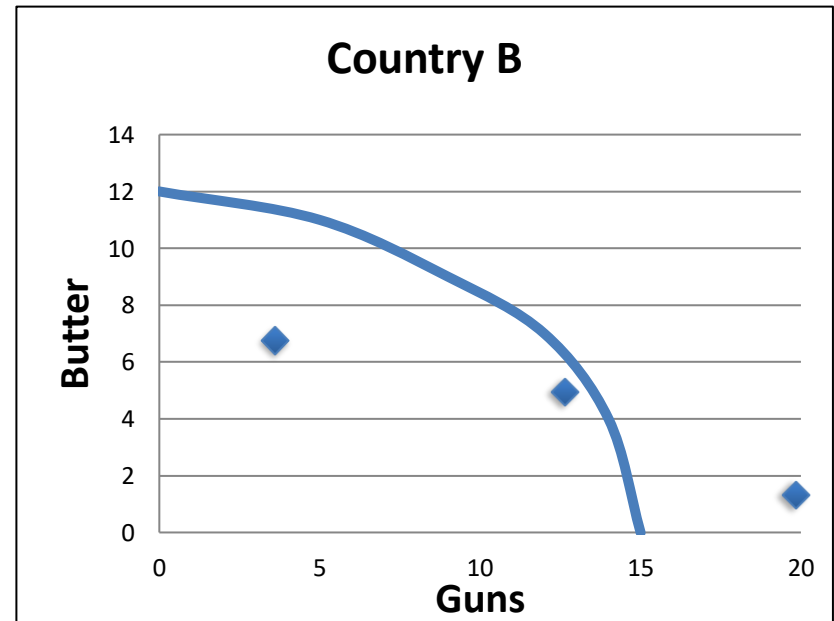
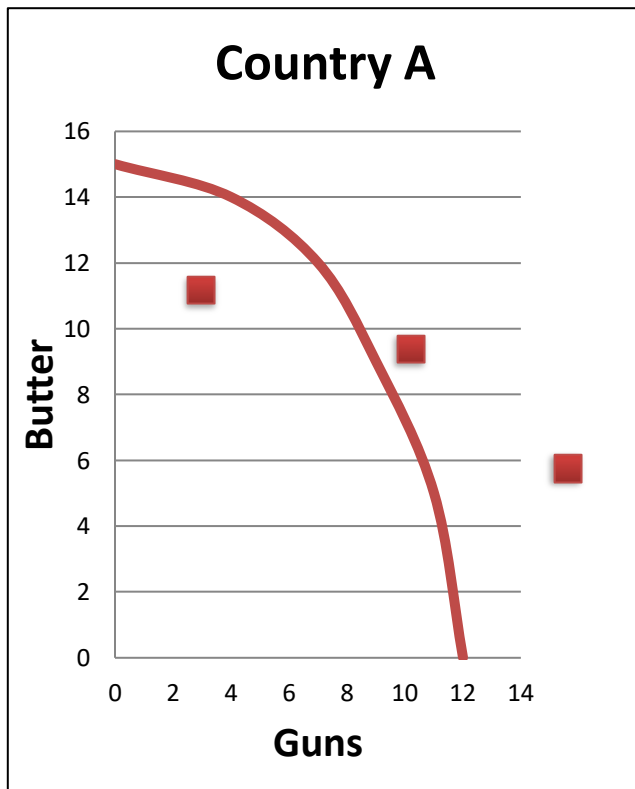
Definition: *The marginal opportunity cost is the extra opportunity cost associated to the production of extra units of a certain goods.*

Notice:
In order to get more of guns, one must give up ever-increasing quantities of butter.

1. Economics and Economic Reasoning

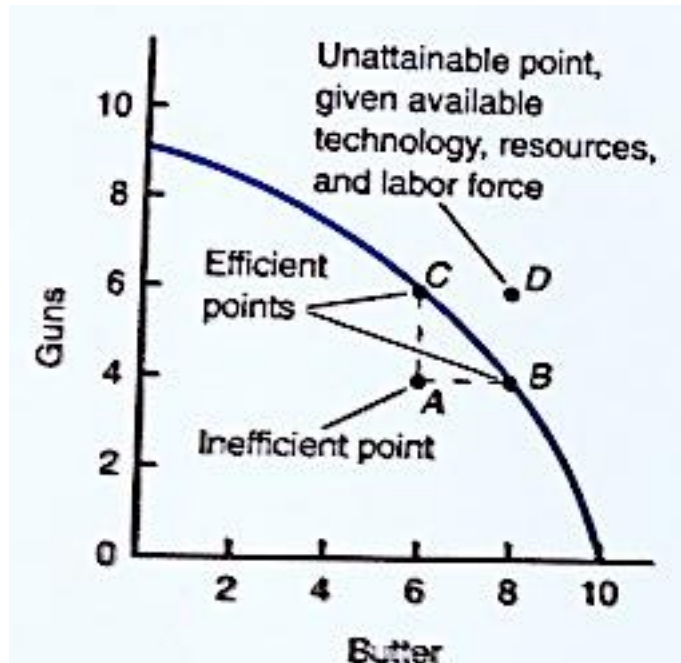
- Economic reasoning:
 - Competitive advantage

Definition: A resource (country, company) has a competitive advantage in the production of a good when compared to other resources, it's better suited to producing that good than another.



1. Economics and Economic Reasoning

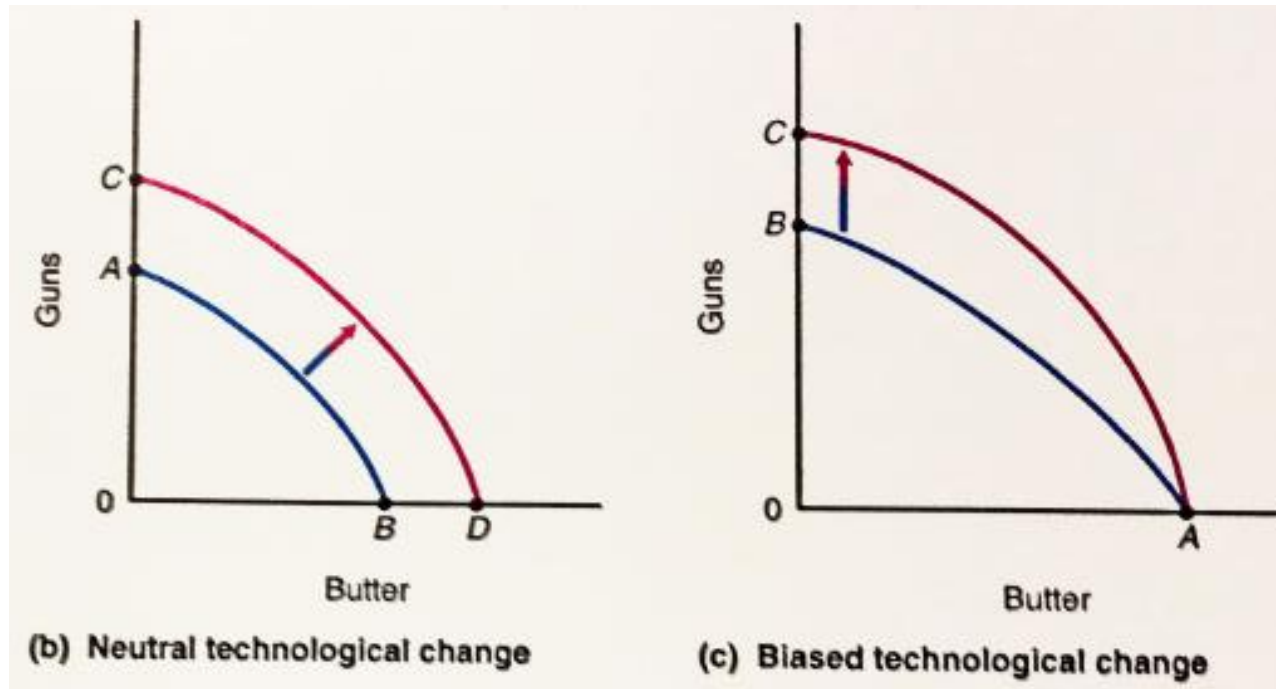
- Economic reasoning:
 - Productive efficiency (P38 Chapter 2)



Definition: *Getting as much output for as few inputs as possible.*

1. Economics and Economic Reasoning

- Economic reasoning:
 - Technological change (P38 Chapter 2)



1. Economics and Economic Reasoning

- Economic terminology (P12 Chapitre 1)
 - Economy: institutional structure through which individuals in a society coordinate their diverse wants and desire.
 - Economics: study of the economy, i.e study of how human beings coordinate their wants.
 - Other important terms:
 - Scarcity
 - opportunity cost (see previous definition)
 - The invisible hand
 - Market forces
 - Economic forces

1. Economics and Economic Reasoning

- Economic insights (P12 Chapitre 1)
 - Economic insights are often embodied in **economic theory** – a formulation of highly abstract, deductive relationships that capture inherent empirically-observed tendencies of economies. Exemple: The invisible hand theory.
 - Economic theory divided into 2 parts:
 - **Microeconomics** is the study of how individual choice is influenced by economic forces
 - **Macroeconomics** is the study of inflation, unemployment, business cycles, and growth. It focuses on aggregate relationships.

1. Economics and Economic Reasoning

- Economic institutions (P15 Chapitre 1)
 - Economic institutions are physical or mental structures that significantly influence economic decisions.
 - Exemple: corporations, governments, cultural norms, schools, family.

1. Economics and Economic Reasoning

- Economic policy options (P15 Chapitre 1)
 - Economic policies are actions (or inactions) taken, usually by government, to influence economic events.
 - Good policy analysis is **objective**.
 - Economics is divided in 3 categories:
 - **Positive economics** is the study of what is, and how the economy works;
 - **Normative economics** is the study of what the goals of the economy should be;
 - The **art of economics** is the application of the knowledge learned in positive economics to the achievement of the goals determined in normative economics.

Introduction to Macroeconomics

2. SUPPLY AND DEMAND

2. Supply and demand

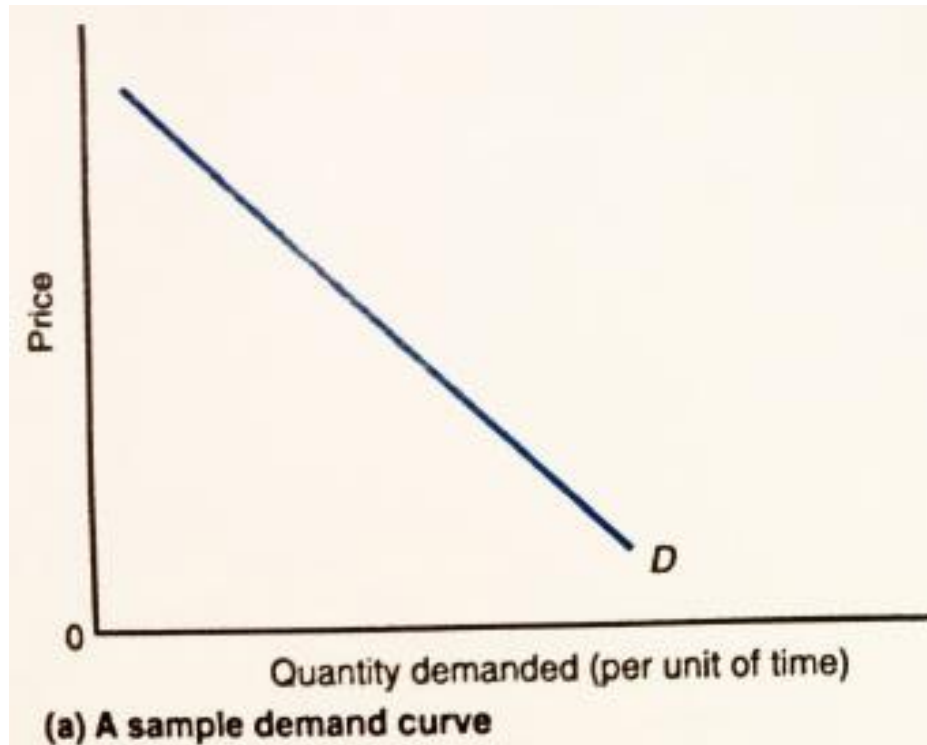
- **The law of demand (P83 Chapter 4)**
 - *More of a good will be demanded the lower its price, other things constant.*
- ...alternatively
 - *Less of a good will be demanded the higher its price, other things constant.*
- ... or simply
 - *The quantity of a good demanded is inversely related to the good's price. Thus, when price goes up, quantity demanded goes down.*

2. Supply and demand

- Differences between demand (the entire demand curve) and quantity demanded:
 - **Demand** refers to a schedule of quantities of a good that will be bought per unit of time at various prices.
 - **Quantity demanded** refers to a specific amount that will be demanded per unit of time at a specific price.

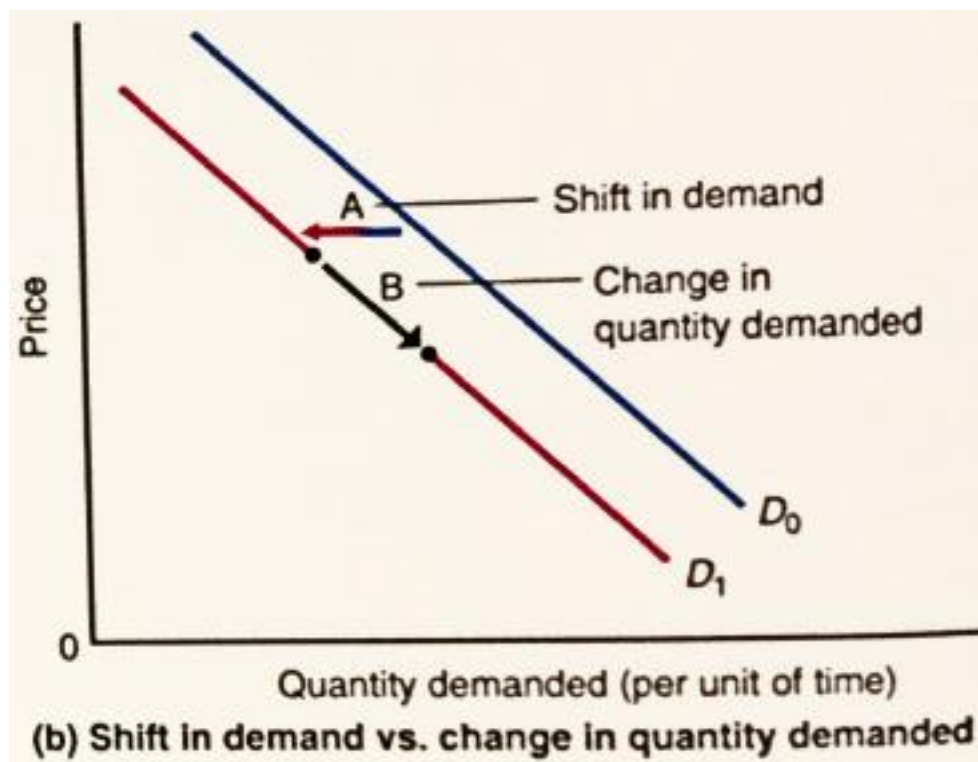
2. Supply and demand

- Demand curve (P84 Chapter 4):



2. Supply and demand

- Shift in demand vs change in qty demanded (P86 Chapter 4)



Examples of shift factor of demand:

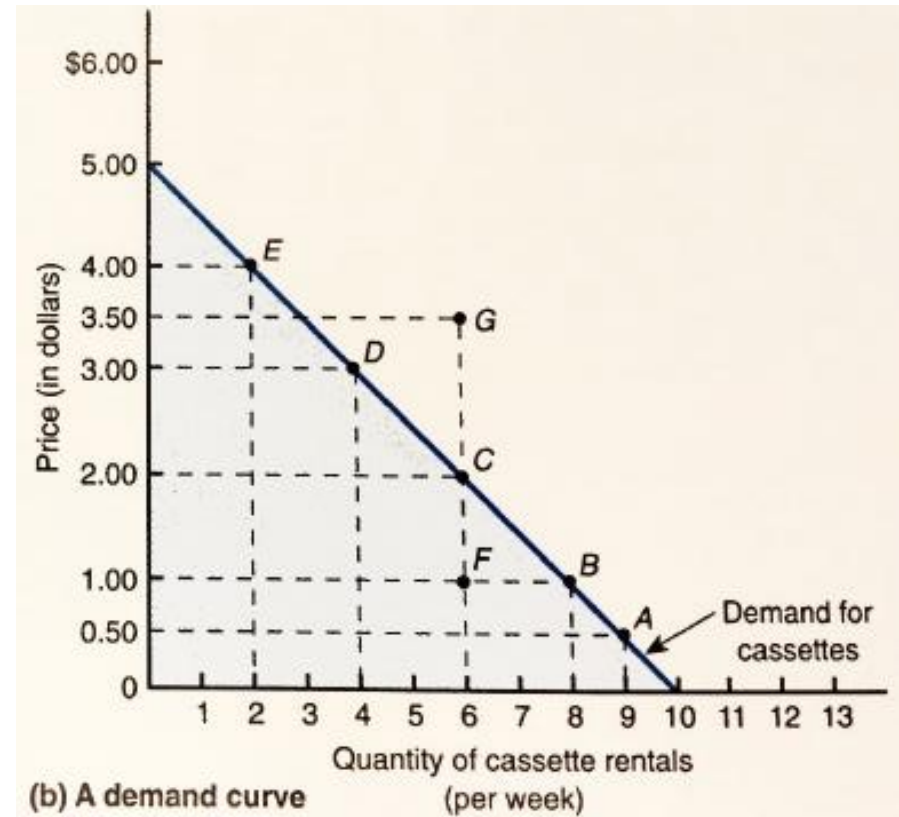
- Society's income
- The prices of other goods
- Tastes
- Expectations

2. Supply and demand

- From a demand table to a demand curve (P87 Chapter 4) :

	Price (in dollars)	Cassette rentals demanded per week
A	0.50	9
B	1.00	8
C	2.00	6
D	3.00	4
E	4.00	2

(a) A demand table

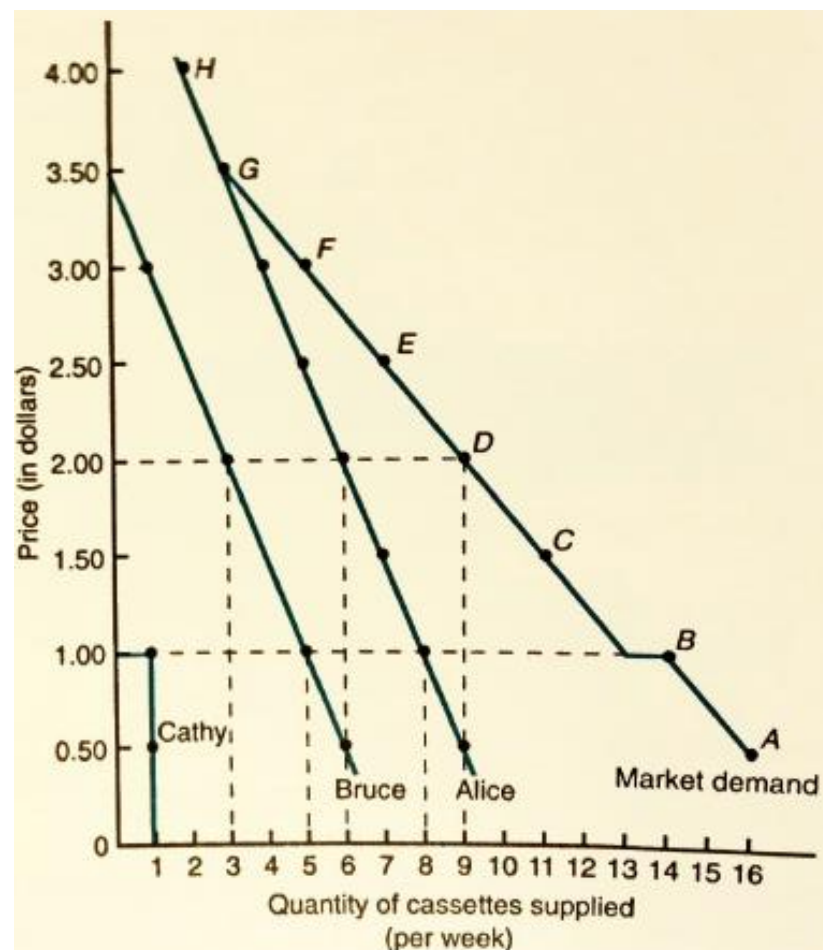


2. Supply and demand

- From individual demands to a market demand curve (P88 Chapter 4) :

	(1)	(2)	(3)	(4)	(5)
Price (in dollars)	Alice	Bruce	Cathy	Market demand	
A	0.50	9	6	1	16
B	1.00	8	5	1	14
C	1.50	7	4	0	11
D	2.00	6	3	0	9
E	2.50	5	2	0	7
F	3.00	4	1	0	5
G	3.50	3	0	0	3
H	4.00	2	0	0	2

(a) A demand table



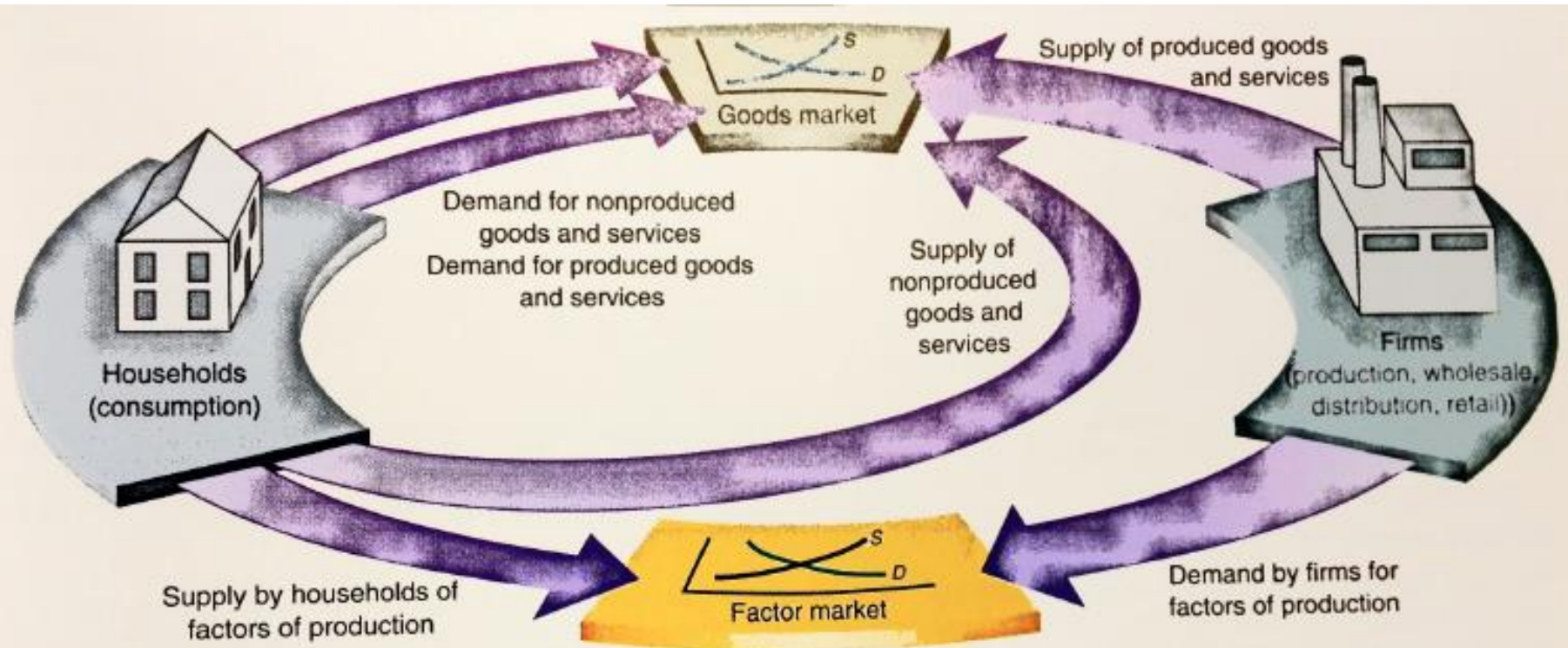
(b) Adding demand curves

2. Supply and demand

- **The law of supply (P90 Chapter 4)**
 - *More of a good will be supplied the higher its price, other things constant.*
- ...alternatively
 - *Less of a good will be supplied the lower its price, other things constant.*
- ... or simply
 - *The quantity of a good demanded is directly related to the good's price. Thus, when price goes up, quantity supplied goes up.*

2. Supply and demand

- The supply process (2nd edition P43 chap 2)

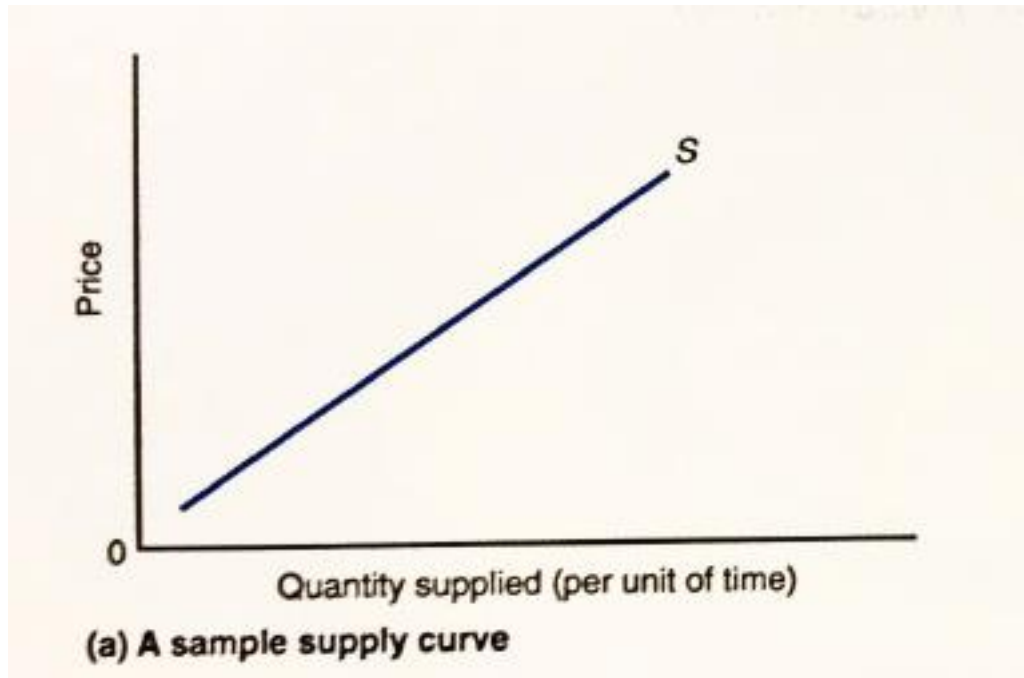


2. Supply and demand

- Differences between supply (the entire supply curve) and quantity supplied:
 - **Supply** refers to the various quantities offered for sale at various prices.
 - **Quantity demanded** refers to a specific quantity offered for sale at a specific price.

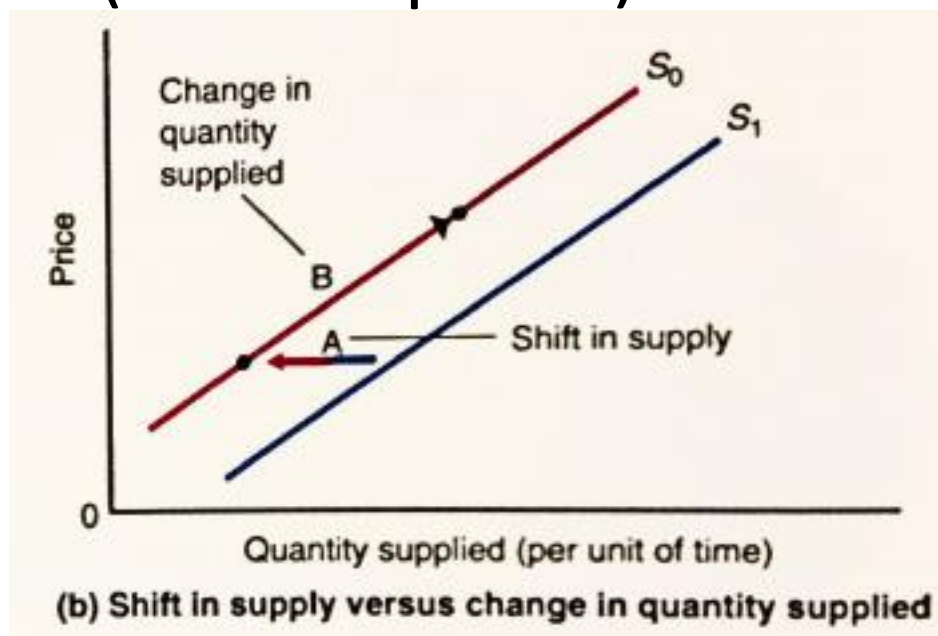
2. Supply and demand

- Supply curve (P91 Chapter 4):



2. Supply and demand

- Shift in demand vs change in qty demanded (P92 Chapter 4)



Examples of shift factor of supply:

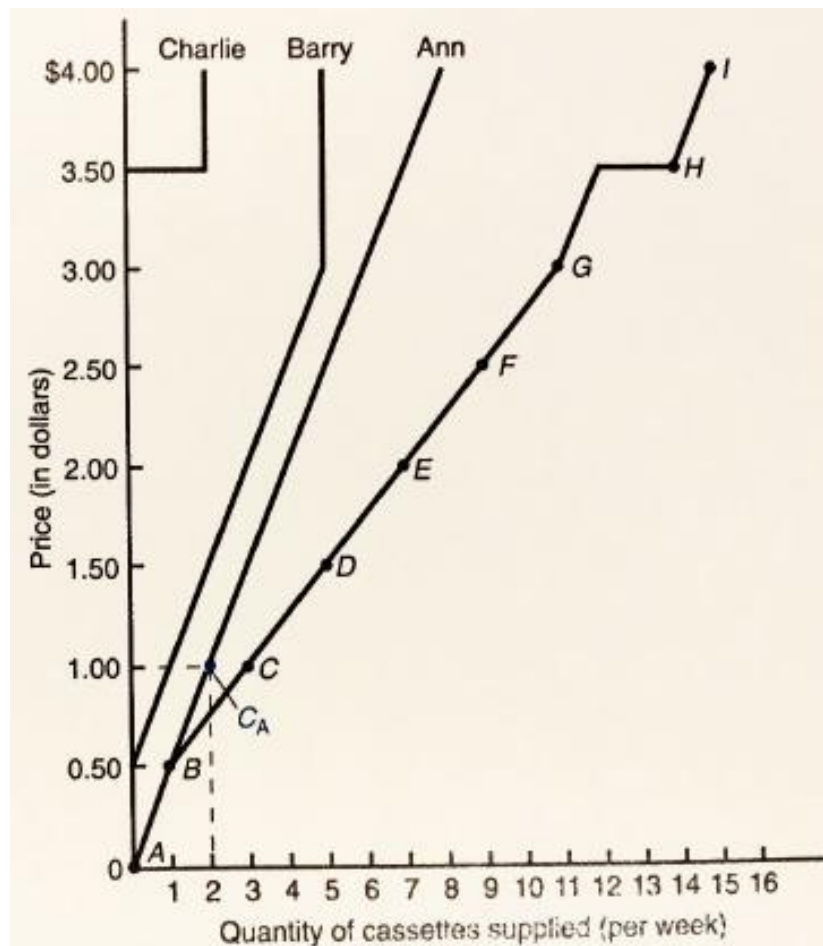
- Changes in the price of inputs used in the production of a good
- Changes in technology
- Changes in suppliers' expectations
- Changes in taxes and subsidies

2. Supply and demand

- From a supply table to a supply curve (P93 Chapter 4)

:

	(1)	(2)	(3)	(4)	(5)
Row	Price (in dollars)	Ann's supply	Barry's supply	Charlie's supply	Market supply
A	0.00	0	0	0	0
B	0.50	1	0	0	1
C	1.00	2	1	0	3
D	1.50	3	2	0	5
E	2.00	4	3	0	7
F	2.50	5	4	0	9
G	3.00	6	5	0	11
H	3.50	7	5	2	14
I	4.00	8	5	2	15



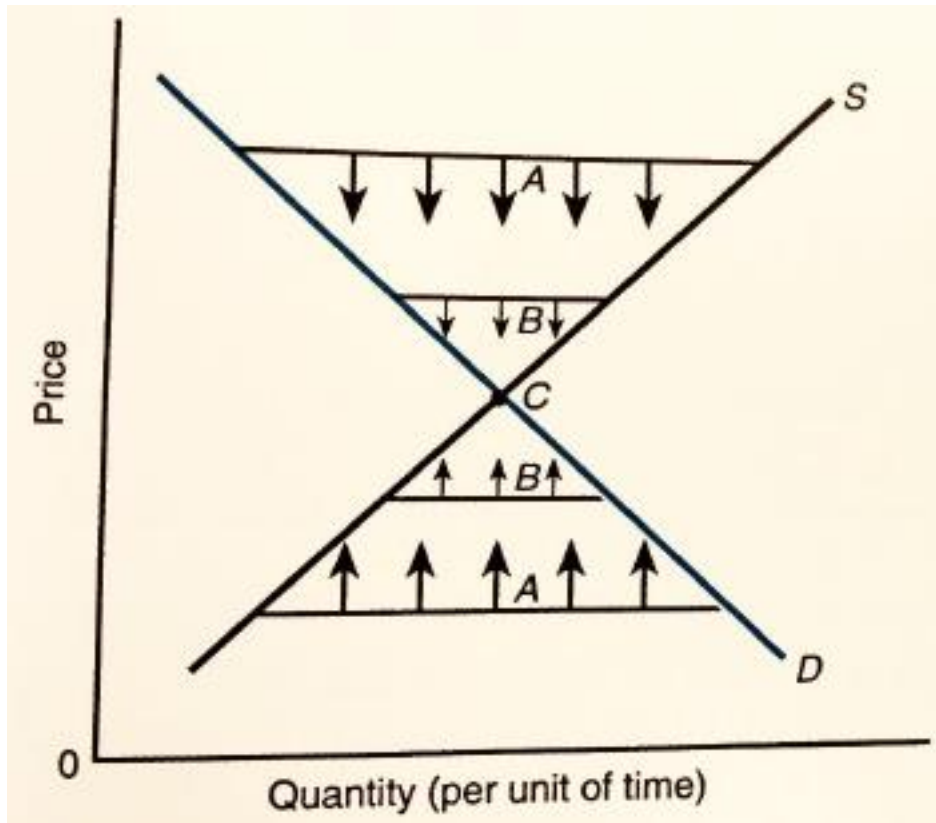
(b) Adding supply curves

2. Supply and demand

- **The first dynamic law of supply and demand (P95 Chapter 4)**
 - *When quantity demanded is greater than quantity supplied, prices tend to rise;*
 - *When quantity supplied is greater than quantity demanded, prices tend to fall*
- **The second dynamic law of supply and demand**
 - *In a market, the larger the difference between quantity supplied and quantity demanded, the greater the pressure on prices to rise (if there is excess demand) or fall (if there is excess supply)*
- **The third dynamic law of supply and demand**
 - *When quantity supplied equals quantity demanded, prices have no tendency to change*

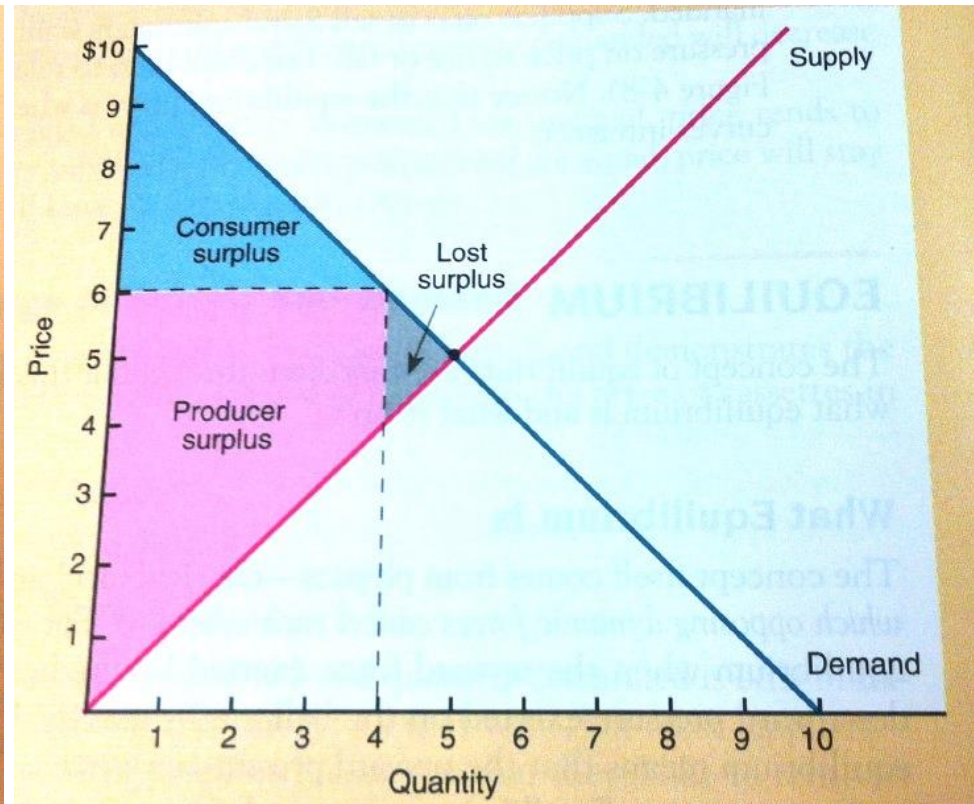
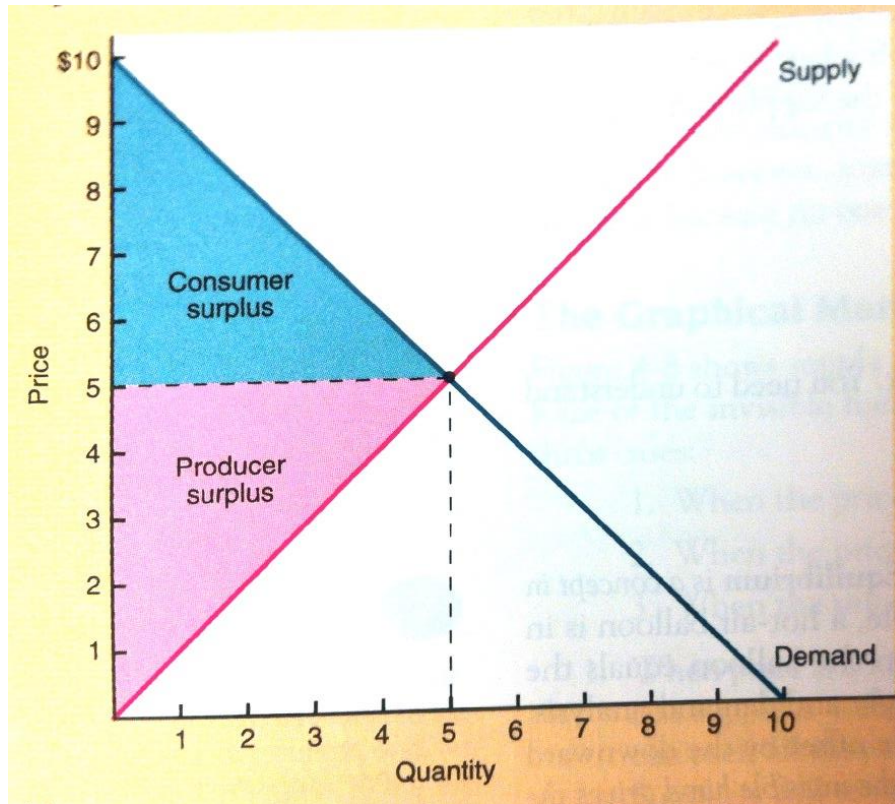
2. Supply and demand

- The Dynamics Laws of Supply and Demand (P96 Chapter 4):



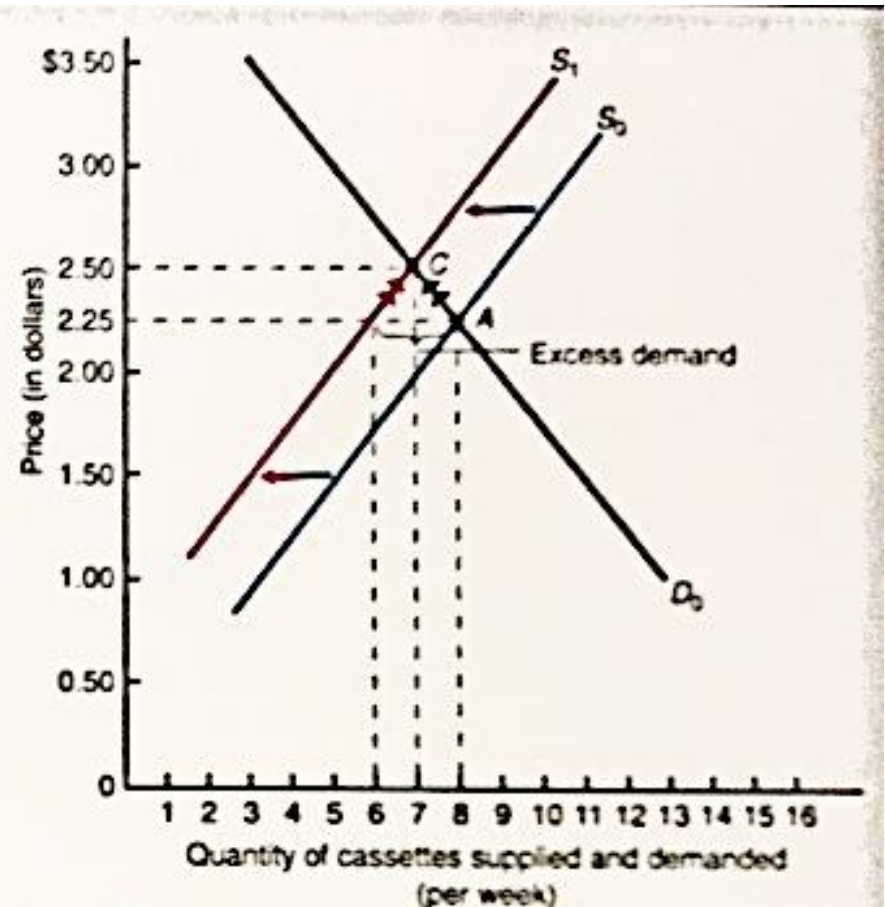
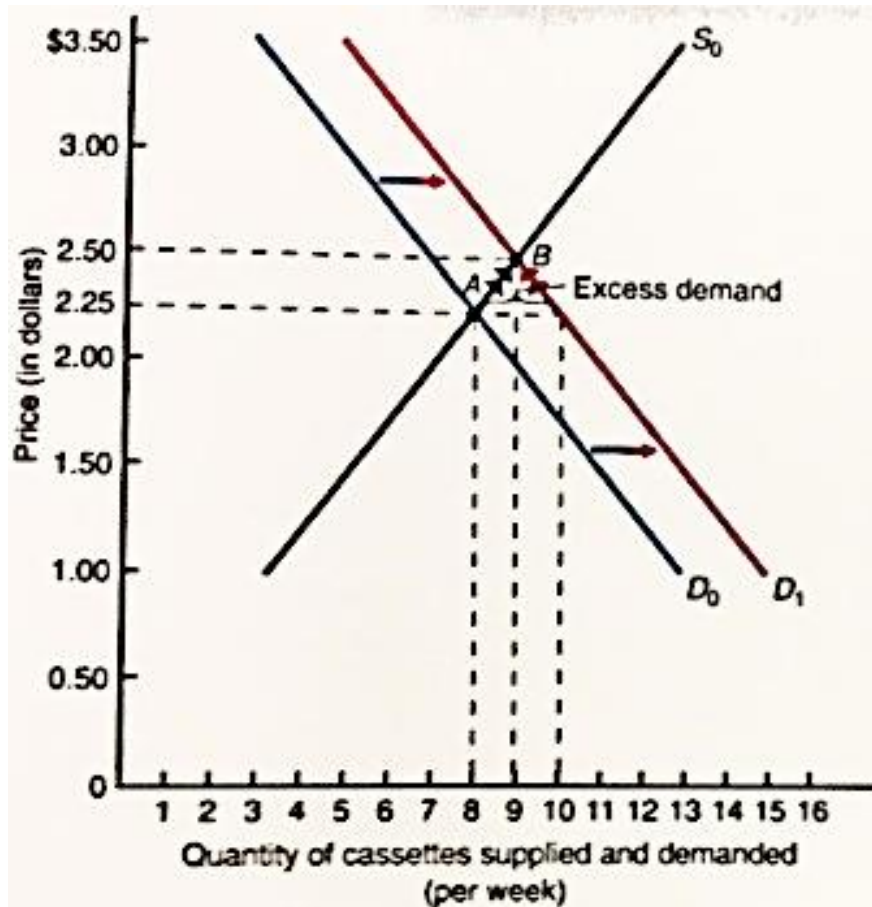
2. Supply and demand

- Consumer and Producer surplus (P98 Chapter 4):



2. Supply and demand

- Changes in supply and demand (P104 Chapter 5)



2. Supply and demand

- Diagram of effects of shifts of demand and supply on price and quantity (P109 Chapter 5)

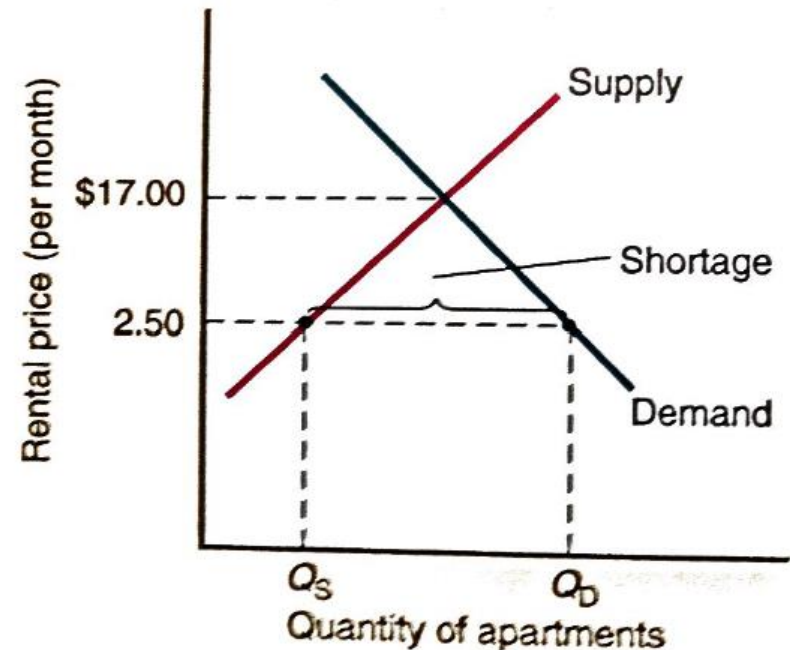
	No change in supply.	Supply shifts out.	Supply shifts in.
No change in demand.	No change.	$P \downarrow$ $Q \uparrow$ Price declines and quantity rises.	$P \uparrow$ $Q \downarrow$ Price rises. Quantity declines.
Demand shifts out.	$P \uparrow$ $Q \uparrow$ Price rises. Quantity rises.	$P ?$ $Q \uparrow$ Quantity rises. Price could be higher or lower depending upon relative size of shifts.	$P \uparrow$ $Q ?$ Price rises. Quantity could rise or fall depending upon relative size of shifts.
Demand shifts in.	$P \downarrow$ $Q \downarrow$ Price declines. Quantity declines.	$P \downarrow$ $Q ?$ Price declines. Quantity could rise or fall depending upon relative size of shifts.	$P ?$ $Q \downarrow$ Quantity declines. Price rises or falls depending upon relative size of shifts.

2. Supply and demand

- Price ceilings (P110 Chapter 5)

**Figure 5-3 Rent Control
In Paris**

A price ceiling imposed on housing rent in Paris during World War I created a shortage of housing when World War I ended and veterans returned home. The shortage would have been eliminated if rents had been allowed to rise to \$17 per month.

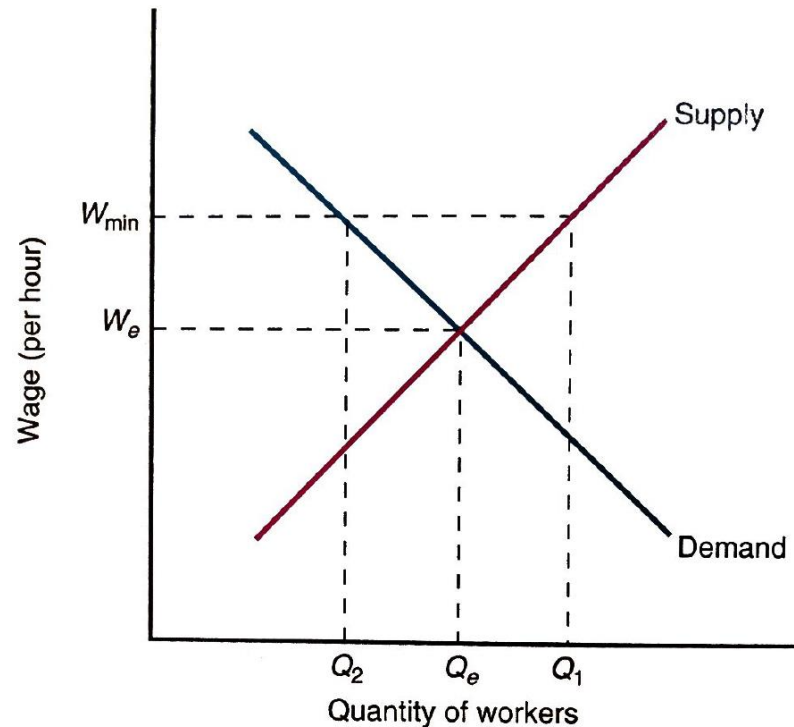


2. Supply and demand

- Price floors (P112 Chapter 5)

Figure 5-4 A Minimum Wage

A minimum wage, W_{\min} , above equilibrium wage, W_e , helps those who are able to find work, shown by Q_2 , but hurts those who would have been employed at the equilibrium wage but can no longer find employment, shown by $Q_e - Q_2$. A minimum wage also hurts producers who have higher costs of production and consumers who may face higher product prices.

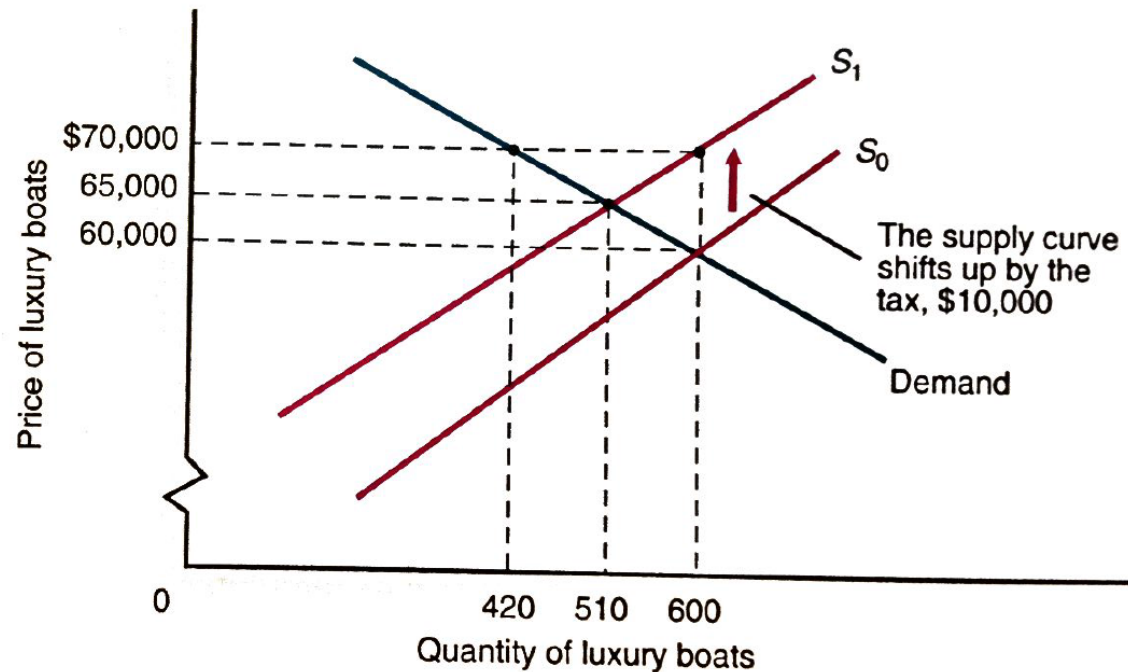


2. Supply and demand

- The effect of an excise tax (P113 Chapter 5)

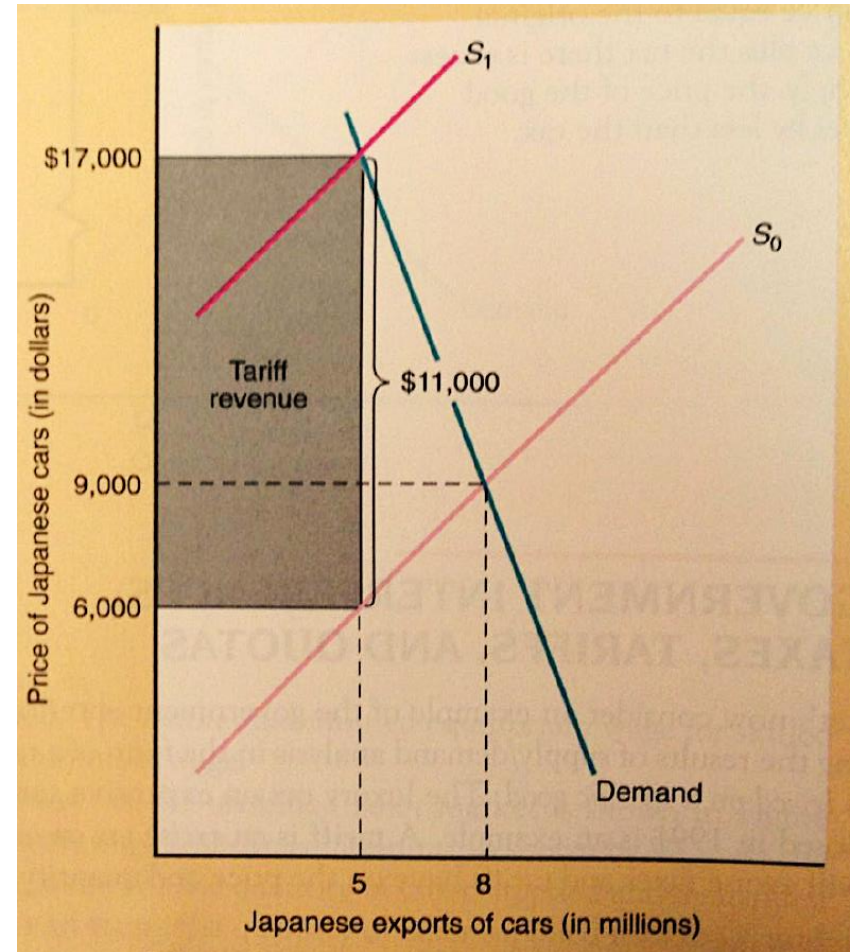
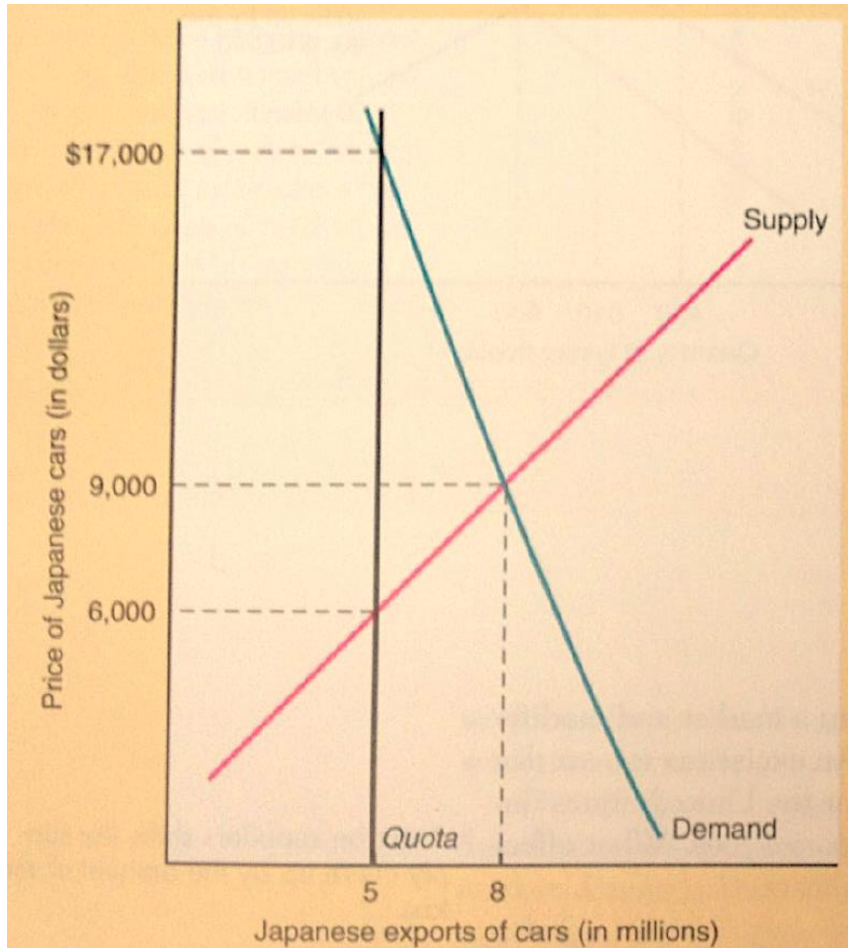
Figure 5-5 The Effect of an Excise Tax

An excise tax on suppliers shifts the entire supply curve up by the amount of the tax. Since at a price equal to the original price plus the tax there is excess supply, the price of the good rises by less than the tax.



2. Supply and demand

- Quota and Tariff (P114 Chapter 5)



Introduction to Macroeconomics

3. THE ECONOMIC ORGANISATION OF SOCIETY

3. The economic organisation...

- Economic system is the set of economic institutions that determine a country's important economic decisions
- An economic system is closely tied to a political system through which people decide what their society want
- 3 central questions that economy must answer:
 - *What* to produce
 - *How* to produce it
 - For *whom* to produce it

3. The economic organisation...

- **Capitalism:**
- It's an economic system based upon private property and the market in which, in principle, individuals decide how, what, and for whom to produce. It relies on market forces to coordinate economic activity.

3. The economic organisation...

- **Socialism** in theory:
- It's an economic system based on individuals' goodwill toward others, not on their own self-interest, and in which, in principle, society decides what, how, and for whom to produce.

3. The economic organisation...

- Socialism in practice:
- In practice socialism became an economic system based on government ownership of the means of production, with economic activity governed by central planning.
- Because it was based on a system developed in the Soviet Union, it's often called **Soviet-style socialism**.

3. The economic organisation...



EXHIBIT 1 Socialist Countries in Transition

This map shows the most important formerly traditional socialist economies that are now going through major transitions. China and the former USSR were the largest socialist economies, although there were a number of socialist countries in Eastern Europe, Africa, and Asia.

3. The economic organisation...

Capitalism

- What to produce ?
 - What firms believe people want and is profitable.
- How to produce ?
 - Businesses decide how to produce efficiently, guided by their desire to make a profit.
- For whom to produce ?
 - Distribution according to ability and inherited wealth.

Soviet-style socialism

- What to produce ?
 - What central planners believe socially beneficial.
- How to produce ?
 - Central planners decide, based on what they think is good for the country.
- For whom to produce ?
 - Central planners distribute goods based on what they determine are individuals' needs.

3. The economic organisation...

- The History of Economic systems:
 - Feudal Society: Rule of Tradition
 - From Feudalism to Mercantilism
 - From Mercantilism to Capitalism
 - From Capitalism to ~~Socialism~~ Welfare Capitalism
 - From Feudalism to Socialism
 - From Socialism to ... ?

3. The economic organisation...

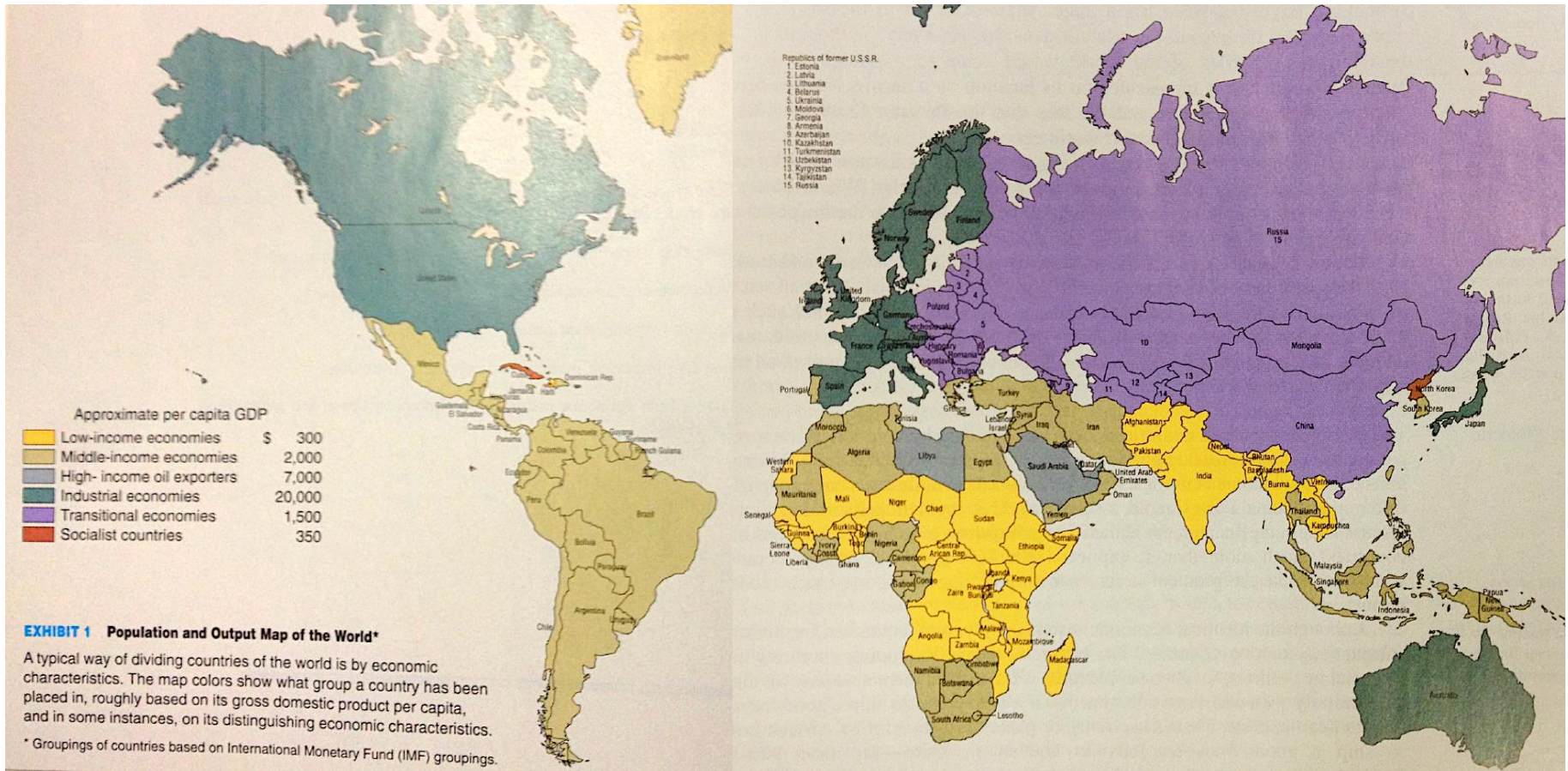
6700 B.C.	First known coins (Iran).
3600 B.C.	First system of taxation (Mesopotamia).
2100 B.C.	First welfare system (Egypt).
2000 B.C.	Coins in general use.
2000 B.C.–500 A.D.	International trade flourishes.
100 B.C.	First corporation (Rome).
105 A.D.	Chinese invent paper (a cheap substance to replace parchment).
301 A.D.	First wage and price controls (Emperor Diocletian of Rome).
700–1400	Development of feudal estates.
1275	Development of tariffs in England.
1400–1800	End of feudal estates and development of private property and wage workers.
1600–1800	Mercantilism and state control of economic activity.
1700s	Development of paper money (France).
1750–1900	Industrial Revolution.
1760–1800	Enclosure movement in England, solidifying private property and market economy.
1776	Publication of Adam Smith's <i>Wealth of Nations</i> .
1860–1960	Development of social security and unemployment insurance (Germany).
1867	Publication of Karl Marx's <i>Das Kapital</i> .
1935–1970	Integration of socialist institutions into capitalism.
1988 onward	Socialist economies in upheaval adopt markets and capitalist institutions.

Introduction to Macroeconomics

4. INTRODUCTION TO THE WORLD ECONOMY

4. Introduction to the world economy

● Overview of world per capita GDP



4. Introduction to the world economy

- Per Capita consumption of commodities 1990 (2nd ed., P110 chapter 5)

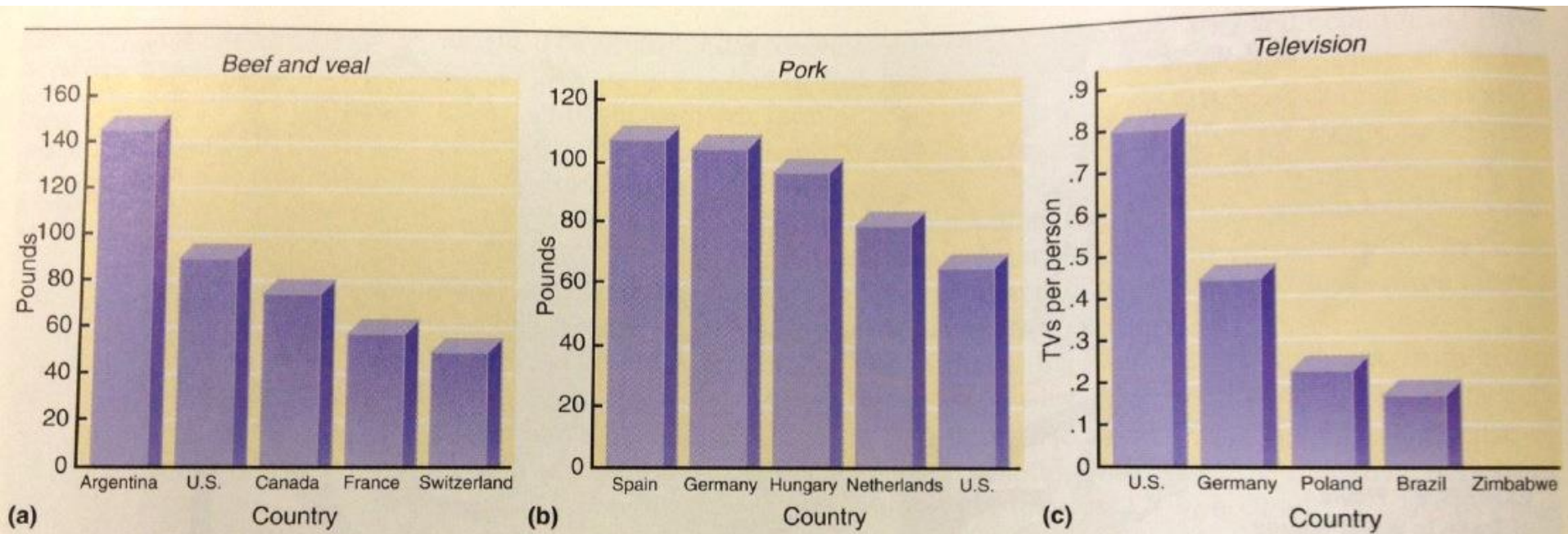


EXHIBIT 3 Per Capita Consumption of Different Commodities, 1990

In Exhibit 3 you can see the per capita consumption of selected goods in various countries. Notice that the United States consumes less beef and veal than does Argentina, and its consumption of pork is small compared to all the other countries, but its “consumption” of television is large.

4. Introduction to the world economy

Foreign exchange rate table (2nd ed., P113 chapter 5)

EXCHANGE RATES

Wednesday, March 23, 1994

The New York foreign exchange selling rates below apply to trading among banks in amounts of \$1 million and more, as quoted at 3 p.m. Eastern time by Bankers Trust Co., Dow Jones Telerate Inc. and other sources. Retail transactions provide fewer units of foreign currency per dollar.

Country	U.S. \$ equil.		Currency per U.S. \$	
	Wed.	Tues.	Wed.	Tues.
Argentina (Peso)	1.01	1.01	.99	.99
Australia (Dollar) .....	.7120	.7081	1.4045	1.4122
Austria (Schilling) .....	.08448	.08420	11.84	11.88
Bahrain (Dinar)	2.6525	2.6525	.3770	.3770
Belgium (Franc) .....	.02882	.02873	34.70	34.80
Brazil (Cruzeiro real) .....	.0012074	.0012236	828.20	817.25
Britain (Pound)	1.4965	1.4880	.6682	.6720
30-Day Forward	1.4946	1.4862	.6691	.6729
90-Day Forward	1.4917	1.4836	.6704	.6740
180-Day Forward	1.4890	1.4815	.6716	.6750
Canada (Dollar) .....	.7330	.7313	1.3643	1.3675
30-Day Forward .....	.7325	.7308	1.3651	1.3684
90-Day Forward .....	.7314	.7297	1.3672	1.3704
180-Day Forward .....	.7299	.7276	1.3701	1.3743
Czech Rep. (Koruna)				
Commercial rate .....	.0338570	.0338604	29.5360	29.5330
Chile (Peso) .....	.002395	.002395	417.60	417.60
China (Renminbi) .....	.114931	.114931	8.7009	8.7009
Colombia (Peso) .....	.001218	.001218	820.91	820.91
Denmark (Krone) .....	.1512	.1508	6.6134	6.6296
Ecuador (Sucre)				
Floating rate .....	.000476	.000476	2099.03	2099.03
Finland (Markka) .....	.17954	.18034	5.5699	5.5451
France (Franc) .....	.17393	.17355	5.7495	5.7620
30-Day Forward .....	.17352	.17314	5.7630	5.7756
90-Day Forward .....	.17285	.17253	5.7853	5.7960
180-Day Forward .....	.17219	.17188	5.8075	5.8181
Germany (Mark) .....	.5944	.5924	1.6825	1.6880
30-Day Forward .....	.5932	.5913	1.6858	1.6913
90-Day Forward .....	.5914	.5897	1.6909	1.6959
180-Day Forward .....	.5897	.5881	1.6958	1.7005

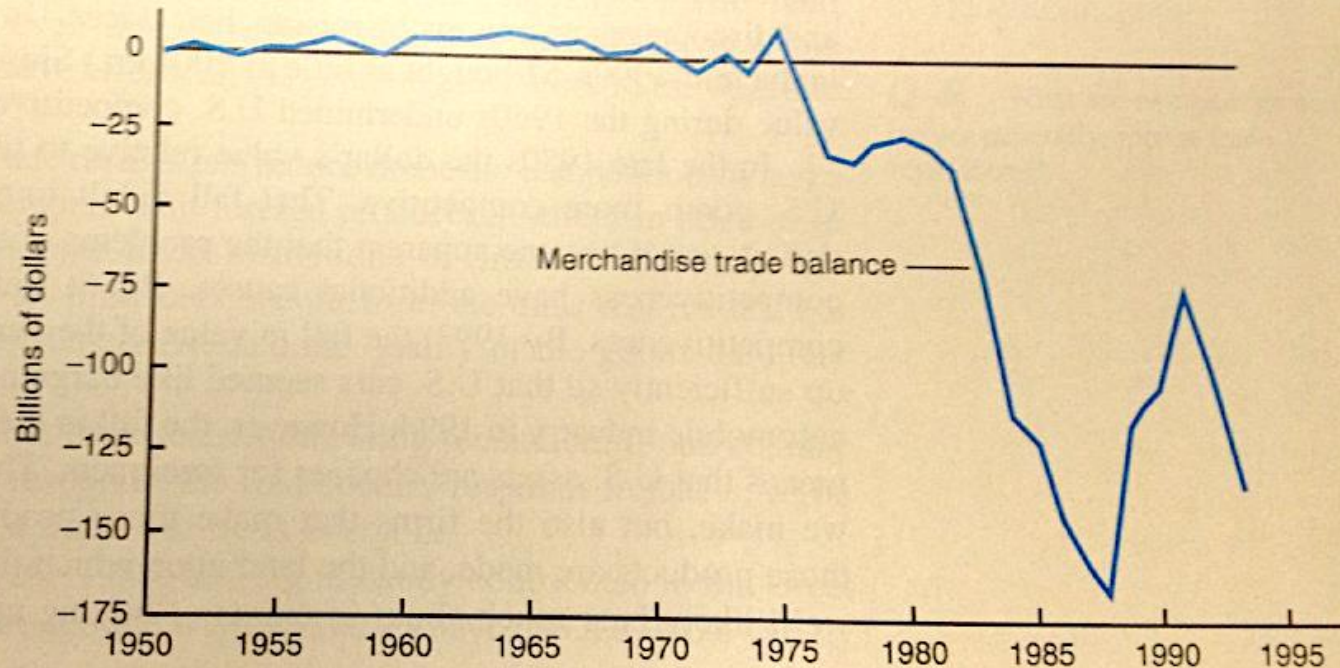
Country	U.S. \$ equil.		Currency per U.S. \$	
	Wed.	Tues.	Wed.	Tues.
Japan (Yen).....	.009399	.009436	106.39	105.98
30-Day Forward .....	.009409	.009445	106.29	105.87
90-Day Forward .....	.009436	.009473	105.98	105.57
180-Day Forward .....	.009484	.009522	105.44	105.02
Jordan (Dinar)	1.4556	1.4556	.6870	.6870
Kuwait (Dinar)	3.3538	3.3538	.2982	.2982
Lebanon (Pound) .....	.000589	.000589	1696.50	1696.50
Malaysia (Ringgit)	3.672	.3672	2.7235	2.7245
Malta (Lira)	2.5641	2.5641	.3900	.3900
Mexico (Peso)				
Floating rate .....	.3003003	.3014772	3.3300	3.3170
Netherland (Guilder) .....	.5286	.5269	1.8918	1.8978
New Zealand (Dollar) .....	.5705	.5685	1.7528	1.7590
Norway (Krone) .....	.1368	.1363	7.3105	7.3374
Pakistan (Rupee) .....	.0329	.0329	30.40	30.40
Peru (New Sol) .....	.4759	.4759	2.10	2.10
Philippines (Peso) .....	.03690	.03690	27.10	27.10
Poland (Zloty) .....	.00004535	.00004522	22052.00	22113.00
Portugal (Escudo) .....	.005769	.005743	173.35	174.12
Saudi Arabia (Riyal) .....	.26668	.26668	3.7498	3.7498
Singapore (Dollar) .....	.6305	.6307	1.5860	1.5855
Slovak Rep. (Koruna) .....	.0305344	.0305530	32.7500	32.7300
South Africa (Rand)				
Commercial rate .....	.2903	.2903	3.4498	3.4448
Financial rate .....	.2157	.2170	4.6350	4.6075
South Korea (Won) .....	.0012384	.0012389	807.50	807.20
Spain (Peseta) .....	.007254	.007217	137.85	138.57
Sweden (Krona) .....	.1272	.1271	7.8598	7.8703
Switzerland (Franc) .....	.7003	.7006	1.4279	1.4273
30-Day Forward .....	.6999	.7002	1.4288	1.4281
90-Day Forward .....	.6998	.7002	1.4290	1.4281
180-Day Forward .....	.7005	.7011	1.4275	1.4263
Taiwan (Dollar) .....	.037887	.037887	26.39	26.39
Thailand (Baht) .....	.03949	.03949	25.32	25.32
Turkey (Lira) .....	.0000461	.0000464	21674.31	21574.40
United Arab (Dirham) .....	.2723	.2723	3.6725	3.6725
Uruguay (New Peso)				
Financial .....	.213447	.213447	4.69	4.69
Venezuela (Bolivar)				
Floating rate .....	.00878	.00878	113.96	113.96

4. Introduction to the world economy

- U.S. Trade Balance

EXHIBIT 5 U.S. Trade Balance

The balance of trade is the difference between the value of goods a country imports and the value of goods it sells abroad, or exports. As you can see from the graph, since the early 1980s the United States has imported many more goods than it has exported. Thus, economists say the United States is running a trade deficit. As you can see, the trade deficit declined somewhat in the early 1990s, but it remained large. Source: U.S. Dept. of Commerce.



4. Introduction to the world economy

- International economic policy and institutions

