- all Gov., centralized decision

Mixed economy: all three combined together

Common misconception:

1. In a one-man economy, there is no scarcity
   - there is still scarcity, but no market price, as there is no market

2. Scarcity is the result of shortage
   - when scarcity exists, shortage may not exist. Shortage is the result of price fixed below equilibrium price.
   - no scarcity, no price, no shortage
   - whenever there is shortage, scarcity exists

3. Competition will still occur when all goods are free-goods or in a one-man economy
   - will not occur

3. Definition of economic good
   - At zero price, quantity demanded is larger than quantity supplied

4. Opportunity cost still exists without choice

5. Interest must exist with money

6. Interest can exist without a market

7. Common property = public good
- X know before production
- Rate of return: +, - or 0

# DIFFERENCE between labour n entrepreneurship#

**MAN-MADE**
Capital
  # stock in warehouse # - consumer good not in the hand of consumers
- facilitates production of seling services
  , when D increase suddenly

**Knowledge n beauty – human capital – increase productivity of labour**

Characteristics:
1. Increasing productivity of other factors
2. Involve opportunity cost
- produce more capital – less consumer gd
  *scarce resources*
  - present consumption decreases
  - more capital – productivity increases
  - as future consumption standard

----------
investment = interest (as factor income)
( give up present consumption for more future consumption)

**Capital formation**: sale, or purchasing capital
(gross investment)

Capital consumption: wear out of capital
(depreciation)

change in capital stock ( net investment/ capital accumulation)
= CF – CC
( can be + or -)

**NATURAL- land**
## must have contribution to production###
# X deserts, infertile soil##

Characteristics:
1. fixed in supply at any moment( XX OVER TIME e.g. billion of years)
2. immovable
  - if moved – human effort is applied > CAPITAL
3. X opportunity cost
Oligopoly
- a small no. of sellers- dominant
- doesn’t matter – as the market influence – from entry barriers n market share
- # ENTRY BARRIES:
  1. new entrants with small market share – hard to enjoy the same economies of scale
  2. already build up – brand names + confidence of consumers
  3. government license may be required
- Imperfect info
- Interdependent in behavior – one reduce price – others reduce price too –
  ####PRICE WAR ####

- Price searcher – product differentiation – can raise price without losing c
  ### THERE MAY BE A PRICE LEADER ### others follow

* YES = price n non price

Ch.13 efficiency of a market economy

Total social surplus: net social benefit > Maximized > efficient
- 2. Bring benefit - X income ---- -- underproduction
- > DWL

Positive externality
- private benefit
- external benefit - brings benefit to society - without payment (so only consider their own benefit)

Social benefit – PB+EP (D)
- so, SB> PB – underproduction

Negative externality
- PC - cost bare by an individual
- EC - cost imposes on others ( WITHOUT COMPENSATION)
- Social cost – PC+EC (s)

Solved by 1. Government intervention
2. market exchange
1. BY taxes – negative externality
   - increase production cost – MPC (make them bare the M external cost)
   - discourage production

2. Subsidy – positive externality
   - reduce MPC – encourage production

3. Quota – negative externality

4. Defining and protecting private property rights - + externality
   - Intellectual property laws
     - e.g. increase their incentives to invent new stuff
     - can receive payment from others when they use their design -### increase PB – produce more

5. Public ownership – negative externalities
   - government become a provider of a good
   - can produce according to SC n SB
| equal distribution of income welfare | transport, fruit money | # DISINCENTIVE EFFECT  
- DWL to society  
Discourage production - cause loss | e.g. salaries n profit tax  
- take away income  
- lower incentive for working n investing  
unemployment benefit  
- discourage the unemployed from seeking jobs |
|---|---|---|
| 2. minimum wage legislation | Increase income of low-paid workers  
- transfer income from the richer to the poor | # negative effect:  
DWL to society  
- excess supply of labour  
- unskilled – laid off  
Unskilled – unemployed  
The poor become poorer |
| Equalizing opportunities | 1. protecting private property rights and equal opportunities in the market | - in a market economy everyone has equal opportunity – guided by market force  
- gov. shud protect PPP,  
- X discrimination  
- Unfair market practice |
| Equal opportunities to create wealth – with their own strength under fair rules | 2. Education and training | Free education – children of poor family  
retraining programme – unemployed workers  
# accumulate human capital – improve productivity |
GDP= monetary value – final goods n services- by all resident producing unit of an economy – within a specific period of time

# Value of Intermediate gd used – included – Final value

Excluded:

| 1. 2nd hand good | X current production  
|                  | Value included in 1st transaction |
| 2. illegal activities | Hard to get reliable data |
| 3. Goods are not produced in that period | X current production |
| 4. Transaction on shares and bonds | X production, transfer in ownership |
| 5. insurance compensation from injury | X current production of service |
| 6. social welfare (fund raising) | X production, transfer payment |
| 7. unpaid services- by household – own consumption | X market value, X reliable data |

Special case (included)

| 1. Commission, stamp duty, dividend received | PRODUCTION OF SERVICE |
| 2. buying insurance | PRODUCTION OF SERVICE |
| 3. interest payment to mortgage | PRODUCTION OF lending SERVICE |
| 4. rental value of self occupied property | Provision of rental service for oneself |
| 5. Value added of intermediate good | |
| 6. spend welfare on services | Production of services |

Circular flow model

Household

Firm

1. output (value-added) = total revenue
   = Value of output - value of intermediate gd from other firms
   # add up each stage

special

| 1. contribution of Amy's garment factory | Only require one od the stage |
| 2. Electricity and water charged | Included (from other firms) |
| 3. Wage, profit tax | XXXXXXXX |
Ch. 17 - Unemployment

Labor force – all persons age 15 or above – perform any work for payment or profit – or available for work and seeking work

X include:
1. retired person
2. full-time students
3. below 15
4. without working ability

composed of:
1. employed population
   (include underemployed – work less than his maximum cap., available for seeking more job)
   - with formal job attachment (on holiday, leave)
   - payment / profit

2. unemployed population

### Unemployment rate:
- depends on % change in U population and labor force
- real GDP – increase with the increase in employed pop.

% change: 
分子 > 分母

<table>
<thead>
<tr>
<th>Case</th>
<th>Description</th>
<th>Labor Force (LF)</th>
<th>Unemployed Population</th>
<th>U Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A group of teachers quit their job and enroll a full-time course in Uni</td>
<td>decrease</td>
<td>unchanged</td>
<td>increase (as 分母 decrease)</td>
</tr>
<tr>
<td>2.</td>
<td>Foreign top students come and work in HK, total no. of job remains unchanged</td>
<td>Increase</td>
<td>Increase</td>
<td>Increase (as 分母, 分子 increase by the same no.)</td>
</tr>
<tr>
<td>3.</td>
<td>Foreigners come and fill up the long-vacant post</td>
<td>Increase</td>
<td>Unchange</td>
<td>Decrease</td>
</tr>
<tr>
<td>Quality</td>
<td>Description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. <strong>store of value</strong></td>
<td>Purchasing power of money can be stored up for future consumption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- more convenient for storing wealth</td>
<td></td>
<td></td>
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</tbody>
</table>

**Qualities of good money**

<table>
<thead>
<tr>
<th>Quality</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>generally accepted</strong></td>
<td>Everyone accept it as medium of exchange</td>
</tr>
<tr>
<td>2. <strong>scarce in supply</strong></td>
<td>- relatively scarce</td>
</tr>
<tr>
<td>3. <strong>Durable</strong></td>
<td>- durable/long-lasting</td>
</tr>
<tr>
<td></td>
<td>- to perform the function of store of value</td>
</tr>
<tr>
<td>4. <strong>Divisible</strong></td>
<td>- can be divided into small unit without losing its value</td>
</tr>
<tr>
<td>5. <strong>Homogeneous</strong></td>
<td>- each unit of $= uniform in quality for easy recognition</td>
</tr>
<tr>
<td></td>
<td>- gd enough to prevent forgery</td>
</tr>
<tr>
<td>6. <strong>Portable</strong></td>
<td>- easy to carry around large transaction</td>
</tr>
<tr>
<td>7. <strong>Stable value</strong></td>
<td>- rather stable over time</td>
</tr>
<tr>
<td></td>
<td>- people trust it</td>
</tr>
</tbody>
</table>

**Forms of money**

<table>
<thead>
<tr>
<th>Form</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Commodity money</strong></td>
<td>Physical good – had intrinsic value</td>
</tr>
<tr>
<td></td>
<td>- heavy metals are inconvenient to carry around</td>
</tr>
<tr>
<td>2. <strong>Convertible paper money</strong></td>
<td>Gold/ silver certificates (representative commodity money)</td>
</tr>
<tr>
<td></td>
<td>- system: gold standard / silver standard</td>
</tr>
<tr>
<td></td>
<td>- limited by supply of gold and silver</td>
</tr>
<tr>
<td>3. <strong>inconvertible (fiat) money</strong></td>
<td>- coins and banknotes</td>
</tr>
<tr>
<td></td>
<td>legal tender: issued by government treasury, central bank or private commercial banks</td>
</tr>
<tr>
<td></td>
<td>(declared by the gov., accepted by law)</td>
</tr>
<tr>
<td></td>
<td>coins: token coins, metal content is less valuable than the face value of a coin</td>
</tr>
</tbody>
</table>

**Deposits money**

<table>
<thead>
<tr>
<th>Form</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Demand deposit (current account)</strong></td>
<td>- write cheques to make payments</td>
</tr>
<tr>
<td></td>
<td>- x interest</td>
</tr>
<tr>
<td></td>
<td>- transactions involving large payment amount</td>
</tr>
</tbody>
</table>
Max. banking multiplier: 1/ RRR
Banking multiplier: 1/ARR

### Method 1

<table>
<thead>
<tr>
<th>Description</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. increase in total deposit</td>
<td>( \text{Initial increase in D} \times (1/rrr) )</td>
</tr>
<tr>
<td>MAX. increase in loan</td>
<td>( \text{Initial increase in loans} \times (\text{initial increase in D (1-rrr)}) \times \text{mc} )</td>
</tr>
<tr>
<td>Max. increase in $ SUPPLY:</td>
<td>Change in ( c ) in ( p_c ) + max. change in total deposit (new max. - old D)</td>
</tr>
<tr>
<td>Max. possible amount of deposit</td>
<td>Max. change in D + original amount</td>
</tr>
</tbody>
</table>

### Method 2 (when new D added / withdrawn)

<table>
<thead>
<tr>
<th>Description</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Max. possible amount of total deposit</td>
<td>Actual reserve / rrr</td>
</tr>
<tr>
<td>2. Max. change in loans</td>
<td>( (\text{actual reserve}/rrr - AR) - \text{ORIGINAL loan} )</td>
</tr>
<tr>
<td>3. Max. change in deposit</td>
<td>Actual R / rrr - original D</td>
</tr>
<tr>
<td>4. Max. change in $ supply</td>
<td>Change in ( c ) in ( p_c ) + change in ( D \times \text{mc} )</td>
</tr>
<tr>
<td>5. Total money supply</td>
<td>Total ( C_p ) + total deposit</td>
</tr>
</tbody>
</table>
| 6. Immediate change / change in excess reserve | - find new reserve 
- find new \( r_r \) 
- find new \( r_e \) 
= new \( r_e \) - old \( r_e \) |

# WHEN there is new deposit to the bank,
Max. increase in $ supply < max increase in deposit
( increase in D - decrease in cash) ( increase in D )

# when there is a fall, in the rrr, (X change in pc)
max. increase in money supply = max. increase in deposit
( increase in D - 0 ) ( increase in D )
NO CHANGE IN PC

Explanation:
1. deposit creation
   - after the bank receives the D ( \( x_m \) ), there is excess reserve ( $x_m $)