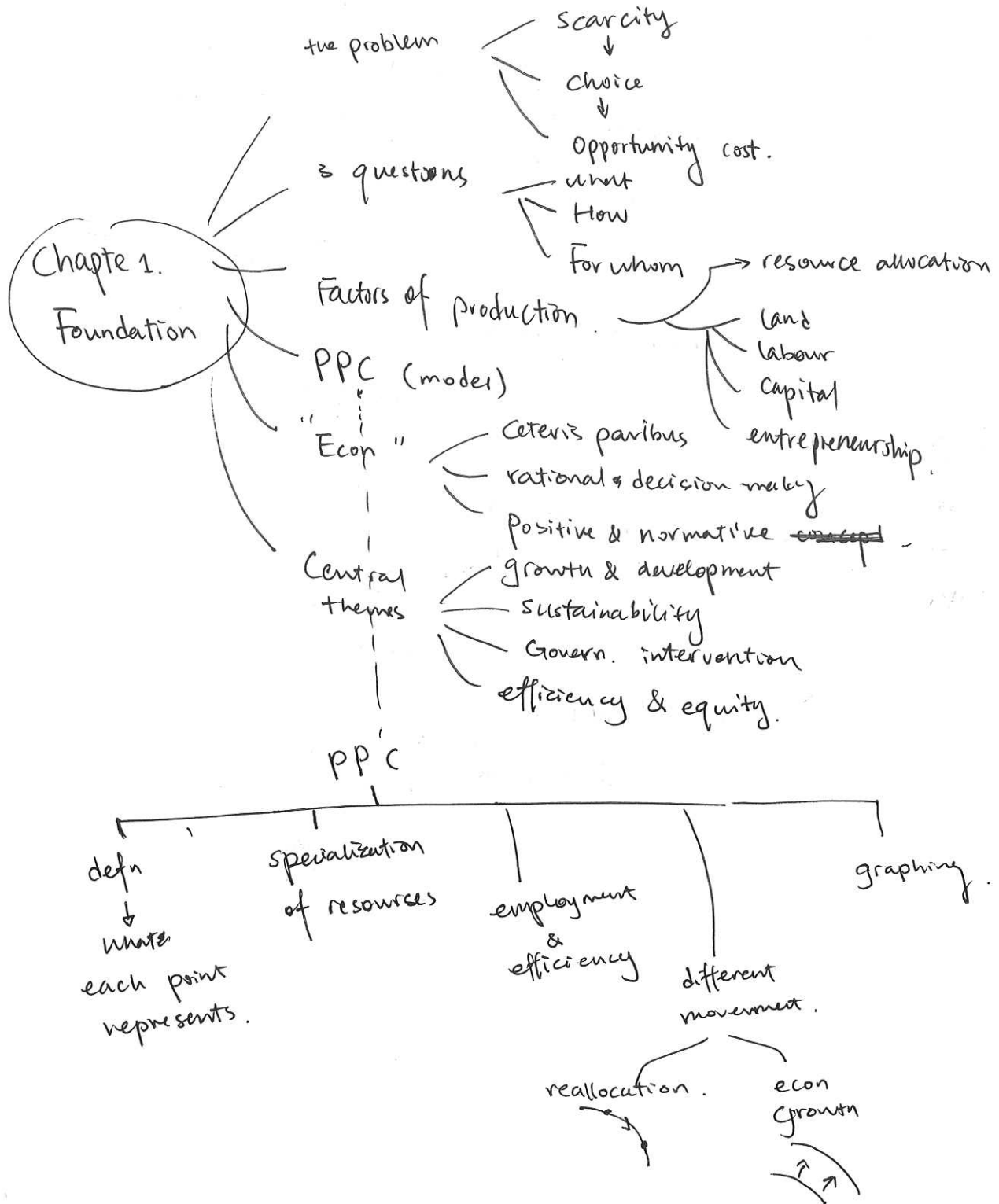
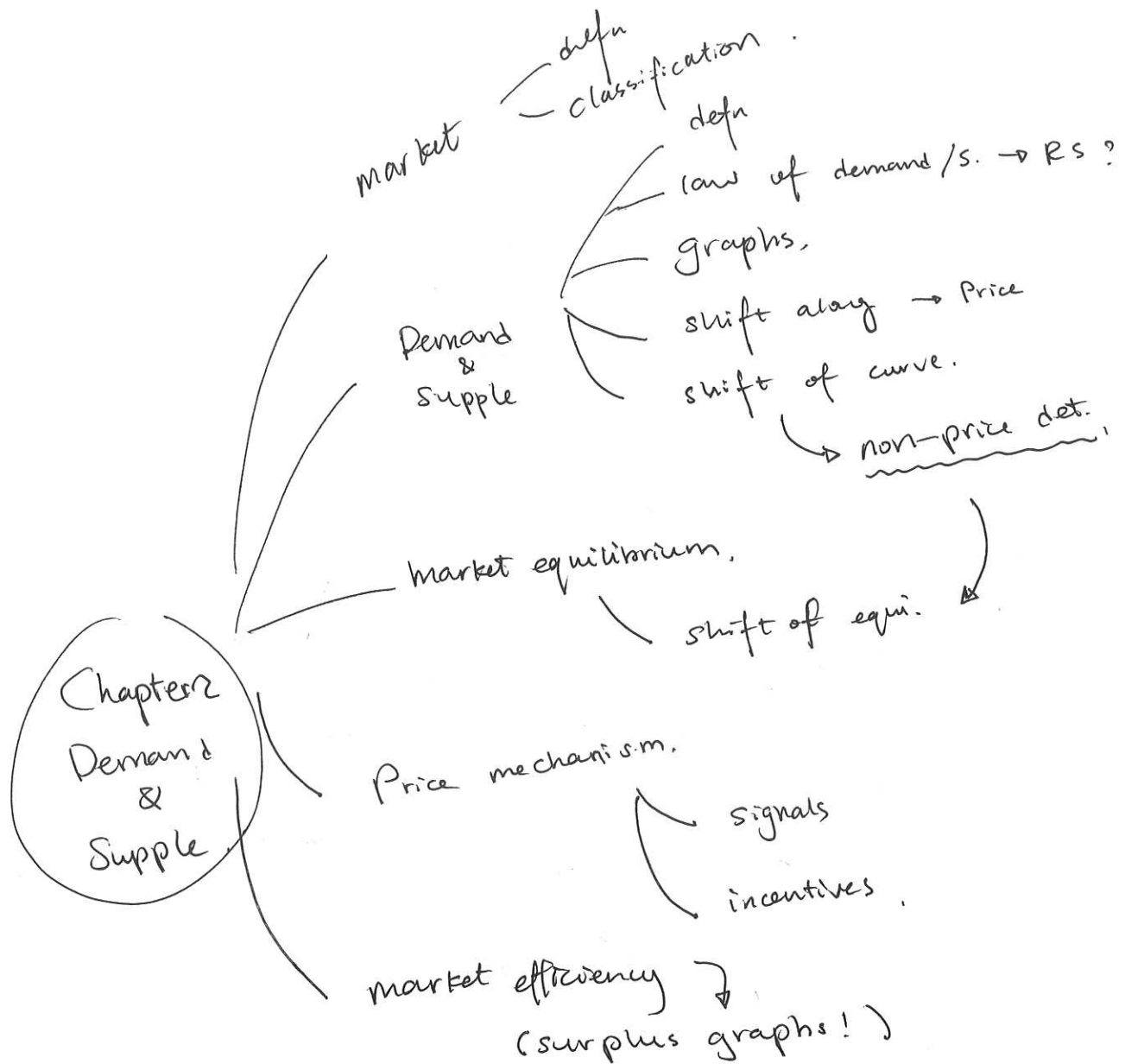


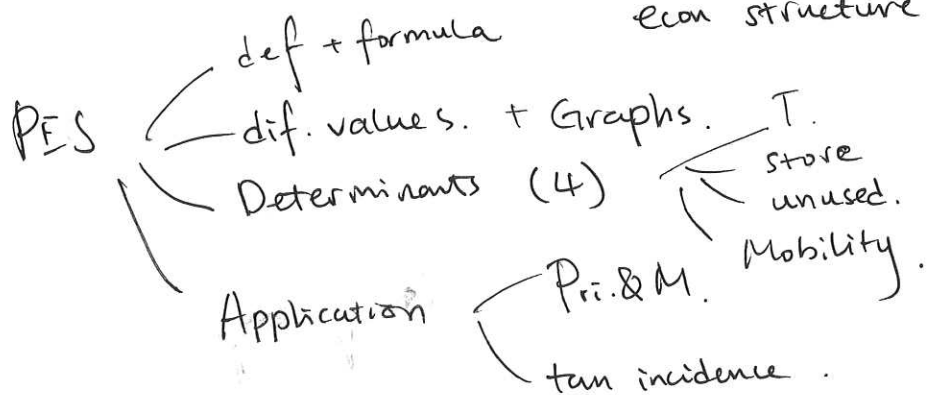
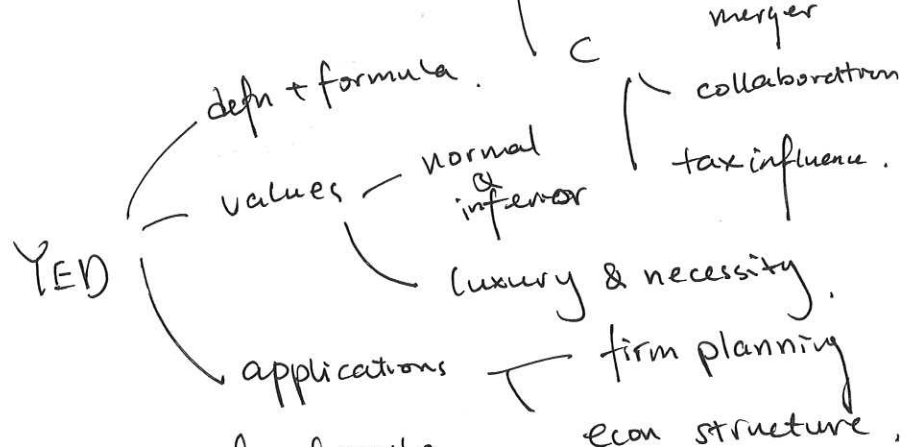
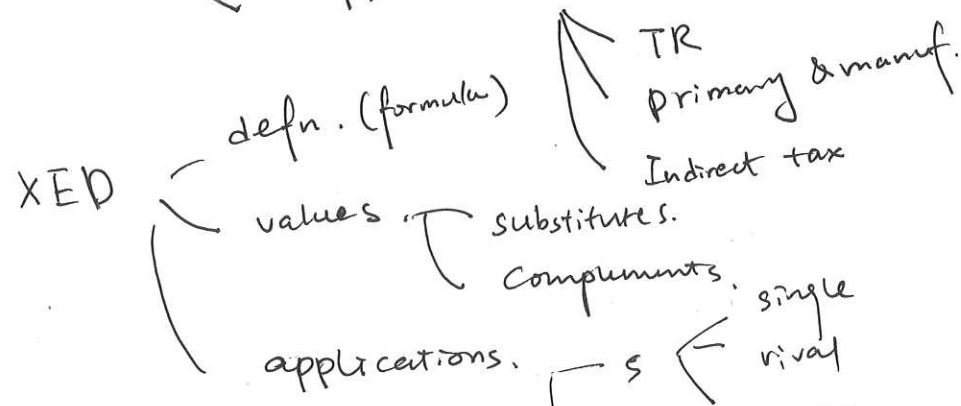
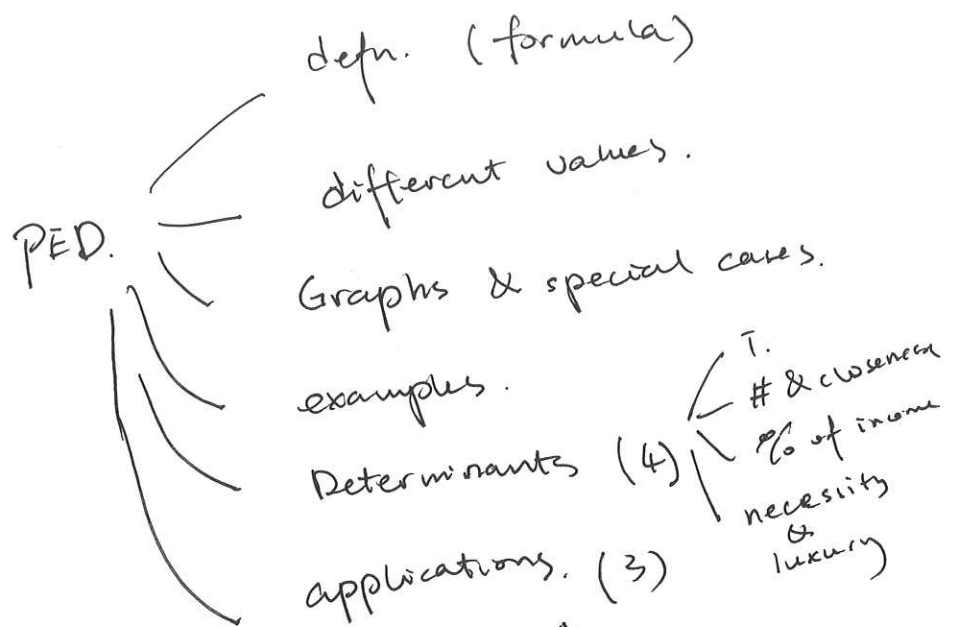
# ECONOMICS

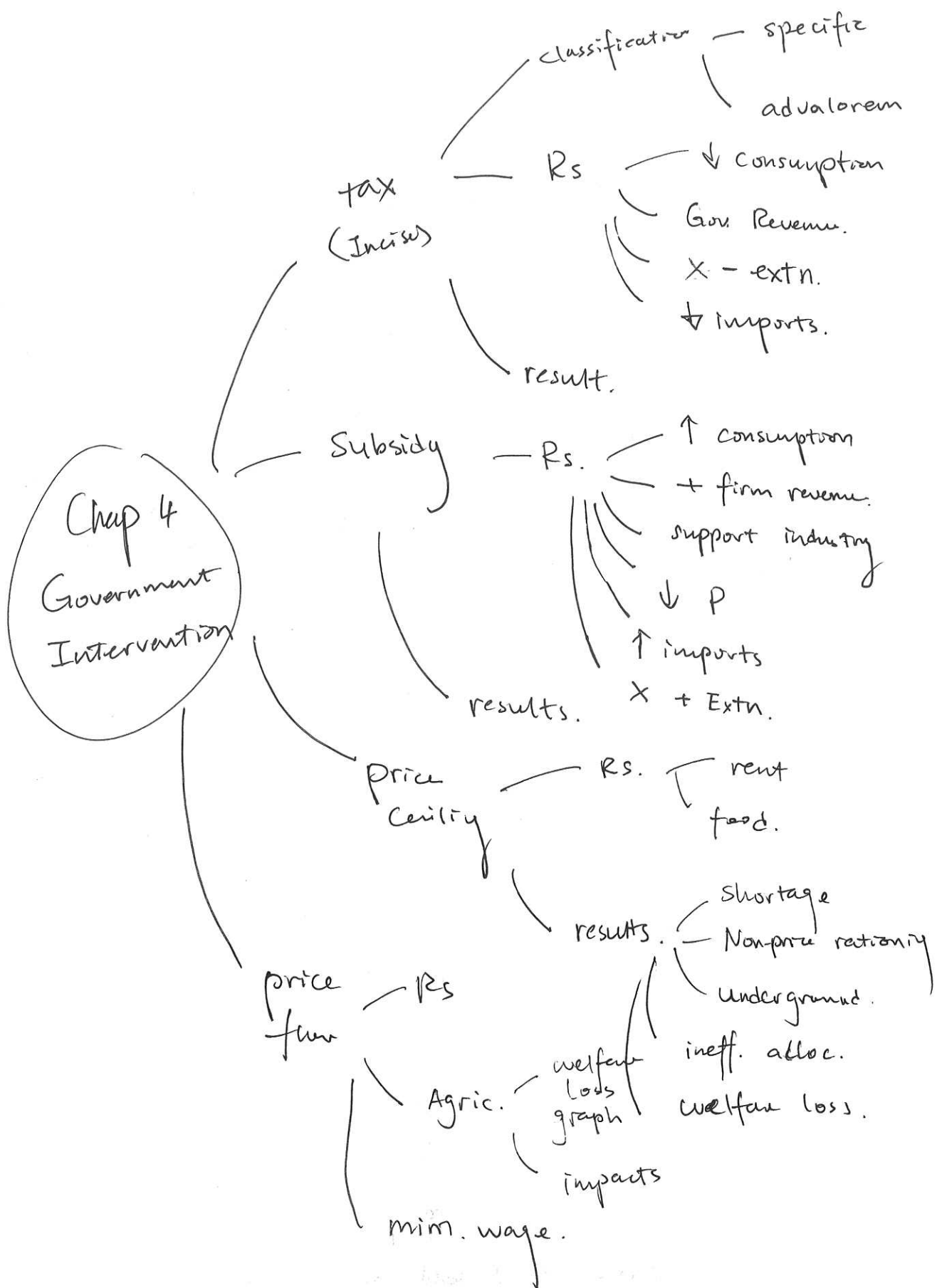
大纲整理





# Chap 3 Elasticities





# ECONOMICS GLOSSARY

## Chapter 1. Foundations

Scarcity

limited resources < unlimited wants;  
results in decision-making & opportunity cost.

Opportunity  
Cost

The value of the next best alternative forgone;  
resulted from scarcity.

Efficiency

Scarce resources are <sup>all employed and</sup> not wasted; (just the right amount is produced) from a society's point of view.  
↳ or, "best allocation of resources"

Ceteris Paribus

Everything else remains constant.

Factors of  
Production  
= Resources

inputs used to produce all g&s that people need and want;  
including land, labour, capital, entrepreneurship.

Land

all natural resources above the ground (ex forests, rivers, fish) and under the ground (ex oil, natural gas, minerals)

Labour

all human effort that goes into producing g&s,  
ex. the work done by teachers, builders, etc.  
There are skilled, semiskilled, unskilled workers.

Capital

man-made factor of production;  
ex machines, tools, factories, etc.

entrepreneur-  
ship

Human efforts used to organize the other 3 factors, including risk-taking, managing, innovation.

positive  
Statement

Used to describe events, and make hypotheses and theories; can either be true or false.

ex. "the rate of inflation is 5%."

Normative  
Statement

Used to determine the goals of economic policies; cannot be true or false.

ex. "the rate of inflation is too high."

Rational  
Economic  
Decision-making

decision-makers act in their best self-interest; try to maximize the satisfaction from decision-making.

ex. consumer:  $\uparrow$  benefit; producer:  $\uparrow$  profit  
labour:  $\uparrow$  wages

Resource  
Allocation

Assigning particular resources to the production of particular g&s.

Over allocation  
of Resources

Too many resources are assigned to the production of particular g&s; there is overproduction.

Reallocation  
of Resources

Changing allocation of resources; hence the combination and quantities produced.

Misallocation  
of Resources

Assigning the wrong amount of resources to the production of particular g&s.  $\rightarrow$  overall/under allo.

## Chapter 2. Demand & Supply

Market

where buyers & sellers gather together to make an exchange.

ex. fish market; shop; Internet; labour market.

Competitive  
market

A market where the price of a good is determined through the interaction of many small buyers & sellers. so that no one can influence the price.

Demand

the quantity of a good that consumers are willing and able to buy at various prices over a period of time, *ceteris paribus*.

Law of  
Demand

$\exists$  a negative causal relationship btw  $P$  and  $Q$ . of a good demanded.

Marginal  
Benefit.

The additional benefits derived from consuming one more unit of a good.  $\downarrow$  equal to  $D$  curve.

As we buy more units of a good,  $MB \downarrow$ .

Individual  
Demand

the demand of a single buyer.

Market  
Demand

the demands of all the buyers in a market.  
found by adding up all the individual demands for each Price.

Normal  
Goods

Consumer  $\uparrow$ ,  $D \uparrow$ .

Most goods are normal goods.

Inferior  
Goods

Income  $\uparrow$ ,  $D \downarrow$ .

ex. Second-hand clothes; used car; bus tickets.

Substitutes

Goods that satisfy similar need.  $XED > 0$

ex. meat and fish.

Complements

Goods that are jointly consumed.  $XED < 0$ .

ex tennis balls & rackets.

Indirect  
Tax

tax on spending to buy  $g \& s$ .  
paid indirectly to the gov.

Subsidy	payment by the gov. to firms in order to lower costs <del>of</del> and price, and increase supply.
Joint Supply	Goods derived from a single product and it's not possible produce one <del>more</del> w/o the other. Ex. Whole milk $\rightarrow$ butter & skim milk.
Competitive Supply	Goods that share the same resources. It's impossible to produce more of one w/o less of the other. Ex. onions & potatoes on the same land.
Market Equilibrium	Position of balance between D & S. Occur when $Q_d = Q_s$ .
Surplus (shortage)	excess supply (demand.) $\downarrow$ $P > P_e$ ( $P < P_e$ )
Price as Signals.	Prices communicate info to decision-makers. Ex. $P \uparrow \xrightarrow{\text{signal}} \text{shortage}$ .
Price as Incentives	Prices motivate decision-makers to respond to the info. Ex. $P \uparrow \rightarrow S \uparrow, D \downarrow$
Consumer Surplus.	Benefit received by consumers who buy a good at a lower price than the price they are willing to pay; = area under D. up to $P_e$ ; Maximized in a free market.
Social Surplus.	Sum of producer and consumer surplus. Maximized in a free market.



## Chapter 3. Elasticities

PED. responsiveness of  $Q$  demanded to change in  $P$ .

$$= \frac{\% \Delta Q}{\% \Delta P}.$$

Price  
(in)elastic  
Demand

$PED > 1$  ( $0 < PED < 1$ ) ;  $\% \Delta Q > \% \Delta P$  ( $<$ ).

necessity

a good that is necessary to a consumer

luxury

a good that is not essential.

Total  
Revenue

$P \times Q$ . ; A firm's total earnings from selling its output.

Primary  
Commodities.

Goods arising from the factor of production land; including all agricultural products, fishing, forestry & extractive products (ex oil, mineral...)

XED.

Responsiveness of demand for one good to change in price of another good.

$$\frac{\% \Delta Q_x}{\% \Delta P_y} ; \text{ involve shift of } D \text{ curve.}$$

YED

Responsiveness of demand for good  $X$  to changes in income .  $\frac{\% \Delta Q_x}{\% \Delta Y}$  ;

involves shift of  $D$  curve.

PES.

responsiveness of  $Q_s$  to change in  $P$ .

$$\frac{\% \Delta Q_s}{\% \Delta P} \rightarrow \text{along } S \text{ curve.}$$

## Chapter 4. Government Intervention.

Incise  
Tax

= indirect tax.

Specific  
Tax.

the tax is a specific amount imposed per unit of the good.

Results in a parallel shift of the  $S$  curve.

the vertical dif. btw initial & after-tax  $S$  curve is equal to tax per unit.

Ad valorem  
tax

The tax is a percentage of the price of the good; results in  $S$  curve steeper than the original  $S$  curve.

Price  
Controls.

Gov. intervention in the market, involving the setting of price ceiling, or price floors.

Thus preventing the market from reaching a market-clearing equilibrium price.

Price  
Ceilings

A maximum price on a good set by the gov. that is below the equil. price of the market. resulting in a shortage.

## Minimum Wage

A min price of labor set by the gov. to protect low-skilled workers and ensure they achieve a minimum standard of consumption. ;

It's an application of a minimum price in the labour market.



# ECONOMICS QUESTIONS

## Chapter 1. Foundations

- why PPC curvature?

Because resources are specialized and are not equally well-suited for the production of all goods.

It is  $\uparrow$  ~~cost~~ costly to produce  $\uparrow$  amounts of some goods.

- Factors that shifts PPC outwards:

- $\uparrow$  in factors of production.
  - $\uparrow$  technology
  - $\uparrow$  institution
- ← natural  
human  
physical.

## Chapter 2. Demand & Supply

- Why D is downward sloping (why law of D)

1. Income effect.
2. Substitute effect.
3. Law of diminishing marginal benefit.

- Non-price determinants of D. ( $\Rightarrow$  D shift)

1. Change in taste & preference.
2. Change in income ← inferior  
normal
3. Demographic change
4. Price of related goods ← substitutes  
complements.

## • Application of YED

### 1. For producers.

- planning investment in the future.

Ex. Greece . Recession .  $\rightarrow$  growth in fast food.

### 2. For economy . (structure)

- primary sector %  $\downarrow$ .
- manufacturing %  $\uparrow$
- service %  $\uparrow\uparrow\uparrow$ .

## • Determinants of PES.

1. time

2. Mobility of FOP.

3. Unused capacity of firms.

4. Ability to store ~~of~~ stocks.

## • Application of PES.

1. Primary commodities & manufactured products.

2. tax incidence (burden)

## • Summary of elasticities.

$PED < 1$ . inelastic demand.

gasoline . food.

$PED > 1$  elastic demand

expensive holidays.

$XED > 0$  substitutes

orange & apple .

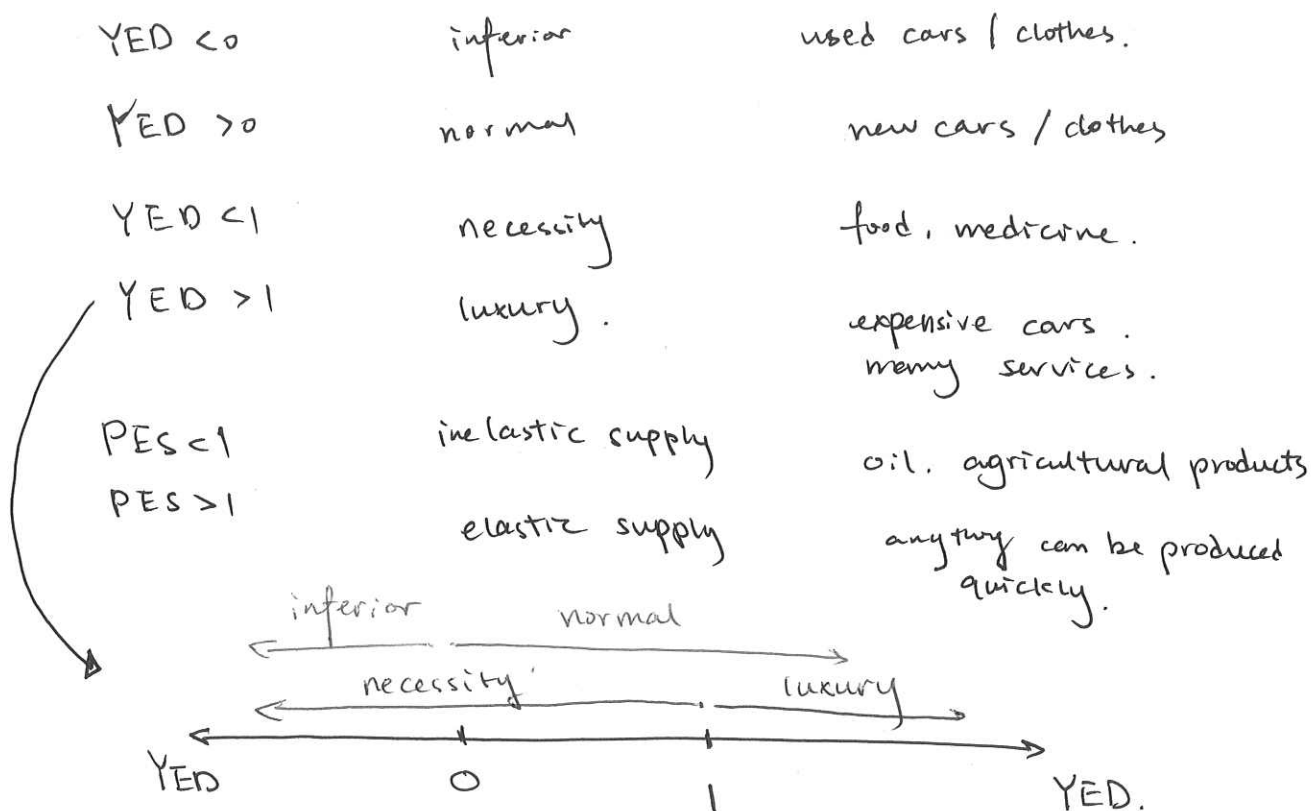
$XED = 0$  not related .

tennis ball & racket

$XED < 0$  complements

pizza & pencil .

$\rightarrow$  Continued.



## Chapter 4. Government Intervention

- Why indirect tax ?
  1. Gov. revenue.  $\rightarrow$  finance gov. expenditures.
  2. On harmful goods. (ex cigarettes) to  $\downarrow$  consumption.
  3. improve allocation of resources when  $\exists$  externalities.
  4. ~~trade~~ tariffs.  $\rightarrow$   $\downarrow$  quantity of imports.
- Why subsidies ?
  1.  $\uparrow$  firm's revenues (ex. agricultural products to support farmers.)
  2. Support particular industries.  
(ex. Renewable energy).

3.  $\downarrow P$  for consumers.  
(ex. food price for low-income ppl)
  4. Encourage consumption of g & s that is considered desirable for society.  
(ex. education.)
  5. Sell more in export market
  6. improve allocation when  $\exists$  + externalities.
- Subsidy is  $\frac{1}{2}$  for domestic producers;  
 $\frac{1}{2}$  for foreign producers.
  - Why price ceiling?
    - rent control.
    - food control
    - make some necessities affordable to poor people.
  - Consequences of price ceiling:
    1. Shortage
    2. Non-price rationing mechanisms
    3. Underground market.
    4. Inefficient resource allocation. (underalloc.)
    3. Welfare loss for society.
  - Why price floor?
    - support farmer's income by  $\uparrow P$  they received.
    - support the wages of low-income workers



• Consequences of Agricultural price floors.

1. surplus
2. Inefficient firms.
3. Gov. measures to dispose the surplus.
  - storage cost
  - export requires covering for higher price
  - destroy involves waste.
4. Inefficient (over)allocation of resources.
5. Welfare loss.
6. " for stakeholders in other countries.

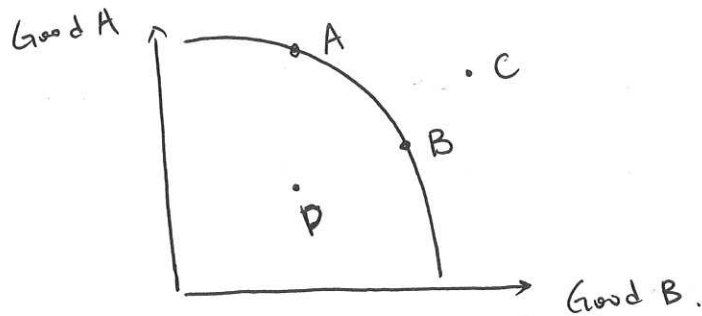
• Consequences of minn wages.

1. illegal workers
2. Misallocation of resources in the labour market
3. Misall ————— " product market.
4. Firms " as cost  $\uparrow$
5. Consumer " as  $P \uparrow$ ,  $Q \downarrow$
6. Workers : some " . some " .



# ECONOMICS IN GRAPHS

## Chapter 1: Foundations



A, B: efficient.  
C: unattainable.  
D: inefficiency

Figure 1. Production Possibilities Curve.

## Chapter 2: Demand & Supply

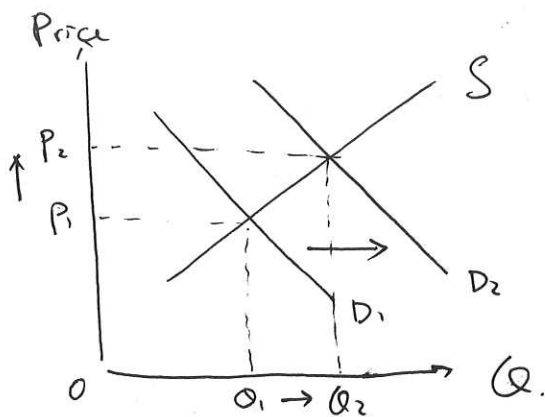


Figure 2.1. Change in D

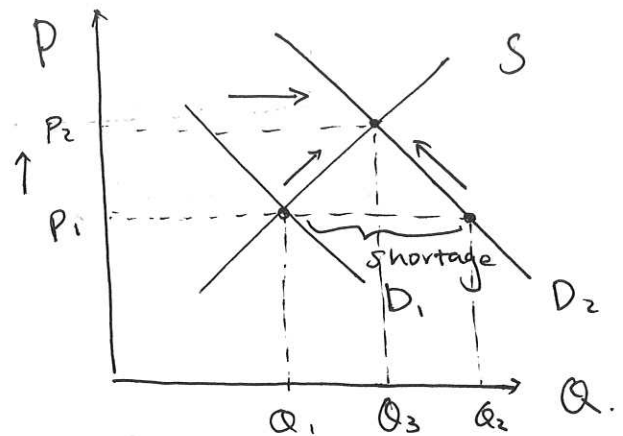
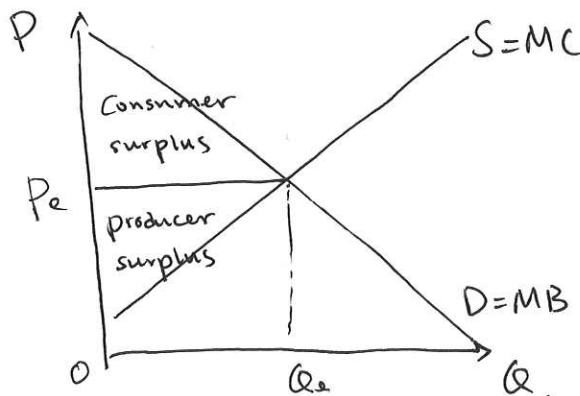


Figure 2.2. Price as signal and incentive.



Allocative efficiency:  
at market equil.  $MB=MC$   
and social surplus is  
maximized.

Fig. 2.3. Consumer & Producer Surplus

# Chapter 3. Elasticities

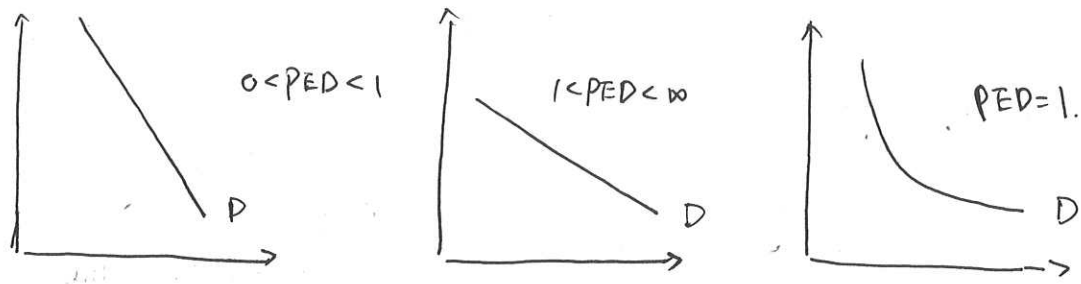


Fig. 3.1. Freq. encountered PED's.

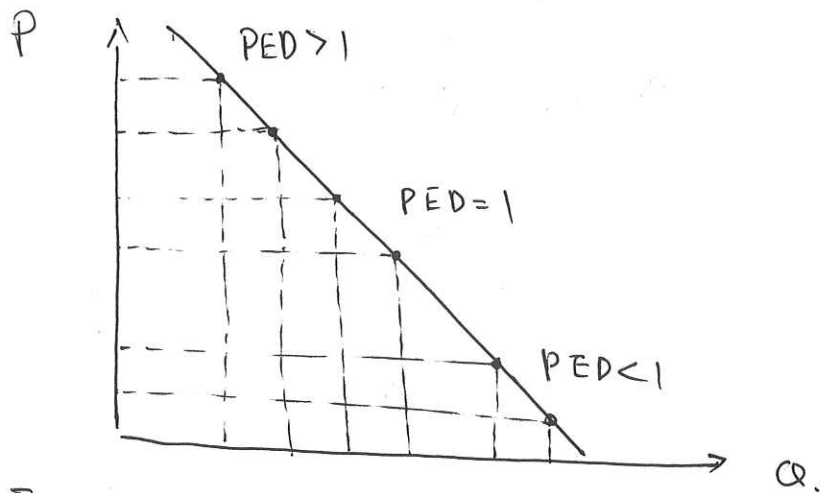


Fig. 3.2. Variability of PED along a straight-line  $D$ .

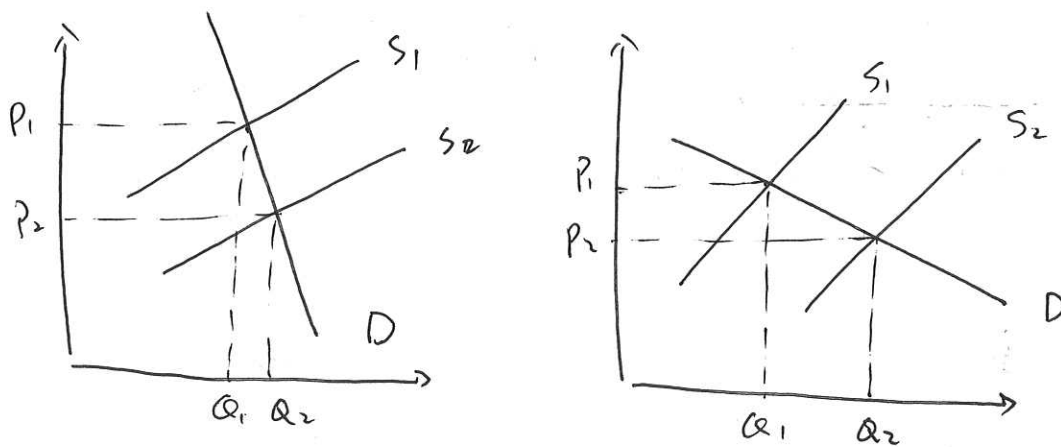


Fig. 3.3. Price fluctuations are larger for primary commodities because of low PED.

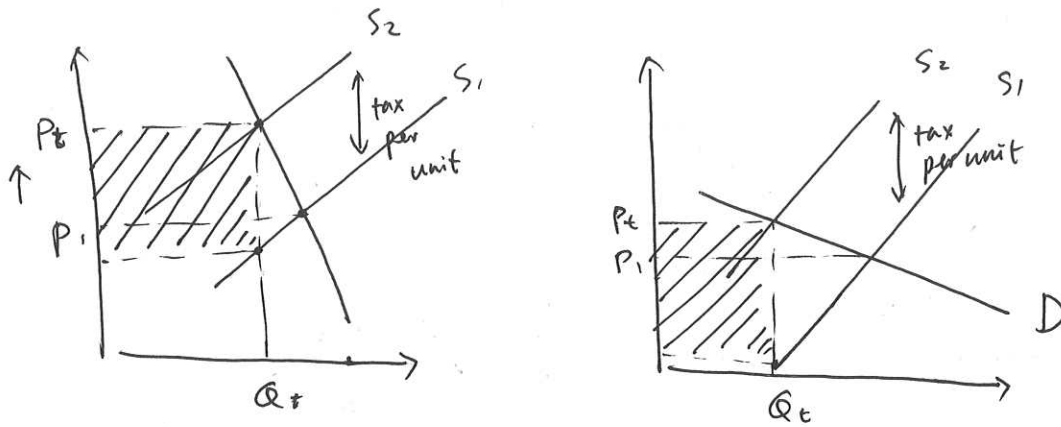


Fig. 3.4. Indirect tax & tax Revenue.

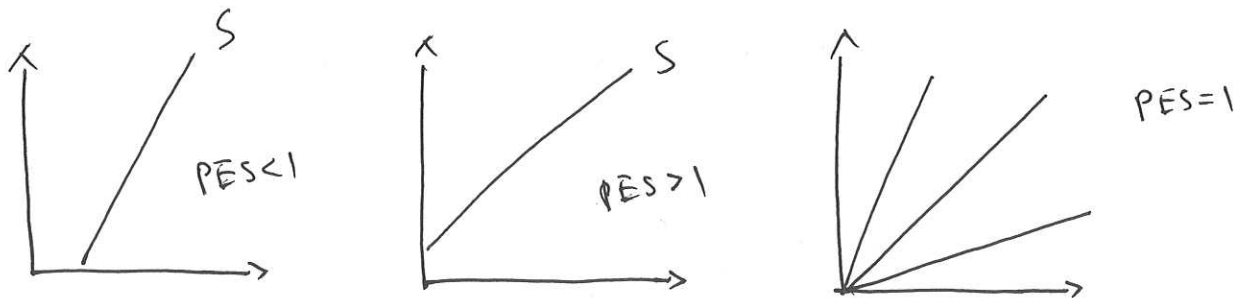
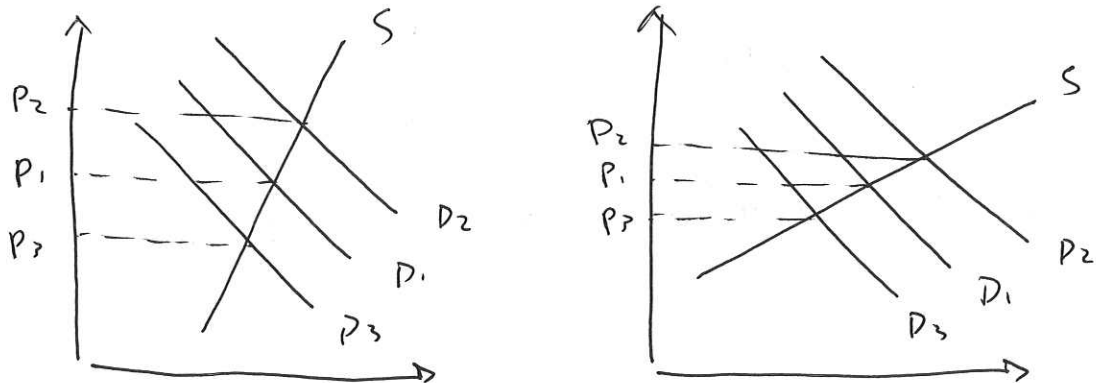


Fig. 3.5. PES & special cases.



# Chapter 4. Government Interventions

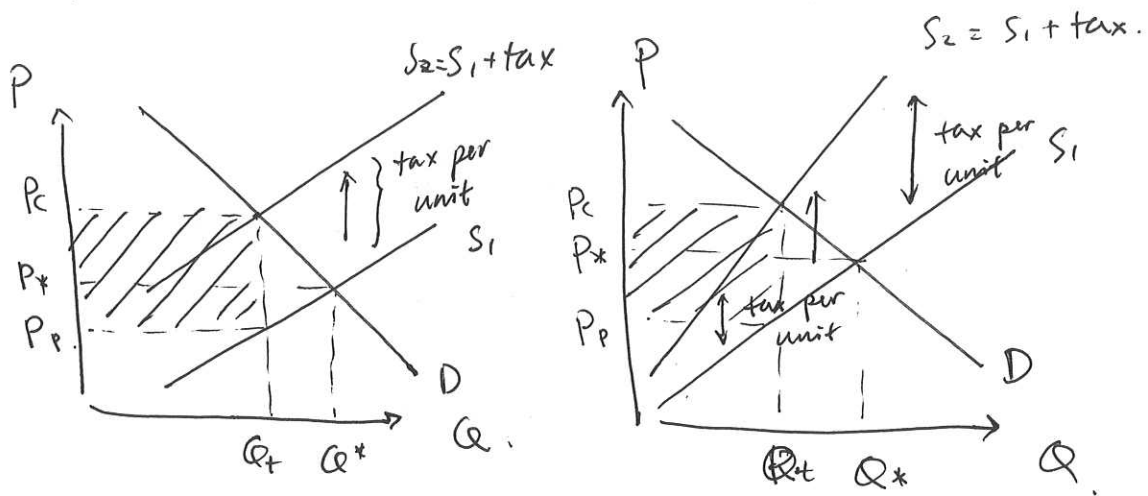


Fig. 4.1. Specific & Ad valorem tax

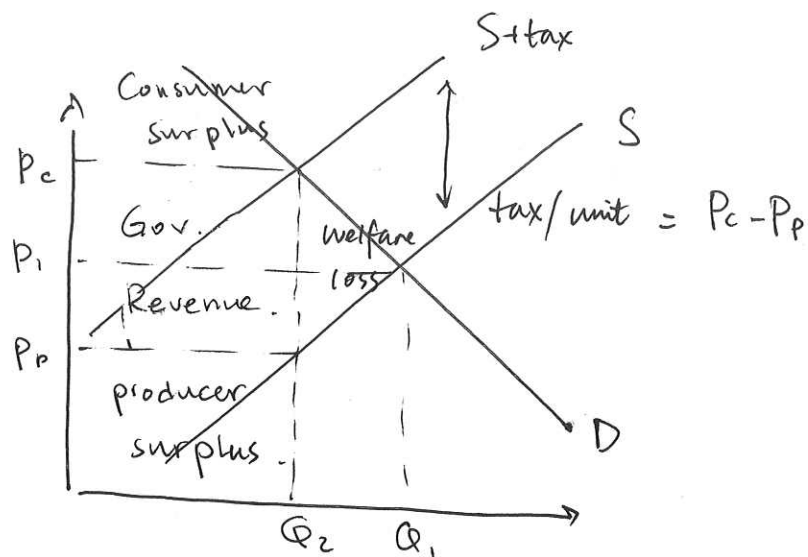


Fig. 4.2. Surplus due to indirect tax.

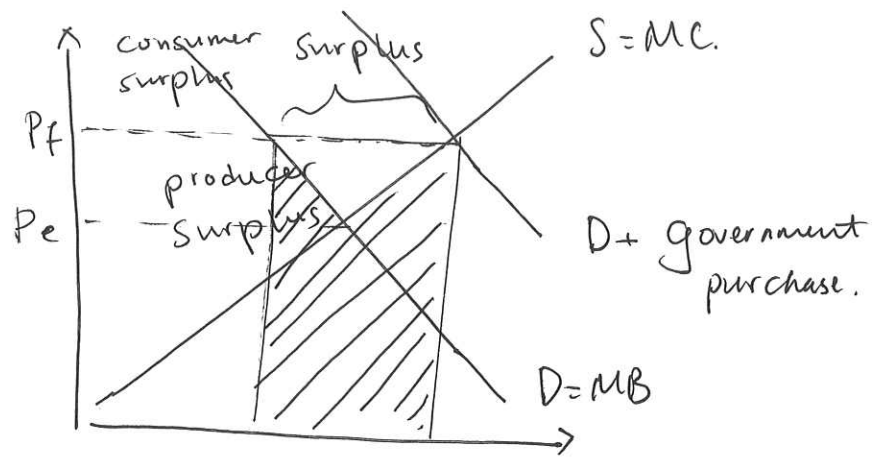


Fig. 4.3. Welfare impacts of a price floor for agricultural products.

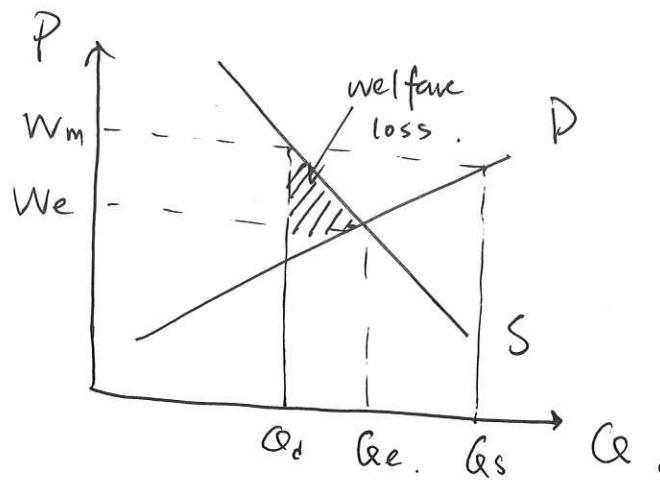


Fig 4.4. Welfare impact of a minimum wage.





# ECONOMICS EXAMPLES.

## Micro

Perfectly elastic demand.

perfect competition.

ex. oranges in Florida.

Perfectly inelastic demand.

ex drug addiction.

Perfectly inelastic supply

ex. original antique furniture.

