REVISION SLIDE 3

EQUILIBRIUM IN FREE MARKET AND MIXED ECONOMY

OUTLINE

- Equilibrium in Free Market
- Equilibrium in Mixed Economy: Government Intervention
  - Price Control
  - Tax
  - Subsidy

FREE MARKET EQUILIBRIUM

Equilibrium: a state of balance between opposing forces

In microeconomics, equilibrium refers to a situation where demand and supply are balanced.

Free Market Equilibrium is achieved through the **Price Mechanism**.

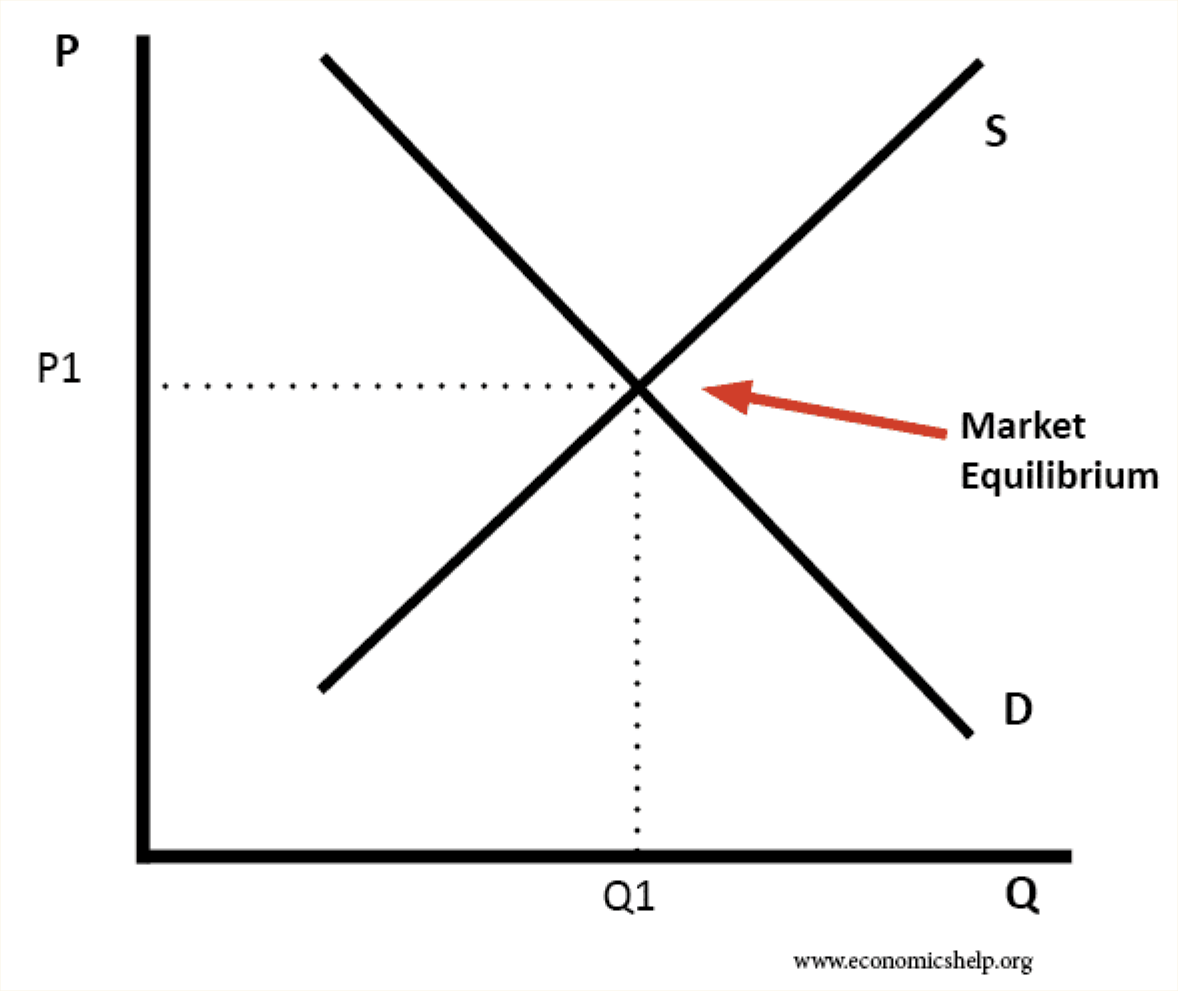
That is, price will adjust to equate demand and supply.

Equilibrium Price (P*): price that equates demand and supply

Market Price (Pmkt): price at which the market operates.

Note that Mkt Price may differ from Eqbm Price.

FREE MARKET EQUILIBRIUM



SURPLUS AND SHORTAGE

When…

Pmkt > P*, there is a surplus (excess supply).

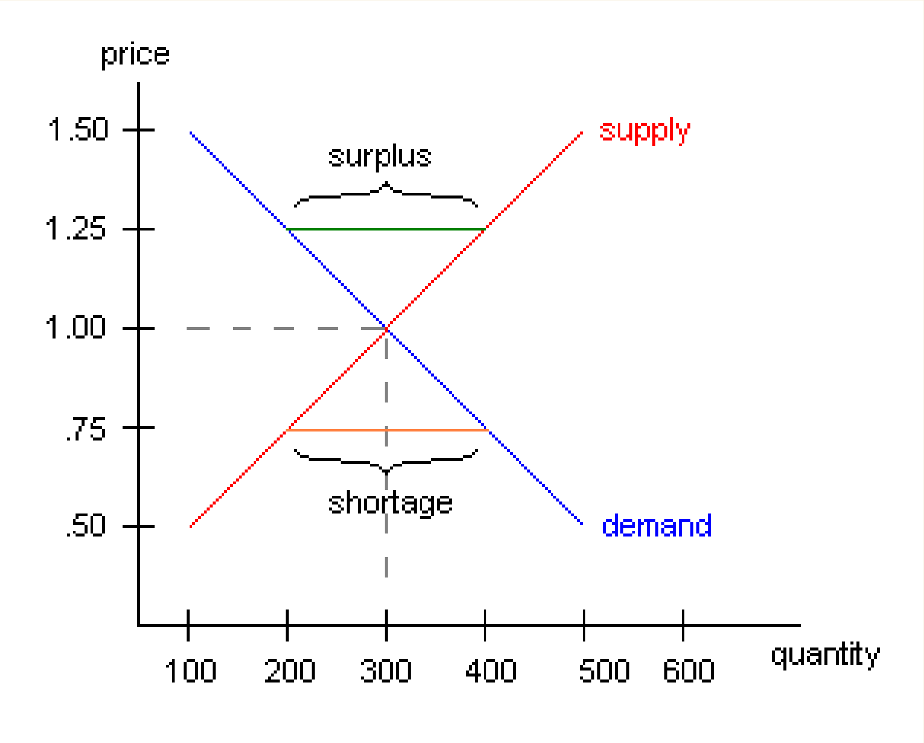
Because at a high price, quantity supplied exceeds quantity demanded.

Pmkt < P*, there is a shortage (excess demand).

Because at a low price, quantity demanded exceeds quantity supplied.

In free market, Pmkt will eventually adjust towards P*, thus clearing any surplus or shortage.

SURPLUS AND SHORTAGE



At P = 1.25, there is a surplus of 200 units.

At P = 0.75, there is a shortage of 200 units.

MIXED ECONOMY

Mixed Economy: an economic system with elements from both free market and command economy.

In the mixed economy, the government may intervene the market.

Forms of Government Interventions:

- Price Control
- Tax
- Subsidy

PRICE CONTROL

The government may set a specific price in a market.

Minimum Price / Price Floor (Pmin):

A limit on how low a price can be charged for a product.

Pmin must be set above P* in order to be effective.

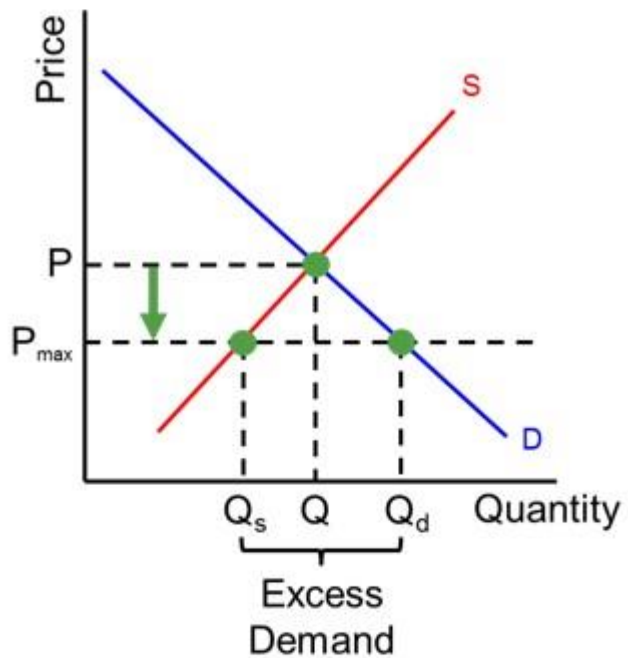
Maximum Price / Price Ceiling (Pmax):

A limit on how high a price can be charged for a product.

Pmax must be set below P* in order to be effective.

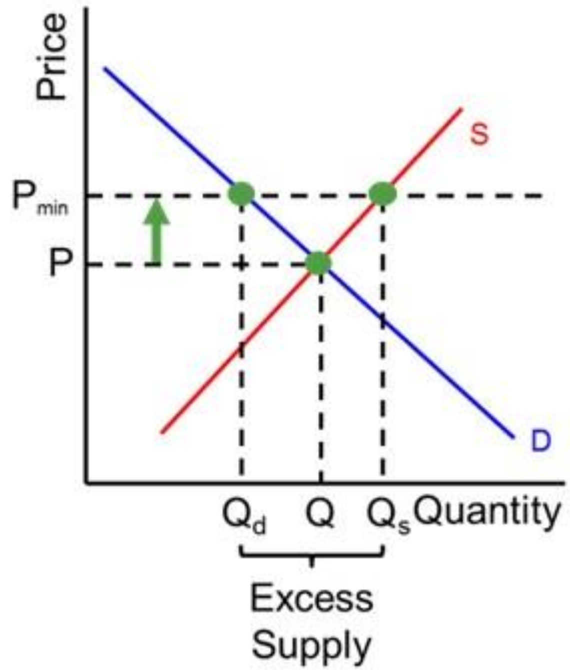
Max. Price

Price must be set below P

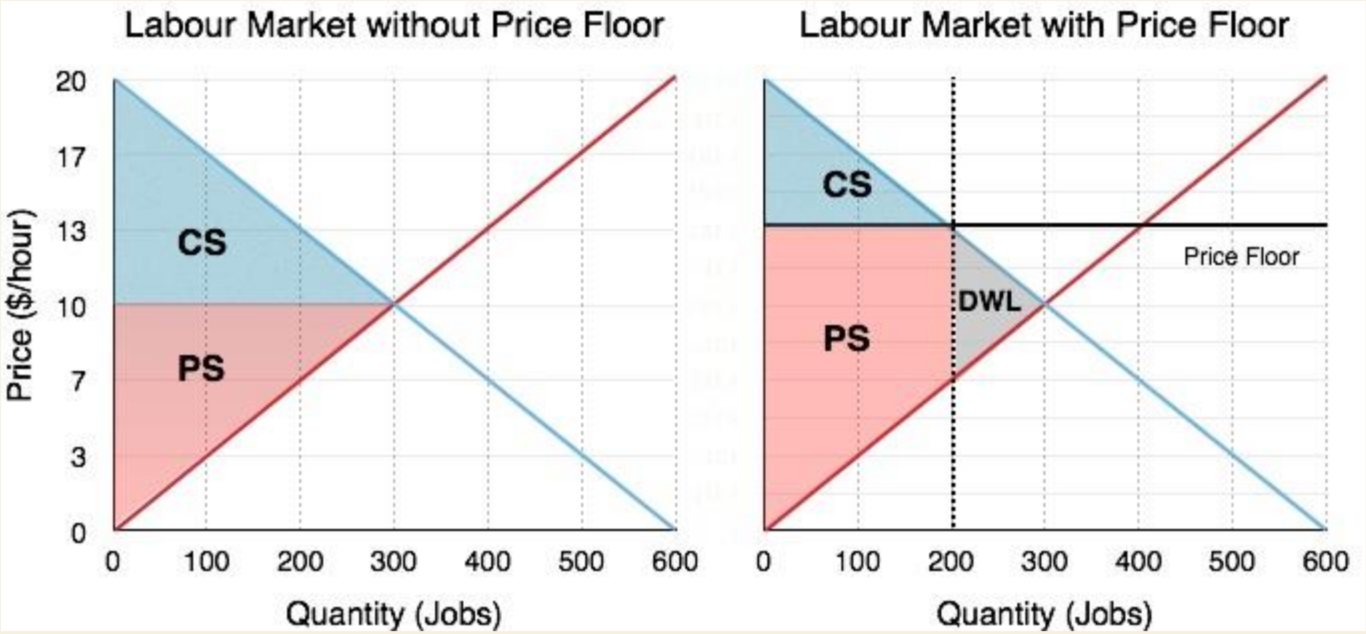


Min. Price

Price must be set above P

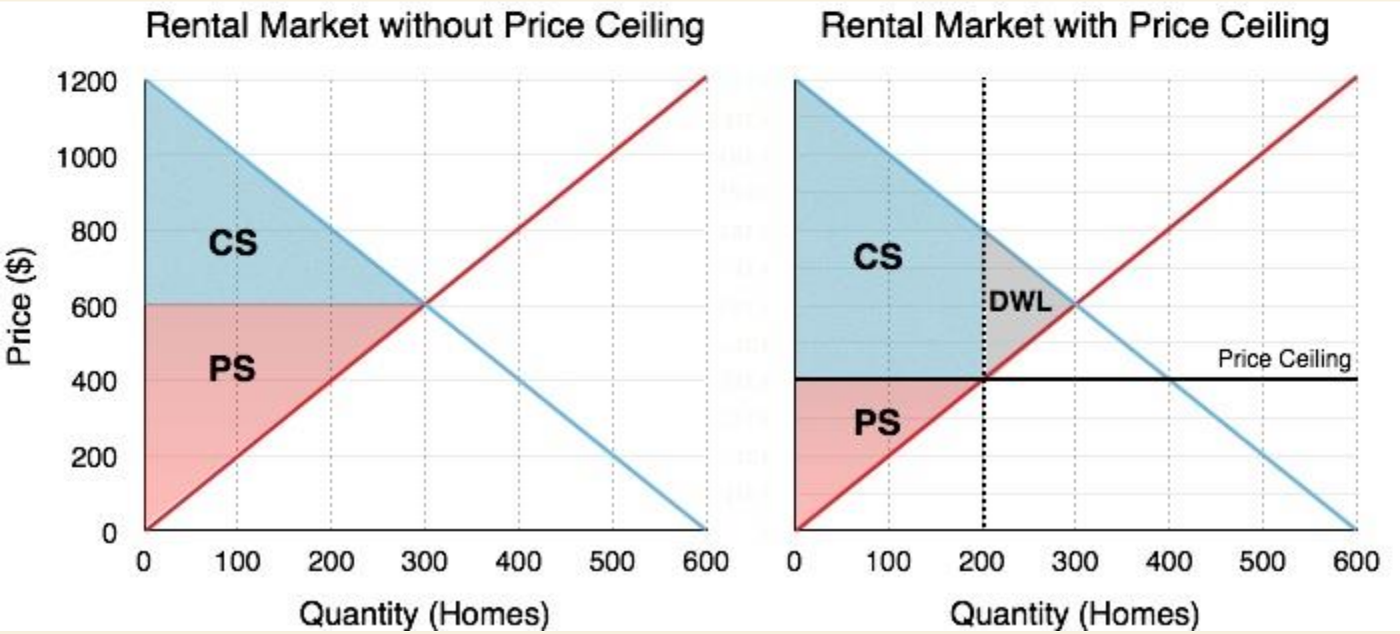


MIN. PRICE / PRICE FLOOR



Under price floor, there are only 200 jobs bought and sold, although there could have been 300 jobs traded in a free market.

MAX. PRICE / PRICE CEILING



Under price ceiling, there are only 200 homes bought and sold, although there could have been 300 homes traded in a free market.

PRICE CONTROL

Both price floor and price ceiling generate **Deadweight Loss** (DWL).

DWL is a loss in welfare, represented by a loss in consumer surplus and/or producer surplus.

DWL illustrates INEFFICIENCY and arises when there is underallocation or overallocation of resources.

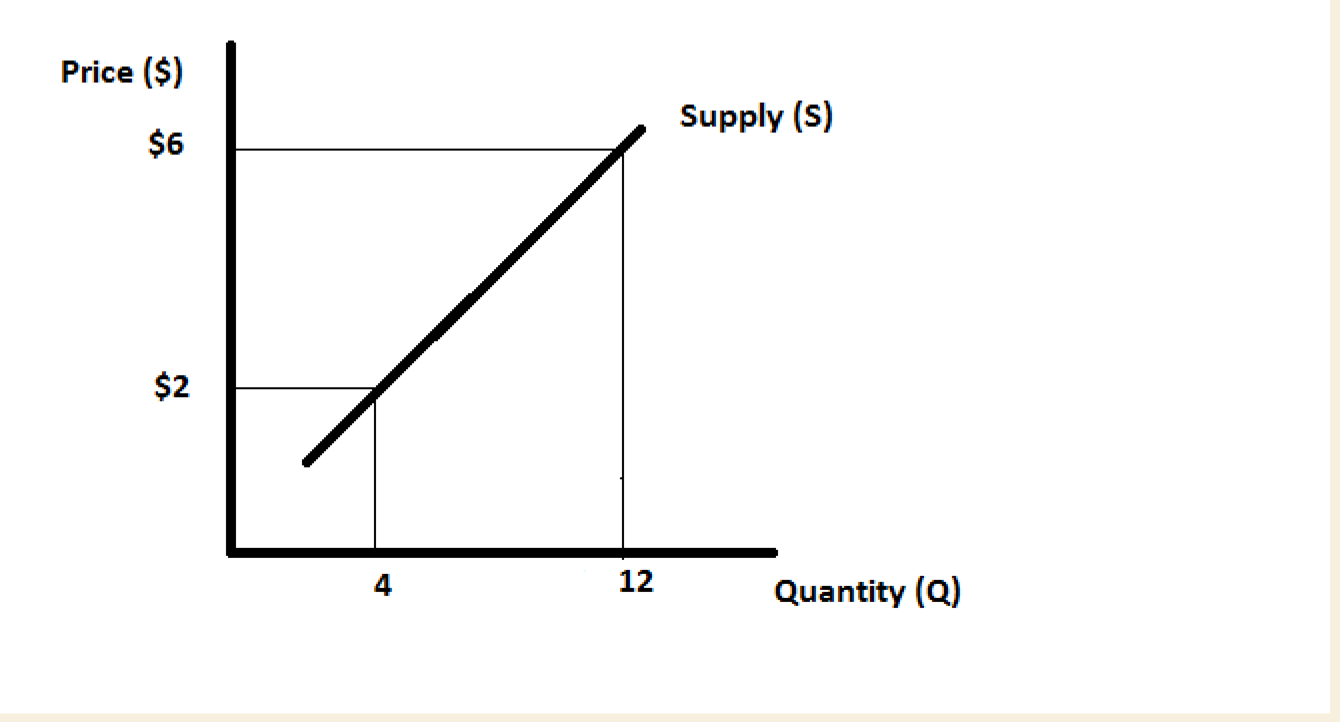
In the case of price controls, there is underallocation of resources as there are **unexploited gains from trade** since less quantity of a product is bought and sold.

TAX

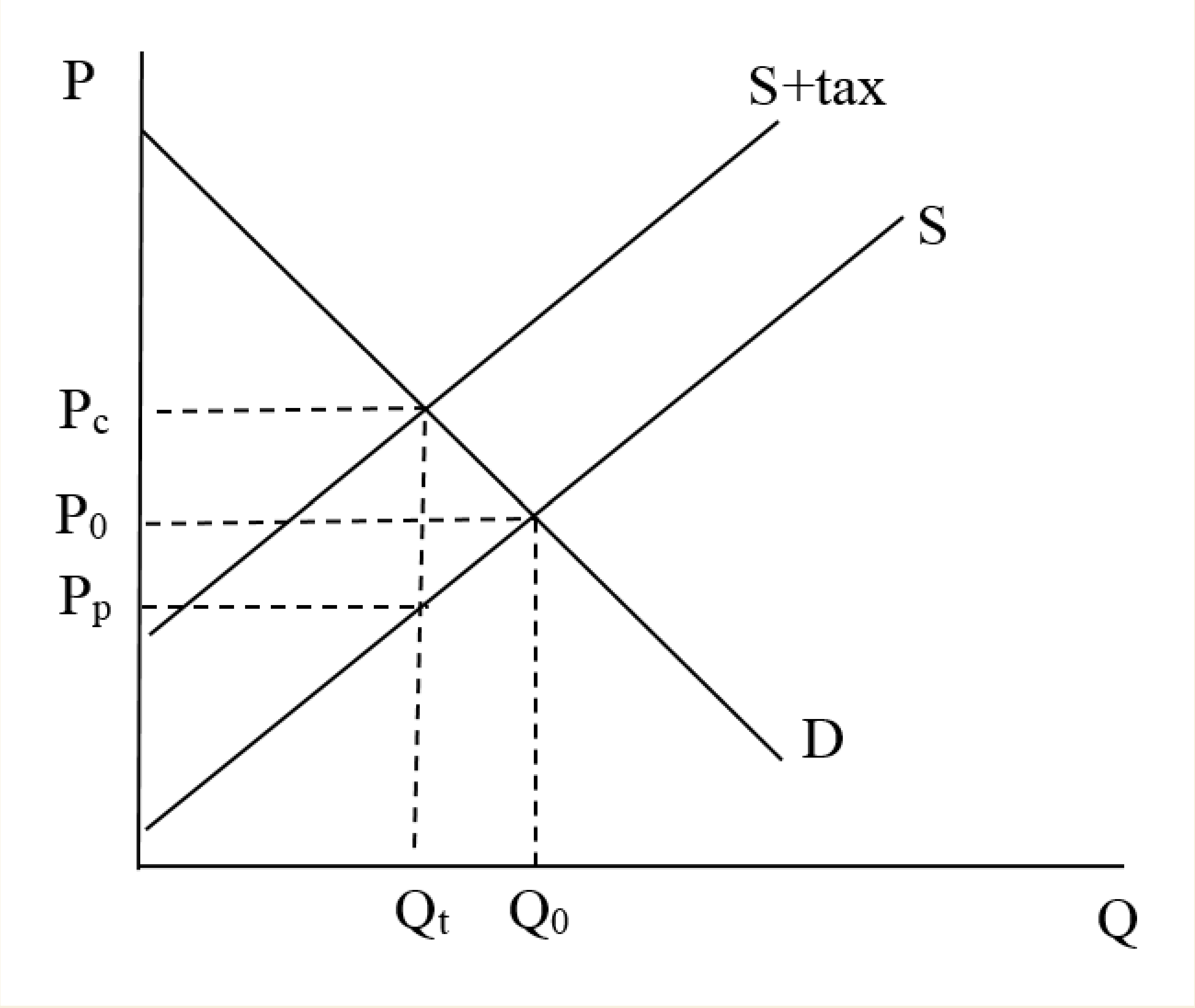
There are many types of taxes, but we will consider "Specific Tax".

Specific Tax or Per-Unit Tax: a fixed amount of tax for each unit of a good or service sold

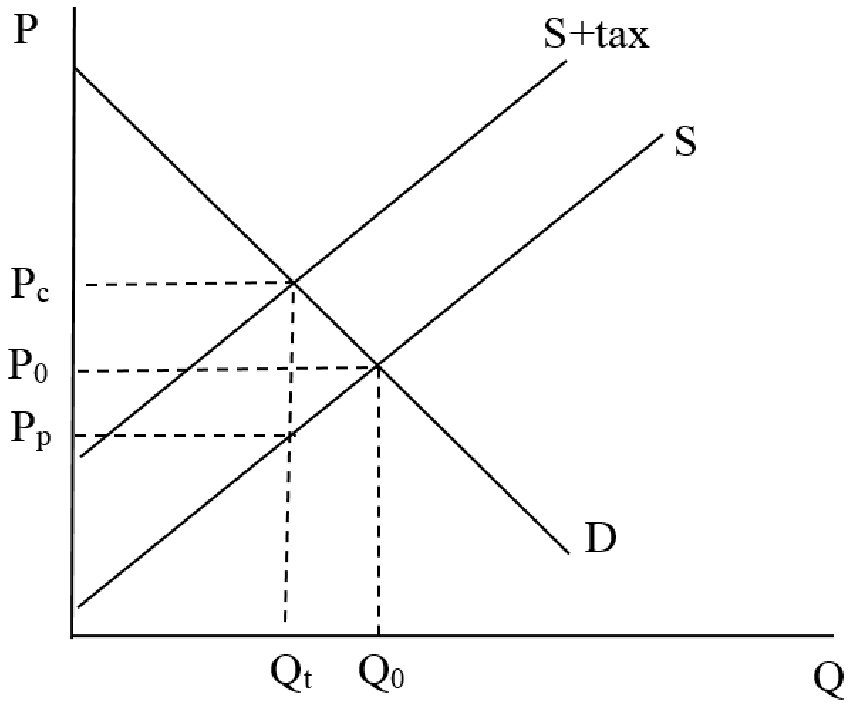
<u>Effect of Tax on Supply Curve</u>



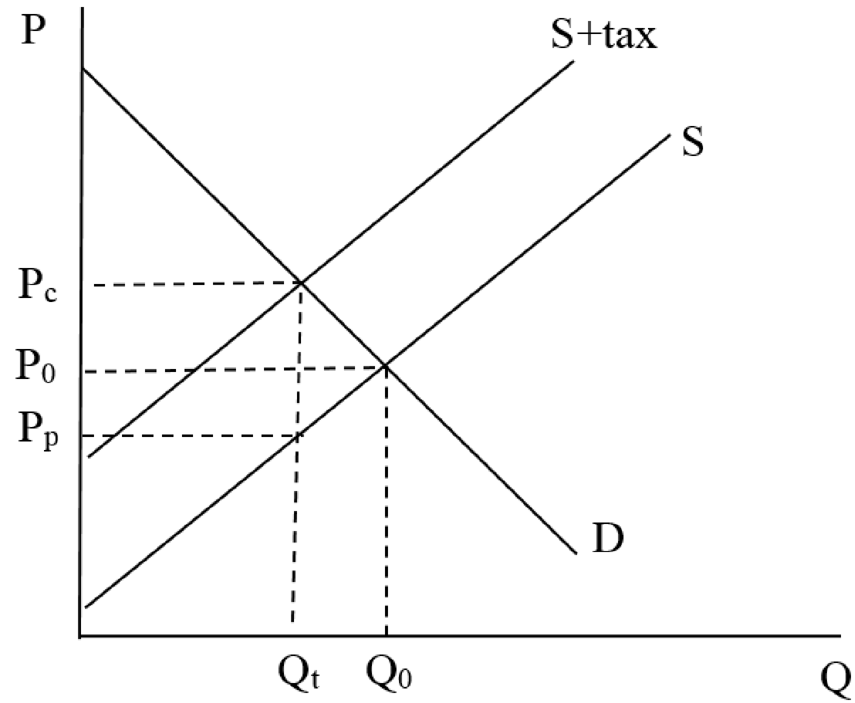
EQUILIBRIUM WITH TAX



TAX AND WELFARE

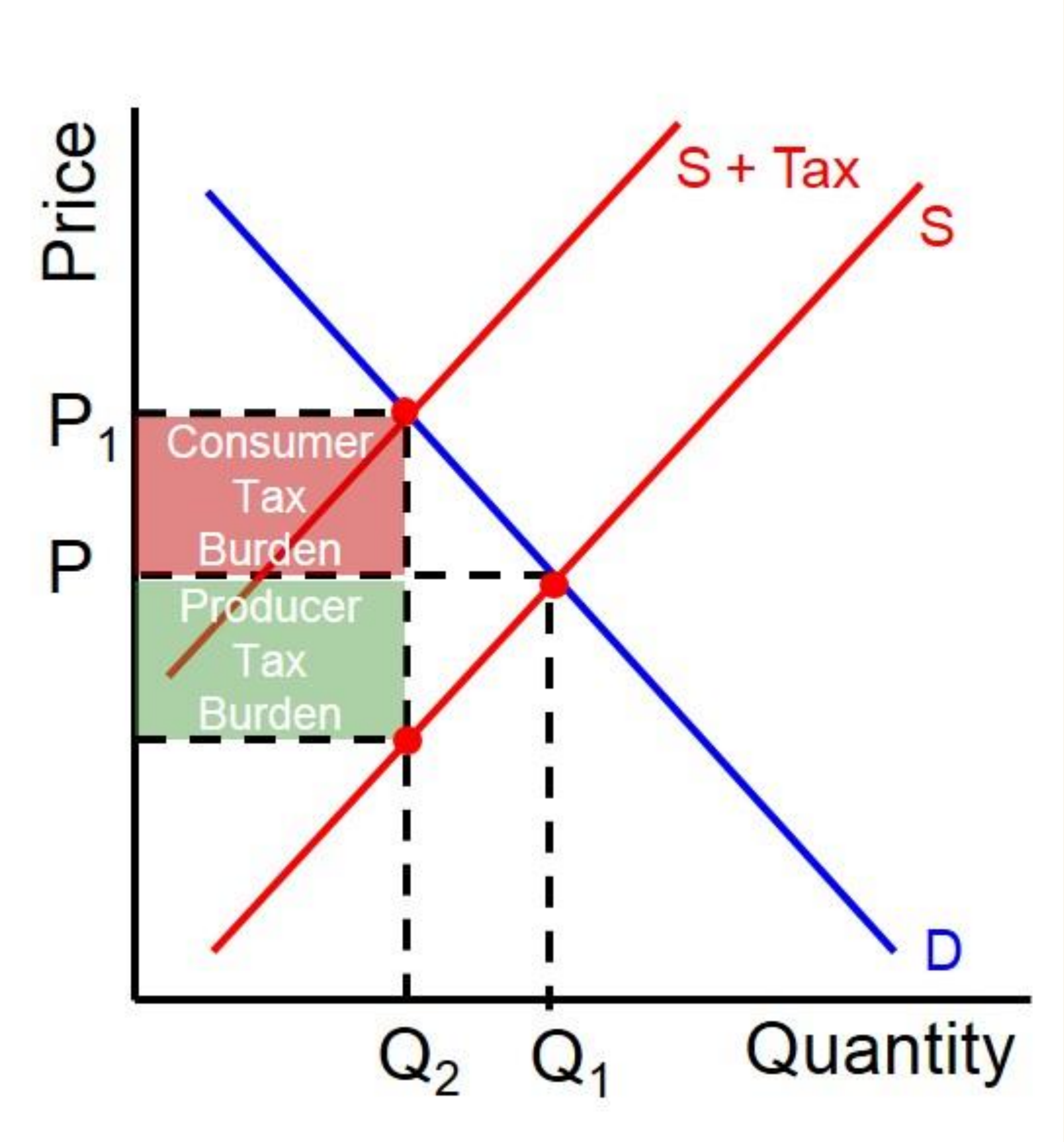


Before Tax

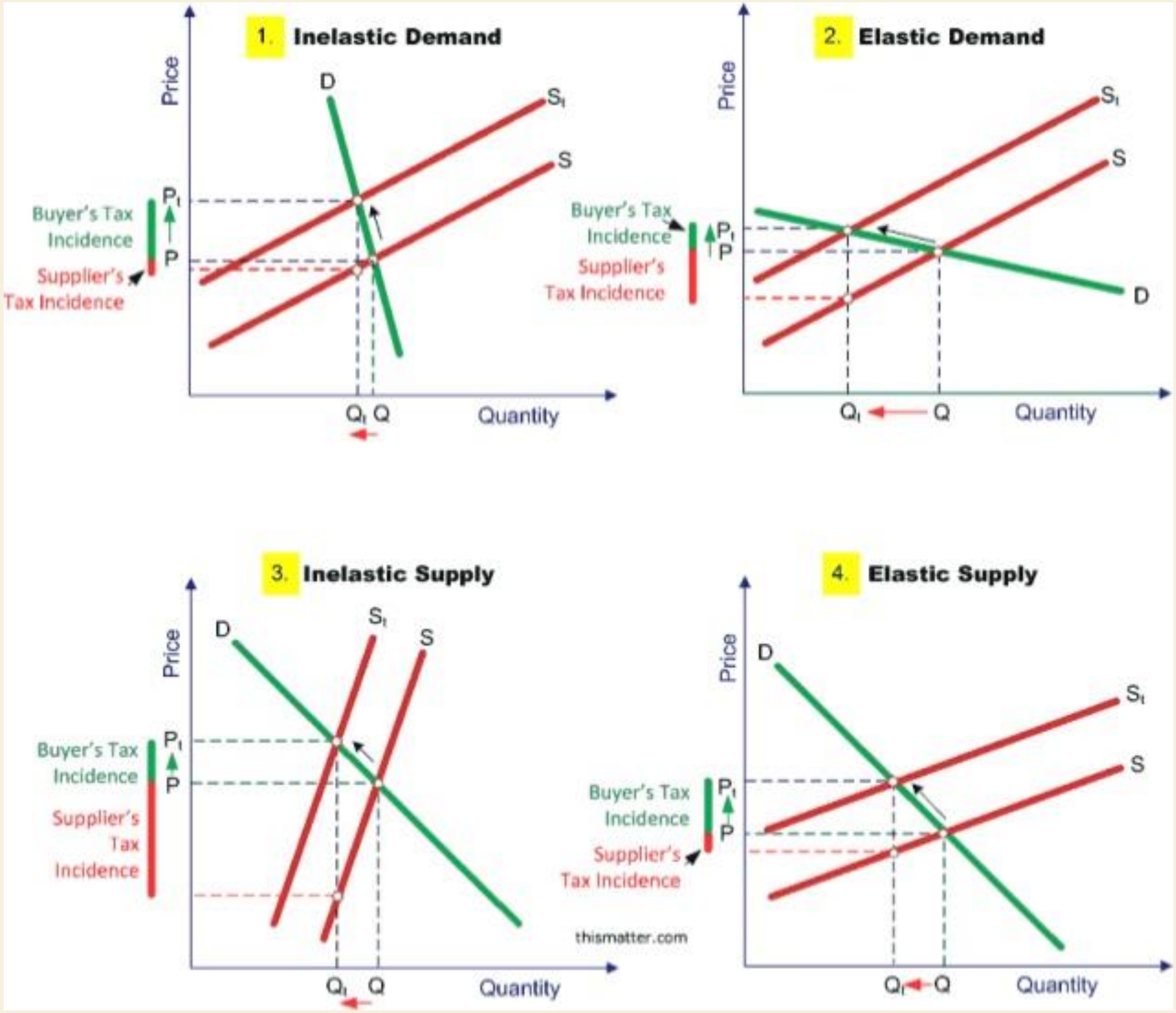


After Tax

TAX INCIDENCE



PED & PES ON TAX INCIDENCE

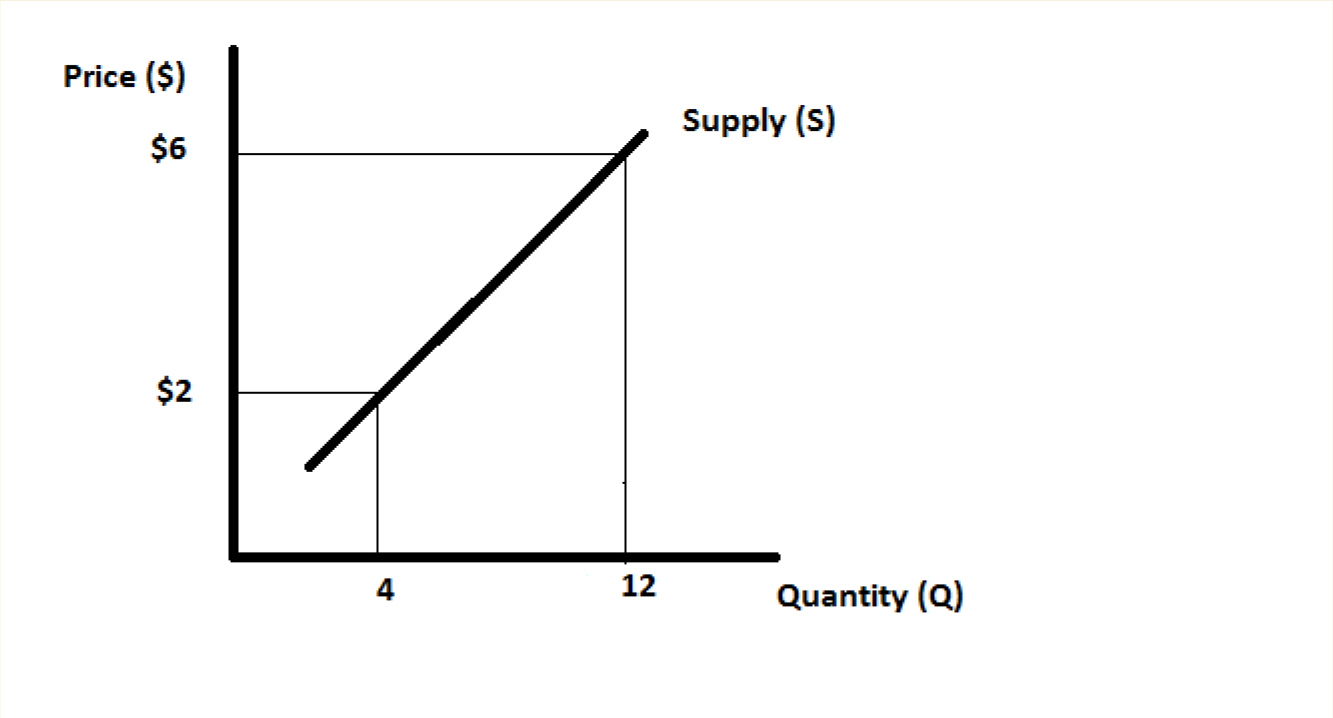


SUBSIDY

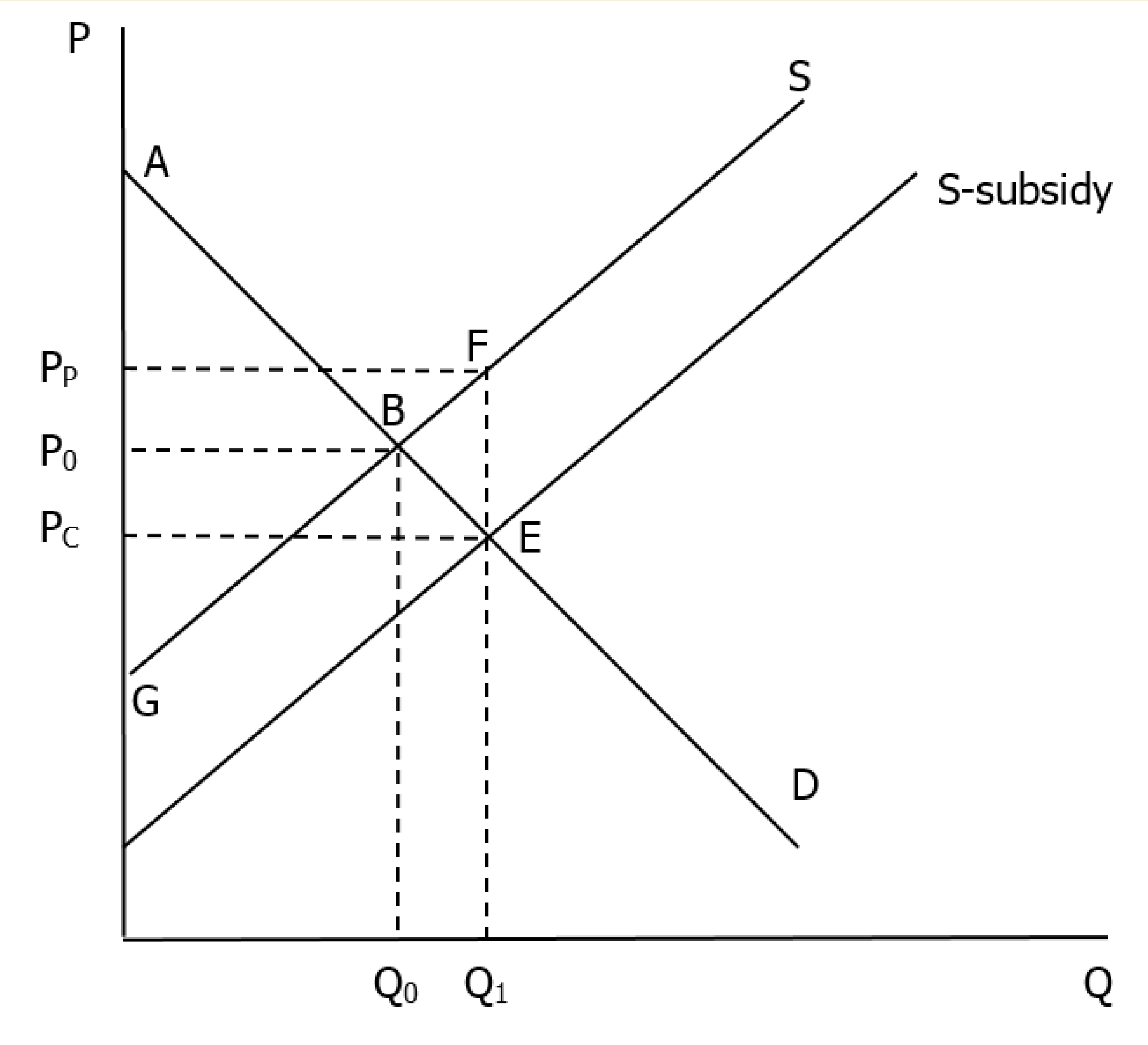
There are many types of subsidies, but we will consider "Unit Subsidy".

Unit Subsidy: a fixed amount of subsidy for each unit of a good or service sold, paid by the government to producers

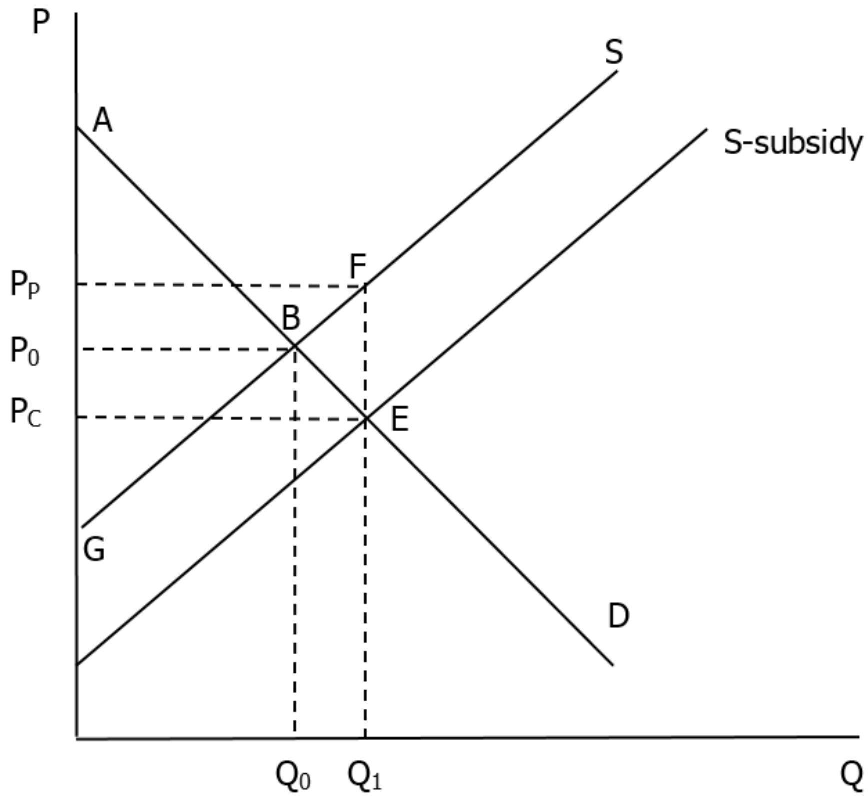
Effect of Subsidy on Supply Curve

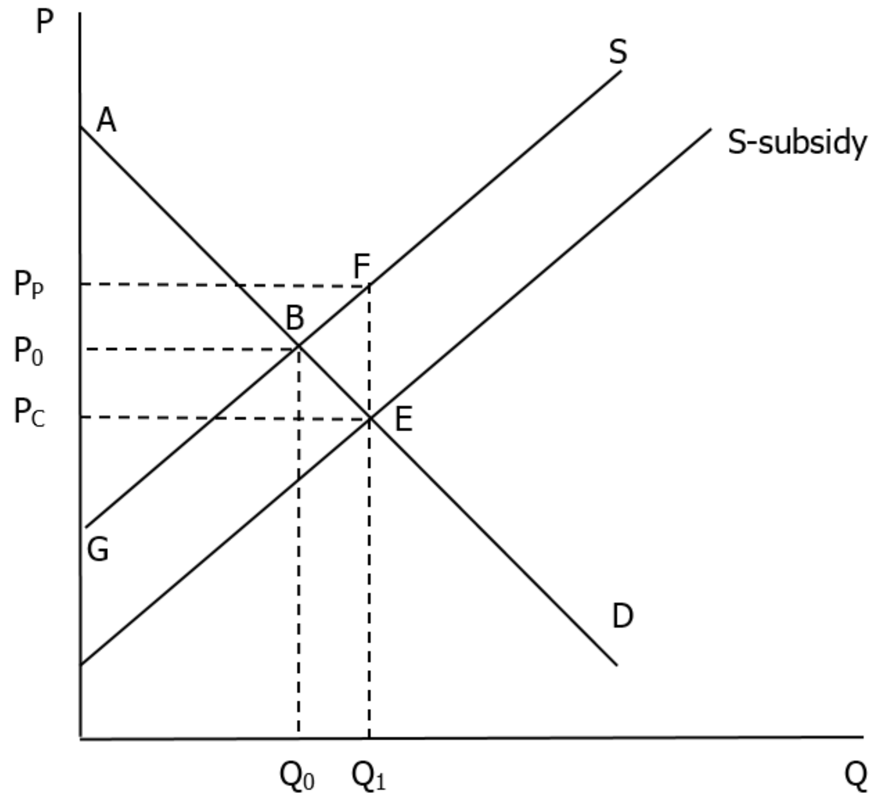


EQUILIBRIUM WITH SUBSIDY

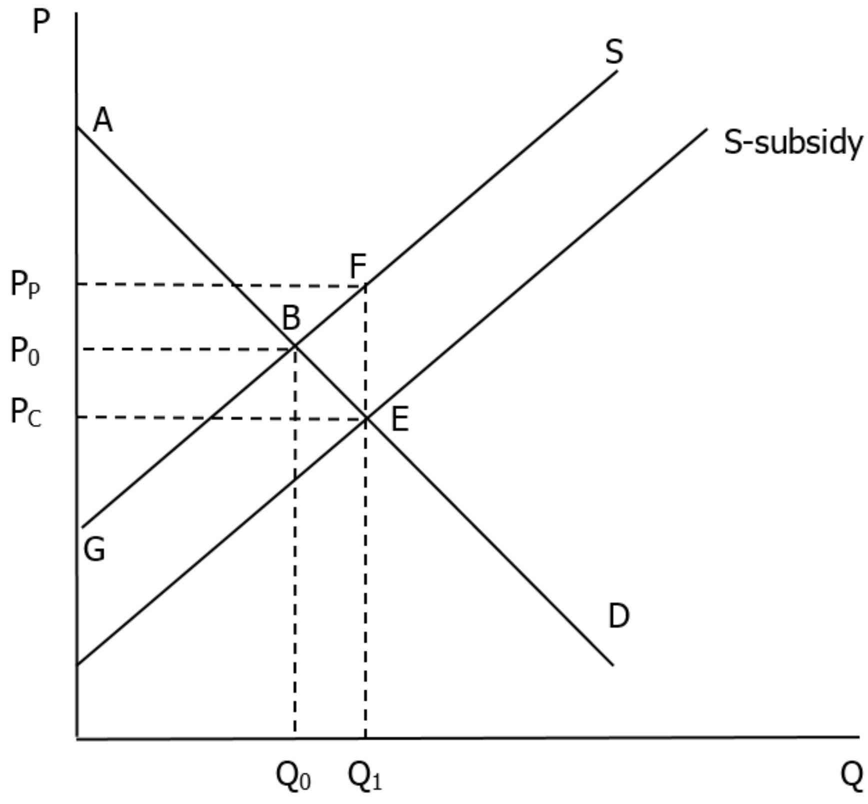


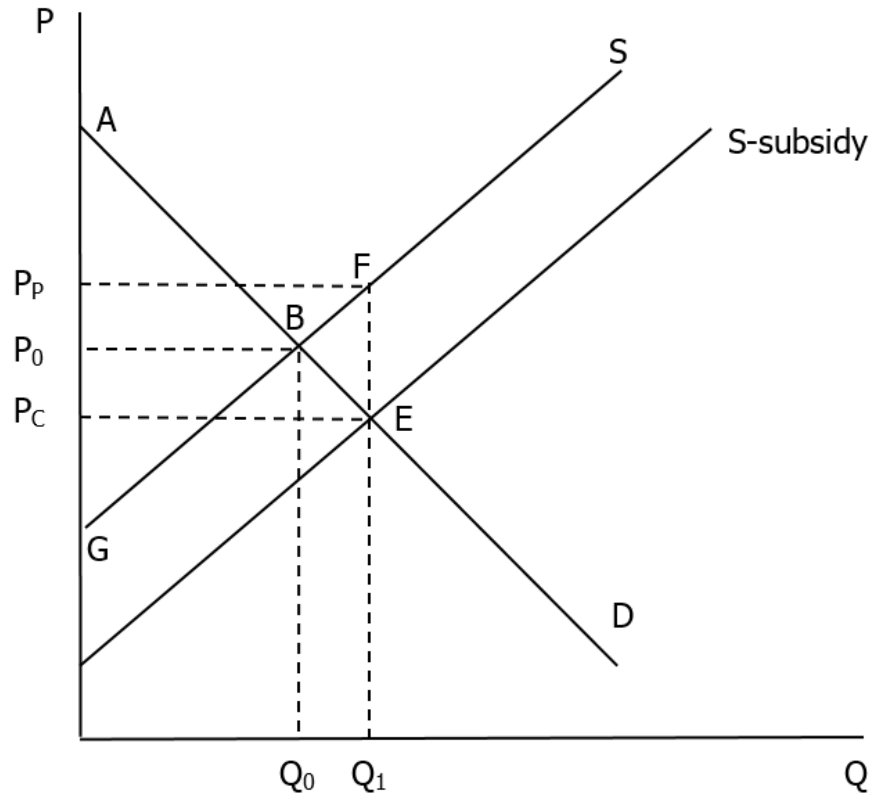
SUBSIDY AND WELFARE





SUBSIDY AND WELFARE





TAX & SUBSIDY ON WELFARE

Both tax and subsidy generate DWL.

Tax reduces the quantity bought and sold, leading to **underallocation of resources**: there are unexploited gains from trade, as the additional cost of producing the extra units is lower than the additional benefit from consuming them.

Subsidy raises the quantity bought and sold, leading to **overallocation of resources**: the additional cost of producing the extra units is higher than the additional benefit from consuming them.