## **Subsidies**



# Assessment Objectives

Specific Expectations	
AO2	Explain the consequences of subsidies on markets
AO4	Draw diagrams to illustrate the effects of subsidies on markets and stakeholders
AO3	Evaluate the effects of subsidies on markets and stakeholders
AO4	Calculate the effects on subsidies on markets and stakeholders

## Subsidy

- Subsidy is an amount of money paid by the government to firm.
  - Subsidies are a negative indirect taxes, the government pays producers which in turn lower the cost of production.
  - A subsidy shifts the supply curve to the right by the amount of the subsidy.
  - A subsidy given to a firm results in a higher level of output and lower price for consumers.
  - May also be paid to consumers as financial assistance or for income redistribution.

## Subsidies – Rationale for Implementation

- There are several reasons why the government grant subsidies to firms
  - 1. Increase revenues (incomes) of producers
  - 2. Improve affordability to low-income consumers
    - Subsidies have the effect of lowering the price of the good that is paid by consumers, thus making the good more affordable.
  - 3. Encourage production and consumption
    - A subsidy has the effect of increasing the quantity of a good produced and consumed.
  - 4. Support the growth of particular industries
    - If granted to firms in a particular industry, they support the growth of that industry.

## Subsidies – Rationale for Implementation

#### 5. Encourage exports of a particular good

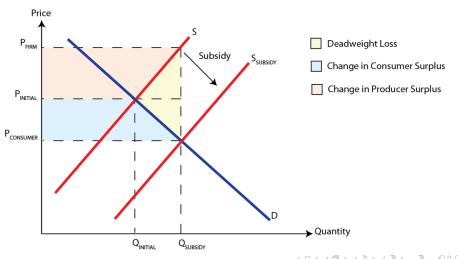
Since subsidies lower the price paid by consumers, they are sometimes granted on goods that are exported (sold to other countries), since lower export prices increase the quantity of exports.

#### 6. Improve resource allocation

 Subsidies are a method to improve the allocation of resources (reduce allocative inefficiencies) by correcting positive externalities.

### **Subsidies**

Note that when identifying the producer surplus after granting the subsidy, we always refer to the initial supply curve, which is S<sub>1</sub>.



## Subsidies – Market Outcomes

- ▶ The market outcomes due to the subsidy are the following:
  - The equilibrium quantity produced and consumed increase from Q<sub>Initial</sub> to Q<sub>Subsidy</sub>.
  - The equilibrium price falls from P<sub>Initial</sub> to P<sub>Consumer</sub>; this is the price paid by consumers.
  - The price received by producers increases for P<sub>Initial</sub> to P<sub>Firm</sub>
  - The amount of the subsidy is given by  $(P_{Firm} P_{Consumer}) \times Q_{Subsidy}$ , or the amount of subsidy per unit is multiplied by the number of units sold; this is the entire shaded area, and represents government spending to provide the subsidy.
  - There is overallocation of resources to the production of the good; Q<sub>Subsidy</sub> is greater than the free market quantity, Q<sub>Initial</sub>
  - The granting of a subsidy results in greater consumer and producer surplus; however society loses due to government spending on the subsidy.

## Subsidies – Market Outcomes

- The losses from government spending is greater than the gain in consumer and producer surplus, welfare loss results, reflecting allocative inefficiency, which in this case is due to overallocation of resources to the production of the good (overproduction).
- This is also illustrated by MB < MC: too much of the good is being produced and consumed relative to the social optimum.
- Welfare loss (dead-weight loss) is a loss of economic efficiency (allocative inefficiency) that can occur when the equilibrium for a good or service is not Pareto optimal.