

NAME: _____

Subsidies

Learning Set

Subsidy in a general sense refers to assistance by the government to individuals or groups of individuals, such as firms, consumers, industries or sectors of an economy.

Subsidies can take the form of direct cash payments or other forms of assistance such as low-interest or interest-free loans (e.g., to students), the provision of goods and services by the government at below-market prices (e.g., subsidized housing) or tax relief (paying lower or no tax).

In this unit, we will study **specific subsidies**. The textbook just calls them subsidies.

Use pages **115 to 118** in your course companion to answer the questions below.

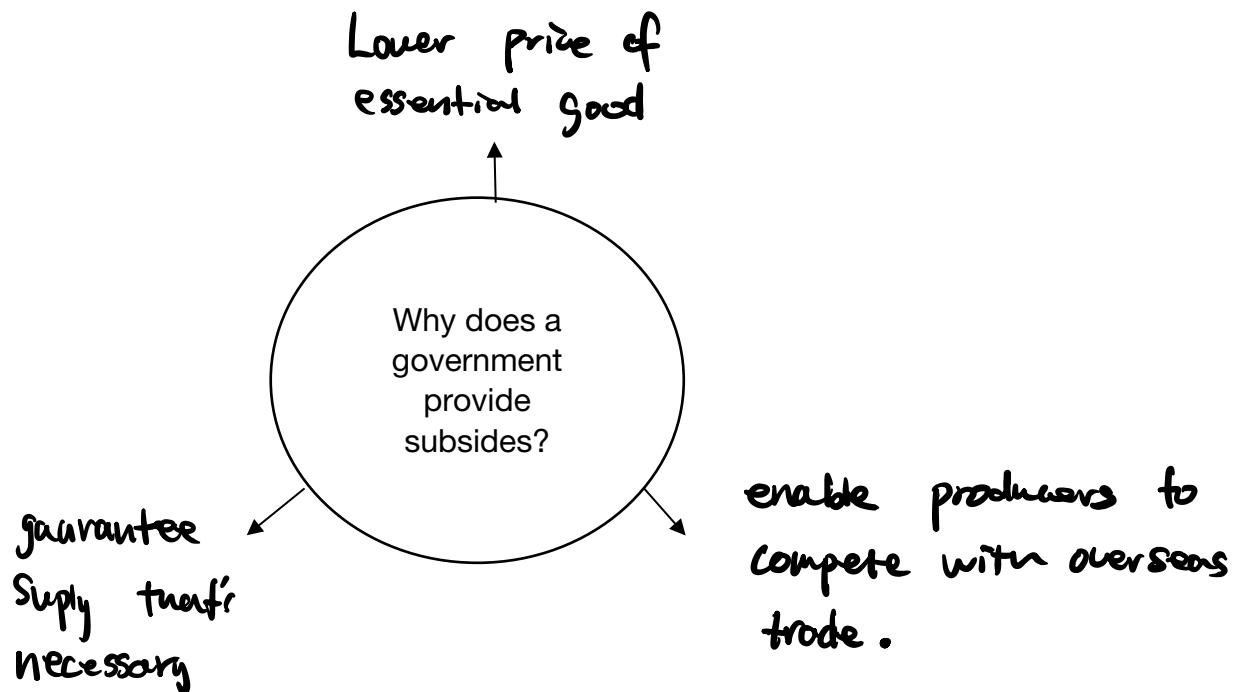
Part I: Defining a Subsidy

1. Provide the textbook definition of a subsidy below.

an amount of money paid by gov. to a firm, per

Part II: Reasons for Subsidies

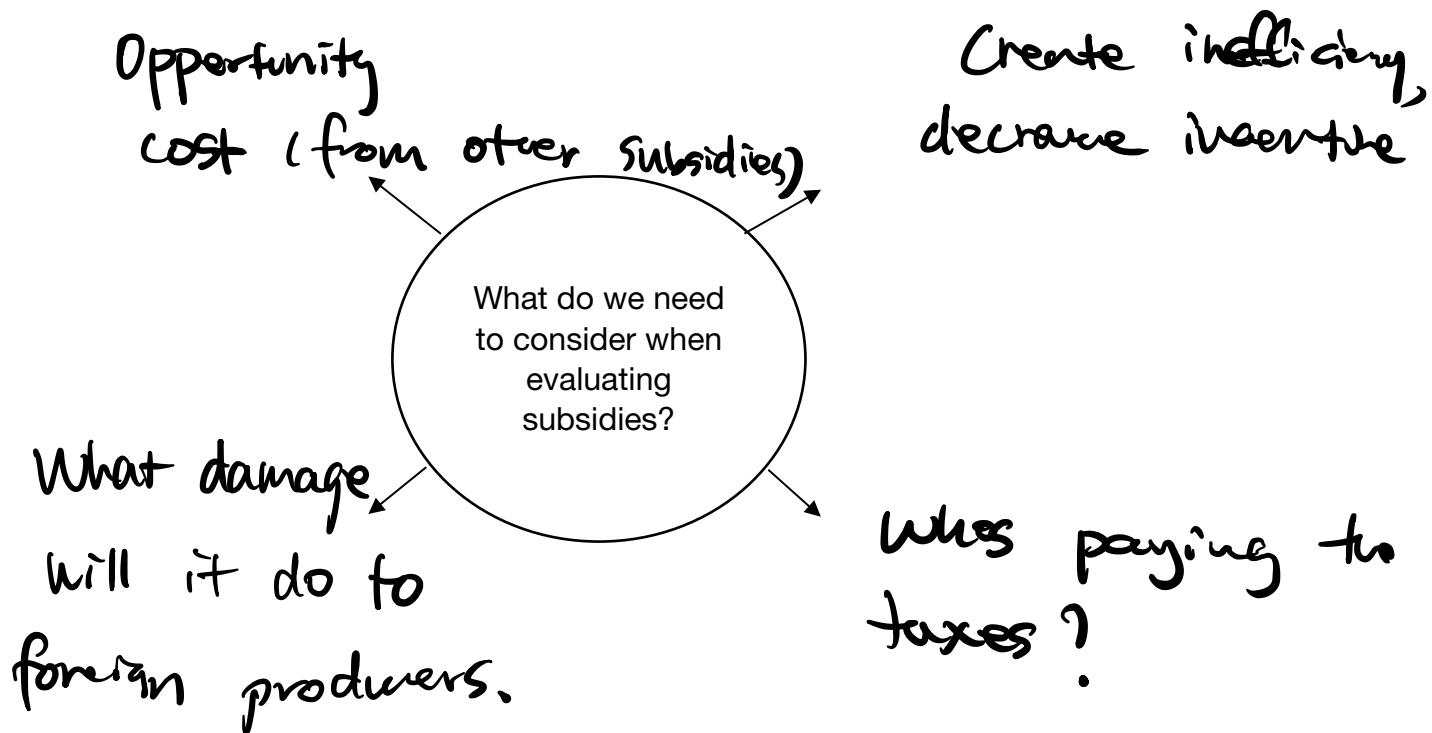
2. Add the three reasons why a government gives a subsidy to the wheel below



Part III: Evaluation of Subsidies



3. Add the four points to consider when evaluating subsidies below:



Part IV: Finding Real Life Examples of Subsidies

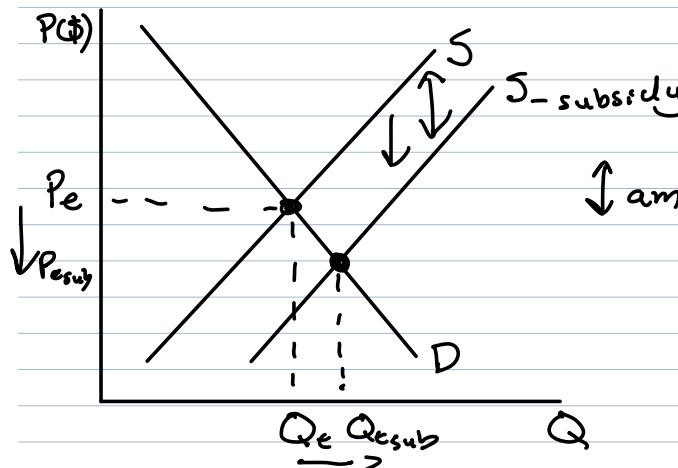
4. Conduct an internet investigation to find an example of a specific subsidy (not a general one). See if you can find out how much the subsidy is and who benefits/loses from it.

- Agricultural e.g. cotton.
- Gasoline
- prescription drugs



Subsidies in Diagrams

① Impact on Price + Quantity

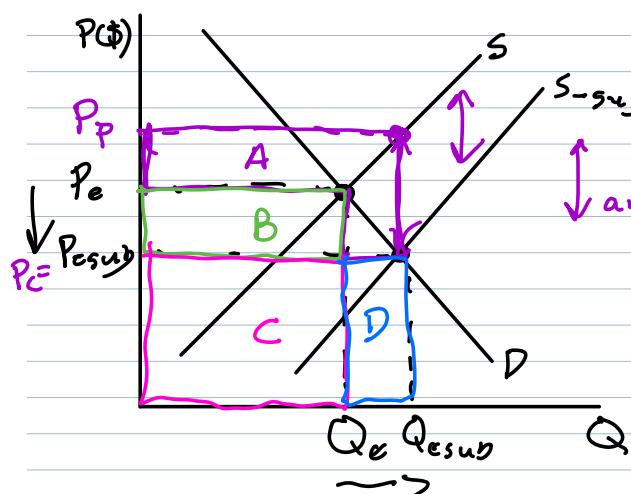


Overall:

- S shifts down to S_{-sub} because the subsidy made it cheaper to produce
- End result: price decreases ($P_e \rightarrow P_{esub}$) and quantity exchanged increases ($Q_e \rightarrow Q_{esub}$).

② Impact on Producer Revenue

$$TR = P * Q$$



Producer TR before subsidy =

$$P_e * Q_e = B + C$$

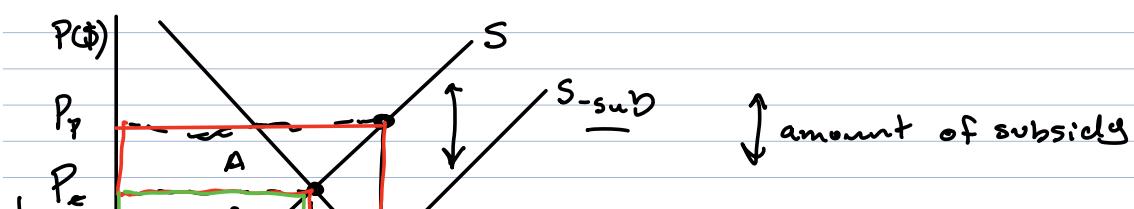
$$\text{After subsidy} = P_p * Q_{esub} = A + B + C + D$$

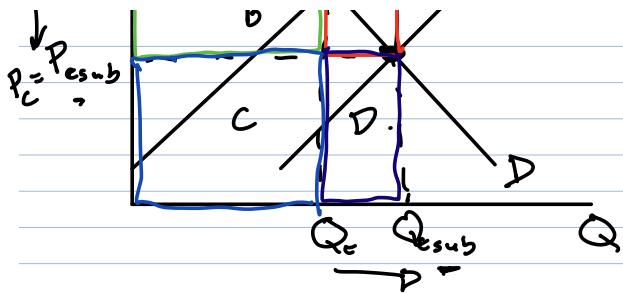
They receive a subsidy of

$$(P_p - P_{esub}) * Q_{esub} = A + B$$

D = extra revenue from selling more at a lower price

③ Impact on Consumers and Consumer Spending





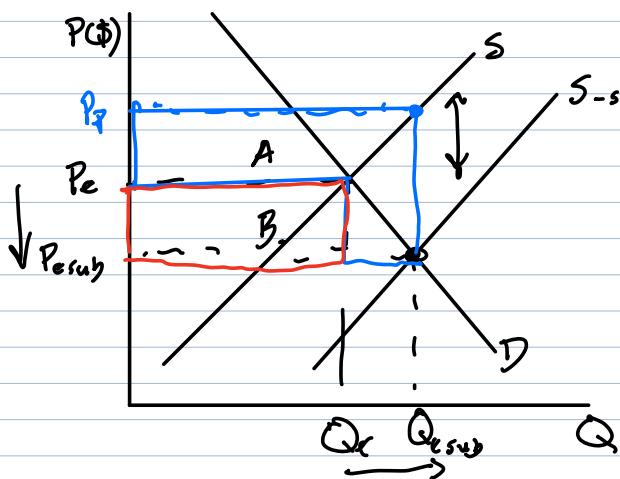
Consumers pay less ($P_e \rightarrow P_{sub}$) and consume more ($Q_e \rightarrow Q_{sub}$).

Consumer "benefit" or share of subsidy = B , because it allows consumers to purchase Q_e at a lower price ($P_e \rightarrow P_{sub}$).

Change in consumer expenditure = $(B+C)-(C+D)$

Extra spending by consumers after subsidy = D .

④ Amount of Government Spending on Subsidy

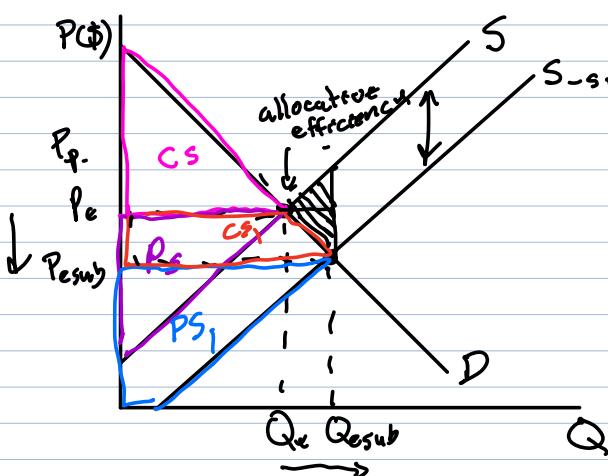


Amt paid by govt = $A+B$

Producer share = A

Consumer share = B .

⑤ Welfare Analysis

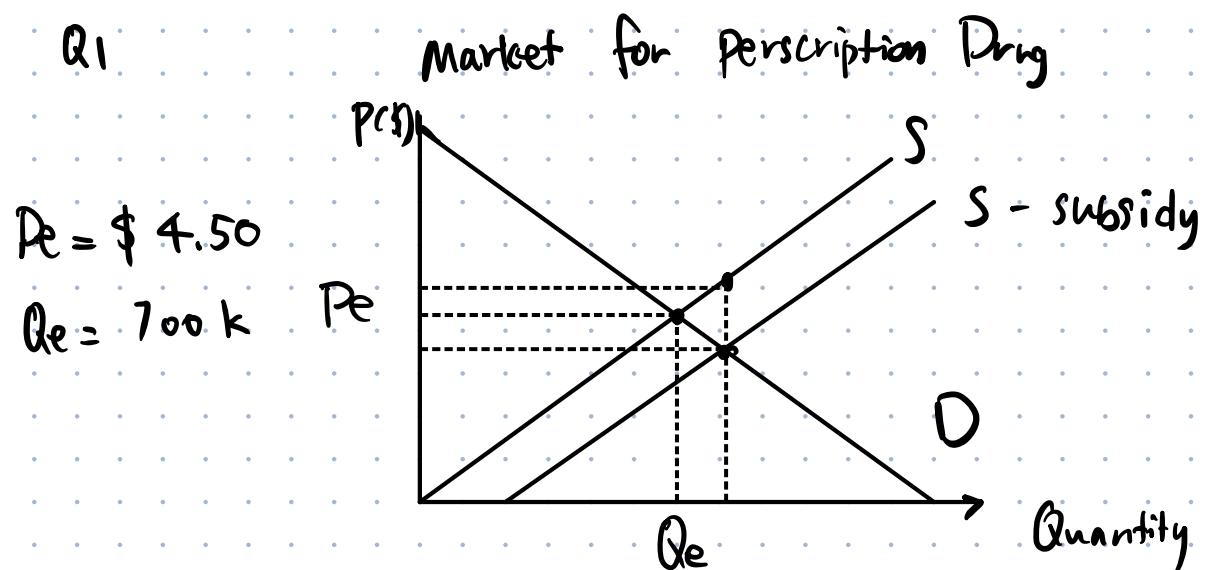


↑ amt of subsidy

deadweight loss
from overproduction/consumption
of the good

Exercise 8.2

Q1



Q2 $P_{r_1} = \$4.00$

$Q_{r_1} = 800 \text{ k}$

Q3 $P_r = 4.50 \cdot 700 \text{ k} = 3.15 \text{ M}$

$P_{r_1} = 4.00 \times 800 \text{ k} = 4.00 \text{ M}$

$P_{r_1} - P_r = 850 \text{ k}$

Q4 $C_r = 4.50 \times 700 \text{ k} = 3.15 \text{ M}$

$C_{r_1} = 4.00 \times 800 \text{ k} = 3.20 \text{ M}$

$C_{r_1} - C_r = 50 \text{ k}$

Q5 $G = 1.00 \times 800 \text{ k} = 800 \text{ k}$

Q6 Increase in producer revenue, +850k
Consumers get cheaper prices for higher Q,

more people can access more goods. from 4.50 → 4.00 , & 700k → 800k.

a7

- Subsidies come from taxation thus potential tax payers might not benefit from it.
- Money might be diverted from other industry thus creating opportunity cost loss for them.
- Other producers (e.g. foreign producers) might loose market share due to competitive market.

IB Economics
"A Growing Hunger"

1. What is a 'farm subsidy'?

A farm subsidy is a government incentive paid to agricultural organizations and farms to supplement their income.

2. Why are farm subsidies being used in the U.S.?

The US. gov created farm subsidies during the great depression to offset the surplus of crops and low prices of both livestock & crops.

3. What's the global economic problem caused by US farm subsidies?

Subsidies caused overproduction which draws lower-quality farmlands into active production, thus depressing global agricultural good prices.

4. Who most benefits within the U.S. from farm subsidies? Who loses within the US?

Land owners within the US. benefit most from farm subsidies. Thus big companies who own land benefit most, rather than actual farmers.

5. Who loses outside of the US? How?

Farmers and agribusinesses are excluded from this subsidy thus it's a increased trade barrier to the US.

6. What do you think should be done to U.S. subsidies?

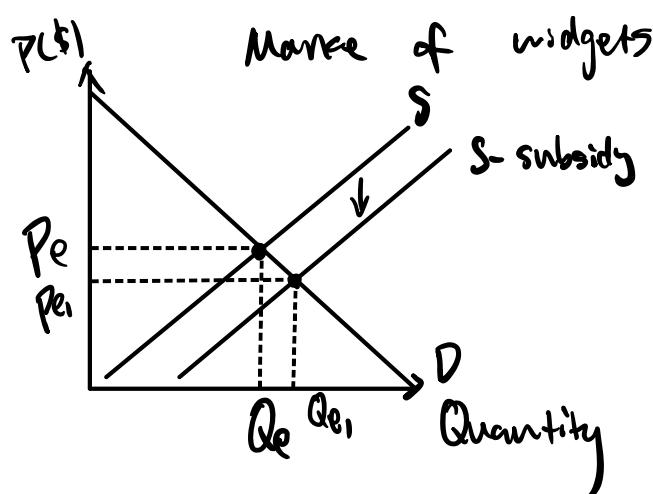
U.S. Farm Subsidies should focus on actual small farmers who need the subsidy.

Subsidies Activity Set

There is a detailed explanation of subsidies on pages 115 to 118 of the textbook. If you need more information or are having trouble, check there first.

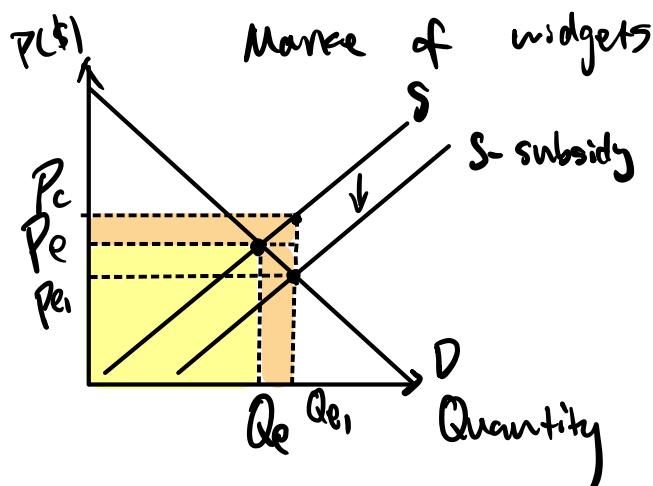
Answer the following questions:

1. Use a diagram to illustrate and explain the effects of a subsidy on the equilibrium price and quantity exchanged in a market.



Equilibrium changes from
 $(Q_e, P_e) \rightarrow (Q_{e1}, P_{e1})$

2. Use a diagram to illustrate and explain the increase in total revenue that firms gain from a subsidy.



Before Subsidy

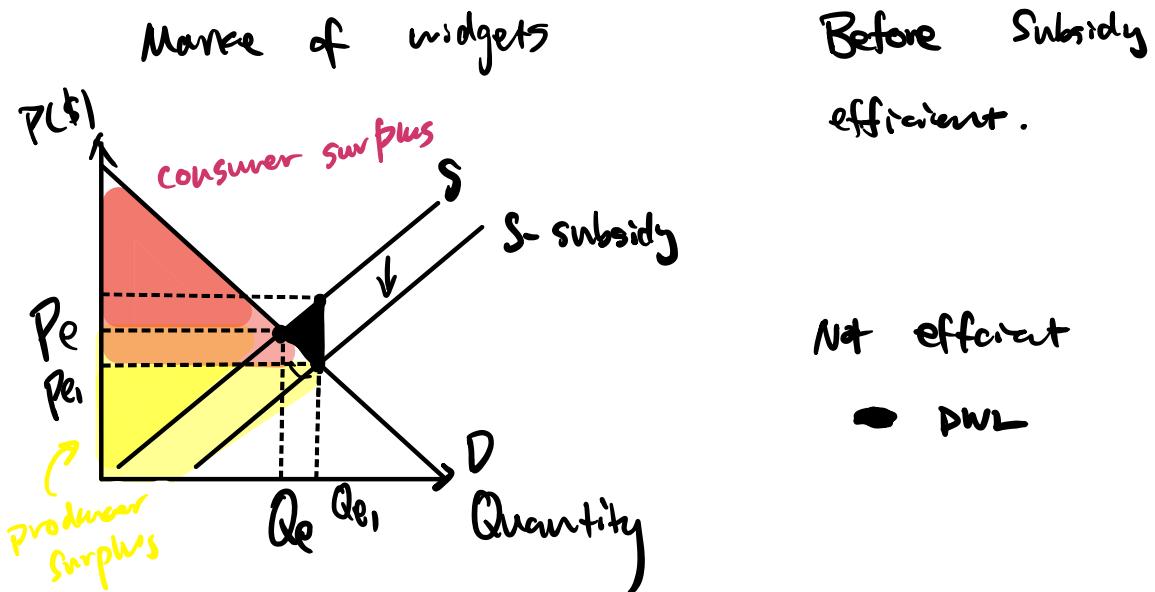
$$Tr = P_e * Q_e$$

After Subsidy.

$$Tr = P_{e1} * Q_{e1}$$

Consumers don't benefit from full subsidy, $P_e \rightarrow P_{e1}$.
 The producer benefits from $P_c \rightarrow P_{e1}$ & increased quantity exchanged $Q_e \rightarrow Q_{e1}$

3. Is a subsidy efficient? Use a diagram to explain your answer.



4. Do consumers benefit from a subsidy? Use a diagram to explain your answer.

Yes → lower price , increased consumer surplus

5. Use a diagram to illustrate the total amount governments pay when issuing a subsidy.

