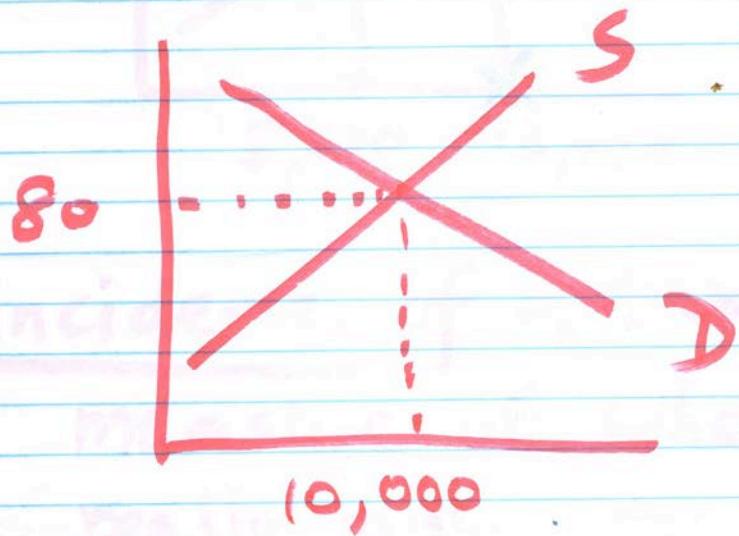


OfficeMax®

## Ch 7 Taxation

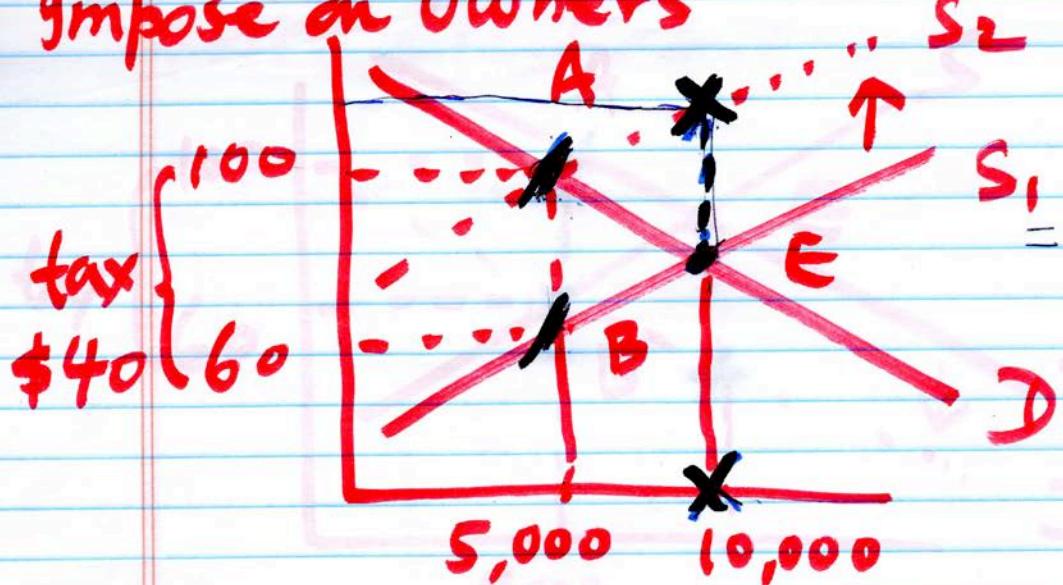
Excise Tax: tax on sales  
of a good or service

S and D of Hotel Rooms



CF 3 Tax & Pow

a. Hotel Owners "pay" tax  
Impose on Owners



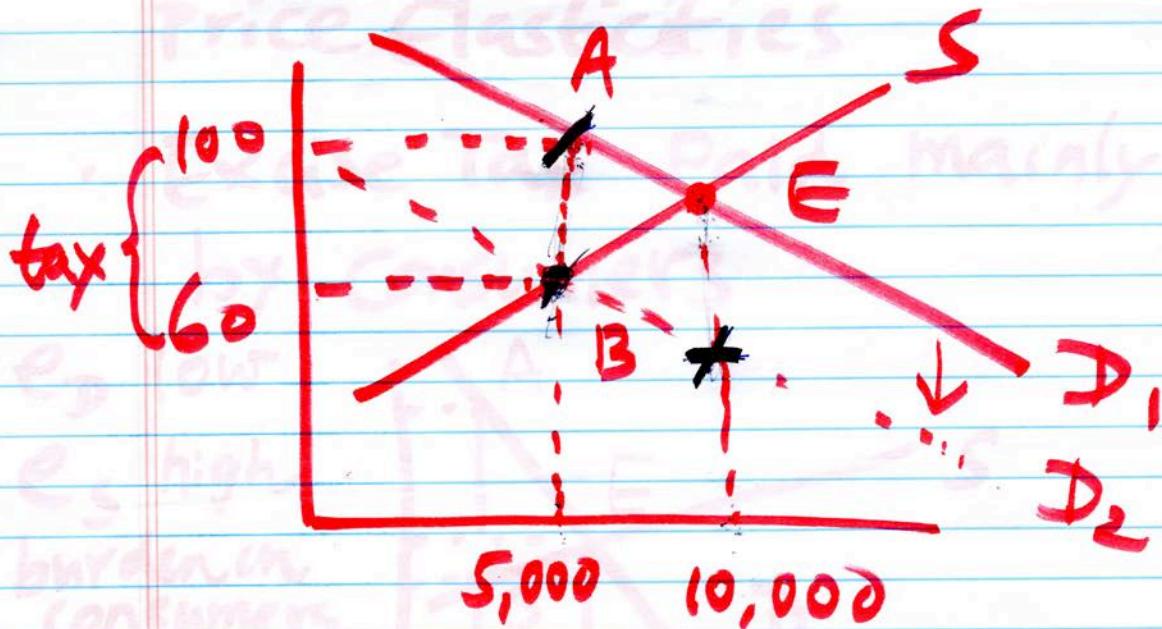
incidence of a tax:  
measure of who  
really pays it

Consumer      A-E ← 20

Producer      E-B ← 20

of Hoff ("Omnibus bill", for X)

## b. Tax imposed on Guests



Incidence

$$\text{Consumer } \underline{A-E} = 20$$

$$\text{Producer } \underline{E-B} = 20$$

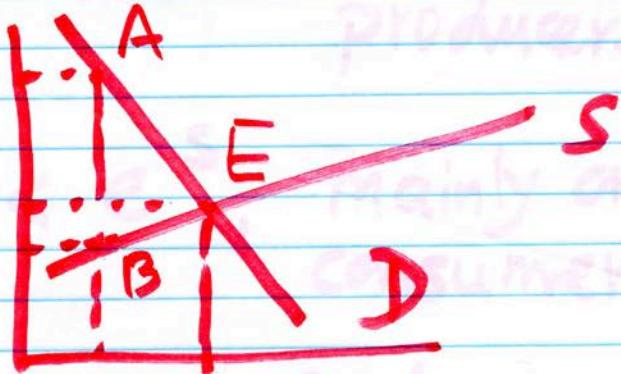
Does not matter who officially pays the tax,  
the effective P & Q same

## P. TAX IMPACT ON ELASTICITY

### Tax Incidence and Price Elasticities

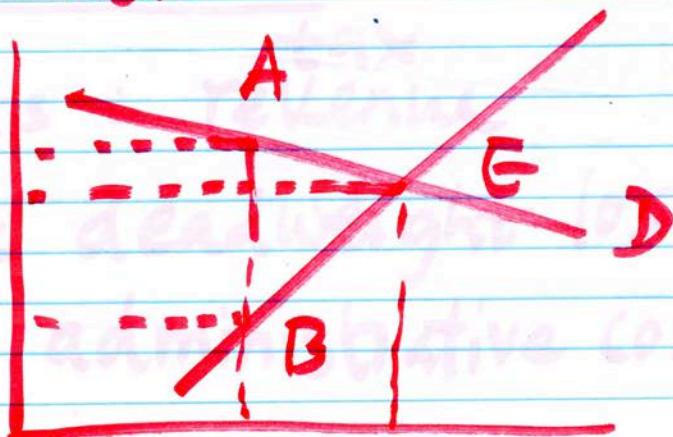
- Excise Tax Paid mainly by Consumers

$e_D$  low  
 $e_S$  high  
burden on consumers



- Tax Paid mainly by Producers

$e_D$  high  
 $e_S$  low  
burden on producers



Tax incidence rule

In general,

$e^s < e^d$ , excise tax  
burden mainly on  
producers

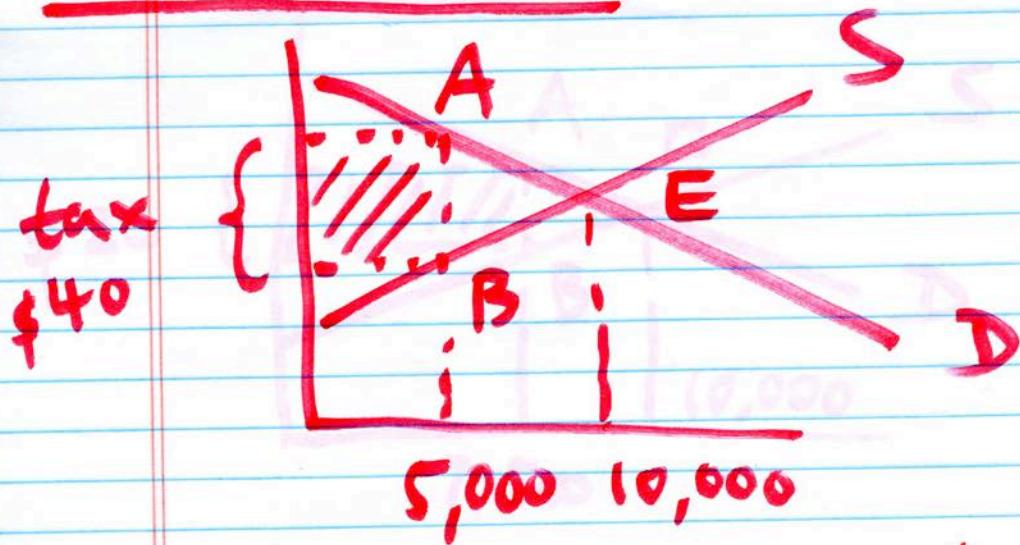
$e^d < e^s$ , mainly on  
consumers

### Benefits and Costs of Taxation

Benefits :  $\frac{\text{tax}}{\text{Revenue}}$

Costs : deadweight loss  
administrative costs

## Tax revenue

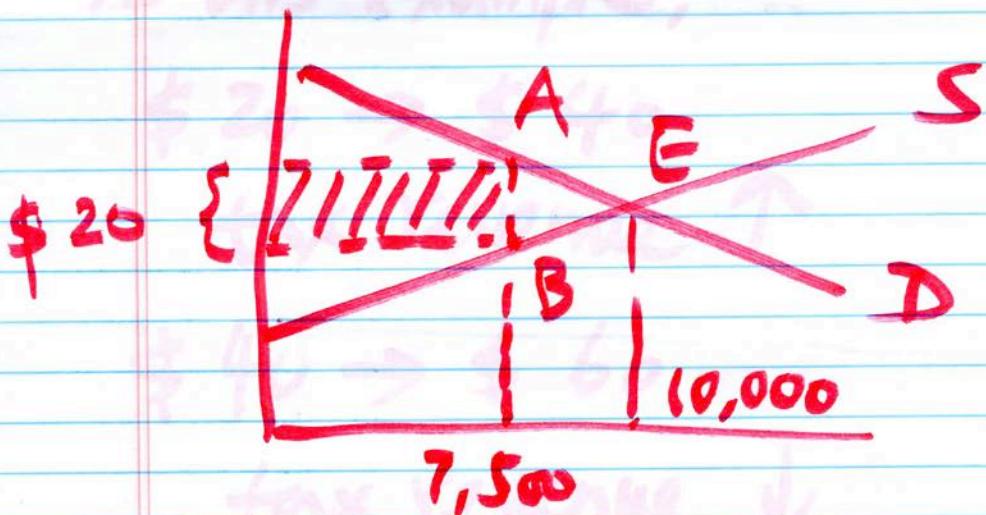


$$/\!/\!/\text{ Tax revenue} = \$200,000$$

Tax rate: amount of tax people are required to pay per unit of whatever is being taxed

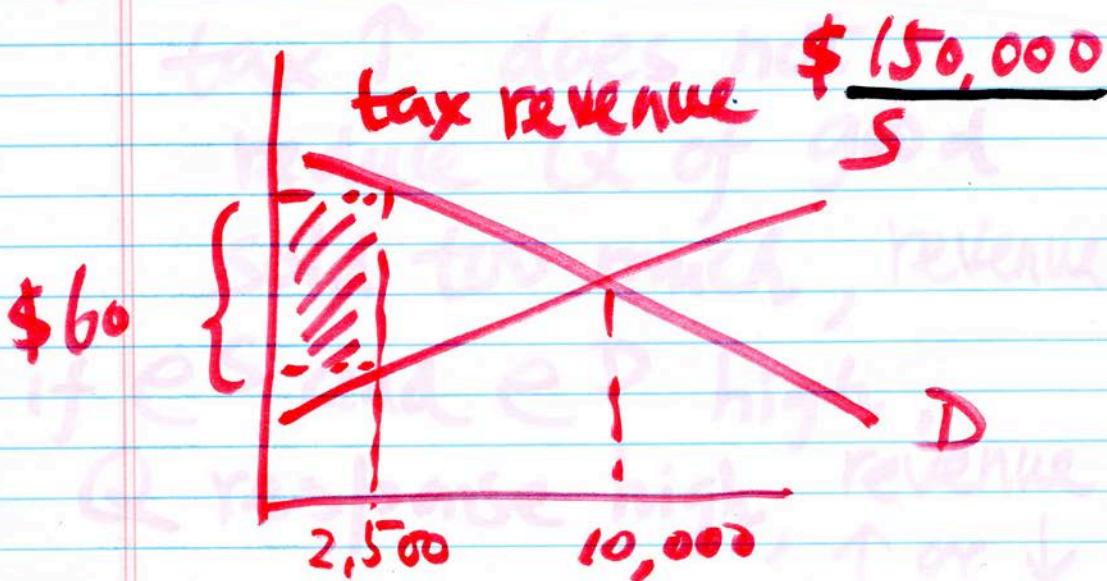
~~Excise Revenue~~

Excise tax = \$20



tax Revenue \$150,000

Excise tax = \$60



$$Excise \text{ tax} = \$50$$

In this example,

$$\$20 \rightarrow \$40$$

tax revenue ↑

$$\$40 \rightarrow \$60$$

tax revenue ↓

if  $e^S$  and  $e^D$  low

tax ↑ does not

reduce Q of good

sold too much, revenue ↑

if  $e^S$  and  $e^D$  high,

Q response high, revenue ↑ or ↓

if initial tax rate low,  
government does not  
lose much revenue with  
 $Q \downarrow$ , tax increase  
 $\Rightarrow$  tax revenue  $\uparrow$

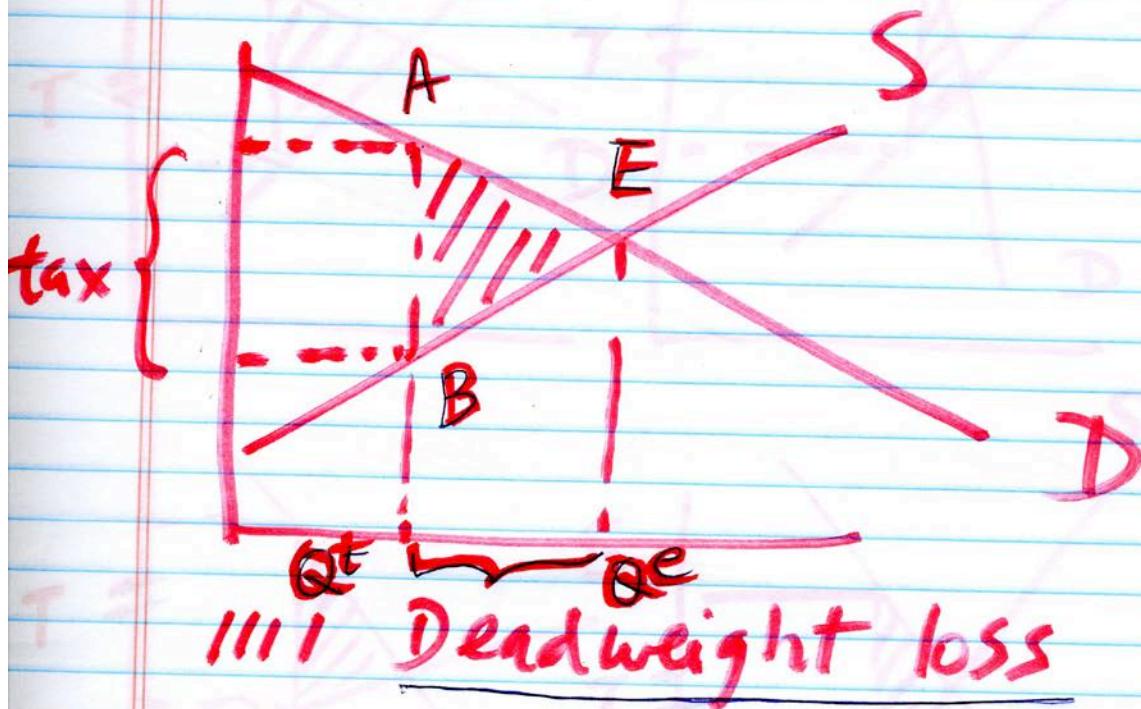
### Application

#### Laffer Curve

- Supply side economics
- Reagan tax cut

## Cost of taxation

### Deadweight loss

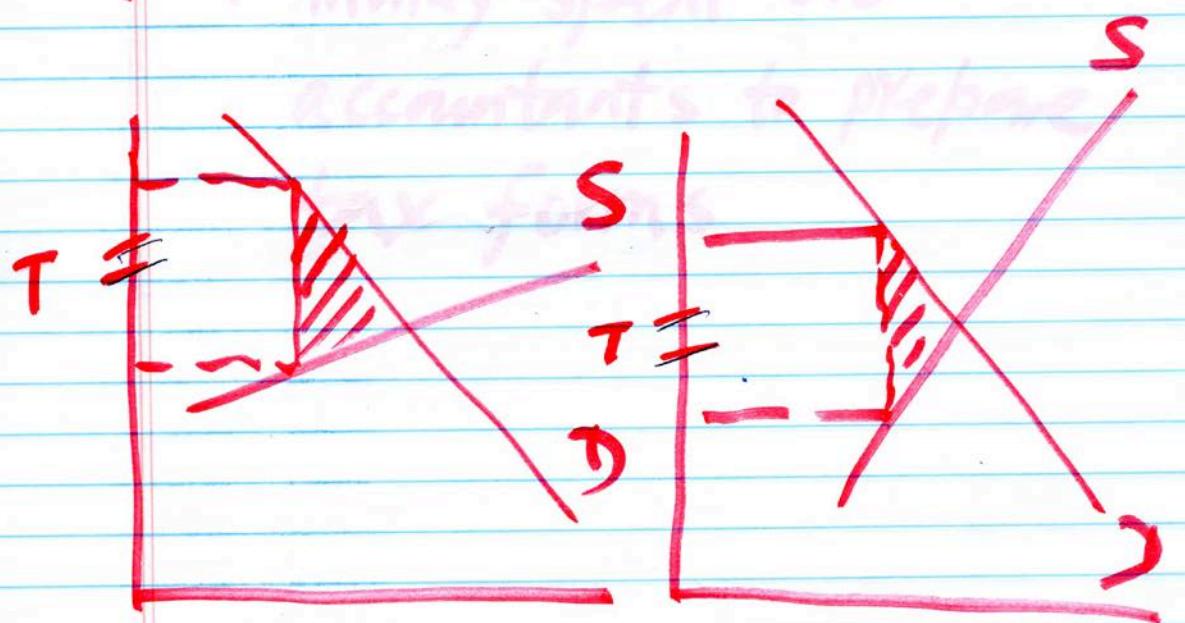
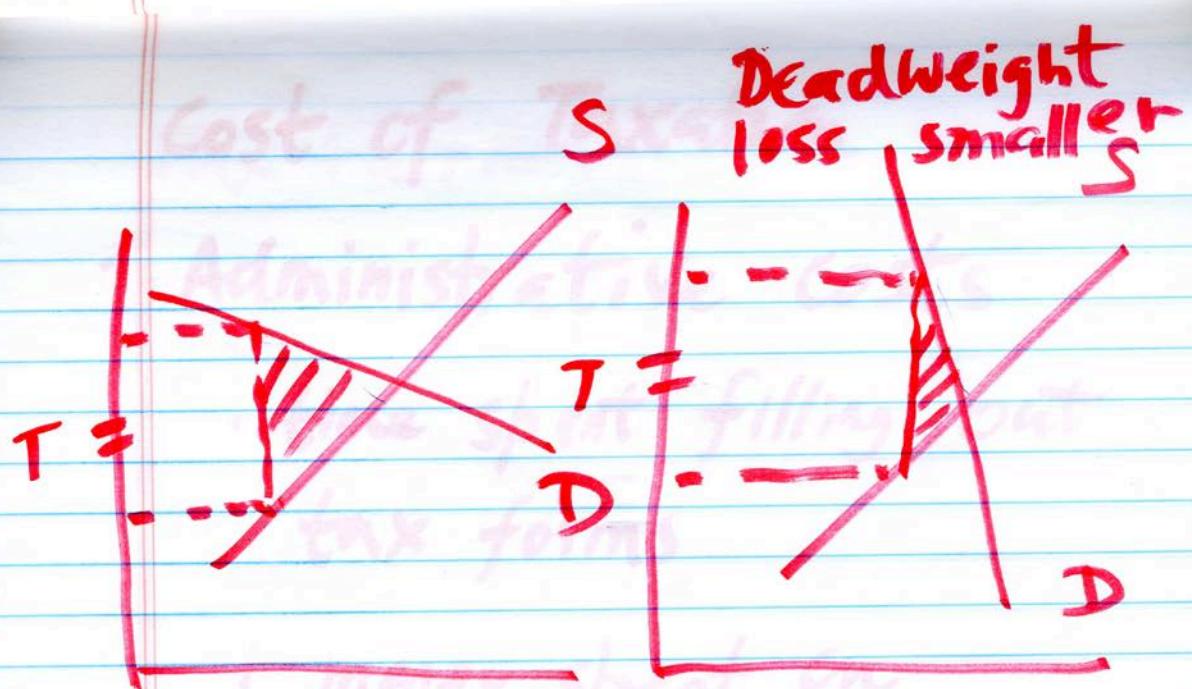


If D or S or both

is relatively inelastic,

smaller deadweight loss

Cost of Taxation



For Comparisons, hold  
 $T$  constant

## DECOMPOSITION

### Cost of Taxation

- Administrative costs
  - time spent filling out tax forms
  - money spent on accountants to prepare tax forms

## Core ch 10

### Tax Fairness

- benefits principle
  - those who benefit from public spending should bear the burden of the tax that pays for the spending
- ability-to-pay principle
  - those with greater ability to pay a tax should pay more tax