IV. TAXES IN THE MARKET MODEL, p. 107

Legal of statutory incidence

Actual or economic incidence of the tax

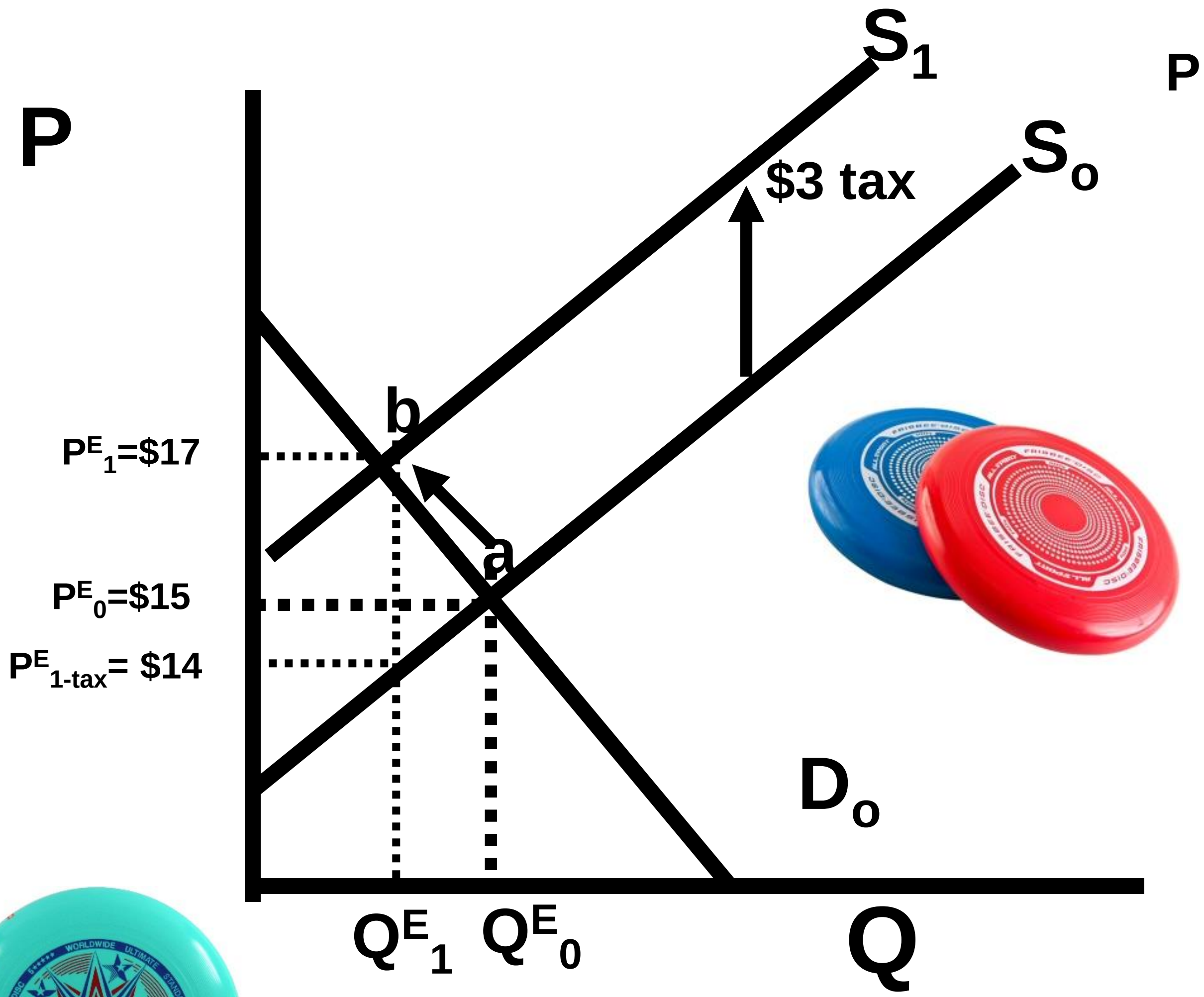
- The curve of the party bearing the legal incidence of the tax will shift by the per unit dollar amount of the tax., p.107

When a tax shifts the demand curve: If consumers bear the legal incidence of the tax, the demand curve will shift down vertically by the dollar amount of the per unit tax.

When a tax shifts the supply curve: If producers have legal incidence, the supply curve will shift upward vertically by the dollar amount of the per unit tax.

Frisbees Market where P^E = $15

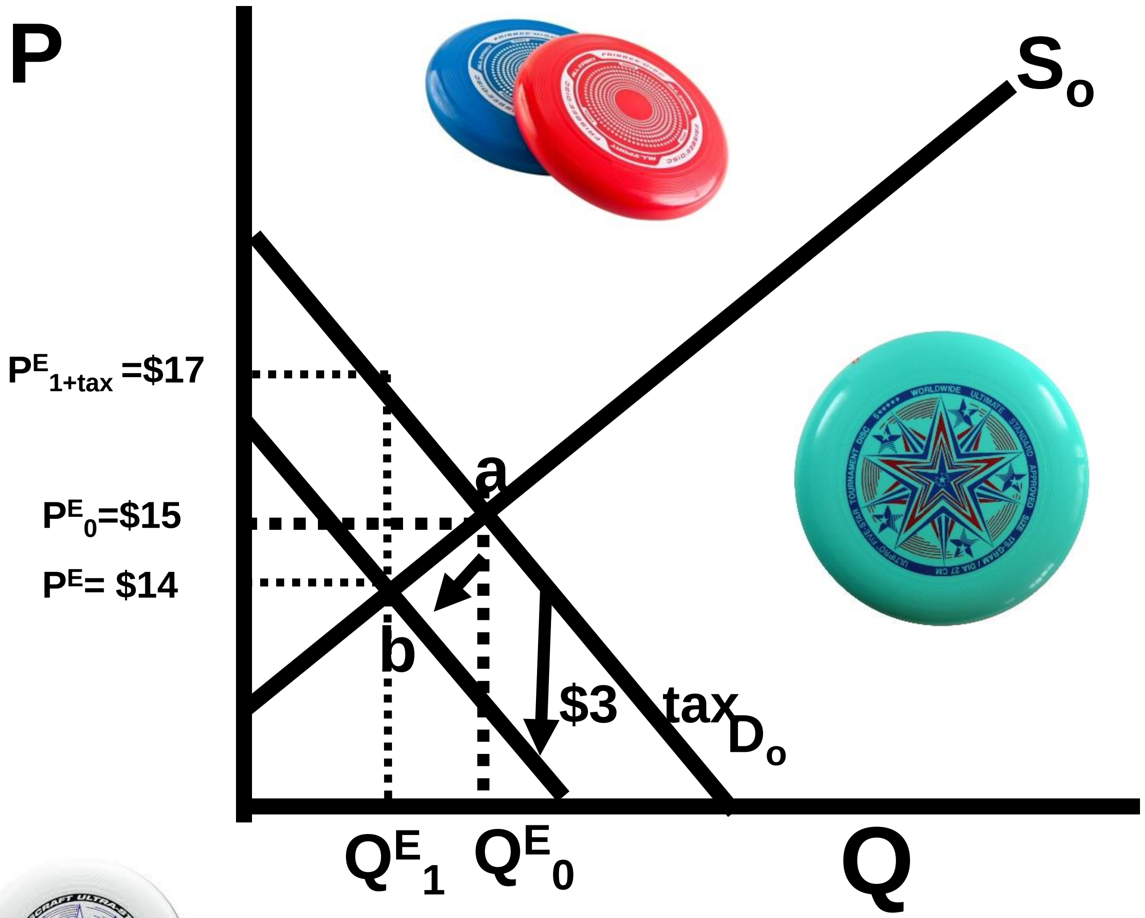
Government imposes a $3 per unit excise tax on Frisbees.



Producers bear legal tax incidence
Supply Shifts

- **Price rises by $2.00.**
- **The consumer pays $2.00 of the tax (actual incidence)**
- **Producers sell product for $17 but only get to keep $14.**
-
- **Producer pays the remaining $1.00 of tax burden.**

Consumers bearing legal tax incidence
Demand Shifts, p. 108



- Price falls by $1.00.
- The consumer pays $2.00 of the tax (actual incidence)
- Producers sell product for $14 instead of $15.
- Producer pays the remaining $1.00 of tax burden.

Tax equivalence, P.108

The impact of the tax is the same whether producers bear legal incidence or consumers bear legal incidence.

-fewer frisbees bought

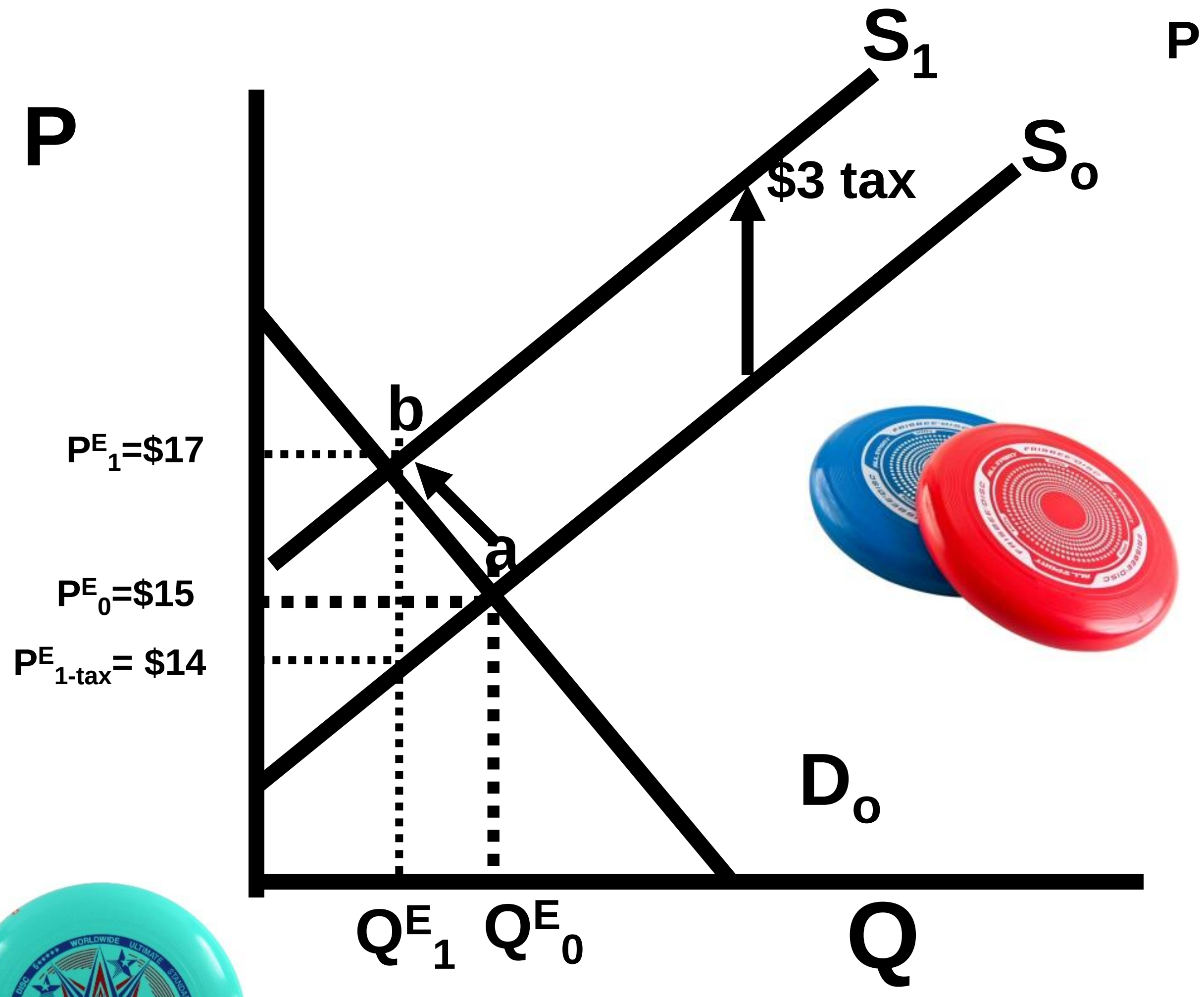
-$2 actual incidence to consumer and $1 to producer

V. Elasticity and Actual Tax Incidence, p. 109

Economic or actual incidence of a tax will depend on the relative elasticities of supply and demand.

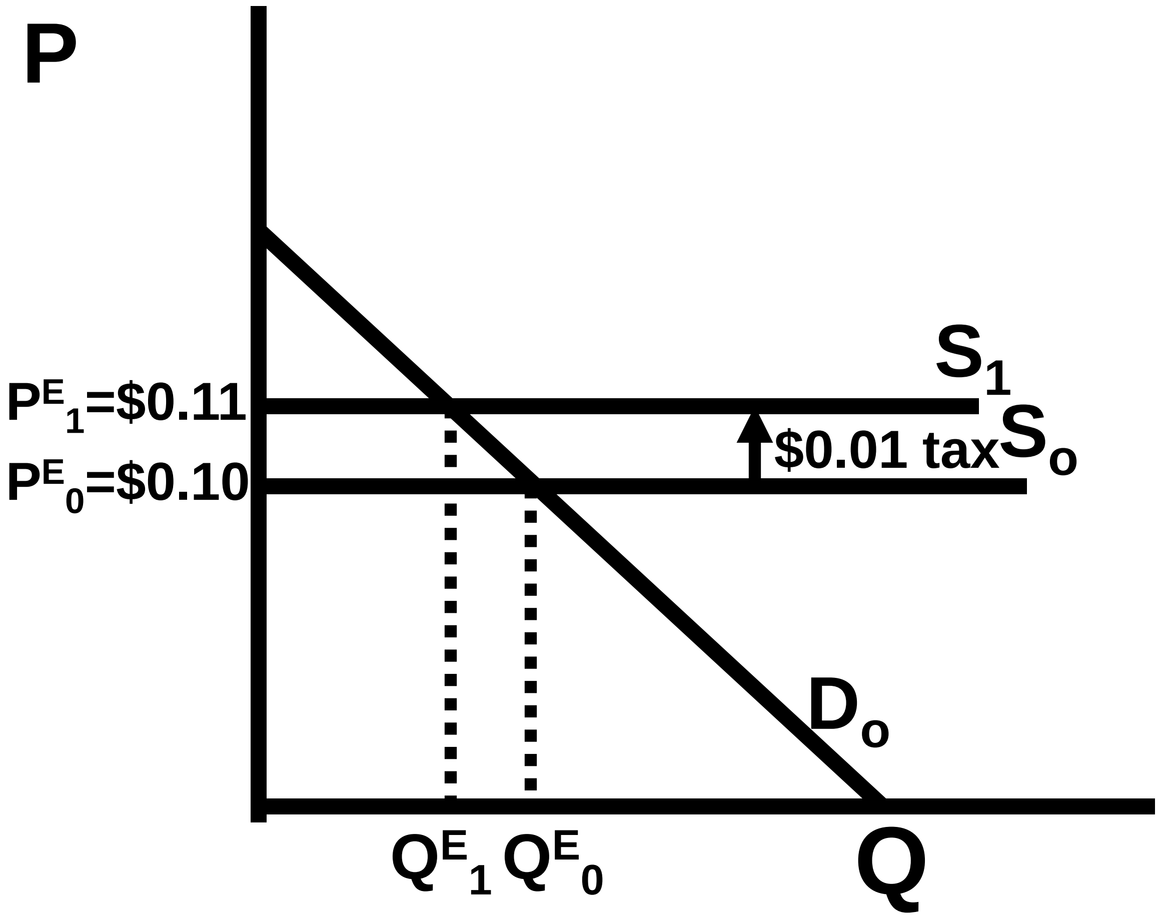
i.e. are consumers more flexible or are producers more flexible?

Case I: Frisbees Market where P^E = $15, p. 109 or first graph on 108
Government imposes a $3 per unit excise tax on Frisbees.



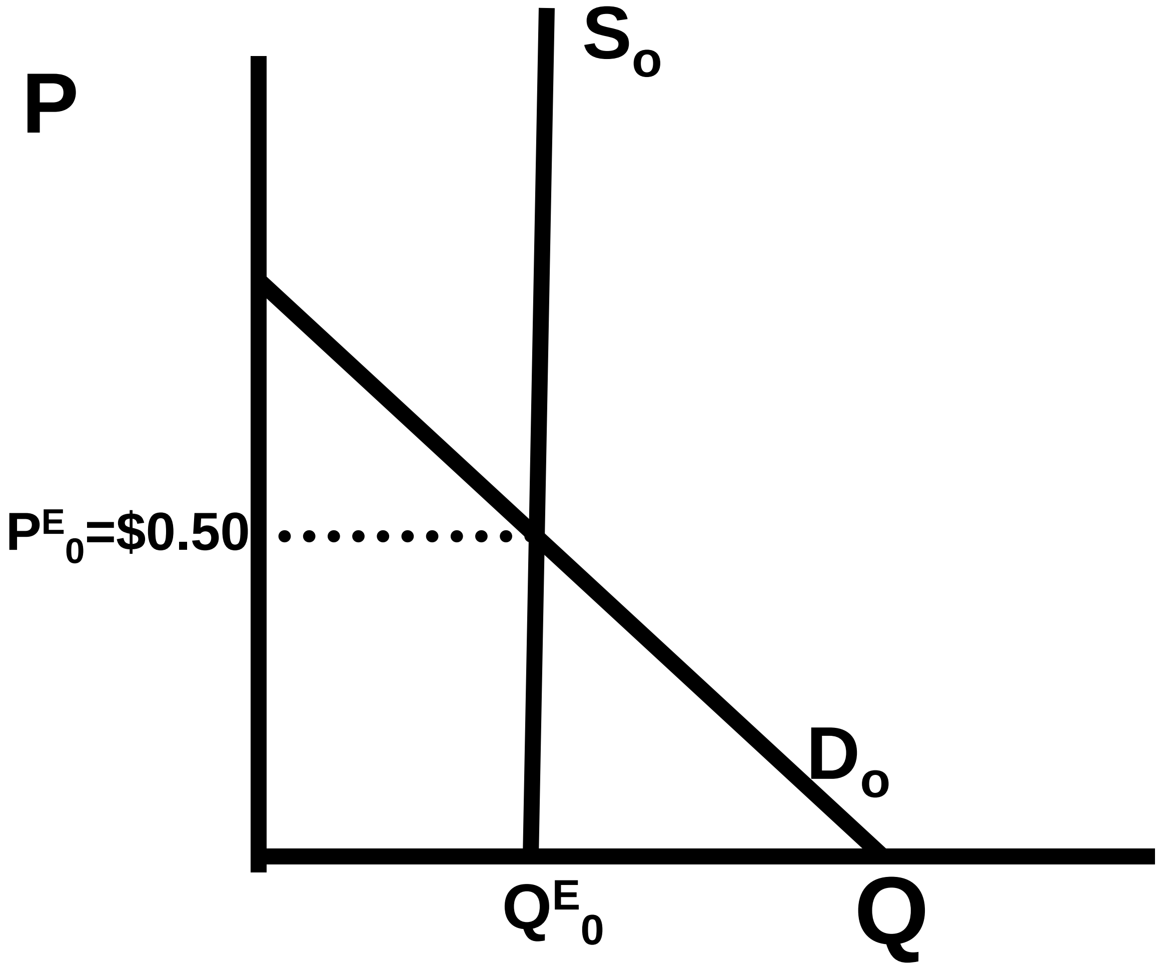
Producers bear legal tax incidence
Supply Shifts

- **Price rises by $2.00.**
- **Consumer pays $2.00 of the tax (actual incidence)**
- **Producers sells for $17 but only keeps $14.**
- **Producer pays remaining $1.00 of tax burden.**
- **Who is more elastic?**
- **Producers**



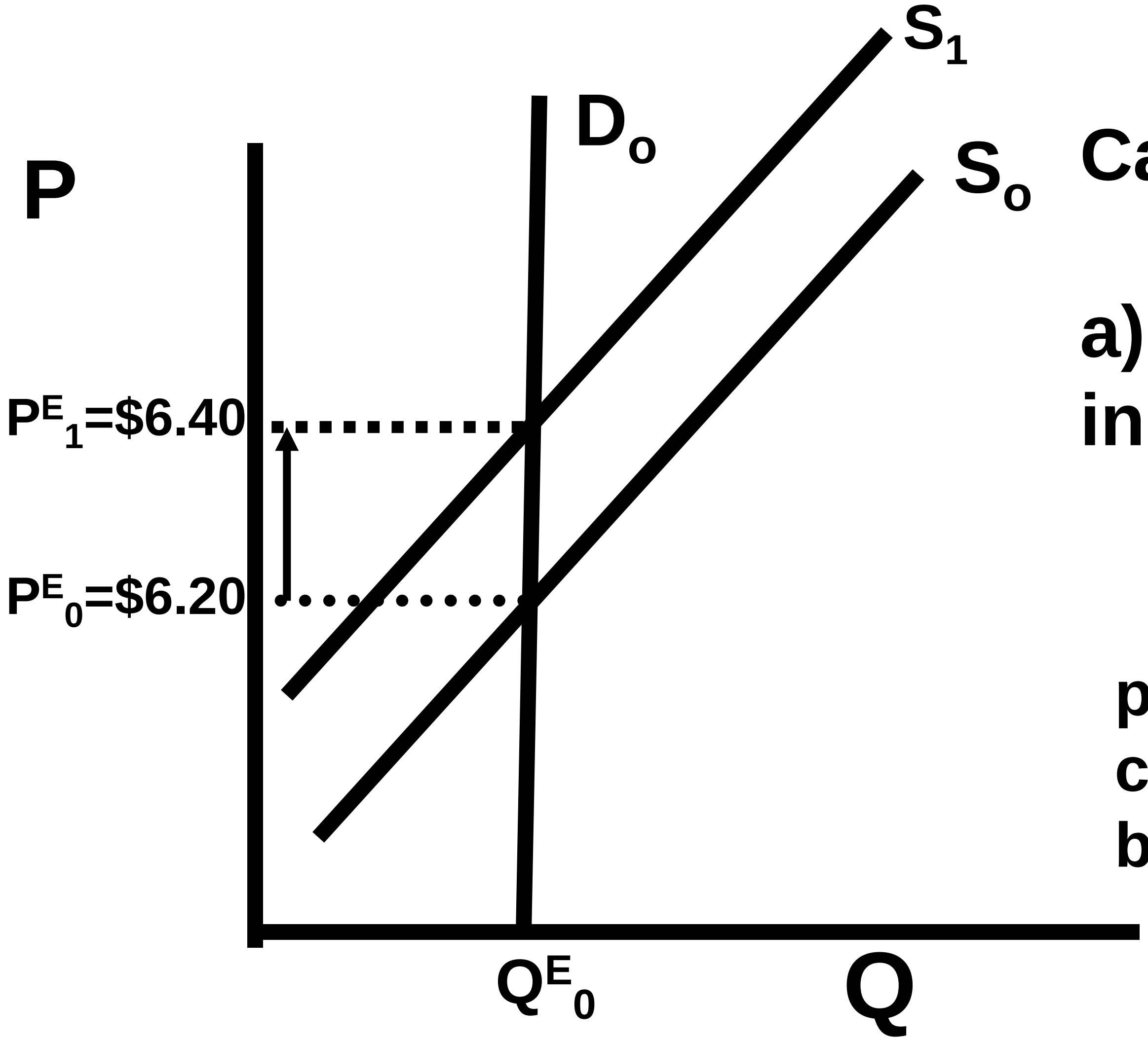
Case II: a) p. 110

- Perfectly elastic supply
- Price rises 1 cent so consumers bear full burden



b) p. 110

- **Perfectly inelastic supply**
- Producer bears full burden of tax



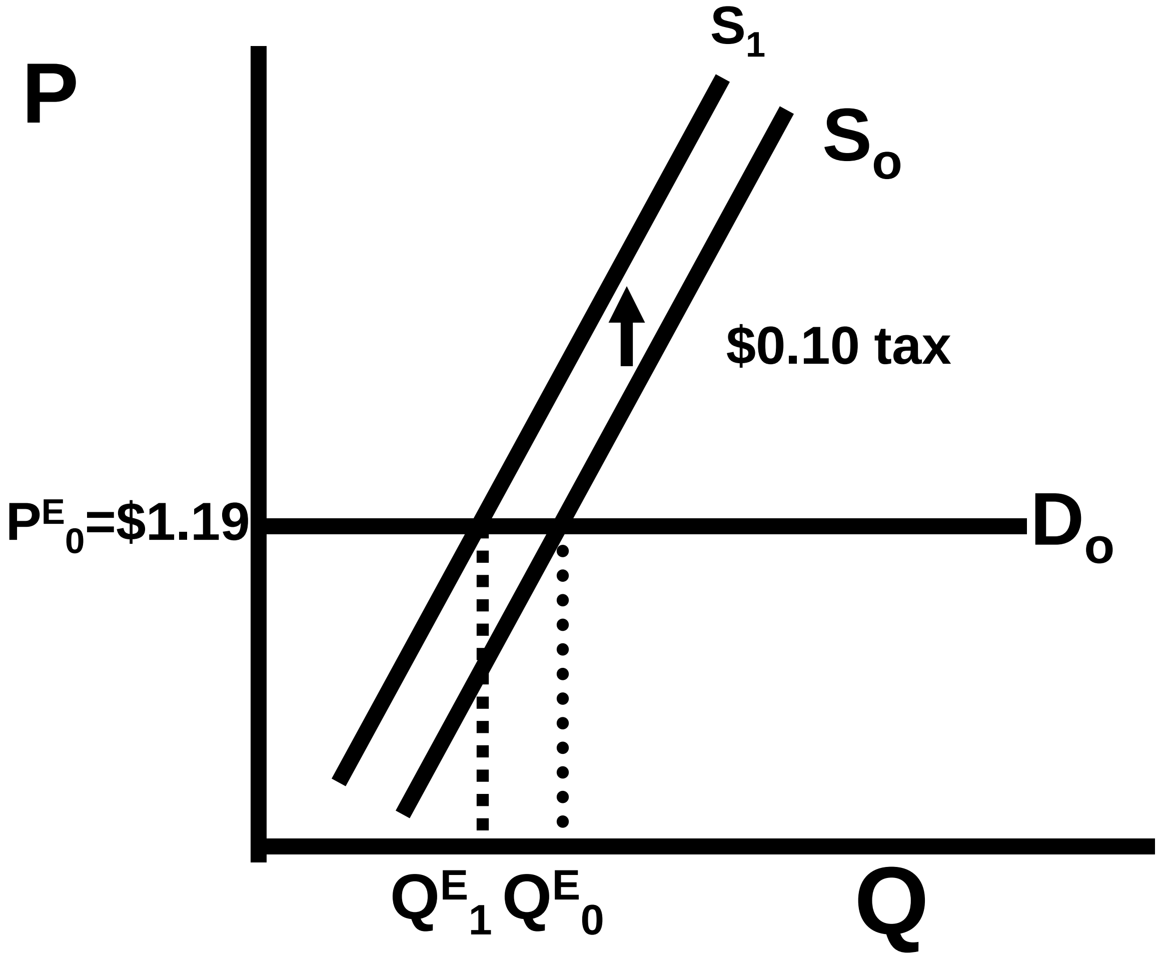
Case III: p. 110

a) Perfectly inelastic demand

price rises by 20 cents
consumer bears full burden of tax

b) Perfectly elastic demand

p.111



- Price does not change
- Seller bears the full burden of the tax.

Summary
p. 111

When comparing producers and consumers – whoever’s curve is most elastic bears the least of the actual tax incidence.

ICLICKER – REEF POLLING

1) If the government imposes a $500 excise tax on imported cars and the market price increases by $100, what is the actual incidence of the tax to consumers?

A. $0

B. $100

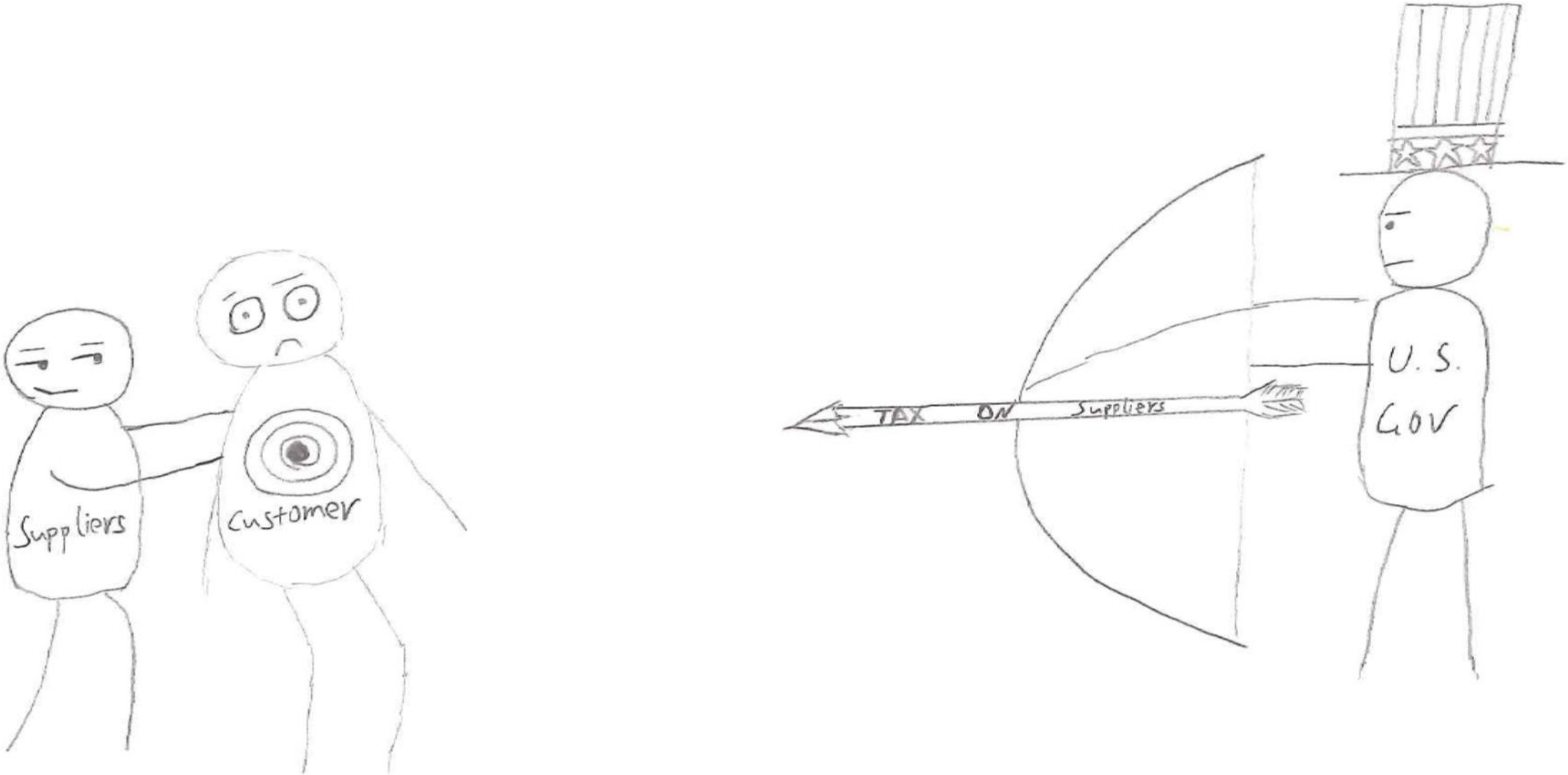
C. $400

D. $500

ICLICKER – REEF POLLING

2) Assuming there is a $500 excise tax and consumers bear $100 of the tax burden while producers bear $400 of the tax burden, which curve is relatively more elastic?

A. Demand
B. Supply

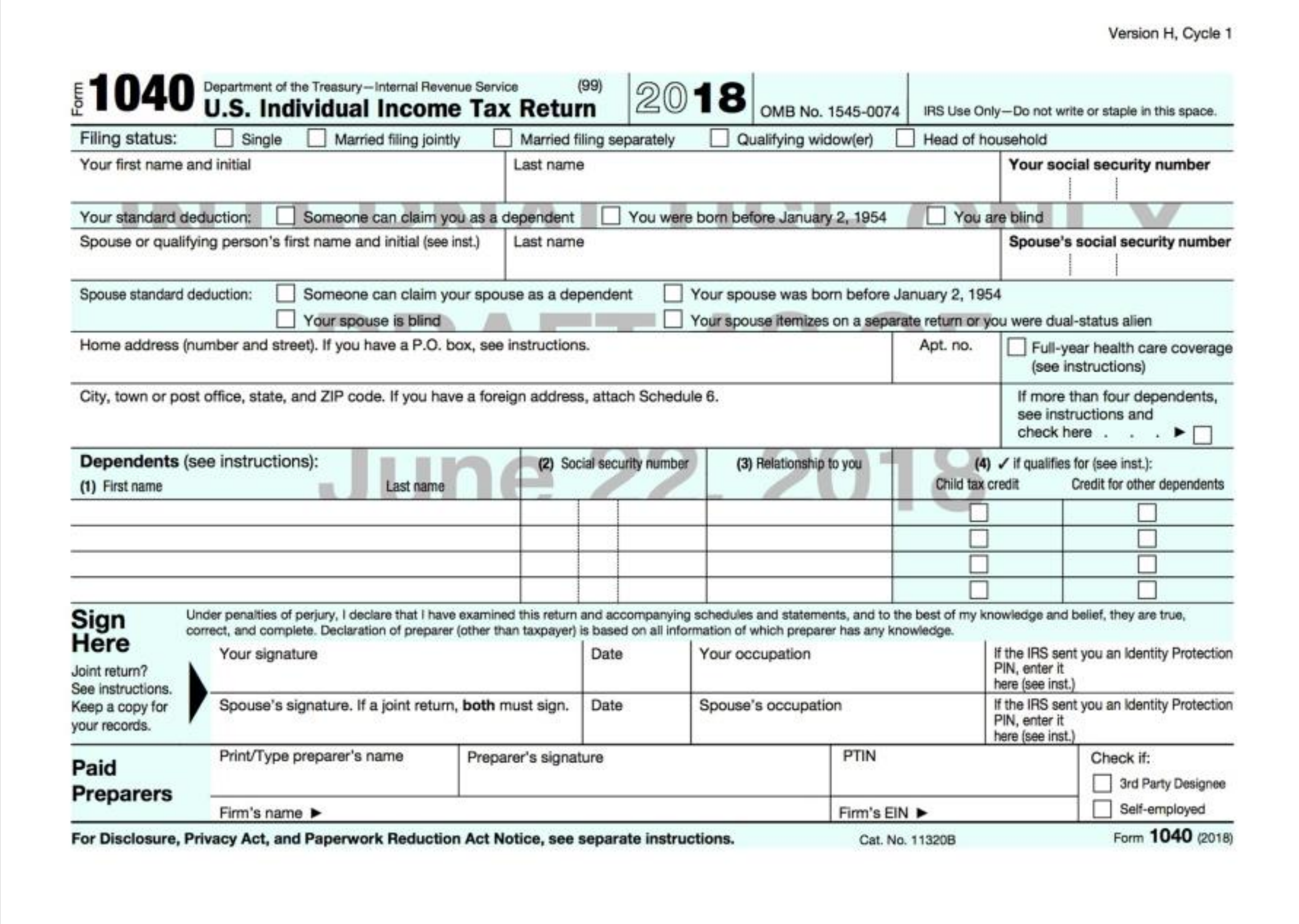

Suppliers
Customer
TAX ON Suppliers
U.S. GOV

INCOME TAXES

Local around 2.9%
“occupational license fee”

State around 6%

Federal -schedule



Version H, Cycle 1

Form **1040** Department of the Treasury—Internal Revenue Service (99) **U.S. Individual Income Tax Return** **2018** OMB No. 1545-0074 IRS Use Only—Do not write or staple in this space.

Filing status: ☐ Single ☐ Married filing jointly ☐ Married filing separately ☐ Qualifying widow(er) ☐ Head of household

Your first name and initial | Last name | **Your social security number**

Your standard deduction: ☐ Someone can claim you as a dependent ☐ You were born before January 2, 1954 ☐ You are blind

Spouse or qualifying person's first name and initial (see inst.) | Last name | **Spouse's social security number**

Spouse standard deduction: ☐ Someone can claim your spouse as a dependent ☐ Your spouse was born before January 2, 1954
☐ Your spouse is blind ☐ Your spouse itemizes on a separate return or you were dual-status alien

Home address (number and street). If you have a P.O. box, see instructions. | Apt. no. | ☐ Full-year health care coverage (see instructions)

City, town or post office, state, and ZIP code. If you have a foreign address, attach Schedule 6. | If more than four dependents, see instructions and check here ▶ ☐

Dependents (see instructions): (1) First name	Last name	(2) Social security number	(3) Relationship to you	(4) ✓ if qualifies for (see inst.): Child tax credit	Credit for other dependents
				☐	☐
				☐	☐
				☐	☐
				☐	☐

Sign Here
Joint return? See instructions. Keep a copy for your records.

Under penalties of perjury, I declare that I have examined this return and accompanying schedules and statements, and to the best of my knowledge and belief, they are true, correct, and complete. Declaration of preparer (other than taxpayer) is based on all information of which preparer has any knowledge.

Your signature | Date | Your occupation | If the IRS sent you an Identity Protection PIN, enter it here (see inst.)

Spouse's signature. If a joint return, **both** must sign. | Date | Spouse's occupation | If the IRS sent you an Identity Protection PIN, enter it here (see inst.)

Paid Preparers
Print/Type preparer's name | Preparer's signature | PTIN | Check if: ☐ 3rd Party Designee ☐ Self-employed
Firm's name ▶ | Firm's EIN ▶

For Disclosure, Privacy Act, and Paperwork Reduction Act Notice, see separate instructions. Cat. No. 11320B Form **1040** (2018)

Average Tax Rate (ATR)

- Tax liability divided by taxable income. It is the percentage of income paid in taxes

- Example:
- ***You earn $20,000 a year and pay $3,000 in taxes***
- ***average tax rate is 3,000/20,000***
- ***or .15 or 15%***

Marginal Tax Rate (MTR)

(additional tax liability) / (additional taxable income)

- % of an extra dollar of income earned that must be paid in taxes
- *Income increases from $40,000 to $70,000 and your tax liability rises from $10,000 to $16,000. What is your marginal tax rate?*
- *MTR=additional tax liability/additional income or $6,000/$30,000 = 20%*

2017 US Marginal Income Tax Rates	
Single filers Taxable income (up to)	Current marginal rate
$9,325	10%
$37,950	15%
$91,900	25%
$191,650	28%
$416,700	33%
$418,400	35%
Over $418,400	39.6%

Standard deduction $6,350
Personal Exemption $4,050

2018 US Marginal Income Tax Rates

Tax bracket	Single
10%	0–$9,525
12%	$9,525–$38,700
22%	$38,700–$82,500
24%	$82,500–$157,500
32%	$157,500–$200,000
35%	$200,000–$500,000
37%	$500,000 and up

Standard deduction $12,000
Personal Exemption -eliminated

Tax Reform for 2018:
Corporate tax rate fell from 35% to 21%.