Applying Demand Functions

Imposing a Tax

- A tax $t$ is levied on sales of a product
- The supply curve shifts up by $t$.
  - Why? The price suppliers get is $t$ less than consumers pay

What Happens

- Quantity sold drops
- The price suppliers gets decreases.
Applying Demand Functions

What Happens

- Quantity sold drops
- The price suppliers get decreases.
- The price consumers pay, tax included, rises.

Suppose Consumers Pay

- A tax $t is levied on purchases of a product

The price consumers pay, tax included, increases.

- The quantity sold drops.
- The price suppliers get decreases.
Applying Demand Functions

Compare the two cases

• Does it make a difference?
• Does it make a difference?
• Lets combine the two effects

Price Consumers Pay

$S_t$

Shift in supply and demand curves is the same, $S_t$

Quantity Sold is the Same

Price to consumers is the same

Net price to suppliers is the same

Does it make a difference?
• Lets combine the two effects

Net price to suppliers is the same
Conclusion

• The incidence of a tax is independent of who actually pays the tax.
• The actual split between demanders and suppliers depends on the slope of the supply and demand curves, not the legalities.

An Old Problem

• The City of Kent is planning a tax on automobile sales.
• One plan would levy the tax on dealers, the other on customers.
• Which will have the greater effect on sales?

There is a difference? (Actually No)

End

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