

## Ch 4: Price and Quantity Controls

# What are We Talking About

- Price Ceilings and Floors

- *Legal* minimum or maximum price
- Minimum wage (Legal Min)
- Rent control (Legal Max)

- Quantity Ceilings and Floors

- Legal minimum and maximum purchase or sale
- Tricky because it can be per purchase or in aggregate.
  - Minimum purchase or sale (Auto Insurance)
  - Maximum purchase quantity (See local ganja store for example)

# A Few Warnings

- This is about messing with well functioning, perfectly competitive markets.
- You generally don't want to touch those.

But ...

# We Should if They are Not

- Markets that are non-competitive in some way
  - Low skill - low wage labor, minimum wage laws (Economists are split on this but evidence is coming in)
  - Labor markets in general (There may be few buyers and buyers may have more information)
  - Monopoly power, internet service etc.
- When there are externalities
  - Pollution, congestion and the like, but other mechanisms often work better
  - Common resource like fishing. Again, different approaches may be better.

# We Do Mess with Markets for Other Reasons

- Critical industry (Argument currently in use for auto tariffs and price floors on milk)
- Infant industry (Just let it grow so we don't have to import)
- Protect the poor (Cheap food)
- Ensure quality (UK had a minimum price of gin)

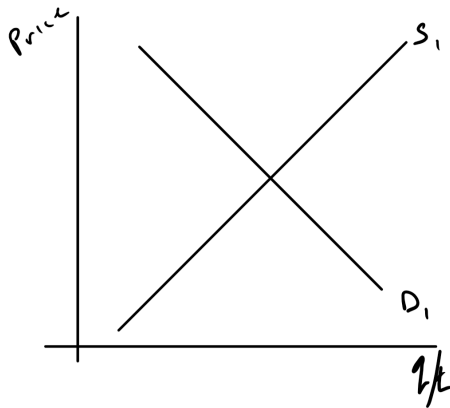
# Why We Care in Macro?

- We do this on vast scales.
  - Quotas on large industries (autos, oil)
  - Tariffs
- The vast scales don't restrict themselves to a single industry they have macro, unemployment, growth, and inflation, effects.

# Warnings

- The analysis that follows assumes that we are constraining well functioning markets.
- You can improve the functioning of *some* markets with constraints, but not all.
- The constraints break prices ability to allocate, so other non-price allocation mechanisms, like discrimination, kick in.

# Price Ceiling





# Summary of Price Ceiling

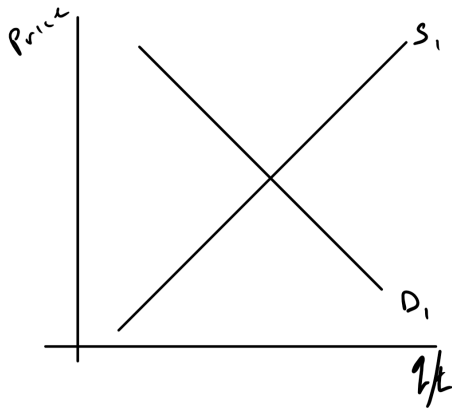
- Quantity demanded is larger than quantity supplied – a shortage.
- The usual equilibrium mechanism, bidding up price, can't work.
- Those that can buy at the low price get a lot of benefits.
- Those that can't end up either:
  - Not getting the goods
  - Buying a close substitute
  - Waiting for a non-price allocation mechanism to kick in.

# Real Example: Rent Control

Anne was trying to move to Berkeley and I tried to help.

- Many don't get to buy
- Some get imperfect substitutes – Oakland.
- Information becomes valuable, since prices no longer transmit information
- Discrimination
- Queues
- Connections to other markets arise
- Administrative Allocation
- Lottery

# Price Floor



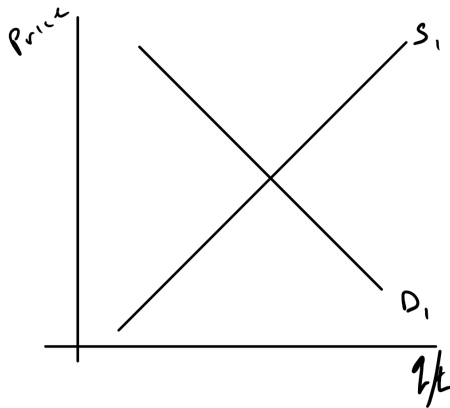
# Summary of Price Floor

- Quantity Supplied is larger than quantity demanded – a surplus.
- The usual equilibrium mechanism, bidding down price, can't work.
- Those that can sell at the high price get a lot of benefits.
- Those that can't end up either:
  - Not selling
  - Selling a close substitute
  - Waiting for a non-price allocation mechanism to kick in.

# Real Example: Airlines Before Deregulation

- Many don't get to sell
- Some get imperfect substitutes – Bus and car.
- Information becomes valuable, since prices no longer transmit information
- Discrimination
- Queues
- Connections to other markets arise
- Administrative Allocation
- Lottery

# Quantity Floor

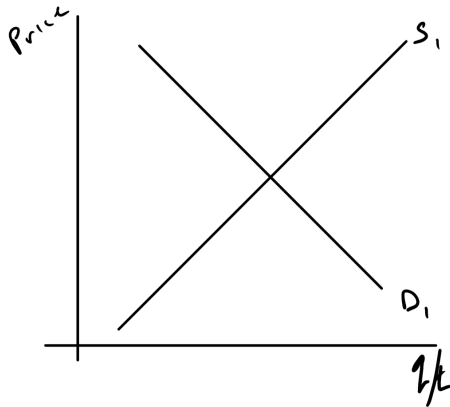


# Summary of Quantity Floor

- Price could be high or low depending on who is constrained, who must buy or sell.
  - If buyers must buy, price is high
  - If sellers must sell, price is low

In short, the unconstrained party, buyer or seller, bids the price up or down.

# Quantity Ceiling





# Next

Welfare Analysis, i.e., how well off you we are, and taxes.