Economics 1: Fall 2010

J. Bradford DeLong, Michael Urbancic, and a cast of thousands...

http://delong.typepad.com/econ_1_fall_2010/

Economics 1: Fall 2010: Supply and Demand; Short-Run and Long Run

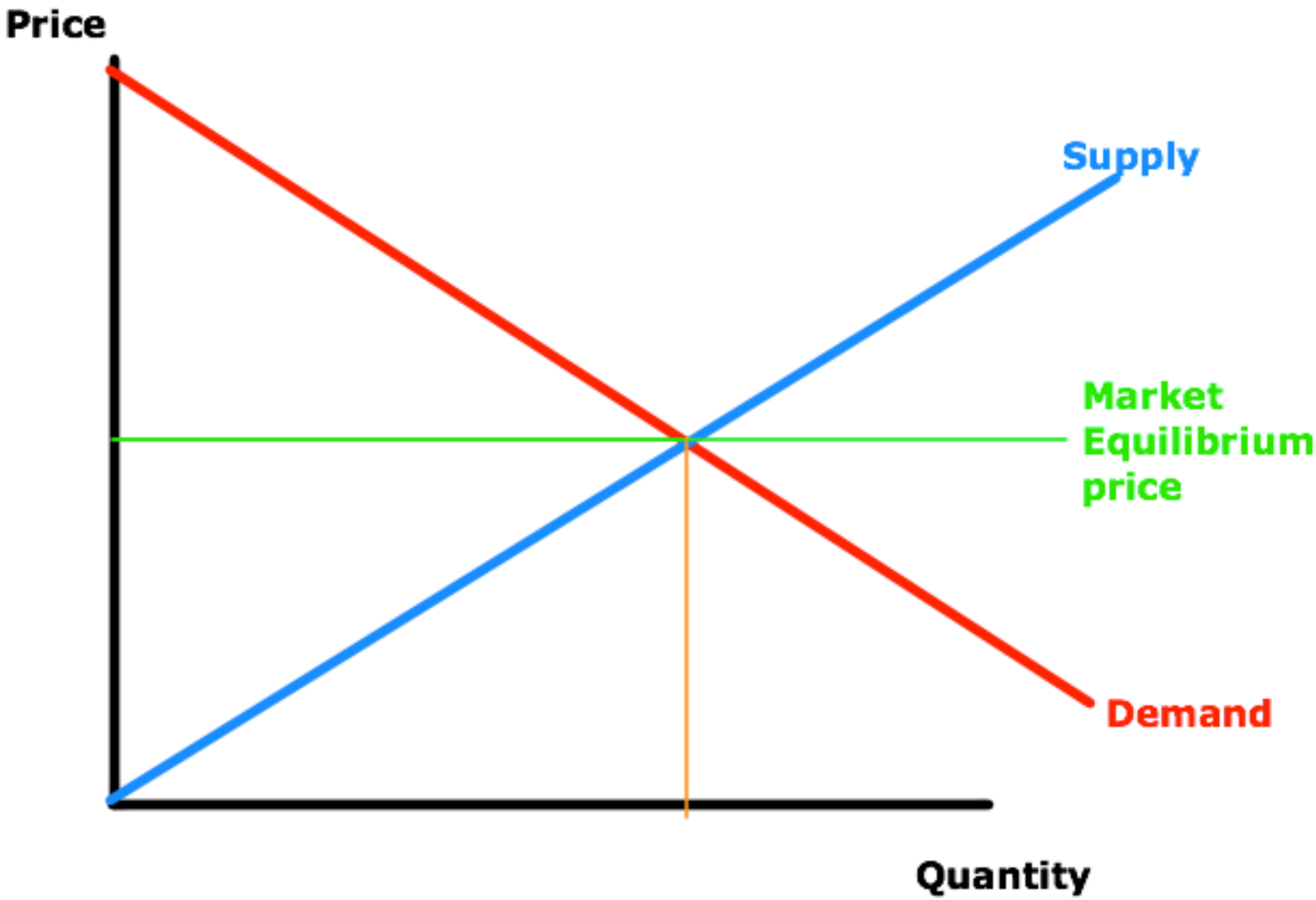
J. Bradford DeLong

October 18, 2010, 12-1
Wheeler Auditorium, U.C. Berkeley

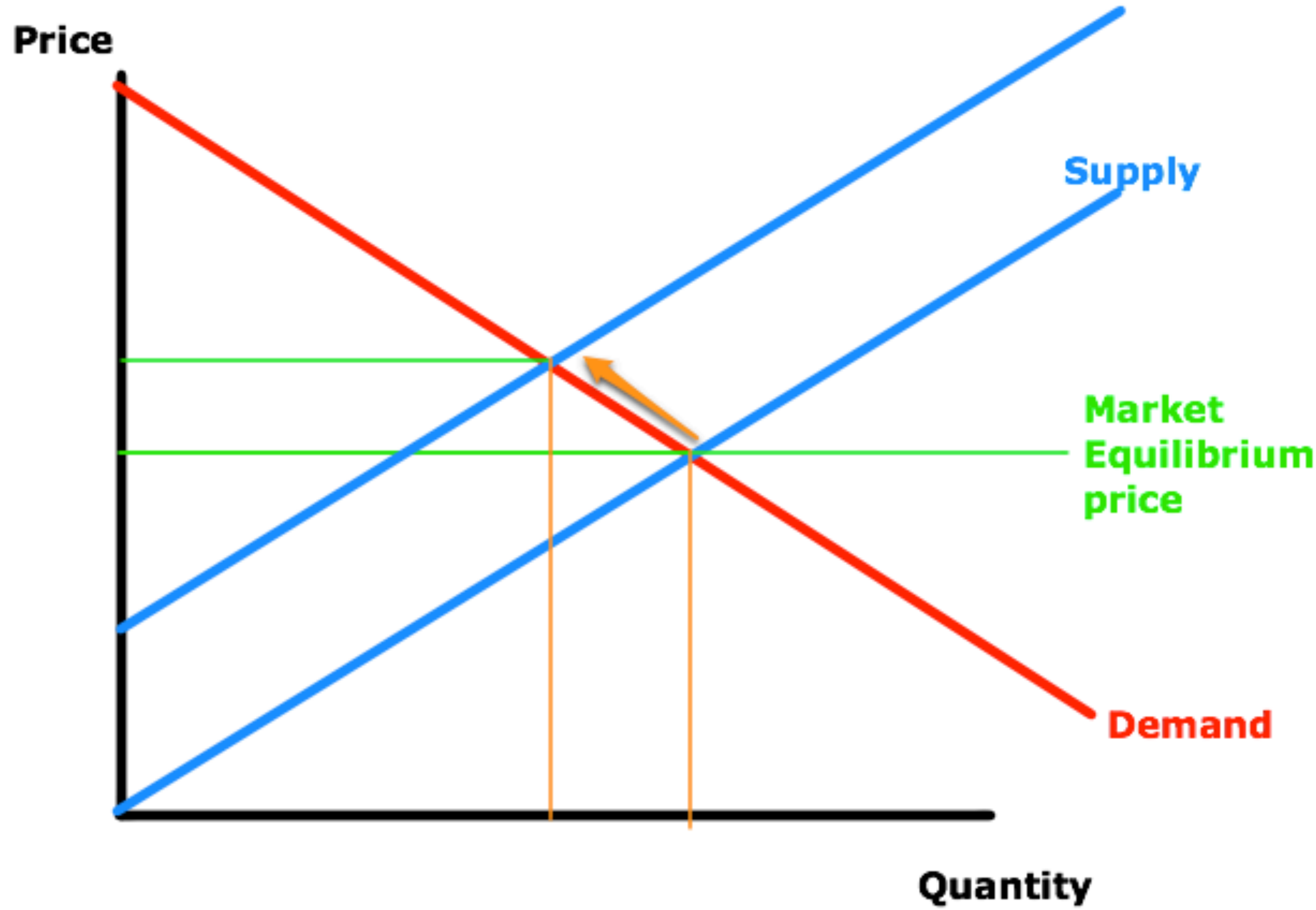
Ladies and Gentlemen, to Your iClickers...

- What is the big reason to impose taxes (or bounties) rather than use command-and-control to limit quantities (or draft participants)?
  - A. Market signals allow people to choose what they want to do
  - B. Command-and-control may put the wrong people in places they should not be
  - C. Command-and-control will greatly reduce consumer plus producer surplus
  - D. Command-and-control will create a favored group that would lose from reversion to the market outcome—even though social surplus would be increased

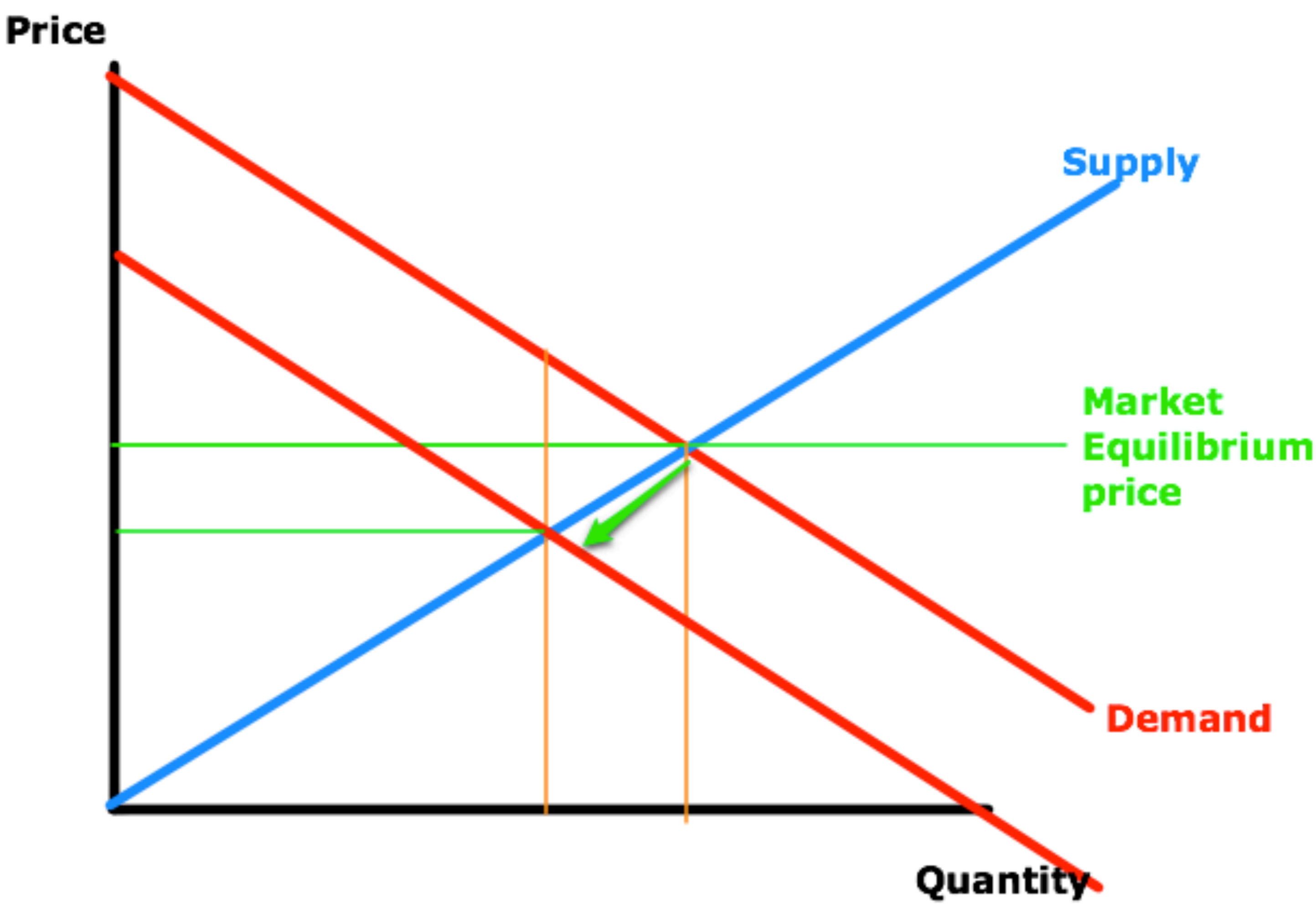
Working with Demand and Supply Curves



Working with Demand and Supply Curves: In-Up Shift in Supply Curve



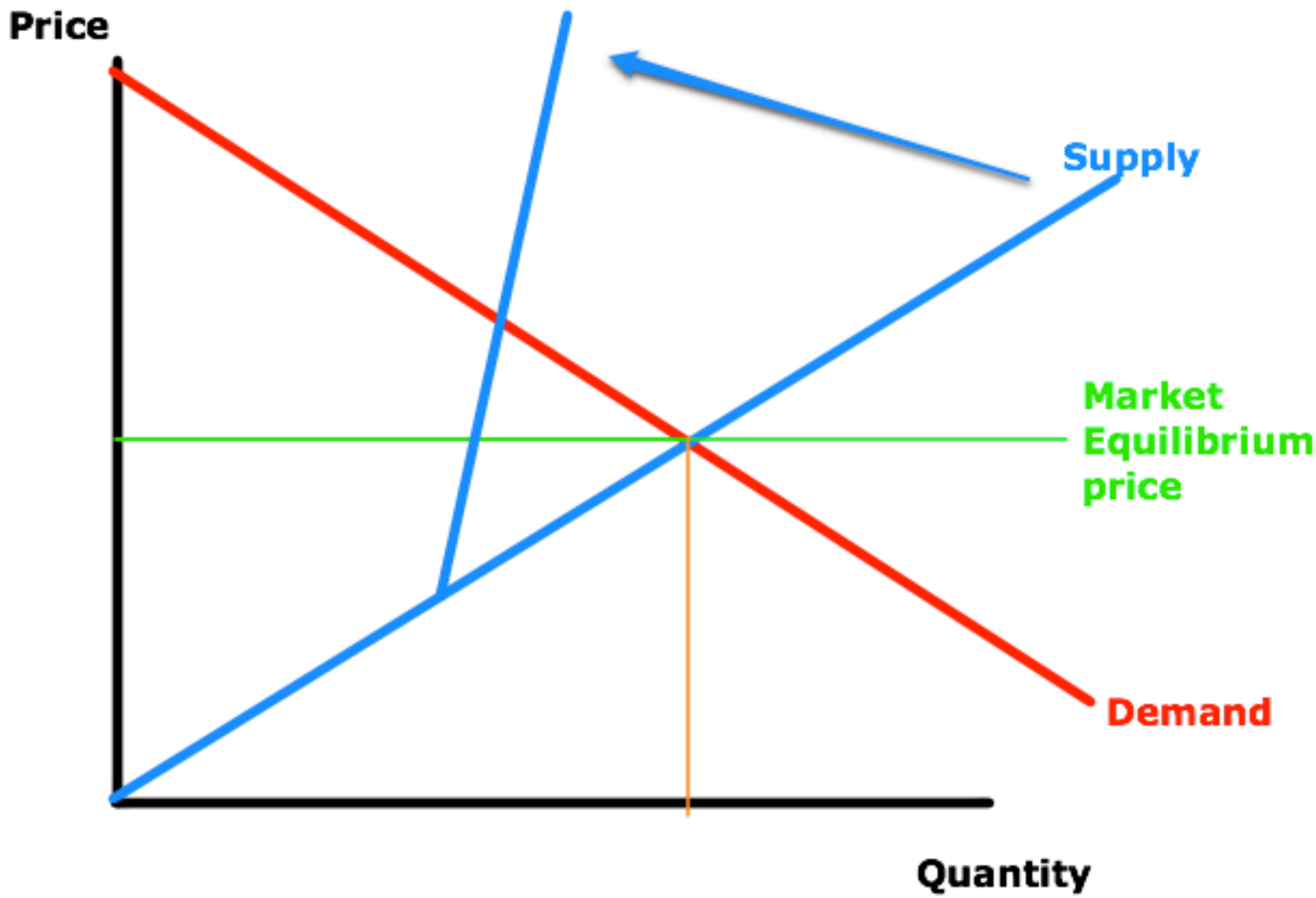
Working with Demand and Supply Curves: In-Down Shift in Demand Curve



Slopes of Demand and Supply Curves: Rule-of-Thumb Implications for Equilibrium

- When supply is inelastic—when the supply curve is steep:
  - Most of the effect of a shift in the demand curve will be on price
  - Little of the effect of a shift in the demand curve will be on quantity
- When supply is elastic—when the supply curve is flat:
  - Most of the effect of a shift in the demand curve will be on quantity
  - Little of the effect of a shift in the demand curve will be on price
- And similarly for demand...

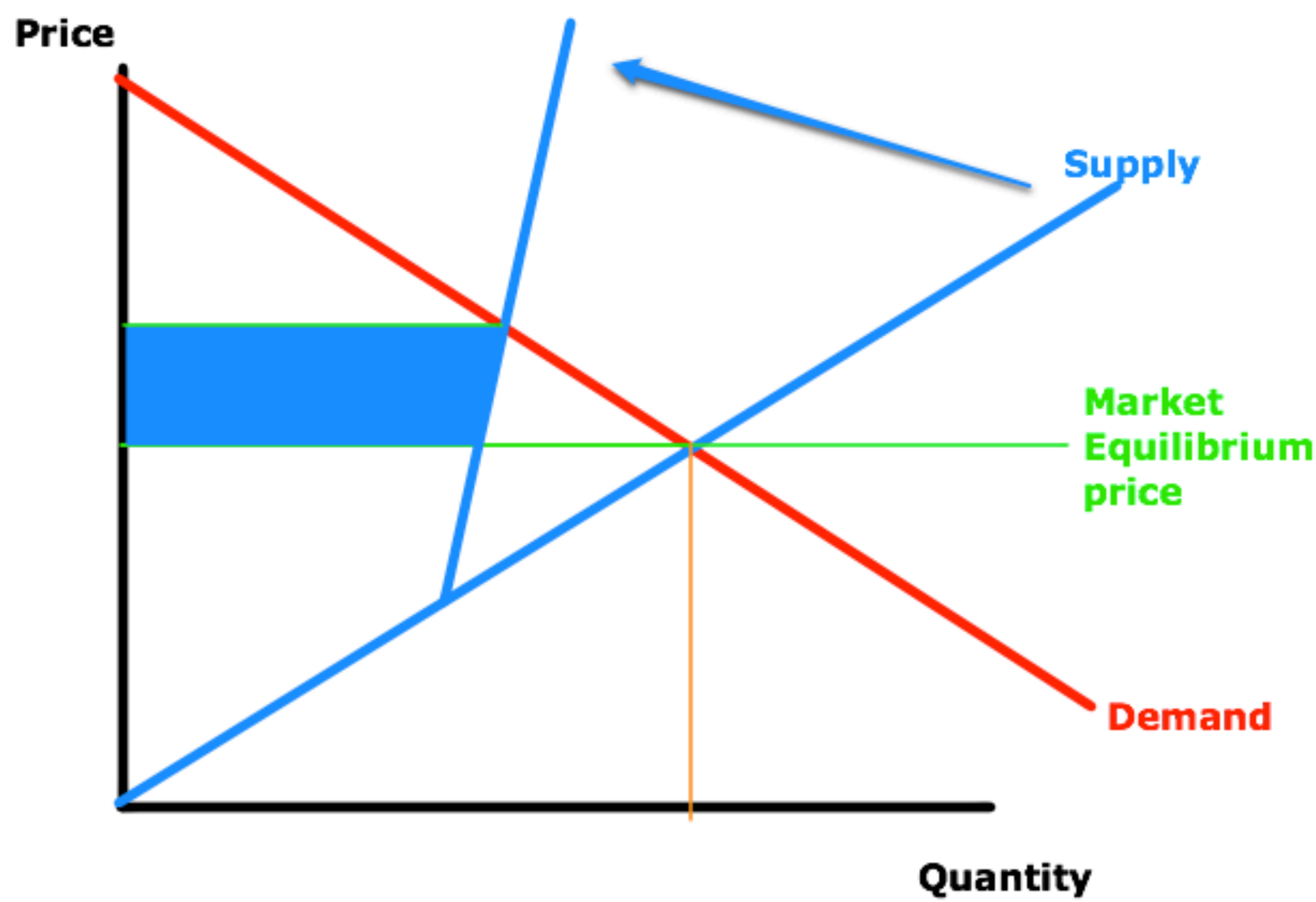
Working with Demand and Supply Curves: Supply Becomes Less Elastic



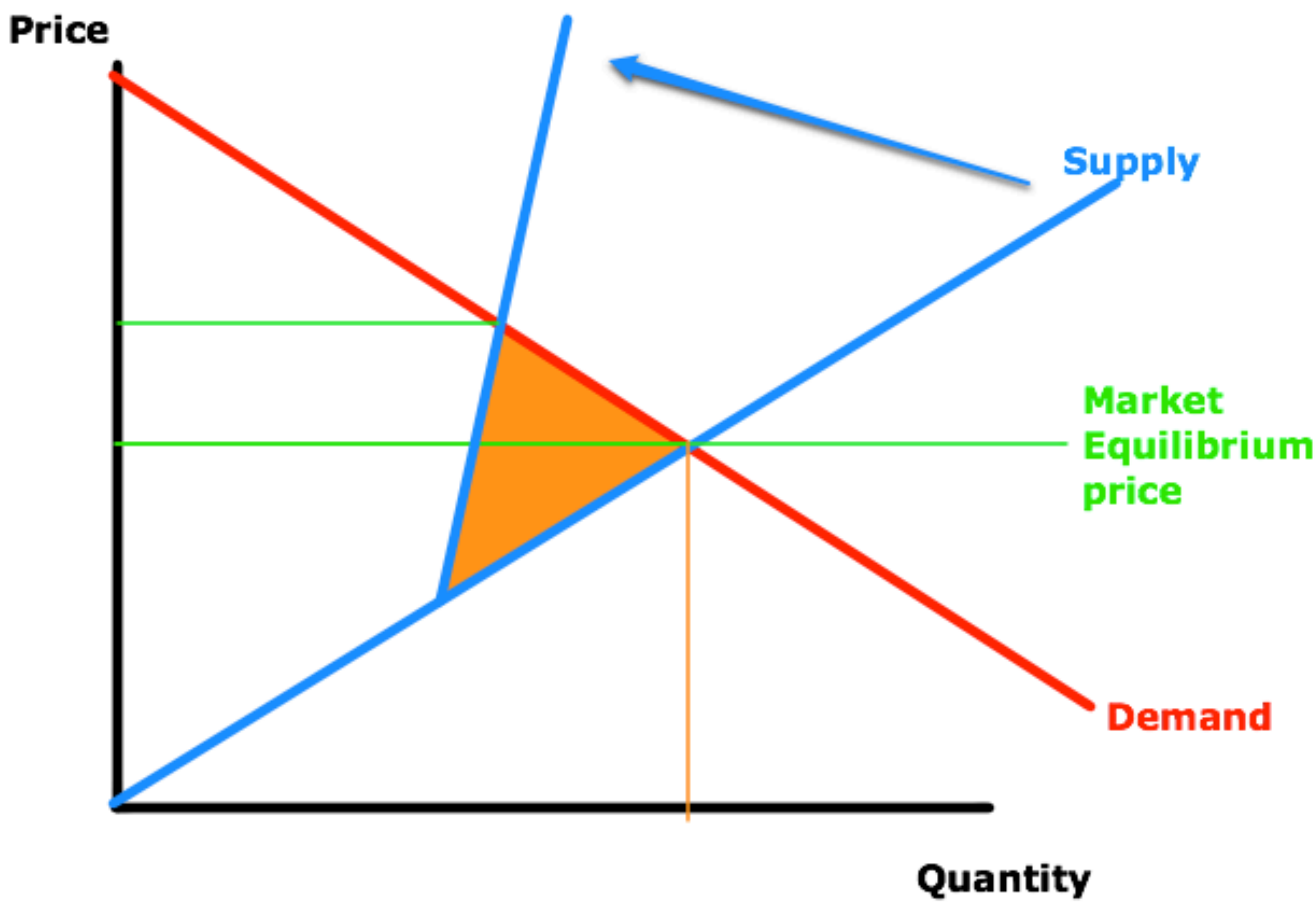
Slopes of Demand and Supply Curves: Rule-of-Thumb Implications for Welfare

- When supply is inelastic—when the supply curve is steep:
  - Little of the effect of a shift in the demand curve will be on the total volume of surplus
  - Most of the effect of a shift in the demand curve will be on the distribution of surplus between producers and consumers
- When supply is elastic—when the supply curve is flat:
  - Most of the effect of a shift in the demand curve will be on the total volume of surplus
  - Little of the effect of a shift in the demand curve will be on the distribution of surplus between producers and consumers
- And similarly for demand...

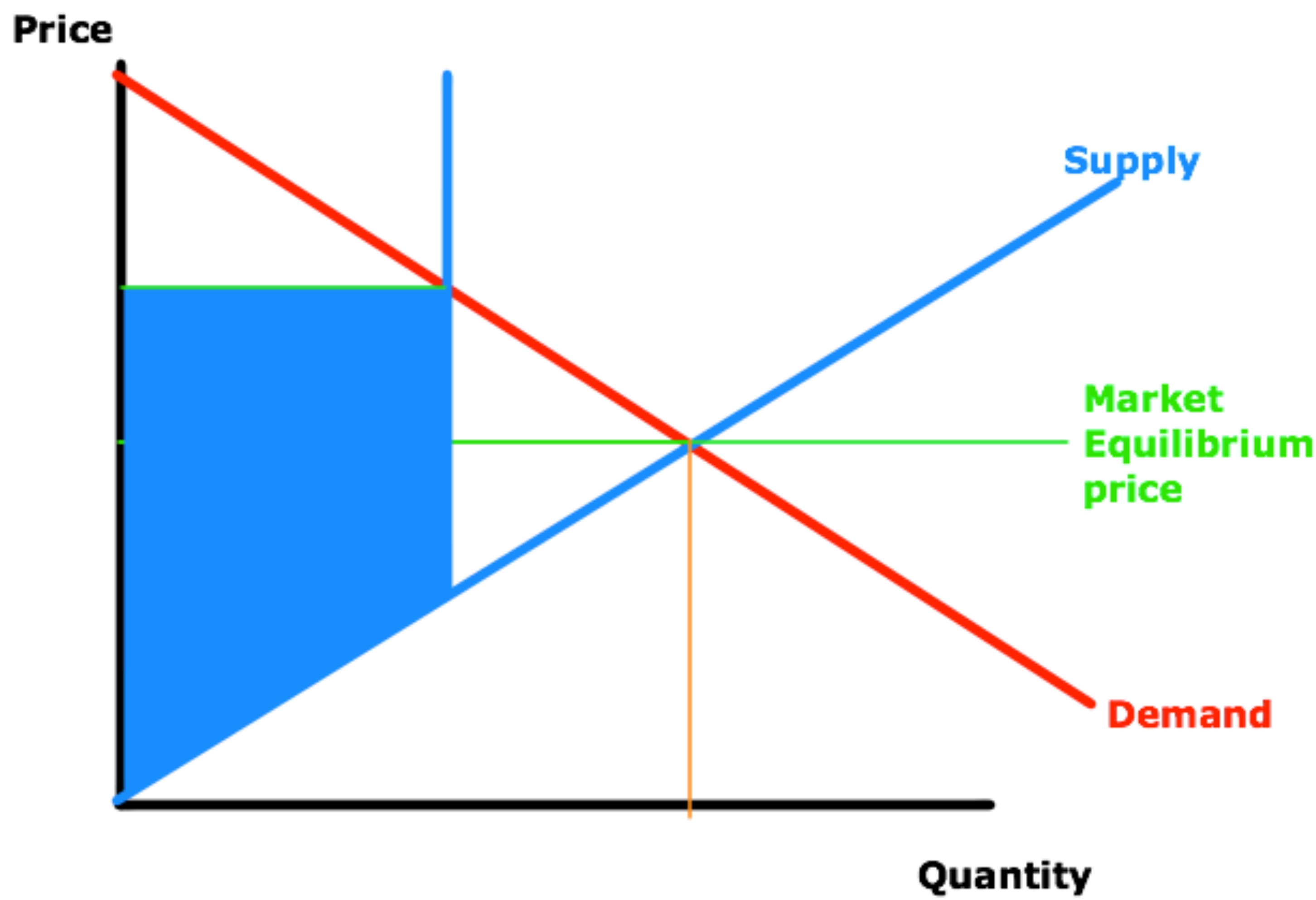
Working with Demand and Supply Curves: Less Elastic Supply Gets a Greater Share of Surplus



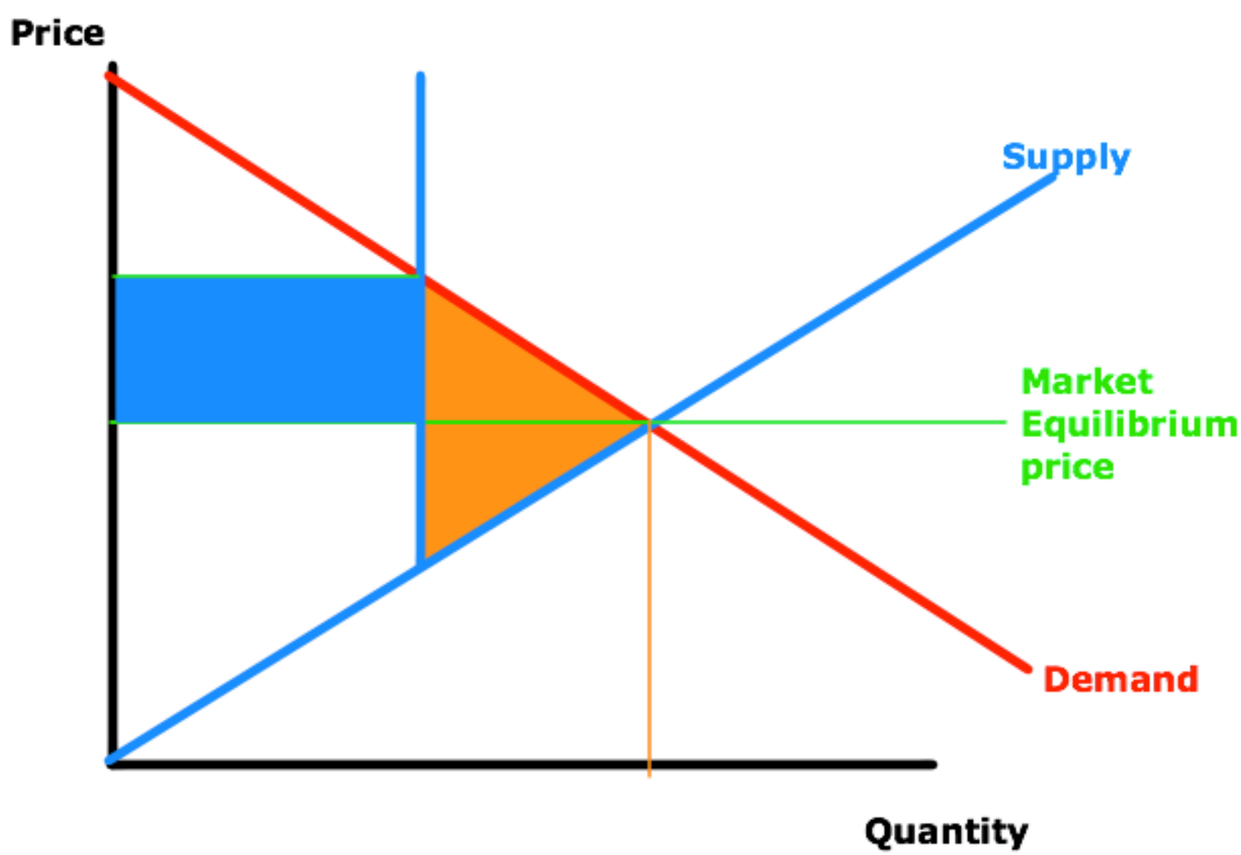
Working with Demand and Supply Curves: But If Supply Is Less Elastic There Is Less Surplus to Share



A Monopolist Would Choose to Act as Though the Supply Curve Were Vertical at That Point That Maximized Producer Surplus



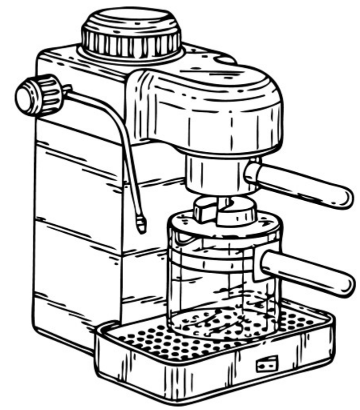
Transferring a Good Deal of What Had Been Consumer Surplus to Producers, at the Cost of Throwing Away Some Producer and Consumer Surplus



The Various "Runs"...

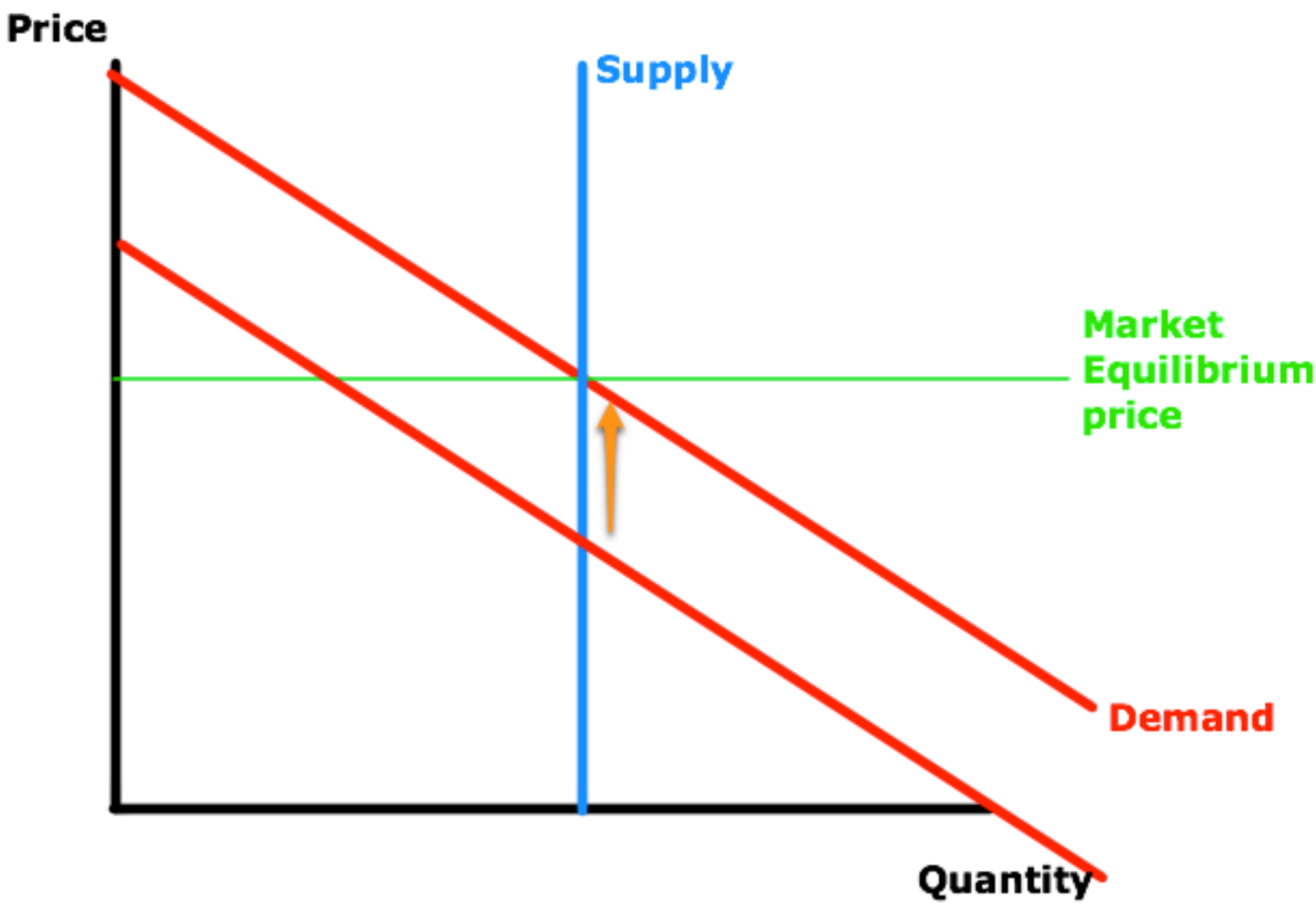
- A small step in the direction of dynamic analysis...
- So far we have implicitly assumed that things aren't changing: that one day is like the next and like the past
- To advance the subject further, follow Alfred Marshall and think of three "runs":
  - The market day
  - The short run
  - The long run

Production on the "Market Day"

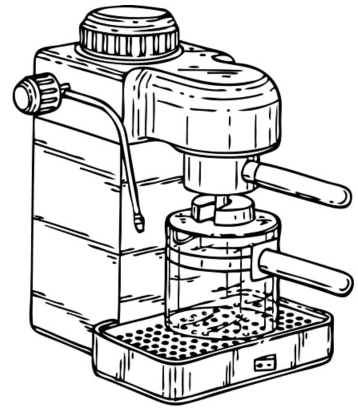


- You have the workers and the capital equipment you have
- You have to make the best of it
- With higher demand today, the best you can do is keep producing—and raise the price
  - Unless you can speedup? But not with these workers...
- On the market day, the supply curve is vertical

Short Run and Long Run: The "Market Day"

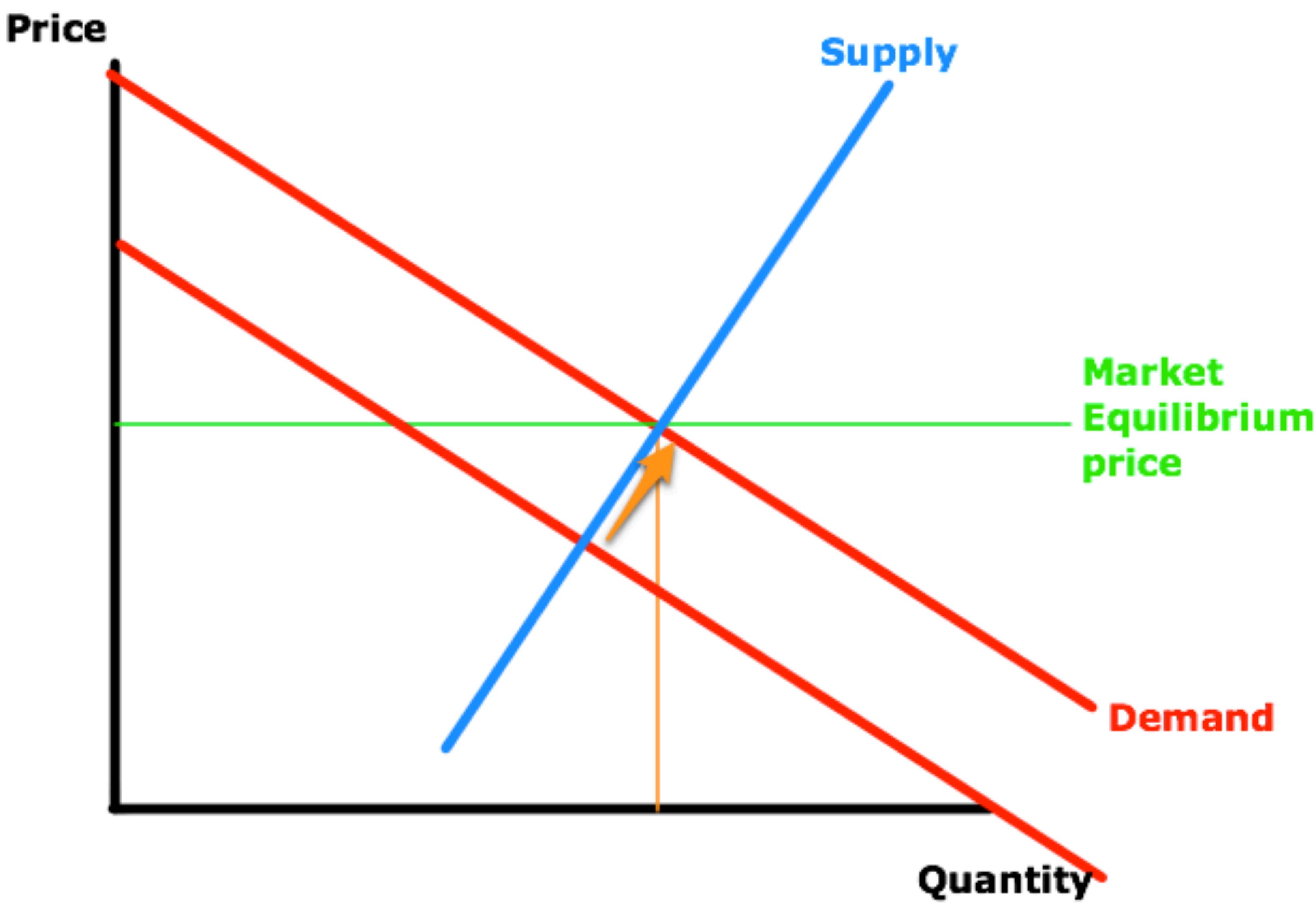


Production in the “Short Run”

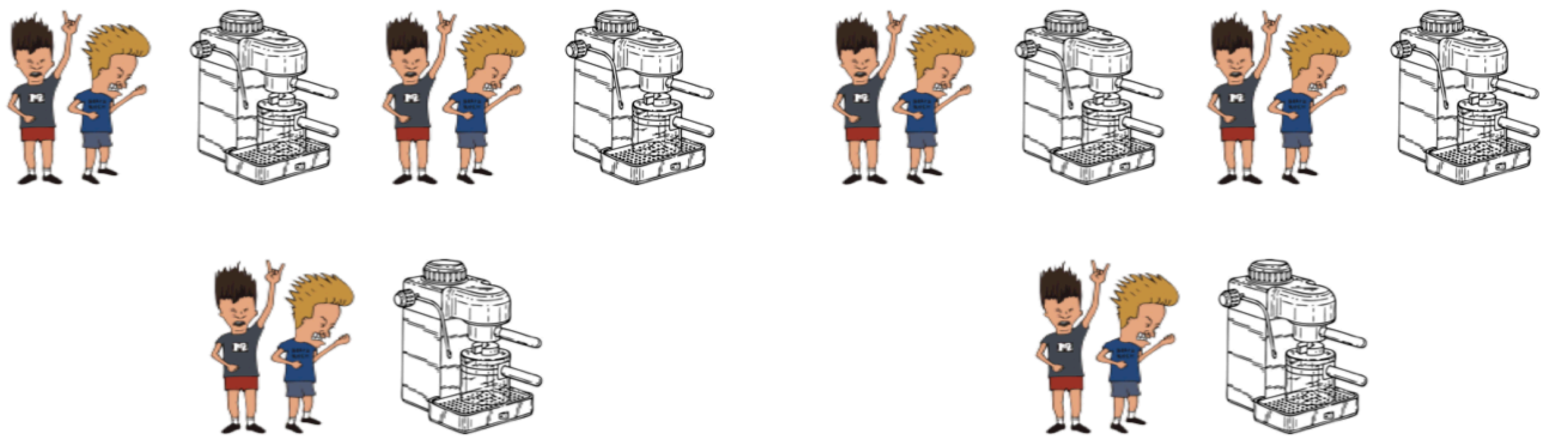


- You can go out and hire more workers
  - Maybe not the workers you wish you could hire, but still they are workers...
- But can you boost your capital equipment—your machines, your buildings, etc—overnight? No.
- And will your average worker be as productive if he has to share the espresso machine with three others than with one other worker? No.
- You can make more, yes, but your per-unit costs go up...

Short Run and Long Run: The "Short Run"

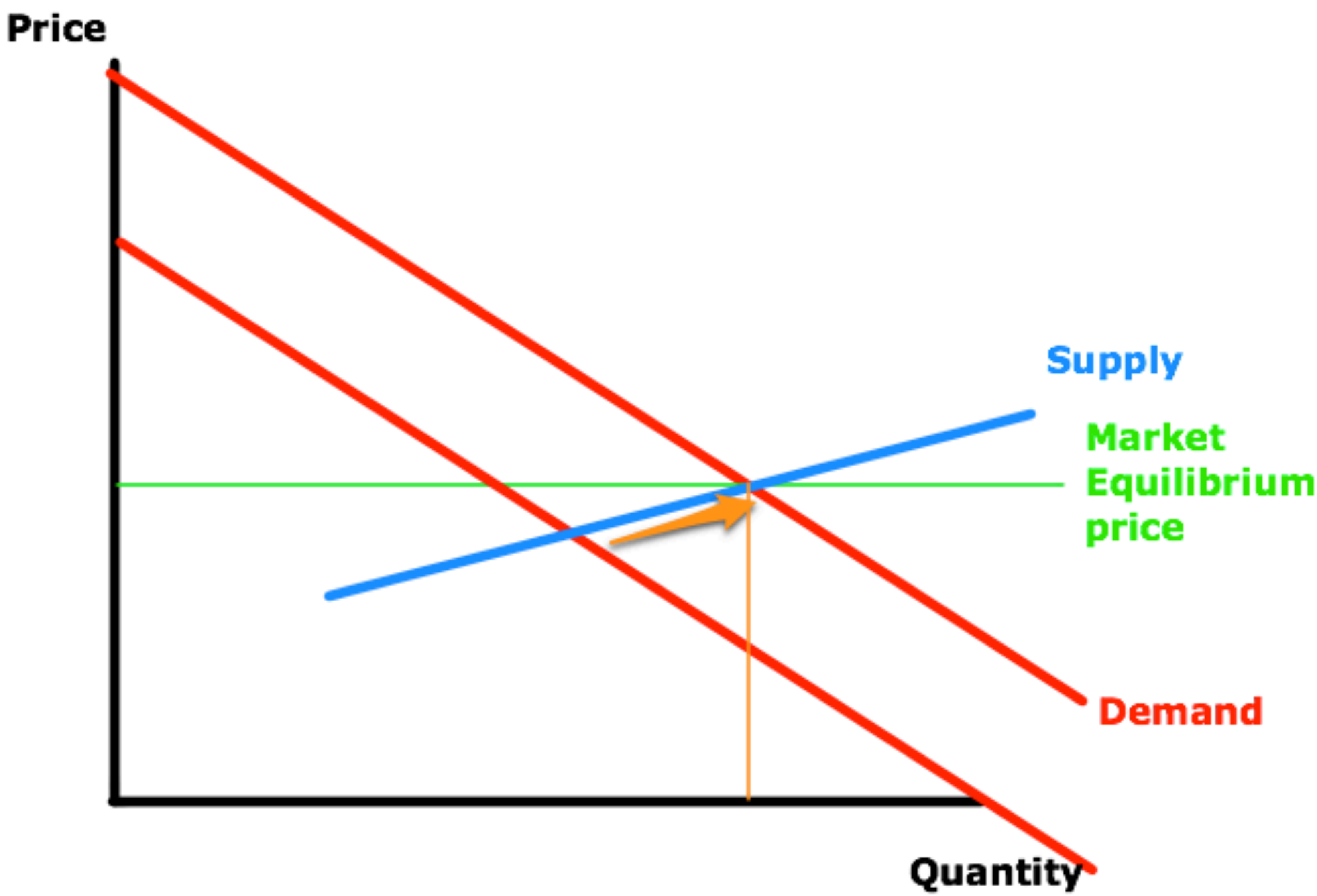


Production in the "Long Run"



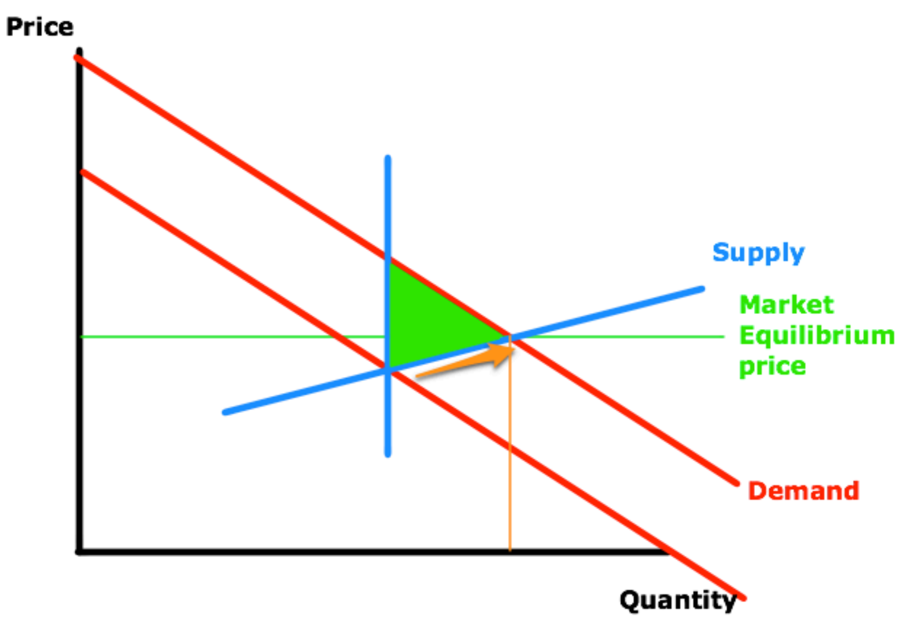
- You can hire more workers, and you can expand your capital equipment
- You can duplicate your whole operation
- And so produce twice as much with twice as many resources at the same per-unit cost
  - At least you could if your suppliers did not raise their prices
  - However, the amount by which your suppliers will raise their prices is likely to be relatively small

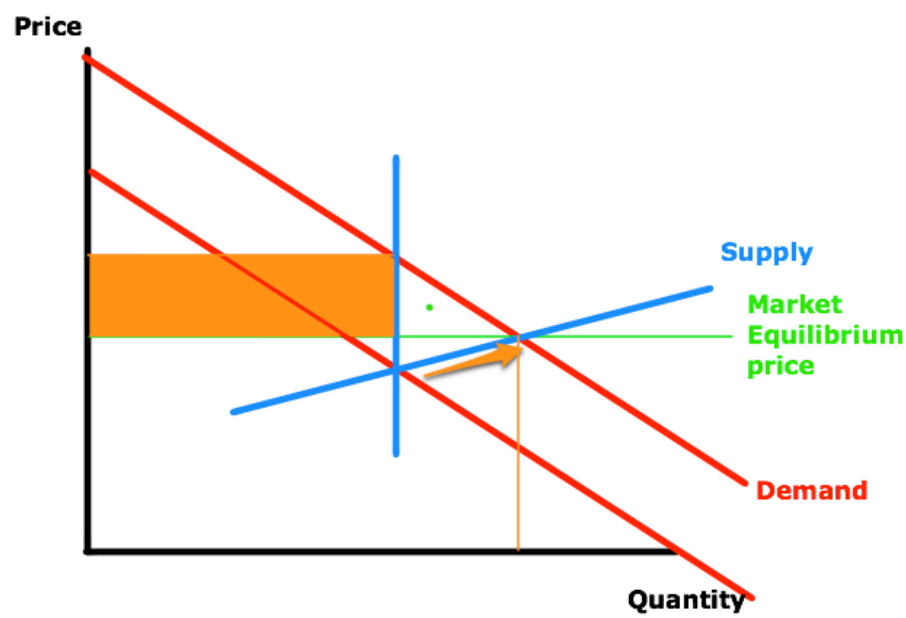
Short Run and Long Run: The "Long Run"



Why Should an Employer Expand Production in Response to Market Signals?

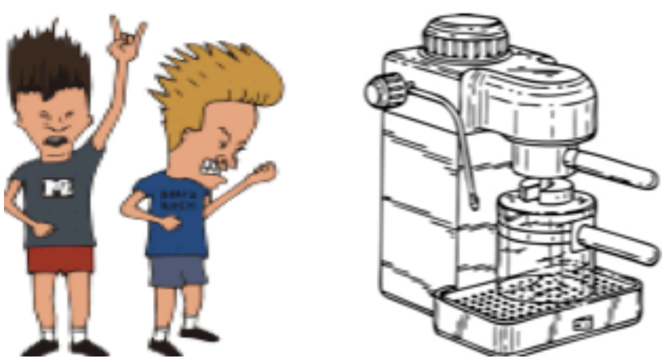
- You create more surplus—some of which you get to keep...
- But you lose bargaining power...
- The answer: fear of competitors, for if you do not meet the market demand somebody else will...
- Hence the importance of *competition*...

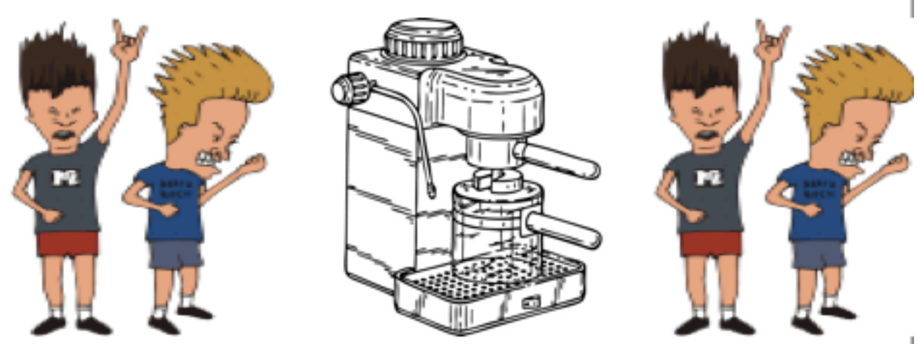




Why Should an Employer Expand Production in Response to Market Signals?

- Consider the Yugoslavian worker-managed firm during the Cold War...
- Workers share the products of their labor...
- The B&B Barista Cooperative...
- Hence the importance of *profits*...





How to Expand Production in Response to Market Signals?

- We don't know how *ex ante*
- F.A. von Hayek (1968), "Competition as a Discovery Procedure":
  - [M]arket theory often prevents access to a true understanding of competition by proceeding from the assumption of a "given" quantity of scarce goods. Which goods are scarce, however, or which things are goods, or how scarce or valuable they are, is precisely one of the conditions that competition should discover.... [C]ompetition is important primarily as a discovery procedure whereby entrepreneurs constantly search for unexploited opportunities.... [I]t seems incredible to me to hold that we can determine in advance the future structure of a society in which the major problem is still to find out what kinds of material and human productive forces are present....

Test Your Knowledge

- Why does a market equilibrium allocation maximize the total societal surplus?
- What are “side deals”?
- Why doesn’t a competitive market equilibrium leave open side deals?
- What happens to the market equilibrium price and quantity when the supply curve moves up and inward?
- What happens to the market equilibrium price and quantity when the demand curve moves in and downward?
- Why do economists prefer taxes and bounties to command-and-control when we want to move away from the market equilibrium for some good reason?