Economics and Economic Evaluation

Lecture 2

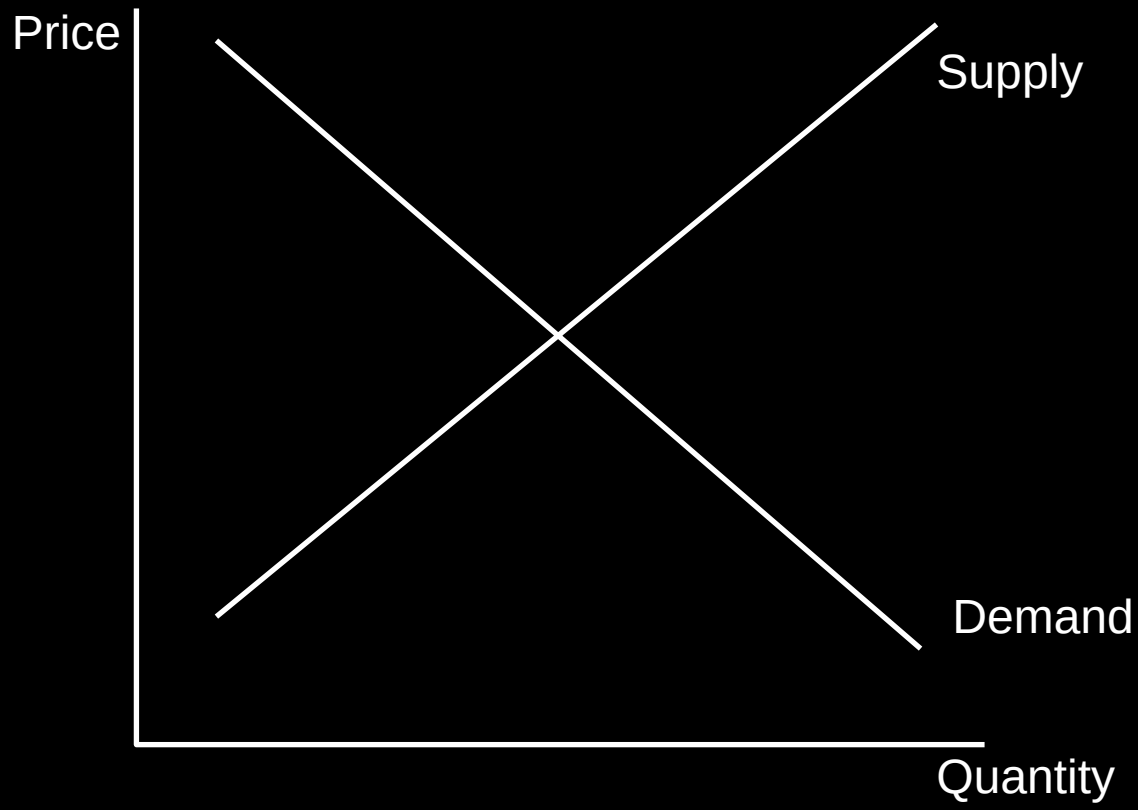
Kevin Frick

What is Economics About?

- Tradeoffs
- Producing as much as possible with a given set of resources
- Producing a given amount at a minimum cost
- Choosing the right amount to produce to maximize profits
- Thinking about tradeoffs over time
- Maximizing utility with a given set of resources

Economics

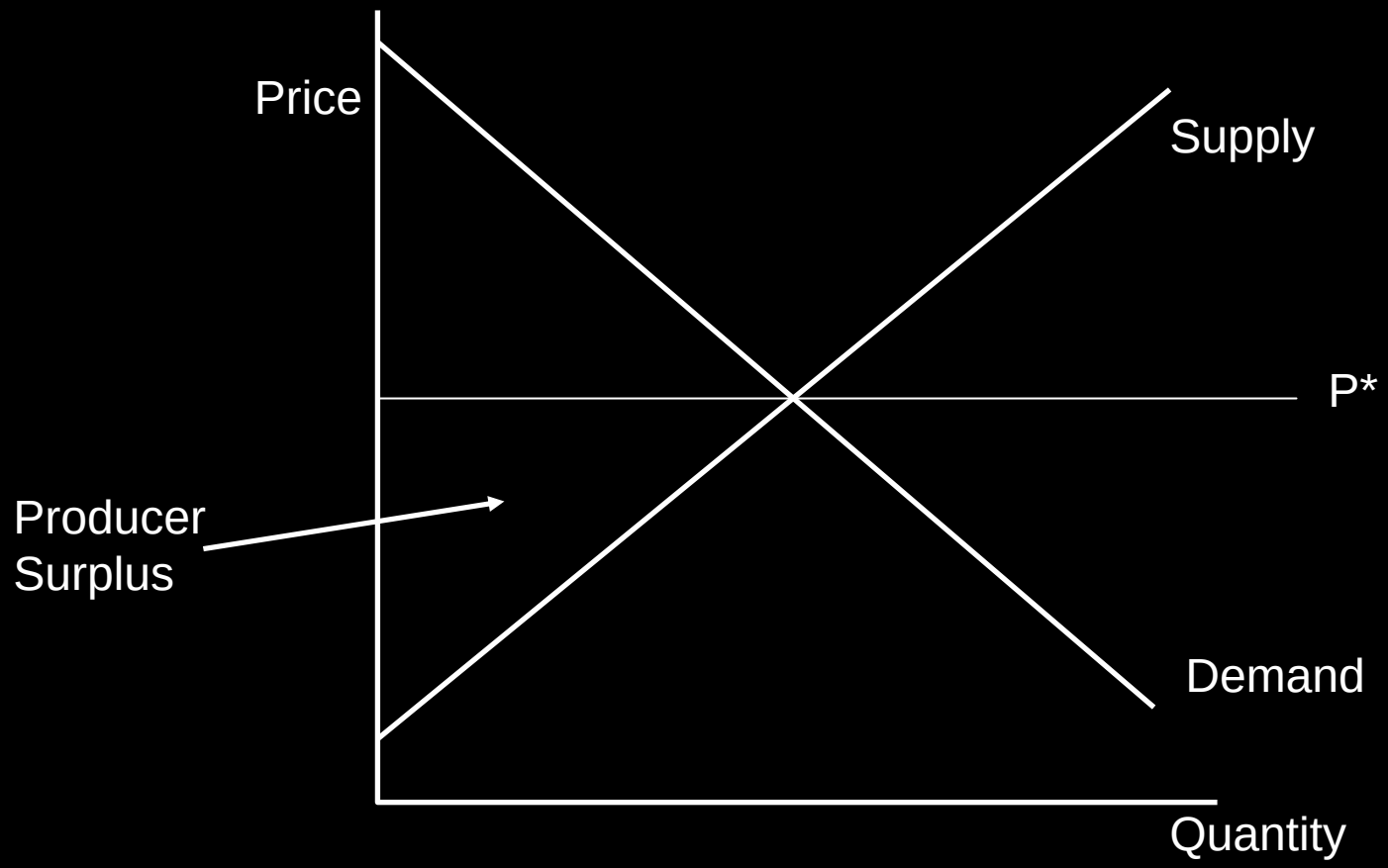
- What leads to market equilibrium?



Supply

- Amount that producers will produce (and expect to be able to sell) at a given price
- Assume that profit maximizing firms will minimize costs
- Note that producers would have been willing to supply a subset of the goods at a lower price

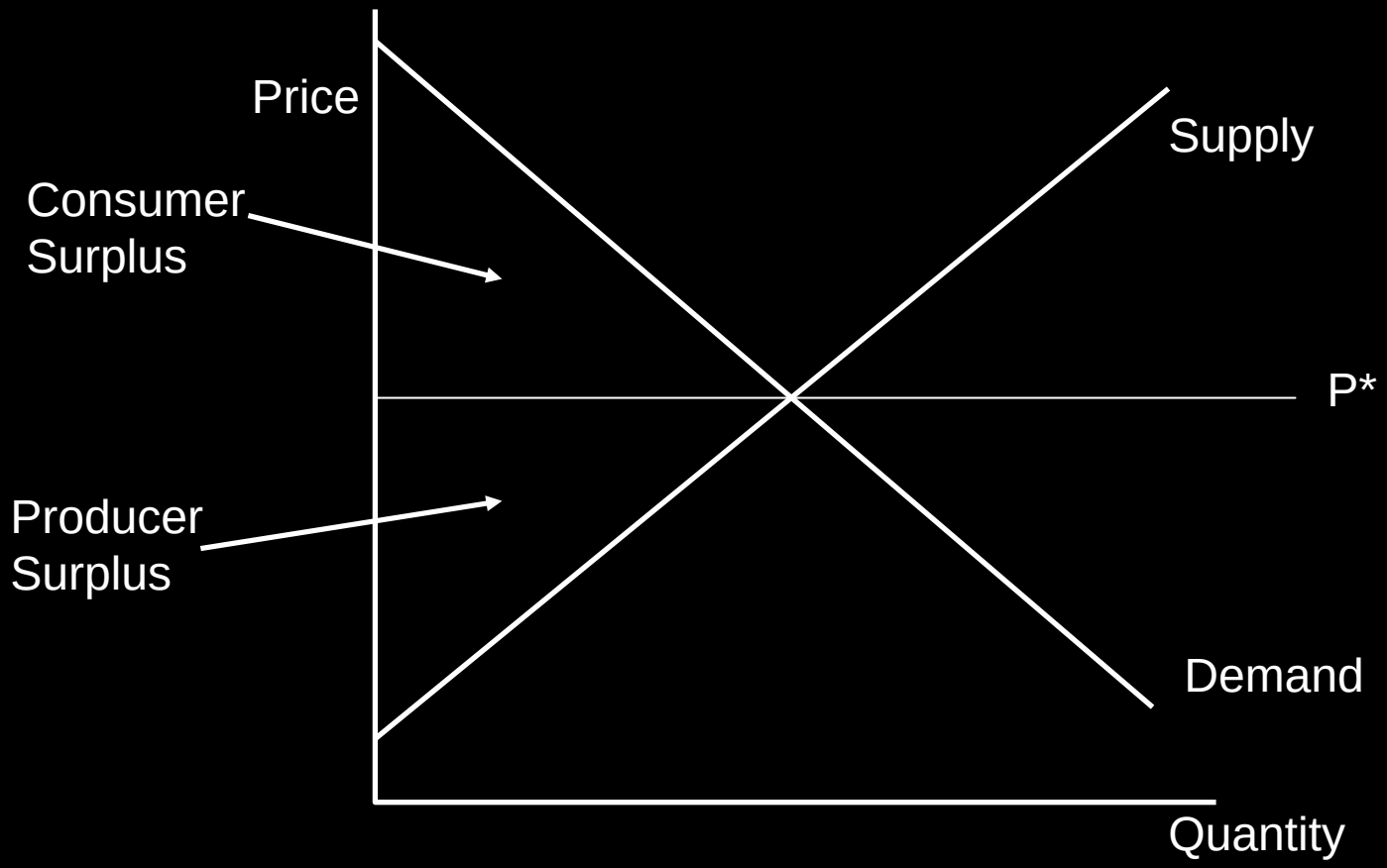
Equilibrium - I



Demand

- Market demand is the amount that will be bought by consumers in the market at different prices
  - Summation of individual consumers' demands
- Individual consumers are assumed to purchase a quantity that will maximize utility
  - Utility is a concept similar to happiness or well-being
- Some of the consumers would be willing to purchase some of the goods at a higher price

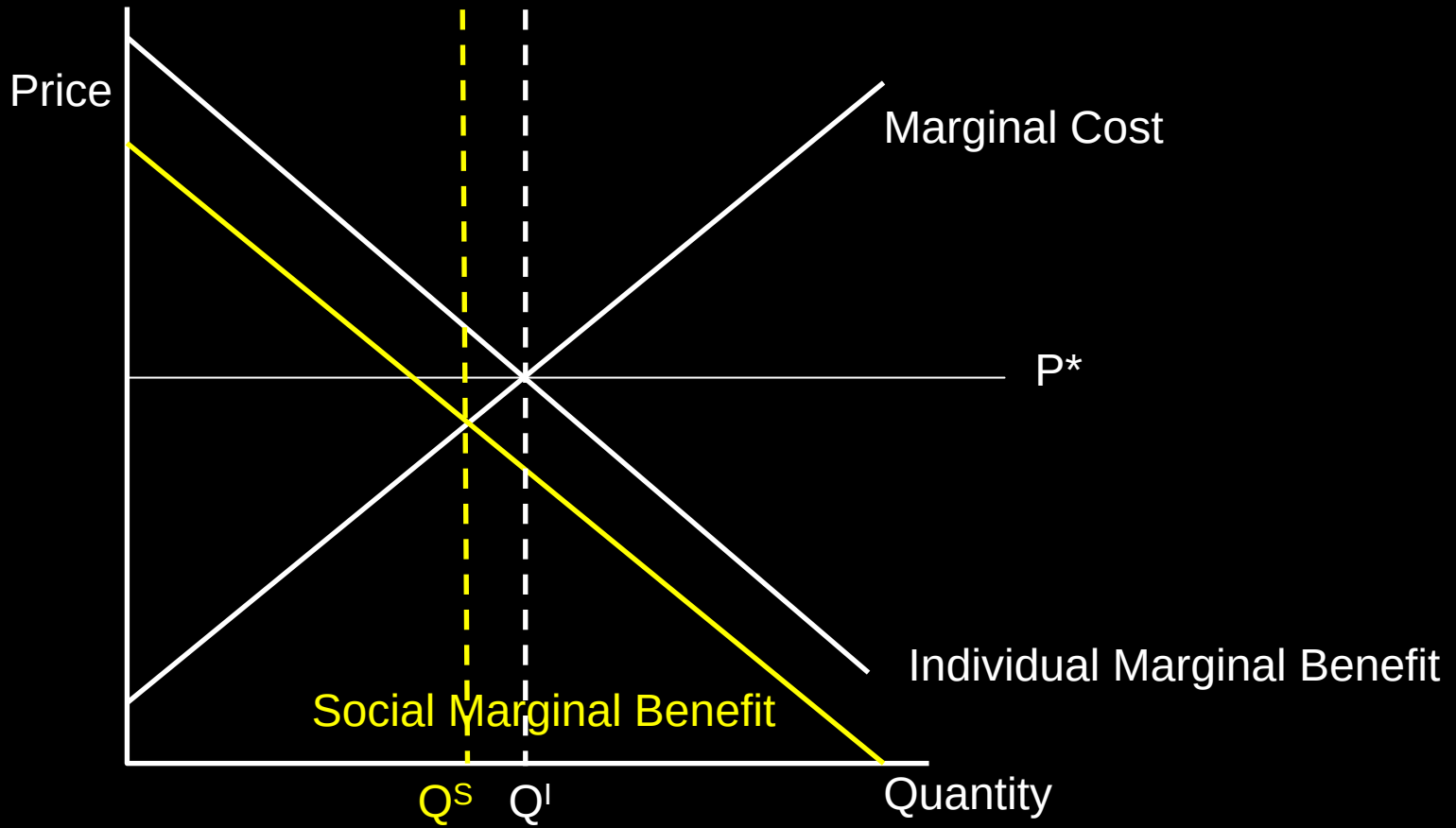
Equilibrium - II



Do Supply and Demand Represent All Benefits and Costs?

- When they do, economists will generally argue against government intervention
  - People are best at making decisions about their own well-being
- Exceptions are called externalities
  - Sometimes the production or consumption of a good or service affects individuals other than the buyer and seller

Cigarette Smoking



Social Benefits Less Than Individual Benefits

- Individual benefits of smoking
  - Pleasure
  - Weight control
  - Potential illness later is (supposed to be) factored in by individual consumer
- Social benefits of smoking
  - Second hand smoke is a negative benefit
  - Makes social benefit lower than individual benefit
  - *Not considered by individual consumer*

Problems with Costs and Benefits

- Avoid consuming in area where costs are higher than benefits
- If decisions are left to individuals there will be consumption in the area in which costs are higher than social benefits
- Consider imposing a tax to limit the consumption
  - Move from Q^I to Q^S

Smoking Cessation

- Would “reverse” relationship between marginal individual and social benefit
  - Marginal social benefit is higher
  - Consider subsidizing

Characterizing Costs and Benefits in a Market/Policy Analysis

- Market supply and demand curves
- These are the summation of individual supply and demand curves
  - Individual producers
  - Individual consumers
- Externalities come from effects on individuals other than consumers

Link to Economic Evaluation in Medical Care

- Consider producers, consumers, and other individuals
  - Societal perspective
- Market demand curve
  - Relates to individual demand curve
  - Relates to willingness to pay
  - Relates to effects of intervention/treatment on health and quality o life
- Market supply curve
  - Reflects production of goods and services by firms that are assumed to be operating at minimum cost

Societal Perspective

- Market analysis considers all costs and all benefits when externalities are included
  - So, a societal perspective economic evaluation should consider all costs and all benefits

Market Demand Curve

- An approximation of the marginal willingness to pay at a market level
- Market level is summation of individuals
- The fact that it is an approximation is also important

WTP Approximation

- Demand is the amount that will be consumed to maximize utility at a given set of prices
- WTP is the maximum amount that a person would give up and be just as well off (have the same utility) with the good and less money as without the good and the original amount of money

Utility

- Effect on health
- Effect on life expectancy
- Effect on earnings potential

Cost-Benefit

- Can use individual willingness to pay
  - Can measure in market
  - Can measure with survey if no market
  - Likely related to income
    - Concern with fairness
      - Want to focus on measuring health and its value to society rather than individual willingness to pay
        - » Leads to cost-utility analysis

Cost-Utility

- Use a measure of health/health related quality of life that can be compared across conditions and individuals
  - Maintain usefulness of comparing dollars which can be compared across conditions and individuals
    - Still sum benefits among individuals
    - Must decide what quality of life is worth
    - Assume worth the same to all in society

Linking Utility to Cost-Utility

- Utility provides us with information about how individuals make tradeoffs
  - Health utility scales are designed by getting respondents to express tradeoffs that they are willing to make

Cost

- Assume cost-minimizing behavior by producers
- Don’t always have a market demand curve
- Assume that even not-for-profit providers will produce at minimum cost
- Can calculate costs of providing intervention/treatment
- No guarantee that cost measured is minimum cost of producing

Conclusion

- Economic theory…
  - Is consistent with cost-benefit analysis
  - Suggests summation of individual values
  - Suggests considering all effects
  - Suggests cost minimization
  - Assumes that consumers have a utility function that describes their preferences for different combinations of goods/states of the world
- Economic evaluation…
  - Cost-benefit is used infrequently
  - All types sum individual values
  - Common recommendation is to consider all effects
  - Rarely assess cost minimization of the production of specific goods and services
  - Can use health utility measures that are derived from combinations of individuals expressing their preferences for different states of the world

Work toward goal of producing maximum health within resources available or minimum cost to produce given health

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