What is a fair price? What is the correct price?

• Prices help achieve efficiency in 2 ways: In deciding who gets the goods that are produced (allocation of goods) and in deciding what goods to produce.
• Lerner breaks down “efficient” into “genuine” and “correct.”
  – A genuine price is one that clears the market (amount demanded is equal to the amount available, or supply = demand).
  – This decides who gets the goods that have been produced.
  – A correct price is one that leads to the right amount being produced.

If price is below genuine price:
• Buyers want more than sellers will sell.
• Sometimes, who gets the available supply is decided by luck
  – or by who has connections.
• The people who want it most might not get it.
• So resources are being wasted.
  – Remember Pareto?

Genuine price

– Example 1: iPhone
– Example 2: Concert ticket scalpers
– Example 3: Hotels near Green Bay when the Packers are playing
– Other examples?
– What happens if price is lower than the “genuine” price?

Genuine price

• But often there is a second price paid;
  – Waiting in line.
• If the people who want the iPhone most wait longest in line, the good goes to the person who wants it most.
  – Is that efficient?

Genuine price

– If everyone faces the same genuine prices, and can buy as much as he wants at those prices, those who want something the most will get it.
– That is efficient, but maybe not fair.
• What does it mean to say that Bill Gates “wants something the most” if he simply outbids others for what he wants?

Genuine price

• When everyone faces the same genuine price
  – The last grapefruit that you and I buy is worth the same to each of us, even if I love grapefruit and you rarely eat them.
  – The last $1 you spend on each good brings you the same satisfaction (“marginal utility”)
Genuine price

- In this discussion, I have pretended that it is always possible to learn what prices are.
- For some of the things your family buys, that is true
  - Examples?
- For other things you have to invest a lot of energy to learn about prices, and perhaps negotiate.
  - Examples?

Detour: How economists approach problems

- I have just argued that:
  - we can ignore some aspects of pricing in the real world
  - And still learn something about how prices can help the economy to operate efficiently
- This is an example of the way economists usually approach problems:
  - Simplify as much as possible,
  - hoping that you won’t simplify away the heart of the problem.
- We will see lots of other examples.

The correct price

- Recall: the correct price is one that leads to the right amount being produced.
- The correct price equals marginal cost: the extra cost of producing one more unit of the good.
  - Then price signals the value of the resources that went into production.
  - At the margin, each dollar’s worth of resources produces goods that consumers value at $1.
  - Note: “marginal cost” must be defined as “marginal opportunity cost” for this rule to make sense.

The correct price = marginal cost

- Understand distinction between average and marginal cost and reason why we focus on marginal cost. (Lerner, pp. 17 – 18).
- A reminder from an earlier slide (#19):
  - A genuine price is one that clears the market (amount demanded is equal to the amount available, or supply = demand).
    - This decides who gets the goods that have been produced.
    - A correct price is one that leads to the right amount being produced.
Efficient price = genuine + correct

• When everyone faces the same genuine price (see #24)
  – The last grapefruit that you and I buy is worth the same
to each of us, even if I love grapefruit and you rarely
  eat them.
  – The last $1 you spend on each good brings you the
same satisfaction (“marginal utility”)
• When that price is also correct (see #28)
  – Then price signals the value of the resources that went
into production.
  – At the margin, each dollar’s worth of resources
produces goods that consumers value at $1.

Efficient price meets Pareto’s criterion

• If price is not genuine, how could we
  change the economy to make someone
  better off without making someone else
  worse off?
• If price is not correct, how could we change
  the economy to make someone better off
  without making someone else worse off?

The correct price = marginal (social) cost

• Measuring MC is tricky because the producer
  might not pay all costs that society pays.
  – May push costs off onto others.
    • Chinese fabric dyers
    • Chemical plants
    • Coal burning power plants
    • Gasoline
  – The costs imposed on others are called “external
costs”
• Marginal social cost = Marginal private cost +
marginal external cost.

The correct price = marginal (social) cost

• External costs are called “external” because
  they are not borne by the producer and
  passed on to the consumer.
• We will see that external costs give one
  reason for government to intervene in the
  private market.

D. The principle of consumers’ sovereignty

• The principle of consumer sovereignty is that
  goods are worth what buyers are willing to pay for
  them.
  – At the margin, $1 spent on any good is equally valuable
to the consumer.
  – With consumer sovereignty, we accept that judgment,
based on the prices paid by the consumer
  – It means that the economist doesn’t normally make
value judgments about what things are worth to
consumers, but accepts the evidence given by the
choices they make in the market place.
  – Economics starts from market prices to value goods,
except where there is a good reason not to.

The principle of consumers’ sovereignty

• Example 1: A rich family gives cream to its
cat, while a poor family out on the street
can’t afford milk for its children.
• Example 2: Instead of giving $3 to a
  homeless beggar, I keep it so I can buy a
  latté before class.
• Example 3: Gasoline?
• Example 4: illegal street drugs?
• Example 5: Fertilizer to build a bomb?
The principle of consumers’ sovereignty

- “Economics starts from market prices to value goods, except where there is a good reason not to.” (Lecture notes 1, p. 4)
- Principle of consumer sovereignty has limits:
  - When my purchases impose costs on other people.

E. Lerner, Ch. 4: What is a fair wage?

- Just as for other prices, economists argue that the wage (the price for labor) cannot be judged as fair or unfair. The important question is whether or not the price is “efficient,” i.e. both “genuine” and “correct.”
  - A genuine wage is one that clears the market (amount of labor demanded is equal to the amount available, or supply = demand).

A genuine wage

- “Wage” is a simplification.
- There are many different wages
  - for different kinds of work,
  - to be done by people with different education and
  - Different experience.

A genuine wage

- Just as producers can impose external costs on others (chemical plant, coal-fired electric plant)…
- So can consumers (gasoline, street drugs, attacks on other people)…
- These external costs also give reasons for government to intervene in the economy.

A genuine wage

- Imposing a legal minimum wage that is above the genuine, market-clearing wage, means that there will be people who want work at the current wage who cannot find work.
- Those who get the jobs at minimum wage will benefit. Those who are left out will be harmed. And buyers of what they produce will pay a higher price.

A genuine wage

- It is also not always easy to learn what wages are being paid, except for union workers.
  - Employers like to keep that information secret
  - Lets them take advantage of those who don’t know what actual wages are.
- These complications are studied in advanced courses, and sometimes in research.
- For this course we can usually ignore them.
Correct wage

• A correct wage is one that reflects the worker’s contribution to output (no exploitation).
Note: the concept of “correct wage” is not listed on the syllabus; it is a bit complex, and we may not spend enough time on it for you to understand it fully.

Pause for Karl Marx (1818 - 1883)

• Marx believed that capitalists always exploit workers.
  – I.e., they take part of the worker’s product.
• To contrary:
  – If wage is correct, worker gets his marginal product.
  – Of course, he does not get his average product.
  – Why?

Correct wage

• Here’s the basic idea of the correct wage:
  – If the wage is genuine, any employer will hire workers to the point where the last dollar of wage paid gives just $1 of benefits to the employer.
  – If the wage is also correct, the last dollar of benefits to the employer also measures the last dollar of benefits to the consumer who buys the product.
  – In other words, the last dollar spent on wages gives the consumer benefits worth $1.

Correct wage

• Lerner gives the extension of this reasoning to cases where several different inputs are combined to produce a single output,
  – or to produce many outputs from the same production process (gasoline and heavy oils or tars, or beef, hides and gelatin from cattle).
• The reasoning gets a bit more complex, but the conclusion is the same:
  – Prices or wages for inputs are genuine when the last $1 spent on the input brings benefits to the employer of $1.
  – Prices or wages for inputs are correct when the last $1 spent on the input brings benefits to the consumer of $1.

Correct wage

Note:
• What Lerner calls “genuine” prices and wages are usually called “market clearing” prices and wages.
• What Lerner calls “correct” prices and wages are usually described by saying that price equals marginal cost.

Information content of prices

• Prices that are genuine and correct convey a great amount of information about changes in scarcity of goods.
  – If gasoline becomes more scarce the price goes up, signaling consumers to conserve.
  – At the same time the rise in price signals producers to expand their production, if they can.
  – If new inventions lower the cost of production for computers their price falls, signaling consumers that it’s OK to buy more.
• The consumer doesn’t need to know why prices are changing.
  – The change in scarcity is automatically signaled through the price.
Information content of prices

- If demand shifts and prices are genuine, the price will change,
  - signals to producers that buyers want either more or less of what they are producing.
- The producer doesn’t need to know why prices are changing; the change in demand is automatically signaled through the price.
  - At the same time, those buyers whose own demand was unchanged are given a signal that the good:
    • has become more easily available (if some buyers cut their purchases)
    • or more scarce (if some buyers increased their purchases).

Information content of prices

- No newspaper reports, faxes, newsletters, or phone calls are needed. Changes in scarcity are communicated through changes in prices.
- And the price changes convey an automatic incentive to conserve or buy more.
  - No law is needed to restrict demand when goods get more scarce, or increase it when more plentiful.

Summary

- If as a consumer I pay attention to how I spend my money, and face genuine prices (given my budget)
  - Then the last dollar I spend on each good gives me the same satisfaction.
- If prices are correct (producers set price = marginal cost)
  - Then the last dollar’s worth of inputs used in producing every good brings the same satisfaction to consumers.
  - Prices correctly signal the relative scarcity of different goods, and changes in that relative scarcity.

F. Lerner, Ch. 5: What is wrong with monopoly?

- “Monopoly” means that there is a single seller of a good.
- “Monopoly power,” really the subject of the chapter, means that there are restrictions on the number of sellers.
- An industry with “monopoly” is contrasted with one that is “competitive”.

What is wrong with monopoly?

- Probably you don’t know any firm that is really competitive, in the economist’s sense.
  - A competitive firm (in the economist’s sense) doesn’t have to compete (in the normal sense) to sell as much as it wants.
    • It decides how much to sell, and just sells it at the market price.
    • Wheat farm, dairy farm, or sugar beet farm
    • Owner of small oil field or a single well
- Marginal revenue (MR) is the extra revenue a firm gets from selling one extra unit.
  - For a competitive firm, MR = price.

With monopoly power, MR is below price

- If a competitive firm’s marginal cost does not change, demand is the same.
- For a competitive firm, MR = price
- If a firm has monopoly power, demand is flatter than the competitive demand curve, for a given advertising or sales policy.
What is wrong with monopoly?

- Whenever there is monopoly power:
  - The producer can’t sell as much as she wants to
    - without lowering the price or
    - going to extra expense through promotions or advertising.
  - The last unit of output that a producer sells brings a price that is above the marginal revenue.
- The producer gets the highest possible profit by expanding output whenever marginal revenue is above marginal cost.
  - So it stops expanding output when marginal revenue equals marginal cost.

What is wrong with monopoly?

- The firm with monopoly power sets a price that is not correct.
  - $1 of society’s resources used by a firm with monopoly power brings benefits worth more than $1 to the consumer.
  - $1 of society’s resources used by a competitive firm brings benefits worth just $1 to the consumer.
- Consumers would be better off if we could move some resources from competitive firms to firms with monopoly power, expanding their output.
  - The goal for efficient use of resources would be that the last $1 worth of society’s resources, wherever they are spent, should bring benefits worth just $1 to the consumer.

What is wrong with monopoly?

- This chain of reasoning gives one situation where the market is not efficient. This gives a potential role for the government:
  - Antitrust laws that sometimes keep firms from combining to form a monopoly.
  - Regulation of other firms which hold “natural monopolies”.
- A second possible failure of efficiency in markets that may justify a role for government: External effects (see slide #33).