

# Week 4

## Demand Response Curve

### Latent Demand

### Consumer Surplus

### Properties

### Linear Response Curve

### Satiating Price

### Elasticity

### Constant Elasticity Curve

### Revenue

## Demand Response Curve

### Latent Demand

refers to demand for a good or service that consumers cannot satisfy for three main reasons. First, the consumer does not have enough money to buy the item. Second, the item is not available. Third, the consumer does not know that the product or service is available.

### Consumer Surplus

It's a measure of the additional benefit that consumers receive because they're paying less for something than what they were willing to pay.

### Properties

- Non-negative
- Continuous
- Differentiable
- Downward sloping

### Linear Response Curve

$$D(p) = D_0 - m * p$$

where  $D_0$  is the demand at price 0 and

$m$  is the slope

## **Satiating Price**

Price at which demand is 0

$$P_S = \frac{D_0}{m}$$

## **Elasticity**

$$\epsilon = \frac{m * p}{D_0 - m * p}$$

## **Constant Elasticity Curve**

$$D(p) = Cp^\epsilon$$

where  $C$  is the demand when price is 1

## **Revenue**

$$R = p * D = Cp^{1-\epsilon}$$