

# A Recap of Economic Theory, Markets, and Willingness to Pay

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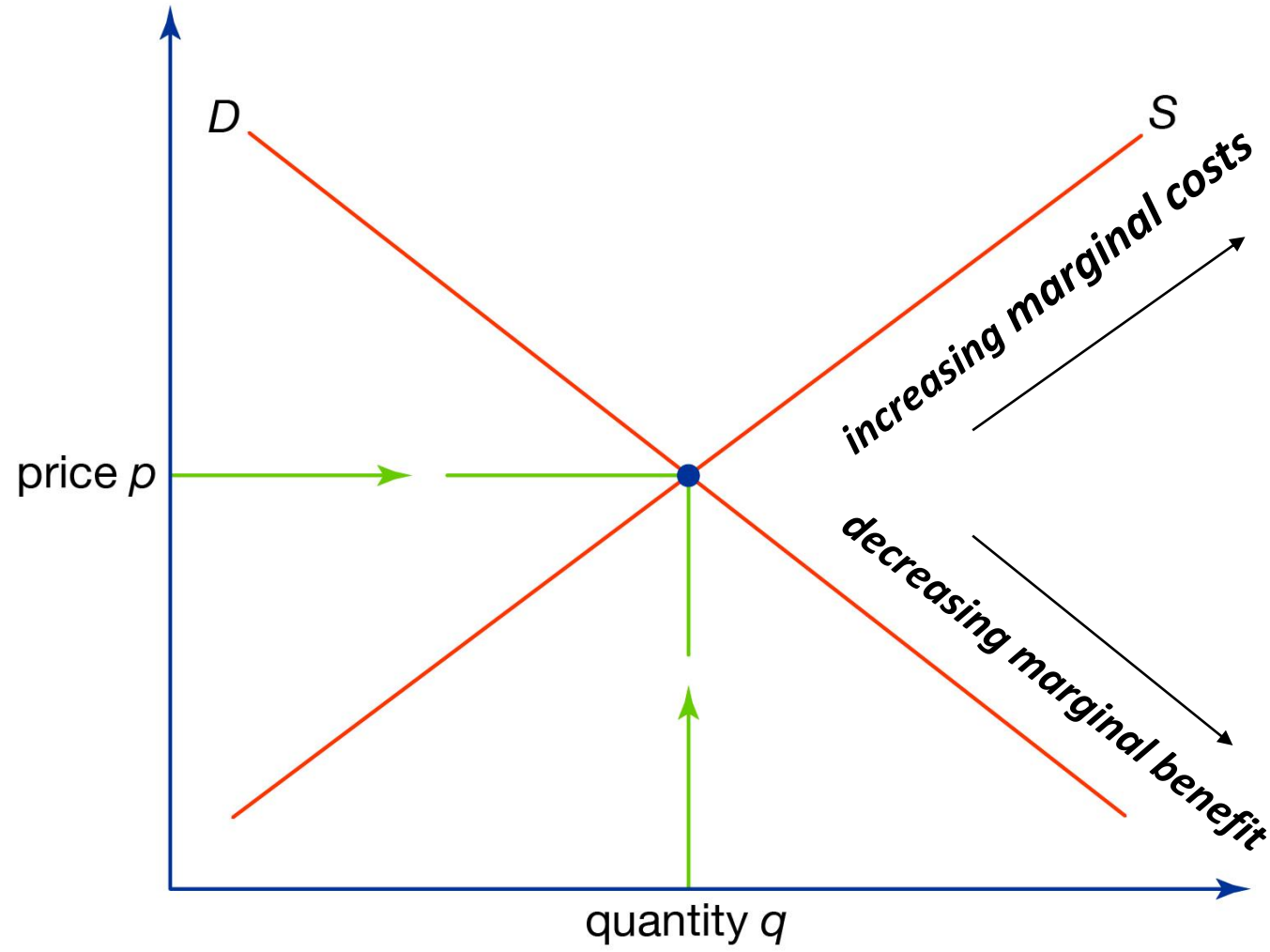
Prof. Parthum  
Environmental Economics  
Econ 475

# Demand and Supply

## A “market” for “something”...

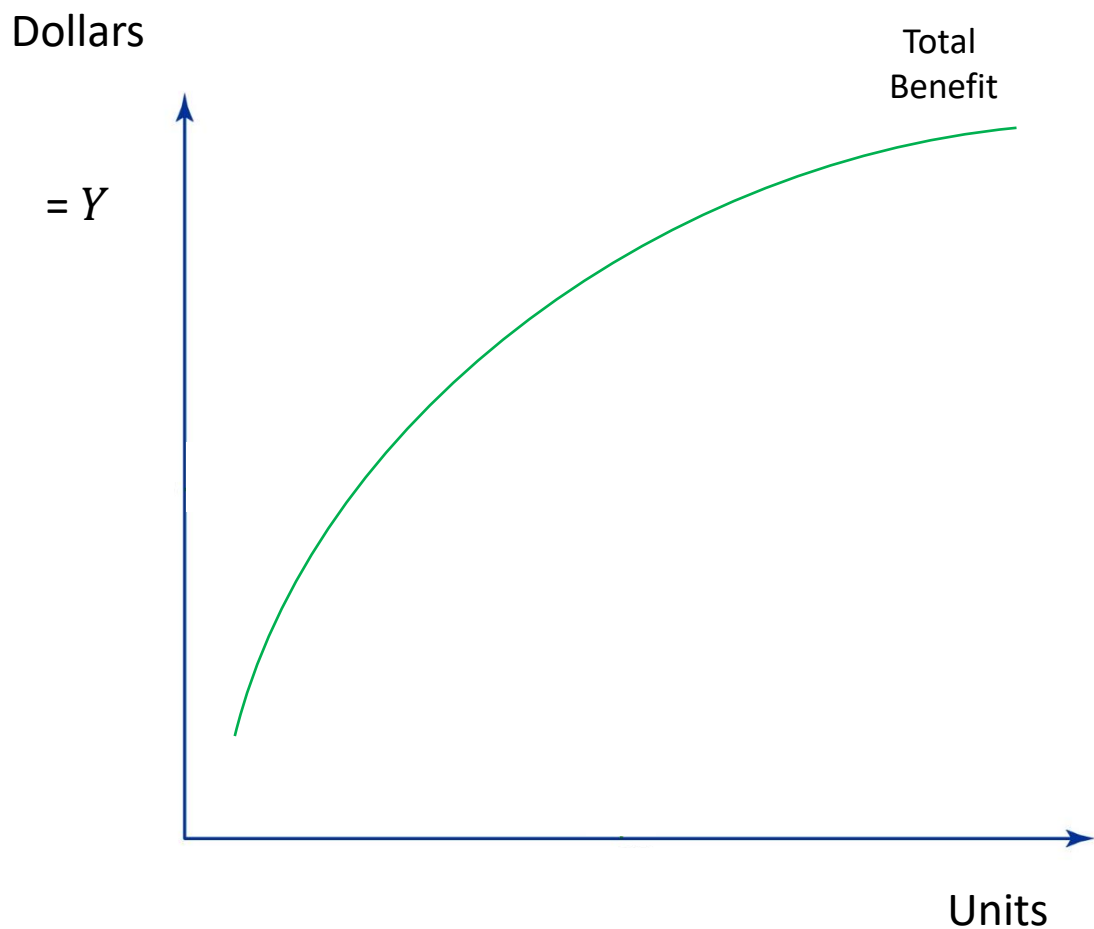
1. Demand for something slopes downward... why?
  - a. If something is more expensive, the quantity demanded will be less
    - i) substitution
    - ii) income
    - iii) *decreasing marginal benefit*
2. Supply of something slopes upward... why?
  - a. As a “supplier” produces more of something it becomes more expensive to supply one more unit of that something
    - i) *increasing marginal costs*

# Demand and Supply

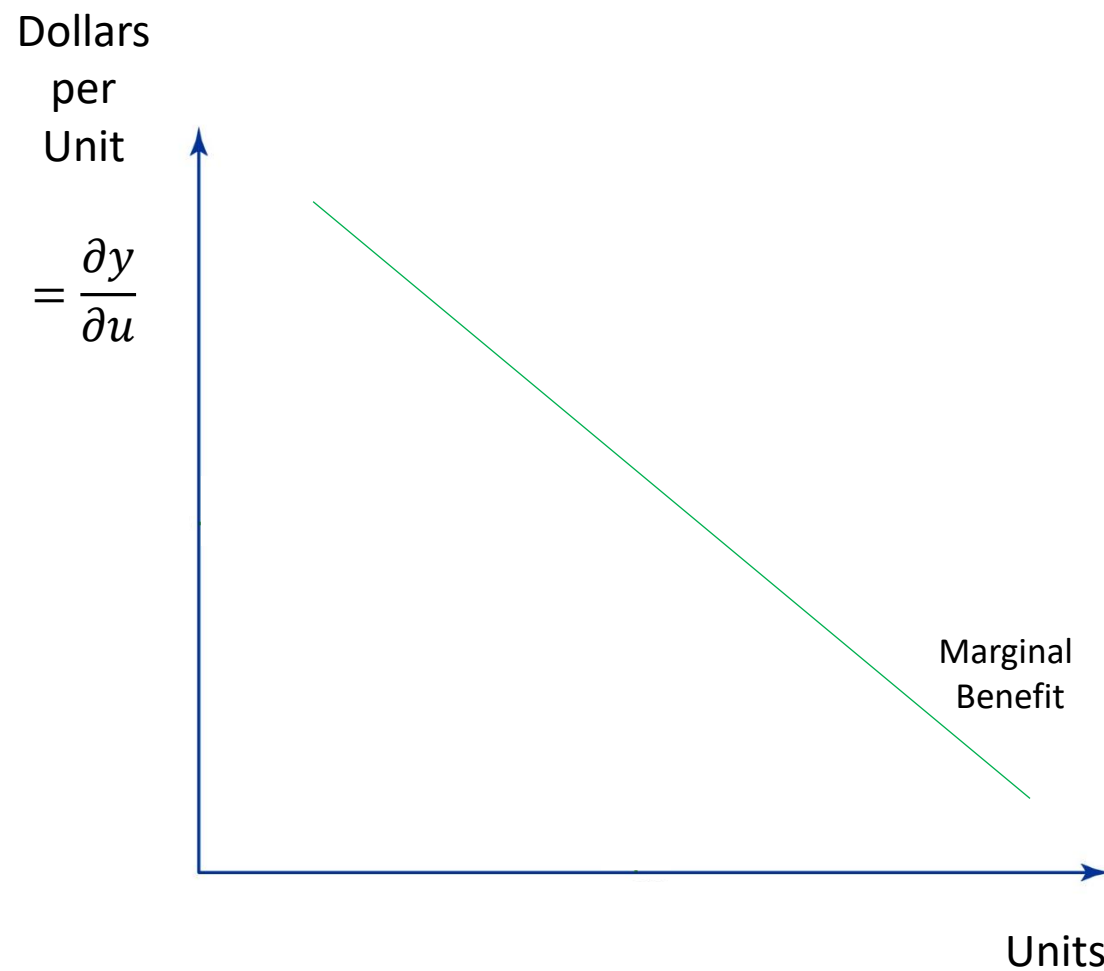


# Demand

## Total Benefits

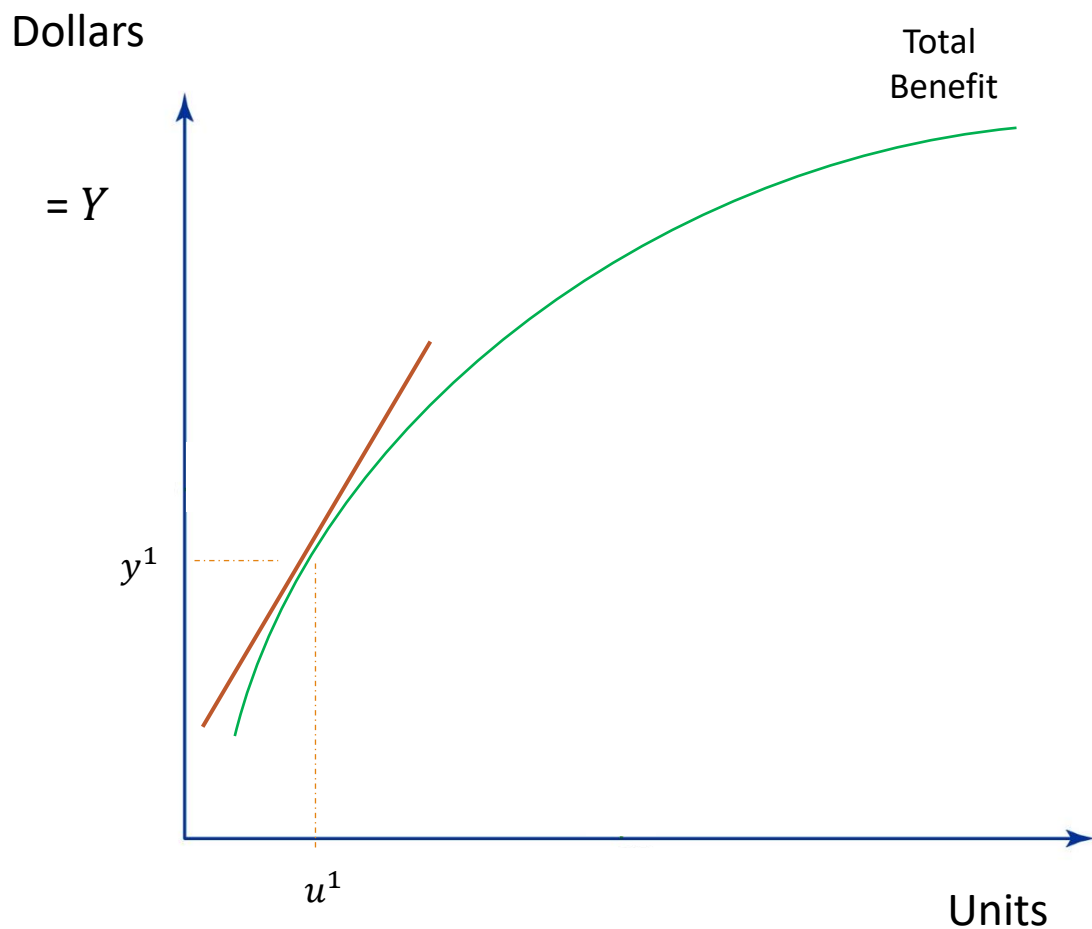


## Marginal Benefits

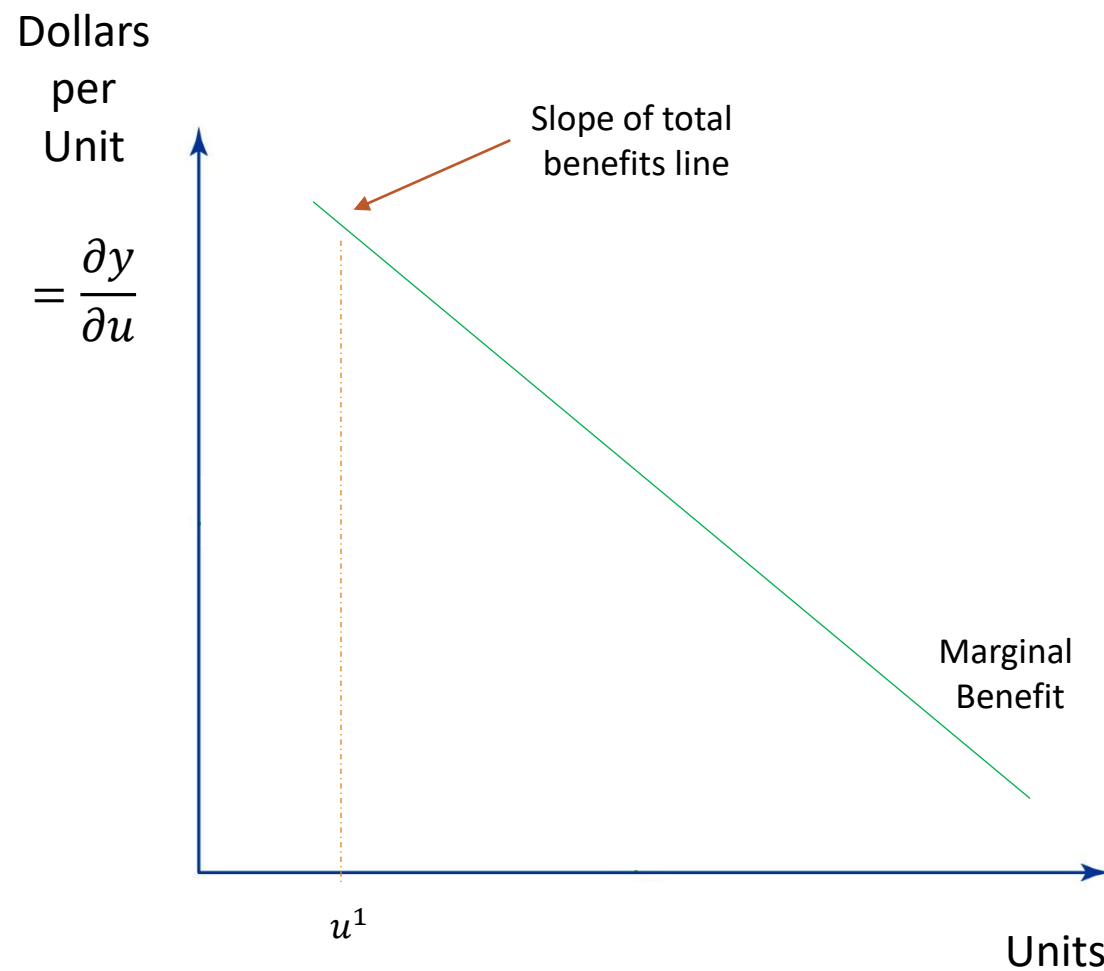


# Demand

## Total Benefits

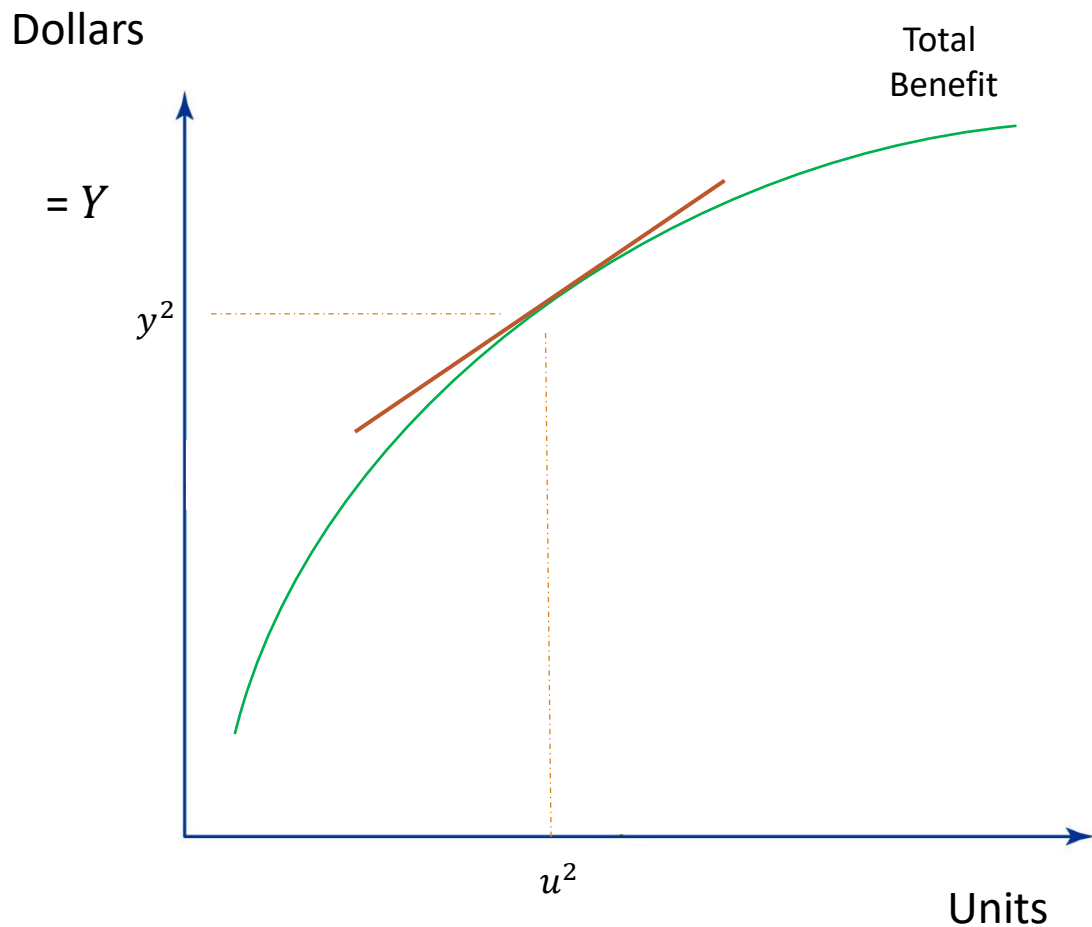


## Marginal Benefits

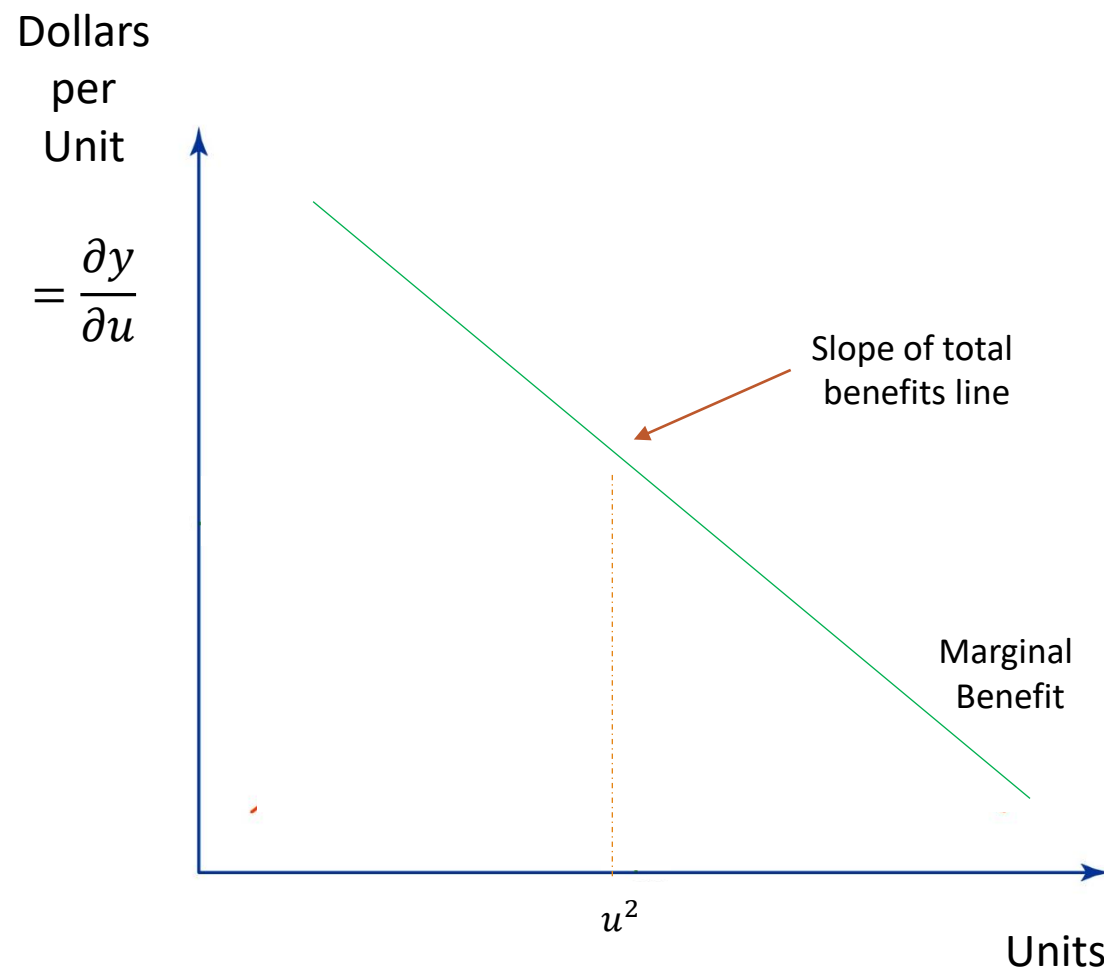


# Demand

## Total Benefits



## Marginal Benefits

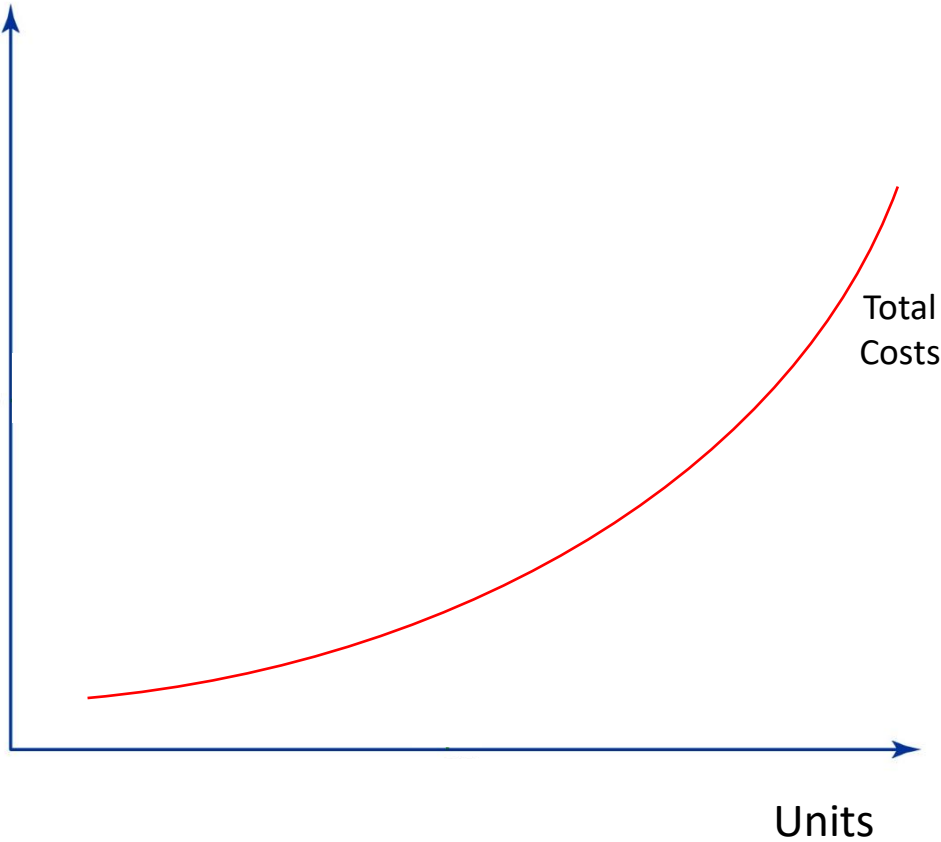


# Supply

## Total Costs

Dollars

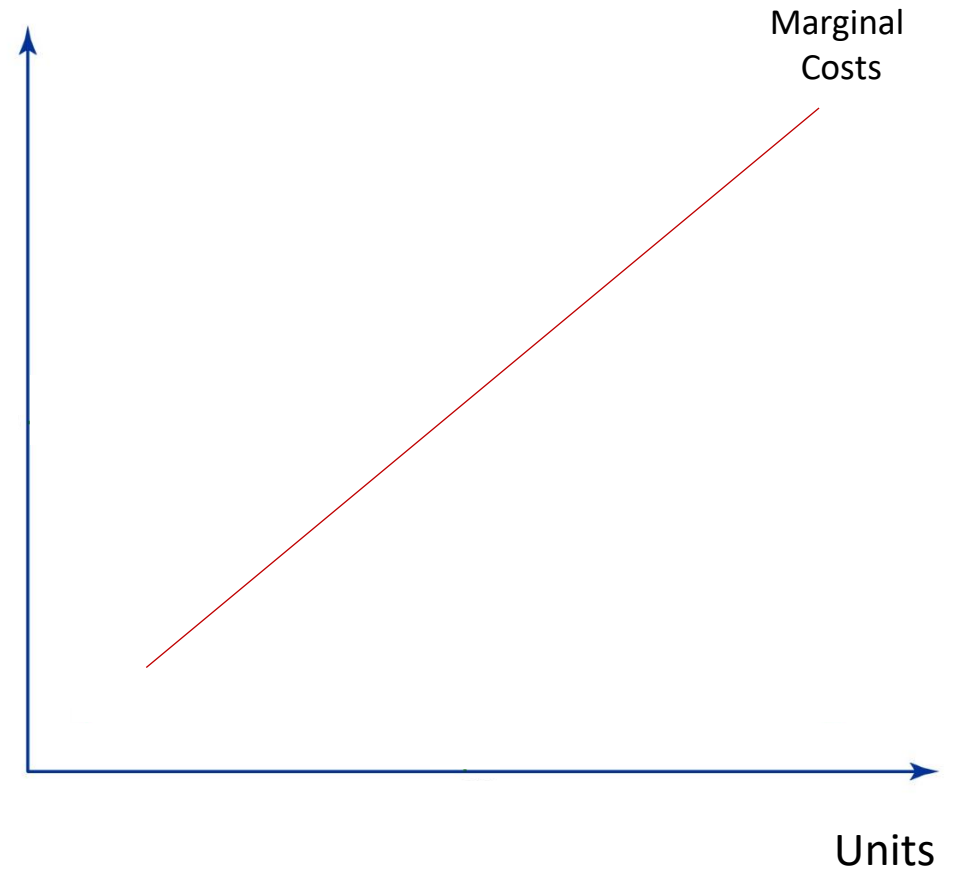
$= Y$



## Marginal Costs

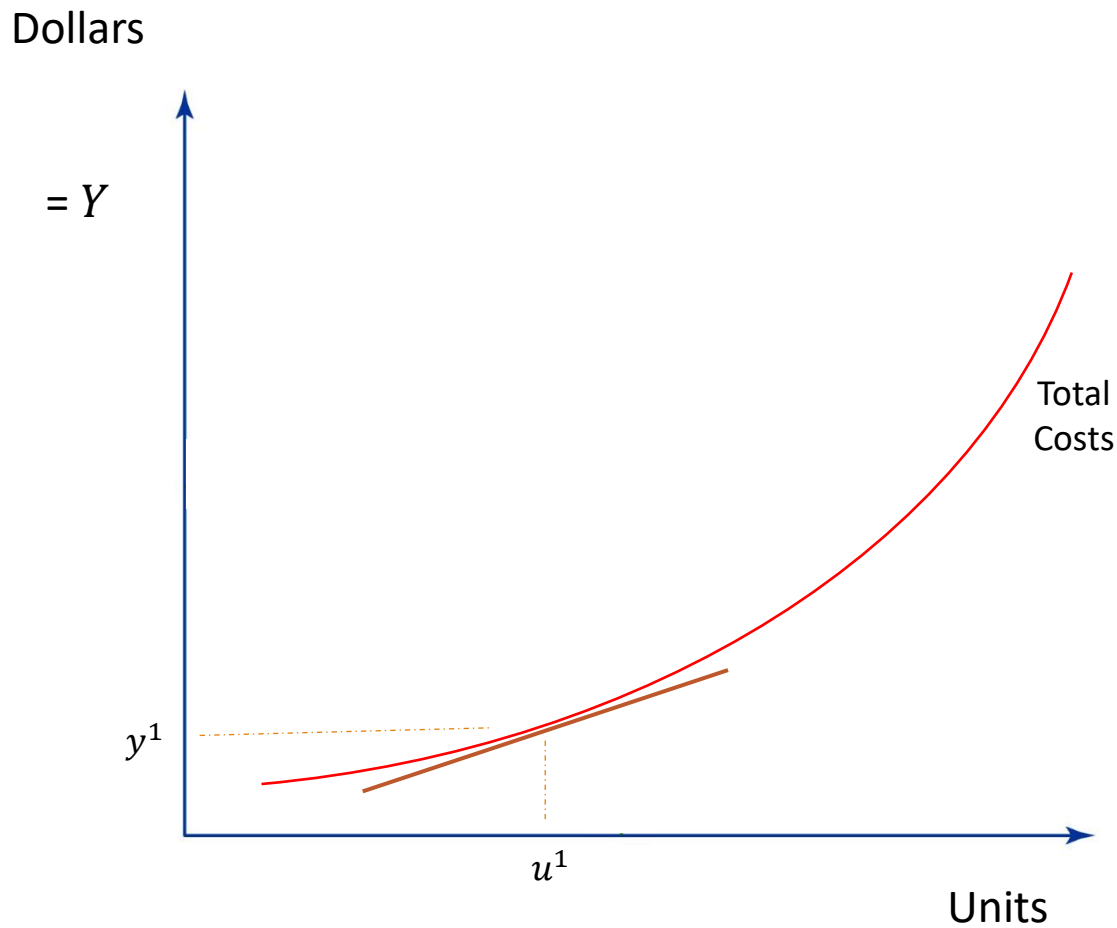
Dollars  
per  
Unit

$$= \frac{\partial y}{\partial u}$$

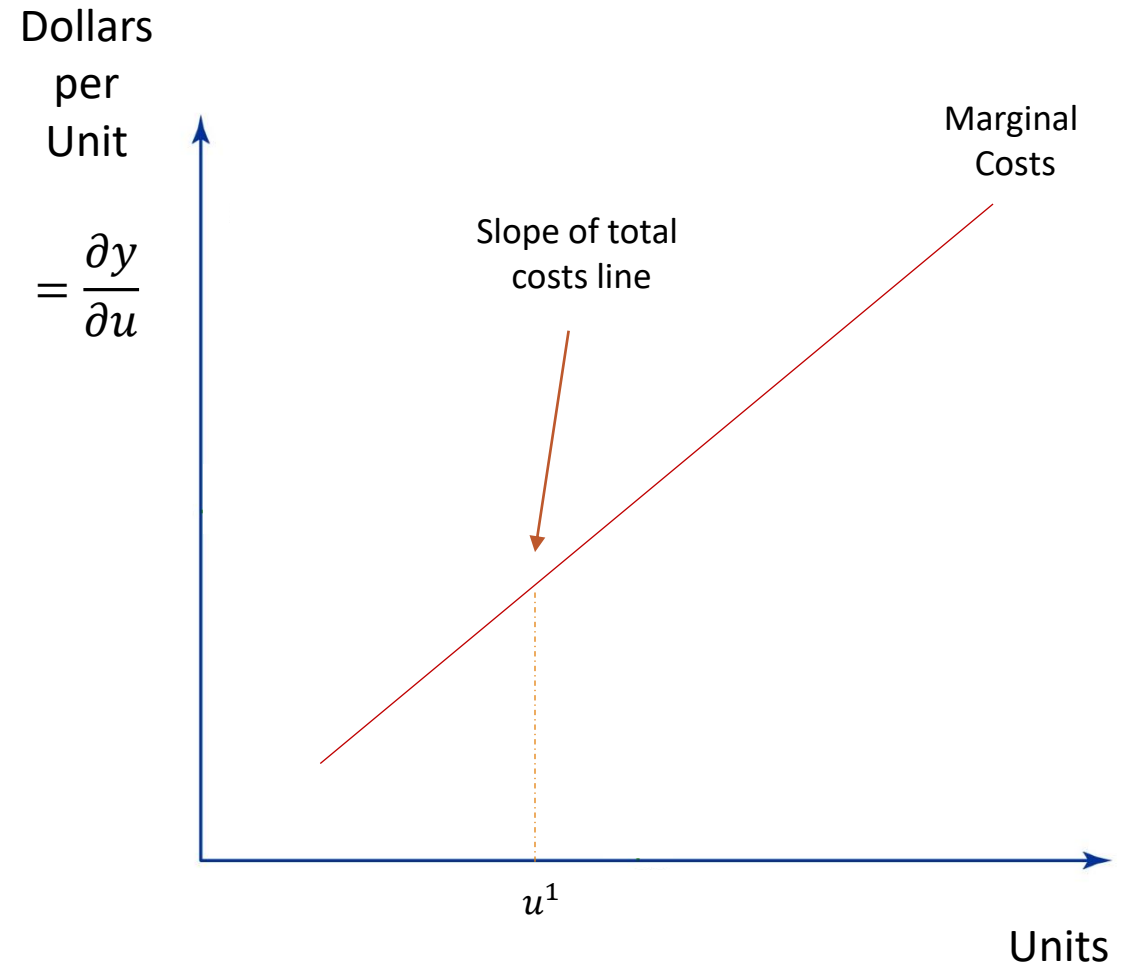


# Supply

## Total Costs



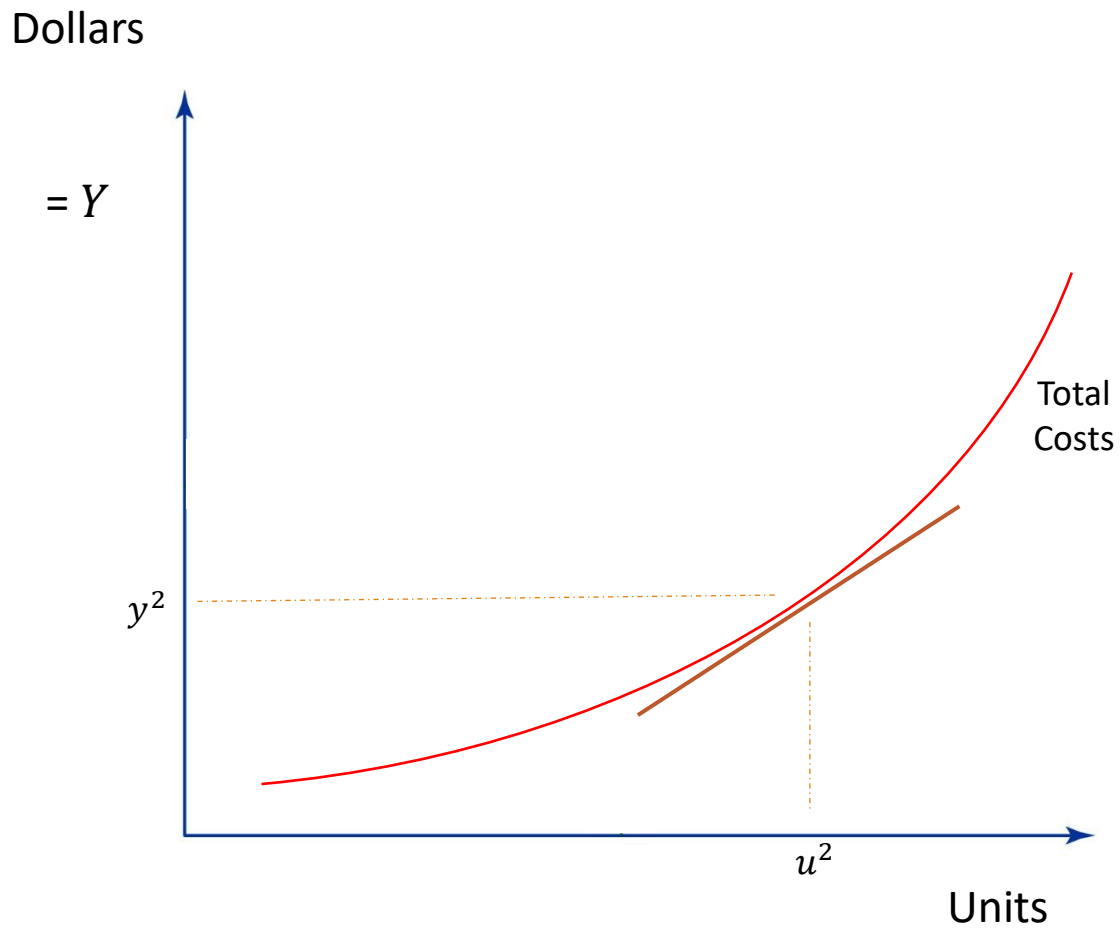
## Marginal Costs



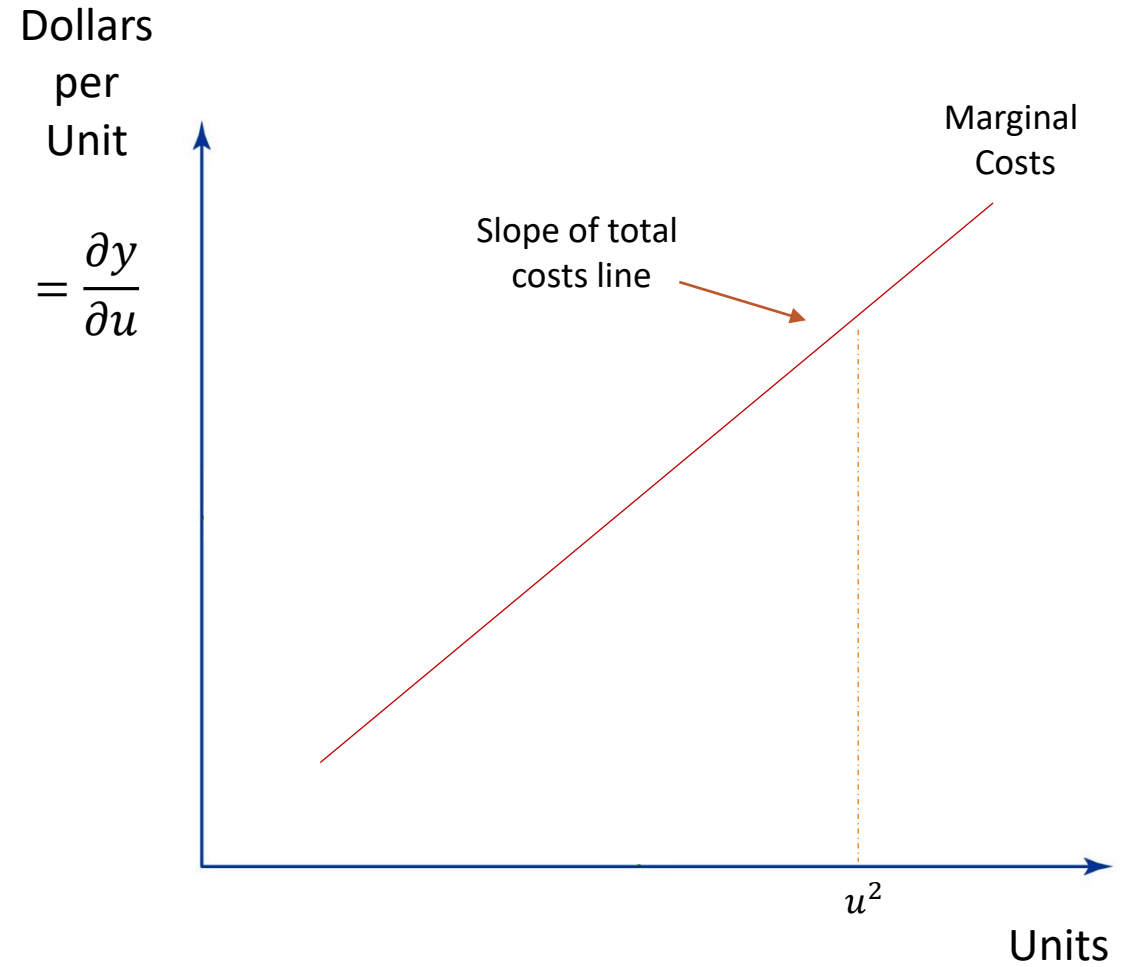


# Supply

## Total Costs

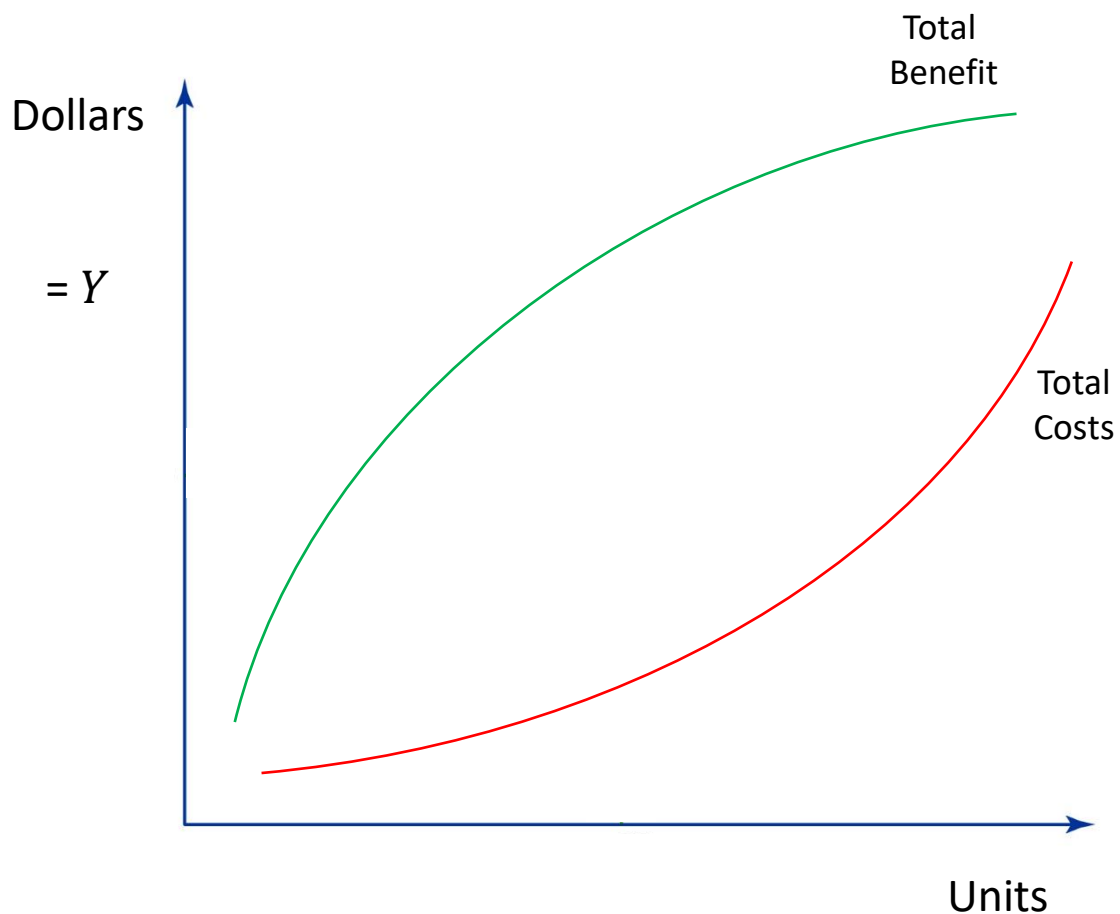


## Marginal Costs

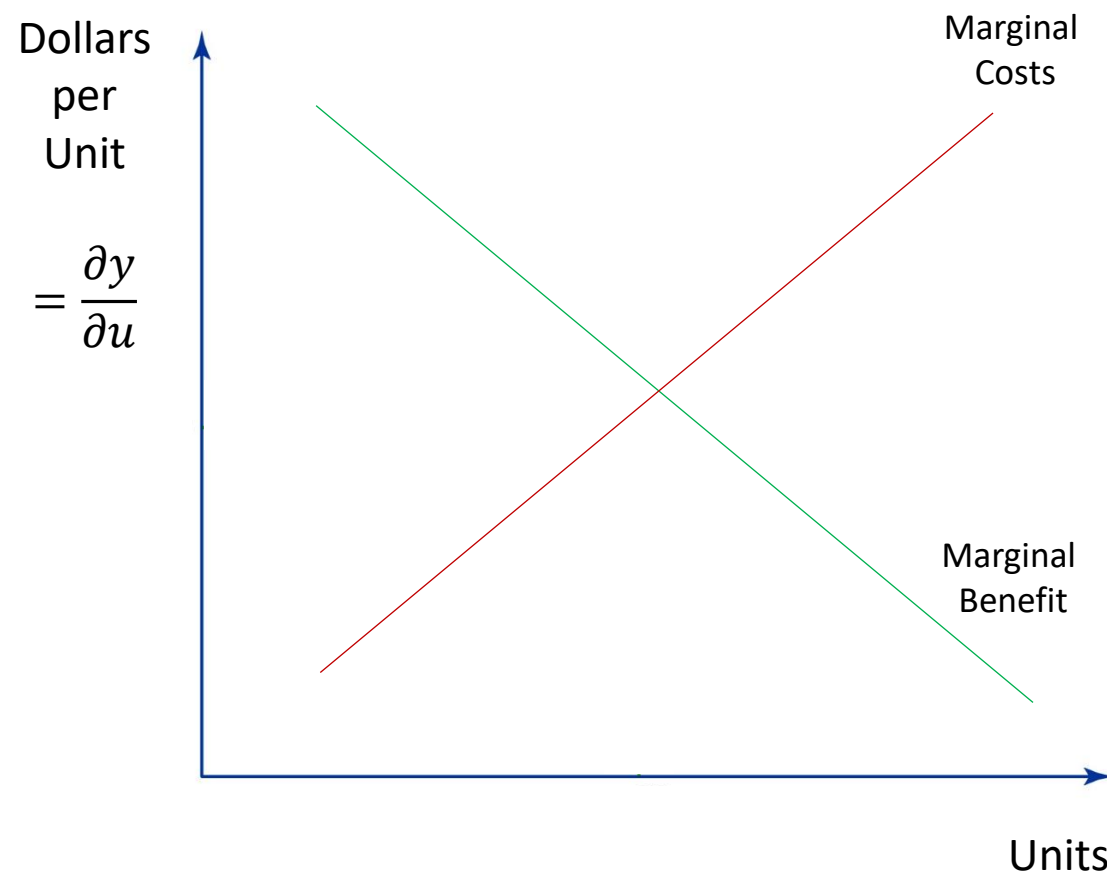


# Demand and Supply

## Total Benefits and Total Costs

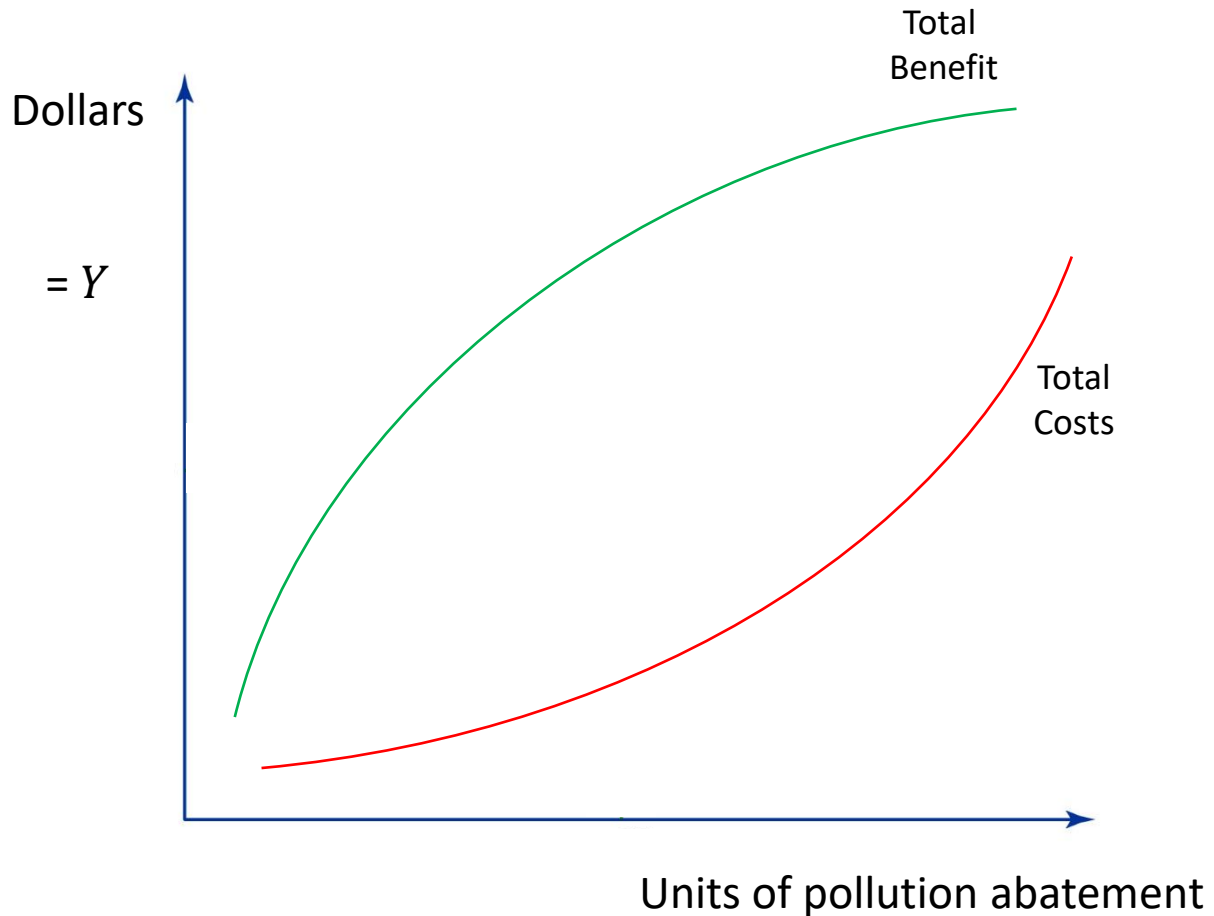


## Marginal Benefits and Marginal Costs

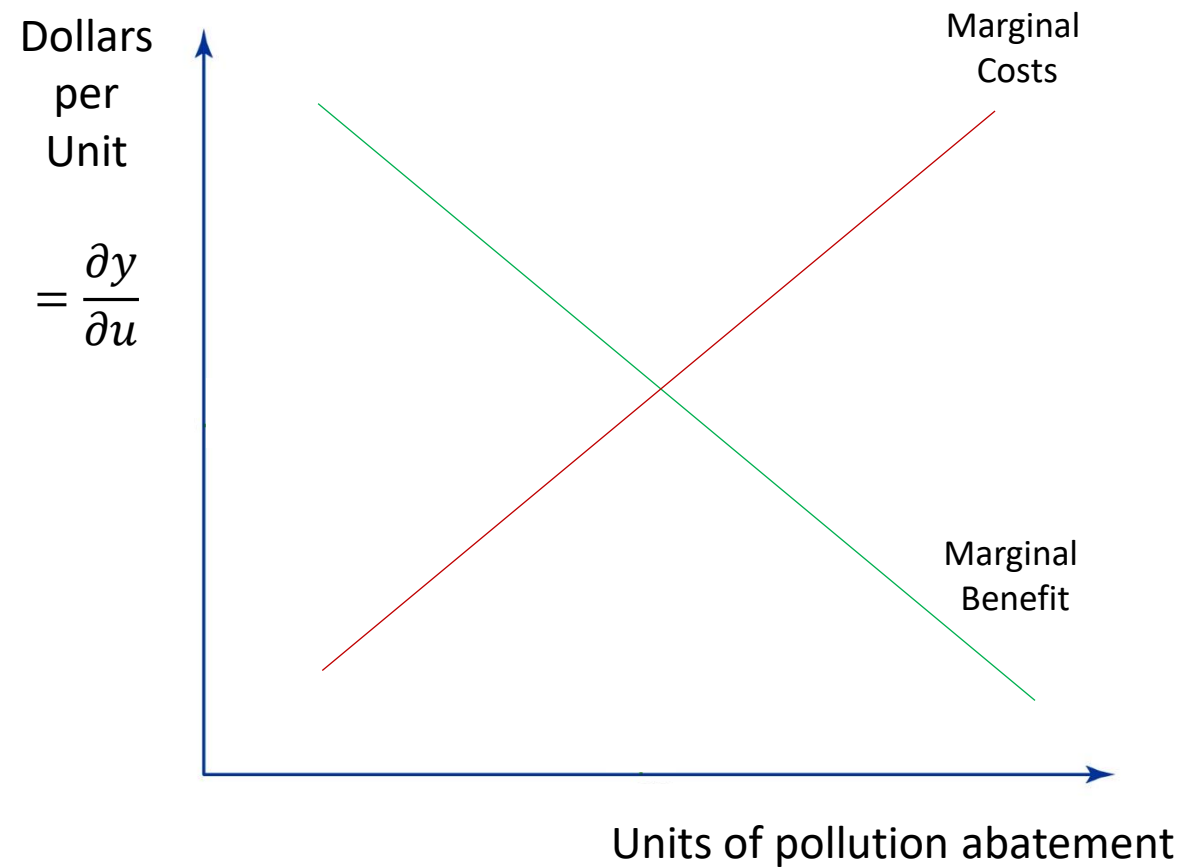


# Market for Pollution

## Total Benefits and Total Costs

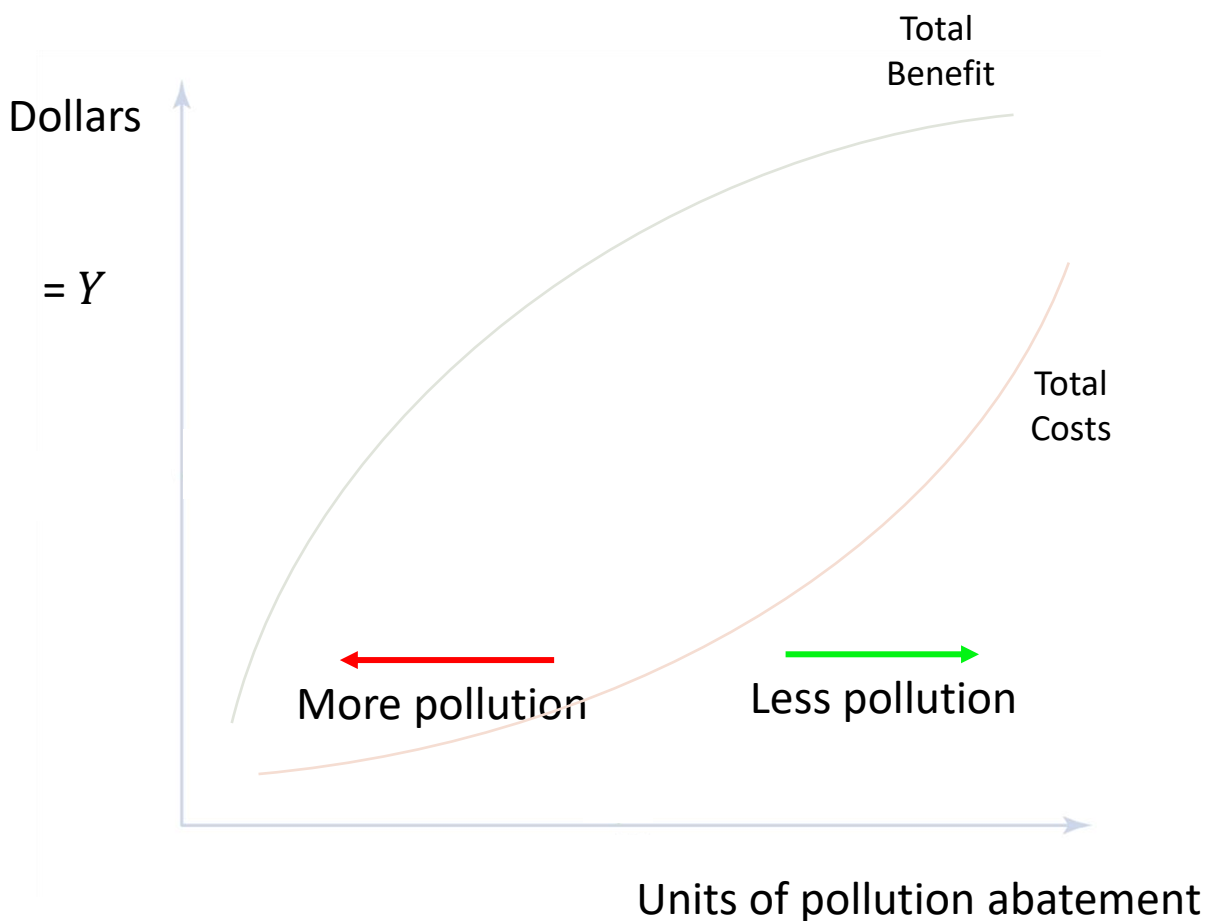


## Marginal Benefits and Marginal Costs

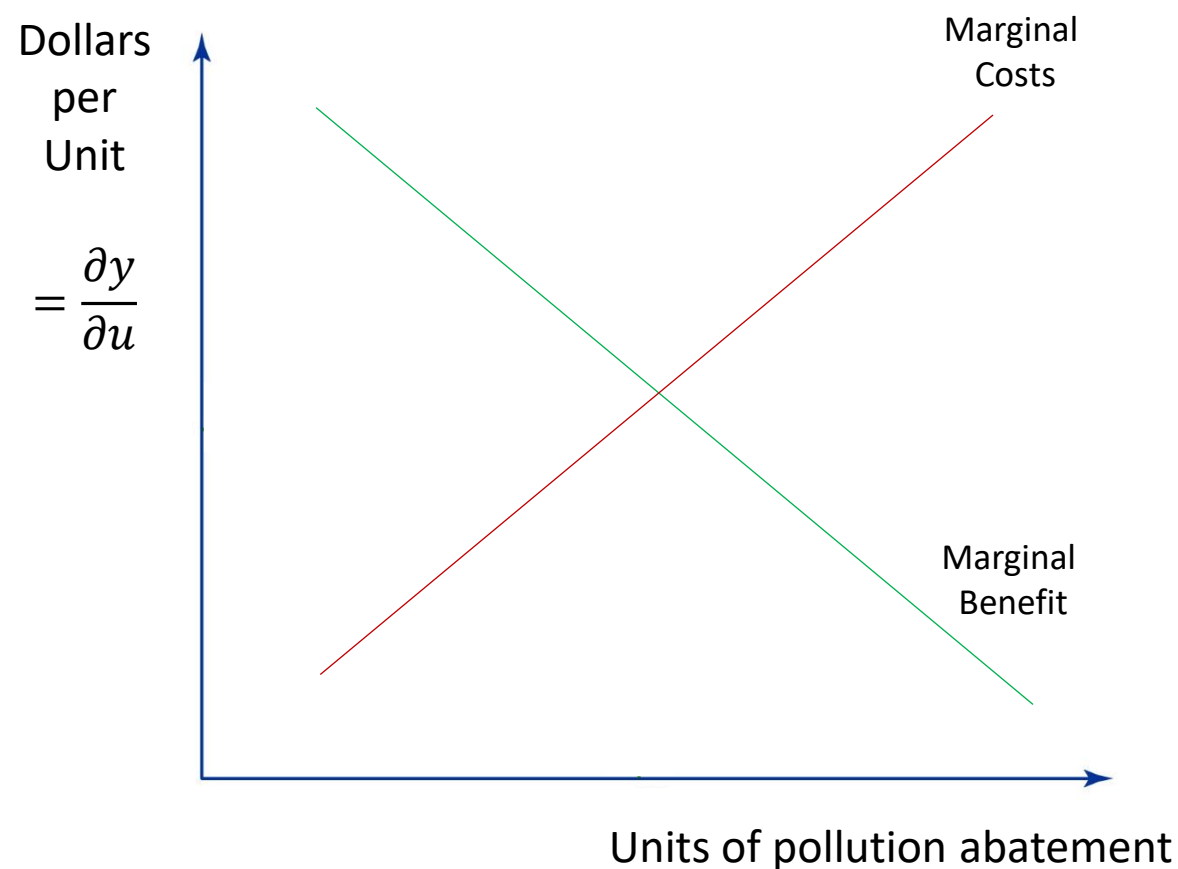


# Market for Pollution

## Total Benefits and Total Costs

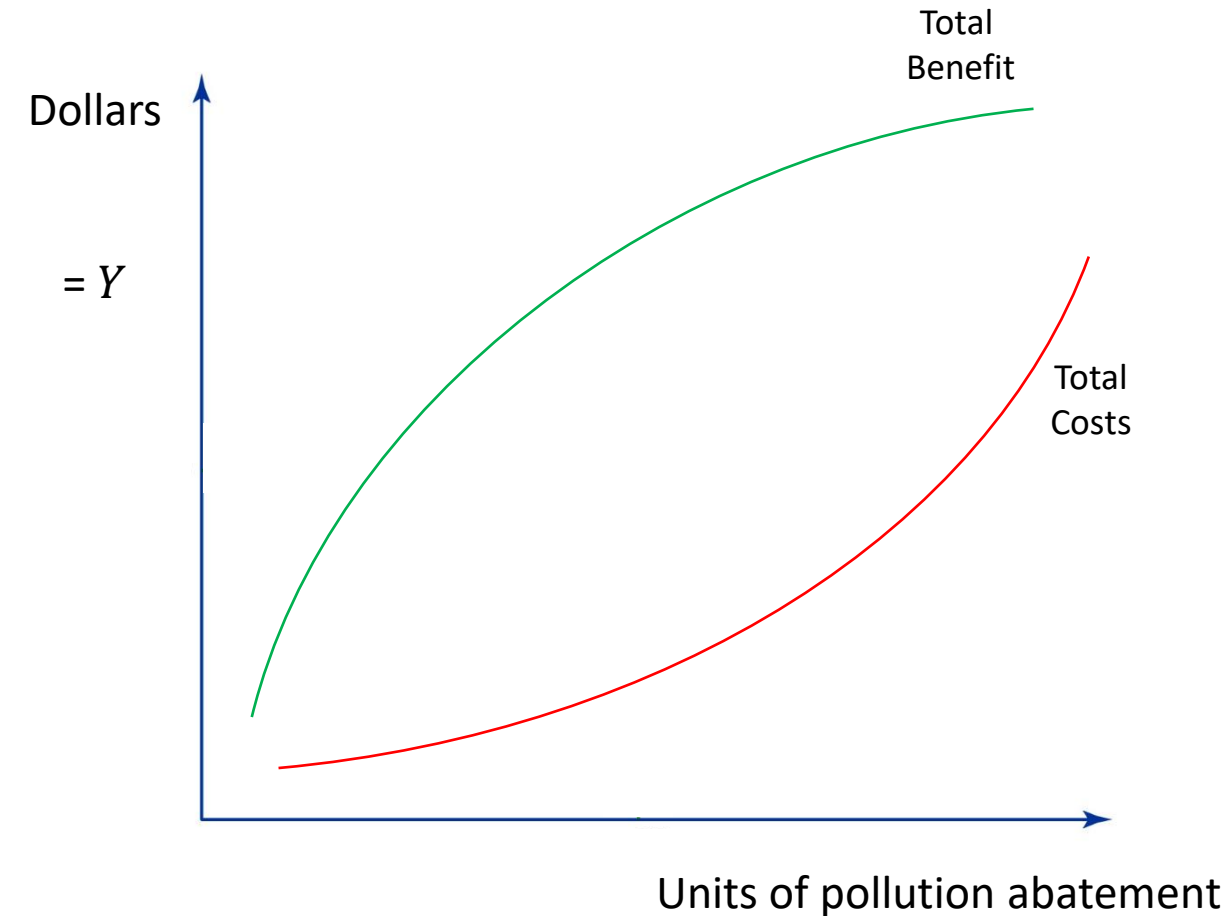


## Marginal Benefits and Marginal Costs

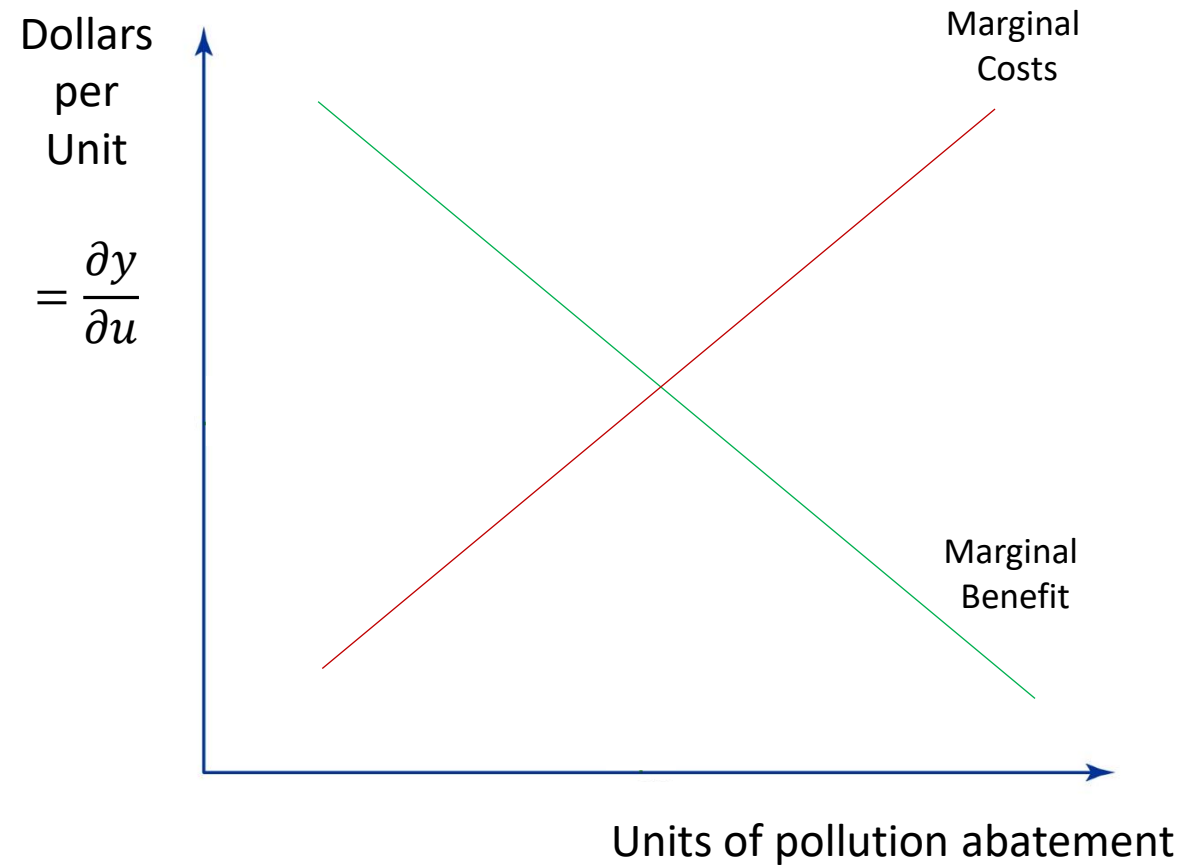


# Market for Pollution

## Total Benefits and Total Costs



## Marginal Benefits and Marginal Costs



# Market for Pollution

## A “market” for “pollution”...

- There are *benefits* from decreasing pollution

*Benefits are decreasing in the  
amount of pollution abatement*

- There are *costs* of decreasing pollution

*Costs are increasing in the  
amount of pollution abatement*

