APPLIED ECONOMICS FOR MANAGERS SESSION 12—

I. EXTERNALITIES

A. COSTS OR BENEFITS CONFERRED ON PARTIES NOT REPRESENTED IN THE TRADE

B. PRICE NEGOTIATED IN THE MARKET DOES NOT REFLECT TRUE MARGINAL COST/MARGINAL BENEFIT ⇒ ***INEFFICIENT***

II. MARKET FAILURE OR A FAILURE TO USE MARKETS

A. MARKETS AND PROPERTY RIGHTS

1. PROPERTY RIGHTS AS A MARKET NECESSITY

2. ABSENCE OF PROPERTY RIGHTS AS THE SOURCE OF EXTERNALITY PROBLEMS

3. RE-INTRODUCTION OF THE MARKET REQUIRES RE-INTRODUCTION OF PROPERTY RIGHTS

B. COASE, PROPERTY RIGHTS, AND EFFICIENCY

C. THE PROBLEM IN FIJENSEA

1. MECHANISMS TO REINTRODUCE PROPERTY RIGHTS

2. EFFLUENT/EMISSION TAXES: GENERATE TAX REVENUE USEFUL FOR MITIGATING POLLUTION DAMAGE OR FOR OTHER PUBLIC SERVICES

3. INCENTIVE TO DEVELOP LESS POLLUTION-PRODUCING TECHNIQUES OR LESS COSTLY WAYS TO LIMIT POLLUTION

4. LEAST-COST WAY OF DESIRED POLLUTION REDUCTION

5. TRADABLE PERMITS:

a. NO NEED TO SET THE TAX “RATE”

b. SELF-ENFORCING MECHANISM

III. EXTERNALITIES WRITTEN IN LARGE—PUBLIC GOODS

A. NON-RIVALRY IN CONSUMPTION—MARGINAL COST = 0

B. NON-EXCLUDABILITY—CAN'T EXCLUDE THOSE NOT PAYING

1. DEFENSE

2. INFORMATION

C. PRICING AND FINANCING PUBLIC GOODS

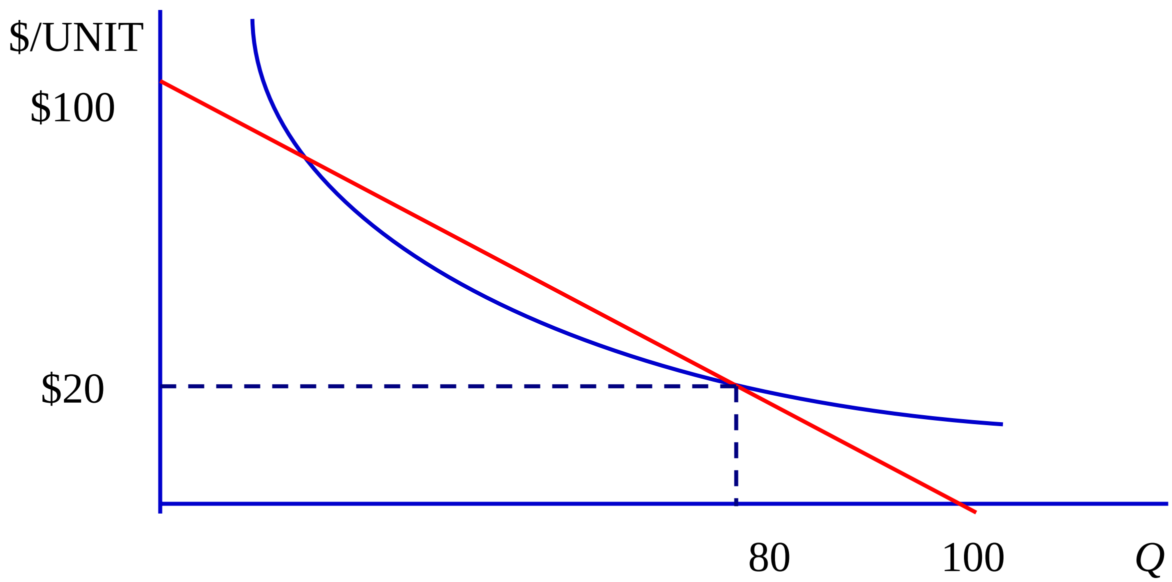
1. EXAMPLE: DEMAND: $P = 100 - Q$

TOTAL COST: $TC = 1600$

AVERAGE COST: $AC = (1600/Q)$

MARGINAL COST: $MC = 0$

2. $MC < AC \Rightarrow AC$ IS FALLING



SURPLUS CALCULATIONS: TOTAL COST = $1600 ALWAYS

AVERAGE COST PRICING: P = $20, PRODUCER SURPLUS = 0,
CONSUMER SURPLUS = $3200

MARGINAL COST PRICING: PRODUCER SURPLUS = – $1600
CONSUMER SURPLUS = $5,000

D. QUASI-PUBLIC GOODS

E. MARGINAL COST PRICING ALWAYS MAXIMIZES TOTAL SURPLUS—BUT HOW TO ACHIEVE IT FOR A PUBLIC GOOD?

1. AVERAGE COST PRICING AND NATURAL MONOPOLIES
2. PRICE DISCRIMINATION
3. TAXES/SUBSIDIES

IV. NETWORK EXTERNALITIES/DEMAND SCALE ECONOMIES

A. VALUE TO EACH CONSUMER INCREASES AS MORE CONSUMERS USE THE PRODUCT

B. PROBLEMS

1. ESTABLISHING AND PRICING A NETWORK
2. COMPETITION IS QUESTION OF SURVIVAL/NATURAL MONOPOLIES?
3. COMPLEMENTARITIES AND PATH DEPENDENCE