**Negative Externalities**

Market achieves efficient solution if all costs of producing paper borne by producer

The production of paper may generate some costs to society producer doesn’t consider

Social Costs = private costs + external (environmental) costs

Social costs may be greater than private costs

Example of [Salmon Industry in Maine](http://milesfinney.net/434/articles/paper.html)

Cost of dead fish is external cost

Cost to society but not to individual paper firms

Market for Paper

P

MPC

P\*=3.00

D=MPB=MSB

Q=25

Quantity (1,000’s per month)

In marginal terms:

Marginal Social Costs (MSC) = Private Marginal Costs MPC) + Marginal External Cost (MEC)

MSC=MPC+MEC MEC defined

Industry supply is only MPC

Suppose MEC=$2 interpret

At market equilibrium of Q=25

MSC=MPC+MEC

= $5

Opportunity cost to society for last pack of paper produced is $5

At Q=25 MSB=3

Value of the marginal pack to society is $3.

For marginal transaction MSC>MSB

MPC+MEC

P

P=5.00

MPC

P\*

P=3.00

D=MPB=MSB

Q\*

Q= 25

“Too much” paper is being produced

At *correct,* efficient allocation, MSB=MSC at Q\*

At Q\*, amount the marginal purchaser paid for paper covered both MPC and MEC

There is still some external costs (dead fish) but cost are accounted for

Correct Cost/benefit calculation made between competing values: fish and paper

Correct tradeoff is made

What if value of fish increases? Decreases?

Problems surrounding Public Policy charged with moving to efficient quantity