

Don Fullerton (2011) Six Distributional Effects of Environmental Policy

Risk Analysis 31/6, 923-926

1

Fullerton: Motivation

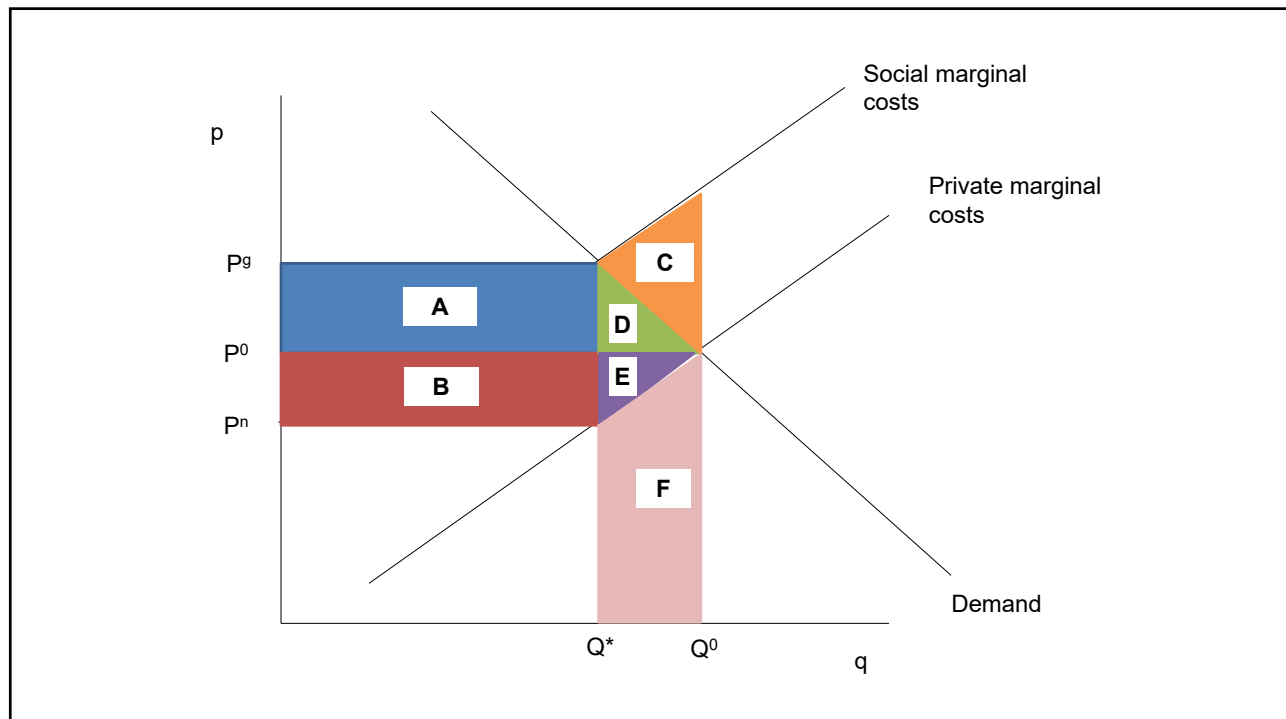
- Done a lot: BCA and Cost-effectiveness studies of environmental regulations
- Less so: who bears the burden of a policy?
- Six separable effects.

2

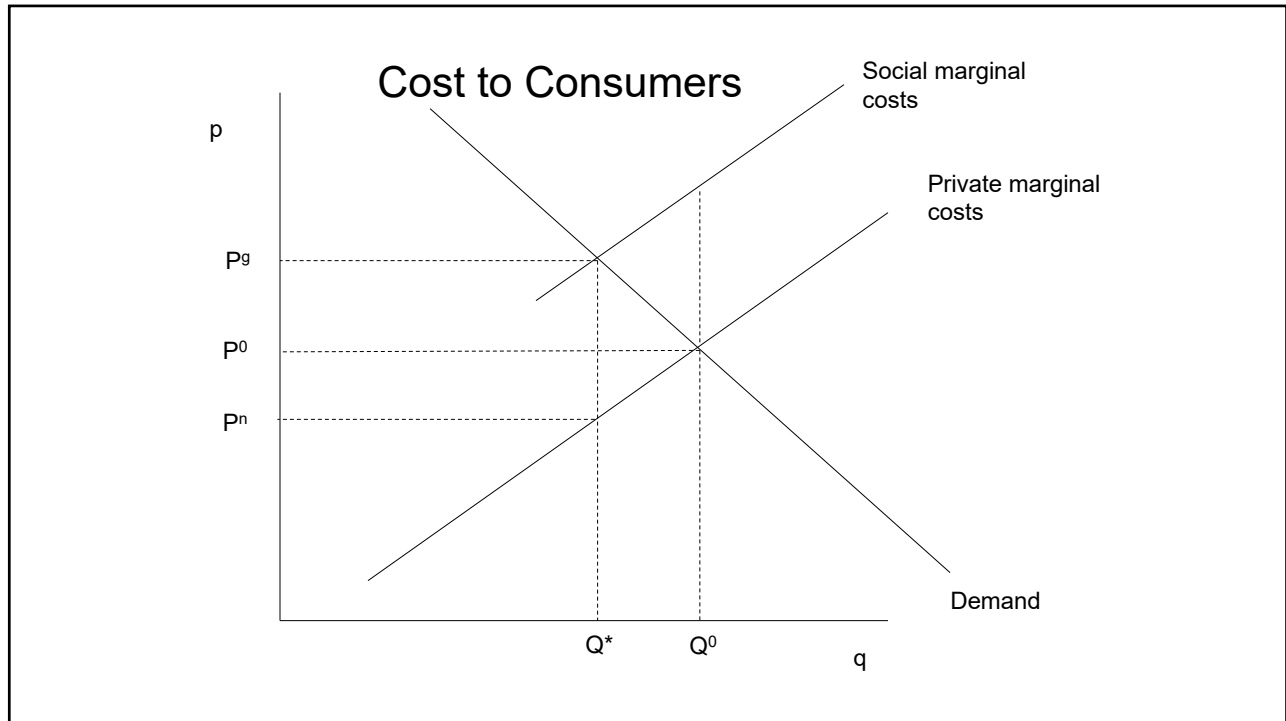
Fullerton

- For illustration here: climate policy that imposes a price per unit of emissions
- Regressive: burden to income ratio is lower for those with more income.
- Proportional: same for all groups
- Progressive: ratio higher for those with more income
- Here partial equilibrium model and assumption of fixed emissions per unit.

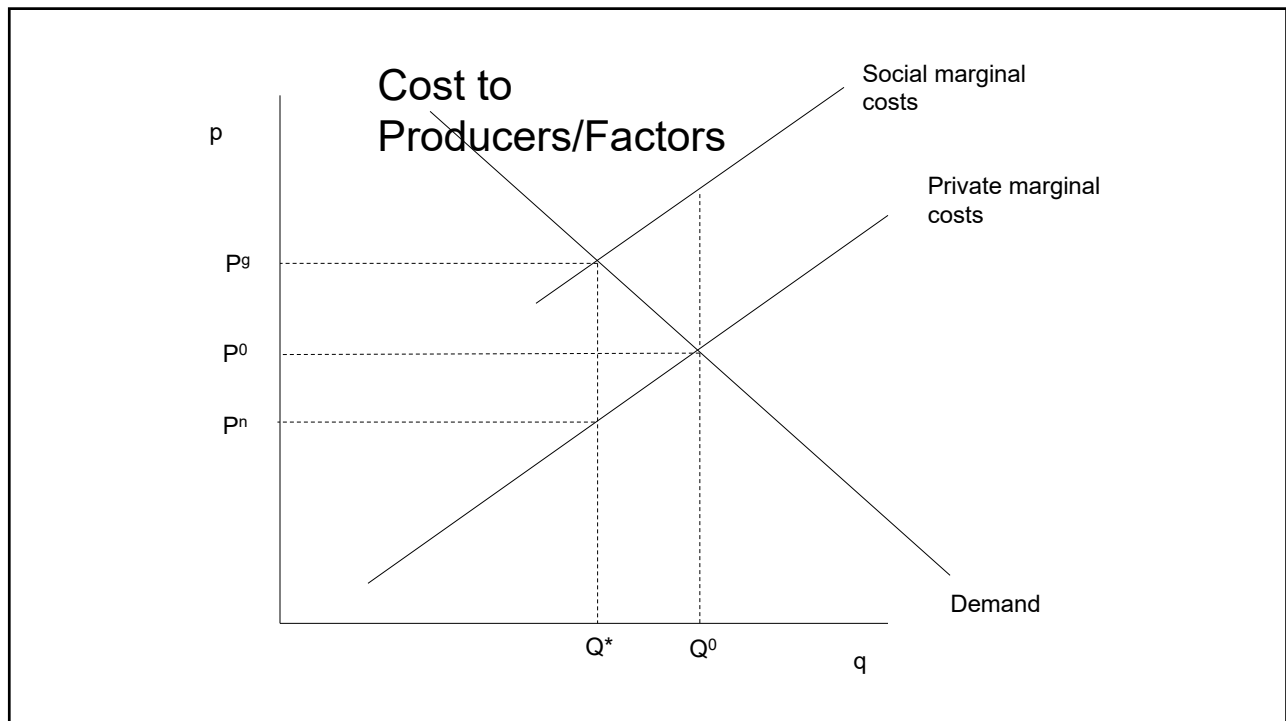
3



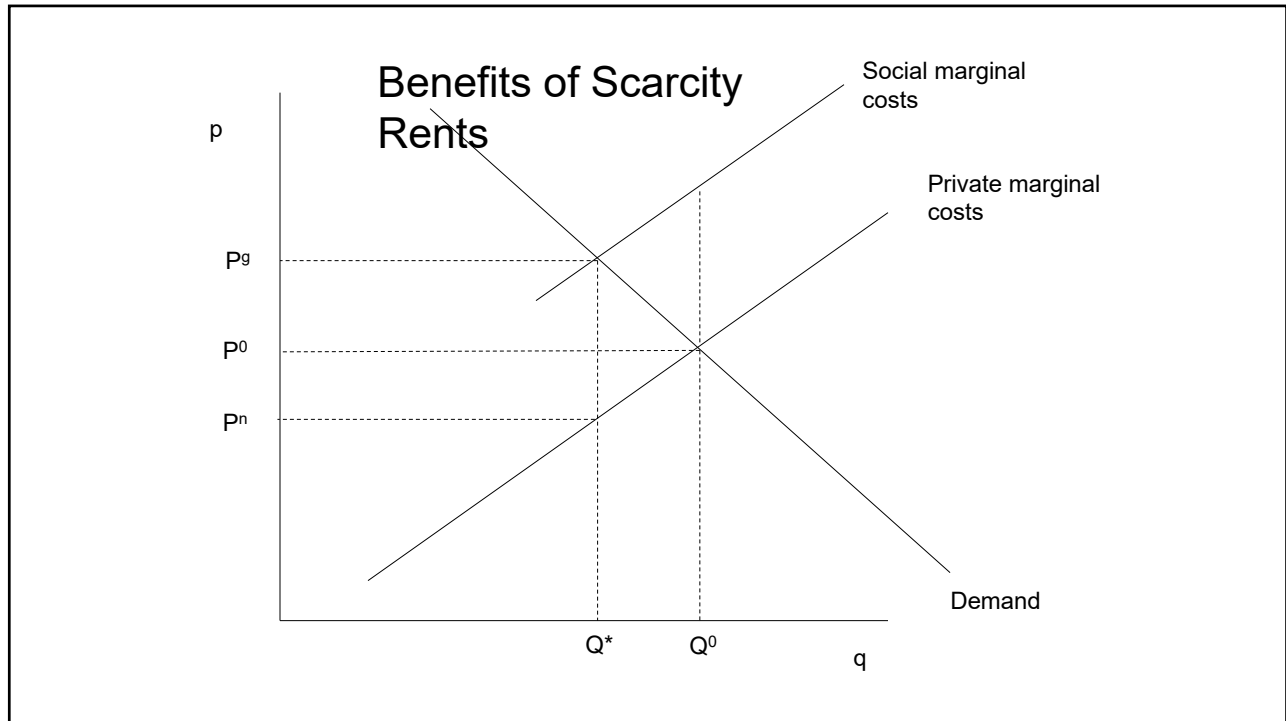
4



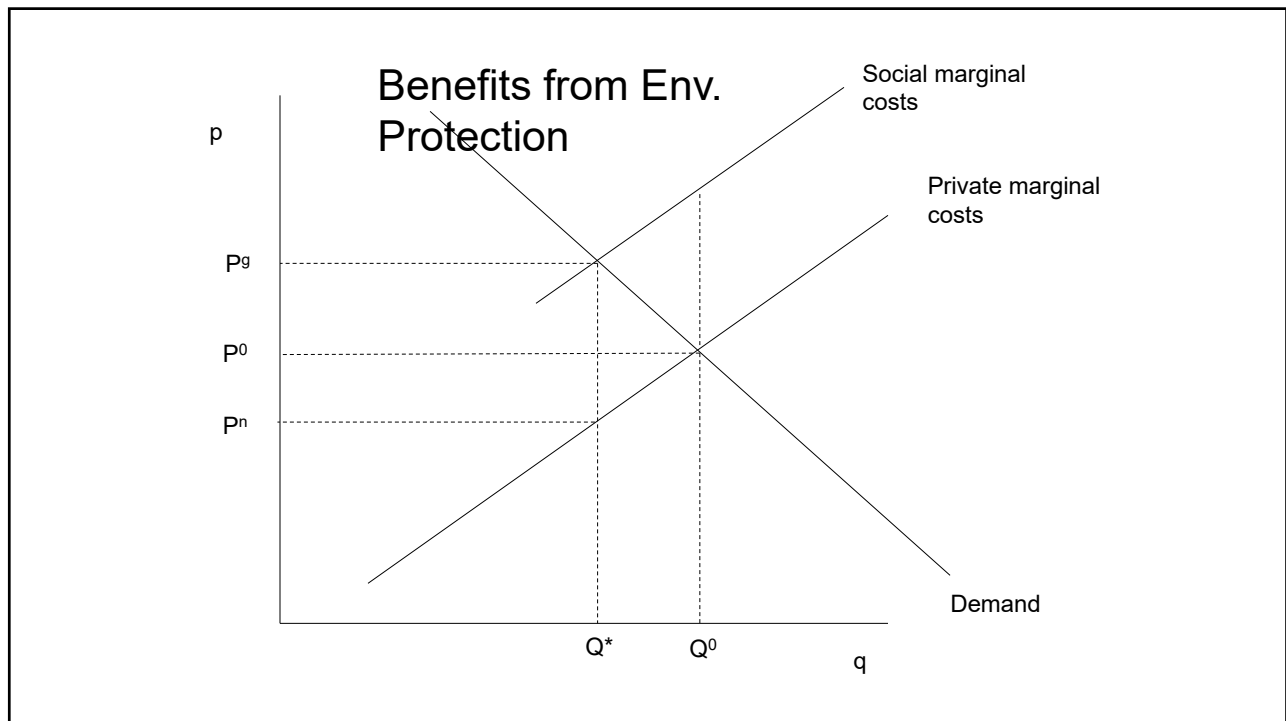
5



6



7

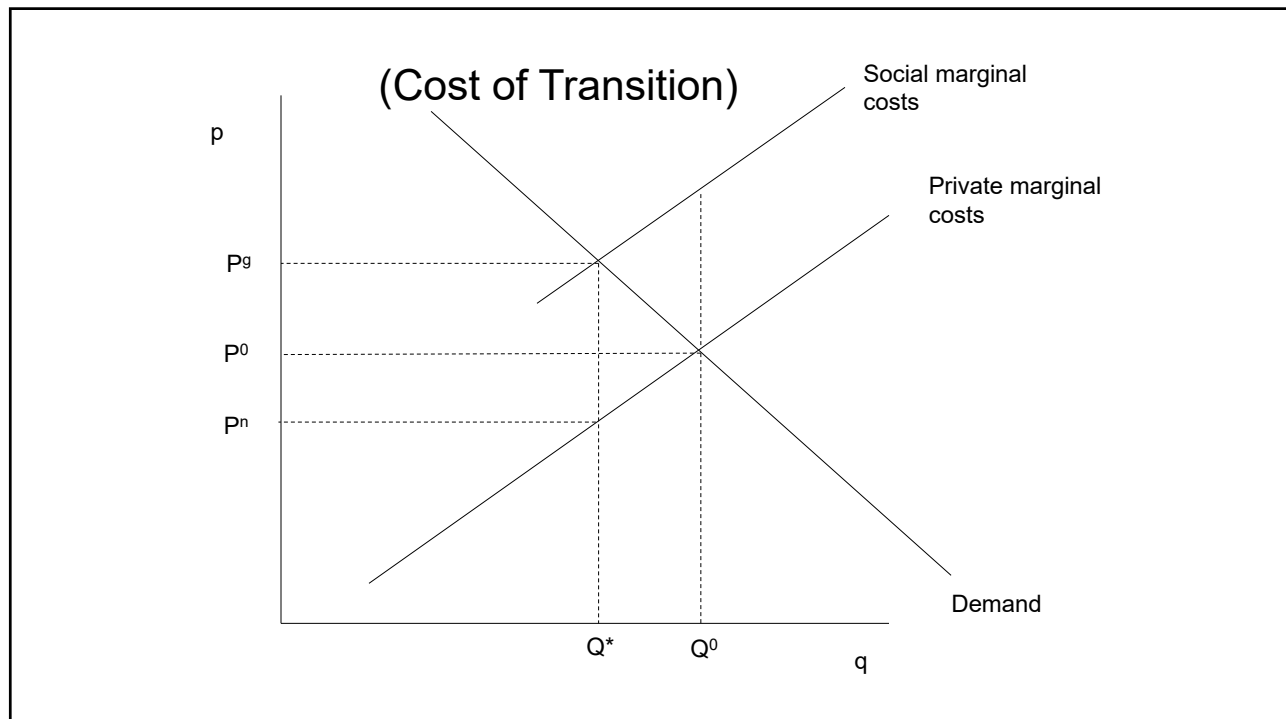


8

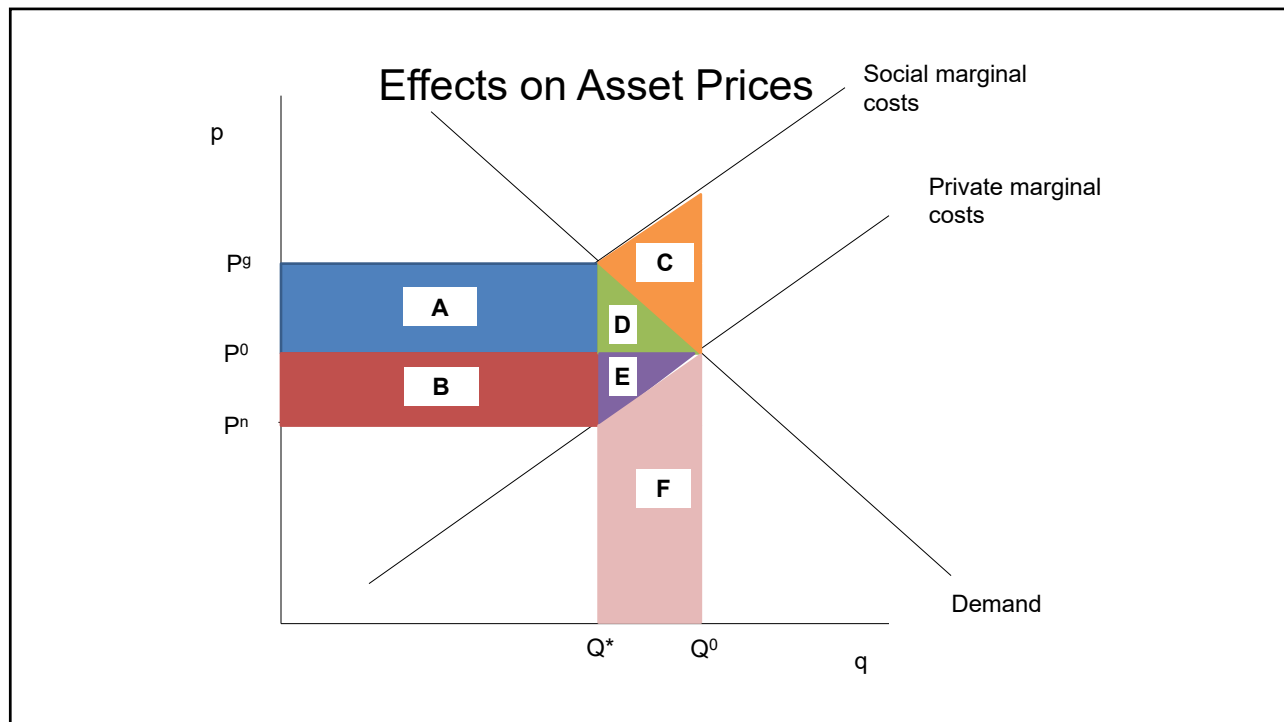
Fullerton

- So far:
- Cost to Consumers:
- Cost to Producers/Factors:
- Benefits from Scarcity Rents:
- Benefits from Env. Protection:
- Net Effect: Gain of

9



10



11

See also Symposium on Distributional Effects of Environmental Policy

- *Review of Environmental Economics and Policy* 13/1, Winter 2019.
- Fullerton, Don and Erich Muehlegger, "Who Bears the Economic Burdens of Environmental Regulations," *REEP* 13/1, 62-82.
- Hsiang, Solomon, Paulina Oliva and Reed Walker, "The Distribution of Environmental Damages," *REEP* 13/1, 83-103.
- Pizer, William A. and Steven Sexton, "The Distributional Impacts of Energy Taxes," *REEP* 13/1, 104-123.

12

See also Paper on Transitional Effect

- Weber, Jeremy G. (2020), “How Should We Think about Environmental Policy and Jobs? An Analogy with Trade Policy,” *Review of Environmental Economics and Policy* 13/1, Winter 2020 14/1, 44-66.
- Four concepts trade scholars have long studied:
 - **1. Adjustment:** How much does trade cause a particular sector to contract?
 - **2. Efficiency:** Do displaced workers quickly find new jobs?
 - **3. Equity:** Does trade mostly affect low-wage workers or lagging regions?
 - **4. Politics:** Do areas harmed by trade support anti-trade candidates?