

## Oligopoly, Tariffs, Crime, and Voting

### Cournot Duopoly model

- no product differentiation

$$BR_1(q_2^*) = q_1^* \text{ and vice versa}$$

- inefficient from firm's point of view

- firms select quantities, not prices

- best suited to long production or short consumption cycles

### Bertrand Duopoly model

- prices lower + quantities higher than Cournot

- undercut each other so long as price exceeds MC

- price setting

### Tariff setting by 2 countries

### A model of crime + police

$$U_G = -x C'' - y^2/x$$

↑  
negative effect of crime  
 $C''$  = cost of 1 police unit

$$U_C = y^{1/2} / (1 + xy)$$

↑  
probability of escaping

criminal payoff

### The median voter theorem

### Strategic voting