

## Are input prices irrelevant for make-or-buy decisions?

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**Abstract** The 1996 Telecommunications Act requires incumbent providers to lease network inputs to rivals at cost-principles-2001t5easT\*3 0 TD -0.00020.3t8.1(E)





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show that this strategic effect does not dominate the entrant's make-or-buy decision for all values of  $W$ .

#### 4 Bertrand vertical differentiation model

The following is a simple quality differentiation model, where we assume that the incumbent produces the high quality good and the entrant produces a lower quality substitute good. In similar fashion to the standard Hotelling framework, we assume that a consumer requires only one unit of the product. A consumer's indirect utility for the high quality good is given by,  $V_h = \dots - p_h$ , while her indirect utility for the low quality good is given by,  $V_l = \dots - p_l$ . The cost function for the high quality good is  $C_h(Q_h) = \dots$  and for the low quality good is  $C_l(Q_l) = \dots$ . The demand functions are  $Q_h(p_h, p_l) = \dots$  and  $Q_l(p_h, p_l) = \dots$ . The profit functions are  $\pi_h(p_h, p_l) = \dots$  and  $\pi_l(p_h, p_l) = \dots$ . The best response functions are  $p_h^*(\pi_l) = \dots$  and  $p_l^*(\pi_h) = \dots$ . The Cournot equilibrium is  $(p_h^*, p_l^*) = (\dots, \dots)$ .



These results appear to be consistent with a gro

$$\frac{2p_{l-h} - p_{h-l} - W_{h-l} - hc_d^E}{(l-h)_l} = 0. \quad (\text{A4})$$

Solving (A3) and (A4)









