"A NEW COST OF MONOPOLY: HOLD-UP OF PERFECTLY COMPETITIVE RETAILERS OR COMPLEMENTARY PRODUCTS"

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Abstract. If a monopolist cannot commit to a wholesale price in advance, even competitive retailers will be reluctant to enter the market, knowing that once they have entered the monopolist has incentive to choose a higher price and reduce their quasi-rents. Retailers earn zero profits in the long run, but this hurts the monopolist by shifting in the retailer short-run supply curve. I call this "competitive hold-up". A similar problem occurs if the monopolist's product is sold directly to consumers but is complementary to a product sold by a competitive industry. This is not double marginalization or the two-monopoly complements externality.

The Model (numerical example version). An upstream monopolist produce a good at constant marginal cost $a = 1$ which he will sell at wholesale price $w$ per unit. A continuum of length $n$ of competing retailers with identical cost curves enter at cost $F = 1$. Each retailer chooses to sell $q(p)$ of the good at marginal cost $c(q) + w$, with $c(q) = q$ here.

| | Monopoly with commitment | Monopoly without commitment | Monopoly with deception | Social Optimum |
|---|---|---|---|---|
| Wholesale price, $w$ | 2.5 | 3 | 3 | 1 |
| Retail price, $p$ | 3.5 | 4 | 3.8 | 2 |
| Amount of retailers, $n$ | 300 | 200 | 300 | 600 |
| Output per retailer, $q$ | 1 | 1 | .8 | 1 |
| | | | | |
| Monopolist profit | 450 | 400 | 480 | 0 |
| Retailer profit | 0 | 0 | -54 | 0 |
| Consumer surplus | 225 | 100 | 144 | 900 |
| Total surplus | 675 | 500 | 570 | 900 |

The model can be adapted to entry of a monopolist when an existing perfectly competitive market sells a complementary good.

*Vote for one of these titles. Check off one of them now. I will ask for you to put your hand up to indicate your vote at the end of my talk.*

(1) THE HOLD-UP PROBLEM IS GREATEST WHEN ONE SIDE OF THE MARKET IS PERFECTLY COMPETITIVE

(2) COMPETITIVE HOLD-UP: MONOPOLY PRICES ARE TOO HIGH TO MAXIMIZE PROFITS WHEN RETAILERS OR COMPLEMENTS ARE PERFECTLY COMPETITIVE

(3) A NEW COST OF MONOPOLY: HOLD-UP OF PERFECTLY COMPETITIVE RETAILERS OR COMPLEMENTARY PRODUCTS

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