

How Useful Is a Product Umbrella for Reputation? , October 13 2009

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Firms produce one good, which has either low or high quality, chosen by each firm anew each of an infinite number of periods. Firms have marginal cost c for low quality and $(1 + \gamma)c$ for high quality.

Amount x of consumers are willing to pay up to v for low quality or $(1 + \theta)v$ for high quality. Quality is unobservable before purchase, but becomes common knowledge after purchase. The interest rate is r , payments occur at the end of periods.

We will assume that $\theta > \gamma$, which is to say that high quality is efficient. An assumption that will be varied is $v > c$: that low quality is s better than no production at all.

The competitive equilibrium price is

$$p^* = c(1 + \gamma) + r\gamma c, \tag{1}$$

The monopoly equivalent of p^* is

$$p^*(monopoly) = [c(1 + \gamma) + r\gamma c] + [(1 + \theta)v - c] \tag{2}$$

but the monopoly will charge $v(1 + \theta)$

Proposition 1: A shift from competition to monopoly can (a) reduce quality and (b) reduce industry profit.

Reason: If the monopoly can still sell low quality profitably, it has less incentive to maintain a reputation for high quality than a zero-profit competitive firm.

Proposition 2: A monopoly selling two products can maintain high quality for each when two monopolies each selling one of the products could not.

Reason: With Umbrella Beliefs, the multiproduct monopolist has more to lose from low quality.

Proposition 3: A competitive industry made up of firms selling two products cannot maintain high quality if an industry of firms selling one product each could not.

Reason: With Umbrella Beliefs, the multiproduct competitive firm does not have more to lose from low quality.

Proposition 4: Suppose some firm has an exogenous monopoly on one product, but there is open competition for another product. If the monopoly is allowed to produce both products, it will capture both markets. If there exists another firm with a monopoly on some third product, allowing both monopolies to produce the competiive product will result in one of the monopolies capturing the competitive market, and this monopoly leveraging will help consumers.

Reason: The monopolist has more to lose, and so can price lower than competitive firms.

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