

Economics 380: Solutions 1

28 September, 2006

1. Haagen Dazs analysis:

- (a) Substitutes: Premium and Standard Ice Cream, Other Desserts and Snacks.
- (b) Buyers: Supermarkets, Corner stores, Direct sales to individuals. Bargaining power: Moderate.
- (c) Suppliers: Milk board, Packaging, Sugar. Bargaining power: Moderate.
- (d) Rivals: Ben & Jerry's, Dreyer's. Rivalry: Loose Oligopoly with competitive fringe. Competition relaxed.
- (e) Entrants: Other makers of desserts and sweets, health foods.
- (f) Compliments: Hot fudge sauce.

2. Possible market definitions:

- (a) A small market: Action movies one can buy on DVD.
- (b) A bigger market: Action movies on DVD or in the cinema.
- (c) From a family's perspective on a Saturday evening: playing board games, going bowling, going to the cinema.
- (d) From the perspective of buying a Christmas present for a 15 year old nephew: books, CDs, a football.

3. Vertical differentiation: everyone prefers A over B when the price is the same. Horizontal differentiation: people will differ in preference when the price is the same.

- (a) Vertical.
- (b) Horizontal.
- (c) Vertical. (Remember we should equalise the price of the two goods).

4. Possible reasons:

- (i) Create loyal customers.
- (ii) Prevent entry from cheaper car makers (e.g. from South Korea, Malaysia).
- (iii) Buyers of small cars are likely to be poor. The car companies can then make money on financing.

5. Bargaining between Ford and Hunts.

- (a) Nash bargaining implies a price of \$150. Both make profits \$5,000.
- (b) If Hunts invest in the Wundermaschine the price will be \$125. Both firms make profits \$7,500. The Wundermaschine costs \$3000, so Hunts should not invest.

(c) Before the Wundermaschine is bought the total surplus is $\$20,000 - \$5,000 - \$3,000 = \$12,000$. Both should therefore get $\$6,000$ using Nash bargaining. This implies a price of $\$140$.

6. Some possible responses the Zara CEO may have to the suggestions:

(a) This may be cheaper than Zara's typical suppliers. On the downside, Morocco is a little further away, the cost savings may require large runs and there may be language difficulties.

(b) Zara typically has lots of variety and a quick turnover in their stores. A permanent star designer exhibition would conflict with this. Zara's clothing is also relatively cheap (for what you get) and this may be sacrificed.

(c) Parents are unlikely to value the comparative advantages of Zara: recent fashion and large variety. While this may be successful, it is not in keeping with their current strategy.

7. Hotelling model.

(a) As A moves towards the centre, differentiation will fall and price competition will increase. This lowers prices, B's profits and will lower A's profits when they are too close. In equilibrium, the firms will have some space between them, possibly locating at the extremes.

(b) Assume both prices are fixed and identical. Then A should always move closer to B: they gain market share, while prices are unchanged. In equilibrium, both firms will locate at $1/2$.

8. All three are necessary conditions for holdup. If the asset is not specific then competition will lead to efficient investments. If the firms can write a complete contract, there is no holdup problem. If the firms can commit not to hold each other up then, by definition, holdup will not occur.