Economics 380: Suggested Solutions to Midterm 1

24 January, 2004

1. (a) Insider substitutes: Other cars. Outside substitutes: Other forms of transportation.
(b) Buyers: Consumers (little bargaining power), Rental car firms (more bargaining power).
(c) Suppliers: Components manufacturers (generally, little bargaining power).
(d) Rivals: GM, Toyota, etc.
(e) Entrants: Niche manufacturers. Unlikely anyone else will enter the car market.
(f) Complements: Tires, mechanics, roads, maps, financing.

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:
(a) Create loyal customers.
(b) Prevent entry from cheaper car makers (e.g. from South Korea, Malaysia).
(c) Buyers of small cars are likely to be poor. The car companies can then make money on financing. (This suggestion comes from one of your classmates).

5. In hindsight, this isn't a particularly well–phrased question. I believe the best way to think about clustering is in chassis sizes which, I have been told, group around several common sizes (although I am unaware of a formal study). Prices, however, are more continuous since any car can have multiple upgrades. In any case, some possible reasons for clustering include:
(a) Demand is clustered around the common sizes.
(b) Customers have problems comparing unorthodox sizes, especially as car magazines like to compare new cars to similar models. Customers may then be wary of new types.

(c) Costs are lowest around these sizes. (Although I find this unlikely).
(d) If consumers are loyal then having identical product ranges means that when consumers change their car type they can always stick to their preferred brand. This loyalty lessons price competition. In comparison, with interlacing product ranges consumers will change manufacturers and have less loyalty.