# Economics 380: Midterm Solutions 1

12 October, 2005

1. "Five" forces analysis of Google. I'll consider the market for internet search, although they are in many businesses.
(a) Substitutes. Inside the market: other search portals either internet–wide or embedded in websites. Outside the market: yellow pages are another obvious search device.
(b) Buyers. The people who advertise on Google and the people who buy Google to embed into their own sites. Since Google is is such a strong position, I would imagine these buyers generally have little bargaining power.
(c) Suppliers. Servers and humans with technical expertise. I would imagine these suppliers face a lot of competition and have little bargaining power.
(d) Rivals. Yahoo, Jeeves and many upstarts. Google has a fairly dominant position in the market, although this can change very quickly.
(e) Entrants. Potentially, anyone with a good idea. There is no shortage of venture capital for people to get into this business.
(f) Compliments. One clearly needs internet to have access to Google. The biggest compliment are the people who write websites.

2. 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.

3. 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.

4. 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.