

Economics 380: Homework 1

17 January, 2004

1. Complete the “five” forces analysis of Haagen Dazs in the slides for week 1.

2. Suppose Ford bargains with Hunts, a supplier of crankshafts. Hunts has cost \$100 per crankshaft; Ford has value \$200 per crankshaft and requires 100 crankshafts.
 - (a) Using the Nash bargaining solution what price would we expect Ford to pay? What are the profits of Ford and Hunts? (Think of Ford’s profits as their value minus the price they pay).
 - (b) Suppose Hunts can invest in a Wundermaschine which costs \$3000 and lowers the cost per crankshaft to \$50. If Hunts buys the Wundermaschine and subsequently bargains with Ford what price would we expect Ford to pay? What are the profits of Ford and Hunts? Should Hunts buy the Wundermaschine?
 - (c) Suppose Ford and Hunts bargain *before* Hunts buys the Wundermaschine. The two firms agree that Hunts will pay for the Wundermaschine and then split the remaining surplus 50:50. What price would we expect Ford to pay? What are the profits of Ford and Hunts?

3.
 - (a) You would like to buy a car which you value at \$15,000. Suppose that if you pay a price p you gain utility $15,000 - p$. You don’t know the reservation price of the dealer but think it is uniformly distributed between \$10,000 and \$15,000. You make a final, take-it or leave-it, offer. What price should you name?
 - (b) Instead, suppose you value the car at \$20,000. What should you offer?
 - (c) Instead, suppose you value the car at \$25,000. What should you offer?
 - (d) Do you think that being able to make multiple offers would enable you to get a better deal?

4. Vertical differentiation, Horizontal differentiation or both?
 - (a) Vacation to Paris vs. Vacation to Rio de Janeiro.
 - (b) Vacation to Paris vs. Vacation to Paris, Texas.
 - (c) Date with Johnny Depp vs. Date with Ashton Kutcher.
 - (d) Date with Kate Winslet vs. Date with Kirsten Dunst.