Travis Moore

ECN100: Section A — Summer 2016

Instructor: Liliana Halim Lawrence

## Homework Week 5 Monopolistic and Oligopoly

- 1. True or False? If False, explain why.
- a) Like a firm in a perfectly competitive industry, a monopolistically competitive firm is willing to sell a good at any price that equals or exceeds its marginal cost.

True, like any business, selling a good above marginal costs is preferable to selling a good below the marginal cost.

b) Fads and fashions are more likely to arise in monopolistic competition or oligopoly than in monopoly or perfect competition.

True, fads and fashions can be made through successful advertising.

c) Suppose there is a monopolistically competitive industry in long-run equilibrium that possesses excess capacity. All the firms in the industry would be better off if they merged into a single firm and produced a single product, but whether consumers are made better off by this is ambiguous.

True, without the competition of other companies, one big company could set its own price in the market, however consumers may not be better off if this were to happen.

- d) In the long run, it is impossible for firms in a monopolistically competitive industry to create a monopoly by joining together to form a single firm.
  - False, in the United States of America it is illegal to have a monopoly on a good.
- e) A successful brand name is like a barrier to entry.

True, a strong brand identity can act like a barrier to entry.

## 2. Use the table below to answer the following:

Industry	HHI	Ad expenditures (\$millions)
Restaurants	179	\$1,784
Cereal	2,098	732
Movie Studios	918	3,324
Laundry Detergent	2,068	132

a) Which market structure – oligopoly or monopolistic competition – best characterizes each of the industries?

The Cereal and Laundry Detergent industries have an HHI above 1,800 which indicates this industry is an oligopoly. Restaurants and Movie Studies have an HHI below 1,000 which indicates a strongly competitive market, or monopolistic competition.

b) Which type of market (oligopoly or MC) has higher advertising expenditures? And, explain why the relationship might exist.

Monopolistic competition has higher advertising expenditures. This can most likely be explained by the highly competition nature of this industry and the need to set your business apart from other businesses through successful advertisement in order to draw in or keep business high.

3. Game Theory in Oligopoly: The following payoff matrix is for two firms in a duopoly markets, and Firm A and B can either choose Low Price or High Price strategy with the following results reflecting their actions.

Firm B:

Low Price High Price

Firm A:Low Price Firm A's profit: \$1,600 Firm A's profit: \$1,800

Firm B's profit: \$2,500 Firm B's profit: \$2,800

High Price Firm A's profit: \$1,800 Firm A's profit: \$2,000

Firm B's profit: \$2,200 Firm B's profit: \$2,400

a) If the two firms collude and decide jointly on their pricing strategy, with the goal of maximizing their joint profits, what combination of strategies, and what's the amount of the greatest joint profit?

Firm A low price with Firm B high price has a total profit of \$4,600.

b) Which strategy is Firm A's dominant strategy?

High Price

c) Which strategy is Firm B's dominant strategy?

Low Price

d) What is the Nash Equilibrium for this game?

Firm B high price with Firm A low price and Firm B high price with Firm A high price.