

PRINCIPLES OF MICROECONOMICS, SEMESTER 1 2016

Tutorial 7 (Due end of Week 9)

Monopolistic Competition

Q1. The wine market in Australia is an example of monopolistic competition.

- a. What are profits in this market in the long-run? Draw the relevant long-run firm-level diagram, showing the price mark-up and excess capacity.
- b. Australian wine makers are keen to preserve their supranormal profits. List all the broad strategies you can think of that would help them maintain such profits.
- c. 'Cleanskin' is a term for a wine which does not have a label, and thus does not indicate the winery's name. It is usually sold at a lower price than most other wine. Explain how Australian wine makers would use cleanskins to increase their profits. What is the relevant economic concept?
- d. Now assume that there are two very distinct market segments - old wine drinkers and young wine drinkers. Do you think that there is any difference between the price elasticity of demand between these two groups of wine drinkers? How could you illustrate these two consumer segments in the one diagram? What would the combined market demand curve look like?

Oligopoly (Game Theory)

Q2. There are two small stores in a small PNG village, and they are the only suppliers of fuel for about fifty kilometres in any direction. On any given day, there are two prices that the stores can set: either 'high' or 'low'. If a store sets a low price, and the other a high price, the one with the low price takes all of the business. If they select the same price, they end up splitting the profits equally (but obviously shared profits will be higher when prices are higher than when they are low).

- a. Using game theory, illustrate this 'game' in a pay-off matrix.
- b. What is the dominant strategy for each firm?
- c. Is there a Nash Equilibrium in your model? If so, where is it?
- d. The village leadership have banned the store owners to meet and set prices. How could both store owners attempt to maximise their profits over the long-run without breaking the rules set by the village leaders?
- e. Despite it being banned, the owners meet in secret and agree to fix prices. Assuming they are not caught, do you think this agreement would last?
- f. What would your answer to 4e) be if we were considering a similar agreement between all of the stores within 20km of the University of Papua New Guinea?