Price Theory I TFUs
Practice Set 04

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1. Richer families are more likely in any given society to employ maids and other domestic help than poorer families. *True, false, or uncertain.* This implies that the importance of domestic help should increase over time as a country develops and per capita incomes grow. (3.2.2, Final 2001)

   False. Income effect raises the demand for employing maids, but the substitution effect, which may change the relative prices of household chores vs. employing maid to do the household chores, may reduce such demand.

2. A world market for saleable quotas for greenhouse-causing gases with a fixed supply of quotas, Q, would lead to more efficient allocation of production of these gases than would a unit tax on the emission of these gases by all firms in the world, if the tax also led to Q units of these gases being produced worldwide. (3.4.3, Core 2003)

   False. The two policies have the same deadweight losses, which means two policies are "equivalent" in a sense of efficiency. The only difference is the distribution issue of some part of surplus, which belongs to the producer's surplus in the quota system, but becomes government revenue in the unit tax system.

3. A permanent reduction in the cost of producing gasoline may increase car sales more in the short run than in the long run but will increase the demand for car maintenance services more in the long run than in the short run. (3.6.2, GSB Final 1999)

   True. Assuming cars and gasolines are complements, there is an increase in demand for cars. Since cars are durable goods, sales shoots over the long-term steady-state and thus there are more sales in the short run. Furthermore, the demand for car maintenance rises more in the long-run.

4. In a world with N goods, a uniform percentage increase in the price of N/2 of these goods will reduce spending on these goods if all goods are normal for all consumers. (3.9.2, Final 2011)

   False. The quantity will decrease; the spending may not necessarily decrease.

5. Often the retail prices for popular videos are lower than the prices for less popular videos. This proves that the video retailing cannot follow the economic model in the theory. (4.1.3)

False. Here we need to recognize that prices are determined by the elasticity of demand, not just the level of demand. Popular videos are those with greater demand, not necessarily those with less elastic demand. In fact, some of the less popular videos appeal to a niche market while lower prices on popular videos make them attractive to a large market. Finally, the optimal price for videos that will mostly be rented is quite high (which is what is done with most less popular titles) while a popular video is often priced to appeal to the sell-through market where tapes are sold (rather than rented) to customers.

6. Rent control can reduce the demand for new housing even if the prices of new housing are not controlled. (4.22.1, Core 1997)

   False. Rent control decreases the discounted rents of the housing owners, so the demand for housing will be reduced. As a result, price of housing will decrease.

7. If a retailer is holding inventories of goods that he sells, he must be expecting the retail price of these goods to be rising over time because the inventories are costly to hold. (4.20.4, Fall 2008)

   False. Suppose the demand for the retailer's services is quite variable and that customers do not like showing up and not being served because there is no stock. Then, to prevent customers from fleeing to other retailers, a store may well stock excess inventories to guard against this kind of event. Similarly, uncertainty about when and how much they would be resupplied from the wholesale markets could lead them to do this.

8. A good with important network economies for its customers would have an elastic aggregate price response even though the individual consumer responses were price inelastic. (4.16.1)

   False. This is not necessarily true – in fact there are good reasons to believe that more often than not this will not be the case. Consider Microsoft O"ce. Because virtually everyone uses the .doc and .ppt file formats that are not very compatible with other processors, Microsoft is able to keep its prices high. The reason for this is that network effects can make the substitution effect very low for necessities, such that the overall elasticity gets maintained at a low level.

9. *** Suppose two countries that have the same aggregate CRS production function. The amount of capital is the same in both countries, and capital is immobile across countries and it is fixed in supply. Country A has less labor than B. Country A can either allow unlimited immigration from Country B or it can charge a fee to immigrants from B. In both cases, the average income of natives in A rises, but this average income rises more if A charges immigrants a fee that maximizes the revenue collected from the immigrants. (4.8.2, Midterm 2008)

   Uncertain Charging a fee to immigrants has two opposite effects: 1) It transfers some income from immigrants to natives in A, which raises the income of natives in A. 2) It discourages immigration from B to A, which tends to lower the income of natives in A, compared with unlimited immigration. Whether the overall effect on average income of natives in A depends on the relative strengths of the two effect, which in turn would depend on the elasticity of supply for labor. If labor supply is inelastic, then it's more likely to improve the income of A natives by charging an immigration fee.