

## 재정학 연습문제 풀이

### 15. 조세와 효율성

15장에서 일부내용은 강의하지 않은 관계로 (예를 들어, 보조금 부분)  
시험범위에 들어가지 않음.

#### [연습문제 #1]

- a. The supply of land is fixed, or perfectly inelastic, so there is no excess burden because the lower price that sellers receive does not cause quantity supplied to fall.
- b. The use of cell phones is probably fairly price-elastic, which implies that the excess burden could be large.
- c. It is possible that companies could identify themselves as high-tech in order to receive the subsidy. Thus, the supply is quite elastic, and there will be substantial excess burden.
- d. Consumers and sellers will likely agree to avoid cups and glasses in order to avoid the tax. A tax that is easily avoided does not have much of an impact, except to create some inconvenience, and does not raise revenue.
- e. Card companies can easily increase or decrease the number of cards in a pack, avoiding the tax and reducing the excess burden.
- f. There are many good substitutes for blueberries. Therefore, their demand is quite elastic, and a tax on them will have a substantial excess burden, relative to the size of revenues collected.

#### [연습문제 #2]

Equation 15.3 relates excess burden to elasticity, price, quantity, and the tax rate. Replacing a general sales tax with a tax on a few products would require a higher tax rate, which increases excess burden, other things equal. The equation indicates that it is better to tax many commodities at a lower rate than to tax a few commodities at a higher rate so the change in the tax structure for Michigan would decrease efficiency.

#### [연습문제 #3]

The quote is misleading. The way in which the presence of the t-squared makes the tax more “important” is that when the tax increases, the excess burden increases with its square. Thus, when the tax doubles, the excess burden quadruples.

#### [연습문제 #5]

It is likely that the demand for owning at least one television is quite inelastic. It follows that the excess burden from a \$233 per year television tax is small relative to the revenues that are collected.

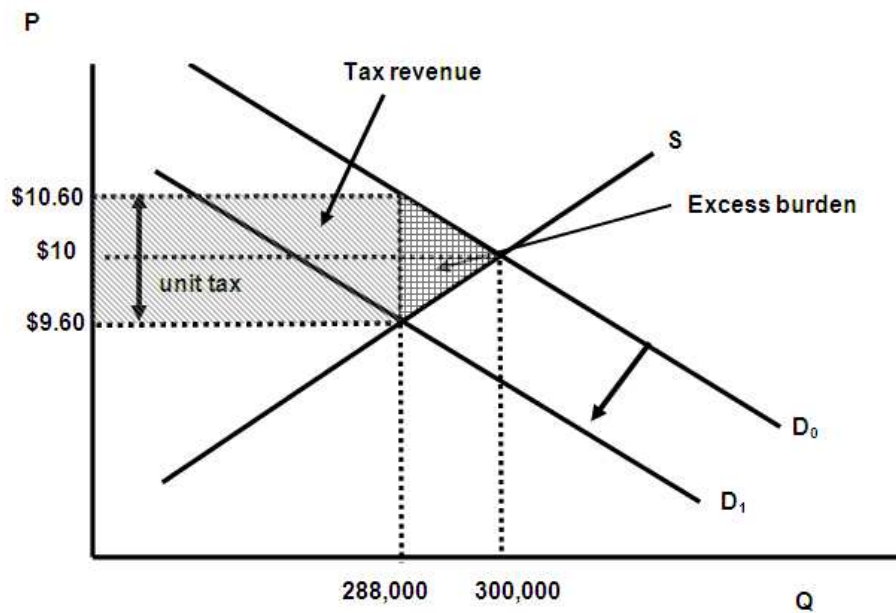
[연습문제 #8]

a. Before-tax equilibrium:  $P = \$10$  and  $Q = 300,000$

After-tax equilibrium:  $P = \$10.60$  and  $Q = 288,000$

Consumers pay  $\$10.60$  and producers receive  $\$9.60$ .

Excess Burden =  $\frac{1}{2}(12,000)(\$0.60) + \frac{1}{2}(12,000)(\$0.40) = \$6,000$ .



- b. If the negative external cost were equal to \$1 per gallon, then a \$1 tax would achieve an efficient allocation and would create no excess burden. With a negative external cost of \$0.50 per gallon, there is still an excess burden associated with a \$1 per gallon tax, but it is smaller since the efficient level of output in this market would be between 288,000 and 300,000.