

## 經濟學原理一課堂實驗(五)：市場交易 C——課稅(Taxation)

### Principles of Economics I - Classroom Experiment (5): Market Trading C - Taxation

我們選出六十位同學參與交易實驗，三人一組，其中十組為買方、十組為賣方。每回合中，各組可以買賣一單位的商品。每組會拿到一張有數字的撲克牌 (J=11, Q=12, K=13, A=1)。拿到紅色(方塊、紅心)的是賣方，拿到黑色(黑桃、梅花)的是買方。請收好這張牌使別人沒辦法看到牌面花色數字。

Sixty students will participate by forming 20 groups, 10 buyers and 10 sellers. In each round, each group can buy or sell one unit. Each group will receive a playing card (J=11, Q=12, K=13, A=1). If your card is red, you are a seller; if it is black, you are a buyer. Please store your card properly so no one can peek.

**賣方(紅)：**「牌面數字乘以十」代表賣出商品所需付出的生產成本，因此賣出商品的利潤就是所賣出的價格減去「牌面上的數字乘以十」。舉例來說，如果拿到的卡片是紅心二，賣出商品的價格是三十元，那利潤就是(三十減二十等於)十元。如果賣出商品的價格是一百元，那利潤就是(一百減二十等於)八十元。如果沒有達成交易，該回合的利潤就是零，但也不必負擔任何成本。

**Seller (Red):** Your cost of production is the “number on your card multiplied by 10.” So, your profit is the difference between the selling price and this cost. For example, if your card is “2 of hearts,” and the selling price is \$30, your profit is  $\$30 - \$(2 \times 10) = \$10$ . If the selling price is \$100, your profit is  $\$100 - \$(2 \times 10) = \$80$ . If you do not trade, you earn no profit (but incur no cost).

**買方(黑)：**「牌面數字乘以十」代表買到商品您會獲得的價值，因此買到商品的利潤(好處)就是「牌面上的數字乘以十」減去買進商品的價格。舉例來說，如果拿到的卡片是黑桃九，買進商品的價格是四十元，那利潤(好處)就是(九十減四十等於)五十元。如果買進商品的價格是八十元，那利潤(好處)就是(九十減八十等於)十元。如果您沒有達成交易，您該回合的利潤(好處)就是零。

**Buyer (Black):** Your value of the product is the “number on your card multiplied by 10.” So, your “profit” (gain) is the difference between this value and the price paid. For example, if your card is “9 of Spades,” and the price is \$40, then your “profit” (gain) is  $\$(9 \times 10) - \$40 = \$50$ . If the price is \$80, then your “profit” (gain) is  $\$(9 \times 10) - \$80 = \$10$ . If you do not trade, you earn/gain nothing.

#### 交易規則 Trading Rules：

(A) **一般交易規則(General Rules)：**實驗者充當交易員，聽取買賣雙方舉手喊價：「X 元買進」或「Y 元賣出」，並紀錄在黑板上。如果有買家或賣家願意接受另一方的喊價，則喊「成交」。成交雙方則到前面來向實驗者申報繳交撲克牌。每次成交後再重新開始下一單位的喊價。The experimenter acts as the specialist taking orders from both sides (“buy \$X” or “sell \$Y”) and recording them on the blackboard. If you want to accept the other side’s standing offer, simply shout “take” and come to the front to report your trade and return your card.

(B) **特殊交易規則(Special Rules)：**請注意實驗者每回合所宣佈的不同課稅方式：第一回合不課稅，第二回合賣方須繳交 20 元營業稅，第三回合買方須繳交 20 元健康捐。Please pay attention to the experimenter’s announcement of different taxes. In round 1, there is no tax. In round 2, sellers pay a sales tax of \$20. In round 3, buyers pay a use tax of \$20.

利潤記錄與結算：每回合後，請在記錄表上填入報酬(賣方則填入成本)和成交價格，並計算本回合的利潤。最後的總利潤除以十則是您所獲得的分數。您的分數越高，成績越高。

Profit Calculation: After each round, please record your value (or cost) and transaction price. Then, calculate your profit or gain for this round. Total profit divided by 10 will be your grade for this experiment.

課稅實驗紀錄表 Record Sheet for "Taxation"

Name \_\_\_\_\_ Major/Year \_\_\_\_\_ Student ID# \_\_\_\_\_  
 姓名：\_\_\_\_\_ 系級：\_\_\_\_\_ 學號：\_\_\_\_\_

姓名：\_\_\_\_\_ 系級：\_\_\_\_\_ 學號：\_\_\_\_\_

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回合 Round	交易規則 Trading Rule	買方報酬 Buyer Value	價格 Price	賣方成本 Seller Cost	本回合利潤 Profit (this round)	備註 Memo
1	一般規則 No Tax					
2	賣方須繳交 20元營業稅 Seller pays \$20 sales tax					
3	買方須繳交 20元健康捐 Buyer pays \$20 use tax					
	總利潤 Total Profit					

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課稅實驗觀察紀錄表 Observation Record Sheet for “Market Trading C - Taxation”

Name \_\_\_\_\_ Major/Year \_\_\_\_\_ Student ID# \_\_\_\_\_  
 姓名：\_\_\_\_\_ 系級：\_\_\_\_\_ 學號：\_\_\_\_\_

姓名：\_\_\_\_\_ 系級：\_\_\_\_\_ 學號：\_\_\_\_\_

回合 Round	交易規則 Trading Rule	初始價格 Initial Price	中間價格 Intermediate Prices	收盤價格 Final Price	雙方喊價情形 Bidding Observations
1	一般規則 No Tax				
2	賣方須繳交 20 元營業稅 Seller pays \$20 sales tax				
3	買方須繳交 20 元健康捐 Buyer pays \$20 use tax				

Answer the following questions 回答下列問題：

1. How do taxing different parties affect bidding and equilibrium prices? 對某一邊課稅如何影響喊價情形與價格？

2. Is taxation “good”? Why or why not? 課稅有比較「好」嗎？為什麼？