練習題

1. 一個完全競爭廠商的經濟利潤值為 0，所指為何：

a. 總收益等於所有外顯與隱含成本之和。

b. 邊際收益等於其邊際成本。

c. 平均收益等於其邊際成本。

d. 平均總成本等於其邊際成本。

e. 以上皆非。

A firm’s economic profit is the difference between its total revenue and the sum of its explicit and implicit costs. So, its economic profit is zero when its total revenue is equal to the sum of its explicit and implicit costs.

2. 正確或錯誤：請問下列敘述正確嗎？不論正確與否，請說明你的理由：

a. 經濟座右銘「桌上一定不會有現金」是指從來沒有未被開發的經濟性機會。

b. 在競爭環境中，當市場達到長期均衡時，廠商不會有任何的會計利潤。

c. 廠商在短期間可以藉由引入成本節省創新而得到經濟利潤。

1. False. The maxim tells us that there are no unexploited economic opportunities

*when the market is in long-run equilibrium*. In fact, there often are unexploited economic opportunities in the short run when markets are not in equilibrium.

1. False. Firms in long-run equilibrium make zero economic profits. They make a

positive accounting profit since, in order to stay in business, the firm must earn enough revenue to cover both explicit costs *and* implicit costs. Thus, accounting profit, which is equal to total revenue minus explicit costs, must equal the opportunity cost of the owner’s resources that have been invested in the firm.

1. True. Firms that introduce cost-saving innovations can earn economic profits

until other firms adopt their innovations. As the innovations spread, the industry curve will shift right, causing the market price of the good to fall and short-term economic profits to fall.

3. John Jones 在大學城經營一間自己的小餐館，其年收益為 5,000 美元，而每年的支出如下所示：

|  |  |
| --- | --- |
| 勞動力 | $2,000 |
| 食物與飲料 | 500 |
| 電力 | 100 |
| 汽車租賃 | 150 |
| 房租 | 500 |
| 設備貸款利息 | 1,000 |

a. 請計算 John 每年的會計利潤。

b. John 每年可以自回收鋁罐賺取 1,000 美元，不過他比較喜歡經營小餐館；事實上，他每年願意支付 高達 275 美元去經營小餐館，而不做回收工作。請問經營這間小餐館可以賺到經濟利潤嗎？ John 應該留下來繼續經營小餐館嗎？請說明之。

a. John’s accounting profit is his revenue minus his explicit costs: $5,000 - $4,250 =

$750

1. In this case, John’s opportunity cost to run the café is $725 per year ($1,000 - $275 = $725). Thus, the café is making an economic profit of $25 per year ($5,000 - $4,250 - $725 = $25). Since the café is earning an economic profit, John should stay in the café business.

4. 請參考第 3 題的資料回答以下問題。

a. 假設小餐館的收益與支出維持相同，但是回收收入上升至每年 1,100 美元，則此小餐館是否仍可以取 得經濟利潤？請說明之。

b. 假設 John 在購買設備時，不是以年利率 10% 的 10,000 美元貸款支付，而是拿出自己的資金，則前題之 3a 及 3b 的答案會出現什麼變化？

c. 若約翰可以一年自回收工作得到 1,000 美元，而他對於回收與經營小餐館並無偏好，則他經營小餐館時，每年需增加多少額外收入，才能賺取正常利潤？

a. In this case, John's opportunity cost of running the café is $825 per year ($1,100 –

$275 = $825). Thus, the café is earning an economic loss of $75 per year ($5,000 - $4,250 - $825 = -$75). Since the café is earning an economic loss, John should not stay in the café business.

1. John’s accounting profit equals his revenue minus his explicit costs. The answer

to part a changes: If he doesn’t need a loan, then his explicit costs equal $3,250. So, his accounting profit equals $1,750 ($5,000- $3,250 = $1,750).

The answer to part b does not change. If John invested $10,000 of his own money in the café, he could have earned $1,000 per year in interest by putting the money in a savings account. That amount is an opportunity cost that must be included when calculating economic profit. Thus, the reduction in explicit costs, by not taking out the loan, is offset by the increase in implicit costs of investing his money in the café. John’s economic profit is therefore unaffected.

1. To earn a normal profit, the café would have to cover all its implicit and explicit

costs. The opportunity cost of John's time is $1,000 per year while the café's accounting profit is only $750 per year. Thus, the café would have to earn additional revenues of $250 per year in order for John to make a normal profit.

5. 請詳細說明，為何在沒有專利法的前題下，一家豆腐工廠發明一項創新技術，可以讓整體豆腐市場的 供給曲線向右移動。另外，最終結束其右移的因素是什麼？

Without a patent, there is nothing stopping the innovation from spreading across the industry to other firms. As knowledge of the innovation spreads, more firms will make profits, and those profits will catch the attention of more and more outside investors, who will desire to enter the industry. As they enter the industry, the supply curve will shift to the right, which will reduce the price and eventually eliminate the profits generated by the innovation.

6. 紐奧良 (New Orleans) 有 200 家廣告公司，其中 199 家廠商都可以得到正常利潤值 500,000 美元的收入，而第 200 家公司僱用一位具有不凡天賦的設計師 Janus Jacobs，使該廠商可以收到 1,000,000 美元之收入。

a. Jacobs 會賺到多少收入？她的每年薪資有多少比例會是經濟租？

b. 為何 Jacobs 任職的廣告公司仍然無法賺到經濟利潤？

1. The company that employs Jacobs will collect $500,000 more in revenue than the other advertising companies in New Orleans. Thus, Jacobs will earn $600,000 per year: the normal salary for a designer ($100,000) plus the additional revenue Jacobs generates for the firm that hires her ($500,000). Since Jacobs’ economic rent is $500,000 per year, 5/6 of her salary (roughly 83 percent) is economic rent.
2. If the company that employs Jacobs tries to pay her the salary of a normal

designer, the owners of other companies will have an incentive to offer Jacobs a higher salary to bid her away because she generates $500,000 per year in additional revenue for whichever company hires her.  In fact, Jacobs' salary will be bid up until no economic profit remains, which occurs when she earns $600,000 per year

7. 在一個貧困的棉花種植區域中，低技術勞工必須選擇為一家工廠工作，以取得每年 6,000 美元報酬，或是成為一位棉花田的佃農。一位農夫可以耕作 120 英畝的農場，而農場租金為每年 10,000 美元。此農場每年可以生產價值 20,000 美元的棉花，而每年生產與行銷棉花的非勞動力總成本為 4,000 美元。一位當地政治人物的座右銘是「勞工至上」，他承諾在當選之後，其管理團隊會供應肥料、資助灌溉並負責行銷，可以讓每位佃農的棉花年產量 3 倍於以往。

a. 如果棉花價格不受此政策影響，且棉花種植產業也沒有增加新的工作機會，則在短期間，對棉花佃農的所得有何影響？在長期間呢？

b. 以長期來看，誰會是此政策下的受益者？他們每年可以得到多少利益呢？

a. The short-run economic profit for a cotton farmer is:

Economic profit = Total Revenue - Explicit costs – Implicit costs

Economic profit = $60,000 - $14,000 - $6,000

Economic profit = $40,000

In the long run, more factory workers would want to move into cotton farming, and would thereby bid up the rent on cotton farms. The rent would continue to rise until it reached $50,000 per farm. At that point the incentive to leave a factory job would no longer exist since cotton farmers would again be making zero economic profit.

b. Landowners would reap the long-term benefits of the scheme. Their income would rise by $40,000 per year per 120-acre plot because rent would rise from $10,000 to $50,000.

8. Wells 有 50 家餐廳，其中 49 家僱用一般的主廚，每週支付其 200 美元薪資，是一位主廚的正常市場價格。在支付此薪資後，這 49 家餐廳中的每一家每週都可賺到正常利潤及收取 1,000 美元總收益。第 50 家餐廳僱用一位天賦不凡的主廚，使得該餐廳消費者願意為了享用該主廚烹調之餐點而支付更高的餐費，使其每週可以賺到 1,500 美元的收入。那麼，這位天賦不凡的主廚，其薪資為：

a. 每週 500 美元。 b. 每週 200 美元。 c. 每週 700 美元。

d. 每週 1,500 美元。

e. 以上皆非。

The restaurant that employs the unusually talented chef will collect $500 more in

revenue each week than the other restaurants in Wells. Thus, the unusually talented chef will earn $700 per week: the usual market price for a chef ($200 per week) plus the additional revenue the chef generates for the restaurant that hires him ($500 per week).

9. 由於許多年長的公民不知道如何支付電子帳單，立法者乃規定某家電力公司對這群年長公民所收取的費用，必須是一般公民每使用「一千瓦小時」電力之價格的一半。當時一般正常電費費率幾乎與提供這些電力的成本一樣。

a. 此項命令對於年長的公民決定是否整夜點亮門廊電燈的決策會產生何種影響？

b. 此項規定對總經濟剩餘有何影響？

a. Lowering the rate that seniors are charged for electricity is equivalent to lowering the price of electricity, leading to an increase in the quantity demanded.

b. Since normal rates mirror the cost of providing power, if rates are cut in half, the

price of electricity will be below the cost of producing it.  As a result, seniors will use electricity wastefully and total economic surplus will fall.

10. 承上題，立法者能嘗試以更有效率的方式，表達其對於年長公民不知如何支付電子帳單的關心嗎？

Since the normal rates mirror the cost of providing power, any policy that changes the

price of each kilowatt-hour of power will lower total economic surplus.  A more efficient policy would be for regulators to give seniors either a tax break or an income subsidy to help them pay their electric bill.  As long as neither the tax break nor the income subsidy depended on the amount of electricity consumed, neither would change in the price of each kilowatt-hour.