

考試科目	經濟學	所別	商學院	考試時間	3月7日(星期日)第一節
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Multiple Choice (1.7 points each) 本科目之選擇題請在答案卡上作答

Identify the letter of the choice that best completes the statement or answers the question.

Mark each answer clearly with a No. 2 pencil on the Scantron form.

- Which of the following would shift the demand curve for new textbooks to the right?
 - A fall in the price of paper used in publishing texts
 - A fall in the price of equivalent used textbooks
 - An increase in the number of students attending college
 - A fall in the price of new textbooks
- Which of the following will NOT cause a shift in the supply of gasoline?
 - An increase in the wage rate of refinery workers
 - A decrease in the price of gasoline
 - An improvement in oil refining technology
 - A decrease in the price of crude oil
- We observe that both the price of and quantity sold of golf balls are rising over time. This is due to
 - continual improvements in the technology used to produce golf balls.
 - increases in the price of golf clubs over time.
 - decreases in membership fees for country clubs with golf facilities.
 - more stringent professional requirements on the quality of golf balls requiring producers to use more expensive raw materials.
- Mikey is very picky and insists that his mom make his breakfast with equal parts of cereal and apple juice – any other combination will end up on the floor. Cereal costs 4 cents per tablespoon and apple juice costs 6 cents per tablespoon. If Mikey's mom budgets \$8 per month for Mikey's breakfast, how much cereal and juice does she buy?
 - 40 tablespoons each of cereal and juice
 - 80 tablespoons each of cereal and juice
 - 40 tablespoons of cereal and 75 tablespoons of juice
 - 100 tablespoons of cereal and 67 tablespoons of juice
- Any risk-averse individual would always
 - take a 10% chance at \$100 rather than a sure \$10.

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- (b) take a 50% chance at \$4 and a 50% chance at \$1 rather than a sure \$1.
(c) take a sure \$10 rather than a 10% chance at \$100.
(d) take a sure \$1 rather than a 50% chance at \$4 and a 50% chance at losing \$1.
6. A farmer uses K units of machinery and L hours of labor to produce Q tons of corn, with the following production function $Q = L^{0.5} + K^{0.75}$. This production function exhibits
(a) decreasing returns to scale for all output levels.
(b) constant returns to scale for all output levels.
(c) increasing returns to scale for all output levels.
(d) no clear pattern of returns to scale.
7. If a competitive firm's marginal costs always increases with output, then at the profit maximizing output level, producer surplus is
(a) zero because marginal costs equal marginal revenue.
(b) zero because price equals marginal costs.
(c) positive because price exceeds average variable costs.
(d) positive because price exceeds average total costs.
8. At the current level of output, long-run marginal cost is \$50 and long-run average cost is \$75. This implies that
(a) there are neither economies nor diseconomies of scale.
(b) there are economies of scale.
(c) there are diseconomies of scale.
(d) the cost-output elasticity is greater than one.
9. How are a firm's short-run and long-run average cost curves related?
(a) SRAC is greater than LRAC, which forces the LRAC curve to be upward sloping.
(b) SRAC and LRAC slope up or down together, but SRAC is always the steeper of the two curves.
(c) The SRAC curve is tangent to and lies above the LRAC curve.
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10. A firm is currently producing 200 units of output using 60 hours of labor and 80 hours of capital. The marginal product of labor is 12 units of output per hour, and the marginal product of capital is 15 units of output per hour. If the wage rate is \$6 per hour and the rental rate is \$3 per hour, then
(a) the firm's use of labor and capital is cost-efficient.

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- (b) the firm should use more labor and less capital.
 (c) the firm should use more capital and less labor.
 (d) we cannot determine if the firm's use of inputs is efficient without more information.

11. There are three firms in Green Valley. Initially, each firm emits 4 units of pollution. The following table shows the total costs for each of three firms (A, B, and C) to eliminate units of pollution from their production processes. For example, for Firm A to eliminate one unit of pollution, it would cost \$1, and for Firm A to eliminate two units of pollution, it would cost a total of \$3.

Unit to be eliminated	Firms		
	A	B	C
One unit	1	4	4
Two units	3	8	9
Three units	6	12	15
Four units	10	16	22

Suppose the government wants to reduce pollution to 9 units, so it gives each firm 3 tradable pollution permits. Which of the following statement is true?

- (a) Firm A will buy permit(s) from firms B and C.
 (b) Firms A and B will buy permit(s) from firm C.
 (c) Firm B will buy permit(s) from firms A and C.
 (d) Firms B and C will buy permit(s) from firm A.

12. Consider a monopolist facing two consumers whose preferences for its product are given by the following demand curves: $P_1 = 20 - Q_1$ and $p_2 = 12 - 2Q_2$. The monopolist's fixed cost is equal to 0 and marginal cost is equal to 4. Suppose the monopolist can not tell the consumers apart. What is the maximum profit if the monopolist uses a two-part tariff pricing scheme?

- (a) 32
 (b) 64
 (c) 128
 (d) 144

13. A monopolistically competitive firm is currently producing 10 units of output. At this level of output the firm is charging a price equal to \$10, has marginal revenue equal to \$6,

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has marginal cost equal to \$6, and has average total cost equal to \$12. From this information we can infer that

- (a) the firm can increase its profit by producing less.
- (b) the profits of the firm are negative.
- (c) firms are likely to enter this market in the long run.
- (d) the firm's fixed cost must be greater than 20.

14. It is commonly argued that national defense is a public good. Nevertheless, many weapons used by the R.O.C. military are produced by U.S. private firms. We can conclude that

- (a) resources would be used more efficiently if the U.S. firms produced the weapons.
- (b) resources would be used more efficiently if private firms provided national defense.
- (c) weapons are rival in consumption and excludable.
- (d) national defense is rival in consumption and excludable.

15. Some economists argue that a resale price maintenance agreement is not anti-competitive because

- (a) suppliers are never able to exercise noncompetitive market power.
- (b) if a supplier has market power, it can exert that power through the wholesale price rather than the retail price.
- (c) retail markets are inherently noncompetitive.
- (d) resale price maintenance prevents the retailers from competing on price.

16. A monetary expansion combined with an increase in government spending will cause

- (a) an increase in output with ambiguous effects on the interest rate.
- (b) a reduction in output with ambiguous effects on the interest rate.
- (c) an increase in the interest rate with ambiguous effects on output.
- (d) a reduction in the interest rate with ambiguous effects on output.

17. Which of the following event is most likely to occur when the interest rate increases?

- (a) the money demand curve shifts to the right
- (b) the money demand curve shifts to the left
- (c) the price of bonds will fall
- (d) the price of bonds will rise

18. The recent recession may increase the marginal propensity to save, which tends to cause

- (a) an increase in the multiplier and a given change in government expenditures to have a smaller effect on equilibrium output.

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(b) a reduction in the multiplier and a given change in government expenditures to have a smaller effect on equilibrium output.

(c) an increase in the multiplier and a given change in government expenditures to have a greater effect on equilibrium output.

(d) a reduction in the multiplier and a given change in government expenditures to have a greater effect on equilibrium output.

19. According to the theory of liquidity preference, which variable adjusts to balance the supply and demand for money?

- (a) interest rate
- (b) monetary base
- (c) quantity of output
- (d) price level

20. Which of the following events will trigger a rightward shift of the aggregate demand curve?

- (a) an increase in the price level
- (b) an increase in tax
- (c) an increase in money supply
- (d) an increase in the nominal wage

21. Without an accommodating monetary policy, a push by workers to get higher wages will cause

- (a) hyperinflation.
- (b) higher unemployment.
- (c) cost-push inflation.
- (d) demand-pull inflation.

22. If the government issues debt to the public to finance its spending, the monetary base will _____ and the money supply will _____.

- (a) decrease; increase
- (b) increase; increase
- (c) increase; decrease
- (d) not change; not change

23. If the expected path of one-year interest rates over the next five years is 5 percent, 6 percent, 8 percent, 9 percent, and 7 percent, then according to the expectations theory

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today's interest rate on the five-year bond should be

- (a) 4 percent.
- (b) 5 percent.
- (c) 6 percent.
- (d) 7 percent.

24. If a bank has \$80,000 of checkable deposits, a required reserve ratio of 20 percent on these deposits, and it holds \$40,000 in reserves, then the maximum deposit outflow it can sustain without altering its balance sheet is

- (a) \$20,000.
- (b) \$30,000.
- (c) \$40,000.
- (d) \$25,000.

25. The most important advantage of discount policy is that the central bank can use it to

- (a) control the money supply.
- (b) punish banks that have deficient reserves.
- (c) perform its role as lender of last resort.
- (d) precisely control the monetary base.

26. The nominal exchange rate is the

- (a) nominal interest rate in one country divided by the nominal interest rate in the other country.
- (b) price of a good in one country divided by the price of the same good in another.
- (c) rate at which a person can trade the currency of one country for the currency of another.
- (d) the number of goods a person can trade for a similar good in another country.

27. If the direct nominal exchange rate, S , is domestic dollar per foreign currency, the domestic price is P , and the foreign price is p^* , the direct real exchange rate is defined as

- (a) $(SP^*)/P$.
- (b) $(SP)/P^*$.
- (c) $P^*/(SP)$.
- (d) $P/(SP^*)$.

28. If purchasing-power parity holds, then the value of the

- (a) real exchange rate is equal to one.

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- (b) nominal exchange rate is equal to one.
(c) real exchange rate is equal to the nominal exchange rate.
(d) real exchange rate is equal to the difference in inflation rates between the two countries.

29. Which of the following statements is incorrect for an open economy?

- (a) A country can have a trade deficit, trade surplus, or balanced trade.
(b) A country that has a trade deficit has positive net capital outflow.
(c) Net exports must equal net capital outflow.
(d) National saving must equal domestic investment plus net capital outflow.

30. The People's Republic of China has had a large trade surplus in recent years. Which of the following is the most likely explanation of this surplus?

- (a) China has a high rate of inflation, which reduces the value of its currency.
(b) China has a large supply of labor, so low wages give it a competitive edge.
(c) China has many trade barriers, which restrict the ability of other countries to sell their products in China.
(d) China has a large amount of saving relative to domestic investment.

Numerical/algebraic problems and short-essay questions

Please answer the following questions IN SEQUENCE. All questions may be answered in EITHER Chinese OR English.

1. Suppose the market for wine can be described by the following equations:

$$\text{Demand : } P = 60 - Q, \quad \text{Supply : } P = 2Q - 30,$$

where P is the price in dollars per bottle and Q is the quantity in millions of bottles.

(a) (4 points) What is the equilibrium price and quantity? Now suppose the government imposes a tax of \$3 per bottle to reduce wine consumption and raise government revenues. What will the new equilibrium quantity of wine be?

(b) (4 points) Calculate the effects of the tax on consumer surplus, producer surplus and social welfare.

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2. (8 points) Customers attending baseball games at the local arena must pay for parking on the grounds and then pay for a ticket needed to enter the arena. If the arena manager knows that the customers' identical demands can be expressed collectively as $P = 25 - 0.000625Q$. How much of a parking fee could the management collect if the marginal cost of providing entertainment were a constant $MC = \$10$ per seat?

3. Consider a market where two firms produce a homogeneous good. The inverse market demand is given by $p = 24 - q_1 - q_2$ where q_1 and q_2 denote the quantities produced by firm 1 and 2, respectively. While there are no production costs incurred by firm 1, the cost function of firm 2 is given by

$$C_2(q_2) = \begin{cases} 0 & \text{if } q_2 = 0 \\ 49 & \text{if } q_2 > 0. \end{cases}$$

Suppose that the firms set quantities simultaneously.

(a) (4 points) Draw the best response curves.

(b) (4 points) Find all pure strategy Nash equilibria.

4. During the recent financial turmoil, the U.S. M1 money multiplier kept slipping and it even dropped below 1 in the early 2009.

(a) (2 points) What are the likely causes of this historically low level of the money multiplier?

(b) (3 points) How would such a low money multiplier affect the effectiveness of the monetary policy applied by the Federal Reserve Bank?

(c) (3 points) Suppose you work for Paul Volcker, the Chair of the U.S. President's Economic Recovery Advisory Board, in the capacity of an economic advisor. Please use the AD-AS model and other models, if necessary, to explain how you would suggest the government to fight the recession.

5. Recently as a result of the Federal Reserve's actions to save the financial institutions and markets, the monetary base of United States has been exploding. However, the increase in the broader monetary aggregate such as M2 is much more moderate.

(a) (2 points) Please suggest reasons explaining the M2's moderate growth despite the dramatic increase in monetary base.

(b) (2 points) Suppose you are a bank with \$100,000 in vault cash. When the central bank conducts open market operation to sell government bonds, you decide to use the \$100,000 to purchase these bonds to earn interest. How would your action affect the monetary base?

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(c) (2 points) Or, you simply decide to put the \$100,000 in the reserve account of your bank at the central bank. How would this action affect the monetary base?

(d) (2 points) Please comment on the following statement: "When reserves pay interest (as the Fed now does), the monetary base becomes an uninteresting economic statistic."

6. (a) (4 points) "Faster population growth might increase a country's GDP, but it makes everyone poorer." Is the above statement true, false, or uncertain, and why?

(b) (5 points) Can capital accumulation itself sustain growth in GDP per capita in the long term? Why or why not?



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微積分 (科管所甲組 99)

注意事項：1、請將算式以及推導過程臚列清楚。
2、每題 10 分，注意時間的分配。

- 一、試求 $\sqrt{(5.98)^2 + (8.01)^2}$ 的近似值？
- 二、試求不定積分 $\int \sqrt{x} \sqrt{1+x} \sqrt{x} dx = ?$
- 三、已知 $y = x \csc^3(2x)$ ，試求 $\frac{dy}{dx} = ?$
- 四、定義 彈性 $e = -\frac{dQ/Q}{dP/P}$ ，試求 $P = Q^{-0.1}$ 的彈性為何？
- 五、請問，曲線 $y = x^{1.5}$ 在 $x=0$ 至 $x=4$ 之間的長度有多大？
- 六、 $y = \frac{u^2 - 1}{u^2 + 1}$ ， $u = (x^2 + 2)^{1/3}$ ，求 $\frac{dy}{dx} = ?$
- 七、試求 $y = 2x$ 與 $y^3 = 2x$ 兩條線所為區域的面積？
- 八、請求出以下微分方程的一般解： $\frac{dy}{dx} + y = x$
- 九、試求 $\int_0^1 \int_y^1 y e^{-x^3} dx dy$ 之值？
- 十、試求 $z = e^{xy} \sin(x+y)$ 的全微分。

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Unit to be eliminated	Firms		
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- (c) $P^*/(SP)$.
- (d) $P/(SP^*)$.

28. If purchasing-power parity holds, then the value of the

- (a) real exchange rate is equal to one.

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- (b) nominal exchange rate is equal to one.
(c) real exchange rate is equal to the nominal exchange rate.
(d) real exchange rate is equal to the difference in inflation rates between the two countries.

29. Which of the following statements is incorrect for an open economy?

- (a) A country can have a trade deficit, trade surplus, or balanced trade.
(b) A country that has a trade deficit has positive net capital outflow.
(c) Net exports must equal net capital outflow.
(d) National saving must equal domestic investment plus net capital outflow.

30. The People's Republic of China has had a large trade surplus in recent years. Which of the following is the most likely explanation of this surplus?

- (a) China has a high rate of inflation, which reduces the value of its currency.
(b) China has a large supply of labor, so low wages give it a competitive edge.
(c) China has many trade barriers, which restrict the ability of other countries to sell their products in China.
(d) China has a large amount of saving relative to domestic investment.

Numerical/algebraic problems and short-essay questions

Please answer the following questions IN SEQUENCE. All questions may be answered in EITHER Chinese OR English.

1. Suppose the market for wine can be described by the following equations:

$$\text{Demand : } P = 60 - Q, \quad \text{Supply : } P = 2Q - 30,$$

where P is the price in dollars per bottle and Q is the quantity in millions of bottles.

(a) (4 points) What is the equilibrium price and quantity? Now suppose the government imposes a tax of \$3 per bottle to reduce wine consumption and raise government revenues. What will the new equilibrium quantity of wine be?

(b) (4 points) Calculate the effects of the tax on consumer surplus, producer surplus and social welfare.

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2. (8 points) Customers attending baseball games at the local arena must pay for parking on the grounds and then pay for a ticket needed to enter the arena. If the arena manager knows that the customers' identical demands can be expressed collectively as $P = 25 - 0.000625Q$. How much of a parking fee could the management collect if the marginal cost of providing entertainment were a constant $MC = \$10$ per seat?

3. Consider a market where two firms produce a homogeneous good. The inverse market demand is given by $p = 24 - q_1 - q_2$ where q_1 and q_2 denote the quantities produced by firm 1 and 2, respectively. While there are no production costs incurred by firm 1, the cost function of firm 2 is given by

$$C_2(q_2) = \begin{cases} 0 & \text{if } q_2 = 0 \\ 49 & \text{if } q_2 > 0. \end{cases}$$

Suppose that the firms set quantities simultaneously.

(a) (4 points) Draw the best response curves.

(b) (4 points) Find all pure strategy Nash equilibria.

4. During the recent financial turmoil, the U.S. M1 money multiplier kept slipping and it even dropped below 1 in the early 2009.

(a) (2 points) What are the likely causes of this historically low level of the money multiplier?

(b) (3 points) How would such a low money multiplier affect the effectiveness of the monetary policy applied by the Federal Reserve Bank?

(c) (3 points) Suppose you work for Paul Volcker, the Chair of the U.S. President's Economic Recovery Advisory Board, in the capacity of an economic advisor. Please use the AD-AS model and other models, if necessary, to explain how you would suggest the government to fight the recession.

5. Recently as a result of the Federal Reserve's actions to save the financial institutions and markets, the monetary base of United States has been exploding. However, the increase in the broader monetary aggregate such as M2 is much more moderate.

(a) (2 points) Please suggest reasons explaining the M2's moderate growth despite the dramatic increase in monetary base.

(b) (2 points) Suppose you are a bank with \$100,000 in vault cash. When the central bank conducts open market operation to sell government bonds, you decide to use the \$100,000 to purchase these bonds to earn interest. How would your action affect the monetary base?

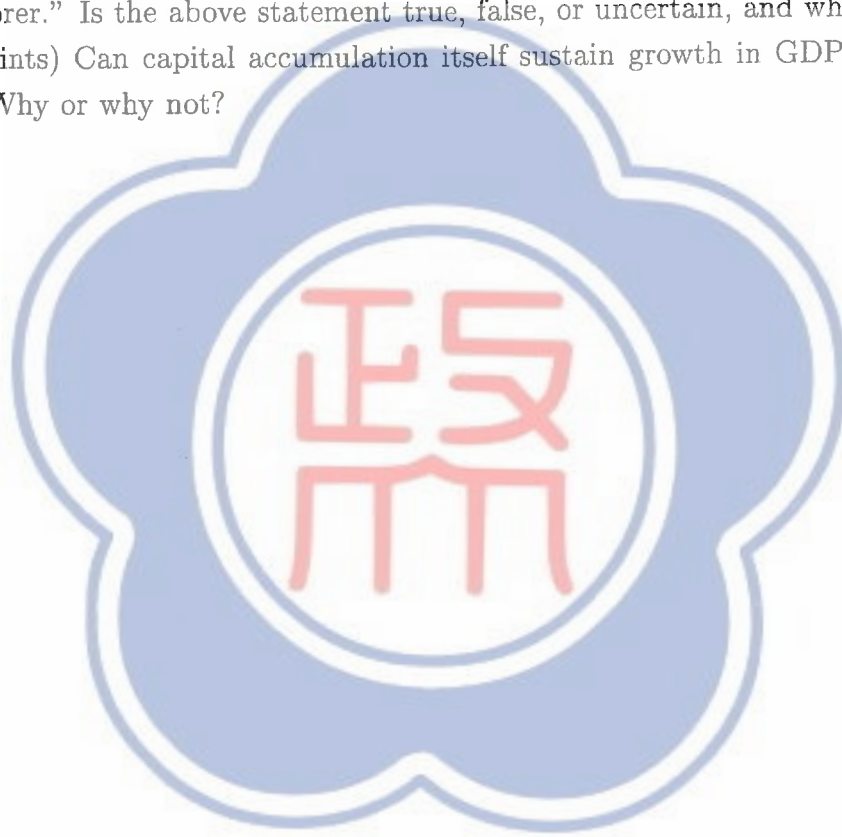
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(c) (2 points) Or, you simply decide to put the \$100,000 in the reserve account of your bank at the central bank. How would this action affect the monetary base?

(d) (2 points) Please comment on the following statement: "When reserves pay interest (as the Fed now does), the monetary base becomes an uninteresting economic statistic."

6. (a) (4 points) "Faster population growth might increase a country's GDP, but it makes everyone poorer." Is the above statement true, false, or uncertain, and why?

(b) (5 points) Can capital accumulation itself sustain growth in GDP per capita in the long term? Why or why not?



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Feature Presentation / 小公司大品牌 / 品牌小巨人



新產品 4
打造
創新產品

Pacific Cycle

不意不徐地思考新點子，然後動手實做，太平洋董事長林正義就是這樣打造讓人興奮的腳踏車。

太平洋自行車

立志做自行車 雙B品牌

除了很會跑的小折300，太平洋自行車還有更多機能性強又特殊的單車品牌，在全球興起的這股單車熱中，越來越多人開始認識它的名字，懂得欣賞它的獨特。

採訪 盧文川 謝光平

「只創造讓人興奮的腳踏車」，這是走進太平洋自行車位在桃園永安的廠區，映入眼簾的標語，也是創造出至世界知名的可攜式折疊車「Bicy」公司裡裡外外唯一的標語。

工廠裡，剛拿下二〇〇八年歐洲自行車獎（Euro Bike Award）的「IF Mode」，正在打包要寄到德國。「你看這登山車，折起來收納不用五分鐘，更不會因為折疊而犧牲任何性能，一滿頭華髮，帶著太陽鏡、一臉笑意的董事長林正

義，邊示範折疊式腳踏車，邊說明運用了哪些專利技術，像個十足的技術狂熱分子。

創新才能不被取代

工廠裡找不到普通的自行車，各色千奇百怪的車倒是琳瑯滿目，像是專為腦性麻痺病患設計的三輪車，甚至有為聯合國設計，專門提供披地雷炸斷雙腳的衣索匹亞難民使用的手動三輪車，坐墊使用了鋼板，可以在使用者誤觸地雷時保護上半身。

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被譽為「自行車之父」的林正義，原本是位老師。乘著七〇年代台灣自行車製造業大好的榮景，他按耐不住血液裡洶湧的冒險性格，和朋友合夥創辦了自行車廠，從代工開始，發現了組裝拆解腳踏車的樂趣，從此愛上這個行業。一九八〇年自立門戶重出江湖，憑著接大廠的單，營收扶搖直上。但到了一九九一年，公司發展得太快速，在歐洲和美國都成立分公司，營業額高達新台幣八億兩千萬，財務槓桿操作過度，被銀行要求增資否則抽銀根，公司幾乎倒閉，林正義從此痛下決定：「寧小毋大，做我自己。」

「我不是為了賺錢而生產，而是for fun(為了樂趣)；我不做me too，只想做自己。」林正義將手指向大門口的標語。做全球客戶的研發中心。太平洋最廣為人知的代表性產品，是售價從三萬元起跳，被台灣車友暱稱為「鳥車」的「Birdy」系列，裡面各種接

頭的設計和轉軸角度，都需要高精密計算，做出來的車架承受力強，騎起來的速度跟大輪子不分軒輊，這台車是林正義在一九九二年車展上，遇上了兩位德國大學生，他們設計的無關節式折疊車在概念上是一大創新，但要量產卻窒礙難行。林正義抱著他們車子的雛型研究了三天三夜，邀請兩人回台灣一起研發，投資了三千萬，Birdy終於在一九九五年量產。Birdy上市的第一年，定價就是三萬到十萬元的高價，整年只賣了幾十台。林正義不著急，仍舊繼續投資研發，銷售冷清的狀況持續到第四年，Birdy的銷售量突然出現十倍速的成長，一口氣賣出六千台，「沒有很特殊的引爆點，就是時間到了，忽然被市場接受了。」林正義估計，Birdy推出十年，總共賣出超過六萬台，最高的單價飆到十八萬元。「創新是沒有時間表的，你不能去管理創新。」林正義特別強調。太平洋廠內有二十名工程師

Pacific 太平洋自行車

成立時間：1980年
 董事長：林正義
 品牌及產品：Birdy、Pacific、Reach、CarryMe自行車
 去年營收：新台幣3.3億元
 品牌成功秘訣：產品為創新，品牌才輪到全名師

1. 本個案公司的經營理念和你所知的捷安特有什麼不同？ 10%
2. 個案公司經營模式能成功有哪些因素？ 10%
3. 你能想到另一個也是小而美的公司嗎？他們是怎麼作的？ 20%

備註	試題隨卷繳交
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根據這兩個圖表，請指出：

- 二、
1. 英國在 2026 年時，不同年齡層的人口各有多少？ 10%
 2. 歐洲各國 65 才以上的人口比英國多的是哪幾個國家？ 10%

Country	Total population 1 Jan 2006 (000)	%aged 0-14	%aged 15-24	%aged 25-64	%aged 65+
Austria	8,206	16.1	12.3	55.6	16.0
Belgium	10,445	17.2	12.1	53.5	17.2
Bulgaria	7,761	13.8	13.7	55.3	17.1
Czech Republic	10,220	14.9	13.4	57.7	14.0
Cyprus	749	19.2	15.9	53.0	11.9
Denmark	5,411	18.8	11.0	55.1	15.0
Estonia	1,347	15.5	15.6	52.5	16.5
Finland	5,236	17.5	12.4	54.2	15.9
France	60,561	18.5	13.0	52.2	16.4
Germany	82,500	14.5	11.7	55.2	18.6
Greece	11,075	14.4	12.4	55.1	18.1
Hungary	10,097	15.6	13.1	55.6	15.6
Ireland	4,109	20.7	15.5	52.6	11.2
Italy	58,462	14.2	10.5	55.9	19.4
Latvia	2,306	14.8	15.6	53.1	16.5
Lithuania	3,425	17.1	15.4	52.5	15.1
Luxembourg	455	18.7	11.5	55.5	14.2
Malta	402	17.6	14.5	54.5	13.3
Netherlands	16,305	18.5	12.0	55.6	14.0
Poland	38,173	16.7	16.5	53.7	13.1
Portugal	10,529	15.6	12.6	54.7	17.0
Romania	21,658	15.9	15.5	53.9	14.7
Slovakia	5,384	17.1	16.1	55.2	11.6
Slovenia	1,997	14.4	13.4	56.9	15.3
Spain	43,038	14.5	12.3	56.4	16.8
Sweden	9,011	17.6	12.2	53.0	17.2
United Kingdom	60,034	18.1	13.1	52.9	16.0

A comparison of the population structure of EU member countries
Source: compiled from Eurostat Yearbook 2006-07 (Population Statistics)

The changes that have affected the size of age-specific segments in the UK are illustrated in Figure 3.16.

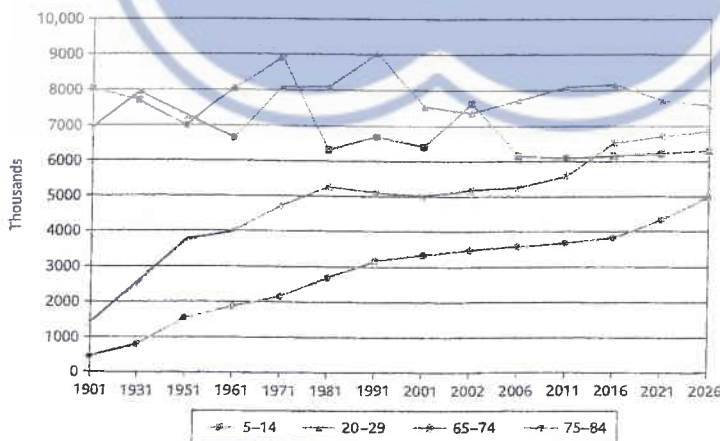


Figure 3.16. Size of selected age cohorts in United Kingdom, 1901-2026 (projected from 2006 onwards)

Source: based on Office of Population Censuses and Surveys estimates

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- 二、
1. 韓國廠商的智慧冰箱概念是什麼？為什麼沒有受到消費者的青睞？ 10%
 2. 瑞士廠商的冰箱概念又是什麼？為什麼也不成功？ 10%
 3. 本文所說得透過民族誌研究來測試新產品離型是如何進行？ 10%
 4. 這樣的研究方法有什麼缺點？ 10%

Thinking around the subject Too many chips in the kitchen?

How does a company developing high-technology consumer products predict whether a new product is going to be a hit with consumers or a miserable failure? One very simple, but naive, solution would be to ask target consumers whether they would purchase the proposed new product. But, for radically new technologies, consumers may have very little idea of what the product involves and how it would fit into their lives. They would probably have difficulty articulating their thoughts about the product to a researcher. Is it any wonder then that an estimated 80 per cent of new products fail?

One method used by companies to try to better predict the likely take-up of new products is based on ethnographic research. This involves supplying participating households with prototype versions of the product and watching how they actually use and interact with it. In return for an incentive, a family may be filmed and a diary recorded of their activities, typically over a two- or three-week period.

Researchers have been curious to understand how automation, and the internet, can be brought into the domestic kitchen. The Korean firm LG developed an 'intelligent fridge' that used bar code readers to record items put into the fridge, and then taken from it and used up. This was linked to a simple stock control programme, which drew up a shopping list for the household, which in turn could be sent through the internet to the household's preferred online grocer. In principle, the household need not worry about shopping or running out of any of its favourite grocery items. But the developers of the intelligent fridge didn't take account of the loss of a sense of control felt by the household. Ethnographic researchers pointed out that what appeared to be a technologically neat solution did not meet the lifestyle requirements of households.

The electronics companies Electrolux and Ericsson joined forces for another study involving human guinea pigs and their use of domestic refrigerators. They wanted to test the concept of a 'screen fridge', which allowed the user to download recipe ideas from the internet, store shopping lists and had a built-in video camera to record messages. Among the questions to which they sought answers were: To what extent are households adventurous in their use of recipes? What is the typical number of recipes that a household relies on when cooking family meals? Who would show most interest in the technology - male members of the household who like gizmos, or the women who do most of the cooking?

The idea of being watched by television cameras throughout the house might seem very Orwellian. However, a rash of reality television shows such as *Big Brother* has made many people more open to the idea of being watched. But the question is often asked - as it has been for the *Big Brother* series - whether what is being seen is reality or the actions of a self-selecting idiosyncratic group who like to be watched. There is apparently no shortage of individuals and households who are willing to be filmed, and stories abound of semi-professional people who make a decent part-time living through such research. But is this really research that represents the population as a whole?

Source: based on Jones 2004

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Please Answer the Questions in ENGLISH

/ Professional English Case I: Harley-Davidson Japan (30分)

Harley-Davidson, Inc., the U.S. maker of the acclaimed Harley-Davidson motorcycle, recently celebrated its ninetieth anniversary. The company has a lot to celebrate its ninetieth anniversary. The company has a lot to celebrate. Its motorcycles have won the hearts and loyalties of "big bike" riders around the world. In Japan, the bike is so popular that Harley's wholly owned local unit-Harley-Davidson Japan KK-need not advertise for customers. The 3500 units it imports into the country each year are snapped up as soon as they reach the salesroom floor.

In the Beginning

Messrs. Harley and Davidson created their first motorized bike in 1903. Only four units were produced that year; but by the 1920s, the H-D assembly lines were turning out 28000 bikes annually. Today, production is up to 80000 vehicles per year and steadily climbing.

H-D bikes first arrived in Japan in 1952. From then until 1981, a domestic trading company acted as the general sales agent for the motorcycles. But Harley wanted more control. So in 1989 it bought a 51 percent controlling share, and by the end of 1991 took over 100 percent ownership to form Harley-Davidson Japan KK.

Give Us More

Tateo Ueno, marketing superintendent for H-D Japan, wants to boost yearly imports of the bike above 3500 units. "We could sell more," he reasons, "but production in the U.S. is limited. We need to sell 5000 a year to maintain our 15 percent share in the Japanese market for motorcycles in the seven hundred fifty-one cc category. So we hope the U.S. production will continue to increase.

H-D Japan has a net work of thirty-five authorized dealers plus another sixty-five corporate dealers who supply the bikes to long waiting lists of customers year after year. But who are these Japanese bikers who prefer a Harley over so many competing domestic brands.

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“We did a market survey,” Ueno says,” and came up with some surprises. There are two kinds of Harley owners in Japan. One kind is fairly old, bikers over the age of 50 who love a big bike, especially one with a side car. On the other hand, we have very young people who want nothing but a Harley.”

H-D Heaven

The mecca for die-hard Harley fans is the H-D show room in Mita, Tokyo. Here, the big bikes are proudly displayed along with a mountain of other H-D gear ranging from jackets and motor oil to emblazoned helmets and Harley’s own model train sets.

Easy Riders, a shop located in Tokyo’s Shinjuku ward, is another place where enthusiast can stock up on Harley gear-and accessories for other foreign bikes-including caps, patches, leather jackets, and coffee mugs. Manager Yasue Noguchi remarks,” we move a lot of Harley merchandise. It’s very popular.

Harley the Heartwinner

Harley owners in Japan don’t fit the common image of bikers as brawny, tattooed hell-raisers. Indeed, the Harley-Davidson Motorcycle Riders Club, one of the various local H-D owner groups, turns the rough-rider image on its head. Members of the club are Japanese and foreign white-collar executives who commute to their offices on the roaring machines.

Owners may spend as much as Y 150000(\$1364) a month to maintain their bikes. But nobody’s complaining. As one owner put it, “You’ve got to have heart to have a Harley. Sure, it costs money to keep one. But who’s counting? You love the machine so much that money doesn’t matter.”

Case 1 Questions

1. Why doesn’t Harley-Davidson Japan KK have to advertise for customers?
2. What motivated Harley –Davidson first to acquire 51 percent control of a domestic trading company and then to buy it completely?
3. Who are these Japanese bikers who prefer a Harley over so many competing domestic brands?

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2. Professional English Case 2: Not Just Toying Around (30分)

The toy industry, like all others, has its good points and its bad points. One person who's trying to take advantage of the good points—that is, what he sees as the many growth opportunities in the toy industry—in Charlie Woo of Los Angeles.

Woo and his family came to the United States from Hong Kong in the late 1970s. To support the family, his mother and father initially started a restaurant but found that venture to be too time consuming. They looked to start another business and settled on the toy industry. By using their contacts in Hong Kong and by bringing their four sons into the business, the Woo family opened ABC Toys. The company's initial goal was to manufacture and distribute toys to small wholesalers who could not get products from the large toy makers because they weren't big enough customers; that is, they didn't buy in enough volume. ABC Toys had identified a specific niche and wasn't even attempting to compete with the likes of Mattel or the other large toy manufacturers. Charlie, who was just about to complete his Ph.D. in physics from UCLA, found himself making a major career switch from physics to toys.

ABC Toys purchased several run-down warehouse buildings on a blighted corner of downtown Los Angeles. Charlie's vision was to encourage other small toy manufacturers and distributors to rent from them and together create a "toy town." He recalls that in the beginning ABC Toys was located there by itself. But Charlie reasoned that this wholesale district would enable customers to come to one location, shop comparatively, and, he hoped, end up buying more products than they would if they had to travel to separate stores. As more and more small toy companies joined ABC Toys in Toy Town, word soon spread about it and customers began coming from all over. Now there are more than 500 wholesale toy dealers within a few blocks of each other in Toy Town.

In 1989, Charlie and one other brother spun out of ABC Toys to form Megatoys. This company now employs 30 people and has hit \$15 million in sales. And Charlie isn't finished yet! He believes that there is still good potential for growth in his business. Why? The changing global trade environment is opening up many potentially profitable areas. After all, in this business, if you want to be successful, you can't just toy around!

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Case 2 QUESTIONS

1. Charlie wants to continue Megatoys' growth. How might he use strategic management concepts to help him achieve his goals?
2. Would SWOT analysis be useful to Charlie in managing Megatoys? Why or why not? Explain your choice.
3. Charlie has asked you to make a presentation to his employees about competitive advantage. Draw up a list of the main ideas you'd want to tell them.

3. Professional English Case 3: What color are you spark plugs? (40 分)

You have discovered that you can afford to buy a new car after all, and you opt to order one from an American automobile manufacturer. Having made that relatively simple decision you must now consider the available options. First there's body style: two-door or four-door? Then there's the engine: four, six, or eight cylinders? Automatic or manual transmission? Power steering? Air conditioning? Central locking system? Tinted glass? Power windows? Defoggers? Defrosters? By the time you actually place an order for a car, you will effectively have ruled out some 30000 alternative versions of your particular vehicle. But you can take pleasure in the knowledge that the car will truly be yours-one of a kind. You may be less pleased to know that this "uniqueness" has added more than \$1000 to the car's price, because that's what it costs the manufacturer to build the required flexibility into assembly operations.

When Henry Ford started out, he simply built the best cars he could, and they were all pretty much alike. At that time, Ford's buyers-who outnumbered the cars-were happy to snap them up as they rolled off the assembly line. Today's automakers, however, offer an enormous variety, a result of the industry's greatly enlarged output, its apparent shortage of buyers, and its consequent determination, in the words of a former General Motors chairman, to build a car "for every purse and purpose." This is a logical approach to a buyers' market. That is, if there are many more cars than buyers, it makes sense to try to attract as many of those buyers as possible by finding out exactly what each one would like to have in car and then providing exactly that.

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Now it's becoming obvious to many companies that this strategy does not always work. Apart from the fact that variety costs the manufacturers a great deal, they have found that it may not pay to focus on a very small market; the potential buyers may be so few that it would not be possible to recover the costs of design, manufacture, promotion, and distribution, let alone make a profit. Therefore, Detroit has already begun following the lead of the Japanese, who—with plants halfway around the world have not been able to offer so many options. Instead, they have carefully researched the U.S. market and broken it into several large segments. By offering only 20 or 30 versions of a popular model, the Japanese are able to engineer and manufacture a higher-quality car, distribute it more efficiently, and sell it for less than the price of a comparable American car. It's a formula that has paid off nicely.

Automakers in the United States would like to find a reasonable compromise between standardization and variety. As one General Motors executive says, "The challenge for all of us is to figure out what product differences the consumer is willing to pay for and which ones are spurious and too expensive."

Case 3 Questions:

1. How do you think U.S. consumers would react if Detroit no longer offered an extensive array of options on cars? Explain your answer.
2. How do automakers that focus on a limited number of market segments figure out what kinds of cars to produce?
3. If total marketing means catering to the consumer, then why have the standardized Japanese cars outsold the more customized American cars?
4. New manufacturing techniques may reduce the cost of doing small runs, thus making small runs cheaper than mass production. How might this development change Detroit's marketing strategy? Explain your answer.