

國立東華大學財務金融系 104 第 1 學期 財務管理 第一次小考

- ✧ 計算題務必寫出過程、使用千分位符號(,)以及小數點標示清楚
- ✧ 若題目沒有特別說明，請計算至小數點以下第 2 位，第 3 位四捨五入。表示方式如 1,234.56，78.09%。
- ✧ 滿分 120 分

1. (32分) 代理問題

- (1). (2 分) 誰是公司的所有權人？
- (2). (2 分) What does the phrase *limited liability* mean in a corporate context?
- (3). (5 分) 為什麼公司(股份有限公司)會有代理問題？
- (4). (6 分) 說明股東和管理當局之間有哪些代理成本？
- (5). (9 分) 要如何利用公司治理機制的大股東以及專家的監督來解決股東和管理當局之間的代理問題？
- (6). (3 分) 請說明公司治理中 free rider 的現象。
- (7). (5 分) 請說明控制股東質押股票所產生的問題。

2. (10分) 理性與非理性的經理人

- (1). (3 分) 經濟學對於人是『理性』的定義為何？
- (2). (4 分) 對於非理性經理人的描述主要有兩個現象，一個是『過度樂觀』，一個是『過度自信』。請分別說明這兩個現象的不同之處。
- (3). (3 分) 許多公司會以管理者股票選擇權授予表現良好的經理人。請問一個過度自信的經理人會傾向早或晚履行這個股票選擇權呢？為什麼？

3. (10分) Are hostile takeovers necessarily bad for firms or their investors? Explain. 當敵意接管發生後，目標公司的可能抵抗策略有哪些（至少寫出五個策略，並簡述這些策略的意義）？

4. (10分) In July 2012, Citigroup (C) had a market-to-book ratio of 0.43, a reflection of investors' assessment that many of Citigroup's assets (such as mortgage securities) were worth far less than their book value. At the same time, the average market-to-book ratio for major U.S. banks and financial firms was 1.2, and for all large U.S. firms it was 2.3. In contrast, Pepsico (PEP) had a market-to-book ratio of 4.8, and IBM had a market-to-book ratio of 10.7.
- (1). 請說明 market-to-book ratio 的定義和用途。
 - (2). 如果你是證券分析師，根據上述資訊，你會如何評價 Citigroup 股票？
5. (10分) In December 2011, high-end retailer Nordstrom (JWN) had an operating margin of 11.5% over the past year; Wal-Mart Stores (WMT) had an operating margin of only 5.9%.
- (1). 請說明 operating margin 的定義和用途。
 - (2). 如果你是證券分析師，根據上述資訊，你認為 Wal-Mart Stores (WMT) 的 operating margin 較其同業公司低的原因為何？
6. (10分) 請使用杜邦恆等式 (DuPont Identity) 的方法去拆解ROE (股東權益報酬率)，並說明如何提高公司的ROE。
7. (20分) See Table 1 showing financial statement data and share price data for Mydeco Corp.
- (1). What is Mydeco's market capitalization at the end of each year?
 - (2). What is Mydeco's market-to-book ratio at the end of each year?
 - (3). What is Mydeco's enterprise value at the end of each year?
 - (4). Comparing Mydeco's gross margin, EBIT margin, and net profit margin in 2009 and 2013, which margins improved?
 - (5). How did Mydeco's accounts receivable days change over this period?
 - (6). How did Mydeco's inventory days change over this period?
 - (7). How did Mydeco's book debt-equity ratio change from 2009 to 2013?
 - (8). Compute Mydeco's ROE each year from 2009 to 2013.
 - (9). Compute Mydeco's ROA each year from 2009 to 2013.
 - (10). Which return (ROE or ROA) is more volatile? Why?

Table 1: 2009–2013 Financial Statement Data and Share Price Data for Mydeco Corp.

Mydeco Corp. 2009-2013

(All data as of fiscal year end; \$ in millions)

Income Statement	2009	2010	2011	2012	2013
Revenue	404.3	363.8	424.6	510.7	604.1
Cost of Goods Sold	(188.3)	(173.8)	(206.2)	(246.8)	(293.4)
Gross Profit	216.0	190.0	218.4	263.9	310.7
Sales and Marketing	(66.7)	(66.4)	(82.8)	(102.1)	(120.8)
Administration	(60.6)	(59.1)	(59.4)	(66.4)	(78.5)
Depreciation & Amortization	(27.3)	(27.0)	(34.3)	(38.4)	(38.6)
EBIT	61.4	37.5	41.9	57.0	72.8
Interest Income (Expense)	(33.7)	(32.9)	(32.2)	(37.4)	(39.4)
Pretax Income	27.7	4.6	9.7	19.6	33.4
Income Tax	(9.7)	(1.6)	(3.4)	(6.9)	(11.7)
Net Income	18.0	3.0	6.3	12.7	21.7
<i>Shares outstanding (millions)</i>	55.0	55.0	55.0	55.0	55.0
<i>Earnings per share</i>	\$0.33	\$0.05	\$0.11	\$0.23	\$0.39
Balance Sheet	2009	2010	2011	2012	2013
Assets					
Cash	48.8	68.9	86.3	77.5	85.0
Accounts Receivable	88.6	69.8	69.8	76.9	86.1
Inventory	33.7	30.9	28.4	31.7	35.3
Total Current Assets	171.1	169.6	184.5	186.1	206.4
Net Property, Plant & Equip.	245.3	243.3	309.0	345.6	347.0
Goodwill & Intangibles	361.7	361.7	361.7	361.7	361.7
Total Assets	778.1	774.6	855.2	893.4	915.1
Liabilities & Shareholders' Equity					
Accounts Payable	18.7	17.9	22.0	26.8	31.7
Accrued Compensation	6.7	6.4	7.0	8.1	9.7
Total Current Liabilities	25.4	24.3	29.0	34.9	41.4
Long-term Debt	500.0	500.0	575.0	600.0	600.0
Total Liabilities	525.4	524.3	604.0	634.9	641.4
Shareholders' Equity	252.7	250.3	251.2	258.5	273.7
Total Liabilities & Shareholders' Equity	778.1	774.6	855.2	893.4	915.1
Statement of Cash Flows	2009	2010	2011	2012	2013
Net Income	18.0	3.0	6.3	12.7	21.7
Depreciation & Amortization	27.3	27.0	34.3	38.4	38.6
Chg. in Accounts Receivable	3.9	18.8	0.0	(7.1)	(9.2)
Chg. in Inventory	(2.9)	2.8	2.5	(3.3)	(3.6)
Chg. in Payables & Accrued Comp	2.2	(1.1)	4.7	5.9	6.5
Cash from Operations	48.5	50.5	47.8	46.6	54.0
Capital Expenditures	(25.0)	(25.0)	(100.0)	(75.0)	(40.0)
Cash from Investing Activities	(25.0)	(25.0)	(100.0)	(75.0)	(40.0)
Dividends Paid	(5.4)	(5.4)	(5.4)	(5.4)	(6.5)
Sale (or purchase) of stock	-	-	-	-	-
Debt Issuance (Pay Down)	-	-	75.0	25.0	-
Cash from Financing Activities	(5.4)	(5.4)	69.6	19.6	(6.5)
Change in Cash	18.1	20.1	17.4	(8.8)	7.5

8. (9分) In mid-2012, Abercrombie & Fitch (ANF) had a book equity of \$1693 million, a price per share of \$35.48, and 82.55 million shares outstanding. At the same time, The Gap (GPS) had a book equity of \$3017 million, a share price of \$27.90, and 489.22 million shares outstanding.
- (1). What is the market-to-book ratio of each of these clothing retailers?
 - (2). What conclusions can you draw by comparing the two ratios?
9. (9分) Consider a retailing firm with a net profit margin of 3.5%, a total asset turnover of 1.8, total assets of \$44 million, and a book value of equity of \$18 million.
- (1). What is the firm's current ROE?
 - (2). If the firm increased its net profit margin to 4%, what would be its ROE?
 - (3). If, in addition, the firm increased its revenues by 20% (while maintaining this higher profit margin and without changing its assets or liabilities), what would be its ROE?