本試題雙面印刷

淡江大學 100 學年度碩士班招生考試試題

72-1

系別:財務金融學系

科目:財務管理

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※下列題目必須填寫完整答案或運算過程,只有單一答案者不予計分。

1. Suppose the following yields on time deposits were taken from the Bank of Taiwan (BOT) at now:

Type/Maturity	One month	Two months	Three months	Four months	Five months	Six months	Seven months
Floating (%)	0.7	0.74	0.9	1.02	1.125	1.165	1.19
Fixed (%)	0.7	0.74	0.91	1.03	1.135	1.185	1.22
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- (a) Using the information, does the future interest rate will be increasing or declining? Why? [6%]
- (b) Using the fixed rate, calculate the 2-month rate three month from now and the 3-month rate one month from now.(the pure expectations theory is true) [6%]
- 2. Acer recently reported \$220,000 of sales, \$140,500 of operating costs other than depreciation, and \$9,250 of depreciation. The company had \$35,250 of outstanding bonds that carry a 6.75% interest rate, and its federal-plus-state income tax rate was 35%. In order to sustain its operations and thus generate future sales and cash flows, the firm was required to spend \$15,250 to buy new fixed assets and to invest \$6,850 in net working capital. What was the firm's free cash flow? [12%]
- 3. Firm L is in a low-risk business and has a WACC of 8%. Firm H's business is exposed to greater risk and consequently it has a WACC of 12%. Assume that Firms L and H consider two project, project A and B. Project A and B have 11% and 9% expected returns, respectively. Two projects have the same risk and have more risk than a typical Firm L project, but less risk than a typical Firm H project. **Discuss** the decisions for Firm L and H. [14%]
- 4. Tamkang Co. has a beta of 1.5 and is currently in equilibrium. The required rate of return on the stock is 12.00% versus a required return on an average stock of 10.00%. Now the required return on an average stock increases by 50.0%. Neither betas nor the risk-free rate change. What would Tamkang's new required return be? [14%]
- 5. Tamkang Co's stock price is 58.88, and it recently paid a \$2.00 dividend. This dividend is expected to grow by 25% for the next 3 year, then grow forever at a constant rate, g; and discount rate was 12%. At what constant rate is the stock expected to grow after Year 3? [14%]

- 6. Tamkang Co. is thinking of opening a new office, and the key data are WACC = 10%, Opportunity cost=\$100000, Net equipment cost (depreciable basis) = \$65000, Straight-line depreciation rate for equipment = 33.333%, Sales revenues = \$141000/each year, Operating costs (excluding depreciation) = \$25000/each year, and tax rate = 35%. The company owns the building that would be used, and it could sell it for \$100000 after taxes if it decides not to open the new office. The equipment for the project would be depreciated by the straight-line method over the project's 3-year life, after which it would be worth nothing and thus it would have a zero salvage value. No new working capital would be required, and revenues and other operating costs would be constant over the project's 3-year life. What is the project's NPV? [14%]
- 7. TKU has a WACC of 12% (ignoring taxes). It can borrow at 8%. Assuming that TKU has a target capital structure of 20% debt and 80% equity, what is its cost of equity? [5%] What is the cost of equity if the capital structure is 60% equity? [5%]
- 8. Assume that TKU plan to open a business that will make and sell a newly designed type of sandal. Two robotic machines are available to make the sandals, Machine A and Machine B. The price per pair will be \$19.50 regardless of which machine is used. The fixed and variable costs associated with the two machines are shown below. What is the difference between the breakeven points for Machines A and B? [10%]

	Machine A	Machine B
Price per pair	\$19.50	\$19.50
Fixed costs	\$25,000	\$100,000
Variable cost/unit	\$7.00	\$4.00