中央大學八十九學年度碩士班研究生入學試題

一、(20%)

Fill in the blanks by choosing the appropriate term from the following list: lease, funded, floating-rate, eurobond, convertible, subordinated, call, sinking fund, prime rate, private placement, public issue, senior, unfunded, eurodollar rate, warrant, debentures, term loan.

a. Debt maturing in more than 1 year is often called ________ debt.

b. An issue of bonds that is sold simultaneously in several countries is called a(n) ________.

c. If a tender ranks behind the firm's general creditors in the event of default, the loan is said to be ________.

d. In many cases a firm is obliged to make regular contributions to a(n)________, which is then used to repurchase bonds.

e. Most bonds give the firm the right to repurchase or ________ the bonds at specified prices.

f. The benchmark interest rate that banks charge to their customers with good to excellent credit is generally termed the ________.

g. The interest rate on bank loans is often used to short-term interest rates. These loans are usually called ________ loans.

h. Where there is a(n) ________, securities are sold directly to a small group of institutional investors. Those securities cannot be resold to individual investors. In the case of a(n) ________, debt can be freely bought and sold by individual investors.

i. A long-term rental agreement is called a(n) ________.

j. A(n) ________ bond can be exchanged for shares of the issuing corporation.

二、(16%)

ABC Corp. has a Price/Earnings (P/E) ratio (defined as the ratio of the current price to last year's earnings, (P_0/E_0) of 15. ABC's expected dividend payout ratio is 30 percent and its expected annual growth rate is 10 percent.

a. What will be the cost of ABC's equity implied by its current P/E ratio if the assumptions of the Gordon formula are vaild?

b. What would ABC's P/E ratio be if the cost of capital were 25 percent?

c. What would ABC's P/E ratio be if its cost of capital were 15 percent and its growth rate were 8 percent?

d. What do you learn from the relative P/E ratios about the appropriate use of P/E ratios?

三、(8%)

Dime a Dozen Diamonds makes synthetic diamonds by treating carbon. Each diamond can be sold for \$100. The materials cost for a standard diamond is \$30. The fixed costs incurred each year for factory upkeep and administrative expenses are \$200,000. The machinery costs \$1 million a year and is depreciated straight-line over 10 years to a salvage value of zero.

a. What is the accounting break-even level of sales in terms of number of diamonds sold?

b. What is NPV break-even sales assuming a tax rate of 35 percent, a 10-year project life, and a discount rate of 12 percent?

四、(12%)

Risky Company (RC) is about to issue a 1-year bond. The bond will bear a coupon of 12 percent (payable at the end of the year) and have a face value of \$1,000. You estimate that the bond has a default probability of 10 percent and that RC will pay off 70 percent of face value if it defaults on the bond. If the bond is priced at par:

a. What is the bond's expected return?

b. What is the bond's yield to maturity (YTM)?

c. This time, however, assume that RC's bond has a 2-year maturity. Suppose in each of the 2 years the bond has a default probability of 10 percent and a payoff of 70 percent of face value in the case of default. Recalculate the expected return to a bondholder who plans to buy the bond (at par) and to hold it for 2 years (unless it defaults at the end of the first year):

ratios	AAA	AA	A	BBB	BB	B
Pretax Return on Total Capital(%)	24.2	22.1	17.1	14.4	12.8	9.9
Operating Income to Sales(%)	21.2	16.3	13.5	12.1	13.1	9.8
Total Debt to Capitalization(%)	19.5	25.6	35.0	39.5	53.7	69.1
Pretax Interest Coverage	13.5	9.0	5.3	3.7	2.4	1.3

注意

五、(本題之每小題請以 200 字或 10 行以內作答)

a. (18 分) 請簡述以下英文文章之大意。
b. (18 分) 請討論 Internet/E-Commerce 公司股價之評估方式 (與傳統公司之異同)。
c. (8 分) 請討論台灣之 Internet/E-commerce 公司之現況及未來股價之發展。

參考用

The Making of a Market Bubble

By LAURA M. HOLSON and SAUL HANSELL

Issue in Depth
The New York Times: Your Money

Ah, to pen the first draft of history.

"iVillage Becomes a Metropolis on First Trading Day," roared a headline in The Los Angeles Times on March 20, 1999, describing the tripling in the stock price of iVillage, the online community for women. When Miningco.com went public a few days later, The Wall Street Journal called that Web forum "the latest Internet stock to strike gold." And a few days after that, Priceline.com ended its first trading session at four times its offering price, prompting USA Today to call it "a hot ticket."

Awful puns aside, those were heady days. The seven Internet companies that sold shares that month were in the vanguard of the legions that made their debuts in 1999 before a public hungry for nothing but Net. Stock prices exploded out of the gate. Entrepreneurs became billionaires overnight. And in the months that followed, investors only clamored for more as the hysteria for anything dot-com reached fever pitch, helping push the Nasdaq market index to its all-time high on March 10, 2000.

Now for the rewrite.

The Nasdaq market's recent rout, even with last week's rebound, helped bring the highfliers back to earth. Four of the seven companies that went public in March 1999 now are trading below their offering prices: Manhattan-based iVillage, down 49 percent; OneMain.com, a collection of Internet service providers, down 72 percent; Autobytel.com, which refers car buyers to dealerships over the Internet, down 74 percent; and Ziff-Davis-ZDNet, which operates technology Web sites, down 34 percent.

The remaining three -- About.com (the Web portal that began life as Miningco.com), Priceline.com and Multex.com, which distributes financial information -- are trading at least 60 percent off their record highs. (Priceline.com has performed most admirably, up 324 percent from its offering price.)

Market pundits say Internet stocks were due for a correction. Anyone who read a prospectus knew that the dizzying sums that investors were paying for unseasoned companies defied their fundamental worth. The breezy days of last spring were bound, logic said, to turn unwelcoming and cold.

But how was it that the investing world suspended disbelief in the first place, letting the most irrationally exuberant investors assign values to these companies?

Put simply, it was in the interest of everyone involved to take advantage of a frenzied market that, in more measured times, would have seemed absurd. Entrepreneurs rushed to get money -- and lots of it. Venture capitalists were eager to cash out. Investment banks were happy to oblige. And, of course, rapacious investors -- big institutions and the man and woman on the street -- clamored for their shares of the new economy.

It is too soon to close the book on the Class of March 1999; the Internet story is far from over. No expert worth the title can predict the permanence of the damage caused by the market's recent shakeout. And investors are only beginning to decide which companies they think have the most promising future.

Even so, these companies are a microcosm for an Internet marketplace where the fortunes of companies have been made -- and lost -- virtually overnight. And their experiences shed light on the roles that financiers, entrepreneurs and investors played in inflating the Internet bubble until it almost burst.

"Try to think about it as Charles Darwin meeting Adam Smith," said Gary Rieschel, a partner at Softbank Technology Partners in Mountain View, Calif. As in nature, he explained, "the checks and balances have to get out of whack for them to get back in order."

The Natural Order of Things

Steve Smith, a founder of OneMain.com, knows about the natural order firsthand. His company, an Internet service provider (like America Online), went public on March 25, 1999.

Even then, Smith recalled, he was worried that the offering price for his company -- $22 a share -- was too high, even though bankers had discounted the value of his subscriber base to the clientele of more established peers.

But who was he to bicker over his good fortune? "I wasn't going to argue with the market at that time," he said.

This, after all, was a market that had just bid up iVillage -- a company that had struggled for several years to go public -- from an offering price of $24 to a first-day close of $80.13. And those numbers did not fully express the demand for dot-com shares; iVillage's investment bankers at Goldman Sachs had originally planned to price the stock at $12 to $14.

So iVillage became the standard against which other companies measured first-day success. Watching the excitement about iVillage mount, executives at Miningco.com decided to put off their public offering so its shares, too, could command more than the $12 to $14 a share that executives first expected, recalled Dan Veru, an early investor in the company. It was a smart move; bankers at Bear, Stearns priced Miningco.com at $25 a share.

How could a rational market push the share prices of these nascent companies to such heights? As he conducted the road show for OneMain.com, pitching the business to professional money managers, Smith recalled, he was surprised that they did not ask many in-depth financial questions. Of his 72 one-on-one meetings with institutional investors, he said, few lasted more than 20 minutes.

"I found people were only interested in the story," he said. "They hadn't read anything at all."

Smith's stock hit a high of $39.5625 the day it began trading, an 80 percent increase over the offering price. Colleagues at Morgan Stanley Dean Witter, where he had been a banker for nine years, swooned.

Soon, though, the stock price of OneMain.com began to slide -- by June, the shares were trading in the mid-teens -- despite Smith's contention that he was delivering on everything he had promised investors, including his subscriber projections. He said, however, that bankers at what is now Deutsche Bank Alex Brown had failed to deliver on two of their promises: The analyst he had expected to cover his company left the bank, Smith said, and its sales and trading desk did not support a higher price. And that, he added bitterly, was despite OneMain.com's having paid fees of more than $7 million. Deutsche Bank Alex Brown declined to comment.

And so Smith, a 40-year-old Californian, found himself across the table from investors for 40 days last year, struggling to pump up his stock price. He was briefly successful -- OneMain.com hit $33.125 last July, during a two-week road trip that took him from San Diego to Boston. But the shares have since drifted downward, falling 87 percent since their peak to close at $6.25 on Thursday, even though he said the company has met the earnings and revenue targets it set for itself.

For Smith, who owns 8 percent of the company, that decline has erased tens of millions of dollars in his net worth.

Other executives in the March '99 class said that at least some investors inquired deeply into their companies and business models, but the executives agreed that most professional money managers had ignored fundamentals and just bet on stocks that seemed to have momentum.

"There is a herd mentality around Internet stocks," said Daniel L. Rosensweig, chief executive of ZDNet.

Even those who professed to be long-term fundamental investors turned out to be short-term traders, he said. "You go on the road show, and all these people say they will hold forever. Then you get the first list of shareholders and find out they flipped the stock right away. The best you can hope for is that they will buy your stock back on the dip."

Yet once a stock falls out of favor, even good news will not necessarily restore its luster. A month ago, iVillage announced a $200 million venture with Unilever, the consumer products giant. And while financial analysts lauded the news, investors ignored it.

"I announce highly strategic deals, and there is no movement in the stock," said Candice Carpenter, the company's chief executive. "Poor Pavlov's dog is confused. It doesn't know what to do."

Of Risky Businesses

Like most of her peers, Carpenter attributes her company's stock performance to an investing environment that now favors the business-to-business Internet sector and companies promising a quicker path to quarterly profits.

In an earlier era, that would have sounded like an odd complaint; companies generally did not even go public until they stood a good chance of delivering profits. So if the market is again demanding earnings, it is only reverting to form.

But when iVillage and the others had their coming-out parties, Carpenter rightly notes, Internet companies and their bankers certainly made no secret of the hurdles that stood between them and earnings. Specifically, she said investors in iVillage were told that it could take the company 7 to 10 years to become profitable.

In fact, some companies devoted 20 pages or more of their prospectuses to such warnings. So much so, some analysts suggest they have little meaning.

"The risk factors have become so common they are almost irrelevant," said Scott Siprelle, a cofounder of Midtown Research Group, a Manhattan investment boutique.

Because Internet companies were so young, he said, investment banks relaxed their insistence on a management team that had long worked together and on years of profitability before taking a company public.

"A good investment bank has to constantly balance the franchise versus the revenue," Siprelle said. "But the opportunity has been so large it has been hard to be disciplined."

Since Jan. 1, 1998, investment banks have earned an estimated $2.18 billion in underwriting fees for taking Internet companies public, according to Commscan, a research company based in Manhattan.

One of the most prosperous investment banks in the technology world is Goldman, Sachs; since 1995, it has helped take 54 Internet companies public. If Brad Koenig, Goldman's co-head of technology investment banking, sounded frayed last week, it was because the criticism leveled at bankers for stocks trading below their offering prices was wearing a little thin.

"First of all, you have to remember that investment banks and underwriters were getting criticism for underpricing IPO's not too long ago," Koenig said. He is right: banks took a drubbing all last year for pricing offerings too low, supposedly to make the stock price soar in first-day trading.

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Now, with e-commerce stocks suffering, Koenig suggests that it is unfair to blame the same bankers for having set offering prices too high.

"It's not like you wake up one morning and price the I.P.O.," he said. He explained that pricing was a three- to four-month process of comparing companies against their peers. Considerable time is spent examining fundamentals.

And even established companies, like Yahoo, traded lower than their offering prices in the early days. Besides, it isn't as though bankers don't exercise discretion: Goldman is one of the most selective, he said, and turns away 15 companies for every one it takes public.

"I don't think we should be held accountable or responsible if a sector falls out of favor," Koenig said.

Even in a momentum-driven environment, some financiers like venture capitalists certainly play their part in the making of fads.

When Isaak Karaev and James Tousignant founded Multex Systems seven years ago, they wanted to help brokerage firms send electronic research to institutional clients.

"Then the Internet happened," said Karaev, the company's chief executive. "And all our investors said, 'This is an Internet play.' We took the opportunity to change ourselves."

Multex created a Web site that lets individuals read Wall Street research for a fee. But the venture capitalists were not satisfied. "The consumer was the big play, so everyone wanted us to jettison everything else and give it all away free," Karaev recalled. The founders agreed to change the company's name to Multex.com, but insisted on keeping the institutional investor service, which accounted for two-thirds of revenue.

Their venture backers should be grateful they did; now, business-to-business Internet companies are hot, while those catering to consumers are not. These days, Karaev said, the company calls itself a "financial e-marketplace," to play to the latest frenzy.

"Our strategy hasn't changed," he said. "The challenge is which component to highlight."

Robert Greene, who invested in Multex at Chase Capital, and is now a partner in Flatiron Partners, concedes that venture money has long followed trends. In 13 years as an investor, he said, "I spent all my time going from one hot area to the next."

Still, the Internet era has been a remarkable time. It used to be that a return of 300 percent was "an awesome home run." Now, with the public markets so accommodating, venture capitalists can make 1,000 percent to 2,000 percent on shares they hold for just two years.

And that means early investors are barely splattered when a bubble bursts. Chase Capital, for example, has paid an average of just over $3 a share for its 3 million Multex.com shares, he said -- putting it hardly in the same boat as investors who bought at $60 a share and saw the stock fall as low as $13.

"Even if these values fall to half of where they peaked, in the context of our industry, they are great returns," Greene said.

The recent decline, however, has sobered things up, he said. "Two months ago, you would look at a business plan and the investment banks would say, 'We can take that company public in four months for $500 million.' So you would say, 'Why not?'" Now, Greene said, "We don't say 'Why not?' We say 'Why?'"

Not to Mention Day Traders

If any one group played the most public role in fueling the Web frenzy, it was day traders and other online investors, many of them congregating in Internet chat rooms like Silicon Investor and Raging Bull. They could sometimes inflate and burst bubbles in a single day.

A little after midnight on March 26, 1999, someone posted a message on Silicon Investor wanting to know if Autobytel.com shares would begin trading later that day. They would -- offered at $23 a share -- and by noon, posters were speculating about how high the price would soar.

"All indications are it will open between 40 and 50," wrote "Scott H."

"They wouldn't start over lunch would they?" added "William Griffin."

"Looking 60-65 opening in next 10-20 mins," wrote "SteveG" at 12:50 p.m.

"WOW," Scott H. responded. "Steve, do you think it will take off after the open?"

In a word, yes. Autobytel.com opened at $52.75 a share, hit a high of $58 and then closed for the day at $40.25.

"nnnnnnnnnooooooooooooooooo wwwwaaaaayyyyyyyyyy!! Close around 39-40!! OOUUCCHHH!!!!!!!!!!" wrote "Opey."

"Got to feel the pain for the buyers at $58," replied "Panita." "They will not sleep well tonight."

Since then, the stock has plummeted, closing Thursday at $6.03, down 90 percent from its high.

And in the chat rooms? "IS THIS ONE GOING ANYWHERE?" read one message posted last month.

Chief executives of the Class of March '99 say they find these investors to be distasteful. Ms. Carpenter said iVillage now has a corporate policy of not answering questions from day traders and people in chat rooms. Still, when shares in iVillage and About.com were enjoying positive momentum last fall, both companies rushed to raise more cash in secondary offerings.

Were they taking advantage of the moment? Ms. Carpenter said iVillage recognized that the business-to-consumer Internet story "was going out of favor."

"We always wanted to have cash on hand for a nice long time," she said -- enough cash, she hopes, to last through what may be a long summer of investor discontent

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