PART VI

1. Pepsico is planning to acquire a fleet of trucks to support its new Pepsi Express distribution system in the Omaha area. The installed cost of the trucks is $777,000. The salvage value at the end of five years is expected to be $75,000 after-tax. The present value of the expected salvage is $42,600, after discounting at Pepsico's cost if capital. The present value (using Pepsico's after-tax cost of debt as the discount rate) is $575,000. Pepsico will incur (in present value terms) operating costs of $140,000 more, after-tax, if the trucks ate owned than if they are leased.
   a. What is the net advantage to leasing in this case?
   b. What should Pepsico do?

2. The Jacobs Company desires to lease a numerically controlled milling machine costing $200,000. Jacobs has asked both First Manufactures Bank Leasing Corporation and Commercial Associates, Inc. (a commercial finance company) to quote an annual lease rate. Both leasing companies now require a 20 percent pretax rate of return on this type of lease. Suppose First Manufacturers estimates the machine's salvage value at the end of lease. Suppose First Manufacturers estimates the machine's salvage value at the end of the lease to be $30,000 and Commercial Associates estimates salvage to be $80,000. Based on this information, what annual (beginning-of-year) lease payments will each leasing company require, if the lease term is 5 years? (Note: Because the required rate of return of both the bank and the finance company is stated on a pretax basis, you need not consider depreciation or the tax effects of salvage.)

3. The following stream of after-tax cash flows are available to you as a potential equity investor in a leveraged lease:

End of Year	Cash Flow (after-tax)	End of Year	Cash Flow (after-tax)
0	$-50	6	$ 0
1	+30	7	-5

2	+20	8	-10
3	+15	9	-15
4	+10	10	+10
5	+5		

The cash flow in year 0 represents the initial equity investment. The positive cash flows in years 1 to 5 result from the tax shield benefits from accelerated depreciation and interest deductibility on the nonrecourse debt. The negative cash flows in years 7 to 9 are indicative of the cash flows generated in a leveraged lease after the earlier- period tax shields have been utilized. The positive cash flow occurring in year 10 in the result of the asset's salvage value.

a. What problems would you encounter in computing the equity investor's rate of return on this investment?
b. If, as a potential equity investors, you require an 8 percent after-tax rate of return on investments of this type, should you make this investment?

4. The BWS Corporation stock is selling at $50 a share today.
   a. Calculate the value of a BWS call option if its exercise price is $40 and it expires today.
   b. What can you say about the value of a BWS call option if its exercise price is $40 and it expires in 6 months?
   c. Calculate the value of a BWS call option if its exercise price is $60 and it expires today.
   d. What can you say about the value of a BWS call option if its exercises price is $60 and it expires in 6 months?

5. The BWS Corporation stock is selling at $50 a share today.
   a. Calculate the value of a BWS put option if its exercise price is $40 and it expires today.
   b. What can you say about the value of a BWS put option if its exercise price is $40 and it expires in 6 months?
   c. Calculate the value of a BWS put option if its exercise price is $60 and it expires today.
   d. What can you say about the value of a BWS put option if its exercises price is $60 and it expires in 6 months.

6. Horizon Corporation has warrants to purchase common stock outstanding. Each warrant entitles the holder to purchase 1 share of the company's common stock at an exercise price of $20 a share. Suppose the warrants expire on September 1, 1995. One month ago, when the company's common stock was trading at about $21.50 a share, the warrants were trading at $5 each.
   a. What was the formula value of the warrants 1 month ago?
   b. What was the premium over the formula value 1 month ago?
   c. What are the reasons investors were willing to pay more than the formula value for these warrants 1 month ago?
   d. Suppose that in August 1995, the Horizon common stock is still trading at $21.50 a share. What do you think the warrant price would be then? why?
   e. Horizon paid an annual dividend of $1 a share, as of one month ago, to its common shareholders. Do warrant holders receive dividends?

7. The capital structure of Whitefield Mills, Inc, is as follows:

Long-term debt	$250 million
Common stock, $1 par	25 million
Contributed capital in excess of par value	150 million
Retained earnings	350 million
	$775 million

The company has decided to raise additional capital by selling $75 million of 8 percent debentures with warrants attached. Each $1,000 debenture will have 25 warrants attached, and each warrant will entitle the holder to purchase one share of common stock at $30.

   a. Show the company's new capital structure after the sale of debentures and the exercise of all the warrants. Assume that mo other changes in capital structure occur between now and the time the warrants are exercised.
   b. What condition is necessary in order for the warrants to be exercised?
   c. How much total money will the company raise as a result of this security issue, if all warrants are exercised.

8. The Bradford Company has debentures outstanding (par value = $1,000) that are convertible into common stock at a price of $40 per share. The convertible bonds have a coupon interest of 8 percent and mature in 20 years. The convertible bonds are callable at 102 percent of par value. The company has a marginal tax rate of 40 percent.
   a. Calculate the conversion value of the bonds if Bradford's common stock is selling for $35 per share.
   b. Calculate the straight-bond value, assuming that straight debt of equivalent risk and maturity is yielding 11 percent.
   c. Determine the conversion premium if the market value of the bonds is $925.
   d. Determine the conversion value of the bonds if the company's common stock price increases to 55 per share.
   e. Given the information in Part d, what is a realistic estimate of the market price of the convertible bond issue? (No numerical calculations are necessary for this part of the problem.)

9. The Wolverine Corporation has a convertible preferred stock outstanding. The par value of this preferred stock is $100, and it pays a $10 dividend. The preferred stock is callable at 103 percent of par value. The preferred stock has 10 years remaining until maturity. The preferred stock is convertible into 2.5 shares of common stock. The current common stock price is $42. Similar (quality and maturity) nonconvertible preferred stock sells at a price to yield 9 percent.
   a. What is the conversion value of this preferred stock?
   b. What is the straight (nonconvertible preferred stock value of this preferred stock?
   c. If interest rate decline such that similar (quality and maturity) nonconvertible preferred stock sells at a price to yield 7 percent and the price of Wolverine's common stock increases to $44, for how much will this convertible preferred stock sell?

10. The Seven Spring Company plans to sell an additional 2 million shares of common stock through a rights offering, The company currently has 20 million shares outstanding. Each shareholder will receive one right for each share currently held. Therefore, each right will enable shareholders to purchase 0.10 shares, Seven Springs common stock currently is selling for $25 per share and the subscription price of the rights will be 22 per share.

a. Calculate the theoretical value of the right for both the rights-on and ex-rights cases.

b. Determine the amount that the market price of the company's stock is expected to drop on the ex-rights date, assuming all other things are equal.

c. If the market price of Seven Springs common stock increases to $30 per share, determine the theoretical value of the rights (rights-on case).