

Financial Management

Chapter 5. Exercises on Dividend Policy

1. Simba, Inc. is planning a capital investment of 5 million \$. The firm's last year net income was 7.5 million \$. Simba shows a debt to equity ratio of 40% which is considered to be optimal. There are 2 million of shares outstanding with a market price of 30 \$.

- If Simba follows the residual dividend policy, calculate the firm's dividend per share.
- Calculate the dividend yield in the previous case.
- If the firm wants to provide a 5% dividend yield, calculate the pay-out.

2. Tryp, Inc.'s last year net income has been 150 million \$. There are 100 million shares outstanding and the company paid 0.5 \$ dividend per share the last year and the price of the share is 12 \$.

- Calculate the firm's pay-out if Tryp pays 0.6 \$ dividend per share.
- Calculate the firm's pay-out if Tryp aims to offer a 5% dividend yield.
- Calculate the firm's dividend yield if Tryp fixes a 30% pay-out.
- If the firm's dividend policy aims the dividend per share to grow at a 10% annual rate, but with a maximum 25% pay-out, calculate the dividend per share.

3. On April 3, 2020, a Spanish company announced that a 0.5 € dividend per share will be pay on May 8.

- Calculate the ex-dividend date and the record date?
- If you own 20000 shares, calculate the gross and net total dividends you will receive on May 8.
- How much you pay in taxes due to this dividend? When do you pay them?

4. The owners' equity accounts for Hexagon International are shown here:

Common stock (\$1 par value)	\$ 30,000
Capital surplus	185,000
Retained earnings	<u>627,500</u>
<i>Total owner's equity</i>	<i>\$842,500</i>

- If Hexagon stock currently sells for \$37 per share and a 10% stock dividend is declared, how many new shares will be distributed? Show how the equity accounts would change.
- If Hexagon declared a 25% stock dividend, how would the accounts change?
- Calculate the price of the share after the stock dividend in the two previous situations.

5. The balance sheet for Levy Corp is shown here in market value terms. There are 12,000 shares of stock outstanding.

Cash	\$ 55,000	Equity	\$ 465,000
Fixed assets	410,000		
<i>Total</i>	<i>465,000</i>	<i>Total</i>	<i>465,000</i>

The company has declared a dividend of \$1.90 per share. The stock goes ex dividend tomorrow. Ignoring any tax effects, what is the stock selling for today? What will it sell for tomorrow? What will the balance sheet look like after the dividends are paid?

6. In the previous problem, suppose Levy has announced it is going to repurchase \$22,800 worth of stock. What effect will this transaction have on the equity of the firm? How many shares will be outstanding?

What will the price per share be after the repurchase? Ignoring tax effects, show how the share repurchases is effectively the same as a cash dividend.

7. The company with the common equity accounts shown here has declared a stock dividend of 15 percent when the market value of its stock is \$45 per share. What effects on the equity accounts will the distribution of the stock dividend have?

Common stock (\$1 par value)	\$ 410,000
Capital surplus	2,150,000
Retained earnings	5,320,000
<i>Total owner's equity</i>	<i>7,880,000</i>

8. Flychucker Corporation is evaluating an extra dividend versus a share repurchase. In either case, \$4,000 would be spent. Current earnings are \$2.10 per share, and the stock currently sells for \$46 per share. There are 800 shares outstanding. Ignore taxes and other imperfections and evaluate the two alternatives in terms of the effect on the price per share of the stock and shareholder wealth.

9. Gibson Co. has a current period cash flow of \$1.2 million and pays no dividends, and the present value of forecasted future cash flows is \$15 million. It is an all-equity financed company with 1 million shares outstanding. Assume the effective personal tax rate is zero.

a. What is the share price of the Gibson Stock?

b. Suppose the board of directors of Gibson Co. announces its plan to pay out 50% of its current cash flow as cash dividends to its shareholders. How can Jeff Miller, who owns 1,000 shares of Gibson stock, achieve a zero payout policy on his own?