τμήμα Αγροτικής Οικονομίας & Ανάπτυξης

ΓΕΩΠΟΝΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ

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MBA in Food & Agribusiness

Financial Management

Contributed Capital

Purchase of Treasury Stock Illustrated

On Sept. 15, Caprock Corporation purchases 1,000 shares of its common stock on the market **for $50 per share.**

When treasury stock is purchased, it is usually recorded at cost:

Sept. 15	Treasury Stock, Common	50,000	
	Cash		50,000
	Acquired 1,000 shares of the company's common stock for $50 per share		

Purchase of Treasury Stock illustrated

Stockholders' Equity Section

Contributed capital	
Common stock, $5 par value, 100,000 shares authorized, 30,000 shares issued, 29,000 shares outstanding	$150,000
Additional paid-in capital	30,000
Total contributed capital	$180,000
Retained earnings	900,000
Total contributed capital and retained earnings	$1,080,000
Less treasury stock, common (1,000 shares at cost)	50,000
Total stockholders' equity	$1,030,000

Notice that the number of shares issued, and therefore legal capital, has not changed even though the number of shares outstanding has decreased.

Common Stock Transactions and Stockholders' Equity

P 1. Sussex Corporation began operations on September 1, 20xx. The corporation's charter authorized 300,000 shares of $8 par value common stock. Sussex Corporation engaged in the following transactions during its first quarter:

Sept.	1	Issued 50,000 shares of common stock, $500,000.
	1	Paid an attorney $32,000 to help start up and organize the corporation and obtain a corporate charter from the state.
Oct.	2	Issued 80,000 shares of common stock, $960,000.
	15	Purchased 10,000 shares of common stock for $150,000.
Nov.	30	Declared a cash dividend of $.40 per share to be paid on December 15 to stockholders of record on December 10.

Required

1. Prepare entries in T accounts to record the above transactions.
2. Prepare the stockholders' equity section of Sussex Corporation's balance sheet on November 30, 20xx. Net income for the quarter was $80,000.

Answer

1. T accounts set up and transactions recorded in the accounts

Cash

Sept.	1	500,000	Sept.	1	32,000
Oct.	2	960,000	Oct.	15	150,000
		1,460,000			*182,000*
Bal.		*1,278,000*			

Dividends Payable

			Nov.	30	48,000
			Bal.		*48,000*

(#shares: 50,000 + 80,000 – 10,000) x $0.4

Start-up and Organization Costs

Sept.	1	32,000			
Bal.		*32,000*			

Dividends

Nov.	30	48,000*			
Bal.		*48,000*			

Common Stock

			Sept.	1	400,000
			Oct.	2	640,000
			Bal.		*1,040,000*

50,000 x $8

80,000 x $8

Additional Paid-in Capital

			Sept.	1	100,000
			Oct.	2	320,000
			Bal.		*420,000*

$500,000 - $400,00

$960,000 - $640,000

Treasury Stock, Common

Oct.	15	150,000			
Bal.		*150,000*			

Answer (cont.)

2.	Stockholders' equity section of the balance sheet prepared	
	Sussex Corporation	
	Balance Sheet	
	November 30, 20xx	
	Stockholders' Equity	
Contributed capital		
	Common stock, $8 par value, 300,000 shares	
	authorized, 130,000 shares issued and	
	120,000 shares outstanding	$1.040.000
	Additional paid-in capital	420.000
Total contributed capital		$1.460.000
Retained earnings*		32.000
Total contributed capital and retained earnings		$1.492.000
Less treasury stock, common (10,000 shares at cost)		150.000
Total stockholders' equity		$1.342.000

*	$80.000	œ	$48.000	=	$32.000

Preferred and Common Stock Dividends and Dividend Yield

P 2. The DeMeo Corporation had both common stock and preferred stock outstanding from 20x7 through 20x9. Information about each stock for the three years is as follows:

Type	Par Value	Shares Outstanding	Other
Preferred	$100	40,000	7% cumulative
Common	20	600,000	

The company paid $140,000, $800,000, and $1,100,000 in dividends for 20x7 through 20x9, respectively. The market price per common share was $15 and $17 per share at the end of years 20x8 and 20x9, respectively.

Required

1. Determine the dividends per share and total dividends paid to the common and preferred stockholders each year.
2. Assuming that the preferred stock was noncumulative, repeat the computations performed in requirement 1.
3. Calculate the 20x8 and 20x9 dividends yield for common stock using dividends per share computed in requirement 2.

Answer

1. Dividends calculated for cumulative preferred stock and common stock

40,000 x $100 X 0.07 = $280,000 per year

	Cumulative Preferred Stock Dividends		Common Stock Dividends		Total Dividends Allocated
	Amount	Per Share	Amount	Per Share	
20x7	$140,000	$ 3.50	—	—	$ 140,000
20x8					
Dividends in arrears,					
20x7	$140,000				
20x8 dividends	280,000		$380,000		
Totals	$420,000	$10.50	$380,000	$0.63*	$ 800,000
20x9	$280,000	$ 7.00	$820,000	$1.37*	$1,100,000

$140,000 / 40,000

$800,000 - $420,000 = $380,000

$1,100,000 - $280,000 = $820,000

Answer (cont.)

2. Dividends calculated for noncumulative preferred stock and common stock					
	Noncumulative Preferred Stock Dividends		Common Stock Dividends		Total Dividends Allocated
	Amount	Per Share	Amount	Per Share	
20x7	$140.000	$ 3,50	–	–	$ 140.000
20x8	$280.000	$ 7,00	$520.000	$0,87 *	$ 800.000
20x9	$280.000	$ 7,00	$820.000	$1,37 *	$1.100.000

Dividends Yield Ratio

Tells investors how much they can expect to receive in dividends expressed as a percentage of the market price per share

$$\text{Dividends Yield} = \frac{\text{Dividends per Share}}{\text{Market Price per Share}}$$

$$\text{Microsoft} = \frac{\$0.32}{\$24.20} = 1.3\%$$

Answer (cont.)

3. The 20x6 and 20x7 dividends yield for common stock calculated

$$\text{Dividends Yield} = \frac{\text{Dividends per Share}}{\text{Market Price per Share}}$$

20x6

$$\frac{\$0,87}{\$15,00} = 5,8\%$$

20x7

$$\frac{\$1,37}{\$17,00} = 8,1\%$$

***Rounded.**

The Corporate Income Statement and the Statement of Stockholder's Equity

Stock Dividends Illustrated

Geminix Corporation declares a 10 percent stock dividend on February 24, distributable on March 31 to stockholders of record on March 15. The market price of the stock on February 24 is $20 per share.

Date of Declaration:

Feb. 24	Stock Dividend Declared	60,000	
	Common Stock Distributable		15,000
	Additional Paid-in Capital		45,000
	Declared a 10 percent stock dividend on common stock, distributable on March 31 to stockholders of record on March 15 30,000 shares x .10 = 3,000 shares 3,000 shares x $20/share = $60,000 3,000 shares x $5/share = $15,000		

Stock Split Illustrated

July 15: Calderon Corporation's 30,000 shares of $5 par value common stock issued and outstanding were split 2 for 1.

Common Stock	Before Stock Split	After Stock Split
Shares issued and outstanding	30,000	60,000
Par value per share	$5.00	$2.50
Amount of common stock equity	$150,000	$150,000

A stock split does not increase the number of shares authorized, nor does it change the balances in the accounts in the stockholders' equity section of the balance sheet.

No journal entry required, memorandum entry is appropriate.

Dividends, Stock Splits, and Stockholders' Equity

P 4. The stockholders' equity section of the balance sheet of Pittman Corporation as of December 31, 20x7, was as follows:

Contributed capital	
Common stock, $4 par value, 500,000 shares authorized, 200,000 shares issued and outstanding	$ 800,000
Additional paid-in capital	1,000,000
Total contributed capital	$1,800,000
Retained earnings	1,200,000
Total stockholders' equity	$3,000,000

Pittman Corporation had the following transactions in 20x8:

Feb.	28	The board of directors declared a 10 percent stock dividend to stockholders of record on March 25 to be distributed on April 5. The market value on this date is $16.
Mar.	25	Date of record for stock dividend.
Apr.	5	Issued stock dividend.
Aug.	3	Declared a 2-for-1 stock split.
Nov.	20	Purchased 18,000 shares of the company's common stock at $8 per share for the treasury.
Dec.	31	Declared a 5 percent stock dividend to stockholders of record on January 25 to be distributed on February 5. The market value per share was $9.

Required

1. Record the stockholders' equity components of the transactions for Pittman Corporation in T accounts.

2. Prepare the stockholders' equity section of the company's balance sheet as of December 31, 20x8. Assume net income for 20x8 is $108,000.
3. If you owned 1,000 shares of Pittman stock on February 1, 20x8, how many shares would you own February 5, 20x9? Would your proportionate share of the ownership of the company be different on the latter date than it was on the former date? Explain your answer.

Answer

200,000 x 0.1 x $(16 – 4)

(((200,000 +20,000) x 2) – 18,000) x 0.05 x $(9 – 2)

200,000 x 0.1 x $4

((200,000+20,000)x2 – 18,000) x 0.05 x $4/2

18,000 x $8

1. Transactions recorded in T accounts

Common Stock

		Bal.	800,000
		4/5	80,000
		Bal.	*880,000*

Additional Paid-in Capital

		Bal.	1,000,000
		2/28	240,000
		12/31	147,700
		Bal.	*1,387,700*

Common Stock Distributable

4/5	80,000	2/28	80,000
		12/31	42,200
		Bal.	*42,200*

Stock Dividends

2/28	320,000 [1]		
12/31	189,900 [2]		
Bal.	*509,900*		

Treasury Stock

11/20	144,000		
Bal.	*144,000*		

Retained Earnings

		Bal.	1,200,000

1	200,000	shares	x	0.10	x	$16	=	$320,000
2	422,000	shares	x	0.05	x	$ 9	=	$189,900

Shares outstanding before split:	200,000	+	20,000	=	220,000
Shares outstanding after split:	220,000	x	2	=	440,000

March 25 — no entry

August 3 — no entry

Answer (cont.)

(200,000+20,000)x2 – 18,000

((200,000+20,000)x2 – 18,000) x 0.05

Pittman Corporation		
Stockholders' Equity		
December 31, 20x8		
Contributed capital		
Common stock, $2 par value, 500,000 shares		
authorized, 440,000 shares issued, 422,000		
shares outstanding	$ 880.000	
Common stock distributable, 21,100 shares	42.200	
Additional paid-in capital	1.387.700	
Total contributed capital		$2.309.900
Retained earnings*		798.100
Total contributed capital and retained earnings		$3.108.000
Less treasury stock, common (18,000 shares, at cost)		144.000
Total stockholders' equity		$2.964.000

*$1.200.000	œ	$320.000	œ	$189.900	+	$108.000	=	$798.100

Answer (cont.)

3. User Insight: Effect of stock transactions determined

If you owned 1,000 shares of Pittman on February 1, 20x8, you would own 2,310 shares on February 5, 20x9 (calculation below).

Your proportionate share would be the same because other shareholders would ceive the same proportionate distributions.

Feb. 1, 20x8:	**Original holding**	**1,000**	**shares**
Apr. 5, 20x8:	**Stock dividend**	**100**	1,000 x 0.1
Aug. 3, 20x8:	**Stock split**	**1,100**	2 for 1 split
Feb. 5, 20x9:	**Stock dividend**	**110**	2,200 x 0.05
Feb. 5, 20x9:	**Total owned**	**2,310**	**shares**

Comprehensive Stockholders' Equity Transactions

P 6. On December 31, 20x7, the stockholders' equity section of Tsang Company's balance sheet appeared as follows:

Contributed capital	
Common stock, $8 par value, 200,000 shares authorized, 60,000 shares issued and outstanding	$ 480,000
Additional paid-in capital	1,280,000
Total contributed capital	$1,760,000
Retained earnings	824,000
Total stockholders' equity	$ 2,584,00

The following are selected transactions involving stockholders' equity in 20x8: On January 4, the board of directors obtained authorization for 20,000 shares of $40 par value noncumulative preferred stock that carried an indicated dividend rate of $4 per share and was callable at $42 per share. On January 14, the company sold 12,000 shares of the preferred stock at $40 per share and issued another 2,000 in exchange for a building valued at $80,000. On March 8, the board of directors declared a 2-for-1 stock split on the common stock. On April 20, after the stock split, the company purchased 3,000 shares of common stock for the treasury at an average price of $12 per share; 1,000 of these shares subsequently were sold on May 4 at an average price of $16 per share. On July 15, the board of directors declared a cash dividend of $4 per share on the preferred stock and $.40 per share on the common stock. The date of record was July 25. The dividends were paid on August 15. The board of directors declared a 15 percent stock dividend on November 28, when the common stock was selling for $20. The date of record for the stock dividend was December 15, and the dividend was to be distributed on January 5.

Required

1. Record the above transactions in journal form.
2. Prepare the stockholders' equity section of the company's balance sheet as of December 31, 20x8. Net loss for 20x8 was $218,000. (**Hint:** Use T accounts to keep track of transactions.)
3. Compute the book value per share for preferred and common stock (including common stock distributable) on December 31, 20x7 and 20x8, using end-of-year shares outstanding. What effect would you expect the change in book value to have on the market price per share of the company's stock?

Answer

12,000 x $40

2,000 x $40

1,000 x $16

1,000 x $12

Or Retained Earnings

1. Transactions recorded

20x8				
Jan.	4	No entry required.		
	14	Cash	480,000	
		Preferred Stock		480,000
		Sold 12,000 shares of $40 par value preferred stock at $40		
	14	Building	80,000	
		Preferred Stock		80,000
		Issued 2,000 shares of preferred stock in exchange for a building valued at $80,000		
Mar.	8	Memo: The 60,000 shares of $8 par value common stock that are issued and outstanding were split 2 for 1, resulting in 120,000 shares of $4 par value common stock issued and outstanding.		
Apr.	20	Treasury Stock, Common	36,000	
		Cash		36,000
		Purchased 3,000 shares of common stock for the treasury at $12 per share		
May	4	Cash	16,000	
		Treasury Stock, Common		12,000
		Paid-in Capital, Treasury Stock		4,000
		Sold 1,000 shares of treasury stock for $16 per share; originally purchased for $12 per share		
July	15	Dividends	103,200	
		Dividends Payable		103,200
		Declared a cash dividend of $4 per share on 14,000 shares of preferred stock and $0.40 per share on 118,000 shares of common stock		
		$56,000 + $47,200 = $103,200		
	25	No entry required.		

Answer (cont.)

20x8				
Aug.	15	Dividends Payable	103,200	
		Cash		103,200
		Paid cash dividends to preferred and common stockholders		
Nov.	28	Stock Dividends	354,000	
		Common Stock Distributable		70,800
		Additional Paid-in Capital		283,200
		Declared a 15 percent stock dividend on 118,000 shares of common stock; market value was $20 per share; par value is $4 per share		
		17,700 shares × $20 = $354,000		
Dec.	15	No entry required.		

118,000 x 0.15 x $20

118,000 x 0.15 x $4

Answer (cont.)

T accounts for stockholders' equity

Preferred Stock

		1/14/x8	480,000
		1/14/x8	80,000
		Bal.	*560,000*

Common Stock

		Bal.	480,000

Common Stock Distributable

		11/28/x8	70,800

Additional Paid-in Capital

		Bal.	1,280,000
		11/28/x8	283,200
		Bal.	*1,563,200*

Paid-in Capital, Treasury Stock

		5/4/x8	4,000

Retained Earnings

7/15/x8	103,200*	Bal.	824,000
11/28/x8	354,000*		
12/31/x8	218,000		
		Bal.	*148,800*

Net loss for 20x8

Treasury Stock, Common

4/20/x8	36,000	5/4/x8	12,000
Bal.	*24,000*		

The diff. with the selling price of $16 per share was already included

*Cash dividends declared and stock dividends declared reduce Retained Earnings.

Answer (cont.)

Tsang Company			
Stockholders' Equity			
December 31, 20x8			
Contributed capital			
Preferred stock, $40 par value, $4 dividend,			
20,000 shares authorized, 14,000 shares			
issued and outstanding			$ 560.000
Common stock, $4 par value, 200,000 shares			
authorized, 120,000 shares issued,			
118,000 shares outstanding			480.000
Common stock distributable, 17,700 shares			70.800
Additional paid-in capital			1.563.200
Paid-in capital, treasury stock			4.000
Total contributed capital			$2.678.000
Retained earnings			148.800
Total contributed capital and retained earnings			$2.826.800
Less treasury stock, common (2,000 shares, at cost)			24.000
Total stockholders' equity			$2.802.800

Book Value

$$\text{Book Value per Share} = \frac{\text{Total Stockholders' Equity}}{\text{Total Common Shares Outstanding}}$$

When a company has both common and preferred stock, subtract the call value of the preferred stock plus any dividends in arrears from total stockholders' equity. (Use par value if call value is not specified.)

Answer (Cont.)

3.	User Insight: Book value per share computed								
December 31, 20x7									
	Common stock:								
	$2,584,000	÷	60,000	shares	=	$43.07*	per share		
December 31, 20x8									
	Preferred stock:								
	Call price of $42 equals book value per share								
	Common stock:								
	($2,802,800	–	$560,000	) ÷ (	118,000*	shares	+	17,700	shares)
	= $2,242,800	÷	135,700	shares	=	$16.53*	per share		

Book value per share usually does not affect market price, which is affected by many other factors.

*Rounded.

After the stock split and treasury stock

Stock Dividend