CHAPTER 18

DIVIDEND POLICY

Problem 1

B. Das Co.: The company is not justified in following the current dividend policy. Since the shareholders would have more profitable investment opportunities than the company, it should distribute entire earnings. In this way, the wealth of the shareholders will be maximised.

Problem 2

D. Damodar Co.: It is a wrong belief that dividends are generally preferred over retained earnings by shareholders. Shareholders are interested in maximising their wealth. The company in the present case is a fast growing company, and it has a high profitability as well. Through retention of earnings, the company will grow faster and as a result the share price also rise faster. If the capital gain tax rate is lower than the current income tax rate, the wealthy shareholders in high tax brackets would prefer the company to retain its earnings so that they could realise their wealth in the form of capital gains and save taxes.

Retired persons may have invested in the shares of Damodar Company to receive regular income. In that case, they would prefer current dividends over capital gains. Similarly, some financial institutions prefer regularity of current dividends rather capital gains. If the most of Damodar's shareholders consist of these types of shareholders, it may continue with its current policy of liberal dividend payment.

Problem 3

Brown Ltd.

Year	EPS	DPS	MP High	MP Low	MP Avg.	BV	Payout	Dividend Yield	Earnings Yield	P/E
2000	3.60	2.00	48.00	32.00	40.00	37.20	55.6%	5.0%	9.0%	11.11
2001	3.90	2.00	53.00	34.00	43.50	38.80	51.3%	4.6%	9.0%	11.15
2002	3.70	2.00	51.00	30.00	40.50	40.60	54.1%	4.9%	9.1%	10.95
2003	3.20	2.00	59.00	31.00	45.00	42.30	62.5%	4.4%	7.1%	14.06
2004	3.80	2.00	60.00	35.00	47.50	43.20	52.6%	4.2%	8.0%	12.50
Average	3.64	2.00	54.20	32.40	43.30	40.42	55.2%	4.6%	8.4%	11.95

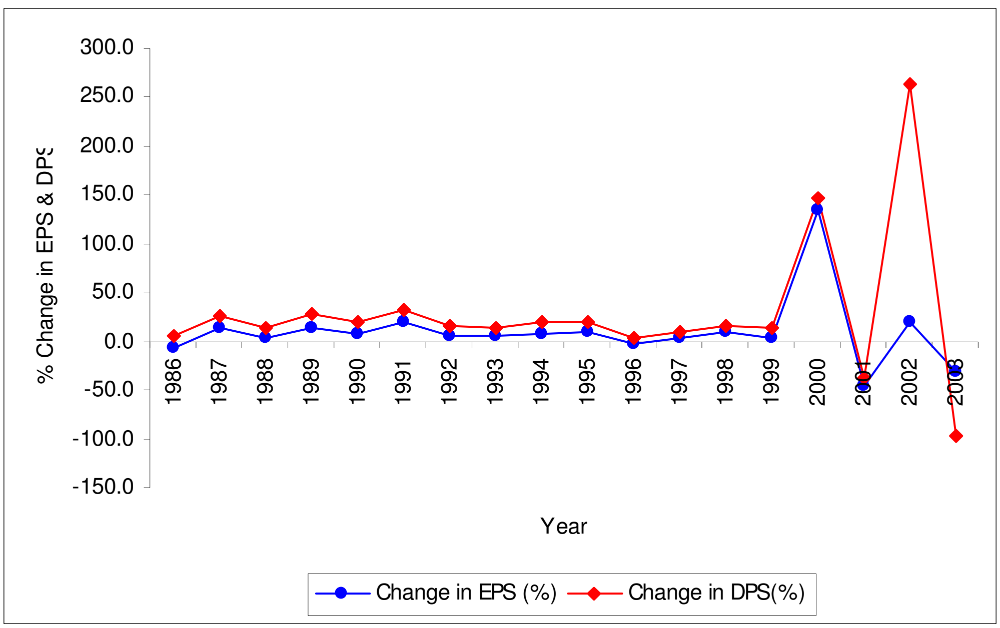
Crown Ltd.

Year	EPS	DPS	MP High	MP Low	MP Avg.	BV	Payout	Dividend Yield	Earnings Yield	P/E
2000	3.50	1.75	38.00	34.00	36.00	30.50	50.0%	4.9%	9.7%	10.29
2001	3.00	1.50	42.00	32.00	37.00	32.50	50.0%	4.1%	8.1%	12.33
2002	2.50	1.25	42.00	28.00	35.00	33.75	50.0%	3.6%	7.1%	14.00
2003	6.00	3.00	50.00	30.00	40.00	36.50	50.0%	7.5%	15.0%	6.67
2004	5.00	2.50	48.00	27.00	37.50	38.50	50.0%	6.7%	13.3%	7.50
Average	4.00	2.00	44.00	30.20	37.10	34.35	50.0%	5.3%	10.7%	10.16

Brown Ltd. is following a policy of paying constant dividend per share. Since its EPS has fluctuated over years, the constant DPS policy has resulted in fluctuating payout. Crown ltd., on the other hand, follows a constant payout policy. As a result, with fluctuating EPS, its DPS has also shown fluctuation. It seems that Crown's shareholders discount the DPS variability, and as a result, its share price is generally lower than that of Brown Ltd. Further, it has higher dividend yield and earnings yield and lower P/E ratio as compared to Brown Ltd. From this comparison, one may conclude that shareholders care for the dividend stability which is defined in terms of low variability in DPS.

Problem 4

Year	Change in EPS (%)	Change in DPS(%)
1986	-	+
1987	+	+
1988	+	+
1989	+	+
1990	+	+
1991	+	+
1992	+	+
1993	+	+
1994	+	+
1995	+	+
1996	-	+
1997	+	+
1998	+	+
1999	+	+
2000	+	+
2001	-	+
2002	+	+
2003	-	-



DPS_t	EPS_t	DPS_{t-1}
5.9	15.9	5.3
6.5	16.4	5.9
7.4	18.4	6.5
8.3	19.8	7.4
9.4	23.6	8.3
10.5	24.7	9.4
11.5	25.9	10.5

13.0	27.8	11.5
14.2	30.7	13.0
15.1	30.1	14.2
15.9	31.2	15.1
17.2	33.9	15.9
19.1	34.9	17.2
21.6	81.8	19.1
23.5	44.9	21.6
80.5	53.6	23.5
28.2	36.5	80.5

	Coeff.	*t Stat*	*P-value*
Intercept	-2.459	-0.294	0.773
EPS_t	0.522	2.155	0.049
DPS_{t-1}	0.219	0.973	0.347
Target payout: Coeff. EPS_t/Coeff. DPS_{t-1}		67%	

Regression Statistics	
Multiple R	0.5954
R Square	0.3545

Problem 5

Ashoka Ltd.

	Current structure		**After bonus**		**After split**	
	No of shares (crore)	**Capital (Rs crore)**	**No of shares (crore)**	**Capital (Rs crore)**	**No of shares (crore)**	**Capital (Rs crore)**
Equity	5.0	50	6.0	60	25.0	50
Pref.	0.5	50	0.5	50	0.5	50
Share pre.		50		120		50
R & S		80		0		80
Total		230		230		230

After 1:5 bonus issue, the number of shares will increase by 20%. No cash flow occurs on the issue of bonus shares. Since the par value is Rs 10 and bonus shares are issued at Rs 100 each share, the share premium account will be credited at Rs 90 each and share capital at Rs 10 each. The total amount, 1x Rs 100 = Rs 100 crore, will be charged to reserves and surpluses and remaining to share premium account.

The five-to-one share split will increase the number of shares five times and the value per share will decrease to one fifth. There will be no other change.

Problem 6

Polychem

	Current structure		**After bonus**		**After split**	
	No of shares	**Capital**	**No of shares**	**Capital**	**No of shares**	**Capital**
Equity	2.0	200	2.1	210	4.0	200
Share pre.		100		104		100
R & S		190		176		190
Total		490		490		490
EPS		17.0		16.2		8.50
DPS		6.5		6.2		3.25

The one-to-twenty bonus issue will cause the number of shares to increase by 5%, while two-for-one share split will result in doubling the number of shares. The par value per share, EPS and DPS will reduce to half after the share split. Since the par value is Rs 100 and bonus shares are issued at Rs 140 each share, the share premium account will be credited at Rs 40 each and share capital at Rs 100 each. The total amount, 0.1x Rs 140 = Rs 14 crore, will be charged to reserves and surpluses account. The like the share split, the bonus issue will also cause dilution in EPS and DPS. Both the share split and the bonus issue do not result in any cash flow.

Problem 7

	(Rs crore)
Paid up capital	12
Reserves	16
Previous years' pre-tax profit	
Year 1	8
Year 2	8.6
Year 3	8.3
Average	8.3

Conditions:

(1) Residual reserve criterion:

Pre-bonus reserve - (Pre-bonus paid-up capital × Bonus ratio) ≥0.40 × (1 + bonus ratio) × pre-bonus paid-up capital

$16 - (12 \times B) \geq 0.40 \times (1 + B) \times 12$

$16 - 12B = 4.8 + 4.8B$

$16.8B = 11.2$

$B = 11.2 : 16.8$ 1: 1.5

(2) Profitability criterion:

0.3 × 3-year avg. PBT ≥ 0.1 × (1 + B) × pre-bonus paid-up capital

$0.3 \times 8.3 = 0.1 \times (1 + B) \times 12$

$2.49 = 1.2 + 1.2B$

$1.2B = 1.29$

$B = 1.29 : 1.20$ 1.075 : 1

The maximum bonus ratio should be 1:1 (1.075:1 approximated).

CASE

CASE 18.1: A. C. Company Ltd.

The following is a description of the financial performance of the company (see Exhibit 1):

- **Sales growth**: Sales have shown fluctuations during past three years. There was an increase of about 42% in 1993; but sales dropped by 8% in 1994. It is estimated that sales will grow by 20% in 1995 and reach a level of Rs 83 crore in 1995.
- **Profitability**: Gross margin (GM) at 17.7% has shown improvement in 1994 after remaining stagnant at 6% in 1992 and 1993. The reduction in cost contributed to this improvement. Net margin (NM) declined in 1993 in spite of increased sales, but showed significant increase at 8.5% in 1994 despite decline in sales. The lower interest costs and taxes caused this improvement.
- **Financing**: The company is conservatively financed. Its debt-equity ratio has declined to 0.5:1 in 1994. The higher profitability and efficient working capital management helped the company to reduce its dependence on borrowing.
- **Working capital management**: The company has done well in managing its inventory and debtors. The collection period has been brought down to 95 days in 1994 from 119 days in 1993.. Similarly, the inventory holding has been reduced to 46 days in 1994 from 81 days in 1993.
- **Share performance**: The improved financial performance of the company reflecting in higher EPS has resulted in a high P/E ratio (32 times in 1994) and high share price in spite of DPS staying at Rs 1 in 1992 and 1993.

Overall, cost reduction, improved working capital management, and low debt-equity ratio have contributed to the improved financial performance of the company. If the company's sales grow at 20% in 1995 and if it is able to maintain its current profitability, its EPS is likely to increase to Rs 10.

The following facts about the company favour a higher DPS:

1. Improved profitability (NP Rs 5.9 crore in 1994)
2. Good future prospects (NP expected Rs 7.1 crore in 1995)
3. Low debt-equity ratio and reserve debt capacity (d/e ratio 0.5 in 1994)
4. Shareholders' expectation for a higher dividend due to increased earnings (EPS expected to be Rs 10 in1995

On the other hand, one could point out the following facts about the company against increasing dividend:

1. Company's need for capital expenditure (Rs 5 crore)
2. High P/E ratio indicating growth-oriented shareholders (P/E 32 in 1994)
3. Need to wait to ensure that higher growth and profitability will be sustained in the future

On the balance, one may argue for some increase in DPS. The company has significantly improved its earnings, its need for capital expenditure is moderate and it has low debt-equity ratio. The increase in DPS will signal to shareholders that the company will be able to sustain its growth and profitability. The company may increase DPS to Rs 1.5 to Rs 2. The increased DPS will be easy to sustain in the near future even if the profitability of the company fluctuates.

Exhibit 1: Financial Performance

	Actual			Estd.
	1992	**1993**	**1994**	**1995**
Sales	53.4	75.6	69.5	83.4
Gross profit	3.4	4.5	12.3	14.8
Net profit	1.3	1.3	5.9	7.1
EPS	1.8	1.8	8.1	9.7
DPS	1	1		
Gross Block (GB)	NA	20	22	27
Inventory holding days	NA	81	46	
Collection period (days)	NA	119	95	
D/E	NA	1.8	0.5	
Gross margin	6.4%	6.0%	17.7%	17.7%
Net margin	2.4%	1.7%	8.5%	8.5%
Sales/GB	NA	3.8	3.2	3.1
GP/GB	NA	22.5%	55.9%	54.7%
P/E ratio	NA	NA	32	
Capex	NA	NA	NA	5