Solution to Case 1

Financial Statements, Cash Flows and Taxes

Ultra Cable Corporation

Answers to questions:

1. Using a cash flow statement explain why Ultra Cable Corporation's cash balance has declined so precipitously this past year.

The statement of cash flows shows that the firm has invested heavily in accounts receivable, inventories and fixed assets. These investments were only partially funded by an increase in payables and retained earnings. Ultra Cable borrowed $2.565million worth of short and long-term debt and drew down on its cash reserves to fund the balance. Thus, although sales went up and cost of goods sold declined, the acquisition of assets and business expansion activities led to a reduction in the cash balance.

Ultra Cable Corporation	
Statement of Cash Flows	
	Current Year
Cash at beginning of current year	**$ 100,000**
Operating activity	
Net income	**357,750**
Plus:	
Depreciation	**197,500**
Increase in accounts payable	**225,000**
Less:	
Increase in accounts receivable	**(850,000)**
Increase in inventory	**(1,626,125)**
Net cash from operating activity	**(1,695,875)**
Investment activity	
Fixed asset acquisitions	**(1,975,000)**
Net cash from investment activity	**(1,975,000)**
Financing activity	
Increase in notes payable	**1,125,000**
Increase in long-term debt	**2,565,700**
Dividends paid	**(107,325)**
Increase in common stock	**-**
Net cash from financing activity	**3,583,375**
Net decrease in Cash	**(87,500)**
Cash, end of current year	**$ 12,500**

2. Why has Ultra Cable's stock price dropped so much recently despite an increase in its revenues and its earnings per share?

Although Ultra Cable has made a net profit that is higher than that of the previous year, its net profit margin is lower (6.98% vs. 7.43%). Most of this decrease has been caused by the significant increase in debt in the current year resulting in much higher interest expenses

($277,500 higher than the previous year). Higher debt is not necessarily bad, if profitability is proportionately higher as well. However, the interest coverage ratio (EBIT/Interest expenses) of this firm has dropped considerably from 5.72 in the prior year to 2.54 this year. Stock prices are affected by earnings as well as by risk expectations. The drop in price is an indication that investors are concerned about the increased risk of bankruptcy due to high debt.

3. Evaluate the firm's absolute and relative liquidity positions and compare them with its liquidity position last year.

Liquidity is defined as the ability of converting an asset into cash without significant loss of value. A firm's liquidity refers to its ability to pay its short-term bills and current liabilities by converting its current assets into cash. Liquidity is also referred to a firm's short-term solvency. There are various measures of liquidity such as the current ratio, the quick ratio, the cash ratio, the ratio of net working capital to total assets, and the interval measure [Current Assets/((CGS+S&A)/365)].

	Current Year	**Last Year**
Cash Ratio = Cash / Current Liabilities)	0.56%	11.27%
Current Ratio	2.06	2.51
Quick Ratio	0.61	0.68
NWC to TA	0.33	0.43
Interval Measure = Current Assets/(CGS+S&A)	427 days	236 days
Absolute Liquidity = NWC = CA - CL	$2,376,125	$1,337,500

The above ratios indicate that although the absolute liquidity (Net working Capital) of the firm has increased in the current year, the relative liquidity of the firm has decreased.

The current ratio has significantly declined. However, the liquidity situation is not critical because, as the interval measure indicates, the firm could continue operating for at least another 427 days if its cash inflows began to dry up. This interval coverage has increased significantly from its level in the prior year. Thus, one can conclude that although the relative liquidity condition of the company has deteriorated since last year, it is not critically low.

4. Compare the firm's market value with its book value. Is the book value a good representation of the firm's true condition? Explain your answer

Ultra Cable's Current Market Value = Current Stock Price X 200,000 shares

= $25*200,000

= $5,000,000

Ultra Cable's Book Value last year = (Total Assets – Total Liabilities) = Shareholders' Equity

= $3,117,500 - $1,387,500

= $1,730,000

Ultra Cable's Book Value per share (Last year) = $1,730,000/200,000 shares = $8.65

Ultra Cable's Book Value this year = (Total Assets – Total Liabilities) = Shareholders' Equity

= $7,283,625-$5,303,200

= $1,980,425

Ultra Cable's Book Value per share (This year)= $1,980,425/200,000 shares = $9.90

The book value per share rarely equals the market value per share. In the case of Ultra Cable, the stock price ($25) is higher than its book value ($9.90) since it has been growing and has had a run up of sales and profits over the past few years. The drop in price recently reflects the increased risk due to higher debt levels and the lower relative liquidity position of the company. Although the book value per share has increased slightly this year ($9.90 vs. $8.65), it is the market value that reflects the true condition of the company. The P/E ratio of the firm has declined from 22.45X last year to around 15X this year, indicating a dampening of investors' perceptions about the future growth prospects of the firm.

5. For the current year, calculate Ultra Cable's cash flow to investors (CFI) measure using its accounting statements. What can be garnered about Ultra Cable's performance from this measure?

The cash flow to investors (CFI) measure (also known as free cash flow) indicates how much cash a firm can freely distribute to its creditors and stockholders. It is cash that is not needed for working capital or fixed asset investments. CFI is measured as follows:

CFI = Cash Flow from operating activity (CFOA) – Cash flow invested in long-term assets (CFLTA) – Cash flow invested in net working capital (CFNWC)

Where: CFOA = Earnings before interest and taxes
+Non-cash expenses
-Current Taxes

CFLTA = Long-term Assets (current year) – Long-Term Assets (prior year)

= Ending Net Fixed Assets-Beginning Net Fixed Assets + Depreciation

CFNWC = NWC (current year)– NWC (prior year)

CFOA = $983,750 + $197,500 - $238,500 = $942,750

CFLTA = $2,670,000 - $892,500 + $197,500 = $1,975,000

CFNWC = [($4,613,625- $2,237,500)- ($2,225,000-$887,500)]

=[$2,376,125 – $1,337,500]

=$1,038,625

CFI = $942,750 -$1,975,000 – $1,038,625

= -$2,070,875

Ultra Cable had a negative amount of free cash flow this year primarily due to its increase in net capital spending and net working capital. A negative cash flow to investors (CFI) means that the amount of net new borrowing and equity would have increased.

Let's check…

Net increase in Long-term debt = $3,065,700 – $500,000 = $2,565,700

Dividends and interest paid = $107,325+$387,500 = $494,825

Net amount of additional capital raised = $2,565,700 - $494,825 = $2,070,875

The CFI calculation shows that Ultra Cable raised additional long-term debt to fund its increase in net fixed assets and net working capital.

6. Using the firm's net working capital calculation for the recent two years, what can you conclude about Ultra Cable's liquidity situation?

	Last Year	Current Year
Current Assets	$2,225,000	$4,613,625
- Current Liabilities	$ 887,500	$2,237,500
= **Net Working Capital**	**$1,337,500**	**$2,376,125**

Ultra Cable Corp. has significantly increased its net working capital (almost 78% higher) in the current year. Its absolute liquidity has increased quite substantially, but its relative liquidity has declined a bit with the current ratio dropping from 2.51 to 2.06 and its quick ratio declining from 0.68 to 0.61. The liquidity situation is not in dire straits but needs some attention.

7. Should the shareholders be concerned regarding the firm's declining cash balance or should they be pleased with the firm's rising earnings per share? Please explain your answer.

The shareholders are rightly concerned about the significant drop in the firm's cash balance and net profit margin. The decline in cash flow is usually an early warning signal. Ultra Cable's managers should take the necessary steps to alleviate the resulting deterioration of the firm's relative liquidity.

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	A	B	C	D	E	F	G	H	I	J	K	L
12	Interest Paid	7.6%	387,500	2.6%	110,000		277,500			CCA	2,388,625	
13	Taxable Income	11.6%	596,250	12.4%	519,585		76,665			CCL	1,350,000	
14	Taxes (40%)	4.7%	238,500	5.0%	207,834		30,666					
15	Net Income	6.980%	357,750	7.428%	311,751		45,999			NWCTY	2,376,125	
16	Dividends	2.1%	107,325	2.2%	93,525		13,800			NWCLY	1,337,500	1.7765421
17	Addition to Retained Earnings	4.9%	250,425	5.2%	218,226		32,199			CNWC	1,038,625	
18	EPS		1.7888		1.5588							
19	BVPS									CFI	(2,070,875)	
20	Price		25.00		35.00							
21	P/EPS		13.98		22.45					Div and Int Paid	494,825	
22	P/BV		2.52		4.05							
23	Table II									2,070,875		
24	**BALANCE SHEET**		**Current Year**		**Last Year**		**Change**					
25										CFC	(2,178,200)	
26	ASSETS									CFS	107,325	
27	Cash		12,500		100,000		87,500				(2,070,875)	
28	Accounts Receivable		1,350,000		500,000		(850,000)					
29	Inventories		3,251,125		1,625,000		(1,626,125)					
30	Total Current Assets		4,613,625		2,225,000		(2,388,625)					
31	NWC						-					
32	Gross Fixed Assets		3,250,000		1,275,000		(1,975,000)					
33	Accumulated Depreciation		580,000		382,500		(197,500)					
34	Net Fixed Assets		2,670,000		892,500		(1,777,500)		(1,975,000)			
35												
36	Total Assets		7,283,625		3,117,500		(4,166,125)					
37												
38	LIABILITIES & EQUITY						**Change**					
39	Accounts Payable		362,500		137,500		225,000					
40	Notes Payable		1,875,000		750,000		1,125,000					
41	Total Current Liabilities		2,237,500		887,500		1,350,000					
42							-					

43	Long-term Debt		3,065,700		500,000	2,565,700
44	Common-stock and Paid in Surplus		1,500,000		1,500,000	
45	(200,000 shares outstanding)					-
46	Retained Earnings		480,425		230,000	250,425
47	Total		7,283,625		3,117,500	4,166,125
48						
49						
50	Interest Coverage Ratio		2.54		5.72	
51	Net Profit Margin		6.98%		7.43%	
52	Cash Ratio		0.56%		11.27%	
53	Current Ratio		2.06		2.51	
54	Quick Ratio		0.61		0.68	
55	NWC to TA		0.33		0.43	
56	Interval Ratio		427 days		236 days	
57	Absolute Liquidity = NWC		2,376,125		1,337,500	
58	Book Value per share		9.902125		8.65	
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List of Files

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