



BASIC TRAINING PROGRAM **FOR NEW COMMERCIAL JUDGES**

Financial Skill Builder

USAID FOSTERING AN INVESTMENT AND LENDER-FRIENDLY ENVIRONMENT (FILE)

Financial Skill Builder

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FINANCIAL SKILL BUILDER

EXERCISE 1.

Columns A through E represent the balance sheets of different types of companies. Identify which of the following balance sheets is a manufacturer, wholesaler, retailer, or service company. Use your understanding of working assets to identify each of them. Be prepared to discuss how you chose each answer.

Balance Sheet of Different Company Types (Each component is expressed as a percentage of total assets)

	A	B	C	D	E
ASSETS					
Cash	4.1	8.9	2.0	0.7	22.8
Accounts Receivable	2.1	29.9	0	26.1	72.3
Inventory	77.6	51.4	0	10.9	0
Total Current assets	83.8	90.2	2.0	37.7	95.1
Net Fixed Assets	15.4	9.1	97.4	49.4	2.4
Other Noncurrent Assets	0.8	0.7	0.6	12.9	2.5
Total Assets	100.0	100.0	100.0	100.0	100.0
LIABILITIES					
Short-term Bank Debt	3.5	10.6	0	7.2	18.4
Accounts Payable	38.0	2.5	0.3	9.3	60.5
Current Maturities	4.9	0	3.6	8.4	0
Accruals	8.5	14.2	0	11.2	2.2
Other Current Liabilities	0.8	2.8	0	3.8	2.5
Total Current Liabilities	55.7	30.1	3.9	39.9	83.6
Long-term Bank Debt	12.7	13.4	33.5	10.7	8.1
Other Long-term debt	0.3	0	0	0.6	2.5
Subordinated debt	0	34.8	0	0	0
Total Liabilities	68.7	78.3	37.4	51.2	94.2
Net worth					
Common stock	0.1	3.2		0.2	1.4
Retained Earnings	31.2	18.5	62.6	48.6	4.4
Total Net worth	31.3	21.7	62.6	48.8	5.8

EXERCISE 2.

Place the following income statement and balance sheet accounts in the correct order:

Total current liabilities Long-term debt Land Common stock Vehicles Retained earnings Accounts receivable Notes payable Notes receivable Total fixed assets Total assets Cash Inventory Total current assets Current maturities of long-term debt Total equity Buildings Total liabilities Goodwill Accrued expenses	Operating expenses Interest expenses Cost of goods sold Taxes Net sales Gross profit Operating profit Net profit after tax
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BALANCE SHEET	INCOME STATEMENT
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EXERCISE 3.

“Krovko” is a roofing company that repairs and installs new roofs on commercial buildings. Three years of Balance Sheets and Income Statements for Krovko are presented below.

BALANCE SHEETS (in thousands of KM)

	2001	2002	2003
ASSETS			
1 Cash	318	626	1,526
2 Accounts receivable	381	758	1,044
3 Inventory	412	166	164
4 Total current assets (1+2+3)	1,111	1,550	2,734
5 Furniture	185	181	192
6 Machinery and equipment	405	437	707
7 Leasehold improvements	25	25	25
8 Transportation equipment	542	763	1,046
9 Gross fixed assets (5+6+7+8)	1,157	1,406	1,970
10 Less: Accum. depreciation	886	973	1,213
11 Total fixed assets - net	271	433	757
12 Investments	34	38	42
13 Prepaid expenses	28	36	29
14 Deposits	28	60	68
15 Acc.rec. employee/stockholder	6	3	1
TOTAL ASSETS (4+11+12+13+14+15)	1,478	2,120	3,631
LIABILITIES			
1 Accounts payable	318	429	701
2 Profit-sharing plan contribution	14	17	77
3 Accruals	141	250	311
4 Total accrued liabilities (2+3)	155	267	388
5a Total current liabilities (1+4)	473	696	1,089
5b Total Long-term liabilities			
6 Total liabilities (5a+5b)	473	696	1,089
Net worth			
7 Common stock	40	40	40
8 Retained earnings	965	1,384	2,502
9 Net worth (7+8)	1,005	1,424	2,542
TOTAL LIABILITIES AND NET WORTH (6+9)	1,478	2,120	3,631

INCOME STATEMENTS (in thousands of KM)

	2001	2002	2003
Sales	5,015	7,296	10,743
Cost of goods sold	3,527	5,163	7,348
Gross profit/ revenues	1,488	2,133	3,395
Operating expenses:			
General and admin.expense	1,015	1,148	1,504
Officers compensation	230	345	455
Rent expense	99	101	106
Bad debt expense	2	0	0
Profit-sharing contribution	15	17	77
Depreciation	95	159	267
Operating income (Gross profit minus Operating expenses)	32	363	986
- Interest expense	8	7	3
+ Interest income	3	8	29
+ Other income	135	55	106
Net profit before tax	162	419	1,118
Tax	0	0	0
Net profit after tax	162	419	1,118

a) Spread and common-size three years of the balance sheet using the following form:

BALANCE SHEET	2001 Amount	%	2002 Amount	%	2003 Amount	%
ASSETS						
Cash						
Accounts receivable						
Inventory						
Other current assets						
Total current assets						
Land						
Buildings						
Equipment						
Other fixed assets						
Depreciation						
Net fixed assets						
Prepaid expenses						
Investments						
Deposits						
Acc. Rec. employee						
TOTAL ASSETS		100		100		100

LIABILITIES						
Notes payable shortterm						
Accounts payable						
Accrued expenses						
Curr. maturities LTdebt						
Other current liabilities						
Taxes payable						
Total current liabilities						
Long-term debt bank						
Subordinate debt						
Other long-term debt						
Total liabilities						
Net worth						
Common stock						
Retained earnings						
Paid-in capital						
Treasury stock						
Total equity						

b) Spread and common-size the income statement using the following form:

INCOME STATEMENT	2001	%	2002	%	2003	%
Net sales		100		100		100
Cost of goods sold						
Gross profit						
Operating expenses						
Operating profit (loss)						
Other income						
Other expense						
Interest expense						
Net profit before tax						
Taxes						
Net profit after tax						

c) Using Krovko's Balance Sheet and Income Statement calculate the direct method cash flow using the worksheet on the following page.

CASH FLOW – DIRECT METHOD

Sales -net	
(Increase) decrease in receivables	
Cash from sales	
<i>(Cost of goods sold)¹</i>	
(Increase) decrease in inventories	
Increase (decrease) in payables	
Cash production costs	
Gross cash profit	
<i>(Selling, general and administrative expense)¹</i>	
(Increase) decrease in prepaids	
Increase (decrease) in accruals	
Cash operating expense	
Cash after operations	
Miscellaneous cash income ²	
Income taxes paid ³	
Net cash after operations	
Interest expense	
Dividends paid/ owner withdrawals	
Financing costs	
Net cash income	
Current portion long-term debt ⁴	
Cash after debt amortization	
Capital expenditures ⁵	
Long-term investments/ intangibles	
Financial surplus (requirements)	
Increase (decrease) short-term debt	
Increase (decrease) long-term debt ⁶	
Increase (decrease) equity ⁷	
Total external financing	
Cash after financing	
Actual change in cash	

() Indicates decline in cash

¹ Net of depreciation

² Other income- other expense +/- change or other current assets/liabilities

³ Tax provision +/- change in deferred tax asset, accrued income taxes payable, and deferred taxes payable

⁴ Previous year's current maturities long-term debt

⁵ Change in net fixed assets plus depreciation

⁶ Change in long-term debt plus this year's current maturities

⁷ Common, preferred, treasury stock only

EXERCISE 4.

Enter the amount of change in KM in the Amount column and indicate whether the change is a source of or a use of cash in the space provided.

KM (000s omitted)	2001	2002	Amount	Type
Accounts receivable	250	200		
Inventory	150	200		
Prepaid expenses	25	30		
Equipment	300	350		
Other current liabilities	90	120		
Notes payable-banks	300	250		
Accounts payable	140	190		
Accrued expenses	80	70		
Long-term debt	200	150		
Common stock	100	120		

EXERCISE 5.

Based on provided Balance Sheets and Income Statements for “Fruit & Vegetable” whole trade company, please make Cash Flow Statement (Indirect Method).

BALANCE SHEET (000 KM)

	2000	20001
ASSETS		
Cash	46	52
Accounts Receivable	40	46
Inventory	100	145
Prepaid expenses	80	80
Other Current Assets	74	79
Total Current assets	340	402
Gross Fixed Assets	640	784
Less: Depreciation	(296)	(338)
Net Fixed Assets	344	446
TOTAL ASSETS	684	848
LIABILITIES		
Short Term Debt	40	96
Payables	140	165
Accrued Expenses	58	70
Total Current Liabilities	238	331
Long Term Liabilities	70	75
TOTAL LIABILITIES	308	406
Common Stock	60	60
Retained Earning	316	382
TOTAL EQUITY	376	442
TOTAL LIAB.& EQUITY	684	848

INCOME STATEMENT (000 KM)

	2000	20001
SALES	4,800	5,236
Cost of goods sold	3,672	4,028
GROSS PROFIT	1,128	1,208
OPERATING EXPENSES		
Variable costs		
Salaries	348	381
Vehicle expenses	42	46

Warehouse expenses	40	46
Office supply	14	12
Acc.& legal services	8	6
Utilities	10	12
Advertising	12	18
Sales and promotion	52	58
Packaging costs	144	158
Uncollectible A/R	48	52
Damaged goods	96	105
Fixed costs		
Lease	36	36
Depreciation	36	42
Insurance	14	16
Tax on salaries	34	50
Pension Fund	60	66
Regist. & permits	6	6
Interest	14	16
TOTAL OPER.EXPENSES	1,014	1,126
INCOME BEFORE TAX	114	82
Tax on income	30	16
NET INCOME	84	66

CASH FLOW STATEMENT (Indirect Method)

1	Net income after tax	
2	Depreciation	
3	+/- changes on Accounts Receivable	
4	+/- changes in Inventory	
5	+/- changes on other Current Assets Account	
6	+/- changes on Accounts Payable	
7	+/- changes on Accrued Expenses	
8	+/- changes on Accrued and delayed taxes on income	
9	+/- changes on other Current Liabilities Accounts	
10	+/- changes on other Noncurrent Liabilities	
11	Operating funds flows (Operating Cash Flow)	
12	+/- changes on Securities Account	
13	+/- changes in Long Term Investment	
14	+/- changes in Gross Fixed Assets	
15	Non expected profit (loss)	
16	Intangible and Other Assets	
17	Investing funds flows	

18	Cash flow before Financing Activities (row 11 + row 17)	
19	+/- changes in Short Term Loan	
20	+/- changes in Long Term Loan	
21	+/- changes in Subordinated Loan	
22	+/- changes in Capital	
23	Dividends paid	
24	Adjustments on Retained Earning Account	
25	Other Interest	
26	Financing funds flows	
27	TOTAL CASH FLOW (row 11+ row 17 + row 26)	
28	Beginning Cash	
29	Plus Operating cash flow (row 11)	
30	Investing cash flow (row 17)	
31	Financing cash flow (row 26)	
32	Ending Cash	

EXERCISE 6.

Use the information on one manufacturing company to calculate the ratios and answer the following questions. Calculate the information for both years.

(000s omitted) KM	2001	2002
Sales	8,257	9,783
Gross profit	2,252	2,682
Operating profit	1,063	1,219
Interest expense	0	0
Net income	1,079	1,173
Dividends	635	484
Cash	860	832
Accounts receivable (net)	660	753
Inventory	669	906
Net fixed assets	1,280	1,737
Prepaid expenses	101	55
Total assets	3,570	4,283
Accounts payable	234	267
Accrued expenses	171	163
Net worth	3,165	3,853

Depreciation expense was KM 354 and KM 206 respectively for the years 2001 and 2002.

	2001	2002
1. What is the company's gross margin?
2. What is the cost of goods sold?
3. What is the return-on-sales ratio?
4. What is the return-on-equity ratio?
5. What is the days accounts receivable ratio?
6. What is the days inventory ratio?
7. What is the days accounts payable?
8. What is the quick ratio?
9. What is the current ratio?
10. What is debt-to-worth ratio?
11. What is the dividend payout ratio?

ANSWERS

EXERCISE 1.

(Retailer = A, Wholesaler = B, Service = C and E, Manufacturer = D)

EXERCISE 2.

BALANCE SHEET	INCOME STATEMENT
Cash	Net sales
Accounts receivable	Cost of goods sold
Inventory	Gross profit
Total current assets	Operating expenses
Land	Operating profit
Buildings	Interest expense
Vehicles	Taxes
Total fixed assets	Net profit after tax
Goodwill	
Notes receivable	
TOTAL ASSETS	
Notes payable	
Accrued expenses	
Current maturities of long-term debt	
Total current liabilities	
Long-term debt	
Total Liabilities	
Common stock	
Retained earnings	
Total equity	

EXERCISE 3.

a) Common-sized Balance Sheet

BALANCE SHEET	2001 Amount	%	2002 Amount	%	2003 Amount	%
ASSETS						
Cash	318	21.5	626	29.5	1,526	42.0
Accounts receivable	381	25.8	758	35.8	1,044	28.8
Inventory	412	27.9	166	7.8	164	4.5
Other current assets	-		-		-	
Total current assets	1,111	75.2	1,550	73.1	2,734	75.3
Land						
Buildings						
Equipment	1,132	76.6	1,381	65.1	1,945	53.6
Other fixed assets	25	1.7	25	1.2	25	0.7
Depreciation	886	59.9	973	45.9	1,213	33.4
Net fixed assets	271	18.3	433	20.4	757	20.8
Prepaid expenses	28	1.9	36	1.7	29	0.8
Investments	34	2.3	38	1.8	42	1.2
Deposits	28	1.9	60	2.8	68	1.9
Acc. Rec. employee	6	0.4	3	0.1	1	0.03
TOTAL ASSETS	1,478	100	2,120	100	3,631	100
LIABILITIES						
Notes payable shortterm						
Accounts payable	318	21.5	429	20.2	701	19.3
Accrued expenses	155	10.5	267	12.6	388	10.7
Curr. maturities LTdebt						
Other current liabilities						
Taxes payable						
Total current liabilities	473	32.0	696	32.8	1,089	29.9
Long-term debt bank						
Subordinate debt						
Other long-term debt						
Total liabilities	473	32.0	696	32.8	1,089	29.9
Net worth	40	2.7	40	1.9	40	1.1
Common stock						
Retained earnings	965	65.29	1,384	65.3	2,502	68.9
Paid-in capital						
Treasury stock						
Total equity	1,005	67.99	1,424	67.2	2,542	70.0

b) Common-sized Income Statement

INCOME STATEMENT	2001	%	2002	%	2003	%
Net sales	5,015	100	7,296	100	10,743	100
Cost of goods sold	3,527	70	5,163	71	7,348	68
Gross profit	1,488	30	2,133	29	3,395	32
Operating expenses	1,456	29	1,770	24	2,409	22
Operating profit (loss)	32	0.6	363	5	986	9
Other income	135	2.7	55	0.8	106	1.0
Other expense						
Interest expense	8	0.2	7	0.09	3	0.03
Net profit before tax	162	3.2	419	5.7	1,118	10.4
Taxes	-		-		-	
Net profit after tax	162	3.2	419	5.7	1,118	10.4

c) CASH FLOW – DIRECT METHOD (KM)

Sales -net	10,743
(Increase) decrease in receivables	(286)
Cash from sales	10,457
<i>(Cost of goods sold)¹</i>	<i>(7,348)</i>
(Increase) decrease in inventories	2
Increase (decrease) in payables	272
Cash production costs	(7,074)
Gross cash profit	3,383
<i>(Selling, general and administrative expense)¹</i>	<i>(2,142)</i>
(Increase) decrease in prepaids	7
Increase (decrease) in accruals	121
Cash operating expense	(2,014)
Cash after operations	1,369
Miscellaneous cash income ² (106+29-8)	127
Income taxes paid ³	0
Net cash after operations	1,496
Interest expense	(3)
Dividends paid/ owner withdrawals	0
Financing costs	0
Net cash income	1,493
Current portion long-term debt ⁴	0
Cash after debt amortization	1,493
Capital expenditures ⁵ (433-267-757)	(591)
Long-term investments/ intangibles	(10)
Financial surplus (requirements)	900
Increase (decrease) short-term debt	
Increase (decrease) long-term debt ⁶	
Increase (decrease) equity ⁷	
Total external financing	
Cash after financing	900
Actual change in cash	900

EXERCISE 4.

KM (000s omitted)	2001	2002	Amount	Type
Accounts receivable	250	200	-50	Source of cash
Inventory	150	200	+50	Use of cash
Prepaid expenses	25	30	+5	Use of cash
Equipment	300	350	+50	Use of cash
Other current liabilities	90	120	+30	Source of cash
Notes payable-banks	300	250	-50	Use of cash
Accounts payable	140	190	+50	Source of cash
Accrued expenses	80	70	-10	Use of cash
Long-term debt	200	150	-50	Use of cash
Common stock	100	120	+20	Source of cash

EXERCISE 5.

1	Net income after tax	66
2	Depreciation	42
3	+/- changes on Accounts Receivable	-6
4	+/- changes in Inventory	-45
5	+/- changes on other Current Assets Account	-5
6	+/- changes on Accounts Payable	25
7	+/- changes on Accrued Expenses	12
8	+/- changes on Accrued and delayed taxes on income	
9	+/- changes on other Current Liabilities Accounts	
10	+/- changes on other Noncurrent Liabilities	
11	Operating funds flows (Operating Cash Flow)	89
12	+/- changes on Securities Account	
13	+/- changes in Long Term Investment	
14	+/- changes in Gross Fixed Assets	-144
15	Non expected profit (loss)	
16	Intangible and Other Assets	
17	Investing funds flows	-144
18	Cash flow before Financing Activities (row 11 + row 17)	-55
19	+/- changes in Short Term Loan	56
20	+/- changes in Long Term Loan	5
21	+/- changes in Subordinated Loan	
22	+/- changes in Capital	
23	Dividends paid	
24	Adjustments on Retained Earning Account	
25	Other Interest	

26	Financing funds flows	61
27	TOTAL CASH FLOW (row 11+ row 17 + row 26)	6
28	Beginning Cash	46
29	Plus Operating cash flow (row 11)	89
30	Investing cash flow (row 17)	-144
31	Financing cash flow (row 26)	61
32	Ending Cash	52

EXERCISE 6.

	2001	2002
1. What is the company's gross margin?	27.27%	27.41%
2. What is the cost of goods sold?(000 omitted)	6,005	7,101
3. What is the return-on-sales ratio?	13.07%	11.99%
4. What is the return-on-equity ratio?	34.09%	30.44%
5. What is the days accounts receivable ratio?	29 days	28 days
6. What is the days inventory ratio?	41 days	47 days
7. What is the days accounts payable?	14 days	14 days
8. What is the quick ratio?	3.75	3.69
9. What is the current ratio?	5.4	5.79
10. What is debt-to-worth ratio?	0.13	0.11
11. What is the dividend payout ratio?	59%	41%