



# Understanding Financial Statements

By Dr. Duncan Elly



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# Understanding Financial Statements



- \* Financial Statements culminate from the ***financial accounting*** cycle which involves various activities that include:
- \* **Recognition of a business transaction or event,**
- \* **Preparation of supporting documents,**
- \* **Recording transactions and events in the book of original entry (journalizing),**
- \* **Classifying the entries in the journals (posting) to the ledger,**



# Understanding Financial Statements



- \* Preparation of the un-adjusted trial balance,
- \* Preparation of end of period adjusting entries (journalizing),
- \* Posting of the end of period adjustments in the ledger,
- \* Preparation of the adjusted trial balance,
- \* Preparation of the **financial statements, reports and other disclosures**,
- \* Preparation of closing entries, and
- \* Preparation of the post closing trial balance.

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# Definitions for Accounting



- \* Accounting is the language of business
- \* Accounting is an Information System
  - a) For Insiders
  - b) For Outsiders
- \* Accounting provides reports to stakeholders about the economic activities and condition of a business

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# Definitions for Accounting



- \* Accounting refers to measurement of economic events and summarizing and reporting them in the form of financial statements for use by the stakeholders i.e. bankers, creditors, shareholders, public and Govt. Reporting is thus the end function of accounting

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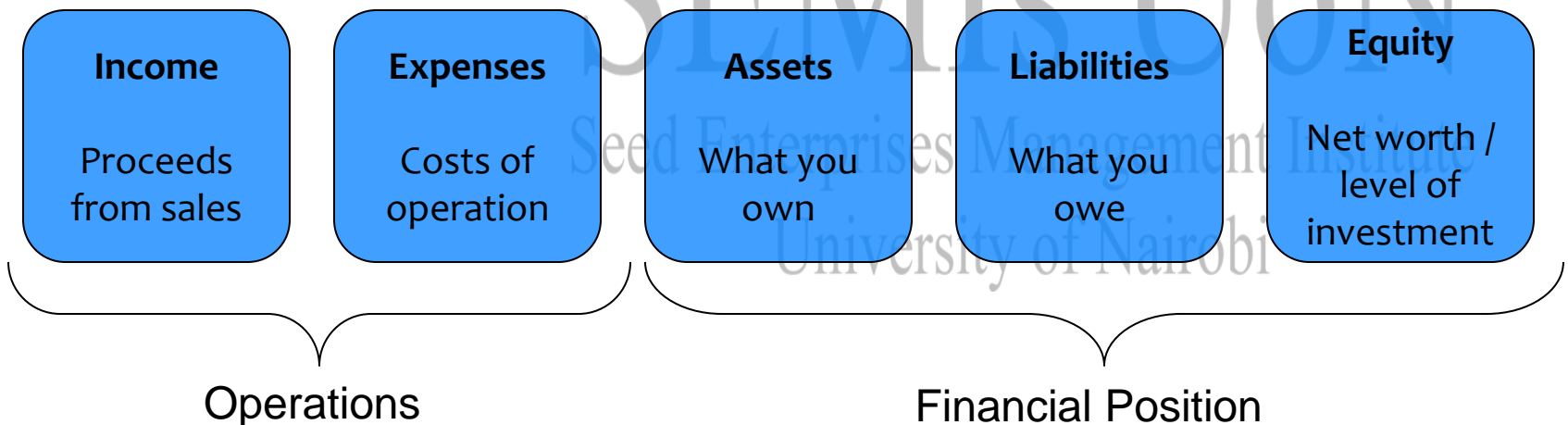


# Accounts



Accounts are the categories into which the effects of transactions are recorded, and from which financial reports are created.

5 major account categories:





# Primary Financial Statements



## Basic financial statements:

- I. Balance Sheet/ Statement of Financial Position
- II. Profit and Loss Account/ Income Statement
- III. Statement of changes in owners' equity/  
Statement of Retained Earnings
- IV. Statement of Cash Flows
- V. Additional Notes

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# Primary Financial Statements



- \* Primary financial statements answer basic questions including:
  - \* What is the company's current financial status?
  - \* What was the company's operating results for the period?
  - \* How did the company obtain and use cash during the period?

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# The Balance Sheet



- \* Summary of the financial position of a company at a particular date
- \* Assets: cash, accounts receivable, inventory, land, buildings, equipment and intangible items
- \* Liabilities: accounts payable, notes payable and mortgages payable
- \* Owners' Equity: net assets after all obligations have been satisfied

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# The Balance Sheet



- \* What are the resources of the company?
- \* What are the company's existing obligations?
- \* What are the company's net assets?
- \* The Balance sheet is a summary of the accounting equation

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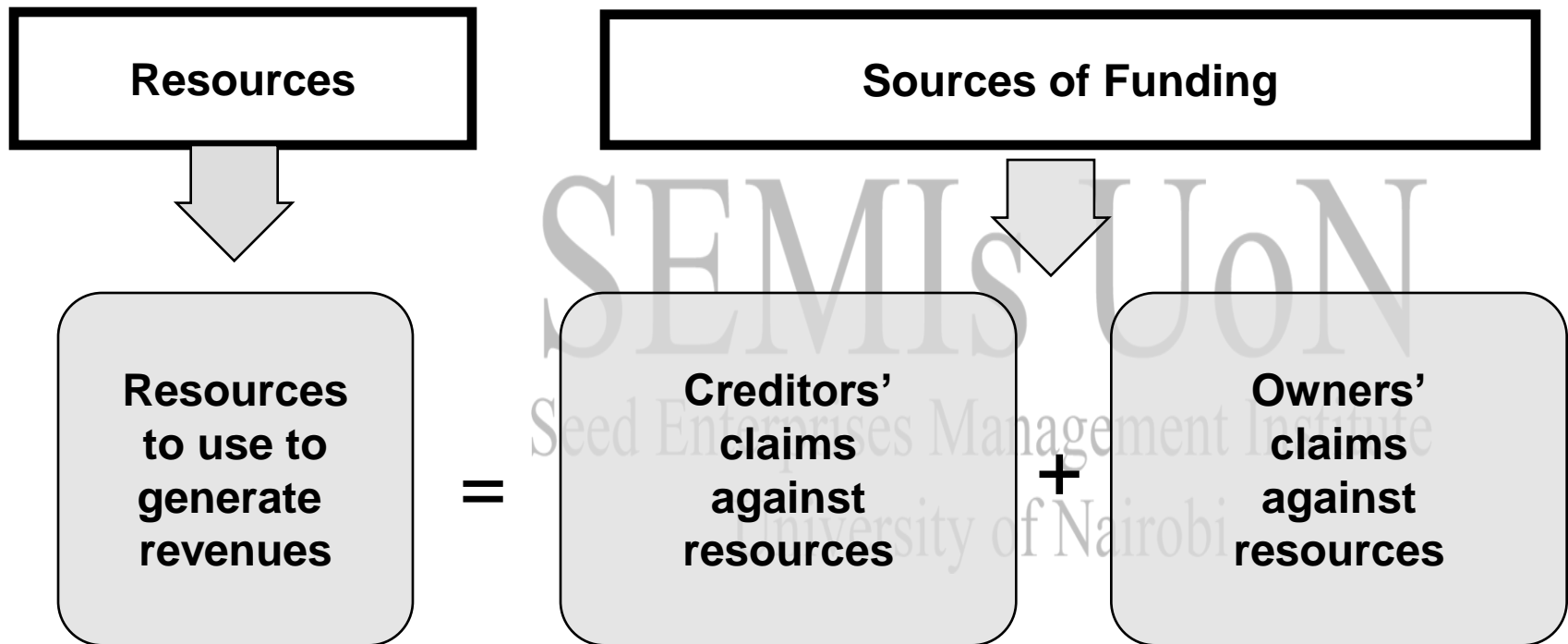
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# Accounting Equation

**Assets = Liabilities + Owners' Equity**





# Classified and Comparative Balance Sheets



- \* **Classified** Balance sheets distinguish between:
  - \* Current and long-term assets
  - \* Current and long-term liabilities
- \* These are Listed in decreasing order of liquidity
- \* **Comparative** Balance sheets present consecutive periods so that financial statement users can identify significant changes over time. They have more than one year of the Balance Sheet.

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# X Company Balance Sheet



<b>Balance Sheet (000's)</b>		<b>2009</b>	<b>2010</b>	<b>\$ Change</b>	<b>% Change</b>
<b>6</b>	<b>Current Assets</b>				
7	Cash	45,000	65,800	20,800	46.2%
8	Accounts Receivable	45,000	60,000	15,000	33.3%
9	Inventories	35,000	40,000	5,000	14.3%
10	Prepaid Expenses	10,000	9,000	(1,000)	-10.0%
11	Total Current Assets	135,000	174,800	39,800	29.5%
<b>13</b>	<b>Property and Equipment</b>				
14	Land	2,500,000	2,500,000	-	0.0%
15	Building	450,000	550,000	100,000	22.2%
16	Furniture & Equipment	50,000	75,000	25,000	50.0%
17	Total Gross P&E	3,000,000	3,125,000	125,000	4.2%
18	Less Accumulated Depreciation	(300,000)	(365,000)	(65,000)	21.7%
19	Net P&E	2,700,000	2,760,000	60,000	2.2%
21	Long-Term Investments	200,000	250,000	50,000	25.0%
23	Total Assets	3,035,000	3,184,800	149,800	4.9%
<b>25</b>	<b>Liabilities and Owners Equity</b>				
<b>27</b>	<b>Current Liabilities</b>				
28	Accounts Payable	35,000	40,000	5,000	14.3%
29	Accrued Income Taxes	12,000	10,000	(2,000)	-16.7%
30	Accrued Expenses	10,000	8,000	(2,000)	-20.0%
31	Current Portion of Long Term Debt	20,000	10,000	(10,000)	-50.0%
32	Total Current Liabilities	77,000	68,000	(9,000)	-11.7%
34	Long-Term Debt:	1,200,000	1,180,000	(20,000)	-1.7%
36	Deferred Income Taxes	12,000	17,000	5,000	41.7%
38	Total Liabilities	1,289,000	1,265,000	(24,000)	-1.9%
<b>40</b>	<b>Owners' Equity</b>				
41	Common Stock	1,000,000	1,000,000	-	0.0%
42	Paid-in-Capital	-	25,000	25,000	
43	Retained Earnings	746,000	894,800	148,800	19.9%
44	Total Owners' Equity	1,746,000	1,919,800	173,800	10.0%
46	Total Liabilities & Owner's Equity	3,035,000	3,184,800	149,800	4.9%

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# Balance Sheet Limitations



- ① Assets recorded at historical value
- ② Only recognizes assets that can be expressed in monetary terms
- ③ Owners' equity is usually less than the company's market value

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# The Income Statement



- \* Shows the results of a company's operations over a period of time.
- \* What goods were sold or services performed that provided revenue for the company?
- \* What costs were incurred in normal operations to generate these revenues?
- \* What are the earnings or company profit?

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# The Income Statement



## Revenues

- \* Assets (cash or Accounts Receivable) created through business operations

## Expenses

- \* Assets (cash or Accounts Payable) consumed through business operations

## Net Income or (Net Loss)

- \* Revenues - Expenses

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# X Company Income Statement



<b>Income Statement (000's)</b>	<b>2009</b>	<b>2010</b>
Total Revenue	960,000	1,110,000
<b>Total Cost of Sales</b>	345,000	420,000
Gross Profit	615,000	690,000
<b>Operating Expenses</b>		
Administrative & General	145,000	165,000
Marketing Expenses	75,000	80,000
Other Operating Expenses	10,000	12,000
Total Operating Expenses	230,000	257,000
<b>EBITDA</b>	385,000	433,000
<b>Depreciation &amp; Amortization</b>	60,000	65,000
<b>EBIT</b>	325,000	368,000
<b>Interest Expense</b>	130,000	120,000
EBT	195,000	248,000
<b>Taxes</b>	40% 78,000	99,200
Net Income	117,000	148,800



# Statement of Retained Earnings



Beginning retained earnings

+ Net income

- Dividends paid

= Ending retained earnings

An additional financial statement that identifies changes in retained earnings from one accounting period to the next.

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Net income results in:

Increase in net assets  
Increase in retained earnings  
Increase in owners' equity

Dividends result in:

Decrease in net assets  
Decrease in retained earnings  
Decrease in owners' equity



# Statement of Cash Flows



- \* Reports the amount of cash collected and paid out by a company in operating, investing and financing activities for a period of time.
- \* How did the company receive cash?
- \* How did the company use its cash?
- \* Complementary to the income statement.
- \* Indicates ability of a company to generate income in the future.

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# Cash Flow Statement



- ❑ Differences between Income Statement and Cash Flow Statement
  - Timing Differences (Working Capital Activities)
  - Capital Expenses Vs Operating Expenses (Investment Activities)
  - Financing Expenses not included in the Income Statement (Financing Activities)
  
- ❑ Represents the changes from last Year's Balance Sheet to this Year's Balance Sheet
  - Asset goes Up = Cash Negative
  - Asset goes down = Cash Positive
  - Liability goes up = Cash Positive
  - Liability goes down = Cash Negative
  - Owner's Equity goes up = Cash Positive
  - Owner's Equity goes down = Cash Negative

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# Statement of Cash Flows



## Cash inflows

- \* Sell goods or services
- \* Sell other assets or by borrowing
- \* Receive cash from investments by owners

## Cash outflows

- \* Pay operating expenses
- \* Expand operations, repay loans
- \* Pay owners a return on investment

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# Match Classification of Cash Flows



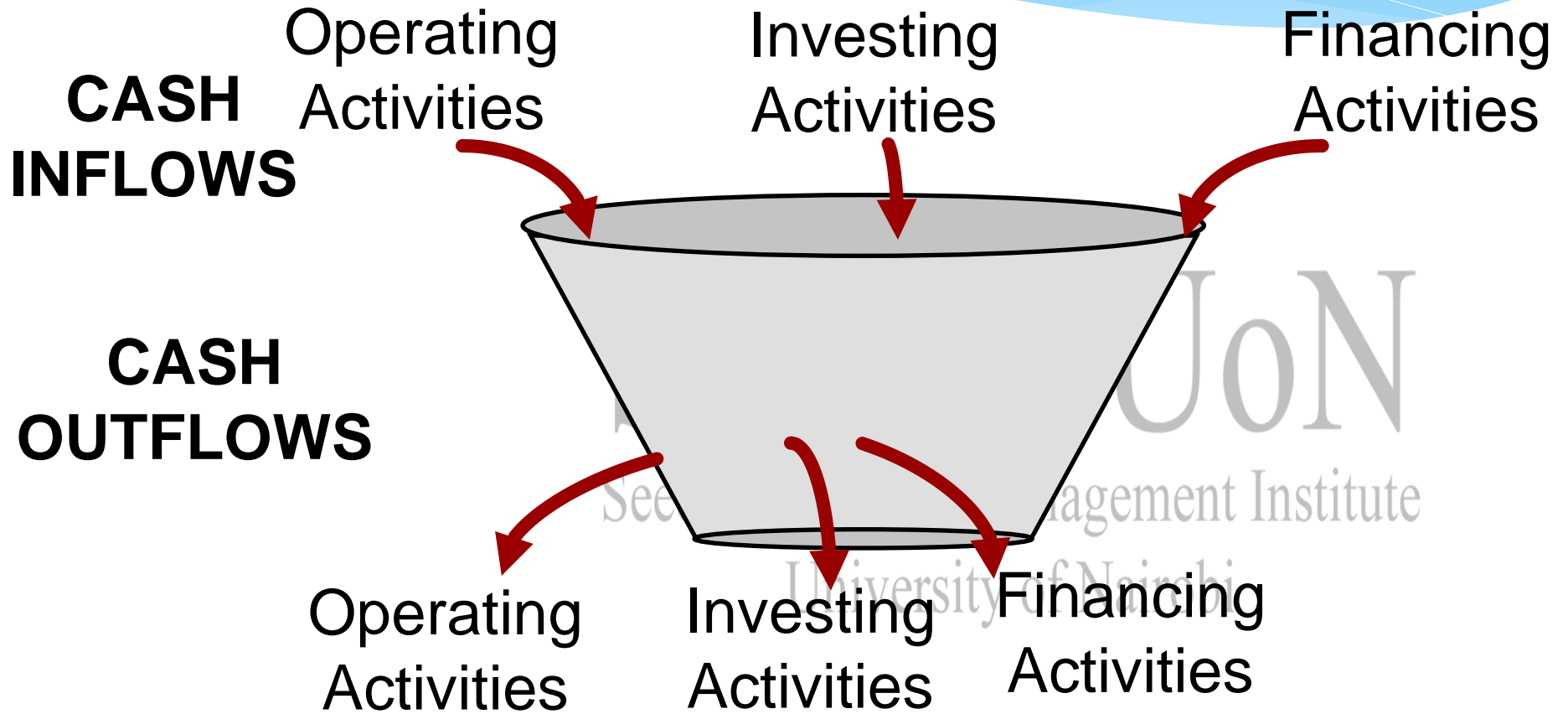
- \* **Operating activities** – Transactions and events that enter into the determination of net income.
- \* **Investing activities** – Transactions and events that involve the purchase and sale of securities, property, plant, equipment, and other assets not generally held for resale, and the making and collecting of loans.
- \* **Financing activities** – Transactions and events whereby resources and obtained from, or repaid to, owners and creditors.

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# Statement of Cash Flows







# Operating Activities

## Cash Inflow

- \* Sale of goods or services
- \* Sale of investments in trading securities
- \* Interest revenue
- \* Dividend revenue

## Cash Outflow

- \* Inventory payments
- \* Interest payments
- \* Wages
- \* Utilities, rent
- \* Taxes

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# Investing Activities

## Cash Inflow

- \* Sale of plant assets
- \* Sale of securities, other than trading securities
- \* Collection of principal on loans

## Cash Outflow

- \* Purchase of plant assets
- \* Purchase of securities, other than trading securities
- \* Making of loans to other entities

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# Financing Activities

## Cash Inflow

- \* Issuance of own stock
- \* Borrowing

## Cash Outflow

- \* Dividend payments
- \* Repaying principal on borrowing
- \* Treasury stock purchase

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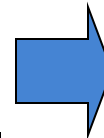
# Cash Flow Statement



## Adjusting Income to Cash

Balance Sheet (000's)	2009	2010	\$ Change
<b>Current Assets</b>			
Cash	45,000	65,800	20,800
Accounts Receivable	45,000	60,000	15,000
Inventories	35,000	40,000	5,000
Prepaid Expenses	10,000	9,000	(1,000)
Total Current Assets	135,000	174,800	39,800
<b>Property and Equipment</b>			
Land	2,500,000	2,500,000	-
Building	450,000	550,000	100,000
Furniture & Equipment	50,000	75,000	25,000
Total Gross P&E	3,000,000	3,125,000	125,000
<b>Less Accumulated Depreciation</b>	<b>(300,000)</b>	<b>(365,000)</b>	<b>(65,000)</b>
Net P&E	2,700,000	2,760,000	60,000
Long-Term Investments	200,000	250,000	50,000
Total Assets	3,035,000	3,184,800	149,800
<b>Liabilities and Owners Equity</b>			
<b>Current Liabilities</b>			
Accounts Payable	35,000	40,000	5,000
Accrued Income Taxes	12,000	10,000	(2,000)
Accrued Expenses	10,000	8,000	(2,000)
Current Portion of Long Term Debt	20,000	10,000	(10,000)
Total Current Liabilities	77,000	68,000	(9,000)
Long-Term Debt:	1,200,000	1,180,000	(20,000)
<b>Deferred Income Taxes</b>	<b>12,000</b>	<b>17,000</b>	<b>5,000</b>
Total Liabilities	1,289,000	1,265,000	(24,000)
<b>Owners' Equity</b>			
Common Stock	1,000,000	1,000,000	-
Paid-in-Capital	-	25,000	25,000
<b>Retained Earnings</b>	<b>746,000</b>	<b>894,800</b>	<b>148,800</b>
Total Owners' Equity	1,746,000	1,919,800	173,800
Total Liabilities & Owner's Equity	3,035,000	3,184,800	149,800

Cash Flow Statement (000's)	2010
Net Income	148,800
Plus Depreciation	65,000
Plus Deferred Taxes	5,000
Cash Income	218,800



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# Cash Flow Statement



## Working Capital Activities

### Balance Sheet (000's)

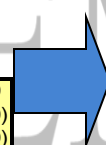
	2009	2010	\$ Change
<b>Current Assets</b>			
Cash	45,000	65,800	20,800
Accounts Receivable	45,000	60,000	15,000
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Prepaid Expenses	10,000	9,000	(1,000)
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Long-Term Investments	200,000	250,000	50,000
Total Assets	3,035,000	3,184,800	149,800
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<b>Current Liabilities</b>			
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Total Owners' Equity	1,746,000	1,919,800	173,800
Total Liabilities & Owner's Equity	3,035,000	3,184,800	149,800

### Cash Flow Statement (000's)

	2010
Net Income	148,800
Plus Depreciation	65,000
Plus Deferred Taxes	5,000
Cash Income	218,800

### Working Capital Activities

Change in Accounts Receivable	(15,000)
Change in Inventory	(5,000)
Change in Prepaid Expenses	1,000
Change in Accounts Payable	5,000
Change in Accrued Income Taxes	(2,000)
Change in Accrued Expenses	(2,000)
Total Change in Working Capital	(18,000)
Operating Cash Flow (OCF)	200,800



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# Cash Flow Statement



## Balance Sheet (000's)

	2009	2010	\$ Change
<b>Current Assets</b>			
Cash	45,000	65,800	20,800
Accounts Receivable	45,000	60,000	15,000
Inventories	35,000	40,000	5,000
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Less Accumulated Depreciation	(300,000)	(365,000)	(65,000)
Net P&E	2,700,000	2,760,000	60,000
<b>Long-Term Investments</b>	<b>200,000</b>	<b>250,000</b>	<b>50,000</b>
Total Assets	3,035,000	3,184,800	149,800
<b>Liabilities and Owners Equity</b>			
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<b>Owners' Equity</b>			
Common Stock	1,000,000	1,000,000	-
Paid-in-Capital	-	25,000	25,000
Retained Earnings	746,000	894,800	148,800
Total Owners' Equity	1,746,000	1,919,800	173,800
Total Liabilities & Owner's Equity	3,035,000	3,184,800	149,800

## Investment Activities

### Cash Flow Statement (000's)

	2010
Net Income	148,800
Plus Depreciation	65,000
Plus Deferred Taxes	5,000
Cash Income	218,800
<b>Working Capital Activities</b>	
Change in Accounts Receivable	(15,000)
Change in Inventory	(5,000)
Change in Prepaid Expenses	1,000
Change in Accounts Payable	5,000
Change in Accrued Income Taxes	(2,000)
Change in Accrued Expenses	(2,000)
Total Change in Working Capital	(18,000)
Operating Cash Flow (OCF)	200,800
<b>Investment Activities</b>	
Capital Expenditures	(125,000)
Investments (Change)	(50,000)
Total Financing Activities	(175,000)
Cash Available for Debt Service (CAFDS)	25,800



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# Cash Flow Statement



## Financing Activities

Balance Sheet (000's)	2009	2010	\$ Change
<b>Current Assets</b>			
Cash	45,000	65,800	20,800
Accounts Receivable	45,000	60,000	15,000
Inventories	35,000	40,000	5,000
Prepaid Expenses	10,000	9,000	(1,000)
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Net P&E	2,700,000	2,760,000	60,000
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Total Assets	3,035,000	3,184,800	149,800
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<b>Current Liabilities</b>			
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Accrued Expenses	10,000	8,000	(2,000)
<b>Current Portion of Long Term Debt</b>	<b>20,000</b>	<b>10,000</b>	<b>(10,000)</b>
Total Current Liabilities	77,000	68,000	(9,000)
<b>Long-Term Debt:</b>	<b>1,200,000</b>	<b>1,180,000</b>	<b>(20,000)</b>
Deferred Income Taxes	12,000	17,000	5,000
Total Liabilities	1,289,000	1,265,000	(24,000)
<b>Owners' Equity</b>			
<b>Common Stock</b>	<b>1,000,000</b>	<b>1,000,000</b>	<b>-</b>
<b>Paid-in-Capital</b>	<b>-</b>	<b>25,000</b>	<b>25,000</b>
Retained Earnings	746,000	894,800	148,800
Total Owners' Equity	1,746,000	1,919,800	173,800
Total Liabilities & Owner's Equity	3,035,000	3,184,800	149,800

Cash Flow Statement (000's)	2010
Net Income	148,800
Plus Depreciation	65,000
Plus Deferred Taxes	5,000
Cash Income	218,800

Working Capital Activities	
Change in Accounts Receivable	(15,000)
Change in Inventory	(5,000)
Change in Prepaid Expenses	1,000
Change in Accounts Payable	5,000
Change in Accrued Income Taxes	(2,000)
Change in Accrued Expenses	(2,000)
Total Change in Working Capital	(18,000)
Operating Cash Flow (OCF)	200,800

Investment Activities	
Capital Expenditures	(125,000)
Investments (Change)	(50,000)
Total Financing Activities	(175,000)
Cash Available for Debt Service (CAFDS)	25,800

Financing Activities	
ST Debt Payments	(10,000)
LT Payments	(20,000)
Equity Contribution	25,000
Total Financing Activities	(5,000)
Free Cash Flow	20,800







# Cash Flow Statement

## Cash Flow Statement (000's)

2010

86	Net Income	148,800
87	Plus Depreciation	65,000
88	Plus Deferred Taxes	5,000
89	Cash Income	<u>218,800</u>
91	<b>Working Capital Activities</b>	
92	Change in Accounts Receivable	(15,000)
93	Change in Inventory	(5,000)
94	Change in Prepaid Expenses	1,000
95	Change in Accounts Payable	5,000
96	Change in Accrued Income Taxes	(2,000)
97	Change in Accrued Expenses	(2,000)
98	Total Change in Working Capital	<u>(18,000)</u>
100	Operating Cash Flow (OCF)	<u>200,800</u>
102	<b>Investment Activities</b>	
103	Capital Expenditures	(125,000)
104	Investments (Change)	(50,000)
105	Total Financing Activities	<u>(175,000)</u>
106		
107	Cash Available for Debt Service (CAFDS)	25,800
109	<b>Financing Activities</b>	
110	ST Debt Payments	(10,000)
111	LT Payments	(20,000)
112	Equity Contribution	25,000
113	Total Financing Activities	<u>(5,000)</u>
115	<b>Free Cash Flow</b>	<u>20,800</u>
117	Beginning Cash	45,000
119	Ending Cash	<u>65,800</u>

## Recap

### Balance Sheet (000's)

2009

2010

\$ Change

Retained Earnings

746,000

894,800

148,800

Timing Differences  
(Working Capital  
Activities)

Investment Activities

Financing Activities

### Balance Sheet (000's)

2009

2010

\$ Change

Current Assets

Cash

45,000

65,800

20,800





# Notes to the Financial Statements



- \* Notes are used to convey information required by GAAP or to provide further explanation.

## There are four general types of notes:

- ① Summary of significant accounting policies: assumptions and estimates.
- ② Additional information about the summary totals.
- ③ Disclosure of important information that is not recognized in the financial statements.
- ④ Supplementary information required by the FASB or the Securities exchange or regulators.



# Users of Financial Statements



- \* Present and Potential Investors
- \* Employees
- \* Lenders
- \* Security Analysts and Advisors
- \* Suppliers and Creditors
- \* Customers
- \* Competitors
- \* Governments and Regulatory agencies
- \* Public
- \* Management

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# Qualitative characteristics of Financial Statements



- \* Understandability
- \* Relevance
- \* Materiality
- \* Reliability
- \* Faithful representation
- \* Economic Substance over legal form
- \* Neutrality
- \* Prudence/ Conservatism
- \* Completeness
- \* Comparability
- \* Consistency

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# Fundamental Accounting Concepts and Assumptions



- \* Separate Entity Concept
- \* Arm's-Length Transactions
- \* Cost Principle
- \* Monetary Measurement Concept
- \* Going Concern Assumption

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# Separate Entity Concept



**Entity** — The organizational unit for which accounting records are maintained.

**Separate entity concept** — The activities of an entity are to be separate from those of its individual owners.

\* Proprietorship

\* Partnership

\* Corporation



# The Cost Principle

- \* All transactions are recorded at historical cost.
- \* Historical cost is assumed to represent the fair market value of the item at the date of the transaction because it reflects the actual use of resources by independent parties.

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# The Monetary Measurement Concept



- \* Accountants measure only those economic activities that can be measured in monetary terms.
- \* Listed values may not be the same as actual market values:
  - \* Inflation
  - \* Measurement issues

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# The Going Concern Assumption



- \* An entity will have a continuing existence for the foreseeable future.



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# Accrual and Cash Accounting



- \* **Accrual Basis:** The effects of transactions and other events are recognized when they occur and reported in the financial statements of the period to which they relate.
- \* **Cash Basis:** Revenues and expenses are recognized only when cash is received or payments are made. Mainly used by small enterprises. Not an accurate picture of true profitability.



# Accrual Accounting



- \* A system of accounting in which revenues and expenses are recorded as they are earned and incurred, not necessarily when cash is received or paid.
- \* Provides a more accurate picture of a company's profitability.
- \* Statement users can make more informed judgments concerning the company's earnings potential.

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# Revenue Recognition

Revenues are recorded when two main criteria are met:

1 →

The earning process is substantially complete

2 →

Cash has either been collected or collection is reasonably assured.



# The Matching Principle



## **costs and expenses**

- \* All costs and expenses incurred in generating revenues must be recognized in the same reporting period as the related revenues.
- \* This process of matching expenses with recognized revenues determines the amount of net income reported on the income statement.

**related revenues**



# Managing Receivables



- \* Receivables refer to the debtors of the business, usually identified as the money owed to the company by its customers who purchased (seed, in the case of a seed business) on credit.
- \* Debtors are listed on the balance sheet as current assets as it is expected that they will be paid within a twelve month period.
- \* If debtors are not managed properly, they can lead to cash flow problems, or even to bad debts, which will impact negatively on profits and liquidity.
- \* Thus, the faster a company collects its receivables, the better. The sooner that customers pay, the sooner can a company put the money in the bank, pay off its own debts or start making new products.

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# Managing Receivables



- \* A measure of the time taken to collect customer debts is the debtor days, determined by the following formula:
- \*  $\text{Debtor Days} = \frac{\text{Average Debtors}}{\text{Credit Sales}} \times 365$ , where  $\text{Average Debtors} = \frac{(\text{Opening Trade Debtors} + \text{Closing Trade Debtors})}{2}$
- \* The debtors days should be compared against the company's credit policy to see if the company is managing its debtors well. If, for example, the company's credit policy is 30 days then:
  - if the average collection period is below 30 days, this means good management and debt collection; or
  - if the average is over 30 days, then it means poor management of debt collection.

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# Managing Inventory



- \* Inventories consists of merchandise a business owns for sale, but which has not been sold.
- \* Inventory of seed companies is principally seed, but may also consist of packaging materials, seed dressing chemicals and other consumables.
- \* Seed companies will have significant inventories at certain times of the year, particularly just prior to the selling season. These inventories may be made up of raw seed and seed processed and ready for sale.
- \* After the selling season is over, seed companies may be left with unsold stock. Since seed is a perishable product, a decision has to be made whether the seed will still meet the minimum germination standards by the time the next selling season begins. If not, the seed needs to be disposed of.





# Managing Inventory



- \* The actual value of inventories is not known until the product is sold, and therefore the company has to estimate values for the balance sheet.
- \* For raw seed, this would normally be determined as the price of grain or the cost of the seed, while processed seed may be valued at the net selling price. Seed that has failed quality assurance would be valued at the net realizable price, usually equivalent to the ruling grain price.
- \* While there are various methods of valuing inventories, on the balance sheet they are generally stated at the lower of cost or net realizable value.
- \* The approaches for inventory valuation include: First in First out (FIFO), Last in First out (LIFO), Weighted average method (WAM) and Specific identification (SI).





# Managing Inventory



- \* FIFO: This method assumes that the oldest goods on hand are sold first.
- \* LIFO: Based on assumption that the most recently purchased goods are sold first.
- \* WAM: Is based on the assumption that all the goods are commingled and no particular batch of goods is retained in the inventories.
- \* The cost of each unit of goods is computed as:  
=  $\frac{\text{Total Cost of Goods}}{\text{No. of units available for sale}}$
- \* SI: Requires distinguishing the units in ending inventory and the batches from which they were procured and multiplying the number of units with the unit costs.



# Managing Inventory



## \* Example:

- \* Suppose seed limited stocked the following tones of seed in a month acquired at the specified prices:

Date	Tons bought	price per tons
2.2.X	1,000	\$100
9.2.X	1,500	\$105
15.2.X	1,750	\$102
25.2.X	500	\$101

If at the end of the period, seed of 900 tons remains in store, What is the value of the seed in store? What are the COGS? Use FIFO, LIFO & WAM



# Managing Inventory



## \* FIFO:

$$* \text{COGS} = 1000(100) + 1500(105) + 1350(102)$$

$$* \text{COGS} = 100,000 + 157,500 + 137,700 = \$395,200$$

$$* \text{Ending Inventory} = 400(102) + 500(101)$$

$$* \text{Ending Inventory} = 40,800 + 50,500 = \$91,300$$

## \* LIFO:

$$* \text{COGS} = 100(100) + 1500(105) + 1750(102) + 500(101)$$

$$* \text{COGS} = 10,000 + 157,500 + 178,500 + 50,500 = \$396,500$$

$$* \text{Ending Inventory} = 900(100)$$

$$* \text{Ending Inventory} = \$90,000$$



# Managing Inventory



- \* Total Costs =  $1,000(100) + 1,500(105) + 1,750(102) + 500(101)$
- \* Total Costs =  $100,000 + 157,500 + 178,500 + 50,500$
- \* Total Costs = 486,500
- \* Total Units Available = 4,750
- \* Weighted Average Cost =  $486,500 / 4,750 = 102.42$
- \* Units sold =  $4,750 - 900 = 3,850$
- \* COGS =  $3,850 * 102.42 = \$394,317$
- \* Ending Inventory =  $900 * 102.42 = \$ 92,178$

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# Managing Inventory



Approach	COGS	Ending Inventory
FIFO	\$395,200	\$91,300
LIFO	\$396,500	\$90,000
WAM	\$394,317	\$ 92,178

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# Managing Inventory



- \* Investors usually want very little money tied up in inventories, because inventories need to be sold to realize cash, and sales may not be easy to achieve.
- \* Furthermore, high stock levels which are slow-moving may lead to losses due to obsolescence or loss of quality.
- \* Consequently, for seed, the principle of first-in, first-out is critical to maintain viable stocks.
- \* Seed that is processed and treated but which loses germination viability represents a significant loss of value.

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