



College of Engineering and Technology Department of Construction Technology and Management

Course: Financial Management of Construction

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Chapter 3

Firms Financial Operations

Contents

- Financial statements
- Balance sheet
- Income statement
- Statement of retained earnings
- Statement of cash flows
- Relationship among financial statements
- Financial analysis

The Accounting System

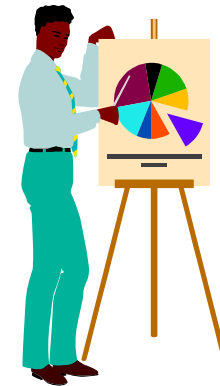


**Collects and processes
financial information**

**Reports
information
to decision
makers**



**Managers
(internal)**



**Investors
and
Creditors
(external)**

The Accounting System

Accounting System

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graph TD; A[Accounting System] --> B[Financial Accounting System<br/>Periodic financial statements and related disclosures]; A --> C[Managerial Accounting System<br/>Detailed plans and continuous performance reports]; B --> D[External Decision Makers<br/>Investors, creditors, suppliers, customers, etc.]; C --> E[Internal Decision Makers<br/>Managers throughout the organization];
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Financial Accounting System
Periodic financial statements and related disclosures

Managerial Accounting System
Detailed plans and continuous performance reports

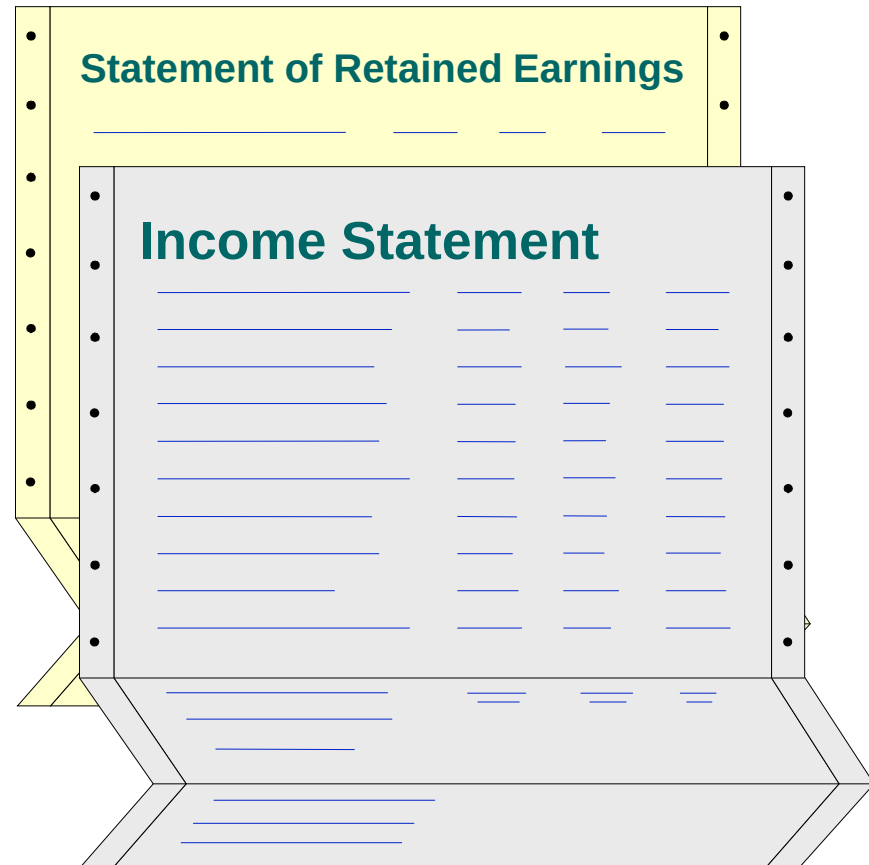
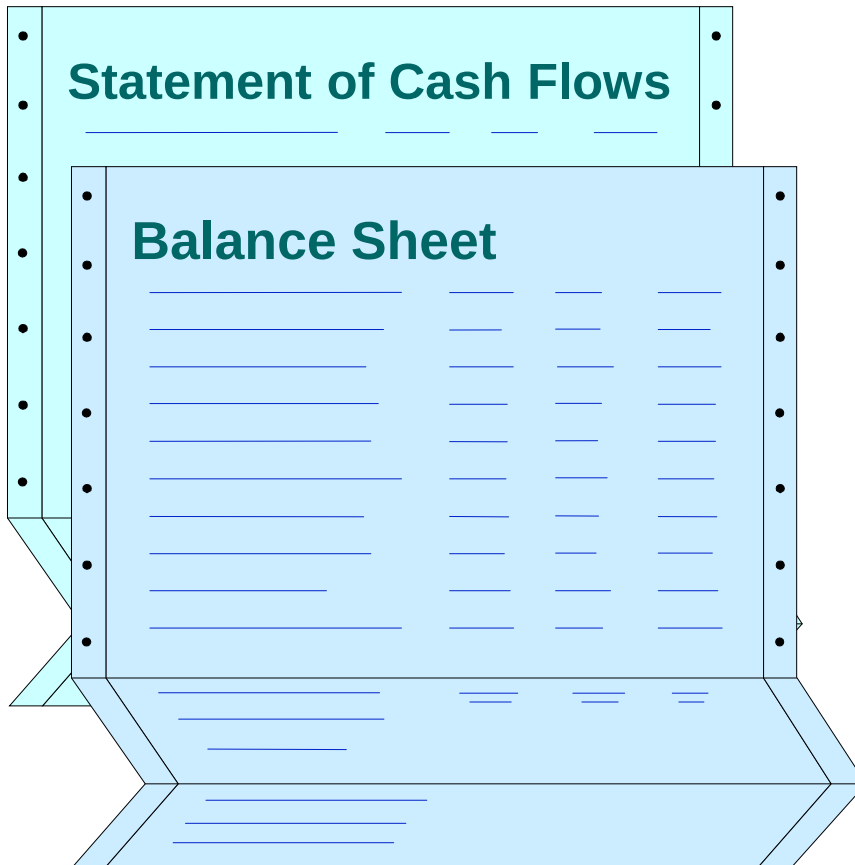
External Decision Makers
Investors, creditors, suppliers, customers, etc.

Internal Decision Makers
Managers throughout the organization

1. The Basic Financial Statements

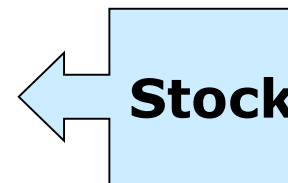
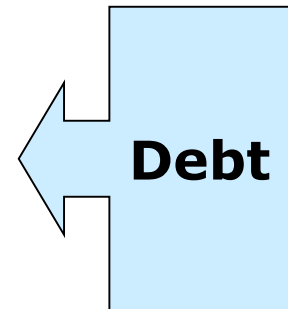
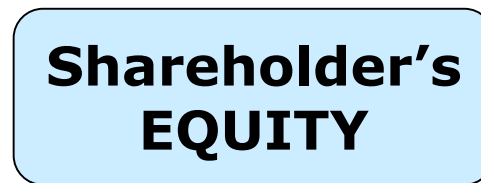
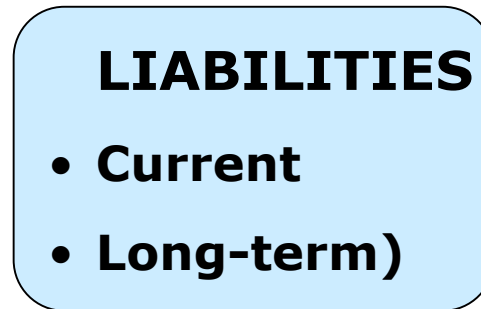
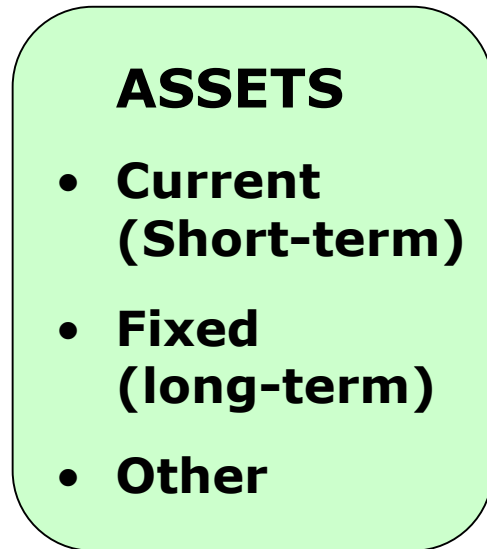
Financial statements summarize the financial activities of the business.

Financial statements paint a picture of the transactions that flow through the business.

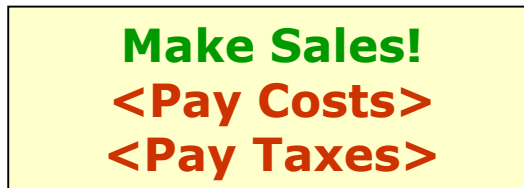
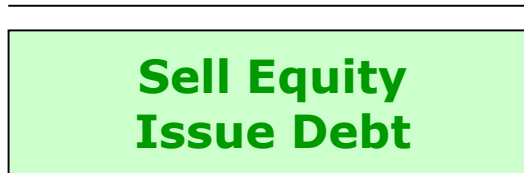


2 Balance Sheet

Capital Supplied 1



Cash Flow



Retain

Return

4

Retain profits or "repay" debt-holders (with interest) and stockholders (with dividends)

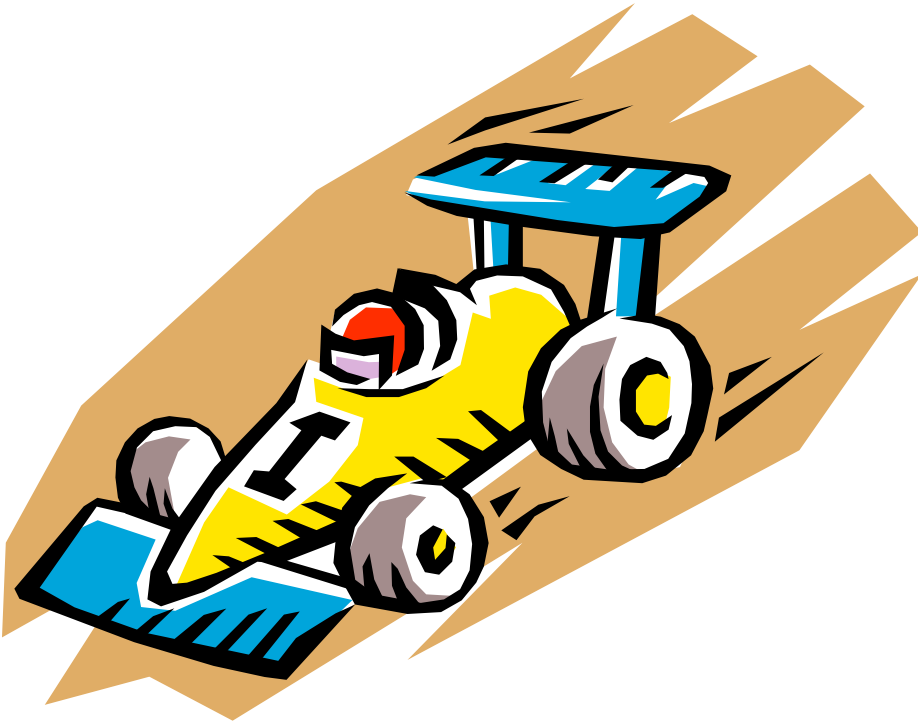
3

The System

Purpose of Financial Statements

To inform the following parties of the financial performance and position of the entity:

- 1) **Management** - for reviewing their performance during the reporting period
- 2) **Shareholders** - for assessing the worth of their investments and reviewing the effectiveness of the Management
- 3) **Investors** - for judging the worth of the entity before deciding to invest
- 4) **Suppliers and Lenders** - for judging the creditworthiness of the entity before deciding to extend credit
- 5) **Government** - for calculating the amount of tax to be collected



**Let's look at
Addis-Matador
CORP.'s
financial
statements.**

1) Balance Sheet

Owns

Assets

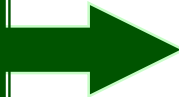
- Current assets:
 - Cash & securities
 - Receivables
 - Inventories
- Fixed assets:
 - Tangible assets
 - Intangible assets

Owes

Liabilities and Equity

- Current liabilities:
 - Payables
 - Short-term debt
- Long-term liabilities
- Shareholders' equity

1. Name of entity
2. Title of statement
3. Specific date
4. Unit of measure



Addis-Matador CORP.
Balance Sheet
At December 31, 2006
(in thousands of dollars)

Assets		
Cash		\$ 4,895
Accounts receivable		5,714
Inventories		8,517
Plant and equipment		7,154
Land		981
Total assets		\$ 27,261
Liabilities and Stockholders' Equity		
Liabilities		
Accounts payable	\$ 7,156	
Notes payable	9,000	
Total liabilities		\$ 16,156
Stockholders' Equity		
Contributed capital	\$ 2,000	
Retained earnings	9,105	
Total stockholders' equity		11,105
Total liabilities and stockholders' equity		\$ 27,261

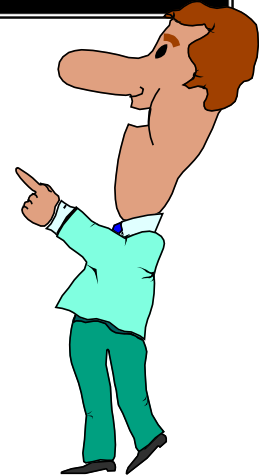
The Balance Sheet

reports the financial position of an entity at a particular point in time.

The Balance Sheet

Basic Accounting Equation

$$\text{Assets} = \text{Liabilities} + \text{Stockholders' Equity}$$



Assets are economic resources owned by the business as a result of past transactions.

Assets are listed by their ease of conversion into cash.

Addis-Matador CORP. Balance Sheet At December 31, 2006 (in thousands of dollars)		
Assets		
Cash		\$ 4,895
Accounts receivable		5,714
Inventories		8,517
Plant and equipment		7,154
Land		981
Total assets		\$ 27,261
Cash	Amount of cash in the company's bank accounts.	
Accounts receivable	Amounts owed by customers from prior sales.	
Inventories	Parts and completed but unsold products.	
Plant and equipment	Factories and production machinery.	
Land	Land on which factories are built.	

Liabilities are debts or obligations of the business that result from past transactions.

Addis-Matador CORP. Balance Sheet At December 31, 2006 (in thousands of dollars)		
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Accounts payable	\$ 2,000	
Notes payable	9,105	
Total liabilities and stockholders' equity		11,105
		\$ 27,261

Accounts payable

Amounts owed to suppliers for prior purchases.

Notes payable

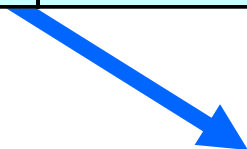
Amounts owed on written debt contracts.

Equity is the amount of financing provided by owners of the business and earnings.

Addis-Matador CORP.
Balance Sheet
At December 31, 2006
(in thousands of dollars)

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Contributed capital	Amounts invested in the business by stockholders.
Retained earnings	Past earnings not distributed to stockholders.



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Use \$ on
the first
item in a
group
and on the
group total.

**Assets =
Liabilities
+
Stockholders'
Equity**

Addis-Matador CORP.
Income Statement
For the Year Ended December 31, 2006
(in thousands of dollars)

Revenues		
Sales revenue		\$ 37,436
Expenses		
Cost of goods sold	\$ 26,980	
Selling, general and administrative	3,624	
Research and development	1,982	
Interest expense	450	
Total expenses		33,036
Pretax income		\$ 4,400
Income tax expense		1,100
Net income		\$ 3,300



1. Name of entity
2. Title of statement
3. Specific date (Unlike the balance sheet, this statement covers a specified **period** of time.)
4. Unit of measure

F The **Income Statement** reports the revenues less expenses of the accounting period.

Revenues		
Sales revenue		\$ 37,436
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Revenues are earnings from the sale of goods or services to customers.

Addis-Matador CORP.
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For the Year Ended December 31, 2006
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Expenses are the dollar amount of resources used up by the entity to earn revenues during a period.

Addis-Matador CORP.
Income Statement
For the Year Ended December 31, 2006
(in thousands of dollars)

Cost of goods sold	The cost to produce products sold this period. Production costs: direct costs
Selling, general and administrative	Operating expenses not directly related to production.
Research and development	Expenses incurred to develop new products.
Interest expense	The cost of using borrowed funds.
Income tax expense	Income taxes on current period's pretax income.

Addis-Matador CORP.
Income Statement
For the Year Ended December 31, 2006
(in thousands of dollars)

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Income tax expense		1,100
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**If expenses exceed revenues,
we report net loss.**

Addis-Matador CORP.
Statement of Retained Earnings
For the Year Ended December 31, 2006
(in thousands of dollars)

Retained earnings, January 1, 2006	\$ 6,805
Net income for 2003	3,300
Dividends for 2003	(1,000)
Retained earnings, December 31, 2006	\$ 9,105

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The Statement of Retained Earnings reports the way that net income and the distribution of dividends affect the financial position of the company during a period.

Statement of Cash Flows

Because
revenues reported
do not always equal
cash collected...

... and **expenses**
reported do not
always equal
cash paid ...

net income is
usually **not equal**
to the change
in cash for
the period.

Addis-Matador CORP.
Statement of Cash Flows
For the Year Ended December 31, 2006
(in thousands of dollars)

Cash flows from operating activities:		
Cash collected from customers	\$ 33,563	
Cash paid to suppliers and employees	(30,854)	
Cash paid for interest	(450)	
Cash paid for taxes	(1,190)	
Net cash flow from operating activities		\$ 1,069
Cash flow from investing activities:		
Cash paid to purchase equipment	\$ (1,625)	
Net cash flow from investing activities		(1,625)
Cash flow from financing activities:		
Cash received from bank loan	\$ 1,400	
Cash paid for dividends	(1,000)	
Net cash flow from financing activities		400
Net decrease in cash during the year		\$ (156)
Cash at beginning of the year		5,051
Cash at end of the year		\$ 4,895

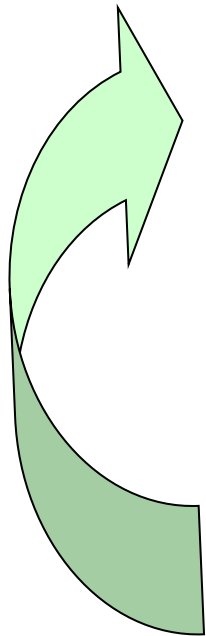
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2. Title of statement
3. Specific date (Like the income statement and statement of retained earnings, this statement covers a specified period of time.)
4. Unit of measure

Addis-Matador CORP.
Statement of Cash Flows
For the Year Ended December 31, 2006
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Cash at beginning of the year		5,051
Cash at end of the year		\$ 4,895

The Statement of Cash Flows reports the inflows and outflows of cash during the period in the categories of operating, investing, and financing.

**"Natural"
Cash Flows**



Sell Equity Issue Debt
<Buy Assets> <Buy Inventory>
Make Sales! <Pay Costs> <Pay Taxes>
<Pay Interest> <Pay Dividends>

**Cash flow statement
Classifications**

Sell Equity Issue Debt <Pay Dividends>
<Buy Assets>
Make Sales! <Buy Inventory> <Pay Costs> <Pay Taxes> <Pay Interest>

Financing

Investing

Operating

=NET CASH FLOW

Addis-Matador CORP.
Statement of Cash Flows
For the Year Ended December 31, 2006
(in thousands of dollars)

Cash flows from operating activities:		
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Cash paid for dividends	(1,000)	
Net cash flow from financing activities		400
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Cash at beginning of the year		5,051

**Cash flows directly related to earning income are shown
in the operating section.**

Addis-Matador CORP.
Statement of Cash Flows
For the Year Ended December 31, 2006
(in thousands of dollars)

Cash flows from operating activities:		
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Cash flow from financing activities:		
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Cash paid for dividends	(1,000)	
Net cash flow from financing activities		400
Net decrease in cash during the year		\$ (156)
Cash at beginning of the year		5,051
Cash at end of the year		\$ 4,895

Cash flows related to the acquisition or sale of productive assets are shown in the investing section.

Addis-Matador CORP.
Statement of Cash Flows
For the Year Ended December 31, 2006
(in thousands of dollars)

Cash flows from operating activities:		
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Cash at end of the year		\$ 4,895

Cash flows from or to investors or creditors are shown in the financing section.

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Statement of Cash Flows
For the Year Ended December 31, 2006
(in thousands of dollars)

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Net decrease in cash during the year		\$ (156)
Cash at beginning of the year		5,051
Cash at end of the year		\$ 4,895

The statement ends with a reconciliation of Cash.

Relationship Among the Financial Statements

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Net income from the income statement increases ending retained earnings on the statement of retained earnings.

Addis-Matador CORP. Statement of Retained Earnings For the Year Ended December 31, 2006 (in thousands of dollars)	
Retained earnings, January 1, 2006	\$ 6,805
Net income for 2006	3,300
Dividends for 2006	(1,000)
Retained earnings, December 31, 2006	\$ 9,105



Relationship Among the Financial Statements

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Total liabilities		\$ 16,156
Stockholders' Equity		
Contributed capital	\$ 2,000	
Retained earnings	9,105	
Total stockholders' equity		11,105
Total liabilities and stockholders' equity		\$ 27,261

Ending retained earnings
from the statement of
retained earnings is one
of the components of
stockholders' equity on
the balance sheet.

Addis-Matador CORP. Statement of Retained Earnings For the Year Ended December 31, 2006 (in thousands of dollars)	
Retained earnings, January 1, 2003	\$ 6,805
Net income for 2003	3,300
Dividends for 2003	(1,000)
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Relationship Among the Financial Statements

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Cash at beginning of the year		5,051
Cash at end of the year		\$ 4,895

The change in cash on the statement of cash flows added to the beginning of the year balance in cash equals the ending balance in cash on the balance sheet.