

FN 201 Business Finance

Lecture Note 1

Introduction to corporate finance
and financial statements

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Bachelor of Economics, International Program

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Introduction to course

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Introduction to course

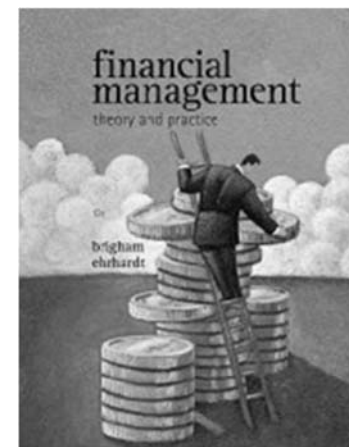
COURSE REQUIREMENTS AND MATERIALS

The following books and lecture notes will be used as a class material:

1. ***BE:** Brigham and Ehrhardt, Financial Management, 12th Edition
2. **BMA:** Brealey, Myers, and Allen, Principles of Corporate Finance, 10th Edition
3. Gitman, L.J., Zutter, C.J., Principles of Managerial Finance, 13th Edition
4. Class handouts and other materials

Note: * refer to main textbook to be used for this course.

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Course Assessment

- Class participation 10%
- Assignment and/or quiz 20%
- Midterm exam 30%
- Final exam 40%

Midterm Exam March 8, 2014; 1.00 – 2.30 PM

Final Exam May 20, 2014; 1.30 – 4.30 PM

*Announcement:

Class on September 28 will be cancelled and make-up class will be scheduled later.

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Lecture Note 1 Outline

Part 1: Basic concepts of corporate

Financial decision and opportunity cost concept

- Legal Forms of Business Organization
- Goals of firm and agency problem
- Role of Financial Manager
- Investment

Part 2: Basic concepts of financial statements

- Accounting cycle
- Financial statements and its components

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Part 1: Basic concepts of corporate

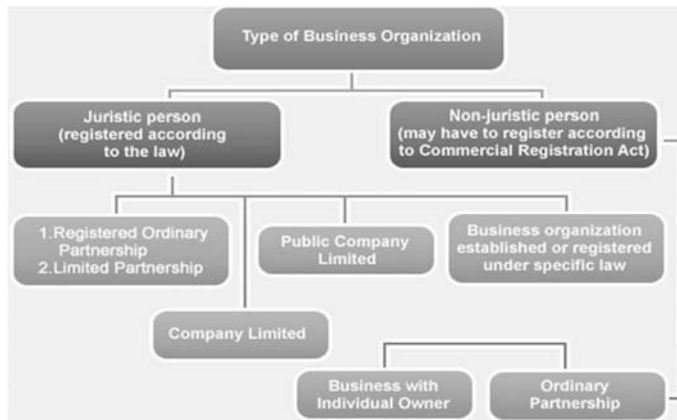
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Overview of Financial Management

- Contributions of financial management
 - Firm's operating performance and growth
 - Consumers
 - Staffs and creditors
 - Community and society
- Financial management in other sector
 - Individual person – personal finance
 - Government sector – public finance
 - Private sector – corporate finance
 - International – international finance
 - Financial institution

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Legal Forms of Business Organization



Source: Department of Business Development, Ministry of Commerce

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Legal Forms of Business Organization

Sole Proprietorships

Partnerships

Corporations

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Legal Forms of Business Organization

| | Sole proprietorship | Partnership | Corporation |
|-------------------|--|---|---|
| Strengths | <ul style="list-style-type: none"> Owner receives all profits (and sustains all losses) Low organizational costs Income included and taxed on proprietor's personal tax return Independence Secrecy Ease of dissolution | <ul style="list-style-type: none"> Can raise more funds than sole proprietorships Borrowing power enhanced by more owners More available brain power and managerial skill Income included and taxed on partner's tax return | <ul style="list-style-type: none"> Owners have <i>limited liability</i>, which guarantees that they cannot lose more than they invested Can achieve large size via sale of stock Ownership (stock) is readily transferable Long life of firm Can hire professional managers Has better access to financing Receives certain tax advantages |
| Weaknesses | <ul style="list-style-type: none"> Owner has <i>unlimited liability</i>—total wealth can be taken to satisfy debts Limited fund-raising power tends to inhibit growth Proprietor must be jack-of-all-trades Difficult to give employees long-run career opportunities Lacks continuity when proprietor dies | <ul style="list-style-type: none"> Owners have <i>unlimited liability</i> and may have to cover debts of other partners Partnership is dissolved when a partner dies Difficult to liquidate or transfer partnership | <ul style="list-style-type: none"> Taxes generally higher, because corporate income is taxed, and dividends paid to owners are also taxed More expensive to organize than other business forms Subject to greater government regulation Lacks secrecy, because stockholders must receive financial reports |

Source: Gitman and Zutter (2011)

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Goals of Firm

- Shareholder wealth maximization
 - maximizing the price of firm's common stocks
- Profit maximization
- Managerial reward maximization
- Behavioral goals
- Social responsibility
 - consumers
 - firm's staff
 - government and social
 - community
 - creditor

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Goals of Firm

Shareholder wealth vs. Profit maximization

| Goal | Objective | Advantage | Disadvantage |
|---------------------------------|--------------------------------------|--|---|
| Profit maximization | Large amount of profits | <ol style="list-style-type: none"> 1. Easy to calculate profits 2. Easy to determine the link between financial decisions and profits | <ol style="list-style-type: none"> 1. Emphasizes the short term 2. Ignores risk or uncertainty 3. Ignores the timing of returns 4. Requires immediate resources |
| Shareholder wealth maximization | Highest market value of common stock | <ol style="list-style-type: none"> 1. Emphasizes the long term 2. Recognizes risk or uncertainty 3. Recognizes the timing of returns 4. Considers stockholders' return | <ol style="list-style-type: none"> 1. Offers no clear relationship between financial decisions and stock price 2. Can lead to management anxiety and frustration 3. Can promote aggressive and creative accounting practices |

Source: Shim and Siegel (2007)

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Do manager really maximize shareholder's wealth?

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Agency Problem

Shareholders vs. Managers

Possible solutions

Salesman vs. Company

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Managerial measures of shareholder's wealth

1. Market value of equity or common stock (MV)
2. Market value added (MVA)
3. Economic value added (EVA)

Note: Capital with costs! Cost of all financing includes (+) Note payable, long-term debt, and equity but not marketable security.

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Managerial measures of shareholder's wealth

Note for Economic Value Added (EVA)

$$\begin{aligned} \text{EVA} &= \text{EBIT} (1 - \text{Tax Rate}) - \text{Cost of all financing} \\ &= \text{Net Income} + \text{Interest} (1 - \text{Tax Rate}) - (\text{Cost of Capital} \times \text{Capital}) \end{aligned}$$

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What are the roles of financial manager?

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Role of Financial Manager

Investment Decision

Current Assets

- Cash
- Short-term investments
- Account receivable
- Inventory

Fixed Assets

- Plant and office equipment
- Machine
- Land

Financing Decision

Current Liabilities

- Account payable
- Accrued expense
- Short-term debt

Long-term debt

- Long-term loan
- Long-term bond

Equity

- Capital stock
- Retained earning

Balance Sheet

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Role of Financial Manager

Liquidity Management

Current Assets

- Cash
- Short-term investments
- Account receivable
- Inventory

Fixed Assets

- Plant and office equipment
- Machine
- Land

Current Liabilities

- Account payable
- Accrued expense
- Short-term debt

Long-term debt

- Long-term loan
- Long-term bond

Equity

- Capital stock
- Retained earning

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Role of Financial Manager

| Current Assets | Current Liabilities |
|------------------------------|---------------------|
| - Cash | - Account payable |
| - Short-term investments | - Accrued expense |
| - Account receivable | - Debt |
| - Inventory | - Long-term debt |
| | - Long-term loan |
| | - Long-term bond |
| Fixed Assets | Equity |
| - Plant and office equipment | - Capital stock |
| - Machine | - Retained earning |
| - Land | |

Growth Management

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Investment: Debt Advantage

Rationale

1. Credit records
2. Higher return on investment
3. Tax reduction

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Investment: Debt Advantage

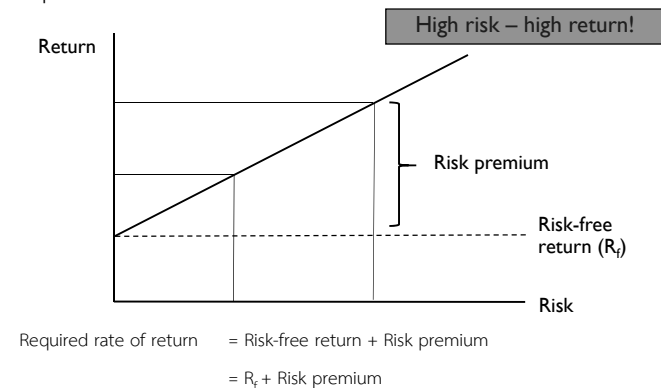
Rationale

| Items | Case 1 | Case 2 | Case 3 | Case 4 |
|--|--------|--------|--------|--------|
| (1) Project return | 150 | 150 | 150 | 150 |
| (2) Debt | 0 | 40 | 60 | 90 |
| (3) Equity | 100 | 60 | 40 | 10 |
| (4) Cost of debt: 10% | 0 | 4 | 6 | 9 |
| (5) Net project return: NPR = (1) - (2) - (4) | | | | |
| (6) Return to Equity: ROE = (5) / (3) | | | | |

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Risk-Return Tradeoff

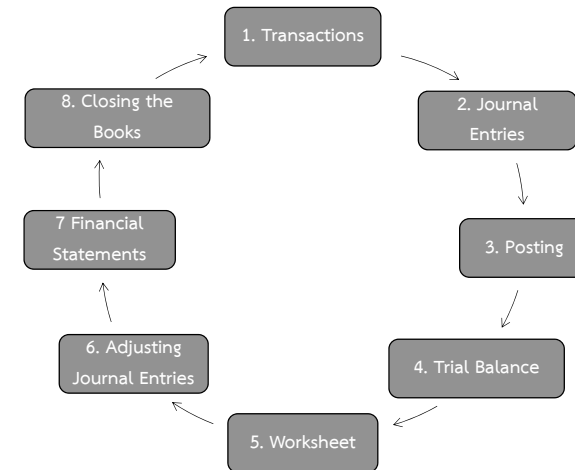
The relationship between risk and return



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Part 2:
Basic concepts of financial statements

Accounting Cycle



Primary Financial Statements

Records that outline the financial activities of a business, an individual or any other entity.

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?

Financial Statements

1. Balance sheet
2. Income statement
3. Statement of retained earnings /
Statement of changes in owner equity
4. Statement of cash flow

* Notes to the Financial Statements

1. Balance Sheet

Summary of the financial position of a company at a particular date

- What are the resources of the company?
- What are the company's existing obligations?
- What are the company's net assets?

Balance Sheet and Its Components

- 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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1. Balance Sheet: Its components

Current Assets

- Cash
- Short-term investments
- Account receivable
- Inventory

Current Liabilities

- Account payable
- Accrued expense
- Short-term debt

Non-current / Fixed Assets

- Plant and office equipment
- Machine
- Land

Non-current / Long-term Liabilities

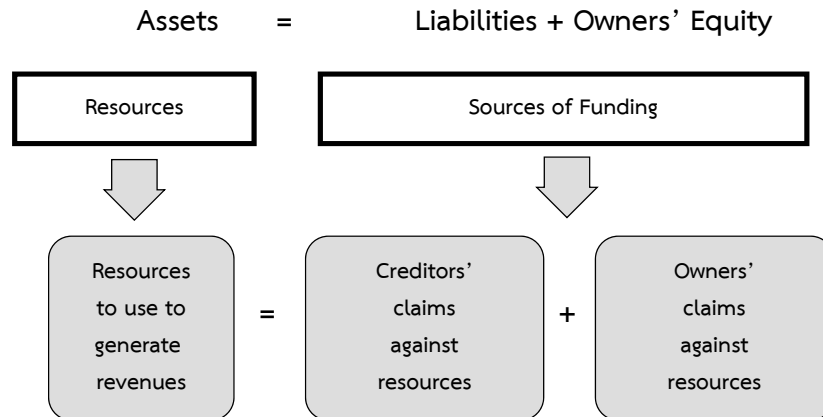
- Long-term loan
- Long-term bond

Equity

- Capital stock
- Retained earning

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1. Balance Sheet: Accounting Equation



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1. Balance Sheet: Its Components

Executive Paper Balance Sheet (millions)

| | Dec 2004 | Dec 2005 | diff |
|-----------------------|-------------|-------------|------|
| Assets | | | |
| Current Assets | | | |
| Cash & Securities | 75 | 110 | 35 |
| Receivables | 433.1 | 440 | 6.9 |
| Inventory | 339.9 | 350 | 10.1 |
| Total | 848 | 900 | 52 |
| Fixed Assets | | | |
| P, P, E | 929.5 | 1000 | 70.5 |
| accum Depr | 396.7 | 450 | 53.3 |
| Net Fixed Assets | 532.8 | 550 | 17.2 |
| Total Assets | 1,380.80 | 1,450.00 | 69.2 |

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1. Balance Sheet: Its Components

Executive Paper Balance Sheet (millions)

| | Dec 2004 | Dec 2005 | diff |
|--|-----------------|-----------------|-------------|
| <i>Liabilities and Equity</i> | | | |
| <i>Current Liabilities</i> | | | |
| Debt due in 1 year | 96.6 | 100.0 | 3.4 |
| Payable | 349.9 | 360.0 | 10.1 |
| Total current liabilities | 446.5 | 460.0 | 13.5 |
| Long term debt | 425.0 | 450.0 | 25.0 |
| Shareholders equity | 509.3 | 540.0 | 30.7 |
| <i>Total liabilities and equity</i> | 1,380.80 | 1,450.00 | 69.2 |

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1. Balance Sheet: Its Components

Executive Paper - Other Data

| | 2004 | 2005 |
|------------------------------------|-------|-------|
| Market value of equity | 598 | 708 |
| Average number of shares, millions | 14.16 | 14.16 |
| Share price, dollars | 42.25 | 50 |

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1. Balance Sheet: Special Issues

Classified and Comparative Balance Sheets

- They distinguish between:
 - Current and long-term assets
 - Current and long-term liabilities
- Listed in decreasing order of liquidity

Limitations

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

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2. 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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2. Income Statement

Revenues

- Assets (cash or AR) created through business operations

Expenses

- Assets (cash or AP) consumed through business operations

Net Income or (Net Loss)

- Revenues - Expenses

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2. Income Statement: Its Components

Sale Revenue

(-) Cost of goods sold

Gross profit

operating expenses

- Salary

- General expenses

- Other operating expenses

(-) Total operating expenses

Earning before interest, taxes, and depreciation (EBITDA)

(-) Depreciation and amortization

Earning before interest and taxes (EBIT) = operating income

(-) Interest expense

Earning before taxes (EBT)

(-) Income Taxes

Net income

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2. Income Statement: Example

| | |
|---|---------------------|
| Sales | \$25,265.00 |
| <u>Costs of Goods Sold</u> | <u>-\$19,891.00</u> |
| Gross Profit | \$5,374.00 |
| <u>Cash operating expense</u> | <u>-\$2,761.00</u> |
| EBITDA | 2,613.00 |
| Depreciation & Amortization | -\$156.00 |
| <u>Net other Income and Expense (+/-)</u> | <u>-\$6.00</u> |
| EBIT | \$2,451.00 |
| <u>Interest</u> | <u>-\$0.00</u> |
| EBT | \$2,451.00 |
| Income Taxes | -\$785.00 |
| <u>Special Income/Charges (+/-)</u> | <u>-\$194.00</u> |
| <u>Net Income (EAT)</u> | <u>\$1,666.00</u> |

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3. Statement of Retained Earnings

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

= to measure changes in owner's equity from the beginning of period to the end of period

Reporting:

1. As a separate statement
2. Shown in a Statement of Comprehensive Income

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3. Statement of Retained Earnings

| |
|------------------------------------|
| Beginning retained earnings |
| + Net income |
| <hr/> |
| - Dividends paid |
| = Ending retained earnings |

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4. 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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4. Statement of Cash Flows: Background

- Accounting profit vs. Cash Flows

– Accrual Method

Sale

- As CASH
- As CREDIT => Account Receivable

Cost of goods sold

- Paid as CASH
- Paid as CREDIT => Account Payable
- Stock => Inventory

Operating expense

- Paid as CASH
- Unpaid items => Accrual expenses
- Non-cash items => Depreciation

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4. Statement of Cash Flows: Background

- Accounting profit vs. Cash Flows

– Accrual Method

Operating Cash Flow Calculation

1. Income Statement

Operating cash flow = Net Income + Depreciation and Amortization

2. Balance Sheet – changes in current assets (CA) and liabilities (CL)

| Changes in CA and CL | Source of Inflow | Source of Outflow |
|-----------------------|------------------|-------------------|
| 1. Account Receivable | | |
| 2. Inventory | | |
| 3. Account Payable | | |
| 4. Accrual Expense | | |

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Operating Cash vs. Cash Flows?

4. Statement of Cash Flows: Classification of Cash Flow

CASH INFLOW VS. CASH OUTFLOW

- **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.

4. Statement of Cash Flows: Classification of Cash Flow

| | Operating activities | Investing activities | Financing activities |
|---------------------|--|---|---|
| Cash Inflow | <ul style="list-style-type: none"> • Sale of goods or services • Sale of investments in trading securities • Interest revenue* • Dividend revenue* | <ul style="list-style-type: none"> • Sale of plant assets • Sale of securities, other than trading securities • Collection of principal on loans* | <ul style="list-style-type: none"> • Issuance of own stock • Borrowing |
| Cash Outflow | <ul style="list-style-type: none"> • Inventory payments • Interest payments* • Wages • Utilities, rent • Taxes | <ul style="list-style-type: none"> • Purchase of plant assets • Purchase of securities, other than trading securities • Making of loans to other entities* | <ul style="list-style-type: none"> • Dividend payments* • Repaying principal on borrowing • Treasury stock purchase* |

4. Statement of Cash Flows: Calculation – (1)

1. Analyze **Balance Sheet** – Source of Inflow vs. Source of Outflows



Note: (1) Retained earning
(2) Fixed Assets

4. Statement of Cash Flows: Calculation – (2)

2. Put the items into the activities in statement of cash flows and compute net cash flow

- Operating cash flow

=

- Investing cash flow

=

- Financing cash flow

=

4. Statement of Cash Flows: Calculation – (3)

Note for “Changes in Fixed Assets” calculation – Example 1 and 2

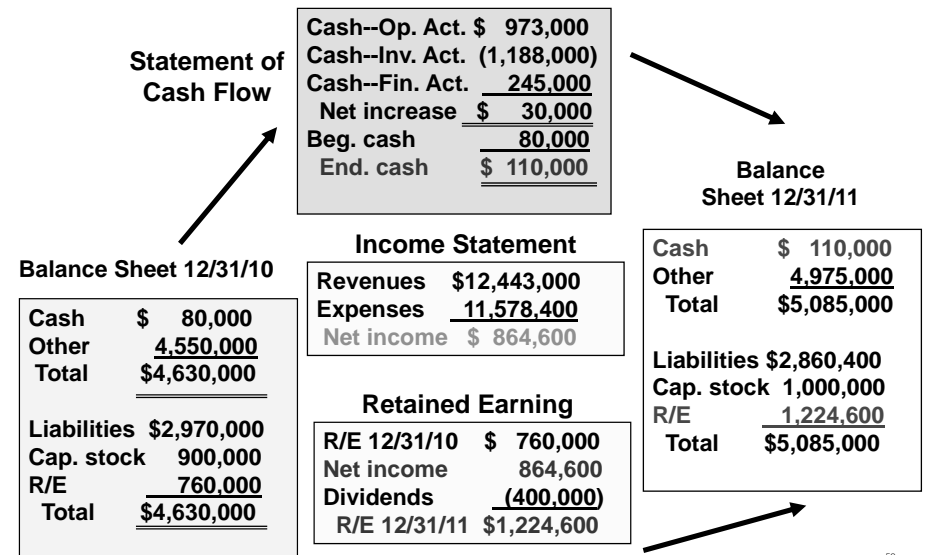
That is:

$$\begin{aligned} \text{Net Change in Fixed Assets or CapEx (Capital Expenditures)} \\ = (\text{EndCap} - \text{BeginCap}) + \text{Depreciation} \end{aligned}$$

Note: CapEx = (EndCap – BeginCap) + Depreciation
Gross Investment = Net Investment + Depreciation

4. Statement of Cash Flows: Analysis

| Cash flows | Period A | Period B | Period C | Period D |
|----------------|----------|----------|----------|----------|
| Operating | (300) | 700 | 2000 | 800 |
| Investing | (1500) | (1000) | (800) | (200) |
| Financing | 2000 | 200 | (700) | (300) |
| Net Cash Flows | 200 | (100) | 500 | 300 |



5. Notes to the Financial Statements

Four general types of notes:

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

Question?