

# 15.511 Corporate Accounting Recitation 3

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June 18, 2004



# Why do we need CF/S?

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- Accrual accounting is often based upon subjective judgments that can introduce measurement error and uncertainty into the reported earnings number.
    - Estimates of uncollectible receivables, useful life of assets, and future pension and health-care benefits, write-offs.
  
  - Managers can readily manipulate accrual income.
    - Postpone discretionary expenditures like R&D
    - Manipulate accounting estimates
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# Statement Format

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- ❑ Operating cash flows result from events or transactions that enter into the determination of net income, i.e., transactions related to the production and delivery of goods and services to customers. In effect, operating cash flows are the cash-basis revenues and expenses of a company.
  - ❑ Investing cash flows result from the purchase or sale of productive assets like plant and equipment, from the purchase or sale of marketable securities, and from the acquisition and divestitures of other companies.
  - ❑ Financing cash flows result when a company sells its own stocks or bonds, pays dividends or buys back its own shares, or borrow money and repays the amounts borrowed.
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# The indirect approach

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- The indirect approach begins with the accrual-basis net income and adjust for:
    - Items included in accrual-basis net income that did not affect cash in the current period, such as
      - Noncash revenues or gains (e.g., revenues earned but not received in cash, gains on disposal of fixed assets);
      - Noncash expenses or losses (e.g., depreciation and amortization, expenses accrued but not paid in cash, and losses on disposal of fixed assets);
    - Items excluded from accrual-basis income that did affect operating cash flows in the current period, such as
      - Cash inflows (revenues) received but not recognized as earned in the current period (e.g., rent received in advance and collections on account);
      - Cash outflows (expenses) paid but not recognized for accrual purposes in the current period (e.g., prepaid insurance and payments on account).
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# Why indirect approach?

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- The indirect approach is used by the overwhelming majority of public companies. Of the 600 companies included in the AICPA's annual financial reporting survey, 589 (98.2%) used the indirect approach for Cash Flow from Operating Activities.
    - For cash flow from investing and cash flow from financing, the formats are the same for direct and indirect approach.
  - Two reasons
    - The indirect approach is easier for firms to implement because it relies exclusively on data already available in the accrual accounts.
    - The indirect approach is more familiar to many accountants because this format was widely used in the changes in working capital statement that preceded SFAS No. 95.
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# One way to understand the adjustments

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- $\text{Cash} + \text{N\$A} = \text{L} + \text{SE}$
  - $\Delta\text{Cash} + \Delta\text{N\$A} = \Delta\text{L} + \Delta\text{SE}$
  - $\Delta\text{Cash} = -\Delta\text{N\$A} + \Delta\text{L} + \Delta\text{SE}$
  - Therefore, increase in N\$A appears with negative signs; increase in Liabilities appears with positive signs; increase in Shareholder's Equity appears with positive signs.
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## Another way to understand the adjustments (I)

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- ❑ Increase in A/R means that you collected less cash. Revenue overestimates the cash inflow from sales.
  - ❑ Increase in inventory means that you paid cash but didn't recognize all of them into COGS. COGS underestimates the cash outflow for purchases.
  - ❑ Increase in prepaid insurance means you paid cash but didn't recognize the payment as expenses yet. Expense account underestimates the cash outflow.
  - ❑ **Increase in Assets = Decrease in Cash**
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## Another way to understand the adjustments (II)

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- Increase in A/P means you paid less cash for purchases or service received. COGS or Expense overestimates the cash outflow.
  - Increase in Salaries Payable, Tax Payable, etc. all means that you have not paid cash yet. However, the Expenses have been recognized. Expense account overestimates the cash outflow.
  - **Increase in short-term financing = Increase in Cash**
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## Another way to understand the adjustments (III)

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- ❑ Increase in PPE, Land, and Intangible Assets means cash outflow. However, the Income Statement does not deal with them. The increases in Long-term assets are listed under Cash Flow from Investing Activities.
  - ❑ Increase in Bonds Payable, other Long-term Liabilities, and Common Stock means cash inflow. Again, Income Statement does not deal with them either. The increase in Long-term liabilities and Common Stock are listed under Cash Flow from Financing Activities.
  - ❑ Where do we put the increase in Retained Earnings?
    - Net Income is at the top of CFO and Dividend is under CFF.
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# Two ways to construct the CF/S

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## □ Columnar Work Sheet

- Step 1: calculate the change in each balance sheet item and enter the changes in non-cash items in the first column of the work sheet with the appropriate signs.
- Step 2: classify the changes as an operating, investing, or financing activities and enter them into the appropriate columns.

## □ T-account Work Sheet

- Set up a big T-account for Cash. Set up T-accounts corresponding to every other items on the balance sheet and enter the beginning and ending balance carefully.
  - Analyze the change in each small T-account and post the changes into the big Cash T-account.
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# The choice

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- Use columnar work sheet if there is no extra info on the sale of assets.
  
  - Use T-account work sheet if there is extra info on the sale of assets other than the B/S, I/S.
    - It's hard to tease out the impact from sales of assets on the operating section and investing section without the help of T-accounts.
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# Statement of Cash Flows Analysis

	1	2	3	4
CFO	Positive	Positive	Positive	Positive
CFI	Positive	Negative	Positive	Negative
CFF	Positive	Negative	Negative	Positive
	?	Cash cow	LBO	Less mature
	5	6	7	8
CFO	Negative	Negative	Negative	Negative
CFI	Positive	Negative	Positive	Negative
CFF	Positive	Positive	Negative	Negative
	Restructuring	Growth firm	Liquidating	?