

Statement of Cash Flows

- Understand the purpose of the SCF
- Distinguish between its three sections
- Understand the difference between the direct and indirect methods for the Operations section
- Understand the adjustments to Net Income required to derive Cash Flow from Operations
- Practice these concepts



Statement of Cash Flows

Beginning Balance

Assets = **Liabilities** + **S.E.**

$$\boxed{\Delta\text{Cash}} + \Delta\text{OA} = \Delta\text{Liabilities} + \Delta\text{CC} + \boxed{\text{NI}} - \text{Div}$$

Assets = **Liabilities** + **S.E.**
Ending Balance

$$\Rightarrow \Delta\text{Cash} +/- \text{“other stuff”} = \text{NI}$$



Statement of Cash Flows

- Fixed claimants (lenders)
- Residual claimants (shareholders)
- Managers

Why do we need a separate financial statement?



Statement of Cash Flows

- Direct or indirect statements
- Categorize transactions into one of the following:
 - ▶ **Operating Activities**
 - ▶ cash provided by the sale of goods or service, including interest and dividends received
 - ▶ cash used to pay operating expenses, including interest expense
 - ▶ **Investing Activities**
 - ▶ cash used to buy long-term assets and investments
 - ▶ cash obtained by selling long-term assets and investments
 - ▶ **Financing Activities**
 - ▶ cash provided by issuing stock or debt instruments
 - ▶ cash used to repay debt principal and repurchase stock
 - ▶ cash used to pay dividends, but NOT interest paid on debt



Statement of Cash Flows

- Direct: start from cash transactions
 - ▶ Investing and Financing sections \implies always direct
- Indirect: start from NI, back out accruals
 - ▶ Cash flow *amount* from operations \implies same as direct
 - ▶ **Key difference:** *Presentation* in the cash flow from operations section



Statement of Cash Flows

- What events affect cash flow from operations and net income equally?
- What events affect cash flow from operations but NOT net income?
- What events affect net income but NOT cash flow from operations?



Statement of Cash Flows

Direct

Beginning Cash

- + Cash rcv'd from customers
- + Interest received
- Cash paid to suppliers
- Cash paid to employees
- Interest paid
- +/- other adjustments
- = Cash from Operations**

+/- Cash from Investing

+/- Cash from Financing

= Ending Cash

Indirect

Beginning Cash

- Net Income
- + Increase in payables
- Increase in receivables
- +/- other adjustments

= Cash from Operations

+/- Cash from Investing

+/- Cash from Financing

= Ending Cash



Statement of Cash Flows

Balance sheet equation:

$$A(t) = L(t) + E(t) \quad \Rightarrow$$

Differences:

$$A = L + E$$

Decompose:

$$\text{Cash} + CA + NCA = CL + NCL + CC + OE + RE$$

Note that $RE = NI - Div$, thus after rearranging,

$$\text{Cash} = NI - CA + CL - NCA + NCL + OE + CC - Div$$

Accounts we know:

$$\text{Cash} = NI - \text{netAR} - \text{Inventory} - OCA + CL - \text{netPPE} \\ ONCA \quad NCL + OE + CC - Div$$



Statement of Cash Flows

$$\text{Cash} = \text{Cash}_{\text{operations}} + \text{Cash}_{\text{investing}} + \text{Cash}_{\text{financing}}$$

$$\text{Cash}_{\text{operations}} = \text{NI} + \text{DepExp} - \text{netAR} - \text{Inventory} - \text{OCA} \\ + \text{CL} - \text{Gain(Loss)}$$

$$\text{Cash}_{\text{investing}} = - \text{netPPE} + \text{Gain(Loss)} - \text{DepExp} - \text{ONCA} + \text{OE} \\ = - \text{Acquisitions} + \text{Disposals} - \text{ONCA} + \text{OE}$$

$$\text{Cash}_{\text{financing}} = \text{NCL} + \text{CC} - \text{Div}$$



Special Rules for Significant Noncash Transactions

Some transactions are omitted from the SCF but disclosed elsewhere (such as at the bottom of the SCF) so long as they are material:

- Acquisition of assets by assuming liabilities (including capital lease obligations) or by issuing equity securities
- Exchanges of non-monetary assets
- Refinancing of long-term debt
- Conversion of debt or preferred stock to common stock
- Issuance of equity securities to retire debt

