SESSION 4: CASH FLOW STATEMENTS – CASH IN AND CASH OUT

Accounting for Finance

The End Game with Cash Flows

- The surface level objective of a statement of cash flows is to explain how much the cash balance of a business changed during a period and why it changed.
- Embedded in the statement of cash flows, though, is other information including:
  - How much cash earnings the company had during the period, as contrasted with accrual earnings (in income statements)
  - How much and where the company reinvested cash during the period to sustain and grow its business
  - How much cash it raised from or returned to its debt and equity investors
- The statement of cash flows preserves the signs on cash flows, with negative cash flows shown as minuses and positive cash flows as pluses. It also looks at cash flows through the eyes of equity investors in the company.

Revisiting the Cash Flow Statement

Statement of Cash Flows

Net cash flow from operations, after taxes and interest expenses	Cash Flows From Operations
Includes divestiture and acquisition of real assets (capital expenditures), disposal and purchase of financial assets and cash spent on acquisition of other firms.	+ Cash Flows From Investing
Net cash flow from the issue and repurchase of equity, from the issue and repayment of debt and after dividend payments.	+ Cash Flows from Financing
Net cash flow, after investing and financing	= Net Change in Cash Balance

1. Cash flows from Operations

Cash Flow Effect	*Item*	*Why?*
Start with	Net Income	Equity Income
Plus	Depreciation and Amortization	Add back non-cash items
Plus	Other non-cash Expenses	
Plus or Minus	Change in Accounts Receivables	Get to cash to equity from operations
	Change in Inventory	
	Change in Other Current Assets	
	Change in Accounts Payable	
	Change in Taxes Due	
Equals	**Cash flow from Operations**	

Change in non-cash working capital

The Working Capital Effect?

- Embedded in the cash flow from operations is the change in working capital items, excluding cash
  - Non-cash Working capital = Non-cash current assets – Non-debt current liabilities
  - An increase in non-cash working capital will decrease cash flows, whereas a decrease in non-cash working capital will increase cash flows.
- To the extent that non-cash working capital ties up cash and capital, a firm with higher needs for that working capital will have lower cash flows from operations, for any given level of net income, than a firm with lower needs.

2. Cash Flows from Investing

Cash Flow Effect	*Item*	*Why?*
Minus	Capital Expenditures	Investment in operating assets
Plus	Divestitures of assets	
Minus	Cash Acquisitions	
Minus	Investments in financial assets	Investment in non-operating assets
Minus	Investments in non-operating assets	
Plus	Divestitures of securities & non-operati	
Equals	**Cash flow from Investing**	

Operating or Non-operating Assets

- The investing activities section includes investments in both operating and non-operating assets, except for investment in liquid, close to riskless securities, which is treated as cash & marketable securities.
- The investments into operating assets, whether internal (cap ex, net of divestitures) or external (acquisitions of other companies) are the engine that drives growth in the operating line items (revenues, operating income etc.) *Note that acquisitions funded with stock will not show up here for obvious reasons.*
- The investments into non-operating assets create a separate source of value, where the payoff will not show up in the operating line items but below the operating income line, as income from cross holdings or securities.

3. Cash flows from Financing

Action	*Item*	*Why?*
Plus	Debt Raised	Net Cash from/to Debt
Minus	Debt Repaid	
Plus	New Equity Issuances	Net Cash from/to Equity Investors
Minus	Dividends Paid	
Minus	Stock Buybacks	
Equals	**Cash flow from Financing**	

Debt Cash Flows

- While interest expenses show up in the operating cash flow section, by reducing net income and showing up in deferred taxes, debt repayments are part of the financing section.
- To the extent that some or all of these debt repayments are funded with debt issuances, the net effect on cash flows can be neutralized or become positive.
- **If total debt increases during a period, it will represent a cash inflow, and if it decreases, it will be a cash outflow. Companies that embark on plans to bring their debt down (up) over time should therefore expect these consequences.**

Dividends and Buybacks

- Until the 1980s, the only cash flow that was received by equity investors in publicly traded companies was dividends. The effect of paying dividends is simple: it reduces the cash balance at the company and increases the cash in the pockets of every shareholder who receives dividends.
- Starting in the 1980s, US companies have returned increasing amounts to their shareholders in the form of buybacks.
  - The effect of buying back stock is exactly the same as paying dividends, to the company, with cash leaving the company.
  - For shareholders, though, the cash flow effect is disparate. Those shareholders who sell their shares back get cash from the company, and those that do not get no cash, but get a larger share of the equity left in the company.
  - Both dividends and buybacks reduce shareholder equity on the balance sheet.

Potential Dividends (Free CF to Equity)

Cash Flow Effect	*Item*
Start with	Net Income
Plus	Depreciation and Amortization
Plus	Other non-cash Expenses
Plus or Minus	Change in Accounts Receivables
	Change in Inventory
	Change in Other Current Asset
	Change in Accounts Payable
	Change in Taxes Due
Equals	**Cash flow from Operations**
Minus	Capital Expenditures
Plus	Divestitures of assets
Minus	Cash Acquisitions
Equals	**FCFE before debt**
Plus	Debt Raised
Minus	Debt Repaid
Equals	**FCFE after Debt**