

Accounting

- Objective: To derive from standard accounting statements the cash that is available to be distributed to investors. This cash is sometimes called Free Cash Flow.

- Accounting Statements (review)
 - Balance Sheet
 - Income Statement

- Calculating Cash Flows Available to Investors
 - Aka “Free Cash Flow”
 - Used by financial managers and investors
 - Different from Accounting Statement of Cash Flows

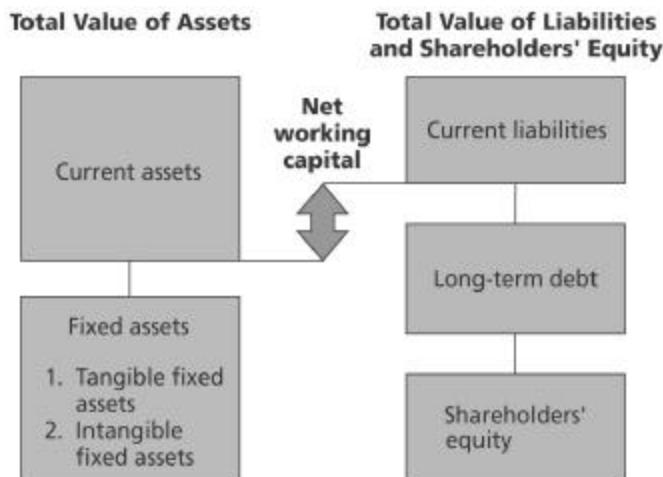
- Accounting Info on Web
 - finance.yahoo.com (MSFT, GE, F); www.edgar-online.gov
 - www.10kwizard.com

2 Accounting: Balance Sheet

US Corp, Inc.

Balance Sheet as of December 31 (\$ in thousands)

Assets	2000	2001	Liabilities and equity	2000	2001
<u>Current Assets</u>			<u>Current liabilities</u>		
Cash	\$ 45	\$ 50	Accounts payable	\$210	\$260
Accounts receivable	260	310	Notes payable	110	175
Inventory	320	385	Total	\$320	\$435
Total	\$ 625	\$ 745	Long-term debt	205	225
<u>Fixed assets</u>			<u>Stockholders' equity</u>		
Net plant and equip	985	1100	Common stock and paid-in surplus	290	290
Total assets	\$1610	\$1845	Retained earnings	795	895
			Total	1085	1185
			Total liabilities and SE	\$1610	\$1845



Accounting for Cash Flows

- Cash Flows - Financial mgrs and investors interested in *cash flow* not accounting profit.
 - Used for DCF analysis.
 - Investors need to know CF to value firm (or bond or stock).
 - Use income statement?
- Can we use Income Statement?
 - Income may not actually be received nor expenses paid!
 - Includes non-cash expense like depreciation.
 - Does not include capital expenditures in year spent.
 - Statement of Cash Flows has different, but similar problems.
 - We need our own calculation. (Financial (Free) Cash Flow).

Financial (Free) Cash Flow I

$$CF(\text{ASSETS}) = CF(\text{BONDS}) + CF(\text{STOCK})$$

Cash flow to bondholders (creditors) = Interest Paid – Net New Debt

Cash flow to stockholders = Dividends Paid – Net New Equity

(where New Equity = Δ SE – Additions to RE)

Cash Flow to Investors

Bonds	\$0	= (Int – New Debt) = 20 – (225 – 205)
Equity	<u>26.55</u>	= (Div – New Equity) = 26.55 – (100 – 100)
		New Equity = Δ SE – Additions to RE
Total	<u>\$26.55</u>	

Financial (Free) Cash Flow II

$$CF(\text{ASSETS}) = CF(\text{BONDS}) + CF(\text{STOCK})$$

Cash flow generated by assets = Operating cash flow – Capital Spending – ΔNWC

where $\text{OCF} = \text{EBIT} + \text{Dep} - \text{Taxes}$

$\text{Capital Spending} = \Delta \text{Net Fixed Assets} + \text{Dep}$

Why have ΔNWC ?

OCF comes from income statement, which, for example, may include sales before revenues are received (GAAP). ΔNWC controls for these effects.

ΔNWC also controls for effects such as inventory build-up.

Cash Flow to Assets (in \$ millions)

+Operating cash flow	\$176.55	= (EBIT + Dep – Taxes) =
–Capital spending	(145)	= (Δ Net FA + Dep) =
–Additions to NWC	(5)	= (Δ NWC) =
Total	\$26.55	

Accounting: Summary

- Objective: To derive from standard accounting statements the cash that is available to be distributed to investors. This cash is sometimes called Free Cash Flow.
- Free cash flow – cash flow available to be distributed to investors.
- FCF (Cash flow generated by assets) = OCF – Capital Spending – Δ NWC
where OCF = EBIT + Dep – Taxes
 Capital Spending = Δ Net Fixed Assets + Dep