Non-cash working capital changes (review)

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- Non-cash working capital changes { Net amount of Sources/Uses of funds
  - Look into all the "Current" accounts in the starting and ending balance sheets for the financial period, i.e. the current assets and current liabilities
  - Exclude "cash", "S. T. Credit Line" and "Current portion of the L T Debt".
  - Work out the "Source of cash" and "Use of Cash" entries
  - Sum the Changes up into the total "Source" and "Use"
  - The "Non-cash WC changes" are represented as the "Source" minus "Use" amounts

- Using the statement of cash flow to screen investment — Judgement
- Aligning management decisions with owners' interests
  mangers
- Role of cash is the "King" — W.C. — Covenants are closly Watched
  4

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The Cash Flow Statement

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- Three types of activities:

1. **Operating Activities**: include operating cash flows related to the production and sales of goods or services. All non-cash expenses (such as depreciation) are added back to net income. Any adjustments in working capital are also included.
2. **Investing Activities**: cash flow transactions related to investment activities, which included purchasing new fixed assets, selling old equipment, and buying and selling financial assets.

   \ book values VS Salvages
3. **Financing Activities**: cash transactions related to financing any capital assets used in business. Activities include the amount of borrowing and paying of existing debt.

Statement of Cash Flow:

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Goodco and Badco Statement of Cash Flow

($000)	Goodco	Badco
Cash Derived from Operating Activities		
Net income for the year from income statement	46	46
Depreciation and non-cash items	70	70
Changes in non-cash working capital	–30	–30
Total	86	86
Cash Used for Investing Activities		
Purchase of fixed assets	–80	–120 ?
Loss or gain on sale of assets	0	0

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Statement of Cash Flow:

Total	–80	–120
Cash Derived from Financing Activities		
Changes in equity	25	–175
Changes in long-term debt	5	55
Less dividends paid	–16	–16
Total	14	–136
Increase (decrease) in cash	20	–170
Net cash, beginning of year	–42	–42
Net cash, end of year	–22	–212
Increase (decrease) in cash	20	–170

Cash + S.T. Credit line (–)

Good

bad

Consolidated Statement of Cash Flows: Research In Motion

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Operating Activities

Financing Activities

Investing Activities

	For the three months ended February 28, 2009	For the year ended March 1, 2009
Cash flows from operating activities		
Net income	$ 518,259	$ 1,892,616
Items not requiring an outlay of cash:		
Amortization	116,125	327,896
Deferred income taxes	3,291	(36,623)
Income taxes payable	(456)	(6,897)
Stock-based compensation	8,900	38,100
Other	5,598	5,867
Net changes in working capital items	**(360,975)**	**(769,114)**
Net cash provided by operating activities	**290,742**	**1,451,845**
Cash flows from financing activities		
Issuance of common shares	2,183	27,024
Excess tax benefits from stock-based compensation	(52)	12,648
Repayment of debt	(14,061)	(14,305)
Net cash provided by financing activities	**(11,930)**	**25,367**
Cash flows from investing activities		
Acquisition of long-term investments	(67,326)	(507,082)
Proceeds on sale or maturity of long-term investments	127,048	431,713
Acquisition of capital assets	(251,932)	(833,521)
Acquisition of intangible assets	(221,964)	(687,913)
Business acquisitions	(48,425)	(48,425)
Acquisition of short-term investments	(250,018)	(917,316)
Proceeds on sale or maturity of short-term investments	170,178	739,021
Net cash used in investing activities	**(542,439)**	**(1,823,523)**
Effect of foreign exchange loss on cash and cash equivalents	(2,541)	(2,541)
Net decrease in cash and cash equivalents for the period	**(266,168)**	**(348,852)**
Cash and cash equivalents, beginning of period	**1,101,714**	**1,184,398**
Cash and cash equivalents, end of period	**$ 835,546**	**$ 835,546**

Lecture 18

- Review of Financial Statements

Operational vs. Financial Management

- All businesses require that management address two areas:
  - Operational health: does our underlying business activity create value independent of how we finance the business?
  - Financial health: have we raised money in a way that can sustain the business?
- The income statement is the primary source of evidence of operational health. Contribution margin is a critical measure. (%)
- The balance sheet is the primary source of evidence of financial health.
- The Statement of Cash Flow links these two.

St. Cash flow

B.sh. B.sh

Income Stat.

Financial Statements:

- Financial statements answer three key questions:
  - *How much did we make, and how much do we keep?* CM (?) CM
    - The income statement (often combined with statement of retained earnings)
  - *How much do we have, and where did the money come from to get it?* Assets VS. Liabilities
    - The balance sheet. – debt / (equity + Retained Earnings)
  - *Where did our money go?*
    - Statement of cash flow. ← Business decisions
- Financial statements are part of a chain:
  - Bookkeeping.
  - Accounting.
  - Financial statements.
  - Analysis and action.

The Income Statement:

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- The form is revenue minus expenses equals earnings.
- Purpose: to answer "how much did we make?" It is the test of value creation in a business.
- It is a "rate", hence a time period must be involved.
- The time period must be long enough to make sense.
- Earnings are not the same as cash flow.

The Form of the Income Statement:

Start with	Gross Revenue from Sales
Minus	Allowance for Bad Debt/Warranty (optional)
Gives	Net Revenue
Minus	Cost of Goods Sold (Variable Costs)
Gives	Contribution or Gross Margin
Minus	Sales General and Administrative Expense (Fixed costs, e.g. Sales & Admin Salaries, Depreciation, etc.)
Gives	Operating Income
Plus/Minus	Other Income (including interest on financing)
Gives	Net Income (Profit or Loss)

Depreciation: – a source of cash

- Some assets wear out, others don't.
- If a business doesn't replace its wearing assets, it isn't viable.
- Depreciation is a *charge against earnings* to reflect the need to replace wearing out assets.
- **It is not a cash cost**. The business has already spent the cash! It can be thought of as a recovery of previously spent costs or "pre-recovering" future costs. If these costs can not be recovered, then the business isn't *earning* its cash flow.
- It is not necessary to save the cash to reinvest in new equipment.

Break Even:

\ Simple breakeven

- The best way to think of break even is: how much sales do I need to generate enough margin to cover my SG&A (or SG&A plus interest on long-term debt).
- Key test for any startup business is a plan to get to break even.
- Volume versus margin versus expense is the key conceptual tradeoff.

(%)

Book break even: CM=SG&A including depreciation

Cash break even: CM=SG&A excluding depreciation

Cash Flows in Income Statement

- Depreciation is a source of cash
- Operating Cash Flow = Operating Income + Depreciation
- Net Cash Flow = Net Income + Depreciation
- The difference between the above two cash flows are the other incomes/losses from financing activities (including financing interest)

- Make difference between income and cash flow

The Balance Sheet:

- How much do I have, and how did I pay for it?

Assets = liabilities plus equity

- Assets: what I have. Liabilities: what I owe.
- If the asset is useful, it is recorded at “book value”: the lesser of original cost minus depreciation or market value. If market value is higher, *it is never recognized in advance of being realized*.

Conservative

- If it is worn out or useless, it is written off (depreciation and writedowns).

status
otherwise

Accounting is always conservative. In times of high inflation, book values deviate from real values.

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The Form of the Balance Sheet:

Assets:

Current: Cash

- Receivables
- Short Term Notes
- Inventory
- Prepaid Expenses

Fixed: Land, Bldgs, & Equip

less Accum Depreciation

Long Term Investments

Goodwill and Intangible Assets

Liabilities:

Current: Short Term Credit Line

- Accounts Payable
- Accrued Expenses
- Taxes Payable
- Curr. Port. Of L-T Debt

Non Cash W.C.

Long Term: Long Term Debt

Repayable Grants

Shareholder's Equity

- Capital Shares
- Retained Earnings

Working Capital

- *Working capital* is the difference between current assets and current liabilities; it is the extra cost of being in business over and above fixed assets.

floating

assurance for banker

- The ST credit line is usually the largest unsecured creditor. It looks to a surplus of working capital as proof that more funds are available in the near term to pay obligations.
- The credit line is a demand loan, callable at any time, and subject to covenants.

Fixing a Working Capital Deficiency:

- The problem is “above the line”: not enough current assets (what will become cash in less than 12 months) to service cash obligations.
- Any change “above the line”, e.g. collecting receivables or reducing inventory, **does not change working capital, because the security for the debt is reducing just as fast as the debt!** The lender focuses on the shortfall, which doesn’t change.
- Hence the saying: “you can’t change an above the line problem above the line”: the fix is more equity or more long term debt (refinancing).

Statement of Cash Flow:

- Makes the “reflection” on the sources and uses of funds easier.

- Breaks funds flow into preset categories:
  - Operating Activities (includes non-cash working capital)
  - Financing Activities (debt and equity)
  - Investing Activities

- The balancing entry is cash. Note that “cash” includes positive and negative (short term borrowing) values. If a company has both, net these out.

Course Overview (Continued):

- Tool building versus thought building

- Keys to success:
  - Homework to master tool building.
  - Access to a spreadsheet program.
  - Clear, brief and thoughtful writing.
  - Think like a business manager (for 4 months only!).
  - Simple math, complex thought about ambiguous situations.

- Exams are open book. Emphasis in writing is on thoughtfulness, clarity and brevity.

Do you appreciate:

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- Arrow analogy for tool building – you can’t learn how to make an arrow just by listening to a lecture.
- Homework: for the thought questions, park them in the right hand side of the brain. These issues are different from engineering problems, they need reflection and intuition. Some problems have both.

Do you appreciate:

- Exams have a lot of material so that those that haven't read prior to the exam don't do as well as the prepared. Exam marks tend to be high.

- Business problems are ambiguous and do not have one clear answer, unlike engineering problems.