INTRODUCTION TO BUSINESS

Financial Statements, Cash Flow

Lecture outline

- Rationale behind financial statements
- Reasons for recording financial transactions
- Sources of financial statements and reports
- The balance sheet
- The income statement
- Statement of cash flow
- Statement of retained earnings
- Modifications of statements

Rationale behind financial statements

- Pieces of paper with numbers – but what is behind?
- Historically, development of specialization leaded to creation of loan (merchant lending and then banking) as a aid in business expansion.
- Eventually production more and more complex so that lenders could not physically inspect all borrowers assets and judge on default risk. Also some investment on the basis of profit sharing.
- So profits had to be determined accurately. Moreover: owners needed to see how effective is their business.

Rationale behind financial statements

- Currently:
  - Owners (and lenders need) financial information to make decisions,
  - managers to operate efficiently,
  - government to learn on economic performance
  - and to tax ☹

  Various difficulties in translation of physical assets into numbers …..

Reasons for recording transactions

- Main reasons for recording:
  - An evidence for the transaction
  - Annual accounts can be produced
  - Security measures can be taken
  - Business performance can be monitored
  - Taxes can be calculated

Purchasing documents: the order form, goods received note, purchase invoice.

Sales documents: orders received, delivery note, sales invoice, statements of accounts (summary).

Other documents: as required for the reasons outlined above

Security issues

- Financial documents must be completed neatly and accurately.
- Three major aspects: authorization of orders, reconciling invoices against orders and goods received notes, authorized signatories.
- Two main criteria for deciding who authorizes an order: the amount of money to be spent or a type of goods being purchased.
- An **audit of financial statements**, is the examination by an independent third party of the financial statements of a company, resulting in the publication of an independent opinion on whether or not those financial statements are relevant, accurate, complete, and fairly presented

Accounting methods

- Cash basis – simple: record a sale when a payment is received, expense when the bill is paid etc.
- Accrual basis – record sales when they are made and expenses when they are incurred. Gives an accurate picture of the company and allows for proper recording of inventory and extended credit.
- Completed-contract method: expenses and income recorded when the project was completed.

Sources of financial statements and reports

- The annual report contains two types of information – numbers and verbal section providing explanation/description.
- Where to find current data?
  - Obviously in company itself
  - Published collection of data (Dun&Bradstret, Coface, Registry Court(!))
- Investment sites on the web
  - Examples
    - http://moneycentral.msn.com/investor
    - http://www.marketguide.com

The balance sheet

- „Snapshot” of firm’s position at a given point in time.

Current Assets
Cash and equivalents
Accounts receivable
Inventory

Long-term (fixed) Assets
Net plant and equipment
Other long-term assets

TOTAL ASSETS

Current Liabilities
Accrued wages and taxes
Accounts payable
Notes payable

Long –Term Debt

Stockholders’ Equity
Common stock
Retained earnings

TOTAL LIABILITIES AND EQUITY

BS

- Compares the possesions of a company and the debts that it ownes on a specific day.
- Opening:
  - Inventory 60.000
  - Furniture and fixtures 15.000
  - Machinery and equipment 10.000
  - Prepaid expences 4.000
  - Supplies 2.000
  - Deposits 4.000
  - Building renovations 25.000
  - Working capital 20.000 **TOTAL 140.000**

Opening Day Balance Sheet

Assets

Current Assets

- Cash (working capital)
- Supplies
- Prepaid Expenses
- Inventory

Total Current Assets

Fixed Assets

- Furniture / Fixtures
- Machinery / Equipment
- Renovations

Total Fixed Assets

Total Assets

Liabilities

Current Liabilities

- Current portion of long-term debt

Total Current Liabilities

Long-Term Liabilities

- Note Payable
- Less: Current Portion

Total Long-term

Total Liabilities

Equity

Total Liabilities & Equity

The balance sheet

- Current assets: cash + equivalents plus items to be converted into cash within one year
- Long-term assets – use exceed one year (physical assets, intellectuall property) net of depreciation
- The retained earnings – when firm „saves” part of its earnings instead of paying out as dividends.
- Net worth – common stock + retained earning
- Net working capital = Current Assets- Current liabilities (often used as a measure of liquidity)

The balance sheet issues

- Cash and equivalents vs other assets. What is the REAL value of non-cash assets?
- Inventory accounting: FIFO (first-in, first-out) or other methods to determine inventory value?
- Possible other sources of funds: preferred stock, convertible bonds, long-term leases.
- Depreciation methods – two sets of statements – one for owners, second for taxation.
- Market values vs book values.

The income statement

- A report summarizing revenues and expenses (or rather costs) during an accounting period
- EBIT- earning before interest and taxes= sales revenue minus operating costs. Often called OPERATING INCOME.
- EBITDA = EBIT+DEPRECIATION or earnings before interest, taxes, depreciation and amortization. Shows amount of cash in the company.
- Net cash flow: Net income + depreciation and amortization. Thus business net cash flow differs from accounting profits!

Projected Income Statement (

Sales

Cost of Goods Sold

- Beginning Inventory
- Purchases
- Freight
- Ending Inventory

Cost of Goods Sold

Gross Margin

Expenses

- Officer's Salary
- Employee Wages
- Accounting / Legal
- Advertising
- Rent
- Depreciation
- Supplies
- utilities
- Telephone
- Interest
- Repairs
- Texas
- Insurance
- Miscellaneous
- Credit card fees
- Dues / Subscriptions

Total Expenses

Net Profit

- Income Taxes

Net Profit after Taxes

For planning purposes, compute the following:

Net Profit
Less: Income Taxes
Less: Loan Principal
Add: Depreciation
Net Cash

Statement of cash flow

- Net CF represents a cash generated by business. But high cash flow not necessarily mean high cash value in BS.
- It may also cause changes in working capital, fixed assets or security transactions (ie. dividend payments)
- Statement of cash flow include:

  - operating activities

  -investing activities

  -financing activities

Projected Cash Flow

Month	Month 1	Month 2	Month 3	. . . . .	Month 12
Beginning Cash					
Cash In					
Cash Available					
Cash Out					
Rent					
Telephone					
Advertising					
Insurance					
Equipment leases					
Office supplies					
Car phone lease					
Owner's salary					
Employee wages					
employee taxes					
Accounting / Legal					
Repairs / Maintenance					
Auto expense					
Loan Payment (P&I)					
Inventory Purchases					
Income Taxes					
Other (itemize)					
Total Cash Out					
Cash Balance					

Statement of retained earnings

- How much of the firm’s earnings were retained in the business rather than paid as dividends.
- In fact it represents claim against assets – it does not represent cash, neither is „available” for dividends or anything else!
- But accounting methods used differ, so:
- Q: can we rely on financial statements ?

Income statement vs cash-flow

- IS: Shows sales as they are generated
- Depreciation is shown
- Interest on loan is listed
- Beginning and ending inventories are included in cost of goods sold calculations

- CF: Show sales when money is received
- Lack of depreciation – only investment items
- Interest and principal are included
- Inventory purchases recorded when bills are paid

Break – even point

- The minimum amount of sales necessary for company’s survival
- After calculating it has to be confronted with its feasibility
- Calculation break-even may prevent from costly mistakes.
- First step: fixed vs. variable expense
- Second: contribution margin: gross profit/sales volume
- BEP: Fixed expences/contribution margin

Modifying accounting data

- Net Operating Working Capital (NOWC) – Operating working capital less accounts payable and accruals. It is the working capital financed out of own funds.
- Total operating capital = NOWC + net fixed assets
- Net Operating Profit After Taxes (NOPAT)- profit a company would generate if it had no debt and held only operating assets
- NOPAT = EBIT x (1- tax rate)
- Operating cash flow = NOPAT+ depreciation

Free cash flow!!!

- The cash actually available for distribution to all investors (incl. debtowners) after the company has made all required investment and increased adequately its working capital. Otherwise amount to be potentially taken out of company without any harm.
- FCF = Operating cash flow – investment in operating capital = (EBIT x (1-T) + depreciation) - (capital expenditures + Δ net operating working capital).