Ch. 3 Financial Statements, Cash Flows and Taxes

Topics

- Key financial statements
  - Balance Sheet
  - Income Statement
  - Cashflow Statement
- Accounting profits vs. cash flow
- Taxes

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The Balance Sheet

Definition

Financial statements that show the value of the firm's assets and liabilities at a particular point in time *(from an accounting perspective).*

- Balance Sheet Identity:

  Assets = Liability + Equity

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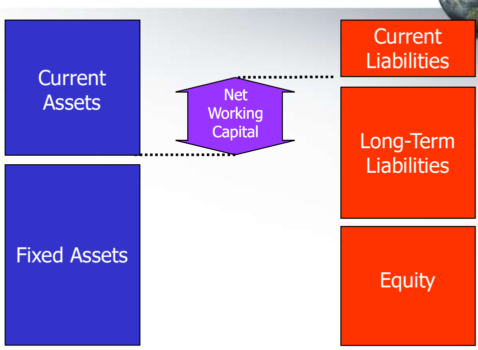
Balance Sheet Model of the Firm



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Cash and Net Working Capital

- Current Assets: Cash and other assets that are expected to be converted to cash with the year.
  - Cash and marketable securities
  - Accounts receivable
  - Inventory
- Current Liabilities: Obligations that are expected to require cash payment within the year.
  - Accounts payable
  - Accruals
- Net Working Capital (NWC) = CA – CL
- Net Operating Working Capital (NOWC)

  = CA required in operations – All non-interest-bearing CL

  = (Cash and equivalents + AR + Inventories) – (AP + Accruals)

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Market Value vs. Book Value

- Book Values are determined by GAAP and reflect original or historical values.
- Market Values measures current values of assets. Equity and Asset "Market Values" are usually higher than their "Book Values."

Example

According to GAAP, your firm has equity worth $6 billion, debt worth $4 billion, assets worth $10 billion. The market values your firm's 100 million shares at $75 per share and the debt at $4 billion.

Q: What is the market value of your assets?

A:

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The Income Statement

Definition

Financial statement that shows the revenues, expenses, and net income of a firm over a period of time *(from an accounting perspective)*.

- Accounting Definition of Income:

  Revenue – Costs = Income

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The Income Statement

- Main Income Statement Items

Sales - Net
– COGS
– SG&A Expenses
– Depreciation
– Other Expenses
= Earnings Before Interest & Taxes (EBIT)
– Interests
= Earnings Before Taxes (EBT or Taxable Income)
– Taxes
= Net Income (Profits)

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The Statement of Cash Flows

Definition

Financial statement that shows the firm's cash receipts and cash payments over a period of time.

- Main Cash Flow Statement Items

+/– Cash Flow from Operations
+/– Cash Flow from Investments
+/– Cash Flow from Financing Activities
= Change in Cash Balance

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Accounting for Differences

- Subjective aspects exist in reporting earnings and book value.
- Some liabilities may excluded from balance sheets.
- International accounting standards vary.

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Profits (Income) vs. Cash Flows

Differences

- "Profits" subtract depreciation (a non-cash expense).
- "Profits" ignore cash expenditures on new capital (the expense is capitalized).
- "Profits" record income and expenses at the time of sales, not when the cash exchanges actually occur.
- "Profits" do not consider changes in working capital.

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Cash Flows

- **Net cash flow (NCF)** = Net Income + Depreciation & amortization
- **Operating cash flow (OCF)**
  = EBIT (1 – T) + Depreciation and amortization
  = NOPAT + Depreciation and amortization
- **Free cash flow (FCF)**
  = (EBIT (1 – T) + Depreciation and amortization) – (Capital expenditures + Changes in NOWC)
  = OCF – Net Investment in Operating Capital

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Taxes

- Taxes have a major impact on financial decisions.

Marginal Tax Rate is the tax that the individual pays on each extra dollar of income.

Average Tax Rate is the total tax bill divided by total income.

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Corporate and Personal Taxes

- Tax Cuts and Jobs Act (TCJA)
  - The GOP tax bill signed into law by President Trump on Dec. 22, 2017. Many tax brackets, thresholds, and rates changed in 2018 including elimination of personal exemptions and the expansion of the Child Tax Credit.
- Individuals
  - Rates begin at 10% and rise to 37% for individuals with income over $500,000 and for married couples filing jointly with income over $600,000.
  - May be subject to state tax.
- Corporations
  - Starting 2018, the effective rate is a flat 21%.
  - Also subject to state tax (around 5%).

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Personal Tax Rates in 2024

Rate	For Single Individuals	For Married Individuals Filing Joint Returns
10%	$0 to $11,600	$0 to $23,200
12%	$11,601 to $47,150	$23,201 to $94,300
22%	$47,151 to $100,525	$94,301 to $201,050
24%	$100,526 to $191,950	$201,051 to $383,900
32%	$191,951 to $243,725	$383,901 to $487,450
35%	$243,726 to $609,350	$487,451 to $731,200
37%	$609,351 or more	$731,201 or more

Source: IRS

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More Tax Issues

- **Capital gains**: Defined as the profits from the sale of assets not normally transacted in the normal course of business, capital gains for individuals are generally taxed as ordinary income if held for less than a year, and at the capital gains rate if held for more than a year.

	For Unmarried Individuals, Taxable Income Over	For Married Individuals Filing Joint Returns, Taxable Income Over	For Heads of Households, Taxable Income Over
0%	$0	$0	$0
15%	$41,675	$83,350	$55,800
20%	$459,750	$517,200	$488,500

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Corporate Tax Rates

- Before the TCJA:

If a Corporation's Taxable Income Is	It Pays This Amount on the Base of the Bracket	Plus This Percentage on the Excess over the Base (Marginal Rate)	Average Tax Rate at Top of Bracket
Up to $50,000	$ 0	15%	15.0%
$50,000–$75,000	7,500	25	18.3
$75,000–$100,000	13,750	34	22.3
$100,000–$335,000	22,250	39	34.0
$335,000–$10,000,000	113,900	34	34.0
$10,000,000–$15,000,000	3,400,000	35	34.3
$15,000,000–$18,333,333	5,150,000	38	35.0
Over $18,333,333	6,416,667	35	35.0

- **After the TCJA (2017): 21% flat rate**
- **Inflation Reduction Act (Aug. 7, 2022):** Companies that make more than $1 billion a year will now have to pay a minimum tax rate of 15% as well as 1% on stock buybacks.

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Tax treatment of various funds

- **Interest paid**: Tax deductible for corporations (paid out of pre-tax income), but usually not for individuals.
- **Interest earned**: Usually fully taxable (an exception being interest from a "muni").
- **Dividends paid**: Paid out of after-tax income.
- **Dividends received**: Investors pay 20% taxes.

  Dividends are paid out of net income which has already been taxed at the corporate level, this is a form of "double taxation."
- **Tax Loss Carry-Back and Carry-Forward**: Since corporate incomes can fluctuate widely, the tax code allows firms to carry losses back to offset profits in previous years or forward to offset profits in the future.

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