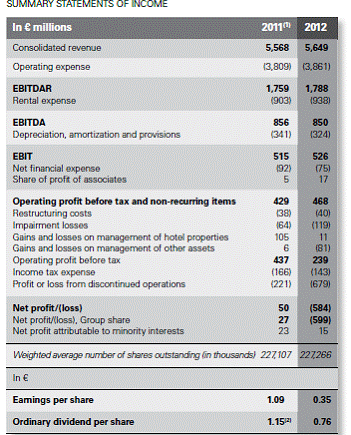
# Balance SheetC:\Users\Hari3\AppData\Local\Microsoft\Windows\INetCacheContent.Word\Assets.jpgC:\Users\Hari3\AppData\Local\Microsoft\Windows\INetCacheContent.Word\Liabilities.jpg

# Income Statement

**EBITDAR:** Earnings Before Interest, Tax, Depreciation, Rental Cost

Impairment of Assets seeks to ensure that an entity's assets are not carried at more than their recoverable amount



# Balance Sheet

**Assets = Liabilities + Shareholders' Equity**

Assets= Current Assets + Non-Current Assets

* Current Assets = Can be converted into Cash in less than one year. eg. Cash, Cash Equals, Inventory (raw, WIP, finished), Account Receivable
* Non-Current Assets: Tangible: machinery, computers, buildings, and land. Intangible: goodwill, brand, patents or copyright

Liabilities = Current Liabilities + Long Term Assets

* Current Liabilities: interest payment on a 10-year loan, short term borrowing, account payable,
* Long-term Liabilities: Debt and non-debt long term financial obligations

**Shareholders' Equity:**  Initial amount of money invested into a business.

If company decide to reinvest the net earning then this can be transferred from income statement onto the balance sheet and shareholder's equity account

# Financial Ratios

**Profitability ratios**

1. **Contribution Margin** = Sales - Variable expenses

**Example**

Sales = $100

Variable Expenses = $40

Contribution Margin = $100 − $40 = $60

1. Contribution Margin % = 100 \* **Contribution Margin** / Sales.

* This ratio indicates the percentage of each sales dollar that is available to cover a company's fixed expenses and profit.

**Example**

Contribution Margin % = 100 \* $60 / $100 = 60%

1. **Gross margin** = [Revenue](https://en.wikipedia.org/wiki/Net_revenue) - [Cost of goods sold](https://en.wikipedia.org/wiki/Cost_of_goods_sold) (COGS)

* Costs are associated with particular goods using one of several formulas, including specific identification, first-in first-out (FIFO), or average cost. Costs include all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. Costs of goods made by the business include material, labor, and allocated overhead. The costs of those goods not yet sold are deferred as costs of inventory until the inventory is sold or written down in value.

**Example**

Revenue = $100

COGS = $30

Gross Margin = $100 - $30 = $70

1. Gross Margin (%) = 100\* **Gross margin** / Revenue

**Example**

Gross Margin % = 100 \* $70 / $100 = 70%

1. **Operating income** = operating revenues - operating expenses

* Operating revenue is revenue (sales) generated from a company's day-to-day business activities, which means revenue posted from selling the company's products and services. A retailer, for example, produces revenue through inventory sales, and a doctor derives revenue from consulting with patients.
* An **operating expense**, **operating** expenditure, operational **expense**, operational expenditure or Opex is an ongoing cost for running a product, business, or system. Its counterpart, a capital expenditure (Capex), is the cost of developing or providing non-consumable parts for the product or system.

**Example**

Operating Revenue = $100

Operating Expenses = $70

Operating Income = $100 – $70 = $30

1. [Operating margin](https://en.wikipedia.org/wiki/Operating_margin) % = 100\***Operating Income** / Net Sales

**Example**

Net Sales = $30

Operating Margin = 100 \* $30 / $30 = 100%

1. **Net profit** = Sales revenue - Total costs

**Example**

Total Cost = $80

Sales Revenue) = $100

Net Profit = $100 − $80 = $20

1. Return on sales (%) ROS = 100 \* **Net profit** / Sales revenue

**Example**

ROS = 100 \* $20 / $100 = 20%

1. [**Profit margin**](https://en.wikipedia.org/wiki/Profit_margin) = 100 \* Net Profit /Net Sales

* Profit margin is an indicator of a company's pricing strategies and how well it controls costs. Differences in competitive strategy and product mix cause the profit margin to vary among different companies,

**Example**

Cost price = $50

Selling price (revenue) = $100

Profit = $100 − $50 = $50

Profit Margin (profit / cost) = 100 \* $50/$50 = 100%

1. [Return on equity](https://en.wikipedia.org/wiki/Return_on_equity) (ROE) = Net Income / Shareholder Equity

* Measure of management's ability to generate income from the equity available to it.
* ROEs of 15-20% are generally considered good.

**Example**

Net Income = $ 30 K

Avg Shareholder Equity = $ 10000

ROE = 30,000/10,000 = 3

1. [Return on assets](https://en.wikipedia.org/wiki/Return_on_assets) (ROA) = Net Income / Average Total Assets

* How many dollars of earnings they derive from each dollar of assets they control.  ROAs over 5% are generally considered good.

**Example**

Net Income = $ 30 K

Avg. Total Assets = $ 40 K

ROE = 30,000/40,000 = 7.5%

**Liquidity ratios**

1. Working Capital = Current Assets - Current Liabilities

**Example**

Current Assets = $ 40 K

Current Liabilities = $ 30 K

Working Capital = 40,000 - 30,000 = $ 10 K

1. [Current ratio (Working Capital Ratio)](https://en.wikipedia.org/wiki/Current_ratio)= CA / CL

* Whether a company has enough short term assets to cover its short-term debt.
* >2 means that the company is not investing excess assets or company has too much inventory
* Most believe that a ratio between 1.2 and 2.0 is sufficient.

**Example**

Current Assets = $ 40 K

Current Liabilities = $ 30 K

Current Ratio = 40,000 / 30,000 = 1.34

1. [Acid-test ratio (Quick ratio)](https://en.wikipedia.org/wiki/Quick_ratio)= (CA - Inventories - Prepayment) / CL

**Example**

Current Assets = $ 40 K

Inventories + Prepayment = $ 10K

Current Liabilities = $ 30 K

Quick Ratio = (40,000 - 10,000) / 30,000 = 1

1. [Cash ratio](https://en.wikipedia.org/wiki/Cash_ratio) = Cash & Marketable Securities / Current Liabilities

**Example**

Assets = $ 10 K

Marketable Securities = $5

Current Liabilities = $ 30 K

Cash Ratio = (10,000 + 5,000) / 30,000 = .5

**Example of Apple Inc.**

|  |  |
| --- | --- |
| **Cash and cash equivalents** | **15,319** |
| **Short-term marketable securities** | **19,384** |
| **Accounts receivable, less allowance of $83** | **10,370** |
| Inventories | 2,042 |
| Deferred tax assets | 5,010 |
| **Vendor non-trade receivables** | **9,537** |
| Other current assets | 9,291 |
| Total current assets | 70,953 |
|  |  |
| Accounts payable | 26,474 |
| Accrued expenses | 22,724 |
| Deferred revenue | 9,088 |
| Commercial paper | 4,499 |
| Current portion of long-term debt | 2,500 |
| **Total current liabilities** | **65,285** |

Acid-test ratio = ( 15,319 + 19,384 + 10,370 + 9,537 ) / 65,285 = 0.84

**Activity ratios (Efficiency Ratios)**

Activity ratios measure a firm's ability to convert different accounts within its balance sheets into cash or sales. Relative efficiency of a firm based on its use of its assets. Activity ratios are most useful when compared to competitor or industry to establish whether an entity's processes are favorable or unfavorable.

1. [Average collection period](https://en.wikipedia.org/wiki/Debtor_collection_period) = 365 \* Account Receivable / Annual Credit Sales

* A long debtors collection period is an indication of slow or late payments by debtors.

1. [Asset turnover](https://en.wikipedia.org/wiki/Asset_turnover) = Net Sales / Total Assets

* Measures the efficiency of a company's use of its [assets](https://en.wikipedia.org/wiki/Asset) in generating sales revenue or sales income

1. Merchandise Inventory Turnover Ratio = Cost of goods sold / Average inventory

* Higher calculations indicate inventory is quickly converted into sales and cash.

1. Total Assets Turnover Ratio = Total sales are divided by total assets

* To see how proficient a business is at using its assets

1. Accounts Receivable Turnover Ratio = Total credit sales / average accounts receivable balance

* Determines an entity's ability to collect money from its customers. A low ratio suggests a deficiency in the collection process.

**Debt ratios (leveraging ratios)**

1. [Debt ratio](https://en.wikipedia.org/wiki/Debt_ratio) = Total Liabilities / Total Assets

* Indicates the percentage of a company's [assets](https://en.wikipedia.org/wiki/Assets) that are provided via [debt](https://en.wikipedia.org/wiki/Debt)
* a company with $2 million in total assets and $500,000 in total liabilities would have a debt ratio of 25%.
* If the ratio is greater than 0.5, most of the company's assets are financed through debt.  The higher the ratio, the greater risk will be associated with the firm's operation. It indicates lower borrowing capacity. Which indicates lower financial flexibility.
* A debt level of 40% may be easily manageable for a company in a sector such as utilities
* A debt level of 30% may be too high for an industry with volatile [cash flows](http://www.investopedia.com/terms/c/cashflow.asp)

**Market ratios**

1. [Earnings per share](https://en.wikipedia.org/wiki/Earnings_per_share) (EPS) = Net Earning / No of Shares

**Example**

Net Income = $ 30 K

No of Equity = 1000

EPS = 30,000/1,000 = $30

1. [Payout ratio](https://en.wikipedia.org/wiki/Payout_ratio) = Dividend/ EPS

**Example**

Dividend = $ 5,000

No of Equity = 1000

Payout Ratio = $ 5,000/1,000 = $5

1. [P/E ratio](https://en.wikipedia.org/wiki/PE_ratio) (PER) = Market Price per Share / EPS

* Average P/E ratio of all companies in the S&P 500 index is 20
* Single-digit P/E would be considered undervalued.
* P/E of 50 would be considered overvalued

**Example**

Market Price per Share = $ 300

EPS = $30

PE Ratio = $ 300/ $30 = 10

**Capital budgeting ratios**

1. Present Value (PV) = FV/(1+Discount Rate)^n
2. Net Present Value = Inflow - Outflow
3. Future Value (FV) = PV \* (1+Discount Rate)^n
4. Internal Rate of Return = At discount rate at which present value of inflow becomes equal to present value of outflow.