

# Chapter 1: SHORT-TERM FINANCING AND PLANNING

## a) Tracing Cash and Net Working Capital

Short-term finance focuses on current assets and current liabilities, the lifeblood of a company's day-to-day operations. **Net Working Capital (NWC)** is defined as Current Assets minus Current Liabilities. A positive NWC means a firm's liquid assets exceed its short-term obligations, indicating a buffer for financial solvency. Tracing NWC involves understanding how daily transactions—like purchasing inventory (increasing current assets) or paying suppliers (decreasing current liabilities)—affect this balance. **Cash** is the most liquid current asset, and tracing it means monitoring its movement through the firm, from receipts (inflows) to disbursements (outflows). An increase in NWC generally suggests an improvement in liquidity, but it's vital to trace the cash component specifically, as NWC can include less liquid items like slow-moving inventory.

## b) Defining Cash in Terms of Other Elements

Cash, in a financial planning context, can be defined as the residual or balancing item on a firm's balance sheet. It is often described in relation to net working capital and other major financial decisions. An alternative definition of cash is derived from the balance sheet identity:

$$\text{Cash} = \text{Long-Term Debt} + \text{Equity} + \text{Current Liabilities} - \text{Noncurrent Assets} - \text{Noncash Current Assets}$$

This formula highlights that the level of cash a firm holds is determined by its long-term financing decisions (debt and equity), its fixed asset investments, and its management of non-cash current assets (like receivables and inventory). Therefore, cash is not just what is in the bank; it is the outcome of all the company's prior investment and financing choices.

## c) The Operating Cycle and the Cash Cycle

The **Operating Cycle** is the time it takes for a firm to purchase inventory, sell it, and collect the cash from the sale. It measures how quickly a firm converts its inventory investment into cash receipts. It is calculated as the sum of the Inventory Period (time to sell inventory) and the Accounts Receivable Period (time to collect cash from sales).

The **Cash Cycle** is a more critical measure of short-term liquidity. It represents the time period between paying for inventory (cash outflow) and collecting cash from the sale of that inventory (cash inflow). It is calculated as the Operating Cycle minus the Accounts Payable Period (the time the firm takes to pay its own suppliers). A short or negative cash cycle is ideal, as it means the firm is receiving cash from sales before it has to pay its suppliers, effectively financing its operations using supplier credit.

## d) Some Aspects of Short-Term Financial Policy

Short-term financial policy revolves around two key decisions: the size of the firm's investment in current assets and the financing of current assets. The size decision, or *current asset management*, can be either restrictive (low levels of current assets, leading to lower liquidity but potentially higher return on assets) or flexible (high levels of current assets, leading to higher liquidity but potentially lower overall returns). The financing decision, or *working capital financing*, involves choosing between short-term (flexible, but more variable cost) and long-term (stable, but higher fixed cost) sources of financing for current assets. A conservative policy favors financing current assets with long-term debt or equity, while an aggressive policy relies heavily on short-term funding sources.

### e) Cash Budgeting

**Cash budgeting** is the primary tool for short-term financial planning. It is a forecast of cash inflows and outflows over a specific period, typically a month or a quarter. The purpose is to identify periods of cash surplus or cash deficit. The process starts with forecasting cash receipts, primarily from sales, and cash disbursements, including payments for inventory, labor, taxes, and capital expenditures. The net cash flow is calculated, and this is added to the beginning cash balance to find the ending cash balance. If the ending balance is below the target minimum, the budget signals a need for short-term borrowing; if it is above, it suggests a temporary cash surplus that can be invested.

### f) The Short-Term Financial Plan

The short-term financial plan uses the insights from the cash budget to formulate specific actions. It addresses how the firm will manage its forecast cash surpluses or deficits. For deficits, the plan specifies the source, amount, and timing of short-term financing (e.g., lines of credit, bank loans, commercial paper). For surpluses, the plan details where and for how long the funds will be invested, prioritizing safety and liquidity (e.g., Treasury bills, short-term certificates of deposit). This plan ensures the firm maintains adequate liquidity, minimizes idle cash balances, and has immediate access to funds when required.

### f) The Short-Term Financial Plans in India

Short-term financial planning in India is particularly influenced by the regulatory environment and the prevalence of specific instruments. Companies heavily rely on **working capital loans** from banks, which often require collateral and adherence to strict covenants. The use of **Commercial Paper (CP)**, a short-term, unsecured promissory note, is common for large, highly-rated companies to meet temporary funding needs. Furthermore, the banking system uses cash credit and overdraft facilities extensively to manage day-to-day liquidity gaps. Planning must also account for regulatory changes, seasonal working capital needs in diverse industries, and the cost and availability of short-term debt, which is often tied to the Reserve Bank of India's policy rates.

## Chapter 2: CASH AND INVENTORY MANAGEMENT & RECEIVABLES MANAGEMENT

### a) Reasons for Holding Cash

Firms hold cash for three main reasons: **Transaction Motive**, **Precautionary Motive**, and **Speculative Motive**.

1. **Transaction Motive:** Cash is needed to meet routine payments and disbursements, such as wages, supplier payments, and utility bills, to ensure the smooth operation of the business.
2. **Precautionary Motive:** Firms hold cash as a buffer against unexpected cash flow shortages or unforeseen expenses, providing a safety net in case of operational hiccups or sudden market changes.
3. **Speculative Motive:** Cash is held to quickly take advantage of unexpected investment opportunities, such as acquiring an undervalued asset or taking a large cash discount on a major purchase.

## b) Determining the Target Cash Balance

The target cash balance is the optimal amount of cash a firm should hold, representing a trade-off between the cost of holding cash and the transaction costs of converting other assets to cash. Holding too much cash incurs an **opportunity cost** (the interest that could have been earned). Holding too little risks a **shortage cost** (transaction fees, borrowing costs, or stock-out costs). Models like the **Baumol Model** and the **Miller-Orr Model** help determine this balance by considering factors like the fixed cost of securities transactions, the interest rate, and the uncertainty/variance of cash flows. The goal is to minimize the total costs associated with cash management.

## c) Managing the Collection

Managing the collection process aims to speed up cash inflows, thereby reducing the cash cycle. Techniques include:

1. **Lockboxes:** Strategically located post office boxes in various regions that customers mail payments to. A local bank checks the box several times a day and deposits the funds, minimizing mail and processing float.
2. **Preauthorized Payments:** Customers grant permission for the firm to automatically debit their bank accounts, ensuring timely and predictable receipts, which is common for recurring payments like utility bills.
3. **Electronic Funds Transfer (EFT):** Using digital systems like NACH in India or ACH in the US to move funds between banks instantly, eliminating check-clearing time (float).

## d) Investing Idle Cash

When a cash budget forecasts a temporary surplus of idle cash, the firm invests these funds in highly liquid, low-risk marketable securities. The primary objectives are safety (preserving capital) and liquidity (ease of converting back to cash), with a secondary focus on yield. Suitable instruments include:

- **Treasury Bills (T-Bills):** Short-term debt of the government, considered virtually risk-free.
- **Certificates of Deposit (CDs):** Time deposits at banks, offering higher yields for longer maturities.

- **Commercial Paper (CP):** Short-term, unsecured promissory notes issued by large corporations.
- **Money Market Mutual Funds:** Funds that invest in a diversified portfolio of short-term debt securities.

### e) Need to Hold Inventory

Inventory is held for several reasons:

1. **Decoupling Function:** Inventory acts as a buffer between various stages of production or between production and sales, allowing each stage to operate independently.
2. **Economies of Scale in Purchasing:** Buying in large quantities can lead to lower purchase costs due to bulk discounts.
3. **Risk Management:** Holding safety stock guards against stock-outs caused by unexpected demand surges or delays in supplier delivery.
4. **Meeting Seasonal Demand:** Building up inventory during slow periods to meet peak demand in busy seasons.

### f) Inventory Management Techniques

Effective inventory management minimizes the total of holding costs (storage, insurance, obsolescence) and ordering costs (setup costs, purchase order costs).

1. **Economic Order Quantity (EOQ):** A classic model that finds the optimal order size that minimizes the sum of inventory holding costs and ordering costs under stable demand conditions.
2. **Just-in-Time (JIT) Inventory:** A system where materials are ordered and received only when needed in the production process, drastically reducing inventory levels and holding costs, though it requires highly reliable suppliers.
3. **Materials Requirements Planning (MRP):** A computer-based system used to schedule and manage inventory for dependent demand items, ensuring materials are available when needed for manufacturing.

### g) Terms of the Sale

The terms of the sale specify the conditions under which the firm sells its goods, particularly regarding payment. These terms include the credit period (how long the buyer has to pay), the cash discount (a percentage reduction if the buyer pays early), and the type of credit instrument. A common expression is "**2/10, net 30**", meaning a buyer receives a 2% discount if payment is made within 10 days; otherwise, the full amount is due in 30 days. These terms directly affect the firm's accounts receivable period and the customer's decision to take the discount.

### h) The Decision to Grant Credit: Risk and Information

Granting credit is essentially making a short-term investment in the customer. The decision is based on a trade-off: increased sales and profit versus the risk of default (bad debt loss). This decision requires gathering and evaluating information about the customer's creditworthiness,

often referred to as the **Five Cs of Credit**: Character, Capacity, Capital, Collateral, and Conditions. This information is gathered from financial statements, bank references, and credit rating agencies. The firm must be convinced that the expected increase in sales revenue outweighs the expected cost of carrying the receivable and the potential bad debt losses.

### **i) Optimal Credit Policy**

The optimal credit policy balances the marginal costs of granting credit (carrying costs, bad debt costs, and costs of collection) with the marginal benefits (increased sales and profits). A **strict** (tight) credit policy minimizes bad debt but restricts sales, potentially below the optimal level. A **loose** (lenient) credit policy maximizes sales but incurs high bad debt and collection costs. The optimal policy is reached when the incremental cash flow from relaxing the credit standards is exactly offset by the incremental costs associated with the policy change.

### **j) Credit Analysis**

Credit analysis is the process of deciding whether to extend credit to a particular customer and, if so, how much. It involves systematically evaluating the customer's ability and willingness to pay. This includes:

1. **Financial Ratio Analysis:** Examining the customer's liquidity, leverage, and profitability ratios from their financial statements.
2. **Credit Scoring:** Using statistical models to assign a numerical score to a customer's creditworthiness based on their financial history and other factors.
3. **Trade References:** Contacting other suppliers to gauge the customer's payment history with them. The outcome of credit analysis often determines the credit limit assigned to a customer.

### **k) Collection Policy**

The collection policy is the set of procedures a firm follows to collect past-due accounts. It ranges from mild to severe measures, with the goal of maximizing cash recovery while preserving customer relationships. Typical steps include:

1. **Monitoring Receivables:** Tracking the age of accounts using an aging schedule.
2. **Sending Reminder Letters/Emails:** Initial, polite reminders shortly after the due date.
3. **Personal Phone Calls:** More direct communication when the account becomes significantly overdue.
4. **Hiring a Collection Agency:** A specialized third party that takes over the collection effort, a more aggressive and costly step.
5. **Legal Action:** The final and most severe step, often used only when large sums are involved and other efforts have failed.

## **Chapter 3: FINANCING DECISIONS, RISK ANALYSIS AND CAPITAL BUDGETING**

## a) Financial Institutions, Markets and Instruments

**Financial institutions** (like banks, insurance companies, and mutual funds) act as intermediaries, channeling funds from savers to borrowers. They reduce transaction costs and provide risk-sharing mechanisms. **Financial markets** are arenas where securities are bought and sold; they can be **Money Markets** (dealing in short-term debt instruments like T-Bills) or **Capital Markets** (dealing in long-term debt and equity). **Financial instruments** are the legal contracts representing claims to future payments or assets, such as stocks (equity ownership) or bonds (debt). These three components form the ecosystem that facilitates the flow of capital and enables companies to execute their financing decisions.

## b) An overview of Indian Financial System, Efficient Capital Markets, and Ratio Analysis

The **Indian Financial System** is regulated by bodies like the Reserve Bank of India (RBI) and the Securities and Exchange Board of India (SEBI). It comprises a well-developed banking system, specialized financial institutions, and capital markets (like the NSE and BSE).

**Can Financing Decisions Create Value?** In perfect capital markets, financing decisions do not create value, as investors can replicate any financial structure themselves (Modigliani-Miller theorem). However, in the real world, financing decisions *can* create value by exploiting market imperfections such as taxes, bankruptcy costs, and information asymmetry.

**Description of Efficient Capital Markets:** An **Efficient Capital Market (ECM)** is one where asset prices fully and instantaneously reflect all available information. Investors cannot consistently "beat the market" because all information that could influence a stock's price is already incorporated into that price.

**Different Types of Efficiency:** The ECM Hypothesis has three forms:

1. **Weak Form Efficiency:** Prices reflect all past market data (e.g., historical prices and trading volumes). Technical analysis is useless.
2. **Semi-Strong Form Efficiency:** Prices reflect all publicly available information (e.g., company announcements, earnings reports, news articles). Fundamental analysis is useless.
3. **Strong Form Efficiency:** Prices reflect all information, both public and private (insider information). No one can earn abnormal returns.

**The Evidence:** Weak-form efficiency is largely accepted; semi-strong form is generally supported but with some anomalies (e.g., small-firm effect); strong-form efficiency is generally *not* supported, as insider trading can yield abnormal returns.

**Behavioural Challenge to Market Efficiency:** Behavioural finance challenges the ECM by arguing that investors are not always rational. Cognitive biases (like overconfidence and herd behavior) and psychological effects lead to systematic mispricings and market anomalies, suggesting prices can deviate from fundamental value for extended periods.

**Empirical Challenge to Market Efficiency:** Empirical challenges point to market anomalies that contradict ECM, such as the persistence of the momentum effect (stocks that performed well continue to do so) and the value effect (cheap stocks tend to outperform).

**Reviewing the Differences, Implications for Corporate Finance:** The debate between ECM and its challenges highlights that while markets are generally efficient, corporations should focus on decisions (like capital budgeting) that increase the firm's intrinsic value rather than attempting to "time the market" or engage in financial gimmicks.

**Ratio Analysis:** Ratios are used to compare a firm's financial performance over time or against industry peers. They are critical for evaluating liquidity (e.g., Current Ratio), solvency (e.g., Debt-Equity Ratio), profitability (e.g., Return on Equity), and efficiency (e.g., Inventory Turnover).

### c) The Capital Structure

**The Capital Structure Question:** This question asks: What is the optimal mix of debt and equity financing for a firm? The goal is to find the capital structure that minimizes the firm's Weighted Average Cost of Capital (WACC) and thereby maximizes the firm's value.

**The Pecking Order Theory:** This theory suggests firms prefer internal financing (retained earnings) first, then debt, and equity only as a last resort. This preference is driven by information asymmetry; managers know more about the firm than investors, and issuing equity signals that the stock is potentially overvalued, leading to a negative market reaction.

**Cost of Financial Distress; Signaling:** Financial distress costs include both **direct costs** (legal and administrative costs of bankruptcy) and **indirect costs** (impaired ability to conduct business, lost sales, and loss of key personnel). Debt provides a **signaling** mechanism; issuing debt signals management's confidence in the firm's future cash flows, as they are willing to take on the fixed commitment of debt repayment.

**Maximizing Firm Value versus Maximizing Stockholders Interests:** While the primary goal is often stated as maximizing firm value, in capital structure terms, this is achieved by minimizing the WACC. Since stockholders are residual claimants, maximizing firm value *usually* translates to maximizing stockholder wealth, assuming agency costs are contained.

**Financial Leverage and Firm Value: An Example:** Financial leverage (using debt) can magnify returns to shareholders. For example, if a company funds a project that earns a rate higher than the interest rate on the debt, the excess return accrues to equity holders, increasing their return on investment.

**Modigliani and Miller: Proposition II:** M&M Proposition II (with taxes) states that a firm's cost of equity capital increases linearly with the firm's debt-equity ratio. This means the benefit of cheaper debt financing is exactly offset by the increased risk (and thus cost) of equity, keeping the WACC constant, until the tax shield is considered. When the tax deductibility of interest is included, the WACC decreases with debt, suggesting an optimal structure of nearly 100% debt (which is unrealistic due to distress costs).

**Growth and Debt-Equity Ratio:** Firms with high growth opportunities often choose lower debt-equity ratios. This is because high debt can lead to **underinvestment problems**

(managers may pass up positive NPV projects to avoid putting shareholders' returns at risk by borrowing more) or **asset substitution** (managers take on high-risk projects).

**How Firms Establish Capital Structure:** Firms establish their structure through a dynamic process considering the trade-off between the tax benefits of debt and the costs of financial distress (the **Trade-Off Theory**), and the sequence of financing choices (the **Pecking Order Theory**). They also look at industry averages, growth opportunities, and asset tangibility.

**Shirking, Perquisites, and Bad Investments: Agency Cost of Equity:** When managers own a small fraction of the firm, they may be tempted to pursue their own interests (e.g., shirk responsibility, consume excessive perquisites, or make bad investments that benefit them personally). These are **Agency Costs of Equity**, which can be mitigated by using more debt, as debt forces managers to be more disciplined due to the threat of default.

## d) Financing Options

### i. Issuing Securities to the Public: The IPO Route (Public Issue)

**The IPO Route:** An Initial Public Offering (IPO) is the first time a company sells its stock to the public. This process involves hiring an underwriter, registering with regulatory bodies, and pricing the issue. It allows the firm to raise capital for expansion, but it is expensive and requires the firm to adhere to strict public reporting requirements.

**The Announcements of New Equity and the Value of the Firm:** New equity issues are often met with a negative market reaction. This is because, according to the Pecking Order Theory, issuing equity is seen as a negative signal (a signal that the stock is overvalued or that the firm has exhausted its internal and debt capacity).

**The Cost of New Issues:** The cost includes the **underwriter's spread** (the difference between the price the public pays and the price the firm receives), **administrative costs** (legal and accounting fees), and **underpricing** (the difference between the closing price on the first day and the IPO price).

**The Rights Issue:** A rights issue offers new shares exclusively to existing shareholders in proportion to their current holdings, allowing them to maintain their percentage ownership. This method is often cheaper and avoids the negative signaling associated with public equity issues.

**The Private Equity Market:** This market involves direct investment in private companies. It includes venture capital (for start-ups) and leveraged buyouts (LBOs). It is less regulated and offers greater flexibility but typically requires giving up a significant ownership stake.

### ii. Financing Options: Long-Term Debt

**Long-Term Debt: A Review:** Long-term debt includes bank loans and bonds with maturities greater than one year. It provides a fixed, tax-deductible interest payment and does not dilute ownership.

**The Public Issue of Bonds:** This involves issuing debt securities to the general public. It requires an investment bank as an underwriter and registration. Bonds are standardized and highly liquid.

**Bond Ratings:** Credit rating agencies (like CRISIL or CARE in India) assess the creditworthiness of the bond issuer. High-rated (investment-grade) bonds carry lower default risk and thus pay lower interest rates than low-rated (junk or speculative) bonds.

**Different Types of Bonds:** Bonds vary in their features: **Convertible Bonds** (can be exchanged for stock), **Subordinated Bonds** (lower priority in liquidation), **Callable Bonds** (issuer can repurchase the bond early), and **Zero-Coupon Bonds** (pay no annual interest but are sold at a deep discount).

**Direct Placement Compared to Public Issues:** Direct (or private) placement involves selling the entire issue to a single or small group of institutional investors. It is less costly, faster, and more flexible than a public issue, but the interest rate is often slightly higher, and the bonds are less liquid.

**Long-Term Syndicated Bank Loans:** A loan provided by a group of banks (a syndicate) to a single borrower. This allows the borrower to access a larger loan amount than a single bank could provide and spreads the risk among the lenders.

### iii. Leasing/ Franchising

#### Types of Leases:

1. **Operating Lease:** Short-term, non-binding, and easily cancellable. The asset's ownership risk remains with the lessor. It is treated as an operating expense.
2. **Capital (or Finance) Lease:** Long-term, non-cancellable, and often covers the entire economic life of the asset. It is essentially an installment purchase and must be recorded on the balance sheet as an asset and a liability.

**Accounting and Leasing:** Under modern accounting standards (like IFRS 16 or ASC 842), many leases that were previously off-balance sheet (operating leases) must now be capitalized, making the firm's assets and liabilities comparable whether they buy or lease.

**The Cash Flows of Leasing:** The cash flows involve the initial cost of the asset (if bought), the after-tax lease payments (if leased), and the residual value of the asset at the end of the lease/asset life.

**NPV Analysis of the Lease-versus-Buy Decision:** This analysis compares the cost of leasing against the cost of buying the asset. The decision is made by calculating the Net Present Value (NPV) of the financing alternatives, often from the lessee's perspective, and choosing the option with the lower (more negative) NPV, which represents a cheaper form of financing.

**Debt Displacement and Lease Valuation:** Leasing effectively displaces some debt capacity because lease obligations are a fixed financing commitment, similar to debt. This must be factored into the financing analysis, as a lease agreement consumes some of the firm's ability to borrow conventional debt.

**Expansion Via Franchising:** Franchising involves a franchisor granting a franchisee the right to use its business name and model for a fee. It allows rapid, low-capital expansion for the franchisor, leveraging the franchisee's local knowledge and investment.

**Expansion Via Management Contracts:** Common in the hospitality industry, a management contract involves the property owner hiring a professional management company to operate the asset (e.g., a hotel) for a fee. The owner retains the asset risk and financing responsibilities, while the operator provides expertise.

### e) Risk and Value in the Hospitality Firm

**The Timing and Value of Cash Flows:** Cash flows that are received sooner are more valuable than cash flows received later due to the time value of money. The **discount rate** reflects this difference, and also accounts for risk; the higher the risk associated with a cash flow, the higher the discount rate applied.

**Valuation and Required Rates of Return:** Valuation is the process of determining the present value of expected future cash flows. The **Required Rate of Return** is the minimum return an investor expects to earn for bearing the risk associated with the cash flows. This rate is typically estimated using the Capital Asset Pricing Model (CAPM) or WACC.

**Scenario Analysis and Break-Even Analysis:** **Scenario Analysis** examines the value or NPV of a project under several possible future economic conditions (e.g., a "best case," "worst case," and "base case" scenario) to assess the range of potential outcomes and project risk. **Break-Even Analysis** determines the level of sales or volume required to cover all fixed and variable costs, identifying the point where the project's NPV is zero.

**Decision Trees:** Decision trees are graphical tools used to analyze a sequence of investment decisions that involve uncertainty. They map out the choices available at different points in time, the probabilities of various outcomes, and the expected cash flows for each path, helping the manager determine the optimal decision strategy by calculating the Expected Net Present Value (ENPV).

## Chapter 4: VALUATION OF A HOSPITALITY FIRM/ CORPORATION

### a) Qualitative Factors that affect Valuation: location, star rating, feedback area

Quantitative valuation models are heavily influenced by several non-financial, qualitative factors, especially in the unique context of a hospitality firm:

1. **Location:** This is paramount. Proximity to demand generators (tourist attractions, convention centers, business districts) significantly impacts revenue and future growth potential. A prime, non-replicable location commands a valuation premium.
2. **Star Rating/Brand Affiliation:** The perceived quality and service level, often represented by a star rating (e.g., three-star, five-star) or a strong global brand (e.g., Marriott, Taj), directly correlates with pricing power (Average Daily Rate or ADR) and occupancy, thus boosting valuation.

3. **Feedback Area (Guest Reviews and Reputation):** In the digital age, online guest reviews (e.g., on TripAdvisor or Google) are a crucial non-financial asset. A consistently high positive feedback profile indicates customer loyalty, operational excellence, and brand strength, which reduces perceived revenue risk and supports a higher valuation multiple.
4. **Management Quality and Contracts:** The stability and expertise of the operating management team and the terms of any long-term management contracts are critical to ensuring future performance.

## b) Various Approaches to Quantitative Valuation

### Discounted Cash Flow Approach (DCF)

The DCF approach is the theoretical cornerstone of valuation. It posits that the value of an asset is the present value of its expected future cash flows. This approach requires:

1. **Forecasting Cash Flows:** Projecting the relevant cash flows (either Cash Flow to Equity or Cash Flow to Firm) for a specific forecast period (e.g., five or ten years).
2. **Calculating the Terminal Value:** Estimating the value of the firm's cash flows beyond the forecast period, usually assuming a constant growth rate forever (Gordon Growth Model).
3. **Discounting:** Discounting all projected cash flows (including the terminal value) back to the present using the appropriate discount rate (Cost of Equity or WACC).

### Cash Flow to Equity Approach

This method values only the equity portion of the firm. The cash flows used are the **Cash Flow to Equity (CFE)**, which represents the cash flow remaining after all operating expenses, taxes, and debt obligations (interest and net principal repayments) have been met. These cash flows are discounted at the **Cost of Equity** (the required return for equity investors), typically derived from the CAPM.

### Cash Flow to Firm Approach

This approach, also known as the Enterprise Valuation approach, values the entire operating business. The cash flows used are the **Cash Flow to Firm (CFF)**, which is the pre-debt, after-tax cash flow available to all investors (both debt and equity holders). These cash flows are discounted at the **Weighted Average Cost of Capital (WACC)**. The value of the firm's equity is then found by subtracting the market value of debt from the calculated firm value.

### Weighted Average Cost of Capital (WACC)

WACC is the overall required return on the firm as a whole. It represents the blended cost of financing the firm's assets, weighted by the proportion of debt and equity used in its capital structure. The formula is:

$$\text{WACC} = (E/V) * R_e + (D/V) * R_d * (1 - t_c)$$

Where E and D are the market values of equity and debt, V is the firm value (E+D),  $R_e$  is the cost of equity,  $R_d$  is the cost of debt, and  $t_c$  is the corporate tax rate. WACC is the appropriate discount rate for CFF.

## Beta and Leverage

**Beta ( $\beta$ )** is a measure of a stock's systematic (non-diversifiable) risk relative to the overall market. A higher Beta means the stock price is more sensitive to market movements. However, the Beta calculated from stock price data (the **Equity Beta**) includes the risk imposed by the firm's financial leverage (debt). To properly value a project or a company using a pure-play comparable, one must first **unlever** the Equity Beta to find the **Asset Beta** (or unlevered Beta), which only reflects the business risk. The Asset Beta is then **relevered** using the target firm's or project's target capital structure to find the appropriate Equity Beta for valuation.

## Relative Valuation or Multiples

Relative valuation determines the value of an asset by looking at the pricing of comparable assets based on a common metric, or **multiple**. This approach is quicker and relies heavily on current market data. Common multiples include:

1. **Price-to-Earnings Ratio (P/E):** Stock Price / Earnings Per Share (EPS).
2. **Enterprise Value-to-EBITDA (EV/EBITDA):** Enterprise Value / Earnings Before Interest, Taxes, Depreciation, and Amortization. This is preferred in hospitality because it is less affected by depreciation policies and capital structure.
3. **Price-to-Book Ratio (P/B):** Stock Price / Book Value Per Share.

The key to successful relative valuation is correctly identifying comparable companies and ensuring consistent calculation of the multiples.

# Chapter 5: INORGANIC GROWTH, DIVIDENDS AND OTHER PAYOUTS

## a) Mergers and Acquisitions

### Basic Forms of Acquisitions:

1. **Merger:** A legal consolidation of two companies into one new entity. The acquiring firm absorbs the target firm, and only the acquiring firm remains.
2. **Consolidation:** Two firms combine to form a completely new entity, and both original firms cease to exist.
3. **Acquisition of Stock:** The acquiring firm purchases the voting stock of the target firm. This is often easier and faster but can leave minority shareholders.
4. **Acquisition of Assets:** The acquiring firm purchases only the assets of the target firm, avoiding the liabilities.

**Synergy:** Synergy is the core justification for an acquisition, representing the incremental value created by combining two firms. It means the value of the combined firm is greater than the sum of the individual firm values:  $\text{Value}(A+B) > \text{Value}(A) + \text{Value}(B)$ .

**Sources of Synergy:** Synergy can arise from:

1. **Cost Reductions (Operating Synergies):** Layoffs of redundant personnel, economies of scale in production, or combined administrative functions.
2. **Revenue Enhancements (Marketing Synergies):** Cross-selling products, improved distribution networks, or combined pricing power.
3. **Financial Synergies:** Tax gains (e.g., using one firm's tax losses to offset the other's profits) or reduced costs of borrowing.

**Friendly vs. Hostile Takeovers:** A **Friendly Takeover** occurs when the target firm's management and board of directors agree to the acquisition and recommend it to shareholders. A **Hostile Takeover** occurs when the target company's management resists the merger. The acquiring firm must then appeal directly to the target firm's shareholders, often through a tender offer (a public offer to buy shares at a premium).

**Defensive Tactics:** Target firms employ defensive tactics to ward off hostile bids. These include:

- **Poison Pill:** Giving shareholders the right to buy new shares at a discount if a hostile bidder acquires a certain percentage of the stock.
- **White Knight:** Finding a friendly acquirer to outbid the hostile one.
- **Greenmail:** The target firm buys back the hostile bidder's shares at a premium, effectively paying them to go away.

**Do Mergers Add Value?** While mergers are pursued for synergy, empirical evidence suggests that most of the economic gains from M&A accrue to the **target firm's shareholders** (who receive a premium), while the shareholders of the **acquiring firm** often experience little to no gain, and sometimes losses. This is often due to acquirers overestimating synergy and overpaying for the target.

## b) Dividends and Other Payouts

**Different Types of Dividends:**

1. **Cash Dividends:** The most common form, paid in currency directly to shareholders.
2. **Stock Dividends:** Distribution of additional shares of stock to existing shareholders, typically as a percentage of shares owned. This does not change the total equity but reduces the price per share.
3. **Liquidating Dividends:** Distribution of assets from a company that is being partially or fully liquidated.

**Standard Method of Cash Dividend Payment:** The process involves four key dates:

1. **Declaration Date:** The board of directors announces the dividend, amount, and date.
2. **Ex-Dividend Date:** The date (two business days before the record date) on or after which a purchaser of the stock is *not* entitled to the declared dividend.
3. **Date of Record:** The date on which the company prepares a list of shareholders eligible to receive the dividend.
4. **Date of Payment:** The actual date the dividend checks are mailed or funds are transferred.

**The Benchmark Case: An Illustration of the Irrelevance of Dividend Policy:** The **Modigliani-Miller (M&M) Dividend Irrelevance Theory** states that in a perfect capital market (no taxes, no transaction costs, rational investors), a firm's dividend policy has no effect on its stock price or its cost of capital. An investor can create their own desired cash flow stream through "homemade dividends" by selling or buying shares.

**Repurchase of Stock:** A stock repurchase (or buyback) is an alternative to a cash dividend. The firm buys back its own shares in the open market. This reduces the number of shares outstanding, increasing the EPS and typically the stock price, as the total market value of equity remains the same (M&M Irrelevance).

**Repurchase of Shares in India:** Share repurchases are popular in India as they offer a tax-efficient way to return capital to shareholders compared to dividends, which are often taxed. Regulations govern the method, maximum amount, and frequency of buybacks.

**Personal Taxes and Dividends:** When dividends are taxed at a higher rate than capital gains (which are taxed only upon sale of the stock), investors may prefer repurchases (which result in a capital gain) over dividends to defer or minimize tax payments.

**Real-World Factors Favouring a High-Dividend Policy:** Despite M&M, some real-world factors favour high dividends:

1. **The Desire for Current Income:** Some investors (e.g., retirees, funds with restrictions) rely on dividend income and are not allowed or do not wish to sell shares to create homemade dividends.
2. **Information Content:** A dividend increase is often interpreted by the market as a positive signal that management is confident in the firm's future cash flows.

**ESOP's (Employee Stock Ownership Plans):** ESOPs are benefit plans that provide employees with an ownership interest in the company in the form of shares. They are designed to align the interests of employees and shareholders, serving as a form of compensation and motivational tool.

**Stock Dividends and Stock Splits:** A **Stock Dividend** is a payment of additional shares (e.g., a 10% stock dividend). A **Stock Split** involves issuing a large number of new shares for each existing share (e.g., a 2-for-1 split). Both increase the number of shares outstanding and reduce the share price proportionally, essentially dividing the ownership pie into smaller pieces. They are often used to bring the stock price into a preferred trading range.