FM Unit 1 V3.docx

Financial Management_MBA_2

Financial Management_MBA_2

ATLAS SkillTech University

Document Details

Submission ID

trn:oid:::3618:127127314

Submission Date

Jan 29, 2026, 6:45 PM GMT+5:30

Download Date

Jan 30, 2026, 10:37 AM GMT+5:30

File Name

FM Unit 1 V3.docx

File Size

215.6 KB

35 Pages

10,594 Words

64,384 Characters

0% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text
- Cited Text
- Small Matches (less than 20 words)

Match Groups

2 Not Cited or Quoted 0%
Matches with neither in-text citation nor quotation marks

0 Missing Quotations 0%
Matches that are still very similar to source material

0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

0% Internet sources
0% Publications
0% Submitted works (Student Papers)

Integrity Flags

1 Integrity Flag for Review

Hidden Text
82 suspect characters on 3 pages
Text is altered to blend into the white background of the document.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- **2** Not Cited or Quoted 0%
  Matches with neither in-text citation nor quotation marks
- **0** Missing Quotations 0%
  Matches that are still very similar to source material
- **0** Missing Citation 0%
  Matches that have quotation marks, but no in-text citation
- **0** Cited and Quoted 0%
  Matches with in-text citation present, but no quotation marks

Top Sources

0% Internet sources
0% Publications
0% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1 Submitted works

Colorado Technical University Online on 2026-01-24 <1%

2 Submitted works

i-CATS University College on 2023-12-26 <1%

Unit 1: Introduction to Corporate Finance

Learning Outcomes:

1. Define and explain the meaning and scope of corporate finance, including its core concepts and key decision areas.
2. Identify and analyze the primary goals of corporate finance, particularly the objective of shareholder wealth maximization.
3. Evaluate the role and significance of corporate finance in organizational success and strategic decision-making.
4. Illustrate the interrelationship between corporate finance and other business functions such as marketing, operations, and human resources.
5. Apply conceptual understanding to real-world caselets and case studies, demonstrating the relevance of corporate finance in practical scenarios.
6. Use appropriate terminology to describe key concepts and principles in corporate finance.
7. Respond to descriptive questions that test comprehension, analysis, and application of financial concepts covered in the unit.

Content

1.0 Introductory Caselet

BENGALURU: Mid-sized technology company Vertex Tech Ltd has been in the fast lane for at least five years. The company, which was started by two engineering alumni with an initial seed investment of ₹25 lakhs, today has a turnover of more than ₹150 crores. Their primary business is to create cloud solutions tailored for SMEs.

As the company gears up to roll out a new set of artificial intelligence driven business tools, led by freshly installed CFO Mr. Arvind Rao, his financial team faces an important decision: how to fund their next phase of growth? With the estimated development, marketing and talent acquisition costs of ₹40 crores. You have a number of options—retained earnings, bank loans, selling new equity, or lining up venture capitalists.

All financing options do come with consequences. Cashing in retained earnings would dodge interest costs, but it could also crimp current operations. Bank loans can keep the ownership control, but they come with more financial risk. Issuing equity might dilute ownership but also bring in valuable strategic partners. The venture capital path would enable growth to be turbo charged, but at risk of losing control and decision-making freedom.

As Mr. Rao lays these option before the Board, it is a reminder that business decisions are not only about numbers. These affect the firm control, risk, horizon and stakeholder interest. As board members with backgrounds in operations, marketing and HR they ask how these financial decisions would correspond to company wide goals and operations.

This situation illustrates the many dimensions of corporate finance and its integral place in strategic decision making.

Critical Thinking Question:

What should be the preference order of different sources of finance for expansion and what are those factors that whether from vertex tech ltd perspective other than cost of capital, which need to consider while making such decisions?

1.1 Meaning and Scope of Corporate Finance

1.1.1 Definition of Corporate Finance

Corporate finance is the study of how corporations make financial decisions and the tools and analysis used to make those decisions. It addresses the practices connected with an organization's funding, investment of funds and cash flow and return on that investment – especially the company's need for value maximization.

Essence of corporate finance There are three main areas of focus for Basic corporate finance and these are:

• Where should a company deploy its capital?

• How to pay for those investments?

• How should it give profits back to its owners?

These queries originate the three key aspects of corporate finance decision-making: investment, financing and dividend decisions. Each decision is to be taken within the company's strategic, operational and economic setting.

Corporative finance are not just for big corporates, but can also be applied to small and medium firms' (SMFs), partnerships even sole proprietorship. The big difference is in the volume and importance of those financial decisions. In every circumstance, though, the same concepts of allocating capital wisely and managing risk hold.

The term corporate finance also includes short-term financial management that is focused on current assets and current liabilities. That includes alllicious exchangesof cash, inventories, receivables, and payables to keep the wheels of industry turning. Companies are forced to strike a balance between profitability and liquidity, often at each other's expense in the interest of long-term growth.

Corporate finance is the subject of applied economics which requires one to apply what have been taught in economics and accounting. Thus, for example economic theory enables us to articulate how markets work and what prompts interest rates to change; accounting furnishes the financial numbers which enable decisions about value opportunities - with strategic management providing the broker that brings financial planning into keeping with long term business ends.

It is also worth mentioning that while corporate finance is in a regulatory framework. Businesses are required to adhere to a set of regulations for the disclosure, rights of shareholders quotas and taxes on governance structures. Therefore, interpreting legal systems is crucial for the practitioners of corporate finance.

The corporate finance analysis has become data-centric. The use of financial model, risk analysis, scenario planning and valuation techniques are now part in parcel of the corporate finance decision making. These instruments are a systematic way of making decision in order to allow manager perceive the risk as well as potential returns involved in financial decisions.

In the end, corporate finance is all about financial activities related to planning, formation of capital and performance evaluation. Its ultimate goal is to maximize the wealth of shareholders, meaning that it's not only profit making but also risk management, ideal capital structure and allocation of resources.

1.1.2 Scope and Functions (Investment, Financing, Dividend Decisions)

Corporations finance scope is related to the management of organization's financial funds; as we emphasize above, corporate finance have two components, strategic and finance issues. Its central operations are defined and concentrated in three primary decision-making regions namely investment decisions, financing decisions, and dividend decisions. These are all significant business elements and they combine to help define a company's fiscal health and strategic approach.

Investment Decisions

B. Capital budgeting decisions (investment) These are concerned with allocation of funds to long term assets whose benefits are likely to be derived over a period of time. And these are decisions to the question: Where should the firm invest its resources?

4.6.Nature of Long Term Investment DecisionsCapital budgeting involves logical evaluation of the projects or assets to be invested which every firm may have e.g. equipment, new products, large customers and other companies. The key techniques used include:

• Net Present Value (NPV):

NPV = The NPV of a project is the difference between its cash inflows' present value and the upfront investment (outlay). It reflects the time value of money through discounting future cash flows to their present value. A positive NPV means that the value which the project generates is greater than what it costs to run, meaning that this project would add upper value to our company and can be realized so we should get down with this project.194 A negative NPV occurs when there is not enough dividend from asset investment, and so a lot of risks are incurred by implementing such an asset in our company!

• Internal Rate of Return (IRR):

The IRR is the rate at which a project's NPV equals zero. Or, in more plain language, it's the anticipated return an investment is supposed to yield. If the IRR is higher than the company's discount rate (or cost of capital), the project can be considered attractive. IRR is often used to compare

various investment opportunities, although it may be less consistent for ventures with nontraditional cash flows.

• Payback Period:

This technique determines the number of years it will take to "pay back" or recapture the investment's initial cost from accumulated cash flows. It it a quick way to evaluate liquidity and risk, as the shortest payback periods are most desirable. But as the payback period ignores the time value of money and any cash flows that come after the point of payback, it's less thorough than NPV or IRR.

• Profitability Index (PI):

2 Alternatively called the benefit-cost ratio, PI is the quotient of present value of future cash inflows divided by initial investment. A PI of >1.0 means the project creates value and PL <1.0 means the project destroys value. This index is relevant when the amount of capital available for investment is scarce and one wants to prioritize projects in their ability to generate value per invested unit.

As I've said, investment decisions are not just about finding profitable projects--they're also about evaluating risk as well as opportunity costs (and strategic fit of investments with long-term objectives). The wrong pieces can erode your capital and leave you in financial ruin over the long haul.

Financing Decisions

Financing decision means the decisions where the firm to raise funds to finance the investments it has decided in capital budgeting analysis. This area addresses question: Where can the firm obtain the funds it needs to operate and grow?

Firms can finance operations through:

• Equity financing (e.g., issuing shares)

• Borrowing money (e.g., issuance of bonds, bank loans)

• Hybrid instruments (e.g., convertible debentures)

Capital structure The cash break-even point So which combination of debt and equity is right for you? The ideal capital structure will keep the cost of capital, risk, and corporate control in balance. Debt is generally cheaper than equity, since interest expenses partially relieve tax liability (see Chapter 6), but excessive debt elevates financial risk and bankruptcy risk.

Other corporations must take into account:

• Market conditions

• Cost of capital

• Control dilution

• Flexibility

• Business risk

• Regulatory implications

Rational financial decisions maximise shareholder wealth by reducing the cost of capital and availing needed funding for business operations.

Dividend Decisions

Dividend decisions pertain to distributing earnings among which shareholders and ploughing back profits for reinvestment. This responds to the question, How much of profit should be distributed as dividend?

Factors affecting dividend policy include:

• Current profitability and retained earnings

• Liquidity position

• Future investment opportunities

• Market expectations

• Tax considerations

• Legal constraints

Stable dividend policy those companies whose dividends remain steady in spite of earnings variance, some firms have a policy of paying this same dividend consistently. Other hold out for the remaining policy of paying a dividend only once all profitable investment opportunities have been exhausted.

Dividend decisions affect investor perceptions, stock pricing and the firm's repo capacity in meeting future growth. A balance must be struck rewarding shareholders and maintaining capital to fund future investment.

Additional Areas Within Scope:

• Working Capital Management: For meeting its day to day operations, having ample liquidity available and the effective use of current assets and liabilities.

• Risk Management: Recognizing and managing financial risks such as hedging, insurance, and diversification.

• Corporate Governance: Transparency and accountability in financial decisions, alignment of management interests with shareholders.

To conclude, corporate finance is not just about calculations —It's about strategy making, managing risks and managing stakeholders.

1.1.3 Evolution of Corporate Finance as a Discipline

A pure discipline like corporate finance has evolved through times along with the course of history, economic theories as well as the markets and business functioning. Its history has come a long way from simple recording keeping in ancient times and evolved into the current analytic powerhouse that now includes economics, statistics, technology and behavioral science.

Ancient to Pre-Industrial Era

The origins of corporate finance are rooted in trade and commerce, with the practice of trade as old as humanity itself during prehistoric times and ancient civilisations. There were financial records for tax collection and trade administration. Finance was almost purely transactional, and ideas such as maximizing profit or the capital structure were not developed.

The development of banking and credit in medieval Europe formed the basis of contemporary financial systems. Later and especially in the 18th century, merchant guilds or trading companies such as the Dutch East India Company were brought to life concepts of businesses such as stock (meaning a financial fund) that made shares a popular type of asset. But there was not yet much in the way of formal theory or systematized practice.

Industrial Revolution

The 19th and 20th centuries saw large factories with huge areas of floor space. This necessitated organized financial planning. Growth of corporations led to the creation of stock exchanges, allowing companies to generate capital through trading ownership in their public offerings.

The invention of double-entry accounting gave managers tools to monitor financial performance and allocate resources more effectively. The managerial function was now taking shape as corporate finance, well anchored the business body.

Thus she discovered a culture-property nexus that was not as apparent to 19th century geographers.

Scholars started to formalize theories of corporate finance near the beginning of the 20th century. The topics covered were the structure of capital, financial assets and functions of financial intermediaries. But the field still had strong links to descriptive practices.

In the 1950s, corporate finance was revolutionized with the introduction of tough analytical models. Two foundational contributions were:

• Modigliani-Miller Capital Structure Theory (1958)Posit that in perfect markets, the capital structure of a company does not matter to value.

• Walter and Gordon Model: Examined the association of dividend policy and firm value.

These theories brought mathematics, probability and economics to bear on analysis of the economy.

PRACTICES OF THE LATE TWENTIETH CENTURY: ACCESS TO CAPITAL MARKETS

Corporate finance and capital market theory became more closely aligned during the 1970s and 1980s. Derivative instruments, portfolio theory and efficient market hypothesis revolutionized the way firms made decisions on financing and investment.

Advances in technology made financial modeling, simulations and valuation tools possible. The global ascendance of investment banks, hedge funds and private equity fueled a rush to the finance industry, injecting more complexity — and hence more opportunity for strategic financial management — into the market.

Contemporary Corporate Finance

Corporate finance is now seen as an established academic and professional field. It also encompasses both long-established topics like cost of capital, budgeting and financial reporting, as well as contemporary (and extending) modules such as behavioral finance, ESG investing and fintech applications.

Poor sustainability and corporate social responsibility (CSR) is also no longer acceptable in financial decision making. Companies are now judged not only in terms of profitability, but for their long-term effect on stakeholders and society.

Did You Know?

"The discipline of corporate finance, as a distinct academic subject, only emerged in the mid-20th century, driven by the need to bring analytical rigor to capital structure and investment decisions. Before that, financial management was largely descriptive and fragmented across economics and accounting."

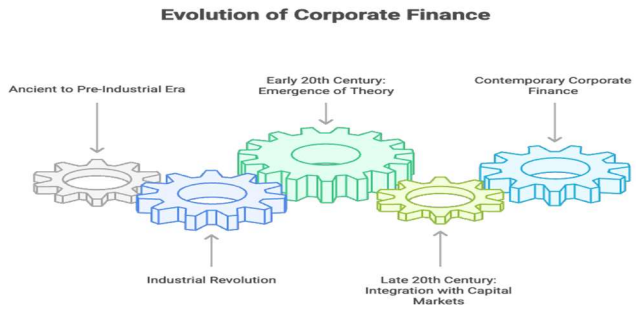


Figure 1.1

1.2 Goals of Corporate Finance

1.2.1 Profit Maximization Objective

Maximizing profit is a classic, age-old goal of entities engaged in corporate finance. It is a method by which the firm seeks to obtain the maximum surplus of revenue over costs in an accounting period, often called a year. The objective is simple: to maximize earnings in order to maximize a return on investment for the owners of the business or its shareholders.

This objective is based on the concept of rational economic man which originates in classic economic theories that depict firms as profit-maximizing units. In this classical perspective, profit is viewed as the compensation of risk and entrepreneurship. So everything in the business – operationally or financially or strategically – is focused on how you contribute to that bottom line.

There are various methods by which firms attempt to accomplish profit maximization:

• Cost Efficiency:

The main drivers for companies are to reduce operating and prouction costs, as achieving more efficiency in the processes, automation in the operations and supply chain efficiency. It's a case where more money goes straight to the bottom line without any increase in sales. "Lean manufacturing practices used in the automotive industry can reduce waste, and automation within logistics cuts labor costs, as well as reducing transit time," Rushakoff said.

• Revenue Growth:

Firms seek growth by a focus on revenue such as expansion to new markets, development of new products, competitive pricing and selectively acquiring customers. This management is a strong driver on the top line as, along with cost controls, the business thrives for record performance. Tech companies, for instance, often expand into new markets or start a subscription service to build up more consistent revenue.

• Financial Leverage:

Using leverage (debt) at the right level, companies can potentially lift returns for shareholders, if returns on their investments are greater than their cost to service that debt. One advantage of leverage is that companies can fund growth opportunities without diluting ownership, but it also adds risk to the balance sheet if not used judiciously. A real world example of this would be infrastructure companies using project debt to finance large projects where long-term cash flows can be used to pay off the debt and provide enhanced returns to shareholders.

• Asset Utilization:

You can maximize the efficiency of your assets which helps you get more return on investment. This includes better utilization of dispensary businesses, inventory turns and effective management of assets. Companies that efficiently utilize their assets can deliver more revenue per unit of capital invested. Retailers such as Walmart, for instance, accomplish high asset utilization through speed stock turnover and optimization of distribution networks.

From a point of view financial decision-making, the profit-maximizing model affects their investment and financing decisions. Take, for instance, the common tendency to favor high-ROA or high-profit-margin investment choices over lower ones.

Although it enjoys intuitive attractiveness, the cost effectiveness of optimizing profits as an in terms of a short run focus, and disregard of qualitative considerations such as risk, timing of returns and stakeholder effects.

It does, however, continue to be a key principle, particularly in small businesses and at companies early in their lifecycle where profits are necessary for survival and expansion.

Furthermore, in most real cases the objective is to maximize the profit and that can be considered as an inner performance measure. Firms create profit goals for departments and leverage profitability measures like gross margin, net income, and operating margin as KPIs to enforce accountability and operational excellence.

But profit maximization in isolation from other considerations, I hasten to add, leads to suboptimal choices. For example, overfocus on cost containment could lead to declining product quality, customer satisfaction or employee engagement. Likewise, postponing needed long-term investments to prop up short-term profits could limit competitiveness in the future.

In the end, profit maximisation is one important financial goal but should be reconciled with other objectives of the firm as part of a broader approach to value creation and ethical business performance.

1.2.2 Wealth Maximization Objective

It is assumed that maximization of profit is the primary motive of a firm, but this goal is not intelligent and appropriate as an operational objective for the business organization. It is a process of enhancing the intrinsic value of the firm in order to boost shareholder value through achieving an optimal share price.

This target changes the measure from short-term gain to long term value. It takes into account the timing of cash flows, risk, cost of capital and perpetuity growth. To the extent it does, it's because such decision-making is consistent with shareholder objectives and long-term corporate ambitions.

This is in contrast to profit maximization, which involves profitability measures, such as accounting profits, whereas wealth maximization is predicated upon economic profits—mainly from cash flow and market valuation. The key concept of this theory is that a company should only invest (or take on projects) if the NPV of future cash flows from the project is greater than zero.

The key components of the objective of wealth maximization are:

• Time Value of Money:

Wealth maximization acknowledges that the time value of money is a reality—a rupee received today is worth more than a rupee expected in the future because if it is received today, one can make an investment to earn returns. This has the virtue of making financial decisions not just about magnitude but also timing, and discourages projects that for some combination of reasons are not being undertaken now. For instance, a project promising you ₹1 crore today is better than the one that promises to pay you ₹1 crore after five years.

• Risk Consideration:

Unlike profit maximization, wealth maximization explicitly involves risk adjusted returns and it is sensitive to uncertainty. This will increase the required expected return for a higher risk investment, so that decisions become consistent with the fundamental trade-off between return and risk. For example, if an investment in a startup business is very risky, you would expect much higher returns on that compared to a government bond with minimal risk.

• Cash Flow Focus:

The model of wealth maximization, gives an emphasis on cash flows rather than accounting profits. Cash flows give a better sense of how well a company can support operations and itself pay back debt holders, return capital to shareholders. As earnings can be distorted by accounting convention, cash flow is often seen as a more accurate measure of financial

performance. For instance, if you are an investor you may wish to evaluate free cash flow vs reported net income when considering a valuation for a company.

• Market Valuation:

And the end all of wealth maximisation is in the market value or share price of the firm. Decisions are judged by their effect on investor's view and firm value in capital markets. A positon that begins increases the value of the firm in a persistent manner, such as opening up a new profitable market or cleaning up corporate governance, will have an upward effect on the share price. For example, when news of breakthroughs in battery technology are announced by Tesla, its market value rockets because investors anticipate increased future value creation.

• Net Present Value (NPV):

The difference between the present value of expected cash inflows and the amount invested is measured by NPV. A project is value adding to shareholder wealth when the NPV is positive and wealth destroying when it's negative. It is known as the best measure of a long term investment.

• Internal Rate of Return (IRR):

IRR is the rate of interest that results in a NPV of zero for a project. It's what you get as a return it on your investment." Projects with IRR exceeds company's cost of capital are considered to create wealth. It is particularly helpful to compare between multiple investment options.

• Economic Value Added (EVA):

After-tax wealth added is free cash flow (FCF) equity.[29] EVA is the difference between NOPAT and (minus) a charge for all capital used in that process (denoted as its "cost of capital"). A positive EVA means the company has made value whereas a negative EVA results in shareholder destruction. EVA ties the creation of wealth directly to operational effectiveness.

• Discounted Cash Flow (DCF) Models:

Reputation and the DCF valuation The DCF models are used to find the present value of future cash flows by discounting them at the cost of capital for the firm. This is a popular technique for valuing projects, business units, and firms in general. DCF analysis provides a single valuation point of whether an investment will increase shareholders' wealth.

This type of thinking helps to promote a longer-term perspective, by encouraging companies to spend money on research, innovation, capacity building and talent development -- all investments that may not immediately contribute profits but that help create long term value.

It also consider corporate governance and ethics as a part of financial decision-making. Wealth considerations are associated overall with risk profile and sustain ability image of the enterprise, as well as shareholder reputation thus encouraging responsible financing.

It also serves as a common goal for all company functions. Be it production in operational excellence, marketing in brand equity OR HR in talent management - every function knows on Page 1 of their SoP that they exist for the creation of shareholder value.

And crucially, maximizing wealth benefits both companies and investors. Investors, particularly institutional ones, judge companies on ability to generate value, whatever that may be (stock price appreciation, dividend growth rate and what the market believes is good). Pursuing this goal makes it easier to lure active investors, lower cost of capital, and improve the company's reputation in the market.

In short, wealth maximization provides comprehensive and permanent target for corporate finance. It trades off risk, timing and cash flow factors encourages prudent decision-making and aligns managerial actions with shareholder interests.

1.2.3 Balancing Profit and Risk in Financial Decisions

In the realm of corporate finance, it is critical to carefully integrate the quest for profits and financial risk control. Profit and risk are inseparable wherein often higher profits correspond to higher risks, whereas safer investments tend to offer relatively little returns. The delicate balance The core of management is to juggle and maximize this trade-off in order to maintain longevity, create value and provide financial stability.

Understanding the Profit-Risk Trade-Off

Maximizing profit is necessary for businesses to grow and satisfy all stakeholders, however if profit maximization is not coupled with the consideration of associated risks can bring financial instability. For example, a company can boost profits by allocating capital to an unstable emerging market or borrowing big to fuel rapid growth. While, such decisions may have attractive returns, they also produce increased financial and operational exposure for the firm.

On the flip side, eliminating risk altogether may incur an opportunity cost with regard to a growth, market expansion or innovation. Excessively Risk Averse Companies –If a company is too risk averse it may miss out on opportunities to be competitive, profitable, or financially acceptable mover for investors.

Indeed, this is the central tradeoff in financial decision making: trying to find investments and strategies that are acceptable in terms of a compromise between expected return and risk.

Instruments and Models for Profit and Risk Optimisation

The risk-return profile of financial decisions is measured in corporate finance by the use of multiple methods and techniques, such as:

1

• Capital Asset Pricing Model (CAPM):

CAPM = A model used to determine the required rate of return for an investment, based on its systematic risk (as measured by beta). It ties expected returns to market risk, or risky investments must have higher returns to be viable. Like a high beta project will have higher return and lower beta one which is much stable will require less return.

• Risk-Adjusted Return Measures:

Metrics such as the Sharpe Ratio, Treynor Ratio or Risk-Adjusted NPV could provide insight regarding whether returns are sufficient given a certain amount of risk. These metrics help establishing fairness between investments in different projects or holdings, weighing reward against the risk. ie: two projects could have same return, but the one with lower volatility will have a higher Sharpe Ratio and is therefore more interesting.

• Scenario and Sensitivity Analysis:

Such methods will gauge how key assumptions, such as interest rates, sales volumes or input costs, impact the profitability of a project. Sensitivity analysis allows the investigator to examine an individual factor, whereas scenario analysis can encompass the collective effect of multiple changes (e.g., best-case, base-case, and worst- case scenarios). For instance, the NPV of a construction project can be re-computed under conditions where raw material costs escalate or demand is less than anticipated.

• Monte Carlo Simulations:

Monte Carlo simulations take this further by attaching probability distributions to the uncertain variables and coming up with thousands of possible scenarios. Above approach gives a wholesome feel for the risk and probability of obtaining certain returns. For example, investment banks commonly use Monte Carlo simulations to predict how a portfolio would perform during various market conditions and this allows them to quantify downside risks as well as the probability of making a loss.

These tools allow managers to works on the assumption of informed decision, quantify what is potentially at stake and weigh projects with risk-return trade-off.

Financial Policies that Support Balance

In order to pursue sustainable development, enterprises introduce financial policies that combine the risk control and profit goals. These policies serve as a break that helps firms meet shareholder expectations and prevent financial disaster.

• Capital Structure Policy:

Firms create capital structure policies in order to preserve the optimal balance between borrowing and financing with equity. The optimal blend enables firms to reduce their overall cost of capital while simultaneously managing the risk associated with their financial leverage.

Debt in too great a proportion raises the risk of default, just as too much equity can dilute returns. For instance, Infosys depends on a highly defensive gradually leveraged capital structure with high stability (and low amounts of debt) while infrastructure companies may take higher loans against the long-term project works.

• Dividend Policy:

Dividend policies are designed to serve the interests of shareholders and the growth requirements of a company. Companies pay dividends in order to compensate investors and assure market confidence. Simultaneously, the retention of earnings provides sufficient funds to invest back in the business/operation, grow and to create a buffer against risks. Apple, for instance, returns money to its shareholders not just via dividend payments and large share buybacks but also while investing heavily in R&D.

• Working Capital Policy:

Working capital policies Useful working capital management enables companies to find a balance between the liquidity and profitability. By managing current assets (cash, receivables, inventory) and current liabilities (payables) effectively, companies maintain smooth operating cycles without tying up too much capital in short-term assets. Walmart's just-in-time inventory system provides an excellent illustration, which shrinks WC requirements even as product availability remains high.

Moreover, to the risk management are very important corporate governance and internal control system. Disclosure, review role of audit committees, the systems for controlling risk and performance are put in place to guarantee that financial decisions correspond with strategic ambitions and levels of acceptable exposure.

Risk: A Strategic Discipline Regardless of the form, whether implicit or explicit (most often partial commitment), risk must be a strategic function.

Protecting your enterprise in the contemporary WORLD OF RISK Investment decisions have always been risky, but in today's risk-centric institutional climate they are more so--moves that were once celebrated can be stigmatized and can destroy careers. They are a proactive and strategic effort embedded in investment planning, project appraisal and corporate strategy. Firms use ERM systems to identify, assess, and treat risks from all levels of the organization.

This transition is particularly critical in a global and digital economy with businesses exposed to various as follows:

Types of Business Risks

• Market Risk:

Market risk is a risk stemming from changes in interest rates, exchange rates, market prices of stocks and commodities. The direct impact of these changes is their effects on the bottom

lines and asset values of a company. For instance, an airline is vulnerable to market risk when fuel costs increase and thus make a company that export goods is at risk from exchange rate fluctuations lowering the returns from foreign sales.

• Credit Risk:

This is the risk that on-and-off campus, your borrowers or clients do not have the funds necessary to repay their obligation. 3) Credit risk is critical in banking, lending and B2B businesses. For example, banks have the credit risk when borrowers default on loans, and suppliers run the same risk should buyers postpone or not pay their purchase price.

• Operational Risk:

Operational risk is associated with breakdowns in internal procedures, personnel or systems, and external events. That includes system failures or fraud or just plain human mistakes, as well as shenanigans further up the supply chain. What I mean Losses are experienced when bank's IT systems fail and transactions cannot be completed or manufacturing plants is down because heavy machinery has broken down.

• Regulatory Risk:

Businesses also experience risk from shifts in the legal, tax, trade or compliance environments. These changes can make goods more expensive or harder to offer in the market. Drive intelligent regulation For instance, there will always be some new environmental rule that requires manufacturing companies to spend tens or hundreds of millions of dollars on cleaning up the environment with new equipment, or financial institutions that have to keep spending more and more money keeping track of things like Basel III in Europe or GDPR.

• Reputational Risk:

This occurs when a firm's reputation is compromised as a result of ethical failure, data security breach, product recall or adverse media. The cost of litigation isn't just monetary; reputational harm can be even more corrosive to customer trust and investor loyalty. For example, Facebook (Meta) faced reputational risk during the Cambridge Analytica scandal while Volkswagen's emissions fraud had a major impact on its global brand.

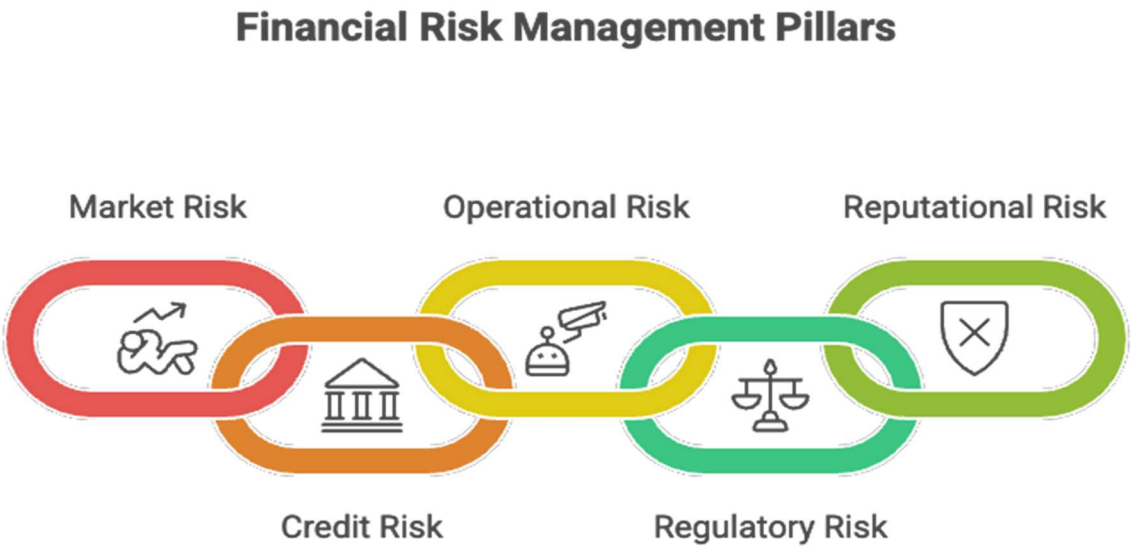


Figure 1.3

A firm that actively manages these risks while pursuing profitable strategies positions itself for long-term success. Balancing profit and risk is not about avoiding risk, but about taking calculated risks that align with strategic goals and enhance shareholder value.

"Activity: Case Analysis – Choosing Between Two Financial Paths"

Read the following scenario and reflect on it: A manufacturing firm is considering two investment projects. Project A offers high short-term profits but involves entering an unstable political region. Project B promises moderate returns over a longer period in a stable market. As a financial advisor, which project would you recommend, and why? Justify your answer using the principles of profit maximization, wealth maximization, and risk assessment.

1.3 The Role and Importance of Corporate Finance

Corporate finance is a specific area of a company's action plan which seeks to maximize its team value by making good decisions about how much and what type of funding it should

raise for the investment in projects that can help grow the business, optimize resources in order to increase performance and ultimately, the dividend paid to its stockholders. AKA what they do is make sure business have enough money in the bank, are making smart investment decisions AND keeping that balance of risk and profit in check. The Key To Corporate Finance Everything revolves around being able to experience growth, financial stability, operational efficiency and value over long-term for the organization and its stakeholders.

1.3.1 Role in Business Decision-Making

Corporate finance has a special place in the spectrum of decision-making tools and techniques described here because it can offer or support much of the analysis companies need to evaluate options, allocate resources, and develop strategies. Each and every decision in a company—whether operational, tactical or strategic—is financial. The purpose of corporate finance is to ascertain these implications, understand them, and reconcile them with the business goals of a company.

Business decision making is the juxtaposition between choosing from multiple options, to determine a best course of action. Corporate finance plays a number of other important roles in this regard:

• Resource Allocation

Scarcity is a concept in business that remains at the forefront of decision making. The function of corporate finance is to allocate capital to the most efficient projects or investments. These methods include net present value, internal rate of return and payback period and serve to compare alternatives and pick the highest-value one.

Every company, for instance, might choose whether to invest in new machinery rather than entering another market or acquiring a competing firm. The choices are compared as to which is preferred on the basis of the analysis made, and a conslusion is reached in this manner. Corporate finance is also divided into short term and long term decisions.

• Cost Management and Budgeting

Cost control is based on goals and detailed budgets, which are established by corporate finance. Good budgeting also assists in providing that spending is consistent with strategic priorities and allows departments to operate within identified financial risks. Variances are the differences between actual and budget performance, allowing corrective actions.

• Capital Structure and Financing Decisions

Capital is usually needed to make business decisions and the mix of financing can be everything. Equity, Debt or Hybrid instruments are the key balancesheet decision module in corporate finance which includes factors such as:

including Interest rate, tax considerations, control of ownership and/or financial flexibility. This affects the cost of capital and risk profile of the firm.

• Risk Management

All commercial decisions have a level of risk in them. Corporate finance provides tools for measuring and managing these risks. These methods include scenario analysis, sensitivity analysis, and financial ratios to enable decision makers to understand the implications of uncertainties such as inflation, market volatility or regulatory changes.

• Strategic Decision Support

Corporate finance is the arm of finance that makes strategic long-term decisions. Cut through the noise of complexities that often dominate M&A, product mixes or transfer deals and enter into M&As, new market expansions from diverse markets, partnerships etc with informed financial models and robust analysis. One uses Financial Projections, Valuation Models, and Synergy Analysis as critical tools to achieve this.

• Operational Decisions

Financial aspects of the business affect even routine decisions: credit terms you give your customers, how much inventory to keep on hand or when to schedule production. It is according to corporate finance as working capital management, liquidity analysis and or cash flow forecasting definitely are key elements for the continuation of companies and improve efficiency.

In other words, corporate finance is not a business activity that stands alone; it is all-encompassing. It’s woven into every important decision a firm makes. To do this, anything from introducing a new product, reorganizing the business or even renegotiating suppliers contracts needs to be planned and financially justified to fit with the company’s medium- to long-term strategy. This 11 Corporate finance has a dual focus as both the buying and selling sides of a business rest under its domain; hence it is based on this central role that corporate finance emerges as strategic partner in any business decision.

1.3.2 Importance in Strategic Growth and Value Creation

Corporate finance is closely related to a firm's long-term ambitions, it being about the company’s long-term realisation of value. Because the business world is highly competitive and fast-changing, a company cannot attain consistent growth and profitability solely through an efficient operation. Strategic growth demands meticulous planning, smart investment, disciplined capital allocation and risk management – all of which are within the realm of corporate finance.

• Strategic Planning and Capital Allocation

Strategic objectives of the business – It may be for example to increase share of a market, enter new markets or introduce new products which needs heavy investment. Corporate finance provides

method and examine the feasibility of these goals under capital budgeting & investment analysis. By relying on mechanisms such as Discounted Cash Flow (DCF), Real Options Analysis and Strategic Value Assessment, financial managers assess the long-term repercussions of strategic initiatives.

This helps to avoid investment projects that produce returns but do not support the firm's mission and competitive position.

• Driving Shareholder Value

The goal of shareholder wealth maximisation is central to corporate finance. Growth must be value-added: smart growth should also enhance the firm's valuation, which is evidenced by higher EPS, increased dividends and rising stock price. Corporate finance is focused on growing the business either by way of organic growth or inorganic growth through mergers and acquisitions.

These can be organic growth strategies, such as product development and market penetration, or inorganic growth strategies, like mergers, acquisitions or joint ventures. Every initiative is considered for its ability to add additional value to shareholders, either in the short-term or the long run.

• Financial Strategy and Competitive Advantage

Corporations make use of finance to establish strategies and plans that could help increase profitability so the business can hold an advantageous position in the market. For instance, with a low cost of capital a firm can afford to be more aggressive in pricing or invest more in R&D. On the other hand, companies with plenty of cash on hand can survive difficult economic times more easily and also take advantage of bargains in hard-hit markets.

The form and timing of financial choices - as regards share repurchase, debt reprofiling, or the issue of capital - can also affect both investor sentiment and market perception, thereby underpinning the strategic standing.

• Innovation and Capacity Building

Smart growth also means making investment in intangibles such as research and development, technology infrastructure, brand equity and talent acquisition. Corporate finance makes such investments financially justifiable and appropriate funding is in place.

For instance, if one were to invest in digital transformation – you might not see profits immediately from this, but it can bring benefits of efficiency, scalability and customer engagement down the line. Financial planning allows businesses to manage profitability today, while preparing for what's possible tomorrow—accelerating innovation without sacrificing financial security.

• Long-Term Risk Management

Risk management is key to sustainable and strategic growth. Corporate finance focuses on such risks that might affect a company's value, these may be broadly classified as market risk and financial risk. Whether it's foreign currency risk when expanding overseas, interest rate risk in borrowing for the long term or regulatory risk of entering new markets, corporate finance offers an analytics framework to plan and respond to uncertainty.

Firms can also use strategic hedging, insurance and portfolio diversification to safeguard value while going for growth.

• Performance Measurement and Course Correction

Here, finally corporate finance serves as a source for strategic growth by establishing measures of performance. With the help of financial ratios, ROI and EVA10 or EVA-1 11 companies can keep track whether strategic initiatives reach its target. This allows to correct the course in time and provide redistributing of resources if required.

Strategic expansion and value addition are not just byproducts of strong leadership or market positing, but rather the result of rigorous financial planning, deliberate capital allocation and strategic risk management that falls under the mantle of corporate finance.

1.3.3 Relationship with Shareholders and Stakeholders

Corporate finance is closely related to the interests of shareholders and a bigger group of stakeholders. Although shareholders are the owners of a company and demand financial terms for their investment, other parties -employees, customers, creditors, suppliers, communities and regulatory authorities- either influence or are influenced by corporate financial decisions. Being able to properly balance these relationships is fundamental to good corporate governance, ethical behavior and long-term success.

Shareholder-Centric Focus

Orthodox corporate finance theory is grounded in a concept of maximising shareholder wealth. Shareholders put money in and hope to get it back (with a return) whether by way of capital gains or dividends. Agency costs are controlled in corporate finance by: a. reducing conflicts between managers and stockholders.

• Various methods to screen investment projects on the basis of their potential to increase firm value.

• Structuring of capital to maximize return and manage financial risks.

• Creating dividend policies that manage payouts against reinvestment needs.

• Establishing open disclosure to keep investor confidence.

Shareholder returns are often expressed in terms of EPS, ROE or value added and market capitalisation. Furthermore, in the investor relations area, we reinforce corporate finance by

supplying financial transparency and alleviating information disparities, as well as responding to market anticipation.

Stakeholder-Oriented Considerations

Following a corporate responsibility perspective on financing decisions, stakeholder-oriented corporate finance is not only about maximizing shareholder value. It requires maneuvers that serve the interests of all interested parties. These stakeholders impact and are impacted by the company's financial activities, and in order to maintain long-term viability it is necessary to have their support. The job of corporate finance, then, is to figure out how best to balance these elements Aug 18 2009 Corporate Finance with Ethical Responsibility Posted by Rich As taxpayers tire of bailing out some employers and as performance continues to be a focus in the public equity markets considerations around executive compensation are increasingly moving beyond the more or less happy family members who worked for Lehman Brothers while clients left still hurting from trading losses tell another tale. The next two critical stakeholders demonstrate how financial decisions affect and are affected by these broader relationships:

• Employees: Compensation structures, benefit plans and investments in training and development have financial consequences. Corporate finance's mission is to ensure these expenses are consistent with productivity and retention objectives.

• Customers: Pricing strategies, product development and service delivery are all influenced by financial planning. Quality and innovation have a cost, and long-term customer loyalty might rely on short-term work that doesn't exactly pad margins.

• Suppliers & Creditors-Optimal working capital and prompt payments signify stability to the suppliers and creditors.

Community & Environment: CSR and Sustainability At the heart of a company's dedication to societal well-being are its outlays on financing sustainability programs as well as subsidizing corporate social responsibility (CSR) programs, frequently driven through financial planning.

Balancing Conflicting Interests

One of the greatest challenges in corporate finance is to serve diverse interests between various groups of stakeholders. It allows, for example, that if management maxes out the dividends it pays to shareholders, there may be no money left over for employee benefit enhancements or environmental projects. On the other extreme, by just having CSR one might be worried about underperformance from investors.

And corporate finance helps to maintain this balance, by:

• Investing in projects that aim to maximize financial return alongside social impact.

• Weighing trade-offs with value-for-money and stakeholder impact analysis.

• Creating financial policies (such as ESG-linked financing) that mainstream sustainability in operations.

Ethical Governance and Transparency

Ethical governance is also supported by sound fiscal management. Honest financial disclosure and adherence to law and ob-gyne obligations create confidence with investors and the public. By way of example, enterprise finance systems are used to provide internal controls through audit trails and corporate governance standards that facilitate transparency and accountability.

The relationship between finance and society is not marginal in a stakeholder-oriented economy. More and more investors are insisting that companies show they care about society as well as their long-term destiny. By implication, Corporate finance is now charged with the responsibility of embedding ESG issues into financial strategy.

Did You Know?

"The concept of stakeholder theory was introduced by R. Edward Freeman in 1984, challenging the traditional shareholder-centric model. It emphasized that sustainable value creation involves balancing the interests of all stakeholders, not just maximizing shareholder returns."

1.4 Relationship with Other Business Functions

1.4.1 Corporate Finance and Accounting

CORPORATE FINANCE VS ACCOUNTING Corporate finance and accounting are two different business processes that monitor the income and expenditure of organization, corporate finance and accounting are often describe by a set of fixed accounts with amounts recorded in either the credit or debit side. They are both about financial stuff, but what they aim for and how they go at it are completely different.

Accounting focuses on recording, reporting and interpreting financial transactions. It offers a logical approach for recording income, costs, assets, liabilities and equity. In contrast, corporate finance is concerned with the planning and sourcing and placing of funds so as to maximize shareholder value. If accounting tells you what has happened, corporate finance focuses on what should happen next.

Despite the distinctness of their organizational extent, these focal and global operations closely interact with each other.

Contribution of Accounting to Corporate Finance

Corporate finance relies on accurate, consistent and timely accountant's information to facilitate the high-quality decision-making process. The accounting documents have long been three: … — the balance sheet, the income statement and the cash flow statement which serve as foundation of assessing company's financial condition, forecasting future performance and decisions on investments and financing. Every line has some unique piece of information which is very important for corporate finance guys.

• Balance Sheet:

The balance sheet provides a snapshot of the company's assets, liabilities and equity, providing rich information on capital structure, liquidity, and leverage. Corporate finance practitioners apply it to determine solvency, working capital needs and the firm's capacity to cover both short- and long-term obligations. For instance, if a company has high current liabilities but low current assets, it might have issues with cash flow, causing financial teams to reconsider working capital policies or seek out more credit lines.

• Income Statement:

The income statement describes revenues, expenses, and profits at a point in time, as well as for the period (if it is a partial-income statement), which provides information related to how profitability and costs were managed. It aids in formulation of budget, cost control, price determination and investment appraisal. Finance managers compare margins, overheads, and earnings growth by product or project to determine where profit centers can be managed more effectively. For example, if increasing operating costs are discovered, then cost optimization or process improvement efforts might be initiated.

• Cash Flow Statement:

The statement of cash flows shows cash flows from operating, investing and financing activities. It's a tool for corporate finance teams to manage liquidity, forecast cash needs and assess the sustainability of operations. Unlike earnings, cash flow directly measures a company's capacity to service debt, distribute dividends and reinvest in the business. For instance, a firm with good profit figures but negative operating cash flows may want to reconsider the collection of receivables or management of inventory.

Corporate finance would not be able to make foreseeing forecasts, compare new investment projects, let alone assess Œ C. De Pietro et al. / Critical Perspectives on Accounting 12 (2001) 61}86 internal rates of return or even costs for capital without these accounting records.

Budgeting and Financial Planning

Budgeting is an obvious common ground between accounting and finance. Accountants prepare budgets from past performance and current trends, and corporate finance maintains budgets to compare performance against these historical standards, to recommend strategy if necessary, and determine an organization's need for funding.

Compliance and Reporting

Corporate finance also utilizes in accounting for the purpose of compliance by the government and financial reporting. This means filing audited financials, dealing with tax liabilities and disclosing financial risks. These reports are essential for investor confidence, but also in relation to governance requirements.

Differences in Orientation

• Timeliness: Accounting is retroactive, while corporate finance is based on prospective activities.

• Rules vs Strategic focus: Finance is rule-based: it follows GAAP or IFRS standards whereas in Corporate finance strategic judgment and financial modeling techniques are given more importance.

• Focus : Accounting focuses on the depiction of information while corporate finance uses this information to make decisions involving investment, financing and dividends.

Accounting and Corporate Finance Interface

Capital Budgeting: Accountants estimate costs and depreciation, finance assess the project with methods like NPV or IRR.

Costing:Accounting provides the cost center data and reporting while finance uses it to analyze costs trends and behavior in order to drive margins and profit.

Tax Planning: Accountantscalculate tax liability (liability is a cost, like anything else) and minimize compliance risk, finance drives tax -efficient investment or financing decisions that enhance shareholder value.

In conclusion, corporate finance and accounting are separate but heavily interconnected concepts. Corporate finance is unable to operate without the accurate, orderly data supplied by accounting; conversely, accounting's data have limited value until they are incorporated into strategic financial decisions.

1.4.2 Corporate Finance and Economics

Business finance and economics are so integrated into one another. The backdrop in which corporate finance occurs is explained in economics. While corporate

finance tends to concentrate on firm-specific financial decision-making, economics provides information about the larger context in which such decisions are made.

Discipline of economics can be categorized into microeconomics while macroeconomics are two main which affect corporate finance in various ways.

Microeconomics and Corporate Finance

Microeconomics studies the actions of individuals, companies and specific markets, as opposed to the behaviour of the economy. It examines how consumers decide what to buy in the face of limited resources, how firms choose the overall level of production and pricing, and how goods are traded on markets. With micro-economics, businesses can learn about the mechanics of demand and supply from a macroeconomic perspective, as well as cost factors and competitive behaviour. These theories describe how firms take financial and strategic decisions in the presence of constraints like a fixed budget, scarce inputs or regulatory hurdles. They illustrate how variables such as price point tactics, marginal cost levels, demand elasticity and competitive conditions also dependate directly over profit generosity and long-term financial programming.

• Demand and Supply: Finance professionals will be informed how changes in demand impact revenue and pricing to ensure they can make better revenue forecasts.

• Elasticity: The price sensitivity can shape the effect of prices on revenue and therefore on financial projections.

• Cost: Use of marginal and average cost studies to support budgeting and pricing.

Market Structures: The finance strategy is not same for a monopolistic, competitive and oligopolistic market.

For instance, a firm operating in a competitive market may be required to compete on price or invest in cost-saving technologies that warrant considerable capital planning and financial modeling.

Macroeconomics and Corporate Finance

The macroeconomic factors force the environment in which companies work, producing apparatus. These include:

• Rates of Interests: Modulations to the rates exposed by central governments impact debt costs and capital structure choices.

• Inflation: Excessive inflation can erode real purchasing power and raise input costs, resulting in changes in working capital management.

• Exchange Rates: Firms involved in international trade are effected by changes/movements in exchange rates, which affect their profits and may require hedging.

GDP Growth Economic growth trend influences demand, investment opportunities and sectoral performance.

• Unemployment Rates: Reflect labor market conditions, which should affect wage-setting strategies and production decisions.

In order to make decisions, corporate finance needs the constant supervision of these indicators. For example, in a rising price environment firms may prefer to borrow fixed-rate and undertake investment projects ahead of time in order prevent costs from going up.

Behavioral Economics in Finance

Modern finance has observed a growing integration of ideas from behavioural economics, which questions the assumption of completely rational actors. Both overconfidence and herd behavior as well as loss aversion may influence investment decisions, risk perception and market valuations.

These biases are not limited to financial markets but exist in corporations as well, and corporate finance professionals need to recognize this and take steps to limit irrational decision-making.

Economic Policy and Regulatory Environment

Government regulations (fiscal and monetary, control over liquidity, interest rates and taxation) have a direct impact on financial planning. After-tax returns are impacted by tax policy; subsidies can change project viability; and short-term borrowing is constrained by liquidity.

Private sector finance needs to incorporate these macro considerations into risk models, capital budgeting and contingency planning in order that firms remain robust to exogenous shocks.

In other words, it is economics that gives the strategic and responsive capabilities of corporate finance its “intelligence”. It takes a nuanced understanding of economic principles to properly interpret market signals, evaluate risk and make decisions that are consistent with not only firm-level goals but also the prevailing external environment.

1.4.3 Corporate Finance and Business Strategy

Corporate finance is inextricably linked to business strategy. Business strategy articulates the company’s competitive positioning over a long term, while corporate finance makes certain that this strategy is financially viable and well-resourced into action. The concurrent of these two forces is the strong point to achieve sustainable growth, risk-adjusted returns and long-term value creation.

Strategic Planning and Capital Allocation

One of the most important responsibilities for corporate finance is to convert strategic objectives into a value-creating financial plan. It could be an expansion into new markets, a

new product line or digital transformation. All of these endeavours require capital and the task of corporate finance is to evaluate:

• The funding needs

• When and how to invest

• The risk-return trade-offs

• Effect on cash flow, income and shareholder value

Using capital budgeting tools like Net Present Value (NPV) and Internal Rate of Return (IRR), finance organizations decide whether planned projects make financial sense and are consistent with firm risk capacity and performance objectives.

Capital Structure and Competitive Advantage

Corporate finance is central to determining an optimal capital structure—how much debt versus equity a firm should have. The leverage should be such that it serves the strategic objectives and does not get the firm into a financial risk.

For example, a company that aggressively seek to grow its business would use more debt to increase their return on equity and conversely some one in an uncertain industry (like airline) would be more conservative line relation.

The appropriate mix of debt and equity Meers competitive advantage through reducing cost of capital, increasing flexibility and provides and enhances ability to implement strategic decisions rapidly.

Mergers, Acquisitions, and Strategic Alliances

Merger and acquisition decisions are focused on corporate finance. Finance teams are responsible for:

• Valuation of target firms

• Synergy analysis

• Structuring the deal (all cash, all stock or a combination of both)

• Due diligence

• Integration planning

They are aimed at helping extract value and shareholder returns from inorganic growth strategies.

Risk Management and Strategic Execution

Every strategic plan involves financial risk – from market and operational risk, to regulatory and executional risk. Toolkits of risk assessment and risk mitigation are brought into corporate finance to make sure that strategic plans are robust.

Scenari o analysis, stress testing and Monte Carlo simulations allow for the assessment on the likelihood of action not being in line with reasonable expectations (and thus to determine what to do about this).

Measuring Strategic Success

corporate finance Corporate finance) Further,* The final:- ® mechanisms, to test strategic actions. Performance measures include return on investment (RoI), KPIs, economic value added (EVA) and balanced scorecards that are used to monitor performance as well as guide future strategic initiatives.

Financial knowledge also helps to highlight poorly performing business units or projects, and companies can shift resources effectively or modify their strategy when required.

And finally, for business plans to be sound and aligned with goals, they must incorporate the two disciplines of corporate finance and business strategy together. Corporate finance provides the needed discipline to make sure that the company's vision is not just a dream but a workable reality.

Knowledge Check 1

Choose the correct option:

1. Which of the following best describes the relationship between accounting and corporate finance?

a) Independent roles

b) Accounting supports finance

c) Finance reports to accounting

d) No direct link

2. Microeconomics primarily helps corporate finance in understanding:

a) Exchange rates

b) Government policy

c) Firm behavior

d) Stock markets

3. A key financial tool used to support strategic business decisions is:

a) Trial balance

b) Marginal costing

c) NPV analysis

d) Ledger entry

4. Behavioral economics contributes to corporate finance by addressing:

a) Tax planning

b) Irrational behavior

c) Cost accounting

d) Asset depreciation

5. Capital budgeting decisions are mainly concerned with:

a) Payroll systems

b) Auditing standards

c) Investment choices

d) Legal compliance

1.5 Summary

ϖ Corporate finance is a field of study that deals with how companies fund their activities in order to maximize shareholder value.

ϖ Profit maximization, which is a traditional approach and wealth maximization are the two main objectives of corporate finance that help in taking financial decisions.

ϖ Profit maximization concentrates on short-term profits, while wealth maximization considers long term value enhancement and takes risk into account and uses the concept of time value of money.

ϖ Investing decisions, Financing decisions and Dividend decisions are the three main tasks of corporate finance.

ϖ Corporate finance is most relevant to every decision maker in the context of business including resource allocation, risk management and rest assured defects.

ϖ It provides a critical need for strategy development and business direction by enabling companies to integrate financial planning processes with long-range enterprise priorities and competitive positioning.

ϖ There is a close link between corporate finance and accounting as historical information is often used to predict, budget and assess performance.

ϖ It is underpinned by economics, both micro-level firm action and market structures, and macro-level interest rates, inflation, GDP.

ϖ Aligning financial planning to business strategy, guarantees expansion and innovation; mergers and overall sustainability of the firm.

ϖ The discipline promotes the ethical examination of rights and balances shareholder value with those of workers, customers, suppliers and their community.

ϖ The corporate finance, financial reporting and ethical governances are enforced in order to enhance task based on good business practice, transparency, regulatory regalement.

ϖ Managers who wish to maximise the value of the firm need to understand and apply the principles of corporate finance.

1.6 Key Terms

Corporate Finance - A branch under finance that has to do with financial decisions corporations make in order to obtain value from shareholders.

Investment Decision – Deciding on the projects or assets a firm should invest in and earn money.

The Financing Decisions: The financing decision is about the composition of assets that the firm should finance.

Dividend Decision – Determining the amount of profit to keep for reinvestment and how much should be paid out as dividends to shareholders.

Profit Maximization – A financial goal that seeks to increase net revenues in the short-run.

Wealth Maximization – A long-term strategic financial objective to increase the value of the firm for its owners.

Capital Investment Analysis the process of analyzing and selecting capital projects that are in line with a firm's long-term strategy.

Working Capital Management [1] -The practice of managing short-term assets and liabilities to maintain financial liquidity and operational efficiency.

Capital Structure – The mix of a company's funding sources, which consists of debt and equity.

Risk Management - The act of analyzing, identifying and addressing a financial risk or threat.

Shareholder Value Shareholder Value - The value of an entity that is ultimately passed on to shareholders.

Stakeholders – Persons or groups influenced by or having an interest in the operation and success of a company.

1.7 Descriptive Questions

Corporate Finance Define corporate finance and explain what it does within the context of today's business firms.

Explain the variation between maximisation of profits and maximisation of wealthas an objective of finance.

Discuss the decision-making process for a business from a corporate finance/VF perspective providing relevant examples.

What are the ways how corporate finance adds to strategic development and value addition for long term?

How is accounting related to corporate finance? In what way do they work together?

How important is economics in corporate financial planning and its relation to macroeconomic measurements or indicators?

How corporate finance is integrated with business strategies to achieve organisational goals?

How does corporate finance reconcile the interests of shareholders and others?

1.8 References

1. Brealey, R. A., Myers, S. C., & Allen, F. (2017). Principles of Corporate Finance. McGraw-Hill Education.

2. Ross, S. A., Westerfield, R. W., & Jaffe, J. (2018). Corporate Finance. McGraw-Hill Education.

3. Damodaran, A. (2015). Applied Corporate Finance. Wiley.

4. Van Horne, J. C., & Wachowicz, J. M. (2008). Fundamentals of Financial Management. Pearson.

5. Pandey, I. M. (2021). Financial Management. Vikas Publishing House.

6. Brigham, E. F., & Ehrhardt, M. C. (2016). Financial Management: Theory & Practice. Cengage Learning.

Knowledge Check 1

1. b) Accounting supports finance
2. c) Firm behavior
3. c) NPV analysis
4. b) Irrational behavior
5. c) Investment choices

1.9 Case Study

Background

AP MUM Novexa Pharmaceuticals Ltd., a mid-sized drug firm with headquarters in Hyderabad, has developed an indigenous drug for rare autoimmune disorder. The drug only recently passed Phase 3 clinical trials and is on its way to commercial launch. The company is now up against some key financial choices: How to finance the marketing and distribution, setting an appropriate price, and how far to balance investor short-term expectations with longer term investment in R&D.

The Management team has to choose between three strategic financing alternatives:

Public equity issuance

Assuming you a big corporate loan

Collaboration with a multi-national pharmaceutical company for partial ownership, including a fight over drug rights

At the same time, Novexa has to figure out how much of its profits will be plowed back into ongoing R&D to develop future drugs and how much will go to early investors, who want their return.

Demand Problems and Solutions Problem :2247 A560 Stuff Ltd.

Problem: The enterprise requires 300 crores in order to launch its product and market it but does not have enough reserves.

Solution:

• Equity Offering: Reduces ownership, but facilitates permanent capital without debt service pressure. Applicable where open market conditions are favorable.

• Debt Funding: No dilution but increases both financial risk and interest burden, even more so when product has not yet demonstrated market-viability.

• Partnering: Shares both profit and control but gains distributions channels and limits risk.

Proposal: Opportunities are significant but discipline is required to ensure the risks are mitigated effectively “Holding the Power”* 9 Recommendation Gradual growth; benefiting from strategic partnerships, with limited equity issuance given valuation risk.

Issue 2: Allocation of Capital to R&D Versus Shareholder Returns

Dilemma: The company has to choose to return the earnings in R&D or pay back early investors with a dividend.

Solution:

• A company with a long-term view on innovation needs to concentrate investment on R&D in order to maintain the pipeline.

• Still, a relatively small dividend or stock buyback could mollify investors and signal the company’s financial strength.

• Wealth maximization would justify retaining earnings and reinvesting them in human capital.

Suggestion: R&D shouldn't be oversold, but let's allocate 70% of profits to it and pay a 30% divided if we want our investors to invest in products which will win the company down the road.

Q3: Pricing Policy and Economic Climate

Problem: Novexa wants to price the drug affordably in a market where cost is a key consideration, but it doesn’t want to sell at a loss.

Solution:

• Set cost-plus pricing to meet margins - taking in account demand elasticity.

• Watch macroeconomic factors eg: inflation, currency risk (in exports), government price controls in pharma.

• Sensitivity analysis should be performed to assess the impact of variation in pricing models and demand responses.

Recommendation: Deploy tiered pricing to balance profit margins and accessibility—eg, low cost in domestic and high-end price for international markets.

Reflective Questions

How could Novexa reconcile the demands of its short-term financial performance with its long-term strategic investments?

What are the pros and cons of pharmaceutical strategic alliances?

How might economic conditions affect the financing and pricing strategies of drug companies?

What is the best way to handle stakeholder 1980 expectations at Novexa and still continue a successful growth?

What capital structure would you recommend if you were the CFO and why?

Conclusion

The Novexa case The case ofNovexais a challenge in the application of corporate finance principles to a high-stakes industry shaped by innovation. Financing investments: Decisions on how to finance an investment need to take account of the opportunity cost of money and can be addressed by a simple discount rule – real interest rates are used as benchmarks to 'discount' future incomes that might have enjoyed if it were saved or invested somewhere. The ability to strike a balance between profit and purpose, control and collaboration, and risk and reward is central to good corporate financial management. By conducting this methodical evaluation of its options, Novexa is in a position to launch a product that can not only achieve success but also make an impact on the global pharmaceutical market.

FM Unit 2 V3 (2).docx

ATLAS SkillTech University

Document Details

Submission ID
trn:oid:::3618:127184701

Submission Date
Jan 30, 2026, 1:18 PM GMT+5:30

Download Date
Jan 30, 2026, 1:23 PM GMT+5:30

File Name
FM Unit 2 V3 (2).docx

File Size
206.7 KB

46 Pages

11,303 Words

61,100 Characters

2% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text
- Cited Text
- Small Matches (less than 10 words)

Match Groups

20 Not Cited or Quoted 2%
Matches with neither in-text citation nor quotation marks

0 Missing Quotations 0%
Matches that are still very similar to source material

0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

2% Internet sources
0% Publications
2% Submitted works (Student Papers)

Integrity Flags

1 Integrity Flag for Review

Hidden Text
61 suspect characters on 3 pages
Text is altered to blend into the white background of the document.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- **20** Not Cited or Quoted 2%
  Matches with neither in-text citation nor quotation marks
- **0** Missing Quotations 0%
  Matches that are still very similar to source material
- **0** Missing Citation 0%
  Matches that have quotation marks, but no in-text citation
- **0** Cited and Quoted 0%
  Matches with in-text citation present, but no quotation marks

Top Sources

2% Internet sources
0% Publications
2% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1	Submitted works	Glyndwr University on 2014-03-28 <1%
2	Submitted works	Alliance University on 2026-01-19 <1%
3	Internet	www.coursehero.com <1%
4	Internet	everant.org <1%
5	Internet	fastercapital.com <1%
6	Submitted works	University of South Africa on 2025-05-16 <1%
7	Internet	ddceutkal.ac.in <1%
8	Internet	pdfcoffee.com <1%
9	Submitted works	Banking Academy on 2025-04-09 <1%
10	Internet	bannronn.com <1%

11 Internet

data88e.org <1%

12 Internet

tripurauniv.ac.in <1%

13 Submitted works

University of Bath on 2007-10-16 <1%

14 Submitted works

University of Venda on 2018-02-22 <1%

15 Internet

timefinest.com <1%

16 Internet

www.classace.io <1%

17 Internet

www.zintego.com <1%

18 Publication

Hickman, Kent; Byrd, John; McPherson, Matt . "Essentials of Finance, Second Editi... <1%

Unit 2: Scope and Objectives of Financial management

Learning Outcomes:

1. Distinguish between profit maximization and wealth maximization, and describe how such goals affect the financial decision making of the firm.
2. Discuss the total financial management package, including planning, acquisition, and application of funds.
3. Evaluate the core objectives of financial management, with emphasis on efficiency, profitability, and value creation.
4. Examine how financial goals align with broader organizational goals, and how conflicts between short-term and long-term objectives can be managed.
5. Apply financial management concepts to real-world case scenarios, demonstrating practical understanding of theoretical principles.
6. Interpret and use key financial management terminology accurately in academic and business contexts.
7. Respond to descriptive and analytical questions that test understanding of financial management functions and goals.

Content

2.0 Introductory Caselet

Aerion Textiles Ltd., is a family owned and run medium sized business based in Coimbatore, generating ideas for more than 3 decades. Historically the company has been a cotton fabric producer for national markets, making their mark on the industry by being extremely reliable, consistent and moderately profitable over long periods. A newer generation of leadership now runs the company. The new CEO, Priya Raman, a financial graduate from an Ivy League business school came with a more ambitious strategy of expansion and upgrade.

Aerion, under her management, is considering two strategic options. The first would be to double down on its current trajectory— it's already clearly focused on profitability by slashing expenses, pursuing lean operations and? keeping its customer base loyal. This lesson is about slow and steady profits, not rapid growth. And the latter option is to invest as much in international market expansion and growth development that they would have invested at home – such as having a digital sales platform and premium lines of higher margin fabrics. While this could create a lot of long-term value for the company, it would be very capital intense and risky.

The board is divided. The traditionals support doing what has always worked in the past--maximizing profits, which has certainly made them wealthy. They argue that chasing long-term value with unspecified returns might put the company's solid footing at risk. Whereas, the new management – embodied and counselled by financial analysts – believes it is in shareholders' interests to maximize wealth adding value making money (the brand).

This is a common short term gain (for shareholder returns) vs long term value creation dilemma - and one that many competitive companies have to struggle with in their business. It requires a clear understanding of purposes, proportions and duties related to financial control.

Critical Thinking Question:

How can Aerion Textiles ensure that it has stability in profits and yet the firm does not forego the opportunity to create wealth in the long run, and what is this financial strategy?

2.1 Profit Maximization vs Wealth Maximization

2.1.1 Concept of Profit Maximization

Maximizing profits has been one of the oldest and most traditional goals for business firms. It is the method by which a firm tries to earn more revenue than it has expenses in some particular accountings period. At the heart, what this is about is: Get as much revenue and margin here off of us. The concept has traditionally been used as a guide in the value of management decisions to production, pricing, investment and financing.

Within classical economic theory, enterprises are abstracted as agents maximising profits under perfect competition. This goal reflects the belief that all other company objectives are secondary to making a profit; increasing earnings will allow companies to expand over time.

The profit maximization aim is typically operationalized using performance measures such as:

• Gross Profit: The profit a business earns when it takes total sales and subtracts only cost of goods sold (COGS),

• Operating Profit: Actual profit derived from normal operations before interest, taxes, or other operating expenses are considered (also known as EBIT - earnings before interest and tax).

• Profit: The ultimate profit after subtracting the costs (among which are interest and taxes) from out of gross income.

• Earnings Per Share (EPS): The amount of the profit for a period attributable to each share of common stockoutstanding which is the net income divided by shares outstanding during year's time frame, so that shows company's profitability per share.

These ratios offer information about a firm's ability to generate cash by efficiently converting its inputs into profits, and they are also commonly applied in the context of short-run decisions.

Profit Maximization The following are the main characteristics of profit maximization:

• Short-Term Perspective: It is largely interested in a here and now return, i.e., for near future or short term such as fiscal year or quarter.

• Output and Sales Emphasis: Companies' habit is to drive companies toward increasing their volume production, lowering the cost of production.

• Managerial Authority: Many times the profit targets are used as internal benchmarks against which manager's effectiveness and B.U. performance can be traced.

But this is highly questionable assumption, since it assumes that you have certainty of future business conditions and stable market dynamics with no conflicting stakeholders – something not very often seen in practice.

Nevertheless, profit maximisation is still an important factor especially when the company is small or just starting out and it has to prove that it can make money. For these companies profitability is vital to its continued operations, re-investment into the company and it overall trustworthiness with potential creditors and stakeholders.

However, a consideration only in terms of profit and without taking into account long-term consequences, sustainability and the value of social responsibility can cause short-sighted decisions. In this context, although profit maximization is a useful working rule it is emerging as one part of larger financial goals.

2.1.2 Concept of Wealth Maximization

It can be concluded that wealth maximization or value maximization of shareholders is a modern and accepted objective as far as financial management is concerned. It focuses on building the value of the firm in long run, and endeavors to ensure to get maximum market value of shareholders' investment in the firm. Contrary to Maximization of Profit (which concentrates on profit in the short run), the objective of Wealth Maximization is to increase the value of the business which results in sustained growth.

This notion is based on the premise that a company's ultimate goal is to maximize shareholder value, or in other words make decisions that will result into an increase in the market value of the firm. This goal factors in several important aspects of a successful business, such as risk, time value of money, long-range returns and strategic decision-making.

Tools and methodologies Tools for evaluation of wealth include, but are not limited to:

- Net Present Value (NPV): The difference between the present value of future cash inflow and outflow indicates how a project adds value.
- Internal Rate of Return (IRR): It is the discount rate at which the NPV becomes zero, i.e., it is equal to the project's expected rate of return.
- Economic Value Added (EVA): A company's net operating profit after taxes, less a charge for the cost of capital.
- MVA (Market Value Added): The difference between the total market value of a firm and the amount invested in it.
- DCF (discounted cash flow) is a way to figure out how much something is worth. It does this by looking at the money that will be made in the future and adjusting it for DCF. This method of DCF uses the DCF to calculate the value of DCF by taking the cash that will be free, in the future and using DCF to find its value today.

These methods help us see the picture of how well a company is doing with money and to think about when we will get money in the future and what risks are involved with the money of the company.

The faces of profit maximization are:

• Long-term focus: Focus on sustainable growth and long-term financial performance.

• When we think about Probability Weighting we tend to discount the risk that is involved in our decisions. This means we put a lot thought into the projects that have a higher risk. We give importance to these higher-risk projects when we are evaluating them. This is what Probability Weighting is about it is, like giving a richer evaluation to the projects that have a higher risk.

• Time Value Of Money: This is about how money you should get now instead of getting a fixed amount later. The question is, is the money you get now more, less or the same as the money you would get later. The Time Value Of Money is important because it helps you figure out if you are better off getting money or waiting for it. Think about the Time Value Of Money like this: would you rather have some money today or the same amount of money later. The Time Value Of Money says that money you get now is worth more, than the amount of money you get later.

Shareholder Centered: A shareholder centered approach considers the interest of shareholders and helps make decision that maximizes value creation for its shareholders leading to more respect in capital markets.

But wealth maximization is surely not the same as profit maximization, for instance – in that it can be gained by ignoring intangible investments made in brand and stakeholder trust and strategy over time that sets up an organization to make more money down the track by being a tougher competitor.

Wealth maximization is also very consistent with moral, ethical and corporate social responsibility. Companies that are green, fair to workers and have strong governance

generally enjoy better reputations and gain the trust of investors as a matter of course (which may also indirectly help support shareholder value).

This creates more integrated decision making and strategy to ensure financial ambition, wider business strategy, sustainability and stakeholder motivation are directly aligned. These methods are described in some detail in Chapter 5.

2.1.3 Key Differences Between Profit and Wealth Maximization

Despite the fact that profit maximization and wealth maximization seek to enhance a firm's financial performance, they are contrasting in scope, approach, and their long run effect. These contrasts are important to consider for the purpose of enlightening how managers ordinate goals differently in different businesses.

Time Frame

• Short-term orientation, with an emphasis on short-term profits (usually less than a fiscal year)

• Wealth Maximization: Focuses on the long term, with a focus on sustainable growth and long-term value.

Measurement Basis

• Says it all about our obsession with short-term gains1 Profit Maximization: Based on accounting profit, which may not represent cash flow or value.

• Wealth Maximization: Relies on the cash flows, market price and investor returns valuation models.

Risk Consideration

• Maximisation of profits, which very often ignores business risk and uncertainty.

• Wealth Maximization: Factors in risk within the framework for decision making through concepts such as DCF and risk-adjusted return measure.

3 Time Value of Money

• Time Value: Does not take time value of money into account, treats all earnings the same regardless when it is realized.

• Objective of Maximizing Wealth: Money has time value and this can be reflected through discounting future cash flows.

Stakeholder Impact

• Maximizing profits: Could possibly cau se a decision that could be harmful to the employees, customers or environment to be made if it is expected to reduce costs and make quicker profit.

• Maximization of Shareholder's Value: This principle expects the company employees to practice high standard of ethics and deal fairly with stakeholder in maintaining goodwill for sustainable performance.

Strategic Alignment

• Profit Maximization: Are concerned with optimizing operations and reducing expenses.

• Wealth Maximization: Consistent with business long term vision, brand creation, innovation, and market penetration.

These contrasts indicate that, although profit maximization may be an appropriate tactical objective, wealth maximization would appear to be a more suitable goal for long-run financial planning and corporate policy. It ensures

that economic choices are not only economically viable, but also seem to be sustainable and in the best interests of stockholders and other stakeholders.

2.1.4 Limitations of Profit Maximization

Even under its historical single-minded pursuit of profit, this theory has a number of limitations and fails to provide a suitable framework for financial management today. These are restraining its utility, relevance and confidence as a strategic planner.

It is based on historical cost and fails to consider the time value of money.

5 There are two major shortcomings of maximizing profit is that it disregards the time value on money. A dollar today is worth more than a dollar tomorrow to you. By not following this route and not ignoring it (read: discounting time-value future cash flows), profit maximizing creates investments which sound good on paper, but in reality are useless.

Overlooks Risk and Uncertainty

As the very foundation of profit maximization is based on certainty -which as we all know doesn't exist in business – doing nothing today could indeed work against you. It

does not account for other financial or investment risks. Profits-high risk, even-when-risky-seems-to-be-the-better-fallback — can make safer if slightly less profit'y projects fall by the wayside.

Short-Term Focus

The thing about trying to make much money as possible in a short time is that it does not help companies plan for the future. This can cause problems because companies might try to save money by cutting costs of focusing on quality. They might also not invest enough in ideas or care enough about what their employees and customers think. The pursuit of profits can lead to these issues and that is bad, for the companys future. The companys long-term prospects are what really matter. The pursuit of maximum profits can hurt these prospects.

Ambiguous Definition of Profit

The word "profit" can mean things. It can be gross profit, operating profit, net profit or retained earnings. This is a problem because people do not always use the word "profit" in the way. When a manager or a company uses the word "profit" in their way it can lead to inconsistent decisions about the company and its profit. The companys interpretation of the word "profit" can be different from others, which's why it can cause problems when making decisions, about the companys profit.

Neglect of Non-Financial Factors

The monetary value is not the same as the value if you do not include things like the brand name, the reputation of the company or how loyal the customers are. This is important today because what people think of a company and how much they trust it can really affect the value of the company. The monetary value of a company is what matters and this can change if the public and the stakeholders do not have confidence, in the company.

Potential for Unethical Behavior

When profit is the important thing it becomes easy to cheat on taxes ignore the law or take advantage of people and resources.

These things might make the company some extra money for a while but they can also lead to a lot of problems like having to pay for lawyers and dealing with damage, to the companys reputation.

The company will also likely lose money in the run and have a hard time recovering from these losses, which is a pretty high price to pay for profit.

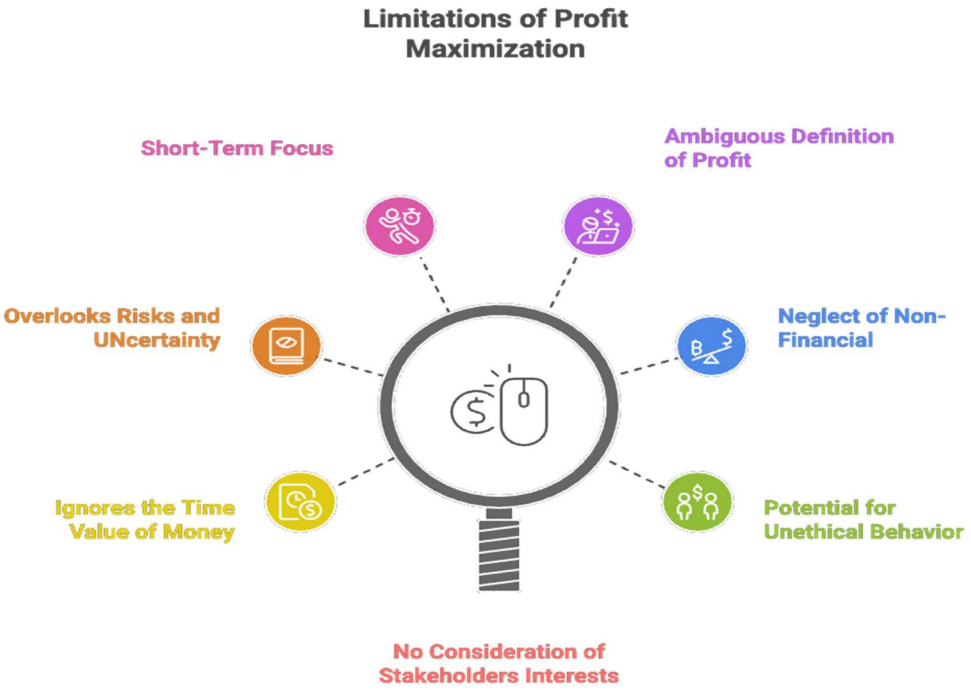
No Consideration for Stakeholder Interests

The main goal of a company is to make money for the people who own it. This means the owners or shareholders get all the profits.. This does not think about the people who work for the company the people who buy from the company or the community.

Some people think this way of doing business is old and too simple. They like something called stakeholder capitalism. This means considering the company as a whole including employees, customers and society not just the owners or shareholders who get the profits, from the company. Stakeholder capitalism is what a lot of businesses believe in today.

It is in this scenery that profit maximisation cannot be considered a satisfactory the sole objective any longer. It must be a part of a more comprehensive framework

involving risk, time, value creation and sustainability.



2.1.5 Why Wealth Maximization is Considered a Superior Objective

Maximization of wealth is considered to be a more comprehensive, strategic and sustained criterion than profit maximization by financial manager for making financial decisions. It lends itself more appropriately to modern business challenges, where business is not purely about short -term profit, but long- term value creation, market performance and ethical responsibility.

Emphasis on Long-Term Value

9 While profit maximization is concerned with short term strategy, wealth maximization looks at long run prospects. It also takes into account that decisions taken now will have an impact over the years on the value of the firm. It allows for investment in research, brand development and capacity that are not immediately profitable but over time provide competitive advantage.

Factors related to time value and risks

That is, wealth maximization essentially applies discounted cash flow to valuation and risk of cash flows. The result: more accurate, realistic evaluations of project and strategic business proposals.

Alignment with Market Valuation

That's pretty much how investors and financial markets themselves already think of companies — via stock prices and expectations of future earnings. Return to Shareholder value translates into being in harmony with "the market".

Promote Sustainable, Ethical Practices

Company's objective of wealth maximization: It is associated with improved corporate ethics and social responsibilities. They know the relationship between social capital and its impact on customer/employee loyalty is one of the most important drivers/high correlations to long-term value.

Encourages Strategic Thinking

Wealth serves as an inspiration to strategy, innovation and nimbleness. It elevates financial management from an operationally efficient function to something that is visually aligned to business or corporate goals.

Did You Know?

"Wealth maximization appears to be the appropriate goal now because of its ability to provide an unambiguous criterion that allows some comparison among decisions (the one that creates the most wealth is better) and for two reasons wealth maximization appeared as a superior alternative in response to deficiencies of profit maximization". It has emerged in 1960s, especially after different theories using modern financial methods developed, such as Net Present Value rule or CAPM.

To sum up, wealth maximization is superior to profit or any other criterion as it provides a clear and Verifiable test for sound financial management while dealing with uncertain future thus the goal for the firms who want to survive in uncertain risk environment.

2.2 Scope of Financial Management

2.2.1 Investment Decision (Capital Budgeting)

Capital Budgerting (Investment Decision): Capital budgeting is the most crucial dimension, which requires considerable attention by nancial managers. It is a long term investment appraisal technique that would help to achieve company's long term objectives. They tend to be big investments, requiring a corresponding level of resource commitment and almost always multi-year (new plant, new market entry, the development of a product in their own right and even mergers or acquisitions).

Complex investment decisions can be of benefit by allocating resources as soon as the cost are less than the benefits. These are decisions that will influence the future size, profitability and competitive position of the business.

Investment decision-making involves several components:

• Preferred Investment Ideas: There are companies looking for track to match their investments and growth strategies.

• Alternatives: Each alternative should be appraised with quantitative measures of the return, cost and risk.

• Criteria forselection of ProjectsRanking of projects& selection of other projects through financial feasibility & strategic fit.

• Implementation and Control: If the investment is approved, it will have to be handled in a proper manner, so that the return expected from it materializes.

The most popular capital budgeting technique used to make the NPV decision is: Multiple techniques of Capital Budgeting are being used in this regard:

• Net Present Value (NPV): It represents cash inflow and outflows. Whether the firm makes money on it or not.

• IRR: The cost of capital that makes NPV = 0, used to determine whether an alternative is more or less profitable as an investment than a project with a negative NPV.

• Breakeven: This is when the initial outlay for an investment pays for itself, which makes it useful in discussions of liquidity.

• PI (profitability index): PV of future cash inflows / Initial investment; used for project ranking.

The whole process of making financial decisions should be made better by using special tools, like sensitivity analysis, scenario analysis or Monte Carlo simulations. This is because these tools help us think about how unsure we're when we make predictions. We should use these tools to get an idea of what might happen. The entire process of capital budgeting should be improved with these tools, like sensitivity analysis, scenario analysis or Monte Carlo simulations to consider the nature of the predictions we make about the future of our capital budgeting.

It is not just a financial investing decision. There are strategic and operational issues of technology investing to think about as well. For one you do not get rich quick, from investing in technology.. In some cases you may have to invest in technology just to keep pace with technology. Similarly social and environmental concerns of technology investing are also being built into capital budgeting for sustainability of technology.

The company uses capital budgeting to make sure the capital is used in the way possible. This helps the company make money from its investments. The company also keeps an eye on how much money is being spent. If the company makes an investment the money can get stuck in things that do not make money for the company. This can hurt the health of the company for a very long time. The capital budgeting is important for the company to use the capital properly and avoid wasting the capital on investments. The company needs to be careful, with the capital to make sure it is used to make money for the company.

.

The decision to invest is really important for managing money. It helps a company figure out where it will be in the future. The investment decision is what shows a company, like this one where its future's.

2.2.2 Financing Decision (Capital Structure)

These are the decisions that relate to how a company will want to raise money to support its long-term operations and investments. This is called management of capital structure. The main goal is to find the mix of borrowed money and the companys own money, which will keep the companys costs low but make the stockholders richer. The company needs to make choices about its capital structure to get the money it needs. Management of capital structure is very important, for the company. The company has to think about how to use debt and equity to achieve its goals.

Capital structure comprises:

• Equity financing is when you get money by selling parts of your company to people who want to invest. This is not a loan so you do not have to pay the money. However when you sell parts of your company you will own a piece of equity financing and the people who invest in your company will own a piece of equity financing too. This means your control, over equity financing will be shared with the owners of equity financing.

• Long-Term Debt: This is, about loans and bonds and other money that Long-Term Debt borrows. You have to pay back Long-Term Debt with some money, which is called interest but the good thing is you get to keep control of your company when you have Long-Term Debt.

• Hybrid Instruments: These are things that have parts of equity and parts of debt. For example you have debentures or preference shares that are Hybrid Instruments. They work like Hybrid Instruments because they can be both equity and debt at the time. Hybrid Instruments are useful, for people who want to invest in something that has a bit of both.

Funding is a concern and we need to be clear, about a few things when it comes to funding. Funding issues require us to give answers to the following questions:

• How much money is the company after?

• What will the money be used to buy?

How expensive and risky is each of these sources?

• How much debt is too much?

A good capital structure is one that helps the business do what it needs to do. It is very important for the business to have a capital structure that serves the business in being successful and running well. The business needs a capital structure that works for the business.

• Lower WACC: When you have a Weighted Average Cost of Capital it means that the money you invest will give you more cash in the future from those investments. This is because a lower Weighted Average Cost of Capital makes the future cash flows, from your investments bigger.

• When we think about Risk and Return we have to make a choice. If we take on a lot of debt our financial risk will go up. On the hand if we issue a lot of new stock the value of each share or our Earnings Per Share will be spread too thin. This is the Risk and Return Trade-off. We have to balance our Risk and Return to make decisions. Much debt is a big Risk and too much stock issuance is not good for our Return. We need to find a balance, between Risk and Return.

• Treasury bulletins. You need to make sure you can still get to the cash. The framework is made to be flexible with money.

Structure Benefits:

Flexible Financing is a thing. A divided structure is helpful because it lets a group get money when it needs to and it also helps the group keep its credit. Treasury bulletins are important, for this.

• Matching Business Risk Profile: When we talk about businesses in stable sectors they often go for debt that is a bit riskier. On the hand companies that are really volatile are more likely to use equity finance to raise money. This is because Business Risk Profile of these companies makes equity finance a better option, for them. In the context of Business Risk Profile it is clear that the type of finance used depends on the Business Risk Profile of the company.

There are some ideas about capital structure that help us understand why businesses choose types of financing. These ideas are called theories of capital structure. They explain why the businesses decide to go with a particular type of financing. The businesses have options for financing and these theories help us make sense of why they make those choices.

* Theories of capital structure

* Approaches of capital structure

These capital structure theories and approaches are important because they help us understand the reasons, behind the financing decisions that the businesses make. The capital structure theories are used to explain why the businesses undertake the type of financing that they do.

Modigliani-Miller Theorem No capital market imperfections: no debt With taxes and bankruptcy costs: yes debt.

• Trade-Off Theory: weighing the tax advantages of debt over the cost of bankruptcy.

• The Pecking Order Principle is pretty simple. It says that long as a company does not have a financing deficit the Pecking Order Principle will tell them to use internal financing first. Then the Pecking Order Principle will tell them to use debt financing if they need money. The Pecking Order Principle likes debt financing, over equity. This is the order that the Pecking Order Principle likes to follow.

The timing of decisions, about funding matters. There are things that can affect when and how the fund-raiser gets money. Like market conditions, interest rates and what investors think. The fund-raiser is also affected by regulation.

There are ways to get money to run a business. We are not talking about getting loans from banks or using debt. Start-ups can get money from angel investors to pay for things they need to do. Big companies can sell stocks to the issue bonds to get the money they need. Angel investors are a source of money for start-ups. Big companies have options, like going public or issuing corporate bonds to raise money.

In conclusion, capital structure policies have an impact on the firm's leverage, funding and stockholders value. Sound capital structure forms the very basis for growth with stability.

1

2.2.3 Dividend Decision

Dividend policy can be the set of guidelines a company uses to decide how much of its earnings it will pay out to shareholders in dividends. The decision is important as it will impact the satisfaction of shareholders, potential reinvestment and overall financial strategy of the entity.

There are basically three ways of distributing profit:

Pay Dividends to Shareholders

Retain Earnings for Reinvestment

Combination of Both

The basic problem in setting dividends is to reconcile the desires of stockholder for a stable income and the company’s needs for funds to finance new investment programs.

Key types of dividends include:

• Cash Dividend Payments direct to shareholders.

• Stock Dividends: Shares of stock distributed (instead of cash).

• Special Dividends: One-time paydays popular after an extraordinary windfall.

• Interim Dividends: Announced prior to reports on an annual basis.

Theories surrounding dividend decisions include:

• Dividend Irrelevance Theory (Modigliani-Miller):

13 3

As demonstrated by the de Franco Modigliani and Merton Miller (1961), in the absence of taxes and transaction costs, if all firms have access to perfect information on capital markets, a firm's dividend policy has no effect on its value. The crucial assumption here is that investors can create the income stream they want: Need cash? Sell some shares ("homemade" dividends). Feel like growing your wealth? Reinvest. Thus, the relevant question of firm value is

of financing and in the investment decision, rather than to the combination of dividends and retained earnings.

• Bird-in-Hand Theory:

The proposal refutes MM's arbitrariness argument on the grounds that providers of funds favoured money today over money tomorrow. The idiom "a bird in the hand is worth two in the bush" also demonstrates what I'm talking about. According to Gordon and Lintner, dividends involve less uncertainty and have a more immediate effect on stock prices, whereas capital gains can be assumed at the expense of future expected cash flows—in other words, are riskier asset pricing. That is why the companies that are paying higher dividends are understood to be less risky, and thus their stocks trade at a premium.

• Tax Preference Theory:

This theory replaces the investor preference toward taxation. Capital gains are often taxed at a rate below what dividends fetch and can — some of the time, depending on how long you hold stock — be deferred until shares are sold. That is, investors can simply defer the taxes and let compounding have its way. That means that investors

will have a tendency to prize those companies who keep the kitty (both money and stocks) on hand use if they feel like it, over companies that pay out dividends (whichmay just pump up stock prices artificially if they're too high). Therefore firms with lower dividend pay out ratios may be more valuable because investors, who are assumed to avoid taxes themselves as well, prefer them (154) so that the outcome of such tax-preferences among taxpayers isto maximize the after-tax value of wealth.

Factors influencing dividend decisions:

• Profits: The greater the profits, the more distributable surplus.

• Cash Flow: Companies have to pay for their dividends, which means they need to have cash on hand.

• Growth stock opportunities: Companies that are growing fast invest what they earn.

• Leverage: A highly leveraged company might prefer to hang onto the earnings, in order to service its debt.

• Tax considerations: The manner in which dividends and capital gains are taxed may influence investors' choice.

• Legal Limit: Dividends cannot be declared if doing so would cause a corporation's assets to fall below legal minimums.

These firms usually follow one of the two policies.

• Stable Dividend Policy:

For instance, under permanent dividend policy the company always pays a constant (or increasing) amount of dividend per share regardless of its fluctuating earning. That gives

investors something to grab onto, and would attract those looking for stable income — like retirees or the more conservative.

Explanation: It is one way that the company is showing its financial muscle and long-term commitment, despite lower profits. "It might add surprise and remove some suspense." But it can also, from time to time, suck out cash reserves when times are hard.

Example: Coca-Cola has paid dividends for years, without interruption, so it deserves the moniker “dividend aristocrat.”

• Residual Dividend Policy:

Residual Dividend Policy: Residual policy is a policy where dividends are considered as residuum after all attractive investments have been met. The ideal is to reinvest in those projects providing the most shareholder value, and only to pay what remains as dividends.

Explanation: This is to ensure the company does not artificially limit it's growth on account of dividends that would have been paid out in future. But dividends could vary wildly from year to year, something that may not matter much to investors in search of stability.

Example: Tech companies, such as Amazon or Alphabet (the parent company of Google), are frequently painted that way. They retain most of their profits to use for R&D, acquisitions and growth, and pay out little or no dividends.

• Hybrid Policy:

Hybrid policies are one part limited premium and another of these other types, paying out either up to assets or up to premiums depending on some set of circumstances. Companies are generally required to pay a steady, minimum dividend but can also put aside special dividends or bonuses as they earn through fat years.

Explanation: It's the best of all possible worlds here. (In my world, which is a world in which people invest for income, it would be even better if rate hikes were happening.) It is the Goldilocks position between shareholder expectation and building a business.

Illustration: Infosys (India) adopts a regular conservative dividend payout with special dividends declared when excess cash is available. Microsoft also pays reliably and at times has paid an extraordinary dividend.

THE INFORMATION CONVEYING ROLE OF DIVIDEND PAYMENT The decision to pay dividends also contains information, this is due to the fact that there are few reliable observable signals of firm value and future dividend payments. A decrease could be read as a signal, while an increase might bolster investor confidence.

Deliberate dividend management allows funds to be released without losing the financial space for future investments. Poor dividend polices can result in cash-flow headaches, unhappy shareholders and even stock-price whipsaws.

Consequently, the dividend policy should be dovetail to all company's overall financial policies, future growth prospects and shareholders' needs.

2.2.4 Liquidity Management

A company needs to have money to pay its debts when they are due. This is what we call liquidity. It is, about making sure the company has money to pay its short term debts. The company has to manage what it owns and what it owes to make sure everything runs smoothly without any problems. Liquidity is very important for a company to be able to pay its short term debts.

Effective liquidity ensures:

- Payment of vendors and other dues on time.

- No debt default in the near-term

• Continuation of operations if there are cash flow problems

• Enhancing credit quality and market posture Components of liquidity management include:

• Cash Management: Holding of cash not in excess, to meet the requirement on time.

• Accounts Receivable Monitoring is, about keeping an eye on the money that people owe to us. We have to set the rules for selling our products and try to get paid. This helps to lower the Days Sales Outstanding, which's the Accounts Receivable. By doing this we can make sure that our Accounts Receivable does not get too big and that we get our money on time.

• Stock Control: Records of the stock with respect to the available amount while avoiding over stocking and stock out.

• Payables Optimization: Maximizing payee and timing terms on all payments.

Solvency and liquidity are presented as a financial measure. The liquidity of a company is very important to consider when we talk about solvency and liquidity. Solvency and liquidity are two things that people look at when they want to know if a company has money to pay its debts.

• To figure out the ratio you need to do this: take the companys Current Assets and divide that by the Current Assets are not used here instead we use the companys Current Liabilities. So it is the companys Current Assets divided by the companys Current Liabilities.

The Quick Ratio is calculated by taking Assets and subtracting Inventory then dividing that by Current Liabilities.

The Natural Gas Act, which is a law in the United States regulates how natural gas is transported and sold across different states. The Natural Gas Act is found in 15 U.S.C. §§ 717 Et seq.

This law is important for the Natural Gas Act because it sets rules, for the Natural Gas Act to follow. The Natural Gas Act is a United States law that affects the Natural Gas Act in many ways.

Cash Ratio = Cash + Cash Equivalents / Current Liabilities Instruments And Techniques Of Liquidity Management Are:

• Forecasting Cash Flow: You need to think about how much money's coming in and how much money is going out. This is important so that you do not run out of money. Forecasting Cash Flow is like keeping track of the money that is coming into your business and the money that is going out of your business. By doing this you can make sure that you have money to pay your bills and keep your business running smoothly. Forecasting Cash Flow helps you plan for the future and make decisions, about your money.

• Cash Budget: Forecast of a company's short-term cash needs by month or quarter.

• Credit design policy: Combining volume of credit sales and for prompt collection.

• Banking arrangements : Maintain OD/credit facility for contingency use.

On the other hand, being underperforming in the liquid part can incur:

• Missed payments and vendor spats

• Borrow more at higher rates

• Asset divestiture demands or operational affectations

• Damaged reputations and investor confidence

Liquidity is not ONLY about being cash rich, but more so on management of working capital and to utilize resources effectively. Companies have to navigate between too much liquidity (and no return) and illiquidity — the condition of New Jersey's finances poised at that knife edge.

2.2.5 Integration with Strategic Management

Managing the finances is not the goal. It is a part of the picture, which is strategic management.

Financial planning and budgeting are important. Financial planning is a part of managing to get results.

The management of finances is a process where people make long-term plans with the people who are affected by talking to them.

This is what we call financial management, which is the process of making these long-term plans for financial management.

Financial planning and budgeting are a part of this because they help us make a plan, for the finances.

Key aspects of integration:

• Investment Policy: The people in charge of money at a company make decisions that help the company by picking investment projects that will be good for the company in the long term. They choose these long term investment projects to help the company grow. The investment projects are a part of what the financial managers do to create value, for the company.

• Asset Investment: Investing assets in projects with the highest strategic and financial return.

• Risk assessment and management including the financial impact of strategic decisions including acquisitions, growth and diversification.

• Performance Measurement. We use indicators to see how well we are doing in meeting our strategic objectives. Financial indicators are really important to track our progress and make sure we are on the path with our strategic objectives. We need to keep an eye on these indicators to know if we are getting closer, to achieving our strategic objectives.

Financial decisions are made so that money is distributed fairly. This means the numbers actually show what is real not just what people say. For example you might want to start selling something in a place. This new place might be expensive to get into. It will affect how much money you have. The people in charge of money have to think about if this new project's a good idea, imagine what could happen and make sure you have enough money for it. Finance has to do all these things to make sure the money is there, for the project.

Financial management also contributes to:

* Helping people with money

* Making sure businesses do well with their money

* Keeping track of the money that the company has

management is very important for people who want to know what is going on with their money.

Financial management helps people make decisions about their money.

The main goal of management is to make sure that people and businesses are using their money wisely.

Financial management is something that everyone should know about because it affects peoples lives in a way.

People need to understand management so they can take care of their money.

Financial management is really important, for companies and people because it helps them stay on top of their money.

•Price Management Strategic in cost of reducing prices.

• Scenario Planning: Gearing up to adjust for changes in the market, economics or regulation.

• Stakeholder management: When a company starts to take shape it is time to show the companys plan in a way that investors lenders and partners can understand. This means explaining the companys strategy in terms so that these stakeholders can see what the company is trying to do with its money. The goal of stakeholder management is to make sure that investors lenders and partners are all on the page as the company and that they can see how their money is being used to help the company grow. This is a part of stakeholder management because it helps to build trust with investors, lenders and partners and it helps the company to get the money it needs to succeed. Stakeholder management is about working with investors, lenders and partners and making sure that they are happy, with the way the company is being run.

So it's actually creating such a good value creation model that links strategy and finance, so every financial decision is in support of the firm’s purpose, mission and competitive position over time.

"Activity: Strategic Finance Roleplay"

Title: The Financial Management Function as a Strategic Business Partner

Put students in groups and give each a different company situation (e.g., bring out a new product, go international, re-organize the company). The finance team (ie: each group) will be responsible for developing Strategy in terms of investing, financing operating and dividend decisions. Teams will pitch their plan and explain why their choices make good financial sense for the firm in the long run. This work underpins the blending of the financial and strategic management dimensions in practice.

2.3 Objectives of Financial Management

2.3.1 Ensuring Availability of Funds

Meeting the needs of day - to-day business operation - One of the primary aims of financial management is to guarantee that fund will be available at any time it is needed. A business requires funds at every stage be it for its set up, day to-day operations, expansion or facing any crisis. Financial management is

whose task is to determine the capital requirements of the firm and finding out sources most suitable for financing needs.

Funding is provided in the form of short-term and long-term financing.

10 • Short-term funds: Need to run day-to-day operations like buying raw materials, paying wages or keeping inventories.

• Long-term capital: To buy machinery, build a facility or start selling in a new market.

A key in reaching for that target is planning, which compares how much you're likely to need with how much you're expecting. It's being ready which is no shameful thing; getting the right amount of money at the right time, not under or over capitalizing.

Sources of funds may include:

• Equity capital

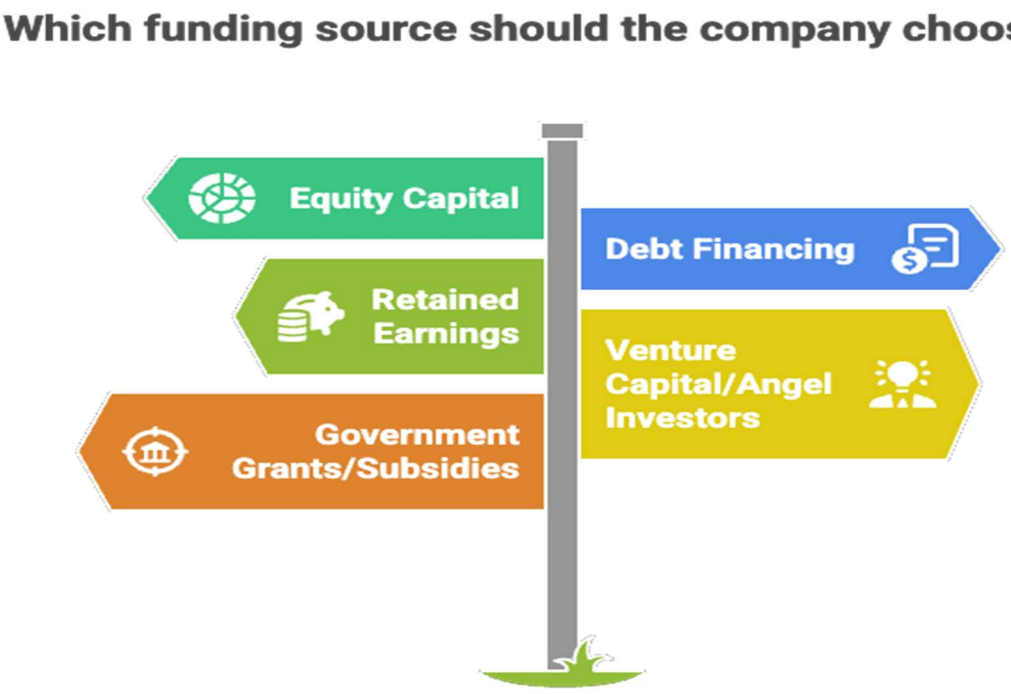
• Funding of the liability (bank loan, bonds)

• Retained earnings

• VC or angels

• Government grants or subsidies

And what methods of valuation should consolidators apply to the alternatives and its impact on cost, flexibility, risk or ownership? Loss of ownership = equity, secondary to the fact that there is no definate payment outlay Loss of control over asset = debt, plus interest if financial risk factored in.



Keeping ready liquidity reserves and having arrangements for running credit lines are also essential practices to ensure availability of funds. This serves as a cushion against potential discrepancies in cash flow or sudden events such as economic downturns or unusual surges in demand.

Some of the key actors in securing funds are:

• Producing cashflow forcast and budgets

• Conducting break-even analysis

• Monitoring receivables and payables

• Establishing relationships with financial institutions

• Monitoring creditworthiness and capital markets

Lack of fund availability may lead to business interruptions, lost business opportunities, bankruptcy or impair your reputation. It is therefore, this objective that constitutes the cornerstone of financial decision - making by which all other elements of business are directly connected.

2.3.2 Optimal Utilization of Funds

Managing the finances is not the goal. It is a part of the picture, which is strategic management.

Financial planning and budgeting are important. Financial planning is a part of managing to get results.

The management of finances is a process where people make long-term plans with the people who are affected by talking to them.

This is what we call financial management, which is the process of making these long-term plans for financial management.

Financial planning and budgeting are a part of this because they help us make a plan, for the finances.

Key aspects of integration:

• Investment Policy: The people in charge of money at a company make decisions that help the company by picking investment projects that will be good for the company in the long term. They choose these long term investment projects to help the company

grow. The investment projects are a part of what the financial managers do to create value, for the company.

• Asset Investment: Investing assets in projects with the highest strategic and financial return.

• Risk assessment and management including the financial impact of strategic decisions including acquisitions, growth and diversification.

• Performance Measurement. We use indicators to see how well we are doing in meeting our strategic objectives. Financial indicators are really important to track our progress and make sure we are on the path with our strategic objectives. We need to keep an eye on these indicators to know if we are getting closer, to achieving our strategic objectives.

Financial decisions are made so that money is distributed fairly. This means the numbers actually show what is real not just what people say. For example you might want to start selling something in a place. This new place might be expensive to get into. It will affect how much money you have. The people in charge of money have to think about if this new project's a good idea, imagine what could happen and make sure you have enough money for it. Finance has to do all these things to make sure the money is there, for the project.

Financial management also contributes to:

* Helping people with money

* Making sure businesses do well with their money

* Keeping track of the money that the company has

management is very important for people who want to know what is going on with their money.

Financial management helps people make decisions about their money.

The main goal of management is to make sure that people and businesses are using their money wisely.

Financial management is something that everyone should know about because it affects peoples lives in a way.

People need to understand management so they can take care of their money.

Financial management is really important, for companies and people because it helps them stay on top of their money.

•Price Management Strategic in cost of reducing prices.

• Scenario Planning: Gearing up to adjust for changes in the market, economics or regulation.

• Stakeholder management: When a company starts to take shape it is time to show the companys plan in a way that investors lenders and partners can understand. This means explaining the companys strategy in terms so that these stakeholders can see what the company is trying to do with its money. The goal of stakeholder management is to make sure that investors lenders and partners are all on the page as the company and that they can see how their money is being used to help the company grow. This is a part of stakeholder management because it helps to build trust with investors, lenders and partners and it helps the company to get the money it needs to succeed. Stakeholder management is about working with investors, lenders and partners and making sure that they are happy, with the way the company is being run.

So it's actually creating such a good value creation model that links strategy and finance, so every financial decision is in support of the firm's purpose, mission and competitive position over time.

2.3.3 Balancing Risk and Return

One of the key goals of finance as a discipline is to ensure that both risk and return are taken into consideration by financial decision-makers. At all times, each investment and funding option involves a different level of risk, and financial managers must assess which ones are worth pursuing in order to maximize return while managing the risk.

Risk is the uncertainty of financial rewards, including return variability, default risk and market volatility. Return, however, is the payoff or benefit gained from an investment or decision. Getting the balance right is doing neither, taking so much risk that you put your financial well-being at stake or being nothing but conservative and not growing.

The risk-return trade-off holds for:

• Investment decisions: Investments with high expected returns may also have higher risks. Of course this decision should be consistent with the risk taking policy of the firm.

• Funding Decisions: Debt is the cheapest but increase financial risk, and equity is more expensive due to dilution and cost of capital.

• Dividend Policy: High dividend may make shareholder happy but decreases retention and hence company retain less in their internal reserves which would expose a firm to liquidity risk.

Various tools of risk and return: Financial management uses the following tools to do so:

• Diversification: Investing in a variety of securities to help minimize risk

• Risk Assessment Tools: Sensitivity analysis, scenario planning and the Value at Risk (VaR) for assistance in determining potential downside risk.

• Capital Asset Pricing Model (CAPM): Estimates demanded return considering the risk free rate, beta (market risk) and market premium

• Cost of Capital Analysis: Assessing the impact on risk and return from various funding mixes The relationship between risk and rewards is not fixed. It varies with:

• Type of industry served (e.g., manufacturing vs. technology)

• Economic conditions

• Firm's financial health

• Regulatory environment

Besides quantitative measures, managerial intuition is very important. Risk tolerance should be consistent with the organisation's strategy and stakeholder expectations set by senior management. For instance, a startup can be prepared to take on more risk in order to grow and a mature company can opt for capital protection.

Ultimately, keeping this balance is what allows companies to grow in a sustainable way, and also attract investments and protect themselves from financial shocks. Mismanaged risk-return tradeoffs can cause bankruptcy, investor flight, and strategic collapse.

2.3.4 Maximizing Shareholder Wealth

Shareholder value maximization is viewed as the primary goal of contemporary financial management. The end result they've been looking for is the increase in their shareholders' net worth, as has rippled through and increased the market price of a share of the company's stock.

This objective has a general nature which extend further than profit maximization, as it involves several aspects:

• Price appreciation (growth of stock value)

• Dividends or cash flows received

• Risk-adjusted returns over time

• Market perception and investor confidence

Shareholders wealth maximization is achieved through :

• Value Creating Investments: Investment decisions taken should be based on NPV and impact on the long term firm value.

• Capital Structure Management: Selecting the most favourable debt-equity ratio to minimise cost of capital.

• Guiding Business Principles: Approaches ought to be compatible with a range of long-term goals which guarantee the economic existence and competitive status of the firm 2.

• Open Book Accounting - Allow disclosure for transparency to restore the trust of investors.

The main shareholder value-based performance measures are:

Earnings per Share (EPS)

Definition: The earnings per share ratio shows how much profit the company is earning in relation to each share.

Formula:

EPS = Profit available for equity holders / Total number of shares outstanding

Example:

- Net Profit = ₹10,00,000
- Shares Outstanding = 2,00,000
- EPS = 10,00,000 ÷ 2,00,000 = ₹5 per share

Return on Equity (ROE)

Roe What it means: ROE is an indicator of how effectively a company uses shareholders' equity to produce profits.

Formula:

ROE = Profit after Tax ÷ Shareholders' Equity × 100

Example:

• Net Profit = ₹8,00,000

• Shareholders' Equity = ₹40,00,000

• ROE = (8,00,000 ÷ 40,00,000) × 100=20%

Market Capitalization

Meaning :: Market Cap (Market Capitalization) is the total amount of price available in the market, it can calculate by taking stock price and multiply it with face value of stock.

Formula:

This is even quite obvious, that $ 100.00 represents the company's present value and market value at stock exchange other than what it was when IPO came out. Market Cap = Price Of Share x Outstanding Shares.

Example:

• Share Price = ₹200

• Shares Outstanding = 5,00,000

• Market Cap = 200 × 5,00,000 = ₹10,00,00,000 (this had to be written as 10 crore)

15 Price-Earnings (P/E) Ratio

15 Definition: P/E ratio is the price of a stock relative to its earnings (from “price to earnings”) and what investors are willing to pay for each rupee of earnings, indicating valuation.

Formula:

16 P/E Ratio = Market Price per Share / EPS (Earnings Per share)

Example:

• Market Price per Share = ₹ 250

• EPS = ₹10

• P/E Ratio = 250 ÷ 10 = Taking the ratio of A to B gives Times.

This way of doing business promotes sustainable behaviour; to create value over the long term, you need ethical leadership, tight relationships with stakeholders and a response to what the market can do. Companies with an obsessive focus on short-term profit may engage in aggressive accounting, or slash costs to the bone — and beyond — at the expense of long-term value.

As shareholder wealth maximisation is the benchmark by which management performance is measured. It’s the theory used to structure executive pay: compensation, stock options and performance bonuses.

Some critics to such a goal mention that shareholders are the only benefit recipients, while leaving aside other interested parties like workers, consumers and society as a whole. The revised meaning is stakeholder informed value creation, because the wealth owned by its shareholders cannot increase without long-term relationships and the responsible business operations necessary to develop them.

Accordingly, the maximization of shareholder’s wealth is still the main criterion for financial decisions in order to combine profitability with durability and responsibility.

2.3.5 Supporting Long-Term Business Sustainability

The company has to manage the finance for the things we need now and also make sure the finance is good for a time. This means the company has to keep the finance of the business okay while dealing with a market that changes a lot. The market can change because of things like money issues changes in what people think is new rules and laws. The company has to manage the finance so that the businesss okay and the finance is good for the future. The finance of the business has to be managed in a way that works for the company and helps the company to keep going. Managing the finance is a job, for the company and it has to be done every day to make sure the business is okay and the finance is good. The company has to think about the finance all the time and make sure it is managed in a way that helps the business.

A company is doing well with money when it:

• Returns consistently and predictably year to year

• The company makes sure it has money to pay its debts and has cash available when it needs it so it can maintain its solvency and liquidity. This is important for the company to keep its solvency and liquidity in check.

• The company tries to stay from taking too many financial risks that could hurt the business so it avoids excessive financial risk and instead looks for safer ways to make money and grow the company and its excessive financial risk is very much minimized.

• The company puts money into ideas and better systems and it also helps people learn new things so they can get the jobs that will be available, in the future. The company invests in education and training for people so they can get these jobs of the future. This way people can get the jobs of the future. Have a better life.

When it comes to development financial management plays a big role in lots of ways:

• Return and Capital: When it comes to managing the companys money the people in charge have to make decisions about where to put the capital. They need to choose things that will bring in money away and also help the company grow in the long run. This means they have to think about what will make the company successful and what

will make it successful later on. The goal is to make use of the capital so that the company can do well in the short term and also have a strong future. This is what managing capital is about, for the people who make these decisions about the companys money, which is the capital.

• Long-term finances: The goal is to create a mix of debt and equity that will help fix the problem of having much debt and make the finances more stable. This will help the long-term finances by finding a balance, between debt and equity in the long-term finances.

• Writing, Speaking: You are going to need to write and speak clearly so that you can talk with the customers who never come to your business. This is because the customers of your business will be talking to you and you need to be able to write to them and speak to them in a way that's easy for them to understand. Your business needs you to be good, at writing and speaking so that you can communicate with the customers of your business.

• Making Reserves: Increasing reserves to help ward off economic shocks and assure stability.

Sustainability is also about dealing with Environmental and Social and Governance issues. Financial managers have to look at things, like this :

• The environmental impact of its operations

• Questions of social responsibility, fair pay and community uplift

• Governance and transparency, business ethics Data sources The literature review comprised of exporting data from Excel to the Citation Manager Software – EndNote Version X2.

Companies that think about the future and look at their money situation over a time plan their investments and check for problems they also consider how well they do with

Environmental and Social and Governance performance. Companies, like these think that Environmental and Social and Governance performance is important.

There are some things that support sustainability too these include:

• Long-term financial forecasting

• Views on economic, political or other matters

•Binary: When we talk about Binary investment it means we are buying into two things: the idea of making things digital and getting used to new technology. Binary investment is, about Binary, which is a big part of our lives now and it involves Binary, which is the way of the future.

We need to make pricing and cost models that can be changed easily. This means our pricing and cost models have to be flexible so we can adjust them when we need to. Making pricing and cost models is important because it helps us understand how much things cost and how much we can sell them for. We have to create pricing and cost models that're adaptable.

The capital-adequacy value is important for the company and its shareholders. It gives them confidence. This value also helps to keep the business running

The company needs to think about sustainability. If they do not they could get in trouble, with the law. This could also hurt the companys reputation. The company could even fail if they ignore sustainability. The capital-adequacy value is crucial for the company and its shareholders to avoid these problems.

And that’s why the financial manager is a linchpin in instilling a culture of long-termism, responsible finance and ethical behavior across the organization.Choose the correct option:

Knowledge Check 1

1. Which of the following is a key goal of financial management?

a) Market share

b) Tax evasion

c) Fund availability

d) Product design

2. Optimal utilization of funds aims to avoid:

a) Risk premiums

b) Underutilization

c) Equity dilution

d) Inventory turnover

3. Balancing risk and return helps in:

12

a) Reducing taxes

b) Avoiding all debt

c) Sustainable growth

d) Increasing labor

4. Shareholder wealth maximization focuses on:

a) Lower profits

b) Market value

c) Reducing staff

d) Government grants

5. Financial sustainability includes:

a) Cost-cutting only

b) Short-term profits

c) Consistent returns

d) Ignoring debt

2.4 Summary

ϖ Financial control is primarily concerned with the existence and efficient use of funds as to attain the set objectives.

_SY: Profit maximization is concerned with immediate earnings, wealth maximization is concemed with shareholders worth in the long run.

b) Maximization of wealth takes time value of money, risk so far as it affects the cut off rate by discounting the future cash inflow for better implementation, capital budgeting should be aligned with corporate strategy.

Investment decisions are made by the selection of projects by assessing return potential and strategic fit.

ϖ The decision regarding the source of financing that is used to finance the mix between debt and equity so as to keep cost and risk to a minimum.

ϖ Choices involving dividend determine whether profits will be distributed or retained for investment.

ϖ The objective of the liquidity management is to ensure that the company can meet its short-term commitments without disturbing its operations.

ϖ Financial management is interlinked to strategic management and directs financial objectives towards sustained business success.

ϖ One overall goal is the trade-off between risk and return so that proper investment and financing decisions can be made.

♣ Shareholder wealth maximization is the backbone of financing decisions in contemporary firms.

ϖ Long-term sustainability is achieved by financial prudence that includes cost containment, prudent investment and alignment with ESG.

- Proficient financial management leads to profitability, venture expansion, risk reduction and reputation in the market.

2.5 Key Terms

Financial Management – Planning, organising and controlling the financial activities such that business objectives are achieved.

Maximizing Profit – A classic objective that emphasizes maximizing an enterprise's net income in the short run.

Wealth Maximization – A contemporary goal that focuses on exceeding the total value of wealth over long term of stockholder's holding period.

Investment Decision – The decision of which assets or projects to choose that produce a future return.

Financing Decision (i) Decisions regarding the amount and type of funds required both long-term and short-term, as well as analyzing the proportions of debt and equity in capital structure.

Act 100) Earnings Retention Decision – The decision of how much to pay out as dividend, and how much to reinvest back into the firm.

Liquidity Management – Keeping enough cash on hand to pay short-term debts.

Capital Budgeting – Analysis of long term investments with the help of financial tools like NPV/IRR.

The Risk-Return Trade-off – a look at the tug of war that occurs between return (very good returns are preferred) and risk (not too much).

Capital Structure – The mix of a company's financing sources, generally debt and equity.

Shareholders' wealth – Market value of shareholders equity, which is claim against the owners.

Upholding – The preservation of financial and operational stability throughout the life span of a business.

2.6 Descriptive Questions

Distinguish between the profit maximization and wealth maximization with examples.

What do you mean by the term financial management? Describe the Financial Management in Modern Business World.

What are the most important aspects of an investment? But how do they affect firm performance?

Explain the significance of funding choices and how capital structure influences risk and return.

What are the determinants of a company's dividend policy?

How does regulating liquidity impact operationally and financially within a business?

Why is maximization of shareholder wealth regarded as a better goal compared to profit maximization in financial management?

How does strategic financial management contribute to long-run business sustainability?

2.7 References

1. Brealey, R.A., Myers, S.C., & Allen, F. (2017). Principles of Corporate Finance. McGraw-Hill Education.

2. Ross, S.A., Westerfield, R.W., & Jaffe, J. (2018). Corporate Finance. McGraw-Hill Education.

3. Pandey, I.M. (2021). Financial Management. Vikas Publishing House.

4. Damodaran, A. (2015). Applied Corporate Finance. Wiley.

5. Brigham, E.F., & Ehrhardt, M.C. (2016). Financial Management: Theory & Practice. Cengage Learning.

6. Van Horne, J.C., & Wachowicz, J.M. (2008). Fundamentals of Financial Management. Pearson Education.

Knowledge Check 1

1. c) Fund availability
2. b) Underutilization
3. c) Sustainable growth
4. b) Market value
5. c) Consistent returns

2.8 Case Study

Background:

Amrit Engineering Pvt. Ltd., a 12-year-old Pune-based machine tool maker, which mainly focuses on industrial machinery. The company has a growing customer base in Thailand and will now look to engage with more of the region. The management of the company has a goal to emerge as a leader in the region; therefore, the company is considering purchasing of a new plant and is exploring the option for external financing decision mark between retained earning or paying dividen d) Nurul:...."the next year we want to be market leaders in this re gion that's why w e are ..." Sara: "... considering investment in b ulding another plant?" S hahida: " Are exploring different options for source of finance?

The company's turn over last year was ₹120 crores and it has 10 % profit margin. Its cash & bank balance is at ₹8 crores and its current D/E ratio stands at just 0.6. The management has retained a group of financial advisors to assist in making these difficult financial decisions.

Problem 1: Investments Decision u2013 Establishing a New Plant Problem:

The new plant entails ₹50 crores. It is expected to add ₹40 crores in annual revenue at an operating margin of 20%. It is projected that you will repay the loan in 6.25 years. Management needs to know whether this investment is in line with strategic goals and if it gets more value for the business.

Solution:

NPV method that is the future cash inflows discounted and value received is positive. The payback period appears extended but the business that has been built from strategic international penetration and brand proliferation is more than worth the initial lag.

The proposal is encouraged to be adopted given the potential for sustainable expansion and wealth enhancement.

Issue 2: Financing Decision – Issue of Raising Capital Que 1) Frost Ltd. would like to raise capital to finance working capital requirements and suggested an issue.

The issue for the company is how to pay for it:

a) Raise ₹30 crores through debt

b) Issue new equity

c) Tap into internal reserves to some extent and get external financing along with them.

Solution:

Choice (a) adds financial risk but retains full control. Option (b) reduces control and will possibly lower EPS. Answer: Option (c) Explanation : raOption (c) is reasonable, since controlling and cost are weighed against one another. A combination of Rs 20 crore from reserves and Rs 30 crore by way of a long-term debt continues to leave the company with a comfortable debt-equity ratio while providing it flexibility.

Suggested use: Moderate funding to not give up too much ownership and stay liquid.

Q3 Dividend Policy Decision Problem 3: Question: Dividend Policy You are a needy student and you may have one or two laptop on your hand.

Shareholders expect regular dividends. But the company requires money for future expansion. The dividend payout ratio is 40 percent for last year.

Solution:

For expansion purposes, the dividend payout should temporarily be reduced to 25%. This is financial prudence without quite stopping the dividends. Being sure to make this clear to shareholders is important.

The choice is in accordance with the long-run wealth maximisation principle and rebuffing of surplus being retained for additional investments.

Reflective Questions

Was it the good thing for the company to consider long payback period project? Why or why not?

What will the impact of the proposed financing policy be on the leverage and risk position of the company?

What could be implications to the company of a decline in dividend-payout ratio?

Was there an option for Amrit Engineering to look at alternative funding options like leasing, venture capital?

How do financial decisions made reconcile with the concept of wealth maximization (as opposed to profit maximization)?

Conclusion

1 The financial problems encountered by Amrit Engineering Pvt. Ltd. represent typical problems of a growth-oriented company. Achieving this means striking a balance between making strategic investments while being financially prudent, staying liquid, choosing the right level of debt and settign shareholder expectations. The case highlights the value of comprehensive finance planning and the need to orient all financial decision’s towards the fundamental goal of creating sustainable shareholder value.

FM Unit 3 V3.docx

Financial Management_MBA_2

Financial Management_MBA_2

ATLAS SkillTech University

Document Details

Submission ID

trn:oid:::3618:127127319

Submission Date

Jan 29, 2026, 6:45 PM GMT+5:30

Download Date

Jan 30, 2026, 10:36 AM GMT+5:30

File Name

FM Unit 3 V3.docx

File Size

145.3 KB

28 Pages

6,750 Words

37,383 Characters

2% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text
- Cited Text
- Small Matches (less than 20 words)

Match Groups

4 Not Cited or Quoted 2%
Matches with neither in-text citation nor quotation marks

0 Missing Quotations 0%
Matches that are still very similar to source material

0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

1% Internet sources
0% Publications
2% Submitted works (Student Papers)

Integrity Flags

1 Integrity Flag for Review

Hidden Text
26 suspect characters on 2 pages
Text is altered to blend into the white background of the document.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- **4** Not Cited or Quoted 2%
  Matches with neither in-text citation nor quotation marks
- **0** Missing Quotations 0%
  Matches that are still very similar to source material
- **0** Missing Citation 0%
  Matches that have quotation marks, but no in-text citation
- **0** Cited and Quoted 0%
  Matches with in-text citation present, but no quotation marks

Top Sources

1% Internet sources
0% Publications
2% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1 Submitted works
IFS School of Finance on 2025-07-28 <1%

2 Submitted works
Roehampton University on 2026-01-03 <1%

3 Submitted works
National Institute of Business Management Sri Lanka on 2025-06-27 <1%

4 Submitted works
Tilburg University on 2025-11-28 <1%

Unit 3: Types of Financing

Learning Outcomes:

1. Explain various sources of financing available to businesses, including debt, equity, and hybrid instruments.
2. Analyze the key factors that influence the choice of financing, such as cost, risk, control, and availability.
3. Evaluate the importance of an appropriate financing mix in achieving business objectives and long-term financial sustainability.
4. Differentiate between short-term and long-term financing options and their impact on business operations.
5. Apply theoretical concepts to real-life financing scenarios through case-based analysis.
6. Assess the implications of financing decisions on a firm's capital structure and stakeholder interests.
7. Use appropriate terminology to communicate financial decisions effectively in academic and professional settings.

Content:

3.0 Introductory Caselet

Former MBA graduate Riya Sharma had always dreamt of starting her own sustainable fashion brand.

— EcoFabrica. Months of market research and a sleek, albeit small product line later, she was ready to take her business idea to the next level. Yet, She calculated that she needed ₹50 lakhs to be invested on bumping up production, marketing and building an ecommerce platform.

When researching funding options, Riya encountered an impasse. Her uncle, a retired businessman, extended an interest-free loan of ₹20 lakh with easy repayment. A venture capitalist fund also expressed interest, offering ₹50 lakhs for a 30% equity stake and a board seat. At the same time, her bank was ready to lend 4 million rupees under a business loan at attractive terms, but it wanted collateral — land that had been in her family for generations.

Each option had clear trade-offs. The loan from her uncle carried emotional strings and the potential for personal relationship strain. The VC funding was all the money, but at a high cost in loss of control. It was kept at home through a bank loan that maintained ownership but with the burden of debt and potential personal risk.

Riya took a seat to review her financing mix. She knew that in order to successfully scale the business, financing decisions would need to be closely tied to the company's growth plan and cash flow forecast based on her long-term goals for EcoFabrica. The right mix of financing, she understood, could be the difference between rapid growth and financial instability.

Critical Thinking Question

If you were Riya, what order of importance would you assign to the criteria that are influencing your financing choice and why? Consider their short term feasibility and long term impact.

3.1 Sources of Financing

Funding sources are the different methods of obtaining money to start, develop and scale a business. No matter what the size or nature of your business, you'll need various

financial resources to carry out activities such as purchasing assets, working capital management, new product launches, R&D funds or regulatory requirements.

Financing is an integral part of strategic financial management since decisions about sources to use also revolve around multiple factors, such as the level of total funds required and for how long will these be used, cost of capital, risk levels and ownership implications (Totokihara & Faure 2009:454). The choice of a source of financing is also indicative of the stage in the life cycle in which an enterprise finds itself, its industry and profitability, as well as its current capital structure.

For a better appreciation of the sources, different financing sources can be classified under various headings according to nature and object of funds.

3.1.1 Source Classification: Long-Term vs Short-Term, Internal vs External

Long-Term vs Short-Term Financing

This categorisation depends on the time period for which funding is needed.

a) Short-Term Sources:

These are short-term sources of finance. They are used to pay for overheads such as raw materials, wages, utility and other regular type bills. Typical examples include:

• Trade credit from suppliers

• Bank overdrafts

• Working capital loans

• Commercial papers

• Invoice discounting or factoring

Short-term sources are in most cases more accessible than those of long-term and less formalities. But, they have higher rollover risks and can be costly when liquidity is tight.

b) Long-Term Sources:

Long term – The funds, received for a period exceeding one year is referred to as long term. They are used to form capital or long-term investments like land purchase, machine acquisitions, Construction of factories and product development. Examples include:

• Equity capital (shares)

• Debentures and bonds

• B ank or financial institution term loans

• Preference shares

• Retained earnings

Long term funds are necessary for the stability of the firm and its growth. But for the most part, they are contingent on submission of financials and credit, possibly regulators, and lots of would-if scenarios.

Illustration:

If a company needs to purchase ₹50 lakh of new machinery from a firm, it will need long-term finance (such as a term loan or an issue of shares). A seasonal producer requiring ₹10 lakh for purchasing raw materials in his peak season will require short-term credit,on the other hand.

Internal vs External Sources

This categorisation is depending on the source of the money.

a) Internal Sources:

That's money that the company generates. Internal sources Internal sources of PSII are the following:

• Retained earnings: Profits a company has collected but not passed along as dividends

• Disposal of non-productive or excess assets: Use and recycling of surplus plant and equipment or redundant land

• Work Capital cut: Faster collection on receivable or more efficient inventory management.

Autonomy is enhanced and internal loans do not require repayment. It would pay for itself, but it depends on how profitable or efficient the business is and might not be enough capital to raise in large amounts.

b) External Sources:

This also includes money that comes in from outside sources. External funding could be debt, equity or a mix of both. Examples include:

• Installation of shares to the public or in private case to investors

• Taking loans from commercial banks or development financial institutions

• Debenture or corporate bond referral

• Leasing from third parties

• Venture capital or angel investment

Funding to finance growth, to invest in technology and to enter new markets can only come from external sources. But they come at a cost, in terms of interest and transaction fees as well as compliance with disclosure rules.

3.1.2 Equity Financing – Shares, Venture Capital, Private Equity

On the other hand, equity funding is where you raise funds by selling shares (ownership) in your business. Shareholders are rewarded with dividends (as applicable) and participate in capital growth. Depending on the type of shares they own, they may also receive a vote in certain company decisions.

Forms of Equity Financing:

a) Equity Shares:

These are common stock held by the general public or private investors. Equityowners are the real owners of the firm and they undertake residual risk. As compensation, they can have the potential for outsized returns in times of profit expansion.

Illustration: A company floats 1,00,000 shares of ₹100 each and raises a capital of ₹1 crore. These shareholders now hold the company in part, and vote on important matters as well as receiving a share of profits.

b) Venture Capital:

It is essentially an equity investment to high-potential early-stage startups. Venture capitals usually provide both money and strategic direction, networks and governance know-how. In return, they get equity, and possibly a request for a board seat.

c) Private Equity:

While there are ways to benefit from the latter, private equity tends to invest in older companies than does venture capital. Private equity investors typically take control positions, are involved in running the businesses and can choose to reorganise or grow them ahead of an exit through a stock market flotation or sale.

Advantages of Equity Financing:

- No fixed repayment obligations
- Enhances the company's creditworthiness
- Excellent choice for high-risk projects that cannot be financed with debt

Disadvantages:

- Ownership dilution
- Dividends are not tax-deductible

• Demand by investors for sustained growth

3.1.3 Debt Financing - Debentures, Bonds and Term Loans

Debt funding entails borrowing from parties outside the business, which is to be repaid along with interest over a specified period. Debt, unlike equity, does not represent ownership in the company, it's a contractual commitment to be repaid.

Common Forms of Debt Financing:

a) Debentures and Bonds:

These are the debt instruments issued by a corporation to finance its long term capital. Tradable/bearer debentures are issued for another borrowed capital. These don’t carry interest, rather they are issued at a discount and redeemed in full with interest. Bond signifies a written promise to pay whereas debenture is an acknowledgement of debt. They can be either secured or unsecured and usually have a fixed rate of interest. These are the bondholders who are creditors and stand above than shareholders if a company is liquidated.

b) Term Loans:

Term loans are bank or institution borrowings typically scheduled for 3-10 years. These are paid back in instalments and will often be backed by company assets.

Illustration:

A firm takes loan of ₹5 crores at 10% p.a. for 5 years. Annual interest payment

= ₹50 lakh. If the corporate tax rate is 30 percent, what is the effective cost of debt?

Debt cost (net of tax) = Interest × (1 − Tax Rate)

= ₹50 lakh × (1 − 0.30) = ₹35 lakh

Advantages of Debt Financing:

• Interest is deductible, reducing the cost of capital

• No dilution of ownership

• Predictable repayment schedule

Disadvantages:

• Increases financial risk

• Earns no revenues that can be paid out currently as interest.Formosan 3G also pays your cash cost.

• Could have covenants limiting operational flexibility

3.1.4 Hybrid Financing – Preference Shares, Convertible Debentures

It has been seen that the financial needs are so large and so diverse as to be best financed by a wide variety of liquid instruments, with or without risk sharing. It is apparent from what has gone before that in many instances there will exist the need for such extensive amounts of funds and such a range of funds that it would seem practical to meet this need only through making available a diversity of forms of liquid instruments either with or with out risk sharing.

Hybrid finance refers to securities which possess characteristics from debt and equity, thereby providing adaptability for both the issuer and investors.

a) Preference Shares:

The auditor must make sure nonvoting specified shares provide fixed dividends and have precedence over voting equity shares in a liquidation. They can be cumulative (unpaid dividends are forwarded) or non-cumulative (unless dividend is declared by the board at the end of the year, it lapses). Some will be redeemable, others may be exchanged for equity.

b) Convertible Debentures:

These are debentures with an option to convert them into equity shares on the expiry of a predetermine period or an event. They act initially as straightforward debt with fixed interest. They turn into equity on conversion and thus, the shareholding pattern is affected.

Advantages:

• Little initial capital required than the pure equity

• Appealing to income and growth investors

• Defers ownership dilution

Disadvantages:

• Complexity in valuation

• Conversion boosts the equity base and dilutes control

• Preference dividends are not tax-deductible

3.1.5 Retained Earnings and Internal Sources

The retained earnings are the proportion of net income not paid out as dividends, but retained by the business. They are a self-enabling mechanism and show the ability of company to earn and employ internal resources to grow in the future.

Uses of Retained Earnings:

• Business expansion

• Asset replacement

• Research and development

• Debt repayment

Advantages:

• No interest or dividend costs

• No ownership dilution

• Reinforces financial autonomy

Limitations:

• May be inadequate for as when you have a large project

• Opportunity cost to shareholders

• Misuse or inefficient allocation possible

Example:

If a company's net profit is ₹10 crore and it distributes ₹4 crore by way of dividend, the balance amount left aside, which can be used for future needs is ₹6 crore. Retained earnings Retained retained earnings can eventually become a significant source of long-term f-nance.

Trade Credit, Leasing and Other Short-Term Financing

a) Trade Credit:

This is an agreement in which suppliers agree to be paid later for their products or services. It's among of the most common forms of short-term finance, particularly for inventory purchases.

b) Leasing:

Leasing is the lease of an asset, and leasing enables a company to utilize the asset without an obligation or no ownership. It makes periodic lease payments to the lessor. Under a finance lease, the lessee takes on the risks and rewards of ownership. The operating lease has a shorter term and the lessor maintains risks.

c) Other Short-Term Instruments:

• Bank bounced checks: Withdrawals higher than bank balance

• Factorisation: A business sells all or some of its receivables to a third party for cash now.

• Commercial paper: An unsecured promissory note issued by a creditworthy company

Advantages:

• Quick access to funds

• Minimal documentation

• Preserves long-term borrowing capacity

Disadvantages:

• High implicit cost

• Reliant on relationships and creditworthiness

• Low tenure can result in liquidity pressure

Did You Know?

"Trade credit is one of the largest sources of short-term finance for small and medium enterprises, often exceeding formal bank borrowing. It serves as an informal line of credit built on trust and repeated transactions."

3.2 Factors Influencing Choice of Financing

Financing is one of the most strategic financial decisions every business has to make. They do so by deciding when to use one form of capital (debt, equity, hybrid) over other sources of funding in terms of both financial and non-financial considerations. The choice not only affects cost of capital and financial risk, but also ownership structure, control, liquidity and value creation over time.

A number of key considerations need to be factored in when choosing a source of funding. Such factors are the cost of capital, risk of the company, control and ownership - effects, Flexibility of funding entities and availability of funds. Fit of finance with business model, cash flow structure, growth strategy and macroeconomic context is important to sustain.

The following sections elaborate on the most important factors affecting this choice.

3.2.1 Cost of Capital Considerations

Cost of capital is the price a company pays for money, either by obtaining debt or tapping external wealth. It is the floor that a business needs to clear in order to justify paying for its financing.

There is a cost to each form of financing:

• Cost of Debt (Kd) (net): This is the interest associated with borrowing. Debt is usually cheaper than equity because news of interest expenses are tax-deductible. Where Webster Define discount cost of debt as:

Kd = Interest Rate × (1 − Stakeholder Tax Rate)

Example: if a firm borrows at 10% and the corporate tax rate is 30%, then the after-tax cost of debt would be :

Kd = 10% X (1 − 0.30) = 7% p.a.

• Cost of Equity (Ke): The equity capital should reward employees for assuming risk with dividends and asset growth. Because dividends are paid out of after-tax earnings and entail more risk, the cost of equity is usually greater than the cost of debt. The preferred method to measure this impact is the Capital Asset Pricing Model (CAPM):

4 Ke = Rf + β(Rm − Rf)

where Rf = risk free rate, β = beta coefficient, Rm = market return.

Example:

Assume the risk-free rate (Rf) to be 4%, the expected return of the market (Rm) to be 10% and beta (\(\beta\)) for the stock is 1.2.

Ke = 4% + 1.2 × (10% − 4%)

Ke = 4% + 1.2 × 6%

Ke = 4% + 7.2%

Ke = 11.2% p.a.

- WACC (Weighted Average Cost of Capital) WACC is the average return which firm has to give to all its suppliers of capital.

WACC = (E/V)Ke + (D/V)Kd(1 -T)

where E = equity, D = debt, V= E+D, T= tax rate.

Example:

Suppose a company has:

- Equity (E) = ₹60 crore
- Debt (D) = ₹40 crore
- Cost of equity (Ke) = 12%
- Cost of debt (Kd) = 8%

• Tax rate (T) = 30% Then,

V = E + D = ₹60 crore + ₹40 crore = ₹100 crore

WACC = (60/100) x 12% + (40/100) x 8%(1-0.30)

WACC = 0.6 × 12% + (0.4 × 8%) × 0.70

WACC = 7.2% + 2.24%

WACC = 9.44% per annum

Sub-factors affecting cost of capital:

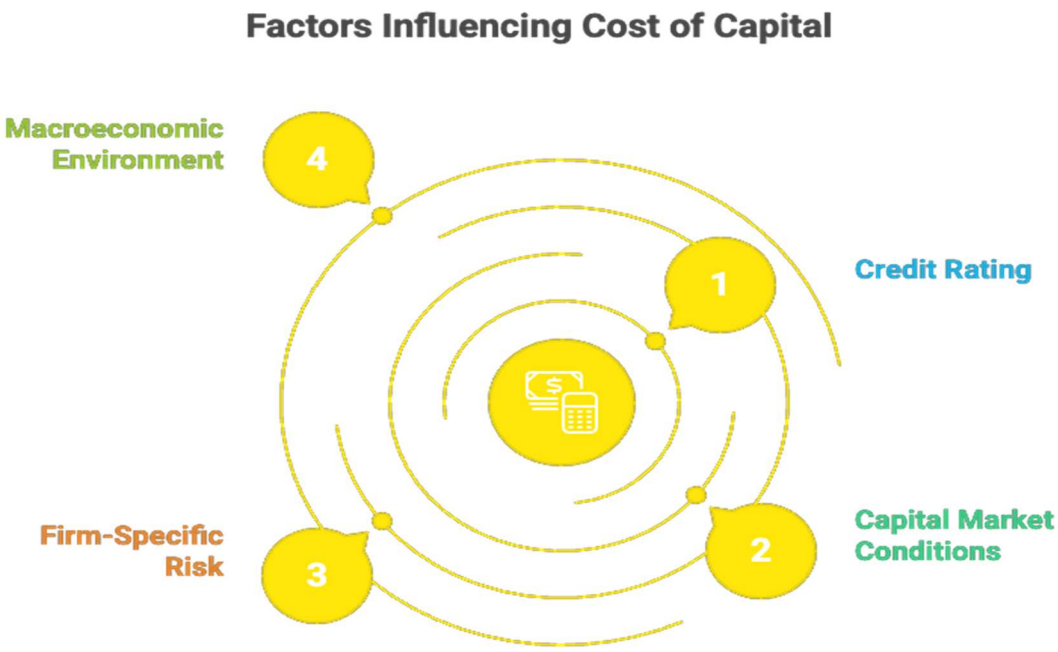
Credit rating: Higher ratings mean lower costs of borrowing.

Capital Market Climate: Bull markets could reduce cost of equity from high valuations.

Firm-Specific Risk: Firm-specific risk Firms with unstable earnings have to pay higher cost of equity.

Macroeconomic Conditions: The rates of interest, inflation and fiscal policies determine costs to debt as well as equity.

Companies want to minimize their WACC while maximizing their loans. The lower the cost of capital, better is the NPV of any investment project from a shareholder perspective.



3.2.2 Risk Profile of the Business

The nature of its financing decisions of an enterprise is greatly influenced by the financial risk endemic to the concern. The term “risk” in this case refers to the uncertainty about whether the company will be able to pay its debts and have enough left over for a payday.

The kinds of risks related to financing decisions:

Business Risk: This emanates the firm's operations. Firms in unstable sectors (such as oil and gas and airlines) are subject to greater earnings variability.

Business Risk: Concerns the amusement of debt. More debt causes the fixed interest obligations to increase and makes the firm more responsive to changes in earnings.

Liquidity Risk The risk that a company will not be able to meet short-term obligations.

Influence of the risk on funding decisions:

• High-risk company are particularly averse to borrowing, since fixed payments could squeeze liquidity. That might be worthwhile, said Chris Iacovella, president and chief executive of the Equity and Fixed Income trade group. “They may opt for equity because it does not require a mandatory repayment, even if more expensive,” he said.

• Companies with low risk can handle more debt in their capital structure, because they enjoy tax advantages and find it cheaper to borrow.

Example:

Take two companies – one, Firm A is a renewable company has steady sales and the other, Firm B is a technology startup with variable cash flows. Company A can take 60% debt in its capital structure without any problem. Firm B, however, may be required to be more exposed to the equity or convertible element lest they suffer any strain from periodic debt repayment.

Risk mitigation considerations:

• Diversification: Companies with multiple lines of business can safely use more debt.

• Hedging and Insurance: Financial instruments and insurance can partially control risk.

• Liquidity: Good liquidity provides some financial flexibility even when leverage is fairly high.

Ultimately, the level of risk that the firm is prepared to accept along with stability and predictablility of earnings and cash flows should be consistent with the what type, as well as how much financing will be used.

3.2.3 Control Considerations (Ownership Dilution vs Borrowing)

Part III The Role of Ownership in Controlling, Monitoring, and Financing the Firm Control is Fundamental Source: Financial Structure and Economic Growth First published 2009 Publisher Content Abstract No abstract available Copyright Information Blackwell Publishing Ltd. It decides who makes decisions in a company, and how this might change depending on which funds are used.

Equity Financing and Ownership Dilution:

When you give up a share of ownership for cash, that is equity financing. The more shares you issue, the less control new shareholders have. This may result in different governance, voting behaviour or strategic focus particularly where large institutional investors or venture capitalists are involved.

So if a startup founder owns 100% of the business and that is say, ₹1 crore in value for the stake, because they sold off 25% to an investor then technically you own only 75% and hence even when you take decisions/consent from an investor may be needed.

Debt Financing and Control Retention:

Debt creates a way for a company to raise money without giving over part of the ownership. Original owners can continue to determine strategy — so founders looking for independence may prefer debt. Nonetheless, too much leverage has the effect of adding financial risk and may result in covenants or interference from the lender.

Key considerations:

Voting Rights: Equity holders have the right to vote; debt holders do not.

Board Influence: No investor in the company wants to be on the outside looking in. Large equity investors typically want board seats or veto rights at least.

Covenants in Debt Contracts: While ownership is not diluted by borrowing, creditors can include financial covenants (e.g., having a particular interest coverage ratio) that limit management's freedom of operation.

Exit Strategy Fit: Investors may have a predetermined exit path such as an IPO or acquisition that will impact the long-term direction of the company.

Example:

In fast-growing startups founders typically prefer to do a convertible debenture in the beginning and kick dilution down the road. When the valuation situation is corrected, you raise equity at a higher valuation losing less ownership.

Control-related issues are particularly relevant in family businesses, founder-led private ventures or strategic collaborations. The most suitable funding combination requires a delicate balance between control, cost and financial viability.

3.2.4 Flexibility and Availability of Funds

Flexibility is the ease with which a firm can raise and manage funds to meet varying opportunities. Availability refers to the actual availability of eco-currency in the market place when needed.

Why flexibility matters:

• Changes in business cycles and working capital requirements

Businesses function in an ever-changing environment where demand, expenses, and cash flow flux with the economy--a season of the year, a time of month or week. In times of expansion or booming business, companies may require more working capital to buy inventory or fund receivables. And, conversely, during brief slowdowns they may need to reduce their spending or make up shortfalls. Second, financial flexibility refers to a firm's ability to modify its finance and operations seamlessly over the business cycle stages.

• Investment opportunities may arise suddenly

Markets change quickly. New technology, purchasing opportunity or market development may be available at any time. Firms with financial slack including, access to credit, available cash or unused debt capacity can move quickly and capitalize on high value opportunities, giving them a competitive edge over competitors who are less nimble.

(Some Economic downturns may necessitate a rapid restructuring or liquidity

During a recession or crisis in particular, participants can experience lower revenues, reduced access to credit, or even net losses. "Financial flexibility allows companies to absorb shocks, to deal with debt service requirements and reallocate resources," says Hubbard. It may mean, that you need to cut operating costs, that you have to renegotiate pay-back terms etc., or dispose of non-core assets in order to remain liquid.

A diverse funding model allows a firm to react quickly and inexpensively to these sorts of occurrences.

Examples of flexible financing instruments:

Revolving Credit Facilities: The facilities which allow the firms to draw, repay and then re-draw as required.

Trade Credit: It is possible time in tough periods.

Convertible Debt:A source of debt which has the option of converting into equity.

Importance of availability:

What's the point of even the cheapest source of finance if it is not available when needed? For instance:

- A small business with bad credit might not receive a bank loan.
- A startup will need to have demonstrated business model in place before it can raise equity investment.
- Strong companies can have trouble raising money from banks in weak economies.

Factors affecting availability of funds:

Firm s credit quality: Lenders and investors are attracted to strong balance sheets.

Reputation and history: Companies with a reputation for on-time repayment are more reliable.

Market environment: The state of financial markets, prevailing interest rates and the mood of investors are all factors affecting the fund supply.

Regulatory climate: Central bank rules, capital markets regulations and tax laws can impede or promote various forms of financing.

Example:

During the Great Financial Crisis, even companies with good fundamentals found it difficult to raise money because credit markets were frozen. Conversely, firms with access to internal accruals or revolving credit lines were able to manage the crisis well.

Over the long term, firms may also retain a balance of both short and long-term instruments, avoid over- leveraging and maintain relationships with numerous lenders and investors in order to maintain flexibility.

3.3 Importance of Appropriate Financing Mix

The optimal capital structure is the mix of debt and equity that is best for a company as determined by maximizing its value. Determining the proportion of capital to be raised from debt and from equity is critical, as it affects cost of capital, risk level, financial flexibility-the whole shareholder value perspective.

The capital structure should be optimized and the firm must have a good balance between the use of internal resources, short and long term need for funding. The difficulty is to find the best trade-off between cost of capital and financial risk management and firm value.

What are the key aspects which make financing mix a strategic financial decision, let's have a look at it.

3.3.1 Concept of Optimal Capital Structure

Best capital structure is the mix of debt and equity that yields the lowest weighted average cost of capital for a firm, and therefore results in the highest market value. The concept reflects the fact that different types of financing have varying costs and risks.

WACC is computed as:

WACC = (E / V) * Ke + (D / V) * Kd * (1 − T)

Where:

E = market value of equity

D = Market value of Debt V E + D

Ke = cost of equityKd = cost of debtT = taxrate

Debt has a cost (interest) that is usually lower than the cost of equity financing due to tax deductions for interest, but too much debt also increases financial risk and may also nurge insolvency. Equity has no fixed payments, but dilutes ownership and there are higher expected returns (as compensation for the increased risk).

Trade-off theory of capital structure According to the trade-off theory, firms need to weigh tax shield benefits of debt

along with the higher costs of bankruptcy and agency conflicts associated with a elevated leverage.

Capital structure is in the most ideal form when marginal benefit of debt and marginal cost of financial distress are equated.

Key considerations:

Firm-Level: Size, Revenues Stability and Growth opportunities

Industry snaps: Capital intensive (utilities) may be able to handle more debt

Macroeconomic factors: Interest rate, Inflation, and Mood of investor

Firm life cycle stage: Newer companies will be more reliant on equity, older ones more on debt

Example:

If the market cap of a company is ₹60 crore and it has debt of ₹40 crore, then the capital structure is 60:40 (market value of equity/debt). If its cost of equity is 14%, the cost of debt is 8% and the tax rate is 30%, what is the WACC?

WACC = (0.6 x 14) + (0.4 x 8 x 70%) = 8.4 + 2.24 = 10.64%

If by increasing the proportion to a 50:50 ratio further decreased WACC, the firm would move nearer to its optimum capital schedule.

3.3.2 Balancing Debt and Equity

Workforce charity: 97% of State's workers kick in to give Calgarians' equity fund a push To build strategic flexibility and financial stability, managers must carefully balance debt and the owner's funds. The capital structure decision need to be consistent with the firm's objectives, risk preference and market place conditions, as it is the starting point for a valuable strategic direction.

Strategic considerations when balancing:

Business type: Debt tends to be higher in capital-intensive industries with more stable cash flows.

Stable cash flows: Companies with variable earnings do not like debt.

Stage of growth: Early-stage companies use equity because they have no collateral.

State of the market: A rosy stock market may lead to equity offerings; high yields might make borrowing less attractive.

Example:

Let us say a company needs ₹100 crore to finance a project, it can think about:

• Debt amounting to ₹60 crore @ 9% p.a., and

• ₹40 crore through equity issuance

Interest on debt : ₹60 crore × 9% = ₹5.4 crore per annum. If the EBIT is ₹20 crore, what is the interest coverage ratio?

ICR = EBIT / Interest = ₹20 crore / ₹5.4 crore ≈ 3.70

This implies some borrowing headroom. Should the ICR Sin 1.5, the company may move to lower its debts for risk optimisation purpose.

Consequently, the optimal debt-equity mix should consider the company’s present financial capabilities as well as its projected strategic objectives.

3.3.3 Impact on Shareholder Wealth and Firm Value

The direct effects of financing decisions are considered on shareholder wealth, usually proxied by the company market price per share and firm value which equals to total equitymarket value plus all interest bearing debts.

The goal of financial decision making is to maximize shareholder wealth, and such a decision relies on the capital-structure choice made by the firm.

Pathways through which capital structures influence firm value:

Weighted Average Cost of Capital (WACC): Prima facie a lower WACC boosts the present value of future cash flows and therefore firm value.

Risk and Return from the Capital Structure: Earnings per share (EPS) may grow as leverage rises, but volatility grows too – on both EPS and stock price.

Market Signaling: Issuing equity might be a signal of overvaluation, issuing debt can be a signal of belief in future cash flow.

Dilution: Unless offset through proportional growth, both EPS and investor returns may be diluted by raising equity.

Example:

Say a company has the choice to raise ₹50 crore either via debt or equity. Its net income before interest and tax (BiT) is ₹10 crore at present. If it raises ₹50 crore through debt at 10 per cent, the annual interest to be paid on it would come to ₹5 crore. Assuming a 30% tax rate:

Net profit after interest and tax = ₹10 crore − ₹5 crore × (1 − 0.30) = ₹6.5 crore

If number of shares outstanding is 1 crore:

New EPS = ₹6.5 crore ÷ 1 crore = ₹6.50 (ii) Cost of new Equity Capital.

If, on the other hand, the company raises ₹50 crore of equity at ₹100 by issuing 0.5 crore new shares (total 1.5 crore), then it will have money with no interest cost to start with. As there is no interest, the entire ₹10 crore PBIT is taxed:

Net profit after tax = ₹10 crore × (1 – 0.30) = ₹7 crore New EPS = ₹7 crore ÷ 1.5 crore = ₹4.67

EPS would have been higher in the debt option over here but choice must account for additional financial risk with fixed interest commitment, burden of future revenue opportunity and certainly the capital strategy.

Other impacts of Financing Decisions:

• Debt discipline: Managers may be forced to allocate funds more effectively under pressure from debt.

• Flexibility and sustainability: An inappropriate mix of funding may result in economic distress, which negatively affects the shareholders' wealth.

Therefore, the financing selected would ideally be one that is and supports long-run value of the firm and shareholder aspiration.

3.3.4 Real-World Examples of Financing Mix in Companies

Abstract The hypotheses of capital structure seem to be more straightforward while investigating the theories through actual company practices. Many firms throughout the world have tried which or failed once experimented different financing mixes based on their business models and market circumstances.

Example 1: Tata Steel (India)

Tata Steel has in the past funded its acquisitions (like Corus in UK) through heavy borrowings. Even with the company's rapid expansion, it had run into trouble when commodity prices dipped and debt needed to be managed. Tata Steel has been reducing debt through the sale of non-core assets and building internal accruals to support its balance sheet over the years.

Key lesson: Use of debt can help boost gains during good times but also put companies in a bind when things go south.

Example 2: Apple Inc. (USA)

For years, Apple had a balance sheet that was almost devoid of debt and used retained earnings to finance operations and innovations. But in recent years, Apple started to issue bonds to pay for share buybacks and dividends — even though the company had a lot of cash parked overseas. This decision was a product of low interest rates and tax benefits.

Main takeaway: Even companies flush with cash can be strategic in their use of debt to best manage their capital structure and return value to shareholders.

Example 3: Reliance Industries Limited

For its huge investments in telecom (Jio) and retail, Reliance used a blend of equity and debt. Having accumulated high levels of debt, the company received over ₹1.5 lakh crore as equity from global investors to achieve a net debt free status in 2020. This change repaired investor confidence and restored share price performance.

Lesson: A well-executed transition of a financing mix can unleash shareholder value.

Example 4: Tesla Inc.

Tesla, in its early years, employed a mix of equity and convertible debt and tolerated dilution in order to fund aggressive R&D as well as production scaling. But each loss was just another ashen log on the fire, with investors and market valuation — important drivers to raising money at skillful terms — continuing to burn bright for Tesla.

Key takeaway: Equity might be something worth considering for high-growth companies to keep pushing innovation but without the pressure of fixed repayments.

These are all examples of the ways financing mix decisions are driven by differing industries, risk profiles and strategic objectives. Learning from such examples is likely to improve the capabilities of capital structure theory in practice.

Knowledge Check 1

Choose the correct option:

1. **What does an optimal capital structure aim to minimize?**
   a. Equity dilution
   b. WACC
   c. Asset turnover
   d. Operating cost
2. **Which of the following is a major advantage of debt financing?**
   a. Ownership dilution
   b. Dividend flexibility
   c. Tax shield
   d. No repayment
3. **A high debt-equity ratio generally indicates:**
   a. High liquidity
   b. Low leverage
   c. High financial risk
   d. Low asset turnover
4. **Issuing new equity may result in:**
   a. Lower EPS
   b. Lower dividend payout
   c. Higher leverage
   d. Tax deductibility

3.4 Summary

ϖ Investment decision is important in determining the liquidity, capital structure and profitability of a firm.

ϖ Sources of Funds can be categorized on the basis of period (Short – term and Long – term), ownership(Debt and Equity),origin (Internal and external).

ϖ Equity financing, such as share issuing and venture capital and private equity, results in the ownership dilution but no repayment obligations.

ϖ Debt financing means raising finance which must be paid back along with interest and provides tax advantages but raises financial risk.

ϖ Hybrid means a thing having two different nature i.e upright and downwards features/qualities (equity and debts). Hybrid financing instruments, such as preference shares and convertible debentures have the feature of both equity and debt instrument.

ϖ Sources of funding that are derived from within the company, such as those related to retained earnings: - they are less expensive, - but may be insufficient in term or quantity.

ϖ Trade credit, leasing and other short-term vehicles help working capital requirements as well as increase liquidity without any long term obligation.

ϖ Major determinants of firms' investment decision are cost of capital, risk profile, role of control and the source on funding.

ϖ The perfect capital structure is the one that combines debt and equity options to minimize the firm’s weighted average cost of capital and maximize firm value.

ϖ Actual firms adjust their composition of financing due to average practice, state in business and strategic objectives.

ϖ Funding determinations have direct implications for shareholdersâ€™ value, market valuation and sustainability in long-run.

ϖ A flexible and well structured financing plan facilitates growth, gives confidence to investor and ensures stability in financial matters.

3.5 Key Terms

Equity Raised – Money realized from the sale of stock and control.

Debt Financing – Raising of capital by offering creditors a promise to pay interest and to repay the amount borrowed.

Hybrid Instruments – Financial products which contain features of both securities and debentures.

Retained Earnings: Income that is not paid out as dividends but rather retained for the next period.

Cost of Capital – The rate of return that must be earned on new or at least incremental investments in order to maintain the market value of the firm's stock.

3 WACC (Weighted Average Cost of Capital) – The weighted-average rate the company is expected to pay to finance their assets.

Optimal Capital Structure – The perfect mix of debt and equity which lowers the firm's cost of capital.

Leverage The use of borrowed money to magnify profit or loss.

Ownership Dillution – A decrease in the proportion of ownership held by shareholders who are not issuing new equity.

Trade Credit – Short-term financing in which a supplier allows longer payment times.

Interest Coverage Ratio – A ratio that indicates a company's ability to pay interest on its outstanding debt, calculated as EBIT.

÷ Interest.

Convertible Bonds/Debentures - D ebt securities that are convertible into equity at a later date.

3.6 Descriptive Questions

Discuss the categorization of various sources of capital. Discuss with examples.

Compare cost, risk, and control of equity, debt and hybrid financing.

What is the impact of company's growth on financing choice?

Define optimal capital structure. What does this mean for the firm's value?

Examine the pros and cons of internal sources of finance.

What impact does the risk profile of a firm have on its financing decisions?

Give a couple of examples to illustrate how the mix of funding can affect shareholder wealth.

Examine the funding approach of an actual corporation and determine its success.

3.7 References

1. Brealey, R. A., Myers, S. C., & Allen, F. (2020). Principles of Corporate Finance. McGraw-Hill Education.

2. Damodaran, A. (2014). Applied Corporate Finance. Wiley.

3. Ross, S. A., Westerfield, R. W., & Jaffe, J. (2019). Corporate Finance. McGraw-Hill Education.

4. Pandey, I. M. (2021). Financial Management. Vikas Publishing House.

5. Van Horne, J. C., & Wachowicz, J. M. (2017). Fundamentals of Financial Management. Pearson Education.

6. Chandra, P. (2020). Financial Management: Theory and Practice. McGraw-Hill.

Knowledge Check 1

1. b. WACC

2. c. Tax shield

3. c. High financial risk

4. a. Lower EPS

3.8 Case Study

Background:

Niva Packaging Limited is a middle Indian manufacturing Company which supplies eco friendly packaging products. The company has been around for eight years and is now preparing to scale-up by setting up a new production capacity in Gujarat. The estimated total cost of expansion is ₹80 crore.

Niva has the following financials:

- Net worth: ₹120 crore
- Total existing debt: ₹50 crore
- Interest coverage ratio: 4.5
- Current debt-equity ratio: 0.42
- Expected EBIT from new Site: ₹18 crore p.a.
- Available internal accruals: ₹20 crore
- Cost of debt as percentage: 9% p.a.
- Cost of equity (estimated): 14% p.a.

Management is discussing the different ways in which it can finance its investment, namely through debt or equity or a combination of both. They're also worried about maintaining ownership control and being overly financially exposed.

Problem Statements

How will it affect cost of capital when you have to raise ₹60 crore and want to do so using 100% debt?

If the company decides to take 100% debt financing:

- Additional interest cost = ₹60 crore × 9% = ₹5.4 crore per year
- Current interest charge = ₹50 crore × 9% = ₹4.5 crore
- Yearly all interest = ₹ 4.5 crore + ₹ 5.4 crore = ₹ 9.9 crore
- New EBIT = ₹22 crore (old) + 18 crore(new project)=₹40 crore
- New Interest Coverage Ratio = ₹40 crore ÷ ₹9.9 crore ≈ 4.04

However, with a total debt of ₹110 crore, the debt-equity ratio is 110 ÷ 120 ≈ 0.92 and poses higher financial risk while new borrowing may remain constrained.

What is the impact of funding 60CR by way of equity issuance?

If the company raises equity financing:

• No additional interest burden

• The Equity price would bring about a more favourable return to shareholders at 14% earnining rate.

• Dilution of ownership: If shares are sold to outside investors, the control by current shareholders might be weakened

• While earning not increasing in similar ratio, EPS could fall

• But financial flexibility is enhanced, and risk of insolvency in the future diminishes

Is a 50:50 blend of financing fair?

If debt of ₹30 crore and equity 0f ₹30 crore raised :

• Extra interest cost = ₹30 crore × 9% = ₹2.7 crore

• Present interest cost = ₹50 crore × 9% = ₹4.5 crore Hanging Reverse Floater: • HRF will have two tranches one is fixed (RFR Fixed) and other floating (RFR Floating).

• Annual interest paying all = ₹4.5 crore + ₹2.7 crore = ₹7.2 crore

• Aggregate EBIT = ₹22 crore (present) + ₹18 crore (new project) = ₹40 crore

•Interest Coverage Ratio = ₹40 crore ÷ ₹7.2 crore ≈ 5.56

Other impacts:

• Less dilution vs Full equity financing

• Debt-equity ratio = (₹50 crore existing + ₹30 crore new debt) ÷ ₹150 crore equity (₹120 crore existing + ₹30 crore new equity) = ₹80 crore ÷ ₹150 crore ≈ 0.53 still moderate enough to be a comfortable level

• The composition provides a mix of cost effectiveness, control of ownership and financial flexibility, along with a high coverage ratio and moderate leverage.

Reflective Questions

When deciding upon its financing strategy, how should Niva Packaging balance between control and the cost of capital?

What are the dangers of highly leveraging debt in capital-intensive development projects?

How can appropriated reserves be used more effectively to reduce reliance on external financing?

Does a firm's position in its life cycle affect the financing mix? Explain with justification.

When should you choose financial flexibility over cost minimization?

Conclusion

Niva Packaging Ltd. has come to a crossroads in which their financing decision will affect how much they could grow and the level of risk they take on in the future. Although 100% of loans are the cost-effective source of finance (by means of tax shield), but it also over-leverages. Equity financing, as an alternative, is free from financial risks but it reduces the ownership percentage and might be more expensive in the long term.

A combination strategy, in which the firm funds ₹20 crore through internal accrual and raises ₹30 crore through debt and equity may provide a good trade-off. It brings balance to its capital structure, maintains a reasonable interest coverage ratio, minimizes short-term dilution and paves the way for long term sustainability. Finally, the combination of financing sources needs to be in strategic accordance with industry "best practices" and risk appetite.

FM Unit 4 V3.docx

Financial Management_MBA_2

Financial Management_MBA_2

ATLAS SkillTech University

Document Details

Submission ID

trn:oid:::3618:127127317

Submission Date

Jan 29, 2026, 6:45 PM GMT+5:30

Download Date

Jan 30, 2026, 10:36 AM GMT+5:30

File Name

FM Unit 4 V3.docx

File Size

192.0 KB

51 Pages

8,559 Words

44,582 Characters

3% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text
- Cited Text
- Small Matches (less than 20 words)

Match Groups

10 Not Cited or Quoted 3%
Matches with neither in-text citation nor quotation marks

0 Missing Quotations 0%
Matches that are still very similar to source material

0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

2% Internet sources
0% Publications
2% Submitted works (Student Papers)

Integrity Flags

1 Integrity Flag for Review

Hidden Text
73 suspect characters on 4 pages
Text is altered to blend into the white background of the document.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- **10** Not Cited or Quoted 3%
  Matches with neither in-text citation nor quotation marks
- **0** Missing Quotations 0%
  Matches that are still very similar to source material
- **0** Missing Citation 0%
  Matches that have quotation marks, but no in-text citation
- **0** Cited and Quoted 0%
  Matches with in-text citation present, but no quotation marks

Top Sources

2% Internet sources
0% Publications
2% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1	Internet	traditionalcatholicpriest.com <1%
2	Internet	bestbrainz.com <1%
3	Internet	au.wiley.com <1%
4	Submitted works	PES University on 2022-06-13 <1%
5	Internet	brightideas.houstontx.gov <1%
6	Internet	fastercapital.com <1%
7	Submitted works	Purdue University on 2025-03-23 <1%
8	Internet	www.classace.io <1%
9	Internet	www.im.natixis.com <1%
10	Submitted works	Colorado State University, Global Campus on 2023-08-13 <1%

Unit 4: Time Value of Money

Learning Outcomes:

1. **Explain the concept of the time value of money (TVM):**

Understand why money's value changes over time and how this principle guides financial decisions.

2. **Compute present value of cash flows:**

Learn to calculate the present value of single cashflows, annuities, perpetuities, and growing perpetuities.

3. **Determine future value of investments:**

Apply formulas to compute the future value of single cashflows and annuities for investment planning.

4. **Apply valuation techniques to financial securities:**

Use PV and FV concepts to assess the worth of bonds and shares under various scenarios.

5. **Differentiate between types of annuities and perpetuities:**

Identify ordinary annuities, annuities due, infinite annuities, and growing perpetuities with correct valuation.

6. **Interpret financial calculations for practical decisions:**

Relate PV and FV computations to real-world cases like retirement, loans, and capital budgeting.

7. **Analyze case studies to reinforce TVM concepts:**

Evaluate financial caselets and case studies to apply theoretical concepts in practice.

Content:

4.0 Introductory Caselet

4.0 Introductory Caselet

Arjun Mehta, a 30-year-old marketing professional in Mumbai, recently received a performance bonus of

₹5,00,000. While he is thrilled with this windfall, he is also puzzled about how to use it wisely. His options range from spending on lifestyle upgrades, investing in fixed deposits, purchasing stocks, or even partially pre-paying his home loan.

Arjun's father advises him to deposit the amount in a fixed deposit that offers a guaranteed 6% annual return. However, his colleague suggests investing in the stock market, where historical data shows potential returns of 10–12% annually, though with higher risk. Meanwhile, his financial advisor recommends considering systematic investment plans (SIPs) in mutual funds, which spread the risk across multiple assets and offer compounding benefits over time.

Arjun wonders: should he invest the lump sum immediately or spread it across monthly investments? If he opts for the fixed deposit, how much will his money grow to in 10 years? On the other hand, what is the present value of his investments if he aims to build a corpus of ₹15 lakhs in the future?

4 The dilemma brings him face-to-face with the fundamental concept of the time value of money (TVM)—that a rupee today is worth more than a rupee tomorrow due to its

potential earning capacity. By applying concepts such as present value, future value, annuities, and perpetuities, Arjun can make an informed choice aligned with his goals of wealth creation and financial security.

This case highlights the importance of evaluating different financial options not just based on returns, but also on timing, risk, and the power of compounding.

Critical Thinking Question:

If you were Arjun, how would you decide between immediate lump-sum investment and systematic periodic investments, considering both risk and the time value of money?

4.1 Present Value:A Single Cashflow

Sense of Present Value (PV) is one of the most simple finance to understand. Its largely founded on the notion that money's worth fluctuates with time because of things like inflation, avenues for investment and risk. If you understand PV that enables I think decision makers, investors, managers to decide how valuable money receivable or payable in the future is tomorrow.

This article 3 explains what PV is, how it’s calculated and its application to business decision making.

4.1.1 Concept of Present Value

The concept of time value of money (TVM) holds that if given the choice, one would prefer to receive a sum of due today rather than at a later date because it can be invested and earn interest, thus any amount of money is worth more the sooner it is received. This notion is what makes present value important in finance, since it adjusts future money flows to their current worth.

Why Present Value Matters

Opportunity Cost of Capital

Money has earning potential. If I hand you ₹1,000 today, you can invest it and earn interest, dividends or capital gains. The same ₹1,000 that you receive five years from now is not worth the same, because you lose out on the chance of growing it over those five years.

Risk and Uncertainty

Future cashflows are uncertain. This uncertainty is considered in present value by discounting them at a rate of return or discount factor.

Inflation Effect

Inflation devalues the purchasing power of money. ₹10,000 today will purchase more goods and services than ₹10,000 five years hence.

Decision-Making Aid

Managers, investors and individuals use PV to evaluate the quality of projects, bonds or loans and investments. It provides an equal basis upon which to evaluate alternative financial choices.

Simple Example

Suppose that you are delivered ₹10,000 five years from today. The reason is, if the rate of discount is 8% per annum then that future value has to be reduced to its present value in order to know what it is worth today. Without doing the math, you already know it will be less than ₹10,000 today, because money declines in value over time.

This clarifies the notion to be cautious about only future values, but also current values.

4.1.2 Formula and Calculation of PV

6 The formula for the present value of a single cashflow is:

$PV = FV \div (1 + r)^n$

Where:

• PV = Present Value

• FV = Future Value (which is the value to be received in future)

• r = Discount rate (Interest or discount rate, expressed as a decimal)

• n = Number of periods such as years, months etc.

Step-by-Step Explanation

Determine the future value (FV): This is the payment due at a specified future date.

Select the appropriate discount rate (r) This rate is generally a company's cost of capital — or the return available in the market – to measure how much growth is reflected.

Find the Time Length (n): It might be in years, months or quarters.

Use the formula: $FV / (1 + r)^n$.

Example 1: Basic Calculation

For instance, say you are going to get ₹50,000 in 3 years and the discount rate is \(10\%\).

PV = 50,000 ÷ $(1 + 0.10)^3$ PV = 50,000 ÷ (1.331) PV = $37,570 The present value of the annuity due will be $37,570

PV = ₹37,568 approximately

Therefore ₹50,000 received after 3 years is equal to approximately ₹37,568 today if the interest rate is 10%.

Example 2: Different Discount Rates

Future Value is ₹1,00,000 and time will be 5 years.

• At 6% discount rate:

PV = 1,00,000 / (1.06)^5 = ₹74,725

• At 10% discount rate:

PV = 1,00,000 ÷ $(1.10)^5$ = ₹62,092

By the way, observe how the PV diminishes as we increase discount factor. This is a reflection of the greater opportunity cost or risk.

Important Observations

• PV decreases with n (the longer I wait, the less PV).

• PV decreases as r increases (higher discounting of today's consumption level).

• PV is never greater than FV, unless r=0.

4.1.3 Applications of PV in Business Decisions

PV is a commonly employed idea in corporate finance, investing, and personal finances.

Investment Appraisal

Managers, when considering capital projects (such as opening a new factory), rely on PV to figure the value of future cash inflows. If the PV of inflows is greater than the cost of the investment, the project is profitable.

Example:

If an investment offers a return of ₹2,00,000 five years from now and if the cost of capital is 8%, then PV = 2,00,000 ÷ $(1.08)^5$ = ₹1,36,604

If the cost of project is ₹1,20,000 it is profitable.

Bond Valuation

Bonds pay interest (interest or coupons) and a principal amount at maturity. The PV acts to discount all future payments in order the find the fair price of a bond.

Loan and Mortgage Analysis

When banks make a loan, they calculate the PV of expected repayments to determine how much to lend and at what interest rate. Borrowers also compare PV of payments in order to make affordability judgments.

Retirement Planning

People project that they must save X today to reach Y in desired retirement corpus. PV calculations guarantee the value of savings is sufficient in real terms and after returns.

Business Valuation

Investors value expected future cashflows (earnings, dividends etc.) using a discount rate to come up with the present value (PV) for those cashflows before paying that as a purchase price.

Risk Assessment

The possibility to include risk into the PV by changing the magnitude of D is an interesting feature because a risk-averting decision maker can take this into account. More risky projects are discounted at higher rates, generating lower PV.

4.2 Present Value of an Annuity

Annuity – A financial instrument that pays at regular intervals for a set period of time. These monthly, quarterly or annual payments can vary in size. The current value of an annuity is the value today of a series of future cash flows from an investment, such as a savings account, considering that they will be discounted from profit expectations.

In this section we discuss Annuities (ordinary annuities), what they are and the different types of annuity, the present value of an ordinary annuit y, the 216 hindsight multiplier Copyright 2010 Cengage Learning.

annuity due value, as well as its applications in finance.

4.2.1 Concept of Annuity and Types (Ordinary, Due)

Concept of Annuity:

Annuity is a sequence of equal payments at a regular interval, for certain number of periods. Unlike one-time cash flow, there are many future cash flows with annuities. Since money has a time value, the next payment is less valuable when discounted to the present.

Annuities are prevalent in loan repayments, leases, jantri shop insurance premiums, pension plans and structured financial products.

Key Features of Annuities

- Uniform cash flows: Equal flows cash flow at regular intervals.

- Fixed intervals - Such types of fund-flow are made at regular interval of time (monthly, yearly etc).

- Finite or Infinite: Annuities may be for a finite period (a 10-year loan, for example), or indefinite (perpetuities).

- Payment date: Payment are made at the start or end of period.

Types of Annuities

Ordinary Annuity

o The payments occur at the end of each period.

o Examples: Repayment of a loan, Interest on bonds.

Annuity Due

o Payments are in advance.

o Examples: lease rentals, insurance premiums.

Other Classifications (for context)

o Perpetuities: An annuity with an infinite number of cash flows, such as preferred stock dividend.

o\ Growing Annuities: Payments grow at a constant growth rate each period.

Example of Distinction

If you pay ₹10,000 a year for 5 years then:

• It is an ordinary annuity if you pay at the end of each year.

• If you pay this amount at the start of each year, it is an annuity due.

This timing difference has important consequences in present value calculations as demonstrated in the following subsections.

4.2.2 The Present Value of an Ordinary Annuity

Ordinary annuity assumes that the payments are made at the end of period. Because every payment is in the future, they like everything else in finance are worth less than $1 at present compared to an annuity due.

Formula

1 where the formula for present value of annuity or an ordinary annuity is :

$$PV = PMT \times [1 - (1 \div (1 + r)^n)] \div r$$

Where:

- PV = Present Value of the annuity
- PMT = Payment per period
- r = Rate of discount per period
- n = Number of periods

Derivation Concept

The formula for this is by taking the present value of each payment and combining them. If payments are for 3 years, for instance:

PV = (PMT ÷ (1 + r)) + (PMT ÷(1 + r)^2) +(PMT ÷ (1 + r)^3).. and so on.

It reduces to the standard annuity formula for a constant\linebreak rate of interest.

Example 1: Loan Repayment

You take a loan of ₹1,00,000 to be paid back with ₹25,000 every year for 5 years. The bank has a discount rate of 8%.

The present value of their investments today is: PV = 25,000 × [1 − (1 ÷ (1.08)^5)] ÷ 0.08

7 PV = 25,000 × [1 − (1 ÷ 1.469)] ÷ 0.08 PV=25,000\,[1 - {\left(\frac{1}{1.469} \right)}]÷0.08

PV = 25,000 × (1 − 0.681) ÷ 0.08

PV = 25,000 × (0.319 ÷ 0.08)

PV = 25,000 × 3.987

PV = ₹99,675 approximately

This demonstrates that it is reasonable to expect the loan size to be close to the NPV of the payments.

Example 2: Pension Planning

A retiree plans to live on ₹50,000 a year for 10 years. If the discount rate is 6%:

$PV = 50,000 \times [1 - (1 / (1.06)^{10})] / 0.06$

$PV = 50,000 \times 7.360$

PV = ₹3,68,000 approximately

That would make the value of the pension approximately ₹3.68 lakhs today.

Observations

• Higher discount rates reduce PV.

• Longer annuitisation periods lead to higher PV, but at a decreasing rate.

• PV of an Annuity is always the present value of an ordinary annuity having same terms.

• Annuity due is also more common in rent, lease and insurance payments situations where the payment or capital amount has to be pay before hand time.

• The importance of the timing element in financial planning.

Did You Know?

"In many countries, pension payments are structured as annuities due rather than ordinary annuities. This is because retirees often require funds at the beginning of each period (such as the start of the month) to meet expenses, making the structure more practical for day-to-day living."

4.2.4 Practical Applications in Finance

Annuities present value is a popular method used in personal finance, corporate finance and investment analysis.

Loan Repayments

Banks formulate EMIs (Equated Monthly Installments) in the form of annuities. The present value (PV) of these paybacks is the amount disbursed. Interests rates allow banks to be profitable and borrowers understand pricing of their loans.

Lease Agreements

Firms frequently rent assets, such as equipment, vehicles or real estate. PV of lease payments helps companies that helps to make a decision whether leasing is cheaper than outright purchase.

Retirement and Pension Planning

People guess how much their pensions or retirement plans are worth today. Pension funds also employ PV of annuities in structuring viable payment plans for retirees.

Valuation of Financial Instruments

Some securities, like bonds, include regular coupon payments in annuity form. The fair price of bonds is determined using PV formulas.

Insurance Premiums

Life insurance and annuity products sold by insurance companies are also dependent to a great extent on the computation of an annuity PV. Insurers make sure they have enough in premiums to pay out tomorrow.

Capital Budgeting Decisions

Investing corporations evaluate the PV of estimated cash inflows almost always in form of annuities against the initial outflow. This is useful for assessing the feasibility of a project.

Education or Goal Planning

When perodically saving for education or other such purpose, families purchase products that apply annuity concepts to schedule how the savings should grow. The PV provides an estimate of how much we need to set aside today.

4.3 The future value of a single cashflow

The terms future value of mone (FVM)n are simple but very important to finance and investment because it increasingly stresses on decision- timing. If present value measures how much future cashflows are worth in today's terms, then future value is the flip side. It looks forward — illustrating what present-day money will grow to at some point in the future, given certain interest rates or returns.

This article explains the meaning of future value, the FV formula and how to calculate it using Projected Cash Flow.

4.3.1 Concept of Future Value

FV: finan The value lies in the future date of a sum of money (or investment), which is worth a certain amount at that point in time (after interest has been applied). It takes

into account the fact that money can earn a rate of return if it is invested, an idea with which TVM is consistent.

Why Future Value is Important

Wealth Growth Measurement

FV shows how money invested today will grow over time for both individuals and firms. It contributes to financial planning and goal-determinate.

Basis for Comparison

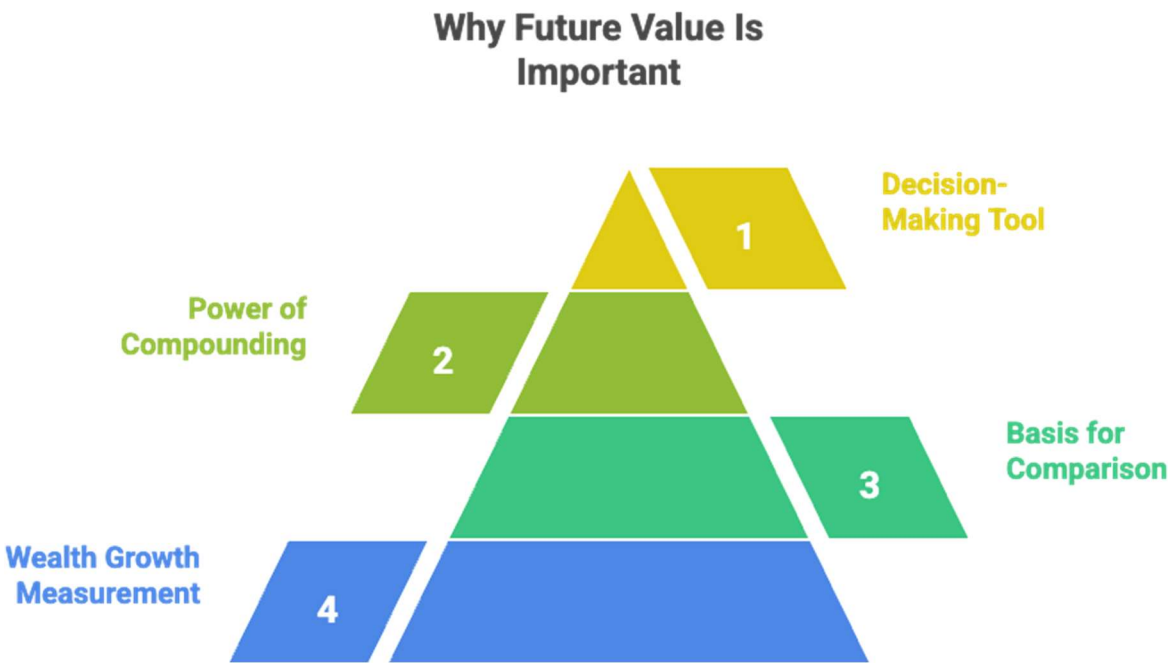
FV allows investors to compare alternative investment options when there is more than one competing opportunity for their money.

Power of Compounding

FV highlights the magic of compounding, where money earns money leading to exponential growth over time.

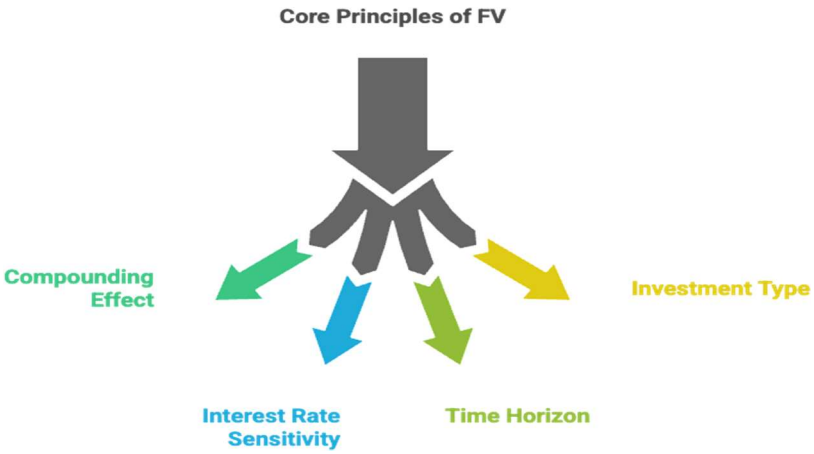
Decision-Making Tool

Firms employ FV to predict : a) the future value of retained earnings, b) the future value of reinvested profits or c) capital expenditures.



Core Principles of FV

- Compounding Effect: The longer the money is invested, the larger the FV.
- Interest Rate Sensitivity: Higher interest rates lead to a higher FV for the same principal.
- Time Horizon: The number of periods significantly impacts the FV.
- Investment Type: FV varies depending on whether returns are simple or compounded.



Simple Illustration

If you put ₹10,000 today at 10% interest per annum:

• The future value in 1 year is FV = ₹11,000 (₹10,000 principal + ₹1,000 interest).

• Time 2 years: FV = ₹12,100 (10,000+1,000+1,100 compounded).

This illustrates how compounding grows wealth more than simple addition of interest.

4.3.2 Formula and Calculation of FV

The future value formula for a single cashflow subject to compounding is given by:

$FV = PV \times (1 + r)^n$

Where:

• FV = Future Value

• PV = Present Value (or how much you invest, or the amount of a loan)

• r = interest or discount rate per period

• n = number compounding periods

Step-by-Step Process

Find the principal (PV): The present amount you have invested.

Find the interest rate (r): In decimal. For example, 8% = 0.08.

Determine the period number (n): The overall time when money is invested.

Use the formula: Rate x PV X $(1 + r)^n$.

Example 1: Basic FV Calculation

You deposit ₹50,000 at the rate of 12% annually for 5 years.

FV = 50,000 × $(1 + 0.12)^5$ FV = 50,000 × (1.762)

FV = ₹88,100 approximately

Therefore, ₹50,000 becomes approximately ₹88,100 in 5 years.

Example 2: Different Interest Rates

PV = ₹1,00,000 Time is 10 years

• At 6%: FV = 1,00,000 × $(1.06)^{10}$ = ₹1,79,085

• At 10%: FV = 1,00,000 × $(1.10)^{10}$ = ₹2,59,374

It's obviously that a little rise in interest, causes big gain for FV.

Example 3: Quarterly Compounding

PV = ₹20,000, r = 8% p.a., n = 4 years compounded quarterly. Quarterly rate = 0.08/4 = 0.02, Total periods = 4 X 4 = 16

FV = 20,000 × $(1 + 0.02)^{16}$ FV = 20,000 × (1.372) FV ≈ $27,440 What a lot of people do is add up all the money they have saved for retirement and multiply by how many years until they plan to retire just like I showed above.

FV = ₹27,440 approximately

This is an example of how the frequency at which compounding occurs increases FV.

Key Insights

•The higher the r, the faster is the growth.

• The compounding effect is more pronounced the larger n.

• Componing more often (monthly vs yearly) increases FV.

Applications of FV in Business Setting 4.3.3

The notion of FV is essential in money and banking, investment research and strategy and personal finance. Companies and people rely on this FV to forecast expansion and make rational choices.

Investment Planning

Companies project how much their current investments will grow in the future. If say, ₹5 crores is invested in a mutual fund offering 12% p.a for 7 years then In your example : FV = 5,00,00,000 × $(1.12)^7$ =

₹11.06 crore approximately.

Capital Budgeting

Managers frequently forecast FV of revenues or cost savings when making project selections. If a machine costing

If ₹1,00,000 produces annual savings of ₹25,000 which is reinvested at 10% per annum the FV after 5 years is important to know to evaluate the attractiveness of project.

Loan and Debt Management

FV is used by borrowers and lenders to ascertain repayment plans. For example, banks discount the X840 FV of outstanding flows to establish their total liability at maturity.

Retirement Planning

People predict what present savings will grow to over their working career. For example, investing

₹1,00,000 per annum at 10% for a period of 20 years becomes crores indicating the magic of compounding.

Valuation of Bonds and Securities

Whether a bond redemptions, share appreciation, or reinvested dividends, are all situations in which you're performing FV analysis. The future value of assets is a nebulous concept for investors to reckon with.

Business Expansion and Reinvestment

Revenues are frequently reinvested in operations. Future value calculations serve to project the future size of operations, based on today's retained earnings.

Education or Goal-Oriented Planning

Parents who are saving for their children's education do the math on how much today's money will become in 10–15 years. This ensures adequate planning.

Example in Business Context

A company depreciates machinery at the rate of 20% on cost per annmn. It is to replace its existing machinery costing ₹2,00,000 in 8 years and has set up a sinking fund to recover this amount at the end of that period totalling ₹2,00,000 earning 9 % p.a. FV = $2,00,000 \times (1.09)^8$ = ₹3,98,000 say Answer I hope this helps!

This implies the firm will have about ₹4 lakh after 8 years to address replacement costs.

4.4 Future Value of an Annuity

Future Value of Annuity The future value of an annuity serves the same function as the future value of cash flow except that it is applied to a series of fixed payments instead. An annuity is a series of payments that occur equally often, and its future value is the total amount to which all such payments grow before a particular time.

This part describes the future value of both an ordinary annuity and an annuity due, as well as their uses in finance.

4.4.1 Future Value of an Ordinary Annuity

10 A regular annuity assumes payments occur at the end of each period. The future value of a such an annuity is the value of all payments compounded at the desired future date.

Formula

2 the future value of an ordinary annuity is given by:

$FV = PMT \times [(1 + r)^n - 1] \div r$

Where:

• FV = Future Value of the annuity.

• PMT = Payment per period

• \(r\) = Interest rate for the period

• n = Number of periods

Derivation

The formula is based on adding each payment together at the end of the period: FV = PMT × $(1 + r)^{n-1}$ + PMT × $(1 + r)^{n-2}$ +... escorts in Dretskehire

This is a geometric series which reduces to the annuity formula given above.

Example 1: Retirement Savings

Let us assume that you invest ₹50,000 at the end of each year in a fund earning 8% p.a. for 10 years.

FV = 50,000 × [$(1.08)^{10}$ − 1] / 0.08

FV = 50,000 × (2.159) ÷ 0.08

FV = 50,000 × 26.991

FV = ₹13,49,550 approximately

So if you add up the ten annual deposits of ₹50,000, it's around ₹13.5 lakhs.

Example 2: Loan Repayment Fund

A firm wishes to deposit ₹1,00,000 at the end of each year for 5 years for repayment of a loan. Interest rate is 10%.

FV = 1,00,000 × (1.610) / 0.10

FV = 1,00,000 × 16.105

FV = ₹16,10,500 approximately

This demonstrates how regular annual payments build to a substantial fund.

Observations

- The Future Value increases with an increasing interest rate.

- The more often a payment is made, the sooner growth resumes.

- The FV of an annuity will always be greater than the amount of payments because you will have added interest.

4.4.2 Future Value of an Annuity Due

A due annuity is one with payments at the beginning of each cycle. Because outflows are occurring at the beginning of the period, payments get one more compounding for early investments than normal annuity. So the FV of an annuity due is always greater.

Formula

The formula is:

The formula for finding the future value of an annuity due (FV) is: FV (annuity due) = FV (ordinary annuity) × (1 + r).

Where (1 + r) is an adjustment factor due to upfront payment.

Example 1: Lease Deposit

If you deposit ₹20,000 at the start of each year for 6 years in a bank paying an annual interest rate of 12%.

Step 1: Find the FV of an ordinary annuity. FV = 20,000 × $[(1.12)^6 - 1] \div 0.12$ PV the present value (PV) is calculated as: PV = FV / (1 + r)n. where n is the number of periods in which the waiting time you perform a bit of algebra to get: FV × r[n(1+r) ... (n-2)] + r^2(n-1)(r+1)^nwhich gets easier if we use this expression for the sum before multiplying by FV.

FV = 20,000 × (1.973) ÷ 0.12

FV = 20000 × 16.442 FV = ₹3,28,840

2: Change to annuity due.

FV = 3,28,840 × 1.12 = ₹3,68,300 (approximately)

Example 2: Insurance Policy

If you make a payment of P15,000 at the start of each year for 8 years (earning 10% p.a. return): Step 1: FV(ordinary) = P15,000[$(1.10)^8$ – 1]/0.10

= 15,000 × 8.531 = ₹1,27,965

Step 2: FV (due) = 1,27,965 × 1.10 = Rs₹1,40,761

Annuity due therefore leads to greater future value since each payment's success adds an extra year of returns.

Observations

- FV of annuity due is > FV of ordinary annuity at same terms.

- Frequent occurrence in leases, insurance premiums and advance payments.

- ideal for your goals that require upfront cash outlays but also offer more accumulation.

4.4.3 Applications of FV of Annuities

The notion of FV for annuities has various applications in personal finance, business strategy and investment planning.

Retirement Planning

We calculate FV of annuities to know tomorrow the wealth we will have in our hand on 2(body) wedding. For example, saving a little each month for decades can grow into millions because of compounding.

Education Planning

Parent who contribute regularly to save for children's future education costs. By computing FV, your friend can know what his contributions will grow to.

Loan Repayment Funds

Corporations establish sinking funds by making annual deposits of a fixed amount to amortize long-term debt. The FV formula makes sure that sufficient funds have accumulated at the end of the period.

Lease and Rental Agreements

FV of annuities is frequently used by tenants or lessees to pre-determine payments. Firms also compare the ways they can lease or buy the assets.

Insurance and Pension Schemes

Annuity products are designed by insurance companies keeping eye on FV of periodic premium. This calculation is also used by pension plans when formulating payouts that can be supported over time.

Capital Budgeting

Managers consider investments that involve the periodic outlay of cash or receipt of cash. FV is employed to evaluate the accumulating future of these flows.

Goal-Oriented Savings

FV of annuities helps households who are saving for weddings, down payments on property, or to travel determine how much they need to put away every month.

Example: Business Expansion

A firm invests ₹5,00,000 per annum in a reserve fund earning 9% interest for 7 years.

FV = 5,00,000 × [(1.09)^7 − 1] ÷ 0.09 \(\normalsize \Rightarrow FV = 5,00,000 \times0959. D Taking the secant line passing through t=7 with slope Approximating with the tangent line at t=10 we get: (accurate to seven digits).751\).

FV = 5,00,000 × 8.30

FV = ₹41,50,000 approximately

This corpus can be tapped for funding further expansion, so it doesn't have to borrow.

"Activity: Planning Your Future Savings"

Imagine you plan to save ₹25,000 every year for 12 years to purchase a holiday home. Assume an investment return of 10% annually. First, calculate the future value if payments are made at the end of each year (ordinary annuity). Next, calculate the future value if payments are made at the beginning of each year (annuity due). Compare the results and discuss how timing of cashflows influences financial planning decisions.

4.5 Present Value of an Infinite Annuity

An infinite annuity, also known as a perpetuity, is an endless series of equal payments with no end date. Unlike with standard annuities or annuities due, which terminate after a certain time frame, perpetuities are valued on the premise that payments will never cease. In financial practice, perpetuities are useful in the case of an instrument with perpetual cash flows; many consol or preferred stock issues may be modeled as examples of perpetuities.

This section discusses perpetuities what they are, the formula for calculating them and how to use them in finance.

4.5.1 Concept of Perpetuities

Defining Perpetuities

A perpetuity is a sequence of payments that continues indefinitely and may be annuities with an infinite number of terms. These payments are for fixed sums, are periodic and are reasonably expected to be made regularly for an indefinite period. The fact that the time value of money exists means that PV is finite: the payments become smaller as we move past each payment, finally reducing to a finite value.

Key Characteristics

Infinite Duration

No payments cease; they go on forever.

Fixed Payment Size

Each old age consumption and our cash payment is time – dynamic intensity.

Regular Intervals

As with ordinary annuities, payments are made annually 5 times a year or 20 times a year.

Finite Present Value

While payments never end, the present value converges because each successive payment has less value to us since it's a payment in the future.

Why Perpetuities Are Important

• Easy Method of Valuation: Dividend discount model is based on perpetuity which can easily be used to dtermine the price of an eauity through simple methods.

• Financial Planning: They assist in gauging the value of income steams perceived to be interminable.

• Long-Term Assets Explained: It gives an explanation of the instruments for which maturity does not happen, but uniform cashflows are generated.

Example of the Concept

Let us pretend that a charco receives ₹1,00,000 every year from a donor forever. Although the payments can go on forever, we can still calculate their present value provided that we have a rate at which to discount it (let's say that this is 5%). So the charity has a concrete method to evaluate the current value of this essentially limitless future income.

Additional Perspectives

• No stream of payments is really forever, but perpetuities are a convenient financial abstraction for long-lived assets like land leases, charitable endowments or some types of preferred stock.

• Economists and studious analysts frequently model very long finit cashflows as perpetuities for the sake of convenience.

4.5.2 Formula and Calculation of Perpetuities Formula

8 The expression for the present value of a perpetuity is:

PV = PMT ÷ r

8 Where:

• PV = Present Value of the perpetuity

• PMT = Fixed periodic payment

• r = Discount rate or the interest rate per period of time

Derivation of the Formula

A perpetuity basically is the sum of an infinite series:

$PV = (PMT / (1 + r)) + (PMT / (1 + r)^2) + (PMT / (1 + r)^3) + ...$

This infinite geometric series converges to the convenient equation PV = PMT / r. Key Assumptions 1.

Payments are equal in size.

The discount factor is constant and positive.

Payments continue indefinitely.

Example 1: Simple Calculation

Example: Consider a company issuing preferred shares that yield an annual dividend of ₹10 in perpetuity. If investors have a minimum return of 5%, the PV is:

PV = 10 ÷ 0.05 = ₹200

So the price of each share 200 today.

Example 2: Higher Discount Rate

If you discount that same dividend at 10% for ₹10 a year:

PV = 10 ÷ 0.10 = ₹100

Present value differs greatly for a high rate of discount, which shows you how sensitive perpetuities are to the rate at which we discount.

Example 3: Institutional Endowment

A trust has transferred a sum of ₹ 500,000 to a university in perpetuity. At 6% of discount: PV = 5,00,000 ÷ 0.06 = ₹83,33,333

This value is the worth of endless payments today.

Observations on Formula Use

• The PV drops widely as r becomes larger.

• If r = 0, PV would be to infinity and that is unrealistic.

• While the formula is straightforward, it is potent in pricing a wide variety of financial instruments.

4.5.3 Practical Applications (e.g., Consol Bonds)

Consol Bonds

The best-known example of perpetuity is the British Consol Bond, introduced in the 18th century. These bonds were not redeemable and paid fixed coupons forever. Investors simply assessed their value through the perpetuity formula.

For example, the PV of a consol paying £3 p.a. and with a discount rate of 6% is: PV = 3 ÷ 0.06 = £50

Preferred Stock Valuation

Some preferred shares feature fixed-payment dividends and no maturity date. For instance, the PV of a preferred share paying ₹8 p.a. at an 8% required return will be 8 ÷ 0.08 = ₹100. It is a common approach in equities markets.

Charitable Endowments

Foundations typically reserve money to produce annual payments in perpetuity for purposes like scholarships or health care. Institutions compute the present value of the needed funds by assuming that donations are perpetuities.

Example: To provide a minimum of ₹1,00,000 per year for scholarship in perpetuity at 10% rate of return, the endowment required is: PV = Annual scholarship desired ÷ r = 1,00,000 ÷ 0.10 = ₹10,00,000

Perpetual Leases

A handful of leases, often in traditional law systems, involved payments that continued indefinitely. They can also be valued using the perpetuity model.

Business Valuation

Finally, analysts usually assume that a company will generate steady cash flows in perpetuity after a so-called “terminal” stage (this is referred to as the terminal value portion of the Discounted Cash Flow analysis). This terminal value is a present value of perpetuity.

Example: If the company’s cash flow is estimated at ₹50 crore annually for ever and if the discount rate is 12% then terminal value = 50 ÷ 0.12 = ₹416.67 crore.

Government Finance

Sometimes tax revenue, royalties, or other government receipts are modeled as perpetuities to simplify the budgeting process.

Observations

• Perpetuities are an ideal they’re theoretical... but also a financial modeler’s best friend very useful.

•The discount rate assumptions are very important sensitivity to changes make large differences to valuations.

• In reality, however, perpetuity models can be used as a rule-of-thumb for very long term (finite) cashflows.

4.6 Present Value of a Growing, Infinite Annuity

The growing infinite annuity, or also known as the growing perpetuity is an advanced financial term to analyze cashflows which goes on perpetually but increases at a constant rate every period. Unlike the standard perpetuity, which maintains constant

payments, a growing perpetuity has each payment increase by an amount over time. This is an important idea in valuation models such as investments with very long lives, company valuations and cash flows that increase at a constant rate for an extended period of time.

THE GROWING PERPETUITY In this section, we discuss the growing perpetuity concept, formula and its determination as well 106.

applications in business valuation.

4.6.1 Concept of Growing Perpetuity

Definition

A growing perpetuity is an annuity which makes cash payments at regular intervals and grows at a constant rate that occurs on the occurrence of each payment period, but in contrast to a simple perpetuity, the payment never ceases. This makes it more appropriate for financial instruments that increase income/dividend over time as opposed to a constant amount.

Characteristics of a Growing Perpetuity

Infinite Duration

But rather than for a finite number of periods, until the windmill wears out or at some future date, say, these are in perpetuity.

Constant Growth

Payments increase by some fixed value (g), which may represent inflation, growth in the economy, or expansion of a company.

Finite Present Value

It is also known that if you have infinite cash flows, the present value would even be finite only when g (growth rate) is less than r (discount rate).

Dependence on r and g

It is critical how the discount rate compares with the growth rate. When g → r, the present value approaches ∞ and when g > r, the formula also does not hold good because it will blow to infinity.

Why It Is Useful

- Many financial assets, such as stocks and dividends, rise over time.

- Better models inflation-adjusted cashflows than fixed perpetuities.

- A more commonsense metric for valuing businesses indefinitely into the future.

Illustration of the Concept

Suppose a company pays ₹10 of dividend this year and is expected to grow at an annual rate of 5%. For example, if an investor needs a return of 10%, then he or she will expect that the dividend payout next year would be ₹10.50, and the year after would be ₹11.025, for ever more. The growing perpetuity formula enables investors to determine the present value of no other than all such growing dividends.

4.6.2 Formula and Calculation of Growing Perpetuity Formula

The present value of a growing perpetuity formula is:

PV = C ÷ (r − g)

Where:

• PV = (Growing) Perpetuity Value.

• C = Cashflow to be received in the previous period (usually payment for next period)

• r = Discount or required rate of return

• g = Payments growth rate (must be less than r)

Key Assumptions

Growth rate remains constant forever.

There is a greater discount rate than growth rate (r > g).

Payments occur at regular intervals.

Step-by-Step Process

Determine the cashflow that you would expect to receive in a future period (C).

Determine the discount rate (r).

Calculate the constant growth rate (g).

Using the formula: FV = 1st Cashflow / (r – g)

Example 1: Dividend Valuation

A firm is expected to pay an annual dividend of ₹5 next year. Dividends are expected to increase at 6% per year and investors demand a return of 10%.

PV = 5 ÷ (0.10 − 0.06) PV = 5 ÷ 0.04 = ₹125

Therefore the Banzai Corp's stock value (from increasing perpetuity formula) is ₹125.

Example 2: Inflation-Linked Income

1) Let's say a trust pays ₹1,00,000 per annum but the payment increases 4% to keep up with inflation. If the discount rate is 9%, then the PV =

PV = 1,00,000 ÷ (0.09 − 0.04)

PV = 1,00,000 ÷ 0.05 = ₹20,00,000 pv (present value)= po * A/I Where PV= Present value Po is known as the flower difference in the payment schedule I The interest is nothing but i/n n also called payment matrix.rate so all other values you know for calculate present value.pk=20 laksLETEUSE!!

The unlimited stream of payments is currently worth ₹20 lakh.

Immunoresponsiveness to Growth Rate Example 3: Immunoresponsiveness to Growt h Rate

For instance, if dividends at the rate of ₹5 are discounted at different rates such as with r = 12%:

• At g = 2%, PV = 5 ÷ (0.12 − 0.02) = 5 ÷ 0.10 = ₹50PV = $50 Answer is D.

• At g = 5%, PV = 5 ÷ (0.12 − 0.05) = 5 ÷ 0.07= ₹71.43

• At g = 10%, PV = 5 ÷ (0.12 − 0.10) = 5 ÷ 0.02 = ₹250

PV is very sensitive to g, and even a slight variation in this value results in intense changes for its magnitude indicating the importance of g on valuation.

Observations

• If r = g then we have PV would undefined (denominator = 0).

• If g > r, PV would be infinite, which is not realistic.

• Thus, the model breaks down except discount rate is greater than growth rate.

4.6.3 Applications in Business Valuation

Growing Perpetuity Growing perpetuity theory is commonly applied in finance and used to value stocks, business dividends forever and projects that has growing free cash flow factor.

Dividend Discount Model (DDM)

The simplest and most common use of the formula is in titling valuation of equity shares using so-called Gordon Growth Model with constant dividend growth model.

Stock price = Next year's dividend (r − g)

For instance, if a firm's D 1 = ₹15, g = 4%, and r s = 10% stocks price = 15/ (0.10 − 0.04) = ₹250 htmlentities|text= }}.

Terminal Value in DCF Analysis

In the context of discounted cashflow (DCF) valuation, after projecting cashflows for 5–10 years simply by assuming that growth continues forever. Terminal value is an estimation of a business or an asset's value beyond the projected forecast period, which can be calculated in three different methods.

Valuing Perpetual Royalties or Licenses

It is characteristic of a number of businesses with indefinite licences, patents or royalties that the payments will rise steadily with demand or inflation. This can be seen as a growing perpetuity.

Real Estate Valuation

Some commercial properties are rented at leases with linkages to inflation or a fixed annual escalation and for such cases this model can be used since rental income grows perpetually at a constant rate.

Retirement and Endowment Planning

Institutions like universities and trusts often adopt growing perpetuity models to value endowment funds when annually paid amount is adjusted for inflation.

Did You Know?

"The Gordon Growth Model, which is essentially the application of a growing perpetuity, is one of the most widely used methods for stock valuation. It was first proposed in the 1950s and continues to be a cornerstone of modern corporate finance, especially in equity research and portfolio management."

4.7 Valuation of Bonds and Shares

Security valuation is one of the most important topics in finance. It requires us to value financial assets, such as bonds or stocks, both of which are actively traded in the capital markets. Accurate valuation is crucial to investors, managers and policy makers as it constitutes a reference point for the investment, financing and dividend decisions.

In this chapter, we will develop the valuation concepts applied to both bonds and shares before introducing further detail on other forms of security valuation, such as the dividend discount model, price–earnings ratio approach and application of security valuation methods.

4.7.1 Bond Valuation (Concept, YTM, Coupon Bonds)

Concept of Bond Valuation:

A bond is a type of fixed-income investment that reflects a loan made by an investor to a borrower — which is most commonly corporate or governmental. It pays interest (called coupon) on a regular basis and at maturity the principal is repaid. The value of a bond is the present worth of all of its cash flows, discounted at the applicable interest rate.

Components of Bond Valuation

Coupon Payment (C): The periodic interest payment made on the bond.

Face Value (F): This is the value to be repaid at the end of maturity, amounting typically to ₹1,000 or something similar.

Discount Rate (r): This is also referred to as yield this indicates the minimum rate of return.

Maturity Period (n): The number of years to when the principal will be repaid.

General Formula

Price of Bond = Present Value of Coupons + Present Value of Face Value P = [C x (1 - (1 + r)^-n) / r] + [F / (1 + r)^n]

Yield to Maturity (YTM)

YTM is the ratio of a bondâ€™s annual interest payment to its price, it represents the discount rate applied to future interest and principal payments to determine present value. It is the investment industry's gold standard for measuring a bond's return.

Example 1: Coupon Bond Valuation

One bond is having face value of ₹1,000; interest rate: 8% per annum and time to maturity: 5 years with a required return of 10%.

C = $ 80, F = $1,000, r = 10%, n = 5

$P = [80 \times (1 - (1.10)^{-5}) \div 0.10] + [1,000 \div (1.10)^{5}]$

= [80 x 3.791] + [1,000 / 1.610]

= 303.28 + 620.92 = ₹924.20

Therefore, the bond is priced at less than its face value and is considered a discount bond. Example 2: Premium Bond

If the SML should be 6% and not 10%:

$P = [80 \times (1 - (1.06)^{-5}) \div 0.06] + [1,000 \div (1.06)^{5}]$

= [80 × 4.212] + [747.26]

= 336.96 + 747.26 = ₹1,084.22

This bond's trading price is over its face value, thus it being a premium bond. Observations

- If coupon rate > required return, bond sells at a premium.
- If coupon rate g, value is finite.
- If r ≤ g, model is invalid.
- Predominantly used in practice for equity valuation.

4.7.4 Price-Earnings Ratio Method

P/E Ratio Method is a way of valuing a company's shares based on the current market price in relation to its per share earnings. It is so popular because it connects valuation specifically to profitability.

Formula

Price per share = EPS × P/E Ratio

Where:

• EPS = Earnings per share

• P/E Ratio = This price-to-earnings multiple is, in some cases, industry averages or peer companies.

Example 1:

If EPS = ₹20 and P/E ratio = 15, then Price = 20 × 15 = ₹300

Example 2:

Two parallel companies in the same industry:

• Assuming Firm A has EPS = ₹15, P/E = 12 → Price = ₹180

• Firm B has EPS = 10, P/E = 20 → Price = ₹200

Even though the EPS is lower, Firm B is trading at a higher price because of its superior growth prospects (as represented by the higher P/E).

Limitations

• Fraud related to earnings per share is sensitive to accounting practices.

• Assumes steady P/E multiples, which might not be the case.

• Ignores dividend policies.

4.7.5 Practical Applications of Security Valuation

The valuation of bonds and shares is an essential element in corporate financial practice as well as investment management.

Applications in Bonds

Investment Analysis: Bond valuation is used by investors to make investment decisions about whether the market price of a bond is overvalued or undervalued.

Portfolio Management :Aids in balancing fixed-income portfolios for best yields.

Credit Risk Analysis: Compares yields and prices to help evaluate default risk.

Applications in Shares

Equity Research: Analysts make buy/hold/sell recommendations based on valuation models.

Mergers & Acquisitions: Valuation sets a standard for bargaining acquisition prices.

Capital Budgeting: In a WACC calculation, firms use stock valuation to determine the cost of equity.

Dividend Policy: Indicates whether shareholders' value is increased through retention of earnings or dividend payout.

Broader Financial Implications

- Valuation is critical to regulators as they monitor market efficiency.
- It can help to generate investor confidence and market liquidity.
- Fair corporate governance tool.

Knowledge Check 1

Choose the correct option:

1. The value of a bond is equal to:

a) Coupon only

b) Face value only

c) PV of all cashflows

d) Yield only

2. The Gordon Growth Model assumes:

a) Zero dividends

b) Constant growth

c) Declining growth

d) Fixed earnings

3. A bond trades at a discount when:

a) Coupon > yield

b) Coupon < yield

c) Coupon = yield

d) Price = par

4. The P/E ratio method values shares based on:

a) Book value

b) Dividends

c) Earnings multiple

d) Face value

5. Preference shares are valued similar to:

a) Equity shares

b) Perpetuities

c) Futures

d) Options

4.8 Summary

ϖ The time value of money (TVM) is the cornerstone of all financial decisions, as it assumes that money today is worth more than the same amount in the future.

ϖ The concept of Present Value (PV) allows reduction of anticipated streams to present values.

ϖ Future Value (FV): future value estimates the value of current cashflows in future by considering the impact of compounding effects.

ϖ A normal annuity has end-of-period payments, while an annuity due has beginning of period paymenls.

Perpetuities are annuities that never mature or terminate, and they have fixed payments in perpetuity; their price is found using a simple PV formula.

ϖ Growth perpetuity enables growing payments in a perpetual fashion at constant rate and is the basis for advanced valuation techniques such as the Gordon model.

ϖ Valuation of bond is by discounting coupon payment and redemption value based appearance yield to maturity (YTM) as a major parameter.

ϖ Preference shares are like perpetuities because of constant dividends but equity shares value is determined by dividend and earnings model.

ϖThe Dividend Discount Model (DDM) A method used to value equity shares by discounting expected dividends to the present.

ϖ The relative PriceEarnings (P/E) ratio approach relates share value to earnings multiples compared with industry norms.

ϖ Security valuation also implies decisions on investments, acquisitions and Corporate governance.

PV, FV, annuities, perpetuities -- these are all basic concepts in financial analysis and long-term planning.

4.9 Key Terms

Time Value of Money (TVM): Money today is worth more than money tomorrow.

Present Value (PV): The value today of a future cashflow, discounted by some suitable price.

Future Value (FV) : Is the value of a cashflow at an specific future time including compounding.

Annuity: Regular payments at the end of a period.

Annuity Due A series of equal payments at the beginning of each period.

Perpetuity: A never-ending series of constant payments.

Annuity (Growth) Perpetuity: A perpetual series endowed at a constant rate.

5 Coupon Rate: The fixed annual interest rate on a bond, expressed as a percentage of the face value.

Yield to Maturity (YTM): The rate of return if a bond is held until it matures.

Preference Share: A share with a fixed dividend priority over equity holders.

Dividend Discount Model (DDM): A model which values a stock as the present value of expected dividends.

9 Price–Earnings Ratio (P/E): A valuation ratio of a company's current share price compared to its per-share earnings.

4.10 Descriptive Questions

Discuss time value of money and its significance in financial decisionmaking with illustrations.

Explain the difference between PV and FV. Provide numerical illustrations.

Differentiate between ordinary annuity and an annuity due with examples.

What is the formula of present value of perpetuity? Illustrate with an example.

Describe what is meant by a growing perpetuity and its uses in business valuations.

What are the principal Bond Valuation Methods? Discuss with formulas and examples.

Dividend Discount Model and Price–Earnings Ratio Share Valuation instructions Compare and contrast Dividend Discount Model from the tradition share valuation method you are familiar with that is, the price–earnings ratio.

Discuss the uses of security valuation in a business context.

4.11 References

1. Brealey, R. A., Myers, S. C., & Allen, F. – Principles of Corporate Finance, McGraw Hill.

2. Damodaran, A. – Investment Valuation: Tools and Techniques for Determining the Value of Any Asset, Wiley.

3. Ross, S. A., Westerfield, R. W., & Jaffe, J. – Corporate Finance, McGraw Hill.

4. Van Horne, J. C., & Wachowicz, J. M. – Fundamentals of Financial Management, Pearson.

5. Pandey, I. M. – Financial Management, Vikas Publishing House.

6. Khan, M. Y., & Jain, P. K. – Financial Management: Text, Problems and Cases, McGraw Hill.

Knowledge Check 1

1. c) PV of all cashflows

2. b) Constant growth

3. b) Coupon < yield

4. c) Earnings multiple

5. b) Perpetuities

4.12 Case Study

Background

Mr. Rohan Sharma aged 40 years is given ₹ 50 lakhs as inheritance by his deceased father. He would like to use the money wisely and secure his family's financial future. He consults financial advisor, who tells him that he has a number of investment options like buying government bonds, investing in dividend-paying shares or thinking about preference shares. And all of these can only be learned if you have a solid grasp on valuation.

Rohan's financial goals are:

- An annual income to support a family.
- Long-term capital appreciation for retirement growth.
- Spread betting between save havens and growth-oriented assets.

The counselor finally chooses to give Rohan three problems, which will help him get his concepts clear regarding valuation before taking any decision.

Problem 1: Bond Valuation

Let us take the example of Rohan where he has a 10-year government bond which is carrying a face value of ₹1,000 and coupon rate at 9% on an annual basis. At this time market interest rates are 8 percent.

Solution:

C = 90, F = $1,000, r = 8%, n = 10

P = 90 × (1 – (1.08)–10)/0.08 + 1000/(1.08)10

= [90 × 6.710] + [463.20]

= 603.90 + 463.20 = ₹1,067.10

The bond is priced at a premium to its face value. Rohan can purchase it for safe, fixed yields.

Problem 2: Preference Share Valuation

Rohan scans through a company that offers perpetual preference shares at an annual dividend of ₹12. There is 10% return expected by the investors in the market.

Solution:

P = D ÷ r = 12 ÷ 0.10 = ₹120

Each preference share has a value of ₹120. It might be worth your money, however, if you're offered it anything south of this price.

Question 3: Equity Valuation based on DDM

Its alternative is share in a firm that is expected to pay a dividend of Rs.5 next year, and the dividends grow at 6% per annum. Required return is 12%.

Solution:

$P = D_1 \div (r - g) = 5 \div (0.12 - 0.06) = 5 \div .06 = ₹83.33$

The fair value is ₹83.33. If market is cheaper, Rohan might buy.

Reflective Questions

If Rohan prefers safety in his capital, which instrument (bond, preference share or equity) must he select and why?

a. Use of the time value of money to justify Rohan’s choice between these two alternatives b. How does the time value of money affect Rohan’s decision between these two options?

What would inflationary pressures mean for the value of bonds and shares?

Why is equity valuation more difficult than valuation of bonds or preference shares?

How might Rohan gain in the long run by spreading his money across funds?

Conclusion

This example shows how the principles of valuation involve practical investment considerations. Bonds have fixed returns, with low growth, preference shares give stable income with low risk

than with equity, while equity shares have the potential to gain value over the long term but are also more volatile. By using these tools together, and following a model for valuation, Rohan is able to get data that help him make knowledgable choices about balance safety, income and growth.

FM Unit 6 V3.docx

Financial Management_MBA_2

Financial Management_MBA_2

ATLAS SkillTech University

Document Details

Submission ID

trn:oid:::3618:127127315

Submission Date

Jan 29, 2026, 6:45 PM GMT+5:30

Download Date

Jan 30, 2026, 10:37 AM GMT+5:30

File Name

FM Unit 6 V3.docx

File Size

74.3 KB

29 Pages

6,624 Words

36,374 Characters

1% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text
- Cited Text
- Small Matches (less than 20 words)

Match Groups

2 Not Cited or Quoted 1%
Matches with neither in-text citation nor quotation marks

0 Missing Quotations 0%
Matches that are still very similar to source material

0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

0% Internet sources
0% Publications
1% Submitted works (Student Papers)

Integrity Flags

1 Integrity Flag for Review

Hidden Text
81 suspect characters on 3 pages
Text is altered to blend into the white background of the document.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- **2** Not Cited or Quoted 1%
  Matches with neither in-text citation nor quotation marks
- **0** Missing Quotations 0%
  Matches that are still very similar to source material
- **0** Missing Citation 0%
  Matches that have quotation marks, but no in-text citation
- **0** Cited and Quoted 0%
  Matches with in-text citation present, but no quotation marks

Top Sources

0% Internet sources
0% Publications
1% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1 Internet

pollution.sustainability-directory.com **<1%**

2 Submitted works

Colorado Technical University Online on 2025-10-19 **<1%**

Unit 6: Capital Structure

Learning Outcomes:

1. Explain the concept and definition of capital structure:

Understand what capital structure means and how it reflects the mix of equity, debt, and hybrid securities in a firm's financing.

2. Identify and evaluate components of capital structure:

Analyze the roles of equity, debt, and hybrid instruments in funding business operations and growth.

3. Assess the importance of capital structure in decision-making:

Examine how financing choices influence profitability, risk, cost of capital, and overall business strategy.

4. Analyze factors influencing capital structure:

Explore determinants such as business risk, tax considerations, cost of debt vs equity, market conditions, and managerial preferences.

5. Examine key theories of capital structure:

Critically review Net Income, Net Operating Income, Traditional, and Modigliani-Miller (MM) Hypothesis to understand their assumptions and implications.

6. Discuss optimal capital structure and firm value relationship:

Evaluate how firms strive to achieve an optimal balance of debt and equity, and how this mix impacts firm value, cost of capital, and risk exposure.

7. Apply capital structure concepts in practical scenarios:

Use case studies and real-world business situations to analyze financing strategies, their outcomes, and their impact on shareholder wealth.

Content:

6.0 Introductory Caselet

Orion Technologies, a rapidly growing mid-sized IT solutions provider, has seen consistent growth in revenues during the last five fiscal years. The company's management is now exploring opportunities to expand into international market with the increasing demand for its cloud-based offerings. This ramp-up, however, needs ₹500 crore funding for establishing offshore offices, hiring niche talent and creating infrastructure.

The fundraising options have been suggested by the finance team and they include:

The sales of new shares in the market to obtain capital are also known as "Equity Financing." This alternative would eliminate interest expenses, but it might dilute the ownership and control of the business as it stands. Shareholders may also anticipate greater returns in the form of dividends or capital gains.

Note Financing: Fundraising with Long-term loans and corporate bonds. While debt has the advantage of tax-deductible interest and no dilution in ownership it does add financial risk for the company. High levels of debt can also have an impact on Orion's credit rating and the future cost of borrowing.

The CEO recommends considering a blended finance structure, with tools like convert debentures or preferred shares which have both characteristics of debt and equity. The board, however, is divided. Whereas some directors think debt financing is cheaper and a more efficient source of growth, others believe equity marks flexibility and minimizes bankruptcy risk.

The situation Orion Technologiesl is in is unfortunately not a rare one. Firms in all industries are challenged to determine the optimal combination of equity, debt and hybrid financing that would both maximize firm value as well as minimize risk. This equilibrium is known as the capital structure of company, and it has a significant impact on long-term strategy.

Critical Thinking Question

As a member of Orion's management team, would you prefer debt or equity financing? Explain your answer in terms of firm value and risk.

6.1 Capital Structure

2 Capital structure is one of the most perversed concepts in corporate finance. It refers to the nucleus of debt, equity and hybrid securities a company turns to for financing operations and growing. The capital structure decisions define the risk, cost and return trade-off faced by the firm in achieving its strategic goals. A sound capital mix lowers the cost of capital, and maximizes shareholder value while securing long term dominance.

This section first considers the idea and definition of capital structure, then explores its

instruments, such as equity, debt and hybrid instruments.

6.1.1 Concept and Definition of Capital Structure

• Meaning of Capital Structure

A firm's capital structure is the mix of equity, debt or other securities that it uses to finance its short term operations and long term investments. It describes how a business arranges its finances so it can achieve strategic goals. Management manages risk, return and control by choosing the mix of debt and equity. A high debt company is said to have more leverage, which itself depends on what assets it has. A company with

more equity will be less risky but also have a higher cost of capital. Therefore, capital structure represents not only financing decisions and requirements but also the overall financial condition.

• Debt-Equity Ratio

One of the most important indicators for capital structure is debt-equity (D-E) ratio, which exhibits proportion of borrowed funds and owners' fund. For instance, if a company has ₹60 crore debt and ₹40 crore equity, then its debt-equity ratio will be 1.5:1. The higher the ratio, the more dependent a company is on borrowing which can raise interest payments and financial risk. The smaller the ratio, the less money is coming from equity — which is more expensive but safer. The optimal debt-equity ratio depends on industry and the company's appetite for risk.

• Definitions by Experts

Capital structure, according to Ezra Solomon is said to be the combination of debt, preference share and equity used by a firm in financing its assets. As James Van Horne describes it, this is the capital that finances a firm on a permanent or long-term basis and consists of longterm debt, preferred stock, and net worth. These definitions clarify that the short-term liabilities such as trade credit and overdraft are not included in capital structure. Rather, it is focused on longer-term funding sources that support a company's operations. Hence, capital structure is a theory as well as an instruction for making financing decisions.

• Strategic Role of Capital Structure

The capitalisation structure determines not only the price of funds but also ownership in th CORPORATION. Selling more equity reduces the percentage of ownership, and debt allows them to keep control while taking on obligations. The better arrangement is one that minimizes cost of capital and maximises returns to shareholders. Decisions about debt and equity can affect value creation over the long-term.

This is why capital structure is not just a financial matrix but an essential part of a company strategy.

6.1.2 Components of Capital Structure (Equity, Debt, Hybrid)

Equity Capital

• Nature of Equity

The figure for equity reflects the shareholders' interest in the company. It includes ordinary shares and sometimes preference shares if the company has had any such issued. Equity holders are residual claimants; they receive funds only after all other obligations, like interest and taxes, have been paid. Dividends are not mandatory, and retained profits can also provide a source of equity financing. So equity is permanent capital, but it's more expensive than debt.

• Common (Ordinary) Shares

These shares have voting rights, ownership, and opportunity for dividends if their are declared. They are riskier than debt in that returns aren't fixed, but they have unlimited upside with capital appreciation. Illustration: A company that issues 5 lakh shares at ₹200 per share raises ₹10 crore in equity. Valuation of common equity: Common equity holders control their investee through voting. While expensive, this type of financing provides long-term stability with no repayment requirements.

• Preference Shares

Preference Shareholders Preference shareholders are entitled to priority in dividend and return of capital upon liquidation. They usually receive a steady dividend payout, a hybrid of debt and equity. They may not have a vote, but the guaranteed payback makes them appealing to risk-averse investors. Example: If a company comes out with ₹3 crore worth of preference share capital at 8%, it undertakes to pay ₹24 lakh every year. Preferred capital trades the steady hand of stability for investors for some flexibility to the company, but dividends are not tax deductible.

Debt Capital

• Nature of Debt

Debt financing means the funds which are borrowed in the form of debentures, bonds or long term loans. It establishes contractual commitments in the form of interest and principal payments. Debt is typically cheaper than equity because lenders assume less risk than shareholders. In addition, interest is tax-deductible so effective cost is less. But a higher level of indebtedness also increases leverage and the risk of bankruptcy in less profitable years.

• Debentures and Bonds

These have long maturities, with regular interest payments and principal repayment at maturity. Example: A company offers 1,00,000 debentures priced at ₹1,000 apiece to raise ₹100 crore. If the coupon rate is 9%, it pays ₹9 crore as interest every year. They can be secured or unsecured, convertible or non-convertible. They are heavily used in industries with predictable cash flows, such as utilities and infrastructure.

• Bank Loans and Institutional Borrowings

Companies usually access long-term funds by borrowing from banks or development financial institutions. The loans may be collateralized, or provided on a project finance basis. Interest rates are market driven, up or down, depending on credit rating and type of collateral provided. For instance, if a company raises ₹50 crore at 11% p.a., it pays interest of ₹5.5 crore every year. Although flexible, bank loans come with tight credit and covenants that limit managers' freedom.

Hybrid Securities

• Concept of Hybrids

Hybrid instruments combine elements of debt and equity, giving firms and investors flexibility. They offer fixed income similar to debt, but have the potential to convert into equity as well. Companies turn to hybrids to avoid the reluctance of investors to bet on plain old debt or equity. Hybrids frequently involve a trade-off among control and cost, along with investor appetite.

• Convertible Debentures

These are the debt papers that can be converted into equity shares after a pre-determined period. For instance, if a company offers ₹50 crore of convertible debentures at 10% p.a., that are able to be converted in shares by the end of the 5th year. At first, you are paid a fixed interest as an investor but later there is your entrance to ownership. Such a structure allows the company to avoid an end-run-around and thus dilution of its control in favor of growth-investors'.

• Preference Shares with Hybrid Features

Some preference shares are cumulative, so unpaid dividends will accumulate and have to be paid at a later date. There are others which can be converted into equity at a later time. These hybrids provide investors with a combination of security and upside. For the company, it offers flexibility in financing deals. But it’s possible for a conversion to water down ownership, so managers need to consider the long-term consequences.

6.1.3 Importance of Capital Structure in Business Decisions

• Influence on Cost of Capital

Capital structure affects the weighted average cost of capital (WACC) directly. If a firm utilizes moderate levels of debt financing, it has tax-sheltered interest that reduces the effective cost of capital. For instance, if equity costs 15 percent and pre-tax cost of debt costs is 10 percent and the tax rate is 30 per cent, after-tax cost of debt equates to only 7 per cent. Equity and debt combination can be used to bring down WACC, which is otherwise higher in the presence of equity alone. The lower the WACC, the more projects are feasible and a firm becomes increasingly competitive.

• Impact on Risk and Return

Risk and return should be balanced to make business decisions for capital structure. Leverage in Debt increases a firm's financial Risk, hence amplifies the returns from equity to its shareholders when profits are high. But that same leverage can exacerbate losses when times are tough, increasing the risk of insolvency. For example, if the pre-interest, equitized cash flow of a corporation is ₹50 lakh, and it pays out ₹20 lakhs in interest thus would yield higher residual returns to equity than would be achieved under conditions where it were unleveraged. But if earnings are insufficient to pay interest, shareholders are left with losses. Thus, capital structure is a determinant of the firm's risk-return tradeoff.

• Control Considerations

The selection of debt vs. equity also has an impact on the company's ownership and control. Selling new shares dilutes existing shareholders' ownership, which could change who has the controlling stake in a company. Debt financing on the other hand does not dilute control but adds burden of repayment. For family businesses or promoters wanting to retain control, debt funding is more often than not the preferred option despite the elevated financial risk. As a result, control issues must be considered when assessing the financial costs of consolidation (through mergers and acquisitions or new project developments).

• Flexibility in Financial Planning

A solid capital structure affords flexibility in the raising of sources and types of financing. Firms with moderate

use keep...available to borrow for future possibilities. For instance, if a bank is already highly borrowed, it might encounter the higher interest rates or be denied to fund for new projects. Conversely, excessive use of equity may waste tax opportunities. As a result, the well balanced capital structure ensures long term smooth decisions.

• Impact on Firm Value

For any given firm value, there is an optimal capital structure for the firm that balances debt with equity. Moderate leverage, in traditional thinking, can increase firm value by taking advantage of tax shields, but high levels ultimately decrease value as the cost of financial distress rises. It follows that corporate decisions on capital budgeting, dividend policy, and mergers should be based on a consideration of the firm's financing arrangements. For example, two firms with the same earnings may be valued differently in the market if one has an ideal capital structure and the other does not.

• Strategic Growth and Expansion

De cisions to expand or not are affected by the availability of cheap capital. A firm with a well-structured capital can secure financing more easily, and at a lower cost. Empirical evidence does show that MNCs actively mix international equity issues and foreign currency debt in their financing to be able to speed up their ability for doing so. Firms in capital-intensive industries, like steel or power companies, used a lot more debt and tech companies preferred to rely on equity — which can be less than ideal when the future is uncertain. The structure adopted affects not only the cost of capital, but also (for strategic growth), the speed and size of that growth.

6.1.4 Factors Influencing Capital Structure

• Nature of the Business

The sector and nature of activity have a pronounced effect on financing structure. Organizations with steady cash flows, such as utilities or infrastructure companies, can support higher debts. Businesses with unpredictable revenue levels, such as new tech companies or seasonal businesses use proportionately less debt to avoid the drag of fixed-interest payments. For instance, a telecom service provider with predictable subscriber revenues may be able to operate comfortably at 2:1 debt-equity ratio; while in contrast a new entrant in fashion retail business might prefer not to have any debt.

• Size and Age of the Firm

Large and established companies typically also have higher credit ratings, which make it cheaper for them to borrow. Smaller companies or new arrivals could find themselves paying more to borrow money, if they can't reach debt markets and instead need to turn more toward equity. For instance, a large automobile

company such as Tata Motors can access corporate bond markets at favorable rates; however, a new electric vehicle startup may rely on venture capi tal equity. So it's a function of size and maturity of the debt.

• Cost of Debt and Equity

Companies evaluate the relative expense of debt and equity when making decisions about how to finance. Debt is usually less costly because of the tax advantages, but excessive debt can increase risk. Equity costs more as investors require greater returns for taking on risk. In particular, when debt costs 9% and equity 15%, firms like to use debt until the marginal risk of over-leverage exceeds cost benefits. So, it is the cost differential that influences this mix between debt and equity.

• Taxation Policy

Because borrowing costs would be tax deductible, firms in high-tax systems gain more from debt financing. On the other hand, if corporate taxes are low, the tax shield is less valuable so equity becomes more attractive. For instance, a company from a country where 35% tax is paid has to shell out ₹3.5 crore less per year on ₹10 crore interest payments. This makes debt an advantageous financing option under high-tax conditions.

• Market Conditions

The prevailing market mood and current economic conditions are key as well. In bull markets, investors are more inclined to take new equity issues and less door need for debt. And in a recession, your equity market might not be friendly. Debt is open. For example, when capital markets are experiencing economic downturns, companies

face difficulty raising equity because investors lose confidence. As a result, the timing and covenants used by capital markets condition financing decisions.

• Control Considerations

If promoters and management want to hold on to control, they prefer debt. When a company issues more equity, it dilutes ownership, and new shareholders receive voting rights. For example, a family-owned company may make riskier use of debt to preserve control. Control is especially important in sectors that value strategic vision and long-term commitment.

• Legal and Regulatory Framework

Debt markets, equity issues and hybrid tools are dependent on regulatory policy to finance strategies. Foreign ownership limitations in some countries may also serve to promote domestic debt

financing. In others, alluringly liquid stock markets draw companies to float shares. Regulatory constraints on the other hand, such as minimum capital ratios in banking or debt ceiling rules for infrastructure also influence capital structure choices.

• Profitability and Cash Flow Position

Companies aligned with stable revenue and good cash flow are in a better position to manage the fixed debt burden. Firms experiencing uncertain cashflows are more prone to issuing equity rather than debt in order to escape financial distress. For example, companies in FMCG business can have high level of leverage, because they manage frequent sales prospects, and startups serving erratic markets raise capital though equities. The stability of cashflow hence determines the capital structure decisions.

• Asset Structure

What kind of assets a company has also makes a difference. Companies with real assets such as equipment, land or buildings can use these to secure loans, supporting debenture financing. They also have trouble borrowing, and tend to fall back on equity. IT firms fund themselves through equity, be it venture capital or IPOs, manufacturing sector by way of debt secured against fixed assets.

• Growth Opportunities

Equity financing can provide a cushion for fast-growing companies by offering flexibility and preventing them from becoming financially distressed due to armed debt. Older companies that can't grow as fast might end up using more debt to increase returns. For instance, a utility company with slow expansion might use debt for relative stability, while a fast-growing tech start-up may opt to raise equity.

Did You Know?

"The famous Modigliani-Miller (MM) theory initially argued that under perfect market conditions, capital structure is irrelevant to firm value. However, in real markets, factors like taxes, bankruptcy risk, and information asymmetry make capital structure decisions highly significant, influencing profitability, flexibility, and shareholder wealth."

6.1.5 Theories of Capital Structure

Capital structure theories seek to rationalise the firm's mix of financing (debt and equity) with reference to its overall value or cost of capital. There are several methods that have been proposed and developed over time, from

from primitive classical theories to the radical Modigliani-Miller Hypothesis. These theories help managers to understand the impact of different combinations of debt and equity on the wealth of shareholders.

Net Income (NI) Approach

• Basic Concept

The Net Income model implies that the higher the level of debt utilized by an organization in its capital structure, the lower will be it's total cost of capital and accordingly for firm value. Debt is cheaper than equity because interest on debt is tax deductible, or lowers your taxes on income.uvwxyz More debt raises the WACC by reducing the amount of more expensive equity relative to the overall mix of financing. This theory is based on the premise that cost of debt (Kd) and cost of equity (Ke) do not vary across different levels of debt.

• Implication

Under the NI theory, optimum capital structure is 100% debt financing because it results in minimum WACC and maximum value of firm. But in reality that's not possible as higher the level of debt more is the risk of bankruptcy.

• Formula

1 WACC = (E/V) × Ke + (D/V) × Kd

Where:

E = Equity, D = Debt, V = Total Capital (E + D), Ke = Cost of Equity, Kd = Cost of Debt

• Example

Suppose a firm needs ₹10,00,000. Option A is all-equity financing with a 15% cost of equity; Option B is 50% debt and 50% equity, where the debt has a 10% after-tax yield.

o WACC in Option A = 15%

o WACC in Option B = (5,00,000 / 10,00,000 × 15%) + (5,00,000 / 10,00,000) × 10% =

12.5%

Asymmetry 2 (NI): Result: Asymmetric signal drives WACC down, since lift in lossaff may not offset Future synergy increase value Negatively relationship between cost of debt and RO (cost of equity) Impact WACC Option B : Lower implies higher value for the firm Decrease future cash flow Increase firm value Fulfilled the NI out-perform Hypothesis 3a.

• Critical Note

It ignores the increasing financial risk with debt, and that investors should expect a higher return with leverage.

Net Operating Income (NOI) Approach

• Basic Concept

The criteria of the NOI approach do not follow those of the NI theory. It is based on the assertion that either capital structure doesn't affect value or WACC of a firm. Under this perspective, the cost of debt is assumed to be constant, and the cost of equity increased with leverage due to higher risk being imputed by shareholders.

• Implication

. Firm value is the same at all debt–equity mixes and there is no optimal capital structure. The WACC is not affected by financing choices Made.

• Formula

V = EBIT ÷ WACC

Hence: because WACC stays the same, firm value is also unchanged.

• Example

EBIT for a company is ₹ 2,00,000. Its cost of capital is 12%. So, the firm is worth 2,00,000 whether it is financed entirely with equity (100% ÷ 0.12 = 16,67,000), 50 per cent debt (50% ÷ 0.14 = ₹14,29,000), or even if only part of its value were financed with debenture Plainly the firms have total value V = ₹2,00(1/13)3T Land. Therefore, value is irrelevant to capital structure.

• Critical Note

Although NOI theory gives prominence to risk adjusted returns, it is based on perfect markets and also does not consider the tax benefits of debt. As a practical matter, however, the tax savings often do render capital structure significant.

Traditional Approach

• Basic Concept

The Traditional Approach interpolates between NI and NOI theories. It claims that in the beginning heavy debt is good (lower) WACC but there's a point where additional debts raise an increased value of a firm proportional or even higher than equity, hence WACC increases again.

• Stages of Traditional Theory

Stage 1: Levering increases value [V_L(x)] Adding leverage decreases WACC because the cost of debt (k_d) is less than the cost of equity (k_e).

Ideal Point: The WACC is minimized, and firm value is maximized at an intermediate degree of leverage.

Over Leveraged: At this stage, a high level of debt increases financial risk that has an upward impact on Ke and in turn WACC.

• Implication

The Traditional theory brings forward the notion of an optimal capital structure and marginal benefits of debt equal to its marginal costs.

• Example

Suppose a company has EBIT of ₹5,00,000.

o At 20% debt, WACC = 10% → Value = ₹50,00,000

o At 50% debt, WACC = 8% → Value = ₹62,50,000

o A new calculation of the WACC, at 80% debt: o WACC =.485 * 80/300 + (1-.17) * (220/300) = 12% → Value= ₹41,66,667

Hence, there is peak at 50% debt, the best structure.

• Critical Note

The Traditional theory is valid as it acknowledges positive (benefits) and negative impacts of borrowing. But it does not give a clear figure for the right blend, causing confusion among managers.

Modigliani-Miller (MM) Hypothesis

• Proposition I (No Taxes)

The first proposition of MM is that in an ideal world free of taxes, capital structure is immaterial. The value of the firm is determined only by its earnings and business risk, not by how it has chosen to apportion debt against equity. This aligns with NOI theory.

• Proposition II (No Taxes)

MM also contended that, as long as WACC does not change, the cost of equity rises proportionately with leverage in order to offset the cheaper cost of debt.

• Proposition I (With Taxes)

Once corporate taxes are incorporated, MM admitted that value of the firm rises with debt because of interest tax shield. Value of leveraged firm = Value of unleveraged firm + (Tax rate penalties for the borrowed funds – Benefits to use debt) X Debt Practice Questions:- 1.

× Debt). So such companies have a motivation to add more debt.

• Example

Assume EBIT = ₹4,00,000, tax rate = 30%, and unlevered WACC = 12%.

o No debt: Value = 4,00,000 × (1 − 0.30) ÷ 0.12 = ₹23,33,333

o With ₹10,00,000 of debt at 10% p.a.: Tax shield =.30 × 10,00,000 =₹3,00,000

o Leveraged firm value = 23,33,333 + 3,00,000 = ₹26,33,333 This indicates that debt increases the firm value in a tax system.

• Critical Note

The MM"s theory is robust, but it has to rely on ideal markets which disregard bankruptcy costs, agency problems and the asymmetries in information of the real world. Yet, it is the basis of contemporary capital structure theory.

"Activity: "Testing Theories of Capital Structure in Practice"

Imagine a company with EBIT of ₹5,00,000. It can be financed either entirely with equity or with 50% equity and 50% debt at 10% p.a.. Using the Net Income approach, calculate how WACC changes when debt is introduced. Then analyze the same scenario using the NOI approach, which assumes that WACC remains constant. Note how the results differ and which theory seems more realistic for a real-world firm operating in a competitive market.

6.1.6 Optimal Capital Structure – Concept and Determinants

Meaning and Factors of Determining Optimal Target Ratios of Debt Capital to Equity Capital

• Concept of Optimal Capital Structure

The best capital structure is the right mix of debt, equity and hybrid financing that minimizes the company's cost of funding such that value is maximized for shareholders. The goal is to optimize the benefits of debt (like tax savings) and minimize the downsides (like bankruptcy.) i.e. a company that finances 40% with debt and 60% with equity might have lower WACC than if it financed using only equity. This WACC is the lowest of all and represents the optimal structure.

• Balancing Debt and Equity

Overuse of debt leads to inflexibility and heightens financial risk. On the other hand, excessive use of equity gets expensive because equity investors require a higher return. The perfect in-between The ideal compromise is mixing the two to get the best of both worlds. This is something firms generally measure through metrics such as their debt-equity ratio, interest coverage ratio and return on equity. For instance, if WACC is 12%

debt (when the latter is 10% of total capital.) Both options increase to 12% with no debt and drop to 10% when the firm's leverage reaches 50%, suggesting the benefits of moderation."

• Determinant 1: Cost of Capital

Crucial in this context are the relation between cost of equity (Ke) and cost of debt (Kd), as leverage increases. From a borrowing perspective, debt is cheaper but riskier; equity is more expensive and safer. Specifically, the WACC is given by:

$$WACC = (E / V) \times Ke + (D / V) \times Kd \times (1 - T)$$

where NVEI represents the net value added, E is equity, D is debt, V stands for total capital and T is tax rate. The structure of a firm is optimized when the WACC is minimized.

• Factor 2: Business Risk and Stability of Cash Flows

With consistent earnings (say, you operate a utility) you can safely carry more debt; with variable profits (as in a startup) you should lean more on equity. Maintanance of stable inflows of cash guarantees that payments on interest and delivering the main debt can be dealt with, reducing possibilities of default. For instance, a power plant owner could have a debt equity ratio of 2:1 while a new tech business may not take on any debt at all.

• Determinant 3: Taxation Environment

Because interest on debt is tax deductible, companies doing business in high-tax environments have an incentive to finance themselves with debt to shield more taxable income. So, if a company incurs an interest expense of ₹1 crore and the tax rate is 30%, then the effective tax saving is ₹30 lakh. This renders debt attractive until the downside exceeds the upside. On the other hand, equity could be relatively more attractive in low tax economies.

• Factor 4: Industry Practices and Market Circumstances

Capital structure tends to be driven by industry standards and investors' sentiments. For instance, companies that invest in infrastructure heavily use debt because investors who buy it up expect to receive a stream of steady returns. Whether market conditions

are ripe also matters: Equity is easier to issue in bull markets, when it may be harder for a company to raise more debt financing amid a recession.

• Determinant 5: Flexibility and Control Issues

Owners frequently prefer debt in order to minimize dilution of control, particularly for family-owned firms. But high debt lowers future borrowing ability and flexibility. The choice between caginess and financial agility looms large. Promoters, for instance, might be willing to pile on more debt if they want to hold on to part of the company.

6.1.7 Impact of Capital Structure on Firm Value and Risk

• Effect on Firm Value

Firm value is directly affected by its capital structure, operating through WACC. Low WACC is leading to a higher NPV of future cashflows and consequently to higher firm value. For example, if a company makes EBIT of $500 million, has interest expense of 2.5% or $300 million on debt of and pays tax at 30%, then the present value of its taxes saved from to is such that: PV tax = 0.

5 crore in it, and its WACC is 10%, you can say it has ₹50 crore (₹ 5 ÷ 0.10) of value. If the WACC releases to 9% with the help of an optimized capital structure, then a firm value increases to ₹55.5 crore. As such, effective capital structuring can significantly contribute to shareholder wealth.

• Cost of Equity and Debt Impact

The effect, of course is that while debt remains cheap at first, equity holders demand more yield to compensate for the added risk. This, however, increases Ke and counteracts the advantage of low Kd. Where debt is abused (used to excess) both Kd & Ke shoot up because of the effects of default risk, which hike WACC. Hence, the value of the firms decreases with borrowings beyond a point making it an inverted U-shaped curve of value against leverage.

• Influence on Risk Profile

High leverage magnifies the financial risk and the inherent business risk. There is financial risk because the debt obligations are fixed regardless of earnings. For instance, if EBIT is ₹1 crore and interest ₹50 lakh, then the company needs to pay interest even in times of downturns. A leveraged company is therefore more likely to experience financial distress than an unleveraged one.

• Impact on Earnings per Share (EPS)

debt also affects EPS through financial leverage. For returns from the use of borrowing (leverage) are higher than the interest cost of debt, leverage will increase EPS and this

is called trading on equity. For instance, when a company Internationally Accredited Specialist Glass Manufacturer borrows.

10 crore at 8% p.a. and you earn 12% on this fund, then shareholders get to enjoy the higher EPS. But when returns are less than 8%, EPS decreases, so this leverage is a double-edged sword.

• Market Perception and Creditworthiness

Leverage ratios are monitored by investors and credit rating agencies as a measure of risk. Too much debt may also prompt credit downgrades, making future borrowing more expensive. However, robust capital structure implies stability and leads to investor confidence. This means that market perception is directly related to financing decisions.

• Bankruptcy Risk and Agency Costs

In excess of a certain level of debt, the risk of bankruptcy and financial distress increases which lowers firm 1 s value.

value. Moreover, agency costs of debt share holders. Creditors can force restrictive covenants on managers that constrain their freedom of action. This undermines firm flexibility and decision-making.

• Strategic Impact

Capital structure, in reality, has a bearing on the competitive stance. Companies with leaner capital structures can pursue more aggressive growth, grow faster and be in better shape for a downturn. Those with weak or leveraged structures, however, will miss opportunities or buckle under financial duress. Active acquisitions, product variety and long- term development all have big dependence on the sound capital structure.

Knowledge Check 1

Choose the correct option:

1. Optimal capital structure aims to:

a) Maximize WACC

b) Minimize risk only

c) Minimize WACC

d) Increase equity cost

2. High debt in capital structure increases:

a) Liquidity

b) Financial risk

c) Voting rights

d) EPS always

3. According to Traditional Theory, firm value is:

a) Always constant

b) Maximized at moderate debt

c) Highest at zero debt

d) Unaffected by debt

4. Which factor does not influence capital structure?

a) Business risk

b) Tax policy

c) Market timing

d) Past sunk cost

5. Excessive leverage may result in:

a) Bankruptcy risk

b) Lower agency costs

c) Increased control

d) Higher credit rating

6.2 Summary

ϖ Capital structure refers to the mix of equity, long-term debt and hybrid securities that are used to fund its operations and growth.

ϖ The debt-equity ratio is a key indicator of financial leverage and affects risk and cost of capital.

ϖ Equity capital is permanent without repayment; however, it is more expensive and may dilute control.

ϖ Debt is less expensive, because the interest on debt capital is tax deductible but increases financial risk by fixed obligation.

ϖ Hybrid instruments have the characteristic of debt as well as equity, providing flexibility to Issuers and investors.

ϖ An efficient capital structure reduces WACC and increases firm value.

ϖ Business risk, profitability, taxes, control issues and market conditions are critical determinants of financing decisions.

ϖ The capital structure theories i.e.NI, NOI, Traditional and MMHypothesis describe that leverage and firm value with different perspective.

Net Income approach leans toward leverage, while NOI says cap structure doesn't matter.

ϖ The Conventional theory maintains an idea to have a perfect capital structure that minimize Weighted Average Cost of Capital as well.

ϖThe MM Hypothesis, in the absence of taxes and other imperfections, structure does not matter but with tax, debt adds value via tax shields.

ϖ Earnings per share, bankruptcy risk, market perception and long-run competitiveness are affected by the capital structure decisions.

6.3 Key Terms

Capital Structure- The relative contributions of debt, equity and hybrid securities to financing the firm.

Debt-Equity Ratio - Leverage ratio expressing the proportion of a company’s debt to its equity.

Share Capital: Permanent capital provided by members, in the form of ordinary and preference shares.

Debt Capital: Funds borrowed that must be paid back with interest at a set rate.

Hybrid Instruments: These are securities that have some characteristics of both debt and equity; for example, preference shares.

WACC: Weighted Average Cost of Capital, which is the average rate a company actually pays to all its security holders.

Leverage: The use of debt to amplify returns to holders of equity.

Target Capital Structure: Combination of debt, equity and other securities that will result in lowest WACC and highest firm value.

Business Risk: The natural of risk all companies encounter that influences their earning.

Tax Shield: Deductibility of the interest on debt, which reduces taxable income.

There are also agency costs that emanate from the conflict between shareholders and debt holders or managers.

MM Hypothesis: A theory developed by Modigliani and Miller on capital structure irrelevance in perfect markets and the relevance of such a structure where taxes exist.

6.4 Descriptive Questions

What is capital structure? Discuss the importance of capital structure in financial decision making.

Explain the various elements of capital structure with examples.

What are the determinants of a firm's capital structure? Explain with practical illustrations.

Differentiate between Net Income and Net Operating Income methods of capital structure.

Discuss the Traditional approach to capital structure. Then how does it determine the best debt-equity combination?

What is Modigliani-Miller Hypothesis? Illustrate with a numerical example.

Describe factors affecting optimal capital structure in the context of current business.

What are the implications of capital structure on value, risk, and EPS?

6.5 References

1. Brealey, R. A., Myers, S. C., & Allen, F. – Principles of Corporate Finance, McGraw Hill.

2. Ross, S. A., Westerfield, R. W., & Jaffe, J. – Corporate Finance, McGraw Hill.

3. Van Horne, J. C., & Wachowicz, J. M. – Fundamentals of Financial Management, Pearson.

4. Damodaran, A. – Corporate Finance: Theory and Practice, Wiley.

5. Pandey, I. M. – Financial Management, Vikas Publishing House.

6. Khan, M. Y., & Jain, P. K. – Financial Management: Text, Problems and Cases, McGraw Hill.

Knowledge Check 1

1. c) Minimize WACC

2. b) Financial risk

3. b) Maximized at moderate debt

4. d) Past sunk cost

5. a) Bankruptcy risk

6.6 Case Study

Background:

Nova Manufacturing Limited, a medium sized engineering firm is looking at expanding its production base to cater for increasing demand. It is estimated that the entire project would cost 200 crore. The administration needs to evaluate the best financing mix - debt, equity or hybrid. It has a cost of equity at 15% and can borrow debt at 10% p.a. The annual rate for corporate tax, is 30%.

The board is split: Some directors would prefer to issue new equity in order to avoid raising the level of financial risk, while others are suggesting that some debt should be issued as it will gain tax savings. The CFO recommends looking at hybrid solutions that keep the right amount of risk and flexibility.

Problem 1 Solution: NPV and WACC Analysis of Debt versus Equity

If the project is being funded completely from equity, the cost of capital is 15 percent. And 50% of equity If project would be financed with debt 4.5:
WACC.14)(40.445.50.0650 costs 11% Page (30) If the firm can borrow at * or *=(E/D), co
The Project Costs and Financing How heavy is the cost?

WACC = (E / V × ke) + (D / V × kd × (1 − T)) where: WACC = Weighted Average Cost of Capital and ke = cost of equity and kd = cost of debt < Less

= (0.5 x 0.15) + (0.5 x 0.10 x 0.70)

= 0.075 + 0.035 = 11%

If project is Ongoing EBIT will be ₹30 crore per annum.

• Value of the firm with 100% equity = EBIT × (1 – T) ÷ ke = (30 × 0.70)/ 0.15 = ₹140 crore

• Firm value with 50% debt = EBIT × (1 − T) ÷ WACC = (30 × 0.70) ÷ 0.11 = ₹190.9 crores

Answer: Increase value: since WACC is lower, investment can be undertaken with lower cost.

Issue 2: The EPS Effects of Financial Leverage

If Nova borrows ₹100 crore at 10% p.a. and the balance amount of ₹100 crore as equity, the interest required to be paid would be

₹10 crore annually. EBIT = ₹30 crore, tax = 30%. PBT (30 − 10) = ₹20 crore

• Net income = ₹14 crore

• When equity = ₹100 crore, share at the price of ₹10 each, No. EPS = 14 ÷ 10 = ₹1.40

If the issue is fully eagle-financed (₹200-crore equity, 20 crore shares):

• Net income = ₹21 crore

• EPS = 21 ÷ 20 = ₹1.05

Solution: EPS increases in 50% level of debt indicating that the company has positive leverage effect.

Issue 3: Assessing the Risk of Excessive Leverage.

Assume company is 80% debt financed (Debt at ₹160 crore and equity at ₹40 crore). Interest = ₹16 crore annually.

• EBIT = ₹30 crore, Profit before tax = 14 crore, net profit after tax (PAT) = 9.8 crore

• Shares = 4 crore (₹10), EPS = 9.8 ÷ 4 = ₹2.45

Even though EPS is greater, the financial risk is also much higher. If the EBIT gets reduced to ₹20 crore because of bear market:

• Profit before tax = 20 − 16 = 4 crore, Net profit = 2.8 crore

• EPS = 2.8 ÷ 4 = ₹0.70

Solution: Excessive leverage amplifies both gains and losses, leaving the firm exposed during downturns.

Reflective Questions

Should Nova opt for the higher EPS alternative with 80% debt, or compromise between risk and return at 50%?

How might rising interest rates influence the choice to lever up?

If the stock markets are lighting up, should Nova increase its dependence on equity even if it's expensive compared to debt?

In what way can hybrid securities, such as convertible debentures, offer an intermediate solution between debt and equity?

What other, non-financial factors (such as control and reputation) should Nova take into account before deciding on its capital structure?

Conclusion

The Nova Manufacturing case is representative of how the decision on capital structure influences both firm value, EPS and risk. Although increased leverage initially increases EPS and reduces WACC, overleveraging leads to greater risk of bankruptcy and stock price volatility. The ideal mix of debt and equity is a trade off between the economy of financing with debt and the security associated with equity. For Nova co, 50/50 debt-equity is good VD. Simultaneously avoids the risks of over-leverage and good USDW too... Nonetheless, decisions have to also consider market situations, control and the long-term strategies.

FM Unit 7 V3.docx

Financial Management_MBA_2

Financial Management_MBA_2

ATLAS SkillTech University

Document Details

Submission ID

trn:oid:::3618:127127316

Submission Date

Jan 29, 2026, 6:45 PM GMT+5:30

Download Date

Jan 30, 2026, 10:37 AM GMT+5:30

File Name

FM Unit 7 V3.docx

File Size

191.0 KB

40 Pages

6,277 Words

33,675 Characters

2% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text
- Cited Text
- Small Matches (less than 20 words)

Match Groups

5 Not Cited or Quoted 2%
Matches with neither in-text citation nor quotation marks

0 Missing Quotations 0%
Matches that are still very similar to source material

0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

1% Internet sources
0% Publications
2% Submitted works (Student Papers)

Integrity Flags

1 Integrity Flag for Review

Hidden Text
79 suspect characters on 4 pages
Text is altered to blend into the white background of the document.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- **5** Not Cited or Quoted 2%
  Matches with neither in-text citation nor quotation marks
- **0** Missing Quotations 0%
  Matches that are still very similar to source material
- **0** Missing Citation 0%
  Matches that have quotation marks, but no in-text citation
- **0** Cited and Quoted 0%
  Matches with in-text citation present, but no quotation marks

Top Sources

1% Internet sources
0% Publications
2% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1 Submitted works
Marvellous University of Technology and Applied Sciences on 2025-10-28 <1%

2 Submitted works
Stanfort Academy on 2024-11-11 <1%

3 Internet
fastercapital.com <1%

4 Submitted works
Regenesys Business School on 2025-08-20 <1%

5 Submitted works
i-CATS University College on 2024-12-13 <1%

Unit 7: Cost of Capital

Learning Outcomes:

1. Explain the concept of cost of capital:

Understand the significance of cost of capital in financial decision-making and its role as a benchmark for evaluating investments.

2. Calculate the cost of equity using various models:

Apply the Dividend Discount Model (DDM), Capital Asset Pricing Model (CAPM), and Earnings-Price ratio to estimate cost of equity.

3. Determine the cost of debt and preferred capital:

Evaluate after-tax cost of debt and compute cost of preference shares considering fixed dividend obligations.

4. Understand and apply Weighted Average Cost of Capital (WACC):

Combine the costs of equity, debt, and preference capital to derive WACC and use it for project appraisal.

5. Assess the impact of capital mix on cost of capital:

Analyze how changes in debt, equity, and hybrid proportions affect overall financing costs and firm valuation.

6. Apply cost of capital concepts in real-world decision-making:

Use case studies and numerical problems to connect theory with practice in corporate financing and investment evaluation.

Content:

7.0 Introductory Caselet

Automaker ZenithAutos is looking to step into the future with a new electric vehicle line. The expansion would cost ₹1,000 crore. The finance department must now calculate the cost of capital to provide direction as to whether the project should move forward.

At present, there are three major sources of long-term funds to Zenith.

• Equity capital: the firm has a significant volume of stock trading and shareholders demand no less than 16% return in current market.

• Debt: Zenith raised ₹400 crore in the form of bonds which have a coupon rate 10% p.a. Cost of Funding: After a 30% tax rate has been considered the effective cost of debt is less than the coupon, but it remains fixed.

• Preference Shareholders: The company has ₹100 crores of preference share capital, carrying fixed rate of dividend @ 12% outstanding.

Knowing the specific cost ofeach source ofsoshouldevery capital weare" " simply It is not sufficient simply to know the individual cost of each source ofsotest assurance that there is a real justification for using this way of comparing finance function performance. What really counts, is the Weighted Average Cost of Capital (WACC), since the project is funded by a mix of equity, debt and preference capital. Lower WACC means that the company can take more projects profitably and a higher WACC limits investment options.

The FMT is a subject of discussion among financial professionals about the appropriate method to estimate cost of equity. Some members in favor of DDM over the one in CAPM (CAPM accounts for risk and anticipations by market). Meanwhile, the CEO complains that increasing leverage to drive down WACC in the short run (thanks to tax shields) also increases financial risk in the long run.

Zenith is left to compute and interpret its cost of equity, debt, and preferences capital in order to determine the WACC which would help guide the investment policy.

Critical Thinking Question

If you were Zenith's CFO, would you prioritize lowering WACC by increasing debt financing or maintain a balanced capital mix to control financial risk? Please justify your decision.

3

7.1 Cost of Equity

The cost of equity is the minimum return that investors expect to earn for owning a company's equity capital. It is not paid out directly like the required interest on loans, but represents the opportunity cost of investing in Zenith instead of an equal-risk alternative. The cost of equity is instrumental in project evaluations; capital budgeting and deciding the Weighted Average Cost of Capital.

7.1.1 Concept and Importance of the Cost of Equity •

Concept of the Cost of Equity

The cost of equity is the return demanded by the shareholders of a company, given its risk profile. While the amount required to be paid to debt holders is explicitly stated in the form of interest, the equity-cost is implicit: the expected return demanded by the shareholders. If this process is not satisfied, the shareholders may attempt to sell their equity, leading to a reduced capital valuation. In other words, the cost of equity is tantamount to the compensation the market demands to own a certain firm's shares. • Importance in Corporate Finance

The cost of equity is chiefly important during capital budgeting. During project evaluations, companies calculate WACC, which is a mix of the cost of debt, preference shares, and equity. Given that equity comprises the higher proportion of financing, its cost is particularly influential in these decisions. If the project return is lower than the cost of equity, it is likely to reduce the shareholders' wealth.

• Influence on Valuation

Cost of equity is also used as a discounting rate for valuation by discounted cash flow models. Higher cost of equity implies a lower present value of expected dividends or earnings, and hence lower stock prices. Yes, a higher discount rate depresses valuation and their firms are not nearly as attractive to investors.

• Example

Now, say a company is planning to pay a dividend of ₹10 next year and the stock is traded at ₹100 with an expected growth rate of 5%. Here's what the cost of equity would be:

ke = (Dividend/Price) + Growth= (10/100) + 0.05=15 percent This means the investors need at 15 percent yield to hold the stock.

• Strategic Relevance

Managers benefit from knowledge of the cost of equity in formulating dividend policies, capital structure decisions and mergers. For

example, firms with high cost of equity finance debt in order to reduce the total cost if risks are under control.

7.1.2 Dividend Discount Model (DDM) Approach

• Concept of DDM

The Dividend Discount Model assumes that the Market Price of a stock is equivalent to the Present Value of all future Dividends. As dividends are cash-flows to equity, the required return can be back-out from expectations of dividends and growth.

• Formula

5 ke = (D1 ÷ P0) + g

Where:

D1 = Anticipated dividend per share within one year P0 = Current market price per share

g = Constant rate of growth in dividends

• Application

This model is best suited for companies that pay dividends which are regular and predictable. For instance if a company pays ₹5 as dividend and is expected to grow at 6% per annum , and the current share price.

₹50.

ke = (5 × 1.06/50) + 0.06 ke = 0.106 + 0.06 ke = 16.6%

• Zero Growth DDM

For firms whose dividend remains constant (no growth):

ke = D ÷ P0

Example: dividend = ₹8, price = ₹80, ke = 10%.

• Variable Growth Situations

Multi-stage DDM is used when dividends are first expected to grow at different rates and then settle down into a constant growth rate. For instance, a firm can achieve 15% dividends growth rate for first 3 years before stabilizing at 5%. The equity cost is then derived through the valuation of the individual stages.

• Limitations

Although elegant, the DDM is based on continuous growth that might not be applicable to firms with erratic dividends or startups. And it overlooks risk factors other than dividend anticipation.

7.1.3 Capital Asset Pricing Model (CAPM) Approach

• Concept of CAPM

The cost of equity under CAPM is derived from the risk free rate, stock-b's beta (systematic risk) and a market risk premium. It is the most widely used because it directly incorporate risk in making cost of equity unlike DDM where we consider only dividends.

• Formula

ke = Rf + β (Rm − Rf) Where:

Rf = Risk free rate (for example government securities)

β = Beta, the risk of stock in relation to market returns Rm = Expected market return

(Rm - Rf) = Market risk premium (a hypothetical addition to the risk free rate if a bank or investment firm could be found borrowing and using leverage).

• Application

If Rf = 6%, β = 1.2, and Rm = 14%, let's assume.

ke = 6% + 1.2 × (14% − 6%) = 6% + 1.2 × 8%=6%+9.6%=15.,readonly.fpgasection *{margin-bottom:10px;}--- * Note that Ke is a quadratic function of Kv which doesn't seem to be widely available, but may be obtainable from \[ZigBee\] or in some link budgets/calculators on the web-though it's easy enough to calculate knowing these functions!

• Interpretation

The higher the beta, the greater is risk and hence cost of equity. As a result, CAPM associates expected return directly with risk, which fits well with investor behavior.

• Advantages

In CAPM, there are risk-free and market risk factors, as a result it is more realistic than DDM. It also works for firms that don't pay dividends.

• Limitations

The estimation of beta and market returns may be a matter of judgment. Secondly, CAPM presumes a linear association between risk and return which may not be valid in the presence of high market fluctuation.

7.1.4 Bond Yield Plus Risk Premium Approach

• Concept of the Approach

It comes up with an estimate of cost of equity by adding a risk premium to the long term

bonds. The reasoning is that equity investors assume more risk than debt holders, so they require a higher return.

• Formula

ke = kd + RP Where:

kd = Yield to maturity on firm's long-term debt

RP = Risk premium for stockholders (usually 3%–5% in excess of bond yield)

• Application

2-13 Assume that a firm's bonds have a 9% yield. The risk-free rate is 6%. b5. If the expected return on a bond is only slightly higher than its yield, what does that suggest about the likely future of interest rates? Then ke = 9% + 5% = 14%. This approach is also easy to perform and often practical in the case of privately owned firms, for which information on dividend or beta may not be available.

• Advantages

o Easy to understand, no difficult input needed.

o Suitable for companies not having listed shares or dividend histories.

o Furnishes an instant check of return on equity needed.

• Limitations

o The risk premium is subjective and can vary greatly.

o Ignores the risk of a particular company beyond the general equity premium.

o Not as accurate for more volatile or growth firms.

Did You Know?

"The Bond Yield Plus Risk Premium approach is often used by investment bankers and valuation experts for private companies. Since market-based data like beta or dividend history is unavailable, they rely on bond yields and add a typical premium of 3–6% to approximate equity returns."

7.1.5 Advantages and Limitations of Different Methods

• Dividend Discount Model (DDM)

Advantages:

o Easy to quantify using known dividends and share price.

o Helpful for adult firms, characterized by a predictable dividend policy.

Limitations:

o He assumes, growth is constant and that doesn't hold with growing industries.

o Inappropriate for companies not paying out dividends.

• Capital Asset Pricing Model (CAPM)

Advantages:

o Includes risk in cost of equity via beta.

o Applicable to companies with a no-dividend history.

o Widely accepted in financial markets.

Limitations:

o Depends on correct estimates of beta and market returns.

o Takes linear risk-return trade-off and efficient market as given.

• Bond Yield Plus Risk Premium

Advantages:

o Applicable with low input data.

o To applied for private companies or when market information is not available.

Limitations:

o Extremely opinionated because its risk premium fluctuates.

o Does not adjust for firm-specific risk.

• Overall Perspective

Have those discussions and come to your best determination regarding best practices for the technology and no on method will be universally the best. In reality, most companies use multiple strategies in combination for the sake of cross-validation of results. For instance, CAPM could offer the theoretical prediction and Bond Yield Plus Risk Premium a possible benchmark. DDM is reliable for dividend-paying

firms, but not for growth companies. To aggregate models lead to more valid and realistic cost of equity predictions.

7.2 Cost of Debt

The cost of debt refers to the rate at which creditors discount the future cash flows produced by borrowing today. It comprises interest payments and issuance costs, net of the tax shield effect as interest is deductible for tax purposes. Unlike equity, the return on which can be uncertain, the cost of borrowing is a contractual obligation and accordingly less problematic to calculate. The cost of debt is an essential input for

computing the Weighted Average Cost to Capital (WACC) and studying the effect of debt on firm value and risk.

7.2.1 Concept of Cost of Debt

• Definition

It is the interest rate a company needs to pay on its debt in order to raise capital from bondd, debentures or bank loans. It's essentially what lenders require in return for deploying capital. Debt holders get a fixed payment irrespective of how the business performs, while equity investors do not.

• Components

The cost of debt is made up of two components:

Explicit Cost: The interest rate or coupons actually paid to lenders.

Implied Cost: Other costs of raising debt (e.g., underwriting, flotation service fees).

• Formula

kd = (Annual Interest Payments + Issuance Costs) / Net Proceeds from Debt

• Example

Assuming a company offers ₹ 1,00,000 worth of bonds at a coupon rate of 10% and the cost incurred for their issuance is ₹2,000. Net proceeds = ₹98,000.

kd = (10,000 + 2,000)/98,000 =.1224 or 12.24%

• Importance of Concept

Managers can calculate the cost of debt to help evaluate different ways of financing. If the ROI is greater than

the cost of borrowing increases the value of the firm. If not, the too-much-debtaya eats into profitability and hikes financial risk.

7.2.2 Before, Tax and After-Tax Costs of Debt

• Before-Tax Cost of Debt

That's the rate received by lenders before taking into account the tax benefit of deducting interest. It is nothing but the coupon rate adjusted with issuance costs.

Formula: kd (pre tax) = Annual Interest ÷ Net Proceeds

• After-Tax Cost of Debt

The cost of debt being tax-deductible makes the effective cost of debt reduced after taking into consideration tax savings.

Formula: kd (after-tax) = kd (before-tax) × (1 − T) Where T = Corporate Tax Rate

• Example

If a firm sells ₹1,00,000 bonds carrying 10% interest and no issue cost have been issued the before-tax kd = 10%. Suppose the corporate tax rate is 30%, then after-tax kd = 10% x (1 − 0.30) = 7%.

• Interpretation

It illustrates how government tax policies can influence financing costs. High-tax settings favor the issuance of debt because tax shields can be particularly valuable. The opposite may be true in low-tax countries:Equity financing might be more attractive.

• Practical Implications

o Both pre-tax and after tax costs of funds are generally considered in financial planning.

o Investors consider before-tax return, however the firm uses after tax return for capital budgeting.

o Decisions must be based on cost in interest... not coupon rates.

7.2.3 Calculation Using Yield to Maturity (YTM)

• Concept of YTM

YTM is the rate of return an investor would earn on a bond held to maturity,

all the coupon payments are reinvested at same rate. For companies, YTM represents the actual cost of borrowing in cases where debt securities are issued at prices other than par.

4 • Formula (Approximate)

4 YTM ≈ Annual Interest + Face Value − Market Price / n]/[(Face Value + Market Price)/2]
Where:

n = Years to maturity

• Example 1: Bond at Discount

A company releases a bond of nominal value ₹1,000 at 10% coupon rate for 5 years. Current market price = ₹950.

YTM ≈ [{100 + (1,000 − 950)/5}]/[{(1,000 + 950)/2}]

= [100 + 10] ÷ 975 = 110 ÷ 975 = 11.28%

Therefore, the cost of debt is 11.28% (before tax).

• Example 2: Bond at Premium

If that same bond trades at ₹1,050:

YTM ≈ [100 + (1,000 - 1,050) / 5] ÷ [(1,000 + 1,050) /2]

= [100 − 10] ÷ 1,025 = 90 ÷ 1,025 = 8.78%

• After-Tax Adjustment

Given tax = 30%, Example 1 after-tax cost = 11.28% × (1 −.30) = 7.90%.

• Relevance of YTM

YTM is a better measure as compared to coupon rate especially if the bonds are trading at discount or premium. It is the market's estimation of the company's risk and its cost of capital.

7.2.4 Significance of Cost of Debt in Financing Decisions

• Capital Structure Decisions

Cost of debt is one of the primary factors affecting the appropriate debt-equity ratio. If the interest tax shield makes debt relatively cheaper, firms will adopt moderate levels of leverage in order to reduce their WACC. But above a certain level, the financial risk and cost of equity both increase with more debt, pushing up overall WACC.

• Impact on Firm Value

Modigliani-Miller with taxes Under the Modigliani-Miller with taxes a firms overall value increases when debt increases because of tax shields. But debt levels face practical constraints such as bankruptcy costs and agency conflicts. Firms have to decide when the additional benefit of a little extra debt (the marginal benefit), is offset by the cost.Assuming it never is will get their company into trouble pretty quickly.

• Influence on Investment Decisions

Firms consider WACC as the new projects' hurdle rate. This is because WACC has after-tax cost of debt, reducing debt costs allows more positive NPV projects. For instance, should after-tax cost of debt fall from 10% to 7%, projects that were previously marginal can become profitable.

• Risk Management Considerations

When you use too much debt, you're just increasing the magnitude of your business's ups and downs (and risk of going out of ... industry?). So management is trading cheap debt

for financial stability. Debt levels are also a significant driver of credit ratings, which in turn determine future borrowing costs.

• Strategic Significance

Companies in high asset- or capital-intensive industries (e.g. utilities, infrastructure) typically have a higher leverage ratio as debt is easier to source and cheaper than equity financing or because they are less risky; whereas companies with unstable earnings due to immaturity/appearance of product (e.g. startups, IT sphere) will opt for an ever-higher equity-base financing scheme. This is an indication of the industry effect on financing decisions.

"Activity: "Estimating Cost of Debt in Practice"

A manufacturing firm issues ₹10 crore worth of bonds at a 12% coupon rate. The bonds have a maturity of 10 years and are currently selling in the market at ₹9.5 crore. The corporate tax rate is 30%. Using the Yield to Maturity (YTM) formula, calculate the before-tax and after-tax cost of debt. Compare these results with the simple coupon rate method. Discuss how using YTM provides a more accurate estimate for decision-making than relying only on nominal interest rates.

7.3 Cost of Preferred Capital

Cost of preferred capital Cost of preferred capital is the required rate of return that preference shareholders seek from company in exchange for placing their money in the business. Preference capital is a form of finance that combines features of both shareholders funds and loan capital. Preference shares pay fixed dividends in the same manner as interest, but lack tax deductibility of interest and so cost of preference share capital is generally.

greater than debt but less than equity. Managers need to be aware of this cost when formulating an efficient capital structure.

7.3.1 Concept of Cost of Preference Shares

• Definition

Preferential share: this is a classification of shares which have preferential right over equity dividend, and other beneficial treatment in repayment of capital when an entity windup. Cost of Preference Shares is the rate at which a company need to pay dividends to the preferance share holders. Given that the dividend rate is generally fixed, there is some debt-like nature to preference shares.

• Nature of Returns

Preference shareholders receive their dividends at a fixed rate (such as 8%, 10% and 12%) and such amount should be paid out before equity holders claim any dividend. But these dividends, unlike interest on debt, are not a mandatory cost if the company doesn't have enough profits. Yet cumulative preferred shares result in unpaid dividends that stack up, obliging companies to pay them out later.

• Hybrid Nature

Preference capital comes with a feature where it has equity like permanence and debt-like fixed returns (excluding redeemable preference shares) because all types of preference shares have no maturity. Its hybrid nature affects its cost — generally higher than debt because dividends are not tax deductible, but frequently cheaper than equity given limited risks compared with common shareholders.

• Importance in Capital Costing

Cost of Preference Shares and WACC When you calculate WACC (weighted average cost of capital), the cost of preference shares (kp) is incorporated to the costs debt and equity.

Exclusion of preferred capital would obscure the total cost computation, particularly for firms that depend heavily on preference finance.

• Example

It is assumed that company gets preference share capital of ₹10,00,000 with 10% dividend. Preference shareholders expect dividends annually. The cost of preference capital is 10% ÷ (Net Proceeds ÷ Issue Price). If issued at par, kp = 10%. And if they are issued at a discount of 5% then price also increases as you loose on net proceeds. Cost of Preferred Capital The following procedure is adopted to calculate the cost of preferred capital

7.3.2 Calculation of Cost of Preferred Capital

• Basic Formula

The preferred capital cost is usually formulated as:

kp = Dp ÷ P0 Where:

Dp = Annual dividend of preference shares

P0 = Proceeds from issue of preference shares

• Irredeemable Preference Shares

In the case of irredeemable (perpetual) preference shares, dividends are paid forever. For example: if a company sells its preference shares at ₹100 each, offering 12% rate of dividend then the cost of preference will be kp; = 12 ÷ 100 = 12%.

• Redeemable Preference Shares

Redeemable preference shares are repaid after a certain number of years. Here cost is the sum of dividends and redemption value.

Formula:

$kp = [Dp + (RV - NP) \div n] \div [(RV + NP) \div 2]$

Where:

RV = Redemption Value, NP = Net Proceeds, n = Years to redemption

• Example: Redeemable Shares

A company redeems redeemable preference shares for face value at the end of the term. Net proceeds = ₹98,000.

kp = (10,000 + (1,05,000 − 98,000)/5) / ((1,05,000 + 98,000)/2)

= [10,000 + 1,400] ÷ 1,01,500 = 11,400 ÷ 1,01,500 = 11.23%

• Adjustment for Flotation Costs

If flotation cost are available; net proceeds will decrease and the cost will increase. For example, if issue expenses bring down proceeds to ₹95,000 in the above case then cost goes up to ≈ 12%.

• Interpretation

The computation shows that discounts, premiums and flotation costs have a significant effect on the cost of preference capital.

7.3.3 Advantages and Limitations

• Advantages

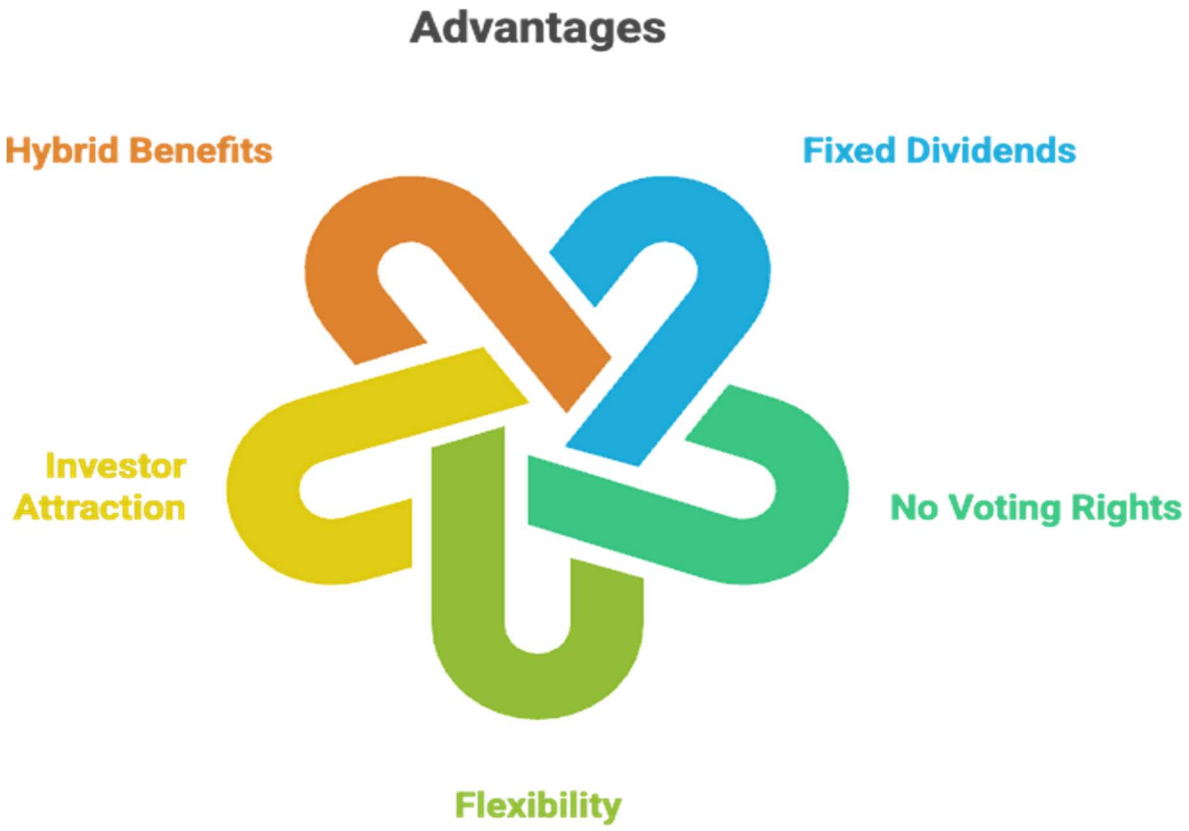
Constant Dividends: Returns are consistent for investors as well as predictability to issuers about obligations.

No Voting Rights: Preference shareholders typically have no say in the business and control stays in the hands of equity owners.

Flexibility: dividends can be waived in low profit years (non cumulative arrears excepted).

Investor Attraction: Conservative investors who prefer a low risk profile over the high returns are attracted to preference shares.

Hybrid rewards: Features of debt (preferred) securities with equity benefits, and good for optimising your financing mix.



• Limitations

Non tax deductible dividends: Unlike debt interest, dividends are not deductible from net income which would make pref shares more expensive.

CUMULATIVE BURDEN: Arrears of cumulative preference dividends entail pressure in the future.

Less Secondary Demand: Preference shares are not as liquid in secondary markets as equities or bonds.

Expensive relative to debt: The higher return investors require as a protection against the risk that they won't earn dividends in lean years.

Priority of Preference Restrictions: They are higher than equity but lower to debt in terms of claiming on assets; hence, they bear moderate level of risk.

Did You Know?

"In India, the Companies Act allows issuance of redeemable preference shares but prohibits irredeemable preference shares. This ensures companies cannot create permanent obligations to preference shareholders without redemption, protecting investor interests."

7.3.4 Role of Optimal Capital Structure in Financing Mix

• Bridge Between Debt and Equity

Preference shares are between real debt and real equity. They offer a fixed return like debt and little or no repayment obligation. This has made them attractive to industries that need long-term capital but don't want the leverage.

• Retention of Control

Since preference share holders don't have voting rights in most of the cases, existing promoters and shareholders continue to control despite attracting huge investments. For family controlled or closely held companies this is especially appealing.

• Enhancing Creditworthiness

Preference share capital supplements shareholder funds and enhances the capital structure, while equally improving the debt-equity ratios. This increases the firm's access to debt financing on favorable conditions. For instance, a company with ₹50 crore debt and ₹50 crore equity is said to have ratio of 1:1. At Rs 20 crore preference capital included New Target X, Maintaining a better leverage profile with amended ratio sets at 50:70.

• Flexibility During Financial Stress

Preference dividends are not mandatory in low-profit years, providing some relief relative to debt payments. But arrears build up in the cumulative shares, that have to be paid later.

• Strategic Applications

Firms may offer convertible preference shares to lure investors who are looking for income and a possible stake in the company. Redeemable preference shares are the source of temporary finance for terminal projects and do not create any permanent liability. Hybrid products help companies tailor their financing plans.

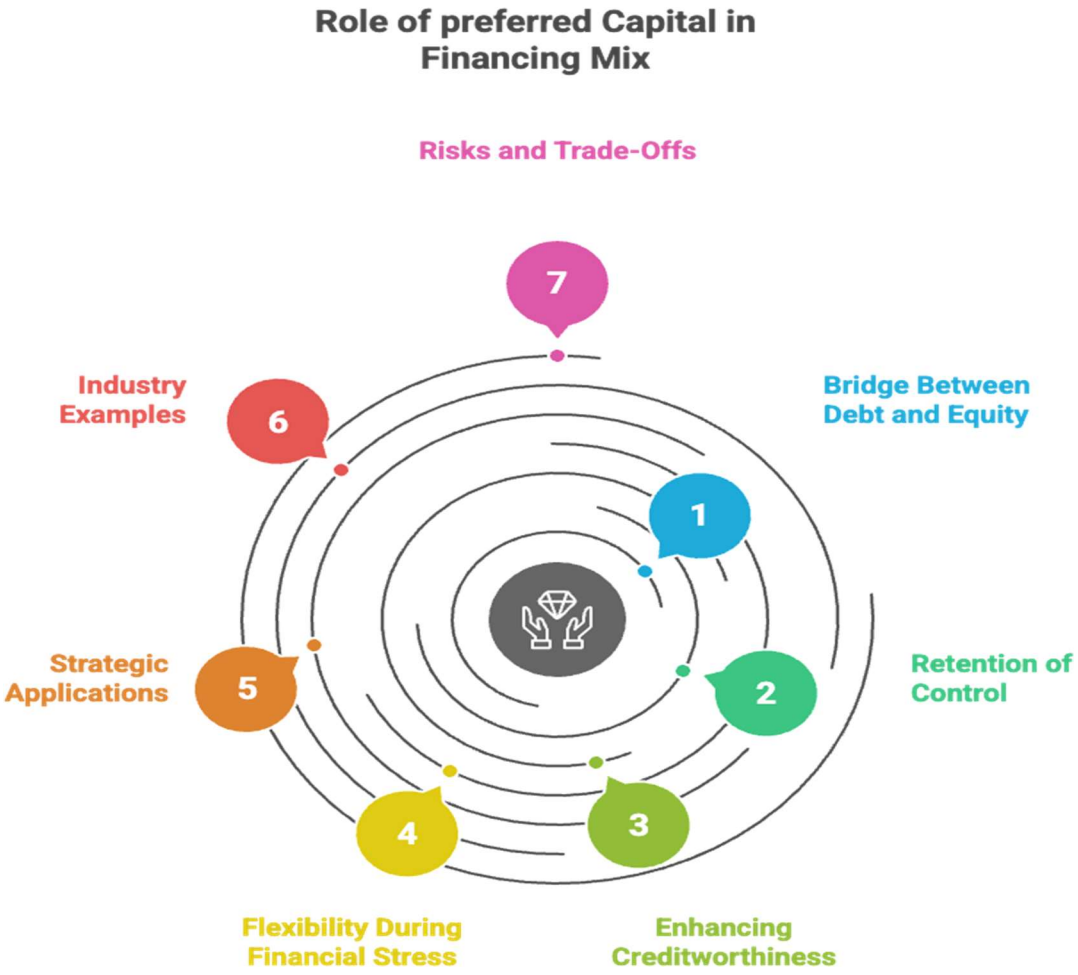
• Industry Examples

o Infrastructure companies could deploy preference capital to ensure balance sheet robustness, with its borrowing capacity remaining unscathed.

o VCs can be given convertible preference shares by startups, which provide them with downside protection against the upside potential.

• Risks and Trade-Offs

Though preference capital can prevent dilution of the control, it places extra cost on companies if profits decline. Managers need to determine whether its advantage is worth the cost relative to debt.



7.4 Weighted Average Cost of Capital (WACC)

The WACC (Weighted Average Cost of Capital) is the average rate of return a firm is expected to pay to its security holders to finance its assets, regardless how that financing is obtained. It equals the cost of each individual type of capital multiplied by its weight in the total capital structure. Back WACC is a hurdle rate for the capital budgeting decision, it is also used as a technique to value projects based on the net present value of cash flows generated by projected income statement (discounted at an interest rate reflecting cost of borrowing).

7.4.1 Concept and Significance of WACC

• Concept

WACC is a weighted average measure of all long-term sources of financing. Each capital source- equity, debt and preference shares have their own costs and WACC is the weighted average of these sources shared in total financing. From a mathematical standpoint, WACC forces firms to judge projects based on the preferences of all investors.

• Formula

WACC = (E/V) × ke + (P/V) × kp + (D/V) × kd × (1 − T) Combination As used above, the company is in a steady state of growth.

1 Where:

E = Market value of equity

P=Price of Preference share D = Price of debt.

V = Firm value (E + P + D) ke = Cost of equity

kp = Cost of preference capital kd = To cost of debt

T = Corporate tax rate

• Significance

Comparison Base: It serves as a hurdle rate about which it is contemplated for investment decisions. When a project's return surpasses WACC, value is added.

Valuation Tool: The rate used to discount cash flows in the valuation of firms, bonds and shares.

Capital Structure Decisions: Helps managers to choose the best ratio of debt to equity.

Risk Analysis: WACC accounts for financial risk (by way of leverage) as well as business risk (through cost of equity).

Shareholder Wealth MaximizationProvides victims with redress for their injuries.

7.4.2 Steps in Calculation of WACC

• Step 1: Identify Capital Sources

Identify the long term funding ingredients: equity, preference and debt. Current liabilities are typically omitted unless used as a source of permanent financing.

• Step 2: Calculate Individual Costs

o Ke with CAPM, DDM or Bond Yield Plus Risk Premium.

o Cost of preference share (kp) as dividend / net proceeds.

o Cost of debt (kd), i.e., coupon yield corrected for issue expenses, or YTM adjusted for taxes.

• Step 3: Determine Market Values

Yes use market values not book when using that information in your assignment to obtain correct answer. (ex: price of share × numbers of outstanding shares in case equity, market price of bond for debt. etc.)

• Step 4: Compute Proportions

To calculate the weight of each component divide its market value by the total capital (V). E.g.: If equity = 60 crore, debt = 30 crore and preference = 10 crore then weights are.6,.3 and.1.

• Step 5: Apply Formula

'You'll then multiply the cost of each component by that component's weight and sum everything together. This gives WACC.

• Step 6: Interpret the Result

It should measure WACC and compare with project IRR or ROI to choose investment.

7.4.3 Practical Example of WACC Calculation

• Data:

o Equity : 50,00,000 shares of ₹40 each =₹20,00,00,000.

o Prefrence share: 5,00,000 shares of ₹100 each = 5,00,00,000

o Loan: Bonds worth ₹10,00,00,000 issued at par and coupon rate of 12%

o Tax rate = 30%

o ke (using CAPM) = 15%

o kp = 12%

◦ kd = 12% × (1 − 0.30) = 8.4%

• Step 1: Total Capital

Value Of V = 20,00,00,000 + 5,00,00,000 + 10,00,00,000 = ₹35,00.00.000

• Step 2: Weights

Equity weight = 20 / 35 = 0.571

Wt. of preference = 5/35 = 0.143

Debt weight = 10 ÷ 35 = 0.286

• Step 3: WACC Calculation

WACC: (0.571 × 15%) + (0.143 × 12%) + (0.286 × 8.4%)

= 8.57% + 1.72a+% + 2.40% = 12.69%)

• Interpretation

12.69% WACC is the discount rate needed sorry, req'd! Firm value increases if the anticipated rate of return is above 12.69% and decreases if it is below.

7.4.4 Role of WACC in Investment and Financing Decisions

• Capital Budgeting Decisions

WACC acts as a minimum rate in the investment evaluation. For instance, if an investment project's IRR is 14% and the WACC is 12%, as the project brings in a positive value it should be accepted.

• Valuation of Firms

WACC is used by analysts to discount cash flows (FCFF) in valuing the firm. The lower the WACC, the greater valuation, and vice versa.

• Optimal Capital Structure

WACC helps to direct managers between debt and equity financing. Higher leverage lowers WACC in the initial period on account of tax shields, but exposes the firm to greater financial risk over time. Companies try to reduce WACC to increase their stock prices as discussed earlier.

• Risk Evaluation

WACC is indication of risk in financing decisions. Firms in stable industries (utilities)

often carry higher debt burden, and volatile industries (tech) keep more equity to minimize financial distress.

• Performance Benchmarking

WACC is a measure of if current operations generate enough return. Value creation is taking place if ROIC exceeds WACC on a consistent basis.

7.4.5 Limitations of WACC

• Assumption of Constant Capital Structure

The WACC assumes that the firm's capital structure will not change, which does not always hold in a dynamic environment.

• Use of Historical Data

Such factors as beta, market return or cost of debt frequently are based on historical data that may not be indicative of what one expects in the future.

• Market Value Challenges

The market values of debt and equity also vary, so it's hard to know exactly what you are doing.

• Not Suitable for All Divisions

It can be misleading to apply one WACC to assessing investments in different divisions. High-risk segments may need higher hurdle rates than lower risk ones.

• Ignores Project-Specific Risks

The WACC only captures the risk associated with an average firm (not project) so that it does not account for specific sources of uncertainty related to specific investment projects. Depending on the strict WACC valuation can be a-over or under-estimation.

• Potential Bias Toward Debt

Tax shields make your debt look cheaper, WACC alone doesn't account for the extra risk associated with over-leverage.

Knowledge Check 1

Choose the correct option:

1. WACC is primarily used as:

a) Dividend rate

b) Hurdle rate

c) Tax shield

d) Coupon rate

2. After-tax cost of debt is lower because:

a) Dividends taxed

b) Interest deductible

c) Equity risk premium

d) Higher leverage

3. In WACC formula, weights are based on:

a) Book value

b) Market value

c) Nominal value

d) Par value

4. If project IRR < WACC, the project:

a) Should be accepted

b) Adds value

c) Should be rejected

d) Reduces risk

5. Major limitation of WACC is:

a) Too complex

b) Ignores tax

c) Constant structure assumption

d) Excludes equity cost

7.5 Summary

 Cost of capital is the lowest return rate which investors will be ready to acceptable for funding a company.

 Cost of equity represents the return shareholders demand and can be calculated via a number of different methods including DDM, CAPM, or Bond Yield + Risk Premium.

 The cost of debt is the nominal interest rate after tax as the interest is tax-deductible.

 Preference Capital: features of debt and equity; cost is dividends divided by issue price or net proceeds.

 WACC: WACC combines the cost of equity, debt and preference capital at market proportion.

 WACC is a discount rate in decision making for investing and impacts the value of firm.

Equity is more expensive than debt because the shareholders accept more risk.

Debt provides tax advantages, but it raises financial risk when used excessively.

Preference shares are more expensive than debt because the interest on debt is deductible as a tax expense.

The best combination of capital structure leads to minimum WACC and maximum shareholders value.

WACC captures the impact of both how to finance and what risk, thereby directing capital budgeting.

Drawbacks of WACC are OG-consistent assumptions and not reflecting firm-specific risks.

7.6 Key Terms

Cost of equity: Return that stockholders require as compensation for the firm's risk.

Costato Di Debito (COSTLL Positive) Actual interest rate a company pays on its debt, reflecting any fees or other charges associated with the borrowing.

Cost of Preference Capital: Dividend the preference shareholders are willing to receive which is usually constant.

Dividend Discount Model (DDM) A method of calculating the cost of equity based on expected dividends and growth.

CAPM: Capital Asset Pricing Model that relates stock returns to the risk-free rate, beta, and market premium.

Bond Yield Plus Risk Premium: Approach for estimating the cost of common equity by adding a premium to the firm's debt yield.

Before-Tax Cost of Debt Interest expense without the benefit of tax savings.

After-Tax Cost of Debt: The cost to borrow after tax benefits are taken into account.

WACC: weighted average cost of capital; weighted return on the firm’s funds.

Hurdle Rate: The least level of return on an investment to trigger approval.

Tax Shield: The impact by which the taxable income decreases, as a result of interest expense being tax deductible.

Beta: Quantitative measure of a stock's volatility relative to the market in CAPM.

7.7 Descriptive Questions

Q2 Define cost of equity and discuss different methods to value it.

Explain cost of debt and the distinction between before-tax and after-tax costs.

How is the cost of Preference Capital to be computed, Discuss with example?

Calculate and explain the WACC formula. Why is it that WACC is thought of as a hurdle rate?

Compare how DDM and CAPM dervise the cost of equities.

How does WACC affect the project appraisals & decisions about financing?

Explain where WACC provides an incomplete or incorrect answer, and why.

What is the influence of capital structure (equity, debt, preference) on overall cost of capital?

7.8 References

1. Brealey, R. A., Myers, S. C., & Allen, F. – Principles of Corporate Finance, McGraw Hill.

2. Ross, S. A., Westerfield, R. W., & Jaffe, J. – Corporate Finance, McGraw Hill.

3. Damodaran, A. – Applied Corporate Finance, Wiley.

4. Van Horne, J. C., & Wachowicz, J. M. – Fundamentals of Financial Management, Pearson.

5. Pandey, I. M. – Financial Management, Vikas Publishing House.

6. Khan, M. Y., & Jain, P. K. – Financial Management: Text, Problems and Cases, McGraw Hill.

Knowledge Check 1

1. b) Hurdle rate

2. b) Interest deductible

3. b) Market value

4. c) Should be rejected

5. c) Constant structure assumption

7.9 Case Study

Background

Development group Alpha Infrastructure Ltd, one of the leading construction companies, is going to set up a metro rail at an initial investment of ₹2,000 crore. The budget committee is to determine the financing mix and hence financial cost for determining project appraisals. Alpha has the following capital structure today:

- Equity: ₹800 crore (market price), ke = 16%

- Preferece Capital: ₹200 crore, rate of dividend = 12%

- Debt: ₹1,000 crore; coupon rate = 10%, after-tax cost of debt = 7% Tax rate = 30%

Problem 1: Calculating WACC

Step 1: Sum of capital (V) = 800 + 200 + 1,000 = ₹2,000 crore Step 2: Weights → Equity = 0.4, Preference = 0.1, Debt = 0.5 Step3: Put in Formula Calculate the cost of debt; it is a rate used to measure the return on equity and debt; the value comes out to duplicate those in the above calculations.

WACC = (0.4 × 16%) + (0.1 × 12%) + (0.5 × 7%).

= 6.4% + 1.2% + 3.5% = 11.1%

Solution: WACC is 11.1%, and that is the lowest return our project has to earn.

Problem 2: Comparing Financing Alternatives

''The CFO recommends another ₹500 crore be raised for the expansion. Two alternatives are available:

• Option A: 100% Equity

If offered to the public at full market value, ke = 16%. This would bump up proportion of equity in the capital, and perhaps raise WACC somewhat because of increased reliance on equity.

• Option B: 100% Debt

Initially borrowing at 10% pre-tax; after tax, kd = 7%. This would raise leverage but lower WACC in the short term.

Analysis:

• If WACC falls to, say, 10%, with more debt then bv that financial risk jumps.

• With greater equity, WACC is unchanged, but more expensive funding can reduce shareholders' wealth.

Question 3: WACC - DCF analysis for project appraisal57 3.

Annual anticipated net cash flow from the metro project = ₹300 crore. Life = 15 years.

If you use WACC = 11.1%, PVAF (15% years, 11.1%) ≈ 6.95. NPV = 300 × 6.95 − 2,000 = 2,085 − 2,000 = ₹85 crore.

Solution NPV being positive, it is feasible to undertake the project.

Reflective Questions

Should Alpha concentrate on reducing the WACC with debt? Or should it place priority of maintaining its current D/E by managing more equity capital?

What is the effect of preference capital on Alpha's financing plan?

What if interest rates went up, what would that do to WACC and to the feasibility of the project?

To be used is WACC as a rate for the four sources of the Division and to which Alpha project should we discount?

How should Alpha position its capital structure in the long run?

Conclusion

This case illustrates how WACC is computed and used to influence actions in investing and financing. Although increasing debt lowers the WACC, it also increases financial risk and could impact credit

ratings. Alpha Infrastructure having a positive NPV at the current WACC means that project is feasible, but management needs to carefully consider risk and reward before changing ratios of capital. The case also illustrates the practical importance of WACC as a decision rule and for assessing financial discipline.

FM Unit 8 V3.docx

Financial Management_MBA_2

Financial Management_MBA_2

ATLAS SkillTech University

Document Details

Submission ID

trn:oid:::3618:127127318

Submission Date

Jan 29, 2026, 6:45 PM GMT+5:30

Download Date

Jan 30, 2026, 10:36 AM GMT+5:30

File Name

FM Unit 8 V3.docx

File Size

77.8 KB

29 Pages

4,860 Words

27,546 Characters

0% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text
- Cited Text
- Small Matches (less than 20 words)

Match Groups

0 Not Cited or Quoted 0%
Matches with neither in-text citation nor quotation marks

0 Missing Quotations 0%
Matches that are still very similar to source material

0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

0% Internet sources
0% Publications
0% Submitted works (Student Papers)

Integrity Flags

1 Integrity Flag for Review

Hidden Text
124 suspect characters on 4 pages
Text is altered to blend into the white background of the document.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- **0** Not Cited or Quoted 0%
  Matches with neither in-text citation nor quotation marks
- **0** Missing Quotations 0%
  Matches that are still very similar to source material
- **0** Missing Citation 0%
  Matches that have quotation marks, but no in-text citation
- **0** Cited and Quoted 0%
  Matches with in-text citation present, but no quotation marks

Top Sources

0% Internet sources
0% Publications
0% Submitted works (Student Papers)

Unit 8: Leverages

Learning Outcomes:

1. Understand the concept and significance of leverage:

Explain how leverage magnifies profits and losses, and why it is important in financial and operational decision-making.

2. Analyze operating leverage:

Calculate operating leverage and assess how changes in sales impact operating profits due to fixed costs.

3. Evaluate financial leverage:

Determine the effect of using debt financing on earnings per share (EPS) and assess its risk-return trade-off.

4. Apply combined leverage in decision-making:

Use combined leverage to analyze the joint impact of operating and financial structures on business performance.

5. Apply leverage concepts in practical scenarios:

Use leverage tools to guide decisions on cost structure, capital structure, and profitability in real-world contexts.

Content:

8.0 Introductory Caselet

Orion Textiles Ltd: – A medium sized fabric company has encountered stiff competition from local as well as foreign rivals. To become more competitive, the company is also looking to invest ₹200 crore in new machines that are automated, to improve efficiency and lower operating costs.

The CFO tells the board that such an investment will increase the company's fixed costs quite high (due to depreciation and maintenance) but it will lower its variable cost per unit. This change will magnify the operating leverage of the firm, allowing a small amount of change in sales to result in a large effect on operating profit. Soaring sales would amplify a profit, while a drop-off in demand could wreak havoc on margins.

At the same time, and to complement it DEBT: Also, the CEO recommends financing some of the project using debt as this attract loans at 9% interest. This would magnify the financial leverage reflecting that fixed interest charges have to be covered irrespective of whether profits are earned. More leverage would also increase the earnings per share (EPS) impact of rising profits at higher levels, but it may be that this comes at an increased risk of financial distress under low demand.

Others advocate for a more balanced view, noting the impact of combined leverage, which measures the net impact of both operating and financial leverage. They emphasize that overuse of leverage, although attractive during good times, could lead to large losses in down times.

This argument highlights the important distinction between business risk (variability of sales and operations) and financial risk (the effect of financing decisions). Orion's senior management now has to determine the right balance between operating and financial strategy that will continue sustained growth over the long term without putting too much at stake in doing so.

Critical Thinking Question

Put yourself in million-Euro double-breasted shoes of Orion's board, would you suggest going high-leverage to achieve maximum potential returns or super-conservative? How would you weigh profit and security in this decision?

8.1 Types of Leverages

Leverage is the practice of deploying fixed costs, be they operating or financial, to amplify a business's potential returns (and risks). With leverage, it's a case of both that glorified lever: it magnifies profits and losses, depending on the basic business conditions. In financial management, leverage is classified into three forms: operating leverage, financial leverage and combined leverage. Each type has a separate function regarding the firm's cost structure, profitability, and risk.

8.1.1 Concept of Leverage and Its Importance

• Basic Concept

In terms of finance, leverage refers to the extent to which the firm depends on fixed costs generally (operating costs such as rent and depreciation or financial costs such as interest payments). Because fixed costs are present, varying levels of sales or operating income lead to disproportionately higher or lower changes in profitability. That's the "magnification effect" that makes leverage double-edged: It can raise returns during good times but deepen losses in bad times.

• Types of Leverages

Operating Leverage: Deals with fixed operating expenses. It is a measure of the sensitivity of operating profit (EBIT) to changes in volume.

Financial Leverage : Has to do with the structures of fixed financial costs. It divides the sensitivity of Earnings per Share (EPS) to changes in EBIT.

Combined Leverage: It gives us the overall effect of changes in 'sales' on EPS considering both operating and financial leverage.

• Importance of Leverage

o Profit Planning: An aid in estimating the influence of sales variations on profits.

o Risk Assessment: Leverage quantifies the business and financial risk of an organization.

o Capital Structure Decisions: Help to determine what mix of debt and equity should be utilized.

o Operational Strategy: Assists to harmonise between fixed and variable production costs.

• Example

Imagine If the sales of a company are ₹10,00,000 and its variable cost is ₹6,00,000 and fixed costs are

₹2,00,000. Contribution = 10,00,000 – 6,00,000 = ₹ 4,00,000. EBIT = 4,00,000 – 2,00,000 =

₹2,00,000. To the extent that sales go up 20%, EBIT goes up even more, meaning there is leverage in action.

• Strategic Relevance

Companies in industries with stable demand (utilities, telecom) tend to use greater leverage at the same time that companies in other industries with fluctuating markets (startups, fashion) choose lower levels of it to minimize their risk.

8.1.2 Operating Leverage – Meaning, Calculation, and Impact

• Meaning of Operating Leverage

Operating Leverage Operating leverage results from the presence of fixed operating costs in the firm's cost system. As sales volume rises, they drive up the additional contribution by an equal amount because no fixed costs are being increased. This in turn amplifies the sensitivity of operating income to changes in sales. Companies that have higher fixed costs compared to variable expenses are considered as having high operating leverage.

• Degree of Operating Leverage (DOL) Formula Formula for Degree of Operating Leverage (DOL) DOL = % Change in EBIT _____Percentage change in Sales.

DOL = Contribution ÷ EBIT or

DOL = % Δ EBIT ÷ % Δ Sales

• Example 1: Example 1: High operating leverage

Sales = Rs.20,00,000 Variable costs = Rs.12,00,000 Fixed costs = Rs.6,00,000

Contribution = 20,00,000 − 12,00,000 = ₹8,00,000 EBIT = 8,00,000 − 6,00,000 = ₹2,0,0,0.

DOL = 8,00,000 ÷ 2,00,000 = 4

Stated differently, a 1% change in sales will produce a 4% change in EBIT.

• Example 2: Low Operating Leverage A numerical example is contrasted with the company in Example 3.

If the fixed costs is instead ₹2,00,000 then EBIT = 8,00,000 − 2,00,000 = ₹6,00,000. DOL = 8,00,000 / 6,00,000 = 1.33

Here EBIT varies only slightly with sales; meaning low financial leverage.

• Impact of Operating Leverage

Sensitivity of Profits: The profit sensitivity to changes in sales is higher with more operating leverage.

Risk Exposure: Firms with larger operating leverage are more prone to business risk because profits can decline sharply during downturns.

Break Even Analysis: With high fixed costs, the break even point is raised so higher sales are required to cover costs.

Strategic Decisions: Firms decide whether or not to adopt automation (higher fixed expenses, higher leverage) or labour (lower fixed costs, low leverage).

• Advantages of Operating Leverage

o Magnifies profits during sales growth.

o Promotes economies of scale through the spreading of fixed costs.

o Delivers more EBIT growth with constant demand.

• Disadvantages of Operating Leverage

o Increases vulnerability during economic downturns.

o High break-even point necessitates constant volume of sales.

o Reduces flexibility in adjusting costs.

• Real-Life Implications

o A technology infrastructure (fixed cost) intensive software company has high operating leverage. After the software is written, more sales mean very large earnings.

o A small bakery, with few costs that are fixed or sunk (i.e. mostly raw materials and wages) has low operating leverage -- profits will not be highly sensitive to changes in how good business is.

Did You Know?

"Operating leverage is sometimes called the 'silent multiplier' in corporate finance. Companies with high automation and fixed costs, like airlines or automobile manufacturers, can see EBIT swing dramatically with small sales changes, even when total revenues appear stable."

8.1.3 Financial Leverage – Meaning, Calculation, and Impact Meaning of Financial Leverage

• Basic Concept

Leverage Leverage is the existence of a charge for the use of funds other than those proivided by shareholders. Financial leverage stems from use of fixed financial charges, interest on debt and preference dividend, in the capital structure. It is a gauge of how much the company's earnings per share (EPS) are affected by fluctuation in operating profit(EBIT). In other words, leverage increases the impact of EBIT on income available to common shareholder.

• Core Idea

If a firm makes more on the money it borrowed than on the cost of that money (the interest), then financial leverage has a positive effect, magnifying the returns to stockholders. As a result, if EBIT is less than the cost of debt, leverage fights equity and works to eat into EPS and possible earnings.

• Relevance

The role of financial leverage is very crucial in the determination of capital structure. It reveals the trade-off between risk and return: debt is cheaper than equity because of the tax deductibility of interest, but too much debt increases financial risk and jeopardizes solvency.

DFL Formulas Formula for Degree of Financial Leverage (DFL) DFL = EBIT / EBIT – I Interest Coverage Ratio and DFL are interrelated to one another.

DFL = EBIT ÷ (EBIT − I)

Where:

EBIT = Earnings Before Interest and Taxes

• I = Interest expense

The formula measures how much the change in EPS is related to a percentage change in EBIT.

Numerical Example: Financial Leverage Gains From Debt Financing Consider Positive24

Let us consider a company with EBIT = ₹5,00,000 and interest = ₹1,00,000.

DFL = 5,00,000 ÷ (5,00,000 – 1,00,000) = 5,00,000 ÷ 4,00,000 = PNBfinance.

By this, I mean that a 1% movement in EBIT translates into higher than 1% change in EPS. If EBIT falls by 10%, EPS falls by only 9%. Here leverage benefits shareholders.

Example 2: Negative Financial Leverage

HoT = ₹1,50,000 and interest = ₹1,00,000.

DFL = 1,50,000 ÷ (1,50,000 − 1,00,000) = 1.50 ÷ 0.50 = 3.0

This implies EPS is very sensitive to EBIT. If EBIT drops 10%, EPS would decline by 30%. There is high financial leverage here as EBIT is just on the edge covering interest.

Impact of Financial Leverage

• On Earnings per Share (EPS):

Positive leverage operates to "leverage up" EPS when EBIT > interes cost. The negative leverage results in lower EPS when EBIT < interest.

• On Risk:

Debt creates financial risk since interest payments must be made, regardless of sales or profitability. Too much leverage can end in financial ruin or failure.

• On Capital Structure Decisions:

Corporates weigh the advantage of cheaper debt against running out of cash. An equal approach contributes to the optimum capital mix.

• On Shareholder Wealth:

Optimal utilization of the financial leverage enables equity holders to increase dollars for shareholders, supports wealth maximization goals. Over-leverage, though creates value, destroys it when rewards are less than the risks.

• Industry Applications:

o Utility cos have high leverage as they are stable cash flow stories.

o Start-ups or cyclical business tend to keep leverage low to prevent risk during the less profitable times.

Extended Considerations

Preference Dividends in Leverage:

Accounting with the preference dividend as if it is an interest amount; Both, preference dividend and interest are a fixed cost, which lowers the earning to equity shareholders.

Adjusted formulas include, when they are taken into account, interests and preference dividends.

Combined Effect with Operating Leverage:

With high fixed operating costs and also high financial debt, the combined leverage effect will cause EPS to be very volatile. Managers must analyze both together.

Tax Advantages:

Interest deductions reduce taxable income and therefore the effective cost of debt. This edge may motivate firms to use debt in the capital structure.

Control Considerations:

Debt helps the promoters keep control (as opposed to issuing more equity). Nonetheless, that added control can mean having more of your assets at financial risk.

"Activity: Analyzing EPS under Different Leverage Scenarios"

A company has EBIT of ₹8,00,000 and is considering raising ₹10,00,000 through debt at 10% p.a. interest or through equity. Calculate EPS in both scenarios assuming 1,00,000 equity shares at ₹10 each. Compare how financial leverage affects EPS in the debt-financed option versus the equity-financed option. Discuss which choice is preferable if EBIT is expected to rise by 20%, and what risks the firm would face if EBIT fell by 20%.

8.1.4 Combined Leverage – Concept, Formula, and Applications Concept of Combined Leverage

• Basic Idea

Combinative leverage refers to when a company employs both fixed operating costs (operating leverage) and fixed financial costs (financial leverage). It sums up the entire impact of sales fluctuations on earnings per share (EPS). That is, it aggregates the magnifying impact of both operating and financial leverage.

• Relationship with Other Leverages

o Operating leverage reflects the impact of sales changes on EBIT.

o Operating Leverage describes how EBIT moves things like the net income or EPS.

o Combined leverage connects changes in sales to changes in EPS, indicating the extent of operating and financial risk confronted.

• Importance of Concept

o Offers a total risk perspective, analyzing business and financing decisions.

o Assists managers in examining the extent to which EPS is affected by changes in sales volume.

o Leaders in determining the optimal balance of operating strategies (automation, cost structure) and financing strategies (debt vs equity).

Degree of Combined Leverage (DCL) Formula

There are two ways to determine the combined leverage:

Multiplicative Approach

DCL = DOL × DFL

Where:

DOL = Degree of Operating Leverage DFL = Degree of Financial Leverage

Direct Formula

DCL = Contribution ÷ (EBIT − I) Where:

Contribution = Sales − Variable Costs EBIT = Contribution − Fixed Costs

I = Interest

This formula displays how a percentage change in sales is magnified to effect a percent change in EPS.

Example 1: Medium Combined Leverage The following example illustrates what happens when going concern combined level is medium.

Sales = ₹40,00,000 Variable expenses = ₹24,00,000

Fixed operating Costs = ₹10,00,000 Interest = ₹2,00,000

Step 1: Contribution = 40,00,000 – 24,00,000 = ₹16,00,000

Step 2: EBIT = ₹16,00,000 − ₹10,00,000 = ₹6,00,000

Step 3 : DCL = Contribution quantity (EBIT − I) = 16,00,000 If a company has negative financial leverage then results will be negative.

Interpretation: One percent perturbation in sales causes a 4% change in EPS.

Example 2: When Combined Leverage is high (Riskier case)

Sales = ₹20,00,000 Variable cost = ₹12,00,000 Fixed cost = ₹6,00,000 Interest @ 10% on total funds employed.

Step 1: Contribution = 20,00,000 – 12,00,000 = ₹8,00,000

Step 2: Fixed Cost = 8,00,000 − 6,00,000 = ₹2,00,000

3: DCL = 8,00,000 ÷ (2,00,000 - 2,00,000) = 8,00,000 ÷ 0 → ∞

Interpretation: The firm is breaking even. Even a little drop in sales can eat it's EPS, making it extremely risky.

Applications of Combined Leverage

Risk Assessment

Debt plus leverage represents the level of equity owner's risk. High DCL means that even small sales shocks translate into large EPS variations to which shareholders are exposed through high volatility.

Decision-Making in Expansion

operating leverage) or take out debt to fund growth (thus increasing financial leverage). Cumulatively the effect directs the safe passage.

Break-Even and Safety Margin Analysis

High Combined Leverage Firms with high combined leverage are near their break-even point, having little or no margin of safety. This enables managers to formulate conservative strategies during economic downturns.

Strategic Planning

o In industries with stable demand, high TOL may be acceptable because sales variability is low.

o In other companies in cycle, the combined leverage is desired to be lower to prevent EPS volatility.

Performance Benchmarking

Investors also measure DCL across firms to find the relative extent of risk exposure (Wu et al., 2013). A company that has a lower DCL may be considered to be safer, even if it delivers marginally lower returns.

Extended Perspective

• Trade-Off Analysis

It's the managers job to weigh the reward (in this case higher potential EPS growth) and its advantage against how much it implies risk increase. Joint leverage offers such a quantitative framework to this trade-off.

• Dynamic Nature

DCL is not fixed but varies with sales volume. At low sales, leverage is high because EBIT margins are narrow, whereas at larger quantities of sales, leverage becomes smaller since we are past the first portion of fixed costs.

• Integration with Capital Budgeting

This form of leverage is operationalized in conjunction with measures like NPV and IRR to determine whether or not projects not only add value, but also fit within certain acceptable risk profiles.

"Activity: Evaluating Risk with Combined Leverage"

A company reports sales of ₹50,00,000, variable costs of ₹30,00,000, fixed costs of ₹12,00,000, and interest of ₹5,00,000. Calculate the degree of combined leverage (DCL). Then, analyze how a 10% increase and a 10% decrease in sales would impact EPS. Note whether the firm should adopt a cautious or aggressive sales strategy based on your findings.

8.1.5 Business Risk vs Financial Risk Business Risk

• Concept

Business risk is defined as the component of earnings uncertainty that would exist even if firm had no debt. It arises from differences in revenues, cost structures, competition

and so on. Put simply, it is the risk of not being able to service operating costs because of demand, price or efficiency panelty volatility.

• Causes of Business Risk

Variability of Revenues: Variations in demand and price affect the stability of sales.

Cost Structure: High fixed costs mean this business carries more risk, as you must pay for them even if sales are slow.

Competition: High competition lowers margins, which raises the level of risk.

Economy: Factors such as inflation, recessions or policy changes would make things less predictable.

Technology displacement: old production technologies have higher obsolescence risk.

• Example

Take a textile factory that has a lot of fixed costs because the company bought spiffy new machines. 5 This means, if demand declines, there is a considerable decrease in revenues but fixed costs do not change, so that EBIT decreases. This reflects business risk.

• Measuring Business Risk

Degree of Operating Leverage DOL) is one such measure. Large DOL means lot of business risk and for small change in sales, large impact on EBIT.

Financial Risk

• Concept

Financial risk is created when a company uses debt or other fixed-interestbearing sources of funds in its capital structure. It is indicative of the potential for a company to default on its interest or dividend obligations, resulting in bankruptcy or diminished shareholder value.

• Causes of Financial Risk

Debt Financing: More the debt, more the interest burden.

Preference Dividends: This is a fixed amount which the companies has to pay and it reduce profit available for equity holders.

Recessions: Reduced income growth can make it more difficult to meet your obligations.

Illiquidity: Insufficent cash flow increases financial risk.

• Example

Suppose, EBIT of a firm is ₹5,00,000 and annual interest that have to pay to debenture holders is ₹4,00,000 so only ₹1,00,000 remained for shareholders. A decline in EBIT disappoint the expectations and could result in losses, reflecting a significant risk.

• Measuring Financial Risk

The term Degree of Financial Leverage (DFL) is commonly in practice. High DFL means that EPS is very responsive to changes in the EBIT, indicating high financial risk.

Business Risk vs Financial Risk

Nature: Business risk is inherent in operations, financial risk stems from funding decisions.

Timeliness: Business risk is present though a company may not have any debt, whereas financial risk arises only once a firm uses debt or preference capital.

Control: Cost structures, pricing and demand drive business risk; capital structure decisions constrain financial risk.

Measurement: DOL is used to measure business risk and DFL is used to measure financial risk.

Effects on Shareholders: EBIT is affected by business risk and EPS by the financial risk.

• Illustration

Both Firm A and Firm B generate EBIT of ₹10,00,000. Firm A is debt free and firm B is having a debt of ₹5,00,000 at the rate of 10% p.a. If sales reduce by 20%, EBIT reduces to ₹8,00,000 in both the cases. The only risk to Firm A's shareholders is from a fall in operating profits (business risk). Both business and financial risk cause Firm B's stockholders to experience a decrease in EBIT as well as to have a constant amount of interest expense (from the loan), resulting in ɑ large decline in EPS.

8.1.6 Practical Applications of Leverages in Decision-Making

Strategic Planning

• Operational Decisions

Analysis of leverage lets managers see whether investing in automation (raising fixed costs and extending operating leverage) is worthwhile or to keep their costs variable. A firm with steady sales growth would employ more operating leverage, whereas a firm in unstable markets reduces fixed costs.

• Financing Decisions

Leverage supports the debt versus equity financing decision. A company with stable earnings might borrow more money to take advantage of tax shields. Higher risk firms favor equity in order to escape the threat of bankruptcy.

Investment Appraisal

• Project Viability

Combined leverage is taken into account by the firm in selecting among alternatives. Projects that add to the fixed costs of a business (such as new plants) are compared with the anticipated stability of sales.

• Example

A company that is contemplating constructing a new factory must determine how increased fixed costs affect EBIT at different sales levels. When DOL is too high, the project may be accept despite appealing ROI.

Profit Planning

• EPS Forecasting

Leverage is effective in forecasting EPs at various level of sales. 2What they do is to prepare sensitivity analyses that present the movement of EPS when sales are higher by -+ 10%. This can help in establishing of sales goals and safety margins.

• Break-Even Analysis

Operating leverages higher the break even point. Managers make the decision that predicted sales levels are well above break-even before they invest in fixed costs.

Risk Management

• Balancing Business and Financial Risk

Companies evaluate both risks together. For instance, a company with a lot of business risk (volatile demand) does not want debt to come along and increase its financial risk. On the other hand, a low business risk firm may employ leverage to increase returns to shareholders.

• Industry Practices

o Airlines: Lots of operating leverage from fleet and infrastructure, so they shy away from too much debt.

o IT companies: Modest to lower fixed costs but potentially modest financial leverage.

Enhancing Shareholder Value

• Positive Leverage Effect

If cash flows from debt-supported projects or acquisitions more than cover the costs of interest, leverage will result in higher EPS and wealth.

• Investor Analysis

Investors look to leverage ratios for a sense of risk. Companies who manage leverage well have also been able to command greater valuation premiums and lower cost of funding.

Practical Numerical Illustration

Sales = ₹50,00,000

Between options 3: The variable cost is ₹30,00,000 Fixed costs are ₹10,00,000 EBIT = 10,00,000

Interest = ₹4,00,000

• DOL = Contribution ÷ EBIT = (20,00,000 ÷ 10,00,000) = 2.0 64

• DFL = EBIT / (EBIT − I) 10,00,000 / 6,00,000 =1.67

• DCL = DOL × DFL = 2.0 × 1.67 = 3.34

Interpretation: A 1 percent sales change results in 3.34 percent EPS change. Such sensitivity could help managers judge whether they can afford to maintain high leverage in a cyclical industry with volatile sales.

Knowledge Check 1

Choose the correct option:

1. Business risk arises mainly due to:

a) Debt financing

b) Operating factors

c) Preference dividends

d) Tax savings

2. Financial risk occurs when a firm:

a) Uses no debt

b) Has fixed costs

c) Uses borrowed funds

d) Reduces variable costs

3. Combined leverage measures the effect of:

a) Sales on EBIT

b) EBIT on EPS

c) Sales on EPS

d) EPS on ROI

4. High operating leverage leads to:

a) Lower break-even

b) Higher break-even

c) No fixed costs

d) Reduced risk

5. Which leverage reflects shareholder sensitivity to EBIT?

a) Operating leverage

b) Financial leverage

c) Combined leverage

d) Business leverage

8.2 Summary

Leverage is the concept that profits and losses are amplified (or accelerated) by fixed costs.

Is inherent on the fixed operating costs and identifies the effect of changes in sales upon EBIT.

Leverage is created by fixed financial charges such as interest and preference dividend, it affects EPS.

Joint leverage directly relates to sales changes with EPS, capturing both operating and financial risks.

Business risk is the risk of fluctuations in EBIT caused by sales fluctuation, costs, competition or industry conditions.

Financial risk is the variability of financial condition resulting from interest-bearing debt or preference financing in relation to fixed financial charges.

Operating leverage relates to the sensitivity of profit and break even point with respect to sales.

 Financial leverage is high, which enhances the return to shareholders but on the other hand does raise risk of insolvency.

 Companies should reduce the level of firm risk to which they are exposed without reducing their ability to compete.

 Use tools to inform decisions around automation, cost structure, debt financing and expansion.

 Level of Leverage (DOL, DFL, and DCL)helps in measuring risk return trade-offs.

 Sound leverage_decision making creates profits and guarantees financial soundness.

8.3 Key Terms

Leverage: The impact of fixed expenses in increasing the sensitivity of any part to profit modifications.

Operating Leverage: Degree to which EBIT is affected by change in sales volume.

Operating Leverage: Sensitivity of EPS to EBIT changes, as a result of debt financing.

Break-Even Analysis: The total impact of changes in sales on EPS.

Business Risk: EBIT variability due to operating and market risk.

G. Financial risk Risk of bankruptcy due to financial obligations.

Break-even: Quantity of merchandise that must be sold for total revenues to equal total costs.

DOL (Degree of Operating Leverage): The percentage change in EBIT for a given percentage change in sales.

Financial Leverage Degree (DFL): It is a ratio defined for the percentage change in EPS to the proportionate percentage change in EBIT.

Degree of Combined Leverage (DCL): The ratio representing the percentage change in EPS relative to a change in sales.

Margin of Safety: The amount by which actual sales exceeds break-even sales.

Risk-Return Trade-Off: The relationship between increased risk and increased potential return due to leverage.

8.4 Descriptive Questions

Explain what is leverage and why it is important in business decisions.

What is operating leverage? Explain with the help of an example. What does it mean for business risk?

Describe financial leverage and its effect on EPS. Substantiate your answer with a numerical proof.

What is combined leverage? Recall its formula and state the uses of it.

Distinguish between business risk and financial risk with appropriate examples.

What role does the concept of leverage play in investment and finance decisions?

Explain the link between break-even analysis and operating leverage.

Assess the advantage and disadvantage of high combined leverage in a cyclical industry.

8.5 References

1. Brealey, R. A., Myers, S. C., & Allen, F. – Principles of Corporate Finance, McGraw Hill.

2. Ross, S. A., Westerfield, R. W., & Jaffe, J. – Corporate Finance, McGraw Hill.

3. Van Horne, J. C., & Wachowicz, J. M. – Fundamentals of Financial Management, Pearson.

4. Pandey, I. M. – Financial Management, Vikas Publishing House.

5. Khan, M. Y., & Jain, P. K. – Financial Management: Text, Problems and Cases, McGraw Hill.

6. Damodaran, A. – Applied Corporate Finance, Wiley.

Knowledge Check 1

1. b) Operating factors

2. c) Uses borrowed funds

3. c) Sales on EPS

4. b) Higher break-even

5. b) Financial leverage

8.6 Case Study

Background

Nova Electronics Ltd. a manufacturer of consumer electronics is in the process of developing a new range of ‘Smart Home’ products. The project will need ₹500 crore to be implemented. The board is discussing the effect of operating and financial leverage on profit and risk. Some numbers for INPX:s current financials are:

• Sales: ₹1,000 crore

• Variable Costs: ₹600 crore

• Fixed Operating Costs: ₹250 crore

• 3 – Debt – 300 Crore @ 10% per Annum

• Equity: ₹200 crore

The management must evaluate the leverage effect and decide about the financing of the new production line.

Problem 1: Calculating Operating Leverage

Contribution = Sales – Variable Costs = 1,000 – 600 = ₹400 crore EBIT = Contribution – Fixed Costs = 400 – 250 = ₹150 crore DOL= Contribution ÷ EBIT= 400÷150=2.67

Solution: A 1% change in sales will result in a 2.67% change in EBIT. The company's operating leverage is moderate to high, which tells you that profits are highly sensitive to sales.

Problem 2: Calculating Financial Leverage

EBIT = ₹150 crore

Interest = 30cr (10% of 300 cr)

DFL = EBIT ÷ (EBIT − I) = 150 ÷ (150 − 30) = 150 ÷ 120 = 1.25

Answer: A 1% increase in EBIT will result in a 1.25% increase in EPS. Nova's financial risk is manageable with moderate financial leverage.

Issue 3: Leverage and EPS Response Both Operating and Financial Gear As we stated previously, EPS would be equally related to functioning leverage except under circumstances of cost push inflation.

DCL = DOL × DFL = 2.67 × 1.25 = 3.34

Implication: Sales change is 3.34 times more powerful than EPS change. EPS would increase by 33.4% for a 10% growth in sales. On the other hand, if sales dropped 10% EPS would decrease by 33.4%.

EPS Illustration:

- EBIT = 150, Interest=30, EBT=120, Tax @30% =36,Net Income = 84 crore
- Equity= ₹200 crore, shares of. 10 each = 20 crore shares
- EPS = 84 ÷ 20 = ₹4.20

If sales increase by 10%:

- Contribution increases to ₹440 crore, EBIT = 190 crore, EBT = 160 crore, Net Income = 112 crore, EPS = ₹5.60
- EPS growth = (5.60 − 4.20) ÷ 4.20 × 100 = 33.3%

This confirms the DCL calculation.

Reflective Questions

If Nova could automate production further (increase the degree of automation << that is, increase fixed costs) to be more efficient, should it do so if it means incurring greater operating leverage?

If Nova incurs more debt for the new project, what will happen to its financial risk?

Would Nova balance business risk with financial risk to maintain steady long-term growth?

Would a more conservative strategy (more equity financing, less fixed costs) fit the competitive nature of the electronics industry better?

How will leverage act on investor expectations to produce the market's valuation of Nova's future earnings?

Conclusion

The Nova Electronics example shows the interrelation of operating leverage, financial leverage, and combined leverage on profit and risk. High operating leverage makes the firm highly sensitive to changes in sales, however the moderate financial leverage allows earnings per share (EPS) to be amplified without excessive risk. Total leverage, by contrast, demonstrates that the volatility of sales can have a massive influence on returns to shareholders. Managers need to be strategically sensitive when setting up cost structures and financing strategies that achieve a trade-off between profitability on the one hand and financial sustainability in the long run, on the other. What Nova's example illustrates so clearly is that leverage tools are not only helpful for quantitative financial and contractual analysis... but also for strategic decision-making.

FM Unit 9 V3.docx

Financial Management_MBA_2

Financial Management_MBA_2

ATLAS SkillTech University

Document Details

Submission ID

trn:oid:::3618:127127321

Submission Date

Jan 29, 2026, 6:45 PM GMT+5:30

Download Date

Jan 30, 2026, 10:35 AM GMT+5:30

File Name

FM Unit 9 V3.docx

File Size

243.5 KB

49 Pages

6,253 Words

36,382 Characters

1% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text
- Cited Text
- Small Matches (less than 20 words)

Match Groups

2 Not Cited or Quoted 1%
Matches with neither in-text citation nor quotation marks

0 Missing Quotations 0%
Matches that are still very similar to source material

0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

0% Internet sources
0% Publications
1% Submitted works (Student Papers)

Integrity Flags

1 Integrity Flag for Review

Hidden Text
79 suspect characters on 4 pages
Text is altered to blend into the white background of the document.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- **2** Not Cited or Quoted 1%
  Matches with neither in-text citation nor quotation marks
- **0** Missing Quotations 0%
  Matches that are still very similar to source material
- **0** Missing Citation 0%
  Matches that have quotation marks, but no in-text citation
- **0** Cited and Quoted 0%
  Matches with in-text citation present, but no quotation marks

Top Sources

0% Internet sources
0% Publications
1% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1 Submitted works

University of Maine on 2025-09-02 <1%

2 Submitted works

Republic of the Maldives on 2025-07-20 <1%

Unit 9: Working Capital Management

Learning Outcomes:

1. Understand the concept and importance of working capital policy and management:

Explain how working capital decisions affect liquidity, profitability, and risk in business operations.

2. Analyze credit management strategies:

Evaluate credit policies, credit terms, and collection procedures to balance sales growth with risk of default.

3. Apply principles of cash management:

Examine techniques for forecasting, controlling, and optimizing cash flows to ensure solvency and efficiency.

4. Evaluate inventory management techniques:

Assess models such as EOQ, ABC analysis, and Just-in-Time for maintaining an optimal balance between cost and availability.

5. Apply working capital concepts in practical scenarios:

Use case studies and numerical tools to make informed decisions on liquidity, asset utilization, and short-term financing.

Content:

9.0 Introductory Caselet

Fastexpanding lifestyle store chain Apex Retail Ltd, which had been opening stores in major cities at will for a few years now. Even as earnings have inched up, the company finds itself increasingly poorly equipped to handle its day-to-day financial affairs. The CFO points out that the company has to lean on suppliers for extended terms despite surging sales and even holds off paying salaries at times. This scenario is an indication of certain irregularities related with its working capital management.

They find through careful accounting analysis, the firm's receivables are increasing rapidly as a result from the relaxed credit terms to customers. Most buyers stretch payments longer than the term and their cash flows get mismatched. Meanwhile, Apex is maintaining a surfeit of inventory in all its stores to prevent running out of stock. This stock represents a substantial amount of capital and increases storage costs. The cash reserves are inadequate, making the company rely on short-term borrowings to discharge its obligations, which hike up interest costs.

There are three critical issues the CFO provides to the board:

Credit management: Does Apex need to make its credit policy more rigid to cut down on defaults even though it might lose a few clients?

Cash Management: How can the organization improve its ability to project and manage cash flows so that payments can be made when due?

Inventory Management: How can stock be managed in a way that does not make too many sacrifices between the conflicting goals of inventory levels and sales, or customer satisfaction?

The board recognizes the impact of WCD on liquidity, profitability and financial stability. Mixing credit, cash, and inventory policies is important for growth with minimum risk. The Apex case is emblematic of the classic challenge that many successful growing firms face: How can you grow sales aggressively, yet not lose control of short-term financial discipline?

Critical Thinking Question

If you were the CFO of Apex, would you focus initially on stricter credit control or tighter inventory levels or higher cash reserves in order to solve its working capital problems? Justify your choice with reasons.

9.1 Working Capital Policy and Management

Working capital policy and management is the preparation of planning, supervising and controlling current assets as well as current liabilities to avoid interruptions in the operations. The emphasis is on maintaining enough liquidity without keeping excess idle. A successful working capital strategy balances consistency and risk, since too much working capital leads to idle money and too little can lead to insolvency.

9.1.1 Concept and Importance of Working Capital

• Concept

Working capital is the percentage of the firm s assets invested in current assets, including cash, receivables and inventories, that will be converted into cash within a year. It may be expressed as: Working Capital = Current Assets − Current Liabilities.

• Types of Measurement

o Gross Working Capital: The sum of the current assets.

o Net Working Capital: Current assets reduced by current liabilities. A positive working capital expressed liquidity; a negative figure have problem as and result short-term financial squeeze.

• Importance

Liquidity Management: to ensure we can handle our short term obligations.

Return: Working capital is employed effectively when it helps improve returns by keeping idle assets to a minimum.

Operational Stability: The seamless fall of raw materials, production and sales relies on sufficient working capital.

Risk Management: Trades off insolvency risk with cost of carrying assets.

Investment Confidence: Sufficient working capital gives confidence to investors and lenders regarding the financial strength.

• Example

If a company's current assets is ₹10,00,000 and its current liabilities are ₹6,00,000. Net working capital = 10,00,000 − 6,00,000 = ₹4,00,000. This indicates strong liquidity.

2

9.1.2 Types of Working Capital (Permanent and Temporary)

• Permanent Working Capital

o Means the lowest level of current assets necessary to maintain its operations.

o It is also on business regardless of seasonality or cyclicality.

o Example: A shop must always have a base stock of ₹50,00,000 on hand regardless of the season for sales.

• Temporary (Variable) Working Capital

o Stands for other current assets to peak seasons or when there are special allocations.

o It varies with business conditions and demand.

o Example: A textile company needs extra ₹20, 00,000 in the festival season for building up stocks.

• Distinguishing Features

Permanent working capital is constant, temporary is variable.

Permanent is funded by long-term sources, temporary by short-term sources of financing.

Permanent is constant, temporary is variable.

• Strategic Relevance

Both need to be estimated correctly or firms will either over-finance (sit on cash) or under-finance (be short of funds).

9.1.3 Working Capital Policies (Aggressive, Conservative, Moderate)

• Aggressive Policy

o Funds a higher percentage of current assets with short-term obligations.

o Lower cost of capital but higher liquidity risk.

o EG: A firm that is funding 80% of its CA by ST loans at 9 % p.a interest and 20% by LT capital. This reduces the cost of funding but raises refinancing risk.

• Conservative Policy

o Depends solely on the long-term funds for fixed and part of current assets.

o Provides solvency but diminishes profitability because of its more expensive financing.

o Example: Financing 70% of CA with LT funds @ 12%. Liquidity is safe but costly.

• Moderate (Matching) Policy

o Aligns financing period with life of the asset. Permanent working capital is funded by long-term funds, temporary needs are met with short-term funds.

o Ex: Permanent inventory financed by long-run equity/debt, Seasonal dmd funded by short-run borrowings.

• Evaluation

o Aggressive = High risk, high profit.

o Conservative = Less risk, less reward.

o Moderate = Balanced trade-off.

9.1.4 Factors Determining Working Capital Requirements

Nature of Business

o Trading companies need greater levels of working capital than service organizations. Manufacturing firms fall in between.

Business Cycle

o Growth periods call for additional working capital and down turns require less.

Production Policies

o There is a greater need for working capital in continuous production compared to seasonal production.

Credit Policy

o Loose credit terms mean bigger receivables and increased working capital requirements. Strict credit policies reduce them.

Operating Efficiency

o Productive firms control inventory and receivables more effectively actual requirements become less.

Growth and Expansion

o Companies that are growing need working capital to support additional operations.

Inflation

o Higher prices increase value of inventories and receivables that need to be financed.

Supplier and Customer Relations

o Increased credit from suppliers decreases requirements and extended payments by customers increase needs.

• Numerical Illustration

A company projects ₹50,00,000 in sales with a cost of goods sold rate of 70% and inventory turns at 6 per year. Average Stock = (Cost of good sold/Turnover) = (35,00,000 / 6) =

₹5,83,333. This figure emphasizes the impact of inventory on estimation of working capital.

Did You Know?

“In India, working capital financing often forms more than 50% of total bank credit to industries. The Reserve Bank of India’s guidelines on cash credit and overdraft directly influence corporate working capital policies.”

9.1.5 Techniques for Effective Working Capital Management

Cash Management

o Forecasting inflows and outflows.

o Maintaining optimal cash balance.

o 9) By embloying techniques such as cash budgets, lockbox systems and concentration banking.

Receivables Management

o Credit terms and collection policy.

o Carrying out credit analysis (age schedules, credit scoring).

o Providing discounts if customers pay the invoice early.

Inventory Management

o Utilizing EOQ (Economic Order Quantity) to reduce order and carrying costs.

o ABC analysis of category items for prioritization of stock.

o Just-in-Time systems to manage inventory holding levels.

Payables Management

o Arranging beneficial credit terms with suppliers.

o Eliminating the risk of bad credit due to late payments.

o Hedging early payment discounts vs liquidity requirements.

o Current Ratio = Current Assets / Current Liabilities (optimal ≈ 2:1).

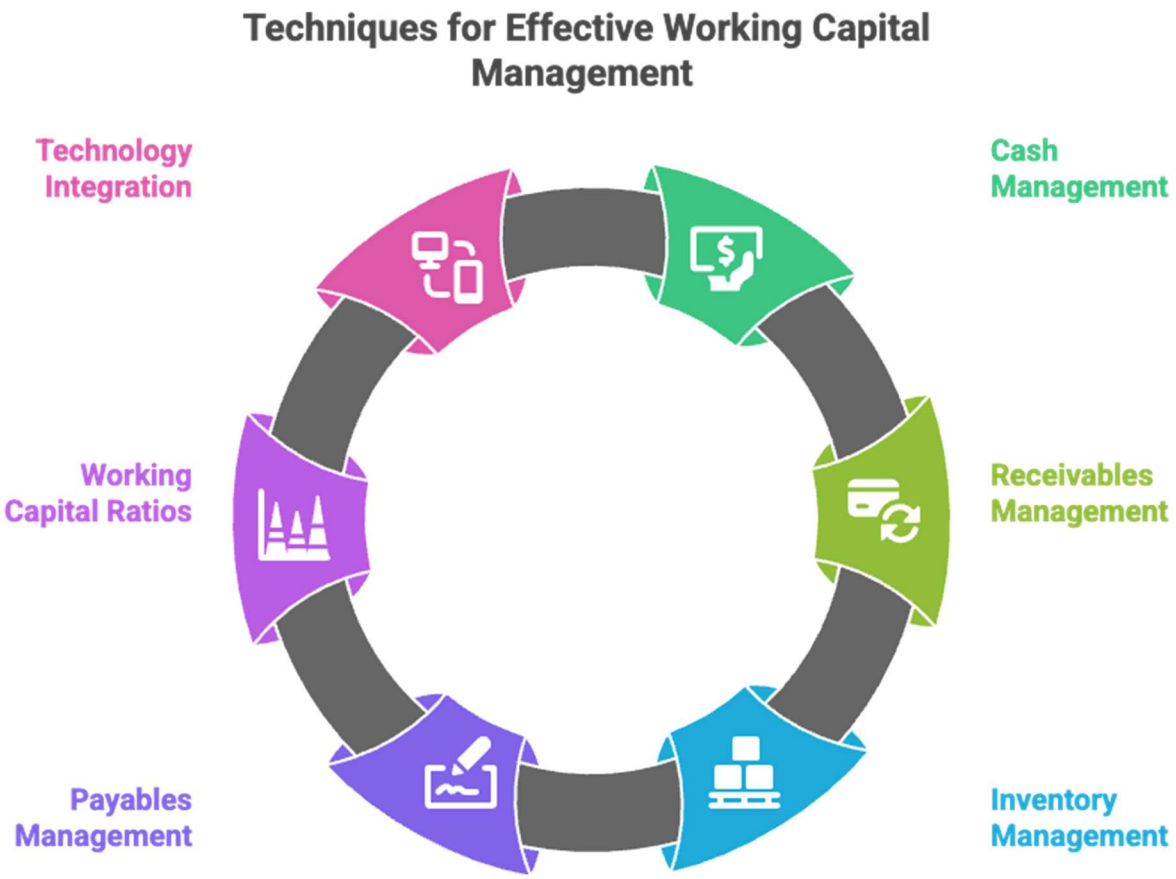
o Quick Ratio = (Current Assets – Inventory) / Current Liabilities (good ~1:1).

o Inventory Turnover = COGS / Average Inventory.

Technology Integration

o Working capital monitoring is simplified with ERP and digital platforms.

o Real-time dashboards improve decision-making.



• Illustrative Example

The current ratio of a firm is calculated as: r Current Ratio = Current Assets / Current Liability If the total current assets are ₹ 20,00,000 and the total currrent liabilities is ₹10,00,000, then its current ratio will be : r = Current Assets/Current Liabilities r=2000l000/1000 000 r=2!.

Excluding inventory of ₹6,00,000, quick ratio = (20,00,000 − 6,00,000) ÷ 10,00,000 = 1.4. These ratios guide liquidity management.

9.2 Credit Management

Credit management is a term denoting practices, policies, and procedures that are used by a company to ensure that it extends credit to the customers within an acceptable or reasonable limit and also that it collects payment from its customers in a reasonable manner. It is crucial to maintaining liquidity as it supplies sales growth. Bad

credit management results in cash flow problems and bad debts whereas effective credit management protects the company, achieves profit and strikes a balance between the two.

9.2.1 Objectives of Credit Management

• Ensuring Liquidity

One of the major goals of credit management is sufficient cash flow by collecting due receivables soon. This cash is necessary for operating expenditures, paying suppliers and servicing debt.

• Balancing Risk and Profitability

Credit growth boosts sales, but it also enlarges the number of firms exposed to the risk that someone doesn't pay up. With credit management, it's all about weighing up the higher revenue potential against the risk of bad debts.

• Customer Relationship Management

Extending credit helps you build long-term relationships with your customers. A thoughtful credit policy encourages customer retention and loyalty by allowing financial freedom.

• Minimizing Bad Debts

It is used for evaluation of customer credit worthiness and credibility to avoid bad debt or loss from defaulter customers.

• Supporting Growth

A good credit management provides for increasing sale without compromising on the financial discipline. In competitive markets firms often resort to credit sales as a means of expanding market share.

• Example

If a firm has to sell goods say at a value of ₹1,00,000 with only cash terms then one can see that how sales will get stuck. But if it gives credit for 30 days, the sale could go up to ₹1,50,000 thereby generating additional income. Effective credit management prevents the excess ₹50,000 from becoming a bad debt.

9.2.2 Credit Policy: Factors and Framework

• Concept

Credit Policy A credit policy is the set of rules, guidelines and procedures that a business follows in extending credit to customers. It contains guidelines for accepting customers, granting credit and collecting.

• Factors Influencing Credit Policy

Trade Practices: In competitive industries, credit terms are often required to be liberal.

Firm Liquidity: Companies that have the luxury of high cash balances can afford to offer generous policies.

Conservatism: Conservative firms have conservative taxing policies, whereas aggressive firms are more risky.

Economic Conditions In recessions, lax policies mean fewer defaults; in growth phases, generous policies let in more customers.

Customer Profile: Customers are not created equal, policy based on the credit history and reliability of whose who buy it.

• Framework of Credit Policy

Credit Sound People: A Method for determining staff strength and providing an estimate of required branch credit personnel.

Terms: Time and conditions for payment.

Collection Policy: Procedures to recover past due accounts.

Supervision: Monthly analysis of accounts receivable.

• Illustrative Example

A wholesaler, for example, could offer 60 days' credit to retailers in a competitive market but cut that to 30 days if liquidity becomes scarce or bad debts increase.

9.2.3 Credit Terms and Standards

• Credit Terms

Terms of credit establish the terms by which customers need to pay off invoices. Common elements include:

o 'Credit Period' : Number of days the buyer can take to pay. (e.g., Net 30, Net 60 etc.).

o Cash Discount: Payments made before the due date receive discounts (e.g. 2/10, Net 30 - 2% is deducted if payment is made within 10 days or else the net amount is payable in full within 30 days).

o Penalty Interest: Interest on late accounts.

• Impact of Credit Terms

o Longer credit terms lead to increased sales but results in more tied up funds.

o Discount promote collections but reduce margin.

o Penalties deter late payment, but may be straining on commercial relationships.

• Credit Standards

Criteria determine who gets credit Set the criteria for determining which customers qualify for credit. They could be based on income, previous payment history or credit score. Tight standards cut down on defaults but reduce sales. Easy standards jack up sales but with more risk attached.

• Numerical Illustration

Let's say a company has terms of 2/10, Net 30. Annual credit sales = ₹12,00,000. This means 60% will take the discount and pay in 10 days, while 40 % will pay on the 30th day.

o Average collection period = (0.6 × 10) + (0.4 × 30) = 6 + 12 =18 days. This decreases the investment in the receivable as opposed to a straight 30-day credit.

9.2.4 Credit Evaluation and Monitoring

• Evaluation Process

Companies verify whether customers are creditworthy: prior to providing the extension of credit, a firm checks on customer2creditworthiness by doing the following:

5 Cs of Credit: Character, Capacity, Capital/Cash Flow, Collateralized and Conditions.

Analysis of Financial Statements : Analyzing liquidity ratio, solvency and profitability.

Credit Rating Agencies: Use of external ratings for assessing risk.

Bank References and Trade References: Confirming how long you've been paying suppliers or lenders.

· Credit Limit Setting

A credit limit is set for each customer through assessment. Restrictions exist to prevent over-exposure to risky clients.

· Monitoring Receivables

o Aging Schedules: Divides receivables between ranges of 0–30 days, 31–60 days.....

o Collection efficiency Ratios:These calculate the average collection period and the receivable turn over.

o Follow-Ups: Issuing of reminders, seeking settlements or legal action for delinquent accounts.

· Numerical Example

If receivables are ₹6,00,000 and the annual credit sales are ₹36,00,000 then Receivable turnover = 36,00,000 ÷ 6,00.000 = 6 times. Average collection period = 365/6 ≈ 61 days. This means that collections are slow in relation to Net 30 terms.

9.2.5 Impact of Credit Policy on Sales and Profitability

· Sales Impact

Liberal policies boost sales by bringing in more customers, but as receivables mount so does the pressure on liquidity. Indeed, tough rules may lower sales but boost cash flows.

· Profitability Impact

Credit policy affects profitability through:

Incremental Sales: Extra revenue resulting from increased sales under liberal policies.

Bad Debts: Losses resulting from uncollectible receivables.

Collections: Administrative expenses for follow-up of accounts.

Lost chance: You can't put the money from receivables to work for you.

· Example

A firm contemplating easy credit terms expects an increase in sales from ₹10,00,000 to

₹12,00,000. Contribution margin is 20%. Additional contribution = ₹40,000. Expected bad debts go up by ₹10,000 and collection cost rises by ₹5,000. Net profit increase = ₹25,000. Hence, the policy is favorable.

· Strategic Balance

The aim is to tailor a credit policy that maximizes net profitability while minimizing the cost of default and without endangering liquidity beyond an acceptable level.

"Activity: Designing an Effective Credit Policy"

Imagine you are the credit manager of a company that has annual sales of ₹20 crore. Currently, all sales are made on Net 30 terms. The marketing head suggests relaxing the policy to Net 60, predicting a 15% increase in sales but also a rise in bad debts from 1% to 3%. Analyze the impact

on sales, receivables, and profitability. Prepare a recommendation on whether the company should adopt the new policy, highlighting risks and benefits.

9.3 Cash Management

Cash management Cash management is that activity which aims at planning, monitoring and controlling cash inflows and outflows so that a firm will have sufficient (but not excessive) liquidity. The cash is the most liquid asset and it has a direct bearing on solvency, profitability of business concern and continuity of his business.

9.3.1 Importance of Cash Management

• Liquidity Assurance

Cash is needed to pay short-term liabilities, including payroll, suppliers, interest and taxes. It's a lack of cash, even in a profitable company, that may result in default or bankruptcy.

• Profitability Balance

Maintaining higher levels of cash provides security, but too much idle monies decrease profitability as it does not generate income. Intelligent cash management maintains liquidity levels and maximizes return on investment by investing excess cash into short-duration instruments.

• Operational Continuity

Cash flow is the life blood of a business in order to finance purchases, production and distribution. A stop in cash flow, and even operations can result, leading to a loss of reputation and trust.

• Financial Flexibility

Cash on hand offers the freedom to grab hold of business opportunities that may come in the form of bulk buying deals or short term investment projects.

• Risk Management

Cash reserves protect you against uncertainties such as late receivables, unexpected expenses, or economic contractions.

• Example

Take an example of a company with raw material payment to be made every month at ₹50,00,000 and labour expenses of ₹20,00,000 in a 8-hour schedule every day.

wages, and ₹10,00,000 in overheads. And even a brief delay in collections, without smart money management, can lead to defaults. In this way, cash management maintains liquidity at no cost of growth.

9.3.2 Objectives of Holding Cash

• Transaction Motive

Firms keep cash for daily transaction purposes like vendor payments, salaries and operational costs on a day-to-day basis. Anticipated cash outflows support holding transaction balances.

• Precautionary Motive

It is due to such unexpected events like machinery breakdown, emergent buying and heightened input prices. Cash reserve works as a buffer. The number is tied to business volatility.

• Speculative Motive

Firms would keep a cash buffer to seize unforeseen opportunities, like buying cheap raw materials or acquiring capital on the cheap in periods of economic contraction.

• Compensating Balances

Banks also often have loan agreements that require firms to keep minimum balances in accounts. This immobilizes money but is required for credit lines.

• Regulatory Requirements

Certain sectors have statutory reserves that they must maintain (insurance companies have a policyholders' surplus).

• Numerical Illustration

A concern having an average daily turnovers of ₹5,00,000 and a normal contingent liability incurredunexpectedly DevComponents Pvt.

₹50,00,000 per annum) might be allowed to maintain a transaction balance of 10 days payment and at the same time may hold another ₹50,00,000 as contingency reserve.

9.3.3 Cash Budgeting and Forecasting

• Concept

Cash budget is an estimate of a company's or individual's anticipated cash receipts and disbursements over a certain period of time. what does it do?it tells when there is surpluses or when there are deficit and firms can make their investment or borrowings plans accordingly.

• Steps in Cash Budgeting

Forecast Inflows: Cash receipts, collections of receivables, dividends, and sale of assets.

Estimated Outflows: Raw material payments, wages, overheads, taxes, interest and capital investments.

Net Cash Flow = Inflows − Outflows.

Opening Balance: Group Opening Balance to be subtracted from closing balance.

Planning or Strategic: Plan for capital budgeting or short term investment decisions.

• Uses

o Prevents liquidity crises.

o Reduces idle cash by predicting surpluses.

o Control device intended to realisation compared actual / target flows.

• Illustrative Example Opening cash = ₹ 10,00,000 Inflows = ₹ 40,00,000 Outflows = ₹ 35,00,000

Closing cash = Opening cash + 40,00,000 − Payments and withdrawals = 10,00,000 + 40,00,000 − 35,00,000 = ₹15,00,000

This represents an excess that could be invested in readily marketable securities.

9.3.4 Cash Management Models (Baumol, Miller-Orr)

• Baumol Model

o Concept: It is analogous to EOQ (Economic Order Quantity) of inventory management in the sense that it gives the optimal cash balance for minimizing cash holding costs and transaction cost of selling securities into cash.

o Formula:

$C = \sqrt{(2 \times T \times b \div i)}$

Where:

C = Optimal cash balance

T = The amount of cash needed for time period n

b = transactions cost of selling securities for cash i= Cost associated with holding cash (interest rate)

o Example: If T = ₹10,00,000, b = ₹500 and i= 10 %,

$C = \sqrt{(2 \times 10,00,000 \times 500 \div 0.10)} = \sqrt{(1,00,00,000)} = ₹10,000.$

The company is to sell its securities in the minimum optimal lump of ₹10,000.

• Miller-Orr Model

o Concept: Applicable where the cash flow is uncertain. It establishes limits, upper, lower and zero-return points for cash balances. It is invested in cash when the balance is above the upper limit and topped back up when it falls below the lower limit.

o Formula for Spread:

$\text{Spread} = 3 \times \sqrt{(3 \times b \times \sigma^2 / (4 \times i))}$

Where:

Where Spread = Distance from Upper Limit and Return Point b = Fixed Transaction Cost of Buying or Selling Securities

σ^2 = Variance of daily net cash flows

i = Daily value interest rate (the opportunity cost of holding cash) Upper Limit = Return Point + Spread

Lower Limit = Pre-determined minimum cash balance Point of Return = Lower Limit + (Spread / 3)

o Example:

If b = ₹50, σ^2= 4,00,000 and i = 0.05, then

Spread = \(3 \times 0arrahy(3 \cdot 50 \cdot4,00,000 /(4\ast0.05)\)

= 3 × √(60,000,000)

≈ 3 × 7,746.0

≈ ₹23,238

If lower bound = ₹10,000, then

Return Point =10,000 +(23,238/3)≈₹17,746

Upper Limit = ₹17,746 + ₹23,238 ≈ 40,984

Did You Know?

"The Miller-Orr model is particularly useful for companies in volatile industries where daily inflows and outflows fluctuate unpredictably. By setting upper and lower control limits, firms minimize the effort of constant monitoring while still avoiding liquidity shortages."

9.3.5 Techniques for Optimizing Cash Levels

Accelerating Inflows

o Accurate and timely invoicing with electronic payment processing.

o Lock box systems to minimize collection float.

o Offering discounts for early payments.

Delaying Outflows

o Extended credit terms with suppliers: o Some small businesses are also trying to negotiate longer payment dates with their suppliers.

o Paying closer to payment due dates, without offending suppliers.

Synchronizing Cash Flows

o Offsetting incoming cash against outgoing flows in order to minimize idle balances.

o Predicting cash flows to prevent mismatches.

Short-Term Investments

o Excess cash may be invested in marketable securities - treasury bills, commercial paper and certificates of deposit.

o These are for liquidity and short term returns.

Use of Ratios

o (c) Cash Turnover Cox Definition: “The cash turnover is the number of times that all, or a major part, of the account’s cash balance moves completely around in one accounting period.

o Cash Conversion Cycle = Inventory Period + Receivables Period − Payables Period

o These margins can be used as indicators for comparing which companies are using cash most efficiently.

Technology and Automation

o ERP technology, automation of reconciliations and AI-driven cash forecasting solutions will optimize liquidity.

Illustrative Example

A firm has an average receivables of ₹12,00,000 on credit sales of ₹72,00,000 per annum.

First Step: Current ACP

ACP = (Average Receivables / Annual Credit Sales) × 365

= (12,00,000 / 72,00,000) x 365

= 0.1667 × 365

= 61 days

That is, on average, customers pay their dues in 61 days.

2 Step: Impact of Price Discount

The service features 2.0% discount for early payments and often motivates clients to pay earlier than the original date. The collection time then becomes 40 days.

Step 3: Receivables Freed Up

By accelerating ACP, the firm shrinks the portion of ACP “locked” in receivables. The formula for receivables is:

Receivables = (Annual Credit Sales / 365) × ACP Where: ACP = average collection period.

• Before discount (61 days):

Receivables = (72,00,000 ÷ 365) × 61 ≈ ₹12,03,288

• After discount (40 days):

Receivables = (72,00,000 ÷ 365) × 40 ≈ ₹7,70,411

Step 4: Working Capital Released

Difference = 12,03,288 - 7,70,411 ≈ ₹4,32,877

This is the sum of money unlocked from receivables and can now be employed for other working capital requirement or short term investments.

9.4 Inventory Management

Management of inventory is an important aspect of working capital. It is all about organizing, managing and overseeing the stock so materials are available when they are needed while not being overstocked. The liquidity, profitability and operation of the integrated steel enterprise are influenced directly by the inventory management efficiency.

9.4.1 Concept and Importance of Inventory Management

• Concept

Inventory is the supply of goods held on hand for production and sales. This comprises of raw material, WIP and finished goods. Inventory management is the control of available stock while avoiding over or under stock.

• Importance

Smooth Going: Sufficient stock for production and delivery.

Cost Savings: by optimising your stock levels all associated storage, insurance and financing costs are reduced.

Customer Retention: Eliminates stockouts and backorders to improve customer satisfaction.

Liquidity Control: Any excess stock holds back money; hence working captila efficiencies is lowered.

Profit management is the efficient trade-off of carrying costs against service levels in order to maximize margins.

• Example

A furniture manufacturing company having monthly sales of ₹10,00,000 needs to keep a base stock at value of raw materials equivalent to ₹3,00,000 for production. If inventory levels increase unnecessarily to

₹6,00,000, idle capital reduces liquidity.

• Strategic Relevance

Efficient inventory management provides a competitive advantage to its stockists by minimizing lead times, reducing overhead, and improving customer service.

9.4.2 Inventory Costs (Ordering, Carrying, Stock-Out)

• Ordering Costs

Costs of purchasing and receiving inventory.

o Administrative expenses (forms, clerical work).

o Transportation and inspection costs.

o =18 Cost calculation o Example: If each order is of ₹500 and firm places 100 order in a year, rational o ordering cost would be.

= ₹50,000.

• Carrying Costs

Cost of carrying inventory in a warehouse.

o Interest on tied-up capital.

o Warehousing, insurance, obsolescence, and depreciation.

o Example : Average inventory = ₹5,00,000, carrying cost = 20% per year → ₹1,00,000.

• Stock-Out Costs

Costs due to insufficient inventory.

o Lost sales and dissatisfied customers.

o Material shortages causing production delays.

o Penalties for delayed deliveries.

o Illustration: Missed mktg order sales loss ₹ 2,00,000 – Profit at 15% contribution margin = ₹30,000 is lost.

• Trade-Off

o Increased carrying costs would be abandoned at the expense of higher ordering costs.

o Smaller order sizes increase the cost of placing orders but lower the costs of holding inventory.

o When stock is too low, the probability of running out increases.

9.4.3 Inventory Control Techniques (EOQ, ABC Analysis)

• Economic Order Quantity (EOQ)

EOQ is used to find the optimal order size that minimizes the total inventory costs (ordering + carrying).

1

o Formula: EOQ = √(2 × D × S ÷ H) Where:

D = Demand in units per year S = Ordering cost per order

1 H = the Annual holding cost per unit

o Numerical Example:

Annual requirement = 10,000 units The ordering cost is ₹100/ order and carrying cost is ₹10/unit.

EOQ = $\sqrt{}$(2 × 10,000 × 100 ÷ 10) = $\sqrt{}$(20,00,000 ÷ 10) = $\sqrt{}$2,00,000 ≈ 447.

This reduces cost by placing an order of 447 units at a time.

• ABC Analysis

Categorizes inventory into three levels based on value:

o A-items: very high monetary value-critical few (approximately 70% of the value, nearly 10% goods).

o B-items: Mid value, mid control (≈ 20% value, 20% items).

o C-items: Items with low value and high quantity/quantity, easy to control (≈ 10% of value; 70% of the items).

o Example:

A company with 1,000 items might categorize 100 as A (close surveillance), 200 as B (limited observation) and 700 as C (simple checks).

• Strategic Use

EOQ guarantees cost-effectiveness, while ABC provides control over vital items without much effort.

9.4.4 Just-in-Time (JIT) and Modern Practices

• Just-in-Time (JIT)

JIT helps to eliminate stocks by scheduling raw materials effectively in line with demand. If not needed, inventory is not restocked.

o Advantages:

 Lower carrying costs.

 Reduced waste and obsolescence.

 Higher efficiency through streamlined processes.

o Challenges:

 Dependence on reliable suppliers.

 Vulnerability to supply chain disruptions.

 Requires advanced forecasting and coordination.

• Modern Practices

o VMI: Vendor-Managed Inventory where supplier is in charge of the inventory at buyer's site.

o MRP (Materials Requirements Planning): It plans inventories from production schedules.

o ERP (Enterprise Resource Planning): Links up inventory with finance, purchasing and sales operations.

o RFID (Radio Frequency Identification): Tags for real time inventory monitoring.

o Lean Inventory Management: This entails reducing waste and enhancing flow.

• Example:

Toyota's JIT eliminated a lot of storage cost and remove coordination between supply delivery and production line. But disruptions such as natural disasters have revealed the dangers of keeping only a modest buffer stock.

9.4.5 Relationship between Inventory and Working Capital

• Impact on Liquidity

Inventory is a significant component of current assets. Blocking funds and reducing liquidity, high levels of inventory are tying up capital. Reduced inventory leads to better liquidity but higher stock-out risks.

• Cash Conversion Cycle

There is a direct relationship between inventory and the time duration of the operating cycle.

- Cash Conversion Cycle = Inventory Period + Receivables Period - Payables Period.

- The longer the days on hand, the more working capital is required.

• Profitability Balance

It's a balancing act for firms: to ensure they have enough stock on hand to fill orders or demand, and not keep so much that the capital invested in it costs too much.

Example

A firm has:

• Annual sales = ₹1,20,00,000

• Cost of sales = ₹90,00,000

• Average inventory = ₹15,00,000

Step 1: Inventory Turnover Ratio

How to Calculate Inventory Turnover You can calculate the number of times inventory is sold and replaced using the following: Inventory Turnover = Cost of Sales ÷ Average Inventory

= 90,00,000 ÷ 15,00,000

= 6 times

This would imply the firm sells and replenishes its inventory 6 times in a year.

Step 2: Inventory Period

Inventory Period = 365 ÷ Inventory Turnover ratio

= 365 ÷ 6

≈ 61 days

This means that inventory sits for an average of 61 days.

Step 3: The Impact of Lowering Inventory

Let's say the company lowers its average stock to ₹12,00,000 and cost of sales remains unchanged.

New Inventory Turnover = 90,00,000 ÷ 12,00,000 =75 turns per year.

= 7.5 times

Days of Inventory = 365 ÷ 7.5

≈ 49 days

Well, then the inventory cycle falls to 49 days from 61 days.

Step 4: Working Capital Released

Change in inventory = OI – NI

= 15,00,000 – 12,00,000

= ₹3,00,000

And that ₹3,00,000 is money liberated from being imprisoned in that stock. And it is now available to spend on some other need for working capital (whether paying suppliers, reducing borrowings or funding growth).

Strategic Relevance

Efficient inventory management:

• Shortens the cash conversion cycle

• Reduces financing requirements

• Improves liquidity

• Enables reinvestment in more productive applications that drives profitability and growth.

Knowledge Check 1

Choose the correct option:

1. EOQ minimizes:

a) Ordering only

b) Carrying only

c) Total costs

d) Stock-outs

2. ABC analysis focuses most control on:

a) C-items

b) A-items

c) B-items

d) All equally

3. JIT aims to:

a) Increase buffer stock

b) Eliminate excess stock

c) Delay supplier payments

d) Reduce receivables

4. Carrying costs include:

a) Salaries

b) Obsolescence

c) Transport charges

d) Discounts offered

5. Inventory turnover ratio measures:

a) Credit terms

b) Sales to inventory

c) Supplier efficiency

d) Debt to equity

9.5 Summary

 Management of working capital helps to operate the business very smoothly by maintaining the balance between liquidity and profitability.

 Fixed Working Capital is the minimum investment in current assets whereas Variable Working Capital varies due to seasonal or cyclical demand.

 Aggressive, conservative, and moderate are plans of working capital finance of the firms.

 The objective of credit management is to introduce policies, terms and standards necessary for controlling sales growth thereby protect bad debt.

 Credit analysis and control tools such as aging schedules and receivable turnover ratios reduce bad debt.

 Cash management makes sure companies satisfy their obligations without maintaining too many idle balances.

 By cash budgeting and forecasting, the surplus and deficit can also be projected.

Models like Baumol and Miller-Orr assists firms in holding the right cash.

The approach allows for stock level optimization to save carrying ordering and stock-out costs.

Application of the methods like EOQ, JIT, and ABC analysis is to simplify control.

Inventory affects the working capital requirement directly by virtue of its impact on liquidity and the CCC.

Proper management of credit, cash and inventory results in an improved profitability and risk management profile for the business.

9.6 Key Terms

Working Capital: Current assets minus current liabilities.

Permanent Working Capital: Level of current assets necessary to continue operation.

Seasonal Working Capital: Also referred to as temporary working capital or cyclical working capital.

Aggressive Policy: Financing policy in which such a large portion of funds are short term.

Conservative Policy: Current assets financed with long-term funds.

CREDIT POLICY : The structure that determines how credit will be provided to its customers and under what terms it will be collected.

Cash Budget: Estimate of the anticipated sources and uses of cash, often on a monthly basis.

Baumol Model: A model for determining an optimal cash balance much like the EOQ.

Modelo de Miller-Orr: Modelo que establece límites superior e inferior para el saldo de efectivo a la incertidumbre.

ERQ (Economic Reorder Quantity): The most economic batch size for minimising total inventory cost.

ABC Classification: Clusterization of stock in three categories or classes named A, B and C according to value for purposes of control.

JIT (Just-in-Time) A system of inventory management that minimizes inventories by having the necessary goods arrive precisely at the time they are needed.

9.7 Descriptive Questions

What do you mean by working capital? Discuss the significance of it in a business.

Distinguish between permanent and temporary working capital giving examples.

Describe aggressive, conservative and moderate working capital policies.

What are the goals of credit management and how does it help in increasing sales?

Explain how cash budgeting assists in the management of liquidity.

Explain Baumol and Miller-Orr's models of cash management with the help of numerical examples.

What are some of the big costs of inventory and how can they be reduced?

Describe the effects of inventory management on working capital and profitability.

9.8 References

Brealey, R. A., Myers, S. C., & Allen, F. – Principles of Corporate Finance McGraw Hill.

Ross, S. A., Westerfield, R. W., & Jaffe, J. – Corporate Finance, McGraw Hill.

Van Horne, J. C., & Wachowicz, J. M. – Fundamentals of Financial Management, Pearson .

Pandey, I. M. – Financial Management, Vikas Publishing House

Khan, M. Y., & Jain, P. K. – Financial Management: Text, Problems and Cases, TMH 14 – Mondal & Mukhrejee – Cost Accounting-TMH.

Damodaran, A.– Applied Corporate Finance (Wiley).

Knowledge Check 1

c) Total costs

b) A-items

b) Eliminate excess stock

b) Obsolescence

b) Sales to inventory

9.9 Case Study

Background

Zenith Manufacturing Ltd., a medium-sized manufacturer of engineering goods has the growth rate of more than ₹500 crore per annum. Liquidity issues have started to emerge despite strong sales. Suppliers whine about not getting paid on time, employees have been receiving irregular salaries and bankers are baying for interest dues. ANALYSIS Examinees analyze credit, cash, and inventory operations that are not running at maximum efficiency.

Key financial data:

• Sales on credit: ₹400 crore per annum; average collection period = 75 days.

• Average receivables: ₹82 crore.

• Average inventory: ₹100 crore; Inventory turnover = 3.6 times.

• Average payables: $8 million with a credit period of 45 days.

• Monthly cash expenses: ₹20 crore.

The CFO needs to face these facts by reexamining his or her working capital policies.

Problem 1: Credit Management Decision

Problem: Days Sales Outstanding, which is currently double the industry norm of 45 days. Marketing encourages free-flowing credit to sustain top-line growth, finance says the policy should be more restrictive.

Solution:

If Zenith shortens the collection period to 60 days, then average receivables goes down from 82 crore to: Receivables = (400 ÷ 365) × 60 = ₹65.75 crore.

Cash release = ₹82 – 65.75 = ₹16.25 crore.

This increases liquidity without greatly added sales. The preferred policy is moderate credit standards and tight supervision.

Problem 2: Cash Management Models

Problem: Random inflows cause unpredictable cash positions. The Miller-Orr model is being taken in to account by the CFO.

Solution:

Suppose daily variance of cash flows = ₹5 crore, cost of transaction = 0.5 per cent and interest rate = 10%. Spread = $3 \times \sqrt{(3 \times b \times \sigma^2 4i)}$

$= 3 \times \sqrt{(3 \times 50000 \times 50000000 \div 0.40)}$

$= 3 \times \sqrt{(1,87,50,00,000 \div 0.40)}$

$\approx 3 \times 21,650 = ₹64,950.$

If (lower limit) = ₹2 crores, return point = ₹4 crores and (upper limit) = 4 + 64.95/100 × 56/100 crore=₹10.95 crores. This cash control is effected daily and requires an external intervention.

3: Inventory Optimization With Data Given

• Annual Sales = ₹400 crore

• Cost of Goods Sold (COGS) = 75% Sales = 0.75 × 400 = ₹300 crore

• Average Inventory = ₹100 crore

Step 1: Determine the Current Inventory Turnover

Formula:

Inventory Turnover = Cost of Goods Sold ÷ Average Inventory

= 300 ÷ 100

= 3.0 times

Turnover reported as 3.6 times below does not jive with the figures given. Turnover is 3 times, not the 3.6 cited in the data.

Step 2: Inventory Period

If turnover = 3.0 (calculated):

Inventory Period = 365 ÷ 3 = 122 days

If turnover = 3.6 (given in the case):

Inventory Period = 365 / 3.6 ≈101 days

"The solution advances by 3.6 and 101 days but this does not match the given data.

Step 3: Alignment with Industry Standard (60 days)

Industry standard = 60 days

Equivalent turnover = 365 / 60 ≈ 6.1 times

Average Inventory Required = COGS / Turnover

= 300 ÷ 6.1

≈ ₹49.2 crore

This is much less than the ₹75 crore quoted in the case answer.

Step 4: Cash Release

Existing Inventory ₹100 crore Optimised Inventory ₹49.2 crore

Cash Release = 100 – 49.2= ₹50.8 crore

This is twice the ₹25 crore seen in the matter.

The reworded Problem and the Solution

· Problem: If using the numbers, simply plugging them in gives 3 times (122 days) and not 3.6 times (101 days). Both are well in excess of the industry average of 60 days.

· Solution: If Zenith conforms to 60 days standard, its average stock will be around ₹49 crore. This will free up approximately ₹51 crore of cash tied in stock, which is much more than the original answer – ₹25 crore.

Reflective Questions

Credit contraction or destocking, which should Zenith first address? Why?

How can cash budgeting and forecasting be used to supplement the use of models such as Miller-Orr?

What are the threats of using aggressive working capital policy in Zenith?

How can Zenith maintain growth targets while managing liquidity?

How would you convince the sales force that we have to tighten up financially, if you were in our CF O's shoes?

Conclusion

The Zenith Manufacturing case shows how poor working capital management can lead to a cash crunch even when sales are good. Through credit policy tightening, structured cash models and inventory optimization, the company is able to release more than ₹40 crore of cash. This will not only maintain liquidity, but also instil confidence in employees and suppliers. The case illustrates that working capital management is not only matters of financial control, but also strategic balance between growth, risk and profitability.