

ENTREPRENEURSHIP: THEORY & PRACTICE (HS308)

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CONTENTS

Modul 4: Sources of Capital and Stock Management

Project financing fixed and working capital requirements, equity financing, securities market, venture capital, debt financing, banks and financial institutions and other non-bank financial sources, management of working capital, break-even analysis- concept and implications for planning and decision making



Project Finance

Financing is the process of providing funds for business activities, making purchases, or investing.

Financing is of 2 types viz., debt financing & equity financing.

Project finance is the funding of long-term infrastructure, industrial projects, and public services using a non-recourse or limited recourse financial structure.

Project finance involves the **public funding** of **infrastructure and other long-term, capital-intensive projects**.

Project financing often utilizes a **non-recourse** or limited recourse financial structure.

E.gs.- commonly for oil and gas companies and the power sector



Non-Recourse Finance

- Non-recourse financing entitles the lender to repayment only from the profits of the project that the loan is funding.
- No other assets of the borrower can be seized to recoup the loan upon default.
- Non-recourse financing typically requires substantial collateral and a higher interest rate and is typically used in land development projects.
- Project financing allows for the development of large-scale projects that might otherwise be too capital-intensive or risky for traditional forms of financing.
- It facilitates the **mobilization of private capital** for infrastructure and other critical projects, thereby contributing to economic development and growth.



Key features of project financing:

- 1. **Limited or Non-recourse Financing**: Project financing typically involves **limited** or non-recourse financing, where the lenders have limited or no recourse to the sponsors' assets if the project fails to generate sufficient cash flow to repay the debt.
- 2. **Cash Flow Repayment**: Repayment of the debt is primarily based on the cash flow generated by the project. Lenders assess the project's feasibility and revenue-generating potential to determine whether it can support the debt service obligations.
- 3. **Complex Structuring**: Project financing involves complex structuring to allocate risks among various parties involved, including sponsors, lenders, contractors, and operators. Risks such as construction, operational, market, and regulatory risks are carefully assessed and allocated to the parties best able to manage them.
- 4. **Long-term Nature**: Project financing is typically used for long-term projects with a lifespan of several years or decades, such as infrastructure projects (e.g., toll roads, airports, ports), energy projects (e.g., power plants, renewable energy facilities), and natural resource projects (e.g., mines, oil and gas extraction).
- 5. **Collateral**: While project financing relies heavily on the project's cash flow for repayment, lenders may still require some form of collateral, such as project assets, revenue streams, or contracts, to mitigate risk.
- 6. **Credit Enhancement**: In some cases, lenders may ask credit enhancement measures such as guarantees, insurance, or letters of credit to improve the credit quality of the project and lower financing costs.



Phases of Project Finance

3 Phases of any Project Financing

1. Pre-financing stage

The pre-financing stage involves conducting a risk assessment before actual financing. It involves the following steps:

- Identifying the project plan: This step ensures a project's alignment with the entities' short-term and long-term goals.
- **Listing the risks and minimising them**: This step lists the risks associated with the project and methods to minimise them so it does not affect the project at a later stage.
- **Checking the feasibility of the project**: This step involves assessing a project's financial and technical feasibility.



2. Financing stage

The financial stage involves raising capital for project initiation. It involves the following steps:

- **Listing potential investors**: This step involves collecting details of potential investors whose goals align with the project's goals and who can benefit from investing in it.
- Negotiating the contract: This step involves the sponsors and lenders negotiating to finalise an
 agreement that can benefit both parties.
- **Documenting the process**: This step requires documenting the terms and conditions of the agreement and other financial details.
- Processing the transactions: In this step, the sponsors receive funds to start their operations.



3. Post-financing stage

The post-financial stage involves monitoring the progress of the project at regular intervals. It involves the following steps:

- **Monitoring the project**: Project managers require tracking the project at regular intervals to ensure that it does not exceed the assigned budget and follows the set timeline.
- Closing the project: This step denotes the completion of the project.
- **Repaying the loans**: In this step, the sponsors require keeping track of the project's cash flow and ensure that they repay the loans on time.



Benefits of Project Finance

- It is a type of non-recourse debt- Non-recourse debt is favourable for sponsors as they have no obligation to pay additional compensation if they default, except for liquidating their assets.
- It maximises leverage- As large projects require extensive capital to finance the development and manufacturing costs, sponsors usually fund a major part of the project using debt, which refers to highly leveraged finance. High leverage allows sponsors to finance their projects without diluting their equity with a minimal obligation on repayments.
- Leverage- Financial leverage is the strategic endeavor of borrowing money to invest in assets. When one uses borrowed funds (debt) for funding the acquisition of assets in the hopes that the income of the new asset or capital gain would surpass the cost of borrowing is known as financial leverage.



- It provides an off-balance sheet treatment- Depending on the project's financial structure, sponsors may not require reporting the debt on its balance sheet, as this is a type of non-recourse debt. This allows them to take further debt to finance other projects.
- **It enables risk sharing** Project financing allows sponsors to share risk with other parties. They do this by paying additional premiums to third-party companies willing to take risks associated with the project.



Limitations of Project Financing

- It is complex- Project financing involves negotiations with multiple participants in the project, which can get complicated and expensive. The process is also time-consuming and resource-intensive when compared to direct financing.
- It has higher transaction costs- Project financing involves higher transaction costs when compared to direct financing because of multiple contracting costs, which are part of the financial structure of a project. This can include legal expenses and extensive documentation related to borrowing, stock issuance and ownership.



- It requires constant expert assistance- Project financing involves multiple parties and complex transactions. This requires sponsors and other parties to pay additional fees to investment bankers and other professionals to monitor and review the entire process.
- It requires ensuring compliance at each step- As project financing involves multiple
 parties, financial institutions require ensuring compliance with laws issued by the
 government. This requires tracking every transaction, documenting tax filings and filing
 paperwork to ensure that there is no tax evasion or illegal movement of funds.



Capital

- Capital is a critical ingredient in any business
- Without capital, no business can be run, and no business can exist
- Capital can be categorized into two forms fixed capital (FC) and working capital (WC)
- The primary difference between fixed capital and working capital is that Fixed Capital is the capital invested by the company in procuring the fixed assets (machineries & plant, land, vehicles, buildings, etc.) required for the business's working
- In contrast, the company's working capital is required to finance its day-to-day operations
- Fixed capital and working capital are imperative for a business to run and grow. And it's not right to say that one is more important than the other.
- However, without fixed capital, it's impossible to start a business. And after the business gets started, it's impossible to run a business without working capital.
- Every business, thus, needs to **take special care of them both**. But it is equally important to invest in the right assets so that the business can benefit from the assets and make use of them regularly.



Working Capital Requirement (WCR)

- WC is the lifeblood of a business, ensuring smooth operations and financial stability
- WC is used to serve the business on a day-to-day basis fulfilling the requirement of everyday production and operation
- It represents the **funds required to cover the company's short-term expenses**, such as inventory, accounts receivable, and operating expenses, minus the short-term liabilities, such as accounts payable
- WCR indicates the **liquidity needed to sustain the ongoing operations** of a business
- Calculating the WCR involves subtracting the short-term liabilities (such as accounts payable)
 from the short-term assets (such as inventory and accounts receivable)

WCR= Current Assets (CAs)- Current Liabilities (CLs)



- WC is used to finance an organisation's short-term business activity, which is one way that it differs from fixed capital
- A company might grow with the use of working cash. Without WC, a business finds it challenging to expand, settle debt, and turn a profit (or continue to do so)
- Small business owners frequently turn to WC business loans to cover the gaps when they run out of working capital
- A company has **negative working capital** if its **ratio of current assets to liabilities is less than one** (or if it has more current liabilities than current assets)
- Effective management of WC is essential for maintaining financial stability and supporting growth initiatives
- Businesses need to strike a balance between optimizing working capital to ensure sufficient liquidity and avoiding excessive tied-up capital that could hinder investment opportunities or expansion efforts



CAs refer to the assets that a company owns that are expected to be converted into cash or used up within one year or the operating cycle of the business, whichever is longer. These assets are essential for the day-to-day operations of the business

Common examples of CAs:

- 1. **Cash and Cash Equivalents**: This includes physical cash, bank balances, and highly liquid investments that can be readily converted into cash, typically within a short period.
- 2. **Accounts Receivable**: Amounts owed to the company by its customers for goods sold or services rendered on credit. Accounts receivable represent the right to receive cash in the future and are usually converted into cash within a few months.
- 3. **Inventory**: This includes raw materials, work-in-progress, and finished goods held by the company for production or sale. Inventory is expected to be sold or used up within the operating cycle of the business.
- 4. **Short-Term Investments**: Investments that can be easily converted into cash and have a maturity date of less than one year. These may include marketable securities, treasury bills, or certificates of deposit.
- 5. **Prepaid Expenses**: Expenses paid in advance by the company, such as insurance premiums or rent, which will be used up over time. Prepaid expenses are considered assets because they represent future economic benefits to the company.
- 6. **Other Current Assets**: This category may include miscellaneous assets that are expected to be converted into cash or used up within one year but do not fit into the above categories. Examples may include advances to suppliers, accrued income, or tax refunds receivable.



CLs refer to the obligations that a company owes and is expected to settle within one year or the operating cycle of the business, whichever is longer. These are short-term debts or financial obligations that the company must repay or fulfill in the near future using its current assets or through the creation of new current liabilities.

Common examples of CLs:

- 1. **Accounts Payable**: Amounts owed by the company to its suppliers or vendors for goods or services received on credit. These are typically short-term obligations that need to be paid within a specified period, often ranging from 30 to 90 days.
- 2. **Short-Term Loans**: Loans or borrowings that are due for repayment within one year. These may include bank overdrafts, lines of credit, or short-term notes payable.
- 3. **Accrued Expenses**: Expenses that have been incurred but not yet paid or recorded. These may include salaries and wages payable, utility bills, interest payable on loans, and taxes payable.
- 4. **Deferred Revenue**: Payments received from customers for goods or services that have not yet been delivered or earned. Deferred revenue represents an obligation to fulfill the company's obligations to the customer in the future.
- 5. Current Portion of Long-Term Debt: The portion of long-term debt that is due for repayment within the next year. Long-term loans or bonds often require periodic payments, and the portion due within one year is classified as a current liability.
- loans or bonds often require periodic payments, and the portion due within one year is classified as a current liability.

 6. **Dividends Payable**: Dividends declared by the company's board of directors but not yet paid to shareholders. Dividends payable
- 7. Other Current Liabilities: This category may include miscellaneous obligations that are due within one year but do not fit into the above categories. Examples may include accrued liabilities for warranties, customer deposits, or lease payments.



Determinants of Working Capital Requirement

- **Size of Business-** Larger businesses usually require more working capital due to their expansive operations, diverse product lines, and vast customer base. Such entities might need significant funds on hand to manage their extensive transactions.
- **Nature of the Business-** A manufacturing enterprise might have different working capital needs than a service-based business. The former often requires funds for inventory, while the latter might need more for payroll.
- Scale of Operations- Companies operating globally typically have more intricate financial needs, warranting higher working capital. Diverse markets, varied currencies, and differing regulations come into play.
- Sales Growth- Rapid sales growth, while positive, can strain resources. As sales volume increases, more working capital is needed to support production, delivery, and potentially longer receivables cycles.
- Credit Policy- A lenient credit policy might attract more customers, but it can tie up funds in receivables. The longer the credit terms, the higher the working capital needed to bridge the gap until payment is received.



- **Government Regulations-** Stringent regulations can lead to increased working capital needs. For instance, specific industries might be required to maintain certain inventory levels, pushing up working capital requirements.
- Creditworthiness- A company with a good credit history can easily obtain short-term credit, reducing the need for high working capital. Conversely, firms with poorer credit might need to maintain higher reserves.
- **Seasonality-** Some businesses, especially those in sectors like agriculture or tourism, experience seasonal sales. They might need more working capital during peak seasons to meet heightened demand.
- Business Cycles- During boom periods, businesses may need more working capital to cater to increased demand. Conversely, during downturns, they might have excess capital due to reduced sales.



Is Negative Working Capital Bad?

- It depends
- Generally, it is bad if a company's current liabilities balance exceeds its current asset balance.
- This means the company does not have enough resources in the short-term to pay off its debts, and it must get creative in finding a way to make sure it can pay its short-term bills on time.
- A short-period of negative working capital may not be an issue depending on a company's place in its business life cycle and if it is able to generate cash quickly to pay off debts.



Types of Working Capital

- **Permanent Working Capital:** Permanent working capital is the amount of resources the company will always need to operate its business without interruption. This is the minimum amount of short-term resources vital to operations.
- Regular Working Capital: Regular working capital is a component of permanent working capital. It is the part of the permanent working capital that is actually required for day-to-day operations and makes up the "most important" part of permanent working capital.
- Reserve Working Capital: Reserve working capital is the other component of permanent working capital. Companies may require an additional amount of working capital on hand for emergencies, seasonality, or unpredictable events.
- Fluctuating Working Capital: Companies may be interested in only knowing what their variable working capital is. For example, companies may opt into paying for inventory as it is a variable cost. However, the company may have a monthly liability relating to insurance it does not have the option to decline. Fluctuating working capital only considers the variable liabilities the company has complete control over.
- **Gross Working Capital:** Gross working capital is simply the total amount of current assets of a business before considering any short-term liabilities.
- Net Working Capital: Net working capital is the difference between current assets and current liabilities.



Management of Working Capital

- Many times, businesses fail not because of a lack of profits but because of insufficient funds required to run its day-to-day operations.
- **Working Capital Management** plays an important part. This is because it greatly impacts the liquidity and profitability of the business.
- So you need to ascertain the amount of working capital needed and the sources of financing such a capital. This is to ensure that the working capital available is sufficient to meet the short term obligations of your business.
- Working capital management requires monitoring a company's assets and liabilities to maintain sufficient
 cash flow to meet its short-term operating costs and short-term debt obligations.
- Managing working capital primarily revolves around managing accounts receivable, accounts payable, inventory, and cash.
- Working capital management involves tracking various ratios, including the working capital ratio, the collection ratio, and the inventory ratio.
- Working capital management can improve a company's cash flow management and earnings quality by using its resources efficiently.
- ullet Working capital management strategies may not materialize due to market fluctuations or may sacrifice long-term successes for short-term benefits.



Main Components of Working Capital Management

Cash

- The core of working capital management is tracking cash and cash needs.
- This involves managing the company's cash flow by forecasting needs, monitoring cash balances, and optimizing cash inflows and outflows to ensure that the company has enough cash to meet its obligations.
- Because cash is always considered a current asset, all accounts should be considered.
- However, companies should be mindful of restricted or time-bound deposits.

Receivables

- To manage capital, companies must be mindful of their receives.
- This is especially important in the short-term as they wait for credit sales to be completed.
- This involves managing the company's credit policies, monitoring customer payments, and improving collection practices.
- At the end of the day, having completed a sale does not matter if the company is unable to collect payment on the sale.



Payables

- Payables in one aspect of working capital management that companies can take advantage of that they
 often have greater control over.
- While other aspects of working capital management may be out of the company's hands (i.e. selling goods or collecting receivables), companies often have a say in how they pay suppliers, what the credit terms are, and when cash outlays are made.

Inventory

- Companies primary consider inventory during working capital management as it may be most risky aspect of managing capital.
- When inventory is sold, a company must go to the market and rely on consumer preferences to convert inventory to cash.
- If this cannot be completed in a timely manner, the company may be forced to have short-term resource stuck in an illiquid position.
- Alternatively, the company may be able to quickly sell the inventory but only with a steep price discount.



Fixed Capital (FC)

- Fixed capital includes the **assets and capital investments**, such as **property, plant, and equipment** (PP&E), that are **needed to start up and conduct business**, **even at a minimal stage**.
- FC in accounting is a real and physical assets used repeatedly in producing products.
- In economics, it refers to a type of capital good that is used as a means of production which is durable.
- FC are considered fixed in that they **are not consumed or destroyed** during the actual production of a good or service but have a **reusable value**.
- FC represents a business's capital asset that is intended for the company's long-term use, such as factories, machinery, and land.
- Since the capital is used to purchase assets for prolonged use by the business, this sum is often also called "Blocked Capital."
- FC investments are typically depreciated on the company's accounting statements over a long period of time—up to 20 years or more.
- Unlike other capital or assets, the FC method of investment is not meant to be resold in the shorter course of business.
- Instead, these assets are used for an extended period.



- The primary reason behind this is that most of **these assets are not liquid** hence, it takes a **long time to sell** such assets.
- These long-term assets do not directly produce anything but help the company with long-term benefits. If a firm invests in a building where the production process occurs, the building becomes its fixed capital.
- FC reflects the **depreciation** of a company's fixed assets over time.
- It represents the **decline in the value of an asset** due to factors such as wear and tear, obsolescence, and physical deterioration.

Types of FC

- 1. **Tangible FC-**A specific category of fixed capital that is **physical**; hence, these **assets can be seen and touched** such as machinery, buildings, vehicles, and land, as they have a physical presence and a transactional monetary value.
- 2. **Intangible FC-** Intangible FC refers to **non-physical assets** that provide **long-term value** to a business, like patents, copyrights, trademarks, and software licenses. While these assets lack a physical presence, they are crucial for enhancing the overall worth of a company.



Factors Impacting the Requirement for FC

- 1. **Scale of the business:** This factor is directly proportional with the scale of the business. The larger is the size of your business and its operation, the higher is the requirement for fixed capital. Similarly, if the business is on a small scale, then the requirement for fixed capital is also lesser.
- 2. **Growth expectation:** As the company starts working and planning growth objectives, the requirement for capital also grows. This is due to the fact that companies need assets for increasing production and running operations smoothly.
- 3. **Collaboration:** When a company collaborates with another company, the requirement for capital also increases. In case the company operates completely on its own, also has higher capital requirements.
- 4. **Production technique:** The requirement for fixed capital also depends on the production technique being employed. If the is capital intensive then the requirement for capital will be more in comparison with a company that uses labour-extensive techniques.



Importance of FC

- 1. **Enabling Long-term Operations:** Fixed assets like machinery and buildings are essential for the ongoing operations of a business. They provide the necessary infrastructure for production, administration, and logistics.
- 2. **Investment in Growth:** Investing in fixed capital is often a sign of a company's commitment to long-term growth and expansion. It indicates a readiness to scale operations and enhance capacity.
- 3. **Financial Health Indicator:** The value and state of a company's fixed assets can be a key indicator of its financial health and operational efficiency. For instance, a factory with advanced machinery can produce goods at a higher volume and quality, resulting in increased revenue and better financial health.
- 4. **Competitive Advantage:** Intangible fixed capital, such as patents and trademarks, can provide a competitive edge in the market. These assets can protect a company's intellectual property and create barriers to entry for competitors.
- 5. Collateral for Financing: Fixed capital assets, especially tangible ones like real estate and machinery, can serve as collateral for obtaining loans and financing. This helps in raising capital for expansion projects. $_{28}$



Financing/Sources FC

- Owner's resources: This is fixed capital's first and foremost source. Since fixed capital is a must-have in starting a business, the owner sources it from his resources.
- Equity Financing: This method entails generating capital by issuing and selling company shares. It's a way to raise funds without incurring debt, but it does require sharing ownership and potentially some control of the business.
- **Debt Financing:** This involves **raising capital by borrowing funds**, typically through business loans or issuing bonds and debentures. This is a great method of raising capital as it is less costly, the company retains ownership control, enjoys tax deductions, has access to even a small capital amount to create growth.
- **Leasing:** Instead of purchasing fixed capital assets outright, leasing offers a way to use them for a period. This option avoids the upfront costs associated with buying and can include maintenance and upgrade options, making it a flexible choice for businesses managing their capital expenditures.
- **Retained earnings:** When a company needs to invest in fixed capital, it can use internal finance. Retained earnings are a portion of the profit retained and reinvested into the company. Usually, retained earnings are invested in acquiring new fixed capital.



Challenges Associated with FC

- 1. **High Initial Investment:** Most of the tangible assets acquired through fixed capital, like machinery and plots, **require a significant initial investment**. This can be an issue for someone who is starting their entrepreneurial journey and can strain a company's finances.
- 2. **Depreciation:** Tangible fixed capital assets can **depreciate over time**. Depreciation can cause a **reduction in the asset's book value** and potentially impact a company's financial statements.
- 3. **Technology Obsolescence:** Rapid technological advancements can render certain fixed capital assets, especially technology-related ones, obsolete. This may **necessitate frequent upgrades or replacements**.
- **Debenture** is essentially a long-term loan that a corporate or government raises from the public for capital requirements without asking for any collateral by relying upon the latter's creditworthiness.
- **Bonds** are the debt instruments issued by a government or a company to borrow funds from individual or corporate investors for a specific duration. In return, the issuer offers periodic interest to the holders.



Difference Between Fixed Capital and Working Capital

Fixed Capital

long-term assets.

Used to purchase non-current assets

for the firm

Not at all liquid.

It can't be converted into cash or

accounting period.

Basis

Definition

Kinds of assets

acquired

How liquid is it?

Conversion

Term

Putting money into an organisation's

kind immediately.

Serves the business for an extended period

Accounting period

It offers benefits for more than one

It offers benefits for less than one accounting period.

Working Capital

Refers to money put in a

company's current assets.

Used to but the company's

current assets

Extremely liquid.

It can be converted into cash or in

kind immediately.

Serves the business for a concise

period

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Basis	Fixed Capital	Working Capital
Objective	Serves strategy-oriented goals.	Serves operational goals.
Consumption	It doesn't directly consume the business but serves the business indirectly.	Business needs working capital to operate.
Risk Involved	Investment in FC involves a risk.	Investment in WC is relatively less risk oriented.



Equity Financing

- Equity, referred to as shareholders' equity (or owners' equity for privately held companies),
 represents the amount of money that would be returned to a company's shareholders if all of
 the assets were liquidated and all of the company's debt was paid off in the case of liquidation.
- Equity financing is the process of raising capital through the sale of shares.
- Companies raise money because they might have a short-term need to pay bills or need funds for a long-term project that promotes growth.
- By selling shares, a business effectively sells ownership of its company in return for cash.
- E.g.- the owner of Company M&M might need to raise capital to fund business expansion. The
 owner decides to give up 12% of ownership in the company and sell it to an investor in return for
 capital. That investor now owns 12% of the company and has a voice in all business decisions
 going forward.
- Investors who purchase the shares are also purchasing ownership rights to the company.



Types of Equity Financing

- Angel Investors- These are wealthy individuals or groups interested in funding businesses they
 believe will provide attractive returns. Angel investors can invest substantial amounts and provide
 needed insight, connections, and advice due to their industry experience. Typically, angels invest
 in the early stage of a business's development.
- Venture Capital (VC)- A type of equity financing that's similar to angel investing, but instead of wealthy individuals, VCs are usually investing on behalf of a venture capital firm and they invest in those business that they think will grow at a rapid pace and will appear on stock exchanges. In general, VC can be a little more difficult to qualify for, and firms usually get involved after angel investors have already made initial investments. They invest a larger sum of money into businesses and receive a larger stake in the company compared to angel investors. The method is also referred to as private equity financing. VC may be best fit for early-stage, high-growth businesses that have started operating already.
- Initial Public Offerings (IPOs) A more well-established business can raise funds through IPOs, selling company stock shares to the public through stock market. Due to the expense, time, and effort, IPO occurs in a later stage of development after the company has grown. Investors in IPOs expect less control than venture capitalists and angel investors.



- IPO is the first sale of stocks issued by a company to the public. Before an IPO, a company is considered a private company, usually with a small number of investors (founders, friends, family, and business investors such as venture capitalists or angel investors). When a company goes through an IPO, the general public is able to buy shares and own a portion of the company for the first time. An IPO is often referred to as "going public".
- Crowdfunding- Crowdfunding platforms allow for a number of people in the public to invest in the company in small amounts via online platform (such as Kickstarter, Indiegogo, and Crowdfunder). Members of the public decide to invest in the companies because they believe in their ideas and hope to earn their money back with returns in the future. The contributions from the public are summed up to reach a target total.
- Corporate Investors- Corporate investors are large companies that invest in private companies to provide them with the necessary funding. The investment is usually created to establish a strategic partnership between the two businesses.



Pros and Cons of Equity Financing

Pros

- No obligation to repay the money
- No additional financial burden on the company
- Large investors can provide a wealth of business expertise, advice, resources, guidance, and contacts
- Larger funding amounts
- Alternative qualification requirementsrather than business revenue or personal credit score (CIBIL), investors will typically look at things like your business idea's potential and your character

Cons

- You have to give investors an ownership percentage of your company
- You have to share your profits with investors
- You give up some control over your company
- Lack of tax shields- Compared to debt, equity investments offer no tax shield. Dividends to shareholders are not a tax-deductible expense, whereas interest payments are eligible for tax benefits. It may be more expensive than borrowing. A dividend is the distribution of a company's earnings to its shareholders and is determined by the company's board of directors.



Debt Financing

- Debt financing occurs when a **firm raises money for working capital or capital expenditures by selling debt instruments** (bank loans or bonds) to individuals and/or institutional investors. In return for lending the money, the individuals or institutions become creditors and receive a promise that the principal and interest on the debt will be repaid.
- The amount of the investment loan—also known as the principal—must be paid back at some agreed date in the future. If the company goes bankrupt, lenders have a higher claim on any liquidated assets than shareholders.
- A **technical term for borrowing money from an outside source** with the promise to return the principal plus the agreed-upon percentage of interest.
- Debt financing is also referred to as **financial leverage** = raising assets through debts/loans
- The cost of debt is the interest charged.
- Unlike equity financing where the lenders receive stock, **debt financing must be paid back**.
- Debt financing preserves company ownership, and the interest paid is tax-deductible



Debt Financing Options

- Bank loan- A common form of debt financing is a bank loan. Banks will often assess the individual financial situation of each company and offer loan sizes and interest rates accordingly.
- Bond- Another form of debt financing is bond issues. A traditional bond certificate includes a principal value, a term by which repayment must be completed, and an interest rate and are backed by a collateral.
 Individuals or entities that purchase the bond then become creditors by loaning money to the business.
- **Debenture-** A debenture is similar to a bond, the biggest difference being that **debentures are backed not by collateral** but rather by the reputation of the borrower. They are, in other words, high-risk but also high-reward, paying higher interest rates than standard bonds.
- Peer-to-peer (P2P) lending This financing lets you borrow directly from other business owners by using a P2P lending site. P2P loans can come with higher interest rates and longer application processes, but more flexible terms.
- **Family-** Other means of debt financing include taking loans from family and friends. They are common with start-ups and small businesses.



Pros and Cons of Debt Financing

Pros

- Debt payments are generally tax-deductible
- A company retains all ownership control
- Debt financing is often less costly than equity financing because of the tax write-offs of debt financing

Cons

- - Interest must be paid to lenders

business revenue/profits

- Payments on debt must be made regardless of
- Debt financing can be risky for businesses with inconsistent cash flow
- Having high interest rates
 - Affecting your credit rating What you borrow affects your credit And this effect can be negative if you're borrowing large sums without repaying them quickly.



Time Span

Returns

Security

Risk

Difference between Debt & Equity Financing

		1 0
Basis	Debt	Equit
Meaning	Debt is a form of financing that is issued	Equity is a type of fina
	with a fixed interest rate and a fixed term.	exchange for a share

Debt capital is issued for terms between

one and ten years.

Debt capital carries a fixed interest rate,

and the full amount is repayable.

Debt capital may be secured (by

collateral) or unsecured.

It is less risky because interest is paid in

the event of a loss and the principal can

be recovered.

ity nancing provided in e of the company's

profits and ownership.

Typically, equity capital is issued for a

longer period of time.

Equity capital has a variable rate of

return. It is dependent on the company's profits.

Equity capital is unsecured because

ownership is provided in lieu of collateral.

It carries a higher level of risk because

returns could be as low as zero if the business does not turn a profit.

Basis	Debt	Equity
Instruments	Loans, bonds, and debentures are examples of debt-raising instruments.	The instruments utilised for fund-raising are shared partnership.
Status	Debt is regarded as a lender by the organisation.	Equity investors are regarded as the company's owners.
Ownership	In the context of debt, ownership is not forfeited.	Ownership is divided among various shareholders based on their shareholdings.
Source	Bank loans are available, as are debentures and bonds to various institutions and the general public.	Shares/stocks may be issued to the general public and to a variety of organisations.



Securities Market

- Securities refer to tradable financial instruments or assets that have economic value. Companies issue
 these instruments to raise capital for financing their activities.
- Securities Market is a platform where individuals and institutions trade various financial instruments.
- Financial securities market is a marketplace where various securities such as stocks, bonds, and derivatives are bought and sold by individuals and organisations.
- The securities markets provide a **regulated framework** for **efficient flow of capital** (equity and debt) from investors to business in the financial market system.
- The **primary function** of the securities market is to **enable allocation of savings from investors** to those who need it (allocation of savings to investments).
- Security markets encompasses stock markets, bond markets and derivatives markets where prices can be determined and participants both professional and non professional can meet.
- New York Stock Exchange (NYSE), London Stock Exchange (LSE), and Frankfurt Stock Exchange (FSE),
 Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE)
- The **investors** are entitled to get **benefits** like **interest, dividend, capital appreciation, bonus shares**, etc. Such investments contribute to the economic development of the country.

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Types of Securities

- **Equity securities**: These represent ownership in a company. When an investor buys equity securities, they become a shareholder of the company. Shareholders are typically not entitled to regular payments although equity securities often pay out dividends. In the meantime, they are able to profit from capital gains when they sell the securities, assuming they have increased in value. E.g. Stocks, etc.
- **Debt securities**: These represent a debt obligation, usually issued for a fixed period of time. When an investor purchases a debt securities, they are lending money to the issuer corporations, governments and other entities in exchange for regular interest payments and a return of the principal amount at maturity. E.g. Bonds, debentures, etc.
- **Hybrid securities**: These represent a combination of characteristics of both debt and equity securities. They typically offer fixed interest payments, like bonds, while also having features of equities. E.g. Mutual funds, etc.
- **Derivatives**: Financial instruments whose value depends upon the value of another asset such as shares, debt securities, commodities, etc. They are financial agreements/contracts whose value is based on an underlying asset, index, or interest rate. This category includes options, futures, swaps, and more.



Types of Securities Markets

- **Primary Market**: Objective- to raise funds. The primary market is where **new securities are issued and sold** for the first time. It involves transactions between the issuing company and investors. In this market, companies raise capital by issuing new stocks or bonds to investors. Examples include Initial Public Offerings (IPOs) and bond issuances.
- **Secondary market**: Once the securities are issued in the primary market, they get listed on the Stock Exchanges and the investors can buy or sell these listed securities through those Stock Exchanges. Stock Exchanges have two main segments Cash Market segment and the Derivatives Market segment. Secondary market is a place where a **majority of stock trading happens**.
- Over-The-Counter Market: The over the counter secondary market is a place where the stock exchange is not involved (directly). This is a platform where investors trade among themselves with the shares that they own. Since there is no regulatory authority or compulsion involved with this manner of trading, the counterparty risks in over the counter trading are typically high. Also, there is no standardization of share prices, since it varies from one owner to another (the buyer and the seller directly deal with each other regarding all terms and conditions of a trade contract).



Functions and Importance of the Securities Market

- 1. **Capital Raising:** Primary markets allow businesses to raise funds for their day-to-day operations and growth.
- 2. **Investment Opportunities**: Securities markets give investors an ample range of choices and risk-return profiles when it comes to financial assets they can invest in to build wealth.
- 3. **Liquidity Provision**: Secondary market trading creates liquidity for securities and allows investors to sell their holdings rapidly at fair prices.
- 4. **Price discovery**: Buying and selling activity generates price signals about securities values.
- 5. **Cost Reduction**: Specialized intermediaries (brokers) reduce the transaction costs involved in issuing and trading securities.



Participants in the Securities Market

Primary market participants include investment banks, governments, and corporations.

- **Investment banks** act as intermediaries between issuers and investors. They assess the underwriting risk of an issuer, and if they decide to take on the risk, they will bring the issuer to the market and work to secure the necessary funding.
- **Governments** and **corporations** can also issue securities directly to the public without an intermediary.

Secondary market participants include retail investors, institutional investors, and broker-dealers.

- Retail investors can purchase securities through their retail brokers or directly from the issuer.
- Institutional investors are large investors such as mutual funds, pension funds. They usually purchase large amounts of securities directly from issuers or in the secondary market.
- Broker-dealers are firms that act as both brokers and dealers. They buy and sell securities on behalf
 of their clients, while also trading for their own accounts.

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Venture Capital

- Venture capital (VC) is a form of private equity and a type of financing for startup companies and small businesses with long-term growth potential.
- A type of private equity investing that involves investment in earlier-stage businesses that require capital.
- In return, the investor will receive an **equity stake** in the business in the form of **shares**.
- Venture capitalists provide backing through financing, technological expertise, or managerial experience.
- It generally comes from investors, investment banks, and financial institutions.
- Companies that raise venture capital do so for a variety of reasons, including to scale the existing business or to support the development of new products and services.
 - Venture capital tends to focus on emerging companies.



Types/Stages of Venture Capital

- **Pre-Seed:** This is the earliest stage of business development when the **founders try to turn an idea into a concrete business plan**. They may enroll in a business accelerator to secure early funding and mentorship.
- Seed Funding: This is the point where a new business seeks to launch its first product. Since there are no revenue streams yet, the company will need VCs to fund all of its operations.
- Early-Stage Funding: Once a business has developed a product, it will need additional capital to ramp up production and sales before it can become self-funding. The business will then need one or more funding rounds, typically denoted incrementally as Series A, Series B, etc.
- Later-stage capital: Later-stage capital is the venture capital provided after the business generates revenues but before an initial public offering (IPO). It includes capital needed for initial expansion (second-stage capital), capital needed for major expansions, product improvement, major marketing campaigns, mergers & acquisitions (third-stage capital), and capital needed to go public (mezzanine or bridge capital).



Characteristics of Venture Capital

- **Illiquid:** Venture capital investments are usually long-term investments and are fairly illiquid compared to market-traded instruments (like stocks or bonds).
- Long-term investment horizon: Venture capital investments feature a structural time lag between the initial investment and the final payout and usually have a time horizon of 10 years. The structural time lag increases the liquidity risk. Therefore, VC investments tend to offer very high (prospective) returns to compensate for this higher-than-normal liquidity risk.
- Large discrepancy between private and public valuation (market valuation): VC investments are held by private funds. Thus, there is no way for any individual investor in the market to determine the value of the investment.
- Mismatch between entrepreneurs and VC investors: An entrepreneur and an investor may have very different objectives regarding a project. The entrepreneur may be concerned with the process (i.e., the means), whereas the investor may only be concerned with the return (i.e., the end). This can make discussions and general collaboration between entrepreneurs and investors challenging as they may have conflicting objectives around how the company should be run.



Venture Capitalist

- A venture capitalist (VC) is an investor who provides young companies with capital in exchange for equity.
- Startups often turn to VCs for funding to scale and commercialize their products.
- Due to the uncertainties of investing in unproven companies, venture capitalists tend to experience high rates of failure.
- However, the rewards are substantial for those investments that do pan out.
- Some of the most well-known venture capitalists are Jim Breyer, an early investor in Meta (Facebook), and Peter Fenton, an investor in X (Twitter).
- Venture capitalist firms are usually formed as limited partnerships (LPs) where the partners invest in the
 VC fund. A committee is usually tasked with making investment decisions. Once those promising emerging growth companies are identified, the pooled investor capital is deployed to fund these companies in exchange for a sizable equity stake.



Venture Capital Structure

Wealthy individuals, insurance companies, pension funds, foundations, and corporate pension funds may pool money in a fund to be controlled by a VC firm.

- Associates: These individuals usually come to VC firms with experience in either business consulting or finance and, sometimes, degrees in business. They tend to do more analytical work, analyzing business models, industry trends, and sectors. Although they do not make key decisions, associates may introduce promising companies to the firm's upper management.
- **Principals**: A principal is a mid-level professional. They usually serve on the boards of companies and ensure that they operate without major hiccups. Principals are also in charge of identifying investment opportunities for VC firms and negotiating terms for both acquisition and exit. Principals are on a "partner track" that depends on the returns they can generate from the deals they make.
- **Partners**: The higher profile partners primarily identify areas or specific businesses to invest in, approve deals (whether investments or exits), occasionally sit on the board of companies, and generally represent their VC firms.



Venture Capital Exit Strategies

The process that allows venture capitalists to realize their returns is called an "exit." Venture capitalists can exit at different stages and with different exit strategies.

- **Secondary market sales:** Before the company goes public (IPO), the venture capitalists who invested in the earlier stage can sell their holdings to new investors during the later rounds. Since the shares have not been issued in the public exchanges, the trades take place in the private equity secondary market.
- **Acquisition:** Another exit strategy is for another firm to acquire the investee company. The acquirer is usually a strategic buyer that is interested in the investee company's growth and technology. Alternatively, a financial buyer could be an acquirer, although this is a little less common.
- Initial public offering (IPO): If the company is operating well and moving to the public exchange, the venture capitalists can take the IPO strategy by selling their portions of shares in the open marketplace after the IPO. There is usually a lock-up period after the initial offering that insiders (including venture capitalists) are not allowed to sell their shares. It is to prevent a decline in the stock price as a result of large numbers of shares flooding into the market. The length of the lock-up period is specified in the contract.



How to Secure VC Funding

- Submit a Business Plan: Any business looking for venture capital must submit a business plan to
 a venture capital firm. The firm or the investor will perform due diligence/worth, which includes a
 thorough investigation of the company's business model, products, management, and operating
 history.
- Investment Pledge: Once due diligence has been completed, the firm or the investor will pledge an investment of capital in exchange for equity in the company. These funds may be provided all at once, but more typically the capital is provided in rounds. The firm or investor then takes an active role in the funded company, advising and monitoring its progress before releasing additional funds.
- **Exit:** The investor exits the company after some time, typically four to six years after the initial investment, by initiating a merger, acquisition, or initial public offering (IPO).



Investment Size

Stage of Investment

Difference between Venture capital and Angel Investors

Angel investors usually invest small amounts of money.

Angel investors are more likely to

invest in startups at the early stages

of development, such as the seed

stage or pre-seed stage. They are often the first outside investors in a

startup and may help provide the initial capital needed to launch the business.

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Basis	VC	Angel investors	
Source of Funds	VC firms manage funds pooled from various sources, such as institutional investors, corporations, pension funds, and high net-worth individuals.	Angel investors are usually high net-worth individuals who invest their personal funds into startups.	

VC firms typically invest larger amounts

of money.

VC firms often invest in startups at later

stages of development, such as Series

A, Series B, or later rounds. They may

also provide follow-on funding as the

company grows.



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Basis	
Control and Involvement	

VC

approach and may seek a significant level

of control over the startups they invest in.

They may also provide strategic guidance,

access to their network, and help with

scaling the business.

VC firms typically take a more hands-on

Angel investors

Angel investors may take a less active role in the startups they

invest in, although some may

choose to provide mentorship,

advice, and introductions to their

network. However, their level of involvement can vary widely depending on their preferences and expertise.

Angel investors may have more flexible exit strategies and may be willing to hold onto their investments for a longer period of time. They may also be more patient and supportive during the

startup's growth phase.

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Exit Strategy

VC firms typically seek high returns on their investments and often have a specific exit strategy in mind, such as an initial public offering (IPO), acquisition by a larger company, or secondary market sale.



Financial Institutions (FIs)

- FIs refer to organizations that provide financial services to customers, e.gs. banks, insurance companies, venture capital firms, etc.
- These institutions play a crucial role in the economy by facilitating the **flow of funds between savers and borrowers** and by offering a wide range of financial products and services.
- A financial institution (FI) is a company engaged in the business of dealing with financial and monetary transactions such as deposits, loans, investments, and currency exchange.
- Financial institutions are vital to a functioning capitalist economy in matching people seeking funds with those who can lend or invest it.
- Financial institutions encompass a broad range of business operations within the financial services sector including banks, insurance companies, brokerage firms, and investment dealers.
- Financial institutions vary by size, scope, and geography.



Banking Financial Institutions

- Two main types of financial institutions- Banking and Non-Banking
- Banking financial institutions are in the business of taking deposits (demand deposits) from the public and giving loans.
- In addition, they provide other services such as investment banking, foreign exchange, and safe deposit boxes.
- These institutions are **heavily regulated by governments** to protect consumers and ensure that the banking system is stable (possess banking license).
- Banking institutions include commercial banks, savings and loan associations, and credit unions.



Types of Banking Financial Institutions

- Depository institutions: Primarily focuses on accepting and safeguarding deposits from individuals, businesses, and other entities. These deposits are typically held in the form of checking accounts, savings accounts, certificates of deposit (CDs), and other deposit products. The main function of depository banking institutions is to provide a safe place for customers to store their money while also offering various banking services. They play a crucial role in the financial system by channeling funds from savers to borrowers.
- Non-depository institutions: Fls that does not primarily rely on deposit-taking as its main source of funding. Instead, these institutions typically obtain funds through other means such as issuing securities, borrowing from other financial institutions, or generating income from fees and commissions. Non-depository institutions still play a crucial role in the financial system by providing various financial services, including lending, investing, and risk management. E.gs. finance companies, insurance companies, and pension funds, etc.



Types of Banking Financial Institutions (in detail)

- **Commercial Banks**: These are the most familiar type of banks to the general public. They provide a wide range of services to individuals, businesses, and governments, including checking and savings accounts, loans, mortgages, and credit cards.
- Investment Banks: These institutions specialize in providing financial advice to corporations and governments regarding capital raising, mergers and acquisitions, and other financial transactions.
 They also engage in trading securities and underwriting new issuances of stocks and bonds.
- Central Banks: These are the primary monetary authorities in their respective countries or regions.
 They oversee monetary policy, regulate commercial banks, and often serve as lenders of last resort to stabilize financial systems during crises.
- **Retail Banks**: These banks primarily serve individual customers and small businesses, offering basic banking services such as savings accounts, checking accounts, loans, and mortgages.



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- **Credit Unions**: These are cooperative financial institutions owned and operated by their members, who are typically individuals with a common bond such as employment in the same industry or living in the same community. Credit unions offer many of the same services as banks but may operate on a smaller scale.
- **Insurance Companies**: These financial institutions provide various types of insurance coverage, including life insurance, health insurance, property insurance, and casualty insurance. They collect premiums from policyholders and pay out claims when covered events occur.
- **Pension Funds**: These funds manage retirement savings on behalf of individuals or employees of organizations. They invest these funds in various assets such as stocks, bonds, and real estate to generate returns that will fund retirement benefits.



Pros of Banking Financial Institutions

- I. Financial Intermediation: Banking financial institutions facilitate financial intermediation by channeling funds from savers (depositors) to borrowers (individuals, businesses, governments) through various lending and investment activities. This helps mobilize savings for productive purposes, stimulating economic growth.
- 2. **Deposit Insurance:** Many banking financial institutions offer deposit insurance, which protects depositors' funds up to a certain limit in case the institution fails. This provides confidence to depositors and promotes stability in the financial system.
- 3. Convenience and Accessibility: Banks offer a wide range of financial services such as checking and savings accounts, loans, mortgages, investment products, and payment services. These services are often accessible through physical branches, ATMs, online banking platforms, and mobile apps, providing convenience to customers.
- 4. Risk Management Services: Banks provide various risk management services such as insurance products, hedging instruments, and advisory services to help individuals and businesses manage financial risks effectively.
- 5. Liquidity Provision: Banks play a crucial role in providing liquidity to the economy by offering services such as check clearing, electronic fund transfers, and overdraft facilities. This enhances the efficiency of financial transactions and supports economic activities. $_{61}$



Cons of Banking Financial Institutions

- 1. **Risk of Bank Failures:** Despite deposit insurance, there is always a risk of bank failures, which can lead to loss of depositor funds, disruptions in financial services, and systemic instability. Financial crises and economic downturns can increase the likelihood of bank failures.
- 2. Interest Rate Risk: Banking financial institutions are exposed to interest rate risk, which arises from fluctuations in interest rates affecting the profitability of their lending and investment activities. Changes in interest rates can impact net interest margins and the value of fixed-income securities held by banks.
- 3. Regulatory Compliance Costs: Banks are subject to extensive regulatory requirements imposed by government authorities to ensure financial stability, consumer protection, and compliance with anti-money laundering (AML) and know-your-customer (KYC) regulations. Compliance with these regulations often entails significant costs and administrative burdens.
- 4. Limited Access for Underserved Populations: Some segments of the population, such as low-income individuals, small businesses, and rural communities, may face challenges accessing banking services due to factors such as physical branch closures, account fees, and credit constraints. This can exacerbate financial exclusion and inequality.
- 5. Systemic Risks: Banking financial institutions are interconnected within the financial system, and problems at one institution can potentially spill over to others, leading to systemic risks. Factors such as excessive leverage, interconnectedness, and contagion effects can amplify risks during periods of financial stress. $_{62}$



Non-Banking Financial Institutions

- Nonbank financial companies (NBFCs), also known as nonbank financial institutions (NBFIs) are entities that provide certain bank-like financial services but do not hold a banking license.
- NBFCs are **not subject to the banking regulations** and oversight by federal and state authorities adhered to by traditional banks.
- Investment banks, mortgage lenders, money market funds, insurance companies, hedge funds, private equity funds, and P2P lenders are all examples of NBFCs.
- Since the Great Recession, NBFCs have proliferated in number and type, playing a key role in meeting the credit demand unmet by traditional banks.
- Non-banking financial institutions include insurance companies, pension funds, and hedge funds,
 etc.
- Various non-banking financial institutions serves a different purpose, but they all work towards the ultimate goal of providing funding for businesses and individuals but are **not regulated as banks**.



Types of Non-Banking Financial Institutions

- 1. **Hedge Funds**: These are investment funds that pool capital from accredited investors and invest in a diverse range of assets using various strategies to generate high returns.
- 2. **Private Equity Firms**: These firms invest in privately-held companies, often acquiring a controlling stake and working to improve the company's performance before exiting through a sale or initial public offering (IPO).
- 3. **Venture Capital Firms**: These firms provide capital to startups and small businesses with high growth potential in exchange for equity ownership. They often take an active role in mentoring and guiding the companies they invest in.
- 4. **Peer-to-Peer Lending Platforms**: These online platforms connect borrowers directly with individual lenders, bypassing traditional financial institutions. They facilitate loans for personal, business, and other purposes.
- 5. Mutual Funds: These investment vehicles pool money from multiple investors to invest in a diversified portfolio of stocks, bonds, or other securities managed by professional portfolio managers.
- 6. **Microfinance Institutions**: These organizations provide financial services such as small loans, savings accounts, and insurance to low-income individuals and communities who typically lack access to traditional banking services.
- 7. **Crowdfunding Platforms**: These online platforms allow individuals and businesses to raise funds from a large number of people, often in exchange for rewards, equity, or debt.



Pros & Cons of Non-Banking Financial Institutions

Pros

- Alternate source of funding and credit
- Direct contact with clients, eliminating intermediaries
- High yields for investors
- Liquidity for the financial system

Cons

- Less regulated than banks
- Non-transparent operations
- Systemic risk to financial system, economy



Difference between Banking & NBFIs/NBFCs

- 1. Non-banking financial institutions are not regulated by the government like banks are. This means that they are not subject to the same laws and regulations.
- 2. Non-banking financial institutions do not take deposits from customers. Instead, they raise money by selling securities or borrowing money.
- 3. Non-banking financial institutions are not required to maintain a reserve ratio (Cash Reserve Ratio-CRR) like banks are. This ratio is the percentage of deposits that a bank must keep in reserve in case of withdrawals.
- 4. Non-banking financial institutions are not subject to the same capital requirements as banks. This means that they are not required to have a certain amount of money in the reserve to protect against losses (Statutory Liquidity Ratio-SLR).
- 5. Finally, non-banking financial institutions are not subject to the same lending restrictions as banks. This means that they can lend money to anyone they choose, without having to follow the government's guidelines.



Break-Even Analysis

- Break-even analysis is a financial tool which helps a company to determine the stage at which the company, or a new service or a product, will be profitable
- In other words, it is a financial calculation for determining the number of products or services a company should sell or provide to **cover its costs** (fixed costs)
- It is used to determine the cost structure of a company or the number of units that need to be sold to cover the cost.
- Break-even is a circumstance where a company neither makes a profit nor loss but recovers all the money spent
- The break-even analysis is used to examine the relation between the fixed cost, variable cost, and revenue.
- It refers to the point at which total costs (TC) and total revenue (TR) are equal (TR=TC)
- Usually, an organisation with a low fixed cost will have a low break-even point of sale



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- Break-even analysis determines the number of units or amount of revenue that's needed to cover the business's total costs
- At the break-even point, you aren't losing or making any money, but all the costs associated with the business will have been covered
- After breaking even, the sales made by the business are pure profit
- Put simply, break-even analysis helps to determine at what point the business or a new product or service – will become profitable
- **Five components** of break-even analysis include fixed costs (FC), variable costs (VC), revenue, contribution margin, and break-even point (BEP)
- FC/Overhead cost: Type of production cost. These are the costs that remain the same no matter how much a company produces (remain the same regardless of production output), such as rent, property tax, insurance, etc.



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- **VC**: Type of production cost. These are the costs that **change based on how much a company produces and sells** (based on the amount of output produced), such as labor, utility expenses, commissions, raw materials, etc.
- Revenue/Total Revenue (TR): The total of all sales of products or services before expenses are taken out. Gross revenue. (PXQ)
- **Contribution Margin**: The amount of sales revenue that remains for a product or service after its variable costs are deducted
- When companies calculate the BEP, they identify the amount of sales required to cover all fixed costs to begin generating a profit
 - BEP=Fixed Costs / (Sales Price Per Unit Variable Cost Per Unit)



Calculation of BEP

VC: Rs. 400; Sale price per unit: Rs. 600; Total FC: Rs. 10,00,000.

Calculation of BEP per unit= Rs.10,00,000/200

Rs. 200 = contribution margin per unit (Rs. 600 - Rs. 200)

Break-Even Point = Rs. 10,00,000/ Rs. 200 = 5000 units

Next, this number of units can be shown in rupees by multiplying the 5,000 units with the selling price of Rs. 600 per unit

We get Break-Even Sales at 5000 units x Rs. 600 = Rs. 30,00,000 (BEP in rupees)



Implications of Break-even Analysis

- **Profitability Assessment**: Break-even analysis helps businesses **evaluate the viability of a product or service**. If the break-even point is too high compared to expected sales, it may indicate that the venture is not financially feasible.
- Setting Pricing Strategies: Break-even analysis aids in determining the minimum price at which a product or service should be sold to cover costs. It also provides insights into the potential for price changes to impact profitability.
- Cost Control: Identifying the components of fixed and variable costs helps in managing expenses more effectively. Businesses can focus on reducing costs or negotiating better deals with suppliers to lower the break-even point.
- **Decision Making**: Break-even analysis **facilitates decision-making** regarding product lines, expansion plans, and resource allocation. It helps in evaluating the financial implications of different options and choosing the most profitable course of action.
- **Risk Management**: Understanding the break-even point allows businesses to **assess their risk exposure**. They can determine the level of sales required to cover costs and make informed decisions about financial commitments and investments.



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- **Performance Evaluation**: Break-even analysis provides a benchmark for **evaluating business performance**. By comparing actual sales to the break-even point, businesses can assess whether they are operating above, at, or below expectations.
- Capital Budgeting: When considering investments in new projects or equipment, break-even analysis helps in estimating the time required to recover the initial investment. It assists in evaluating the potential return on investment and assessing the project's feasibility.
- Leverage Point Identification: Break-even analysis identifies the point at which incremental sales generate profit. This helps in focusing marketing efforts and identifying opportunities to increase revenue and profitability.
- Sensitivity Analysis: Businesses can conduct sensitivity analysis by adjusting variables such as price, volume, and costs to assess the impact on the break-even point. This helps in understanding the potential risks and uncertainties associated with different scenarios.



Limitations of Break-even Analysis

- **Doesn't predict demand** Although a break-even analysis can tell you when you'll break even, it doesn't give you any insight into how likely that is to happen. Plus, demand isn't stable, so even if you think there's a gap in the market, your break-even point could end up being a lot more ambitious than you initially thought.
- **Depends on reliable data** In short, the accuracy of your break-even analysis is dependent on the accuracy of your data. If your calculations are wrong or you're dealing with fluctuating costs, break-even analysis may not be the most useful tool in your arsenal.
- **Too simple** Break-even analysis is best for companies with one price-point. If you have multiple products with multiple prices, then break-even analysis may be too simple for your needs. In addition, it's worth remembering that costs can change, so your break-even point may need to be evaluated and adjusted at a later time.
- **Ignores competition** Another limitation of a break-even analysis concerns the fact that competitors aren't factored into the equation. New entrants to the market could affect demand for your products or cause you to change your prices, which is likely to affect your break-even point.



When is Break-even Analysis Used?

- **Starting a new business:** To start a new business, a break-even analysis is a must. Not only it helps in deciding whether the idea of starting a new business is viable, but it will force the startup to be realistic about the costs, as well as provide a basis for the pricing strategy.
- Creating a new product: In the case of an existing business, the company should still perform a
 break-even analysis before launching a new product—particularly if such a product is going to add
 a significant expenditure.
- Changing the business model: If the company is about to the change the business model, like, switching from wholesale business to retail business, then a break-even analysis must be performed. The costs could change considerably and breakeven analysis will help in setting the selling price.



Benefits of Break-even Analysis

- Catch missing expenses: When you're thinking about a new business, it's very much possible that you may forget about a few expenses. Therefore, a break-even analysis can help you to review all financial commitments to figure out the break-even point. This analysis certainly restricts the number of surprises down the road or at least prepares a company for them.
- Set revenue targets: Once the break-even analysis is complete, you will get to know how much you need to sell to be profitable. This will help you and your sales team to set more concrete sales goals.
- Make smarter decisions: Entrepreneurs often take decisions in relation to their business based on emotion. Emotion is important i.e. how you feel, though it's not enough. In order to be a successful entrepreneur, decisions should be based on facts.
- Fund your business: This analysis is a key component in any business plan. It's generally a requirement if you want outsiders to fund your business. In order to fund your business, you have to prove that your plan is viable. Furthermore, if the analysis looks good, you will be comfortable enough to take the burden of various ways of financing.
- **Better pricing:** Finding the break-even point will **help in pricing the products better**. This tool is highly used for providing the best price of a product that can fetch maximum profit without increasing the existing price.
- Cover fixed costs: Doing a break-even analysis helps in covering all fixed cost.