INVESTMENT BANKING

SECOND YEAR B.A. Programme

Semester – 3

Lesson Writers

D. Swapna,
M.B.A., MHRM., M.Phil.
Assistant Professor & Vice-Principal,
Dept. of Commerce & Management
Mahatma Gandhi College
Guntur.
.

Venna Sakunthala,
M.Com.
Lecturer
Dept. of Commerce & Management
Mahatma Gandhi College
Guntur.

Editor

Prof. D.A.R. Subrahmanyam
M.Com., PGDBM., Ph.D.
Principal,
Mahatma Gandhi College,
Guntur.

Director

Dr. NAGARAJU BATTU
MBA, MHRM, LLM, M.Sc.(Psy), M.A.(Soc), M.Ed., M.Phil., Ph.D.
Centre for Distance Education,
Acharya Nagarjuna University,
Nagarjuna Nagar 522 510, GUNTUR.

Ph : 0863 - 2346208, 2346222, 2346259 (Study Material)
Website : www.anucde.info
e-mail : anucdedirector@gmail.com

B.A. SECOND YEAR

Semester – 3 : INVESTMENT BANKING

First Edition : 2023

No. of Copies :

Published by :
Dr. Nagaraju Battu
Director,
Centre for Distance Education,
Acharya Nagarjuna University.

Printed at :

FOREWORD

Since its establishment in 1976, Acharya Nagarjuna University has been forging ahead in the path of progress and dynamism, offering a variety of courses and research contributions. I am extremely happy that by gaining a 'A' Grade from the NAAC in the year 2014, the Acharya Nagarjuna University is offering educational opportunities at the UG, PG levels apart from research degrees to students from over 285 affiliated colleges spread over the two districts of Guntur and Prakasam.

The University has also started the Centre for Distance Education with the aim to bring higher education within reach of all. The centre will be a great help to those who cannot join in colleges, those who cannot afford the exorbitant fees as regular students, and even housewives desirous of pursuing higher studies. With the goal of bringing education in the door step of all such people. Acharya Nagarjuna University has started offering B.A, and B, Com courses at the Degree level and M.A, M.Com., L.L.M., courses at the PG level from the academic year 2021-22 on the basis of Semester system.

To facilitate easier understanding by students studying through the distance mode, these self-instruction materials have been prepared by eminent and experienced teachers. The lessons have been drafted with great care and expertise in the stipulated time by these teachers. Constructive ideas and scholarly suggestions are welcome from students and teachers invited respectively. Such ideas will be incorporated for the greater efficacy of this distance mode of education. For clarification of doubts and feedback, weekly classes and contact classes will be arranged at the UG and PG levels respectively.

It is aim that students getting higher education through the Centre for Distance Education should improve their qualification, have better employment opportunities and in turn facilitate the country's progress. It is my fond desire that in the years to come, the Centre for Distance Education will go from strength to strength in the form of new courses and by catering to larger number of people. My congratulations to all the Directors, Coordinators, Editors and Lesson -writers of the Centre who have helped in these endeavours.

Prof. P.Rajasekhar
Vice –Chancellor,
Acharya Nagarjuna University

SECOND YEAR B.A.

SEMESTER – III

COURSE – 3 : 313BAN21 INVESTMENT BANKING

No. of hours per week: 5	**Max. Marks**	**:**	**100**
No. of Credits : 04	**Semester end examination**	**:**	**70**
	Internal Assessment	**:**	**30**

Learning Outcomes :

After successful completion of this course, the students will be able to:

1. *Acquire knowledge of terms in connection with Investment Banking*
2. *Understand Major Investment Banking Products and Services.*
3. *Understand the importance and relevance of investment Bankers in any financial system.*
4. *Comprehend the personal financial planning and investing skills*

SYLLABUS :

UNIT – I : INTRODUCTION TO INVESTMENT BANKING – 10 Hours

Introduction to Capital Markets – Functions of Capital Markets – Regulatory Framework of Securities Market in India – Listing Procedure in Stock Markets – Introduction to Investment Banking – Purpose of Investment – Banking Types of Investment Banks Functions of Investment Banks – Investment Banking vs. Merchant Banking – Evolution of Investment Banking – Global Perspective and India Perspective – Business of Investment Banking – Overview of Indian Investment Banks.

UNIT – II : ISSUE MANAGEMENT – 10 Hours

Initial Public Offering IPO – Significance and Decisions of IPO – Regulatory norms of IPO – IPO Pricing – Due Diligence Process – Rights Issues Investment Bankers role in Listed Companies.

UNIT – III : SERVICES OF INVESTMENT BANKER – 10 Hours

Corporate Advisory Services Business – Advisory Services Underwriting Services – Project Advisory Services – Financial Restructuring Services +- Mergers and Acquisitions Advisory and other allied Services.

UNIT – IV : BUSINESS VALUATION – 10 Hours

Various valuation models applied in estimating value of the firm and value of equity – Merits and Limitations of each models/methods of valuation – Valuing Private Equity and Venture Finance.

UNIT – V : ISSUES FACING IN INVESTMENT BANKING – 10 Hours

Issues facing Investment Banks – Designing new financial instruments – Adoption of Blockchain in Investment Banks – Data Security – Other Issues.

References :

1. Matt Krantz and Robert R. Jhonson, Investment Banking, Dummies a Wiley Brand, 2020.
2. Joshua Rosenbaum, Joshua Pearl, Investment Banking, Valuation, Leveraged Buyouts and Mergers and Acquisitions, Wiley, 2013.
3. CA Tapan Jindal, Investment Banking, Bharath Publishing House, 2015.
4. Pratap G. Subramanayam, Investment Banking, McGraw Hill Higher Education, 2008.
5. Falguni H. Pandya, Security Analysis and Portfolio Management, Jaico Books, 2014.
6. Pratapa S. Giri, Investment Banking, McGraw Hill Higher Education, 2013.
7. Bharathi V. Pathak, Indian Financial System, Pearson Education India, 2014.
8. MY Khan, Financial Services, McGraw Hill Higher Education, 2013.
9. Madhu Vij and Swati Dhawan, Financial Services and Merchant Banking, McGraw Hill Higher Education, 2012.

MODEL QUESTION PAPER
SECOND YEAR B.A.
Semester – 3
INVESTMENT BANKING

Time: 3 hours **Max. Marks: 70**

SECTION A **(5 x 4 = 20 Marks)**

Answer any **FIVE** of the following questions.

1. Define capital markets.
2. IPO.
3. Purpose of investment banking.
4. Define merger and acquisitions.
5. Write about venture finance.
6. Merchant Banking.
7. What are the Issues on Data Security?
8. What are underwriting services?

SECTION B **(5 x 10 = 50 Marks)**

Answer **ALL** of the following questions.

9 (a) What are the Functions of Capital markets?

(OR)

(b) Write about different types of Investment Banks.

10 (a) Explain the Significance and Decisions of IPO.

(OR)

(b) What is the role of Investment Bankers in Listed Companies?

11 (a) What are the different types of Advisory Services?

(OR)

(b) Differentiate between Corporate and Business Advisory Services.

12 (a) What are the Methods of Valuation?

(OR)

(b) Write about various valuation models in estimating Value of the Firm and Value of Equity.

13 (a) What are the Issues faced by Investment Banks?

(OR)

(b) Explain the Adoption of Block chain in Investment Banks.

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CONTENTS

LESSON – 1
CAPITAL MARKETS

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand :

- The meaning, structure, components, players of capital markets.
- The learner will comprehend industrial securities market.
- The learner will understand the meaning of primary markets.
- The learner will understand the characteristics of primary markets.

STRUCTURE OF THE LESSON :

1.1. INTRODUCTION :

Capital Market is a market for long-term sources of finance to the industrial and corporate sector. The development of a nation depends upon the rapid growth of industrialisation of a country.

Asset formation is the crucial factor for prosperity of nation. The asset creation is based on supply of capital and technology. Capital alone will not create prosperity. The prosperity is the combination of Technology, Capital and Human Resources. The chemistry of these factors will definitely help the underdeveloped countries towards developed nation.

1.2. DEFINITIONS OF CAPITAL MARKET :

According to Arun K. Datta the capital market may be defined as, "the capital market is a complex of institutions investment and practices with established links between the demand for and supply of different types of capital gains".

According to F. Livingston the capital market may be defined as, "In a developing economy, it is the business of the capital market to facilitate the main stream of command over capital to the point of the highest yield. By doing so, it enables, control over resources to pass into the hands of those who can employ them must effectively thereby increasing production capacity and spelling the national dividend."

1.3. IMPORTANCE OF CAPITAL MARKET :

Capital market deals with long-term funds. These funds are subject to uncertainty and risk. It supplies long and medium term funds to the corporate sector. It provides the mechanism for facilitating capital fund transactions. It deals in ordinary shares, bond debentures and stocks and securities of the government. In this market the funds flow will come from savers. It converts financial assets into productive physical assets. It provides incentives to savers in the form of interest or dividend to the investors. It leads to capital formation. The following factors play an important role in the growth of the capital market :

1. A strong and powerful Central Government
2. Financial dynamics
3. Speedy industrialisation
4. Attracting Foreign Investment
5. Investments from NRIs
6. Speedy Implementation of policies
7. Regulatory changes
8. Globalisation
9. The level of savings and investment pattern of the household sectors
10. Development of financial theories
11. Sophisticated technological advances

1.4. FUNCTIONS OF CAPITAL MARKET :

Capital market plays a vital role in the development by mobilising the savings to the needy corporate sector. In recent years there has been a substantial growth in the Capital Market.

The Capital Market involves in various functions and significance. They are presented below :

i. Coordinator
ii. Motivation to savings
iii. Transformation to investments
iv. Enhances economic growth
v. Stability
vi. Advantages to the investors
vii. Barometer

i. Coordinator :

The Capital Market functions as coordinator between savers and investors. It mobilises the savings from those who have surplus fund and divert them to the needy persons or organisations. Therefore, it acts as a facilitator of the financial resource. In this way it plays a vital role in transferring the surplus resources to deficit sectors. It increases the productivity of the industry which ultimately reflects in GDP and national income of the country. It increases the prosperity of the nation.

ii. Motivation of Savings :

The Capital Market provides a wide range of financial instruments at all times. India has a vast number of individual savers and the crores of rupees are available with them. These resources can be attracted by the capital market with nature. The banks and non-banking financial institutions motivate the people to save more and more. In less developed countries, there is no efficient capital market to tap the savings. In underdeveloped countries there are very little savings due to various factors. In those countries they invest mostly in unproductive sector.

iii. Transformation of Investment :

The Capital Market is a place where the savings are mobilised from various sources, is at the disposal of businessmen and the government. It facilitates lending to the corporate sector and the government. It diverts the savings amount towards capital formation of the corporate sector. It creates assets by helping the industry. Thus, it enhances the productivity and leads to industrialisation. The industrial development of the country depends upon the dynamic nature of the capital market. It also provides facilities through banks and non-banking financial institutions. The development of financial institutions made the way easy to capital market. The capital has become more mobile. The interest rate fall lead to an increase in the investment.

iv. Enhances economic growth :

The development of the Capital Market is influenced by many factors like the level of savings with the public, per capita income, purchasing capacity, and the general condition of the economy. The capital market smoothens and accelerates the process of economic growth. The Capital Market consists of various institutions like banking and non-banking financial institutions. It allocates the resources very cautiously in accordance with the development of needs of the country. The balanced and proper allocation of the financial resources leads to the expansion of the industrial sector. Therefore, it promotes the balances regional development. All regions should be developed in the country.

v. Stability :

The Capital Market provides a stable security prices in the stock market. It tends to stabilise the value of stocks and securities. It reduces the fluctuations in the prices to the minimum level. The process of stabilisation is facilitated by providing funds to the borrowers at a lower interest rate. The speculative prices in the stock market can be reduced by supply of funds. The flow of funds towards secondary market reduces the prices at certain level. Therefore, the Capital Market provides funds to the stock market at a low rate of interest.

vi. Advantages to the Investors :

The investors who have surplus funds can invest in long term financial instruments. In Capital Market, a number of long-term financial instruments are available to the investor at any time. Hence, the investors can lend their money in the Capital Market at reasonable rate of interest. The Capital Market helps the investors in many ways. It is the coordinator to bring the buyer and seller at one place and ensure the marketability of investments. The stock market prices are published in newspapers everyday which enables the investor to keep track of their investments and channelise them into most profitable way. The Capital Market safeguards the interest of the investors by compensating from the stock exchange compensating fund in case of fraud and default.

vii. Barometer :

The development of the Capital Market is the indicator of the development of a nation. The prosperity and wealth of a nation depends, upon the dynamic capital market. It not only reflects the general condition of the economy but also smoothens and accelerates the process of economic growth. It consists a number of institutions, allocates the resources rationally in accordance with the development needs of the country. A good allocation of resources leads to expansion of trade and industry. It helps both public and private sector.

Generally, the corporate sector requires funds not only for meeting their long-term requirements of funds for their new projects modernisation, expansion and diversification programmes but also for covering their operational needs. Therefore, their requirement of capital is classified as given below:

a. Long-term capital

b. Short-term capital

c. Venture capital

d. Export capital

Long-term capital represents the amount of capital invested in the form of fixed assets. Fixed assets are such as land, building, plant and machinery necessary for every company at the initial stage of the commencement of the production. Heavy amount of capital is required by the companies when they are going for modernisation or expansion or diversification. Therefore, the requirement of long-term capital is supplied by the capital market.

This is also referred to as Fixed Capital. Usually the corporate sector mobilises the fixed capital from the Capital Market through various long-term maturity financial instruments. Therefore, it provides adequate funds to the corporate sector by offering various financial instruments. They mobilise the funds through issue of Equity shares. Preference shares, debentures, bonds etc. These financial instruments have a longer maturity period and they are treated by the companies as permanent capital. Some instruments have no maturity until the close down of a business unit.

Short-term capital represents the amount of capital invested in current assets. The Current Assets consist of cash, bank balances, inventory, debtors etc. The short-term capital is required to meet the need of working capital of the corporate sector. Working capital is required for meeting the operating cost of the business concern. They are required to pay different amounts to different parties as per their schedule. Hence, they procure the working capital from the commercial banks. In India a majority of the corporate sector is funded by the banks through different modes of finance. The working capital is known as circulating capital. An adequate supply of working capital leads to smooth functioning of production of goods. There are some other avenues available to the corporate sector to meet the needs of the working capital.

Venture capital is the capital which invested in highly risky ventures. It is also known as seed capital. It is a quite recent entrant in the capital market. It has great significance in helping technocrat entrepreneurs at the commencement stage of the concern. It has technical expertise. But it lacks finance.

Export capital refers for making payment in International Trade. The payment of international trade involves in bills of exchange and other instruments.

1.5. THE GROWTH OF THE CAPITAL MARKET :

The Indian financial system is both developed and integrated today. Integration has been through a participatory approach in granting loans as well as in saving schemes. The expansion in size and number of 59 institutions has led to a considerable degree of diversification and increase in the types of financial instruments in the financial sector which are wholly owned by the government. The development banks in the Indian financial system have witnessed vast changes in the planning periods. Now the development banks constitute the backbone of the Indian Capital Market. The relevant of the development banks in the industrial financial system is not merely qualitative, but they have overwhelming qualitative dimensions in terms of their promotional and innovational functions. The growth of the capital market is determined by the following factors:

1. Economic Development
2. Rapid Industrialisation
3. Level of savings and investment of the household sector
4. Technological advances
5. Corporate performance
6. Regulatory framework
7. Participation of foreign institutional investors in the capital market
8. Development of financial services
9. Liquidity factors

10. Political stability
11. Globalisation
12. Financial Innovation
13. Economic and financial sector reforms
14. International developments
15. Agency costs
16. Emergence of financial intermediaries
17. Specialisation among investment managers
18. Incentives
19. Speed in acquiring, processing and acting upon information
20. NRIs investment.

1.6. STRUCTURE OF CAPITAL MARKET IN INDIA :

The structure of the capital market has undergone vast changes in recent years. The Indian capital market has transformed into a new appearance over the last four and half decades. Now it comprises an impressive network of financial institutions and financial instruments. The market for already issued securities has become more sophisticated in response to the different needs of the investors. The specialised financial institutions were involved in providing long-term credit to the corporate sector. Therefore, the premier financial institutions such as ICICI, IDBI, UTI, LIC and GIC constitute the largest segment. A number of new financial instruments and financial intermediaries have emerged in the capital market, Usually the capital markets are classified in two ways:

1. On the basis of issuer.
2. On the basis of instruments.

On the basis of issuer the capital markets can be classified again into two types

1. Corporate securities market.
2. Government securities market.

On the basis of financial instruments the capital markets are classified into two kinds:

1. Equity Market
2. Debt Market

Recently there has been a substantial development of the Indian Capital Market. It comprises various sub-markets. Equity market is more popular in India. It refers to the market for equity shares of existing and new companies. Every company shall approach the market for rising of funds. The equity market can be divided into two categories :

1. Primary Market
2. Secondary Market.

Debt Market represents the market for long-term financial instruments such as debentures, bonds etc.

1.7. KEYWORDS :

- Capital Market
- Industrialization
- Prosperity
- Globalization
- Coordinator
- Liquidity Factors
- Political Stability
- Equity Market
- Debt Market
- Working Capital
- Debentures
- Venture Capital
- International Trade

1.8. SELF ASSESSMENT QUESTIONS :

1. Meaning and definition of Capital markets.
2. Importance of Capital market.
3. Functions of Capital markets.
4. Factors determining Capital markets.
5. Structure of Capital markets in India.

1.9. SUGGESTED READINGS :

1. Securities Laws and Capital Markets, AJ Publications, CS Anoop Jain, 19th Revised Edition.
2. Capital Markets in India, Edited by Rajesh Chakrabarti & Sankar De.
3. Capital Markets in India, Reforms and Regulations, Deepak R Raste.

D. Swapna

LESSON – 2
SECURITIES MARKET

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand :

- The meaning, structure, components, players of Securities markets.
- The learner will comprehend industrial securities market.
- The learner will understand the meaning of primary markets.
- The learner will understand the characteristics of primary markets.

STRUCTURE OF THE LESSON :

2.1. A REGULATORY FRAMEWORK FOR GOVERNING THE SECURITIES IN INDIA :

- It helps in dealing with human issues such as fraud, manipulations, insider trading, etc.
- To survive a competitive market or to gain profits.
- To facilitate systematic development.
- To ensure the smooth working of the security market.

- The regulation provides a good environment that further encourages the investor and also protects the interest of the investor.
- To govern the participants of the security market.
- To formulate the policies and standards for fair trading.
- To ensure the long-term liabilities and safety of the investor.
- To ensure a transparent and efficient market system.

REGULATORY FRAMEWORKS IN INDIA :

- The SEBI Act (1992)

This Act was enacted to regulate and promote the securities market. SEBI has full autonomy over the security market. It can conduct inquiries of all the adjudicate offences under the 1992 Act. This Act provides for the power of registration of all intermediaries in the market. If in any case, any company violates the provisions of the act, SEBI has the power to penalize them according to the provisions of the act.

- The Companies Act (1956)
- This Act mainly deals with the aspects which are related to the company management .it regulates the provisions related to the use of premium, discount on issues , payment of interest or dividend.
- The Securities Contracts (Regulations) Act 1956

The main objective of this act is to stop undesirable transactions in the securities market. This Act gives the Central government authority to contract in securities, organize a trading activity in securities on a specified recognized stock exchange and listing of securities on the stock exchange.

- The Depositories Act 1996

The main objective of this act was to ensure the free transferability of the securities with accuracy. It provides for the maintenance of the records in a book. All the securities of public listed companies will be freely transferable by dematerializing the securities and depository mode.

2.2 STOCK EXCHANGE :

It plays an important role in the capital market. It is the place where any person can trade securities including shares, bonds and other financial instruments. It helps in the mobilization of the funds from savings into the different developed sectors of the economy. This has also some limitations for which there is a need for regulation to control such activities. For this, An Act was passed by the Central government named “The Securities Contracts (Regulations) Act 1956”.

This Act deals with regulations for control of all types of securities or aims to prevent undesirable transactions of the securities. This Act deals with various procedures for the stock exchange, the listing of the securities, operation of the brokers, recognition of the stock exchange, rules and guidelines for the market participants.

2.3 FUNCTIONS OF STOCK EXCHANGE :

- Economic Growth

It is a channel or platform through which an investor invests according to their interests. The process of trading means disinvestment and reinvestment. It offers various opportunities to the investors for the formation of capital and which leads to economic growth.

- Mobilization of Savings

All the transactions in the market ensure the protection of the investor. Investment can be done through mutual funds for those who cannot afford to invest in huge amounts of securities. It helps in increasing the confidence of the small investors.

- Liquidity

It helps in ensuring the liquidity of the investment. If any investor needs money, then he can liquidate or sell the securities during any trade days. This gives the investors’ confidence to the investors that he can convert his existing security into the cash.

- Barometer of National Economy

It is considered an economic barometer as it represents progress at national or international levels. It also records the change in share prices.

- Transaction safely and protection of investor interest

Securities are traded in the stock exchange which are listed and this is done after verifying the position of the company. The SEBI also keeps an eye on the functioning in the system. It protects the interest of the investor as it is controlled by the exchange.

2.4. SECURITY EXCHANGE BOARD OF INDIA :

It is a statutory regulatory body that regulates the security market and financial securities in India. The SEBI also makes such regulations that protect the interest of the investor. It is composed of One Chairman (who is nominated by the Union government), two officers from the Union Finance Ministry and another member is from the Reserve Bank of India. The main role played in the stock exchange are by Issuers of security, Investors and Financial Intermediaries.

Security Exchange Board Of India Act 1992 :

It is a law made by the Parliament for maintaining such an environment that is free from fraudulent practices or to develop the security market in India. This act has a supreme authority to make laws and regulations which shall be applied to all the listed companies.

Under this act there is an establishment of the security exchange Board of India which states about the management and office of the board. The power and functions of the board are specified by the act which they are bound to follow. It also deals with the registration of stock brokers and sub-brokers.

Powers :

- Quasi Legislative Powers: To formulate such rules and regulations like insider trading regulations and essential disclosure requirements. This also helps in consolidating the provisions of existing listing agreements of the financial market.
- Quasi Executive Powers- If any document or book of account violates of any regulation, then they have the power to examine the documents. They are also empowered to take legal action or to pass judgments against the person who violates the rules.
- Quasi-Judicial Powers - It empowers the authority to deliver the judgment related to fraud or other unethical activities.

2.5. FUNCTIONS OF SEBI (Section 11 of SEBI ACT 1992) :

- PROTECTIVE FUNCTIONS :

  1. To protect the interest of the investors in the securities market.
  2. It prohibits insider trading and unfair trade practices.
  3. It serves as a platform for stockbrokers, investment, registrars, and other people.
  4. It also checks price rigging.
  5. It also educates the investors about the securities markets.

- REGULATORY FUNCTIONS :
  1. It regulates the operations of custodians of securities, depositories, and participants.
  2. To regulate the business operations in the securities market.
  3. To monitor the acquisition of the shares.
  4. It regulates the working of mutual funds.
  5. It also conducts inquiries of the stock exchange.
  6. Registration of brokers and sub- brokers
  7. It also establishes the rules for taking over the company.

- DEVELOPMENTAL FUNCTIONS :
  1. It promotes the development of the securities market.

2. It takes care of research and development to ensure an efficient security market.
3. It also promotes the free functioning of the market.
4. It also promotes the training of the intermediaries.
5. It also provides online trading.

Regulations by SEBI :

- Issue of capital and Disclosure Agreement (2009) - It helps in the issues related to capital by improving the trading in securities.
- Regulation on the prohibition of Insider Trading (2015) - It introduced the new provisions for insider trading for fair trading in India.
- Regulation on Substantial Acquisition of the shares and Takeovers (2011) - This regulation is made to solve the problems related to the fair acquisition of shares.

2.6. LISTING PROCEDURE IN STOCK MARKETS :

Types of equity listing:

The process of equity listing on the Exchange consists of several steps. Its time requirement and complexity also depend on the "type" of listing the company intends to realise:

1. "Simple" listing on the Exchange, without a capital increase (issue of new shares) or public offering of existing shares (exit). In this case, when the company appears on the market, it creates a future possibility for flexible funding. At the same time, it "learns" how to comply with requirements associated with maintaining its shares on the Exchange, while allowing the company to continuously test company performance in the public markets. Performing well during this presence on the Exchange improves a company's conditions for raising future funds.

A firm may benefit from this option when it does not need additional capital at the time of the listing, or when the firm's owners intend to sell their stakes or a portion thereof only in the medium or long term.
On the other hand, going public on an Exchange undoubtedly creates a challenge that the company has to cope with even in the period preceding raising the actual funds or prior to exit

2. "Traditional public offering": a listing where the admission to the Exchange is coupled with the offer of a share package to the public, i.e. either the issue of new shares or sale by owners or a combination of the two.

The listing process comprises the following steps :

1. Decision about listing on the Exchange

The company compares the benefits of a presence on the Exchange (the “profit” of the listing) with the challenges connected with it (primarily the disclosure obligations of its presence on the Exchange, but also one-off and ongoing expenses). If the company considers that the benefits outweigh the costs of listing, it may then decide to apply for a listing on the Exchange.

2. Selection of the contributors

The first and most important task during the preparatory phase is the selection of the contributing players.

Investment firms have a dual role. On the one hand, they carry out advisory services, the preparation of the issue process, and the transaction itself, while on the other hand they offer/sell the securities to the public. In a public offering, they also provide an underwriting guarantee on behalf of the issuer. Fees are generally charges in accordance with these main services. Choosing the right investment firm is of paramount importance since this is the player who will assist the issuer during the entire listing process and who organises this multi-player and complex negotiation. It is reasonable to select the advising bank (or banks) based on a tender, and selecting the other players together with the advising bank is recommended. The issuer has to make preparations even prior to the selection of the advisor and needs to have knowledge of the qualification criteria and the requirements expected during the selection and listing process.

Auditors’ responsibility is far larger and far more complex in the case of a public company and transactions resulting in an increase in the number of shareholders. In addition to the traditional audit services, the auditor prepares a more detailed financial report (the so-called long form report) in the preparation of a listing, and its tasks often include an assessment (but not a certification) of the management's earnings forecasts.

Legal advisors deal with the examination of the legal status, significant contracts and legal relationships of the issuer, as well as with the documentation of shareholder rights (statutes, deed of foundation, shareholders’ agreements etc.). Legal advisors’ main task is to prepare a final report. The role of lawyers is very important in the preparation of a public offering, subscription and underwriting contracts linked to the sale of shares. Given that at this stage of the process the interests of the issuer and of the lead manager may differ, both parties often have their own legal counsel.

Marketing and PR advisors provide assistance with the distribution of shares during the public offering and with marketing the securities to potential buyers. These advisors participate in organising road shows preceding the sale of the shares and in providing logistic services.

If the company intends to make a simple listing on the Exchange, it is not necessary to involve all of the players listed above – the respective regulation does not require the contribution of an advisor in this case. Still, if a package of new or existing shares is to be sold to the public, contribution of an investment firm has to be involved.

3. Preparations for listing on the Exchange

The company shall prepare not only for the listing, but for the maintenance associated with listing on the Exchange. It is necessary that an appropriate level of investor relations and a harmonisation of the internal corporate processes among the different business units are ensured. It is particularly important in the case of a public offering, but also useful in a simple listing, to devise an appropriate marketing campaign at this stage.

4. Preparation of a prospectus.

The most important document of a listing is the so-called prospectus. The prospectus shall contain all relevant information on the economic, market, financial and legal situation of the company (and their likely developments in the future), giving investors the widest possible range of information to ensure proper decision-making. The prospectus shall explicitly contain a statement that the shares are to be listed on an Exchange and shall indicate as a prime risk factor, if no investment firms participated in its compilation. The prospectus prepared for a listing on the BSE shall be submitted for approval to the Central Bank of Hungary, which shall make a decision within 20 working days. Issuing the Prospectus can only be done following the MNB's approval. As a consequence of Hungary 's EU membership and on the basis of a "single passport", the BSE also accepts prospectuses approved by the supervisory authority of any other EU member state. The provisions regarding the contents of the prospectus are determined by the respective EU regulation.

5. Compilation of the listing documentation.

This documentation basically consists of an application, different statements and additional documents (to assist in this, the Exchange has compiled an application form).

6. Official submission of the listing documentation to the Exchange (application for listing)

In order to ensure smoother administration, it is recommended that an unofficial draft version of the application be submitted to the Exchange for a preliminary assessment prior to the official submission of listing documentation. This shall be followed by the official submission of the papers already agreed upon.

7. Public notice of new listing applications

Subsequent to the receipt of the application, the Exchange issues a public notice informing the market of the receipt of the application.

8. Review of the application

The Exchange has 10 Exchange days to review the application and must make a decision within 30 calendar days of its receipt. If necessary, the Exchange may request the issuer to submit any missing documents, and the issuer shall appropriately supplement the documentation within ten working days – in such cases, the deadline for the assessment by the Exchange shall be extended by the period needed to submit the missing documents.

9. Publications on the Exchange website regarding the listing

The documents relevant to investors shall be published at least two Exchange days before the listing.

10. If the documentation is complete and appropriate, a decision on listing shall be made (otherwise, the application shall be rejected).

11. First trading day Trading in the shares officially commences on the Exchange.

Investment banking is a type of banking that organizes large, complex financial transactions such as mergers or initial public offering (IPO) underwriting. These banks may raise money for companies in a variety of ways, including underwriting the issuance of new securities for a corporation, municipality, or other institution. They may manage a corporation's IPO. Investment banks also provide advice in mergers, acquisitions, and reorganizations.

In essence, investment bankers are experts who have their fingers on the pulse of the current investment climate. They help their clients navigate the complex world of high finance.

2.7. KEYWORDS :

- SEBI Act
- Depositories Act
- Stock Exchange
- National Economy
- Liquidity
- Quasi Legislative Powers
- Quasi Executive Powers
- Quasi Judicial Powers
- Prospectus

2.8. SELF ASSESSMENT QUESTIONS :

1. Regulatory Framework in India.
2. Meaning and definition of stock Exchange.
3. Functions of stock Exchange.
4. SEBI.

5. What are the powers of SEBI?
6. Functions of SEBI.
7. Types of equity listing.
8. Process of listing.

2.9. SUGGESTED READINGS :

1) Securities Market Foundation, Book by (NiSM) National Institute of Securities Markets.
2) Securities Laws & Capital Markets, CS N.S. Zad, 8 th Edition.
3) Investing in Stock Markets, Prof. (Dr.) Vanita Tripathi & Neeti Panwar, 6 th Edition.
4) Securities Law & Market Operation, Dr. P. Sudha, Sultan Chand & Sons.

D. Swapna

LESSON – 3

INVESTMENT BANKING

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand :

- The meaning, structure, components, players of Investment Banking.
- The learner will understand the Investment Banking.
- The learner will understand the characteristics of Investment Banking.
- Functions of Investment Banking.
- The learner will understand the meaning of Merchant Banks.
- Investment Banking Vs. Merchant Banking.

STRUCTURE OF THE LESSON :

3.1. Meaning of Investment Banking

3.2. Purpose of Investment Banking

3.3. Types of Investment Banks

3.4. Functions of Investment Banking

3.5. Comparison Chart Merchant Banks & Investment Banks

3.6. Key difference between Merchant Banks & Investment Banks

3.7. Key words

3.8. Self Assessment Questions

3.9. Suggested readings

3.1. UNDERSTANDING INVESTMENT BANKING :

Investment banks underwrite new debt and equity securities for all types of corporations, aid in the sale of securities, and help facilitate mergers and acquisitions, reorganizations, and broker trades for institutions and private investors. Investment banks also provide guidance to issuers regarding the offering and placement of stock.

3.2. PURPOSE OF INVESTMENT BANKING :

Investment bankers get involved in the very early stages of funding a new project or endeavor. Investment bankers are typically contacted by people, companies, or governments who need cash to start businesses, expand factories, and build schools or bridges. Representatives from the investment banking operation then find investors or organizations like pension plans, mutual funds, and private investors who have more cash than they know what to do with (a nice problem to have) and who want a return for the use of their funds. Investment banks also offer advice regarding what investment securities should be bought or the ones an investor may want to buy. One of the trickiest parts of understanding investment banking is that it's typically a menu of financial services. Some investment banking operations may offer some services, but not others.

The services offered by investment banks typically fall into one of a few buckets. One of the best ways to understand investment banks is to examine all the functions that some of the biggest investment banks perform. For example, Morgan Stanley, one of the world's largest investment banks, has its hands in several key business areas, including the following:

- Capital raising : This part of the investment banking function helps companies and organizations generate money from investors. This is typically done by selling shares of stock or debt.
- Financial advisory : In this role, the investment banking operation is hired to help a company or government make decisions on managing their financial resources. Advice may pertain to whether to buy another company or sell off part of the business. A common business decision tackled by this type of investment banking is whether to acquire another company or divest of a current product line. This is called mergers and acquisitions (M&A) advisory.
- Corporate lending : Investment banks typically help companies and other large borrowers sell securities to raise money. But large investment banks are also frequently involved in extending loans to their customers, often short-term loans (called bridge loans) to tide a company over while another transaction is in the works.
- Sales and trading : Investment bankers are a creative and innovative lot, in the business of constructing financial instruments to be bought and sold. It's natural for investment bankers to also buy and sell stocks and other financial instruments either on the behalf of their clients or using their own money.
- Brokerage services : Some investment banking operations include brokerage services where they may hold clients' assets or help them conduct trades.
- Research : Investment banks not only help large institutions sell securities to investors, but also assist investors looking to buy securities. Many investment banks run research units that advise investors on whether they should buy a particular investment.
  The terms investments and securities are pretty much interchangeable.
- Investments : Investment banks typically serve the role of a middleman, sitting between the entities that need money and those that have it. But periodically, units of investment banking operations may invest their own money in promising companies or projects. This type of investment, often made in companies that don't have investments that the public can buy, is called private equity.

3.3. TYPES OF INVESTMENT BANKS :

There are two major types of investment banks based on their function. This might be more Relevantly referred to as branches of operation in investment banking.

1. Sell side : that includes functions such as trading securities and includes the facilitation of transactions through market-making, and the promotion and marketing of securities through research and underwriting.

2. Buy side : refers to institutions that give guidance and advice as it pertains to buying investment services. Common entities on the buy side include insurance companies, hedge funds, unit trusts, mutual funds and private equity funds.

3. Private or boutique investment banks : are concerned with private and confidential information and transactions that might not be revealed to the public. They are usually smaller banking entities that specialize in one or more areas of investment products. Others in this sector focus their services on one type or one specific group of industries. These private entities carry out a variety of functions. Some may act as investment advisors while others specialize in the trade of certain assets and commodities. There are also those that offer services to specific social groups and industries. Examples of private investment banks include; Almeida Capital, Atlantic-Pacific Capital, J.P. Morgan Cazenove, Triago, China International Capital Corporation and CITIC Securities.

4. Public, Full-service or Bulge bracket investment banks : enlist a wider variety of market activities that include research, underwriting, mergers and acquisitions, trading, merchant banking, investment management and securities trading services. These bulge bracket banks are enormous investment institutions that cover all or most industries. They serve a wide variety of client types and offer most if not all possible types of investment banking services in their portfolio. Major institutions that fall under this umbrella today are Bank of America Merrill Lynch, Barclays Capital, Citigroup, JPMorgan Chase and Morgan Stanley.

3.4. INVESTMENT BANKING FUNCTIONS :

Investment banks have many functions to perform. Some of the most important functions of investment banking are as follows :

- **IPO :** Investment Banks facilitate public and Private Corporation's Initial Public Offering known as IPO (issuing securities in the primary market) by providing underwriting services. Other services include acting as intermediaries in trading for clients and foreign exchange management.

- **Investment Management :** Investment Bankers also provide advice to investors to purchase, manage and trade various securities (shares, bonds, etc.) and other assets like real estate, hedge fund, mutual funds etc. Investors may be financial institutions or big fund houses or private investors. The investment management division of an investment bank is divided into separate groups, namely, Private Wealth Management and Private Client Services.

- **Boutiques :** Small investment banking firms providing financial services are called boutiques. These mainly specialize in trading bonds, advising for mergers and acquisitions, providing technical analysis etc.

- **Mergers and Acquisitions :** Another major function of the investment banking include mergers and acquisitions (M&A) and corporate finance which involve subscribing investors to a security issuance, coordinating with bidders, or negotiating with a merger target.

- **Structuring of Derivatives :** This has been a relatively recent division which involves highly technical and numerate employees working on creating complex structured derivative products which typically offer much greater margins and returns than underlying cash securities.

- **Merchant banking** is nothing but the private equity activity of investment banks. Goldman Sachs Capital Partners and JP Morgan's One Equity Partners are the current examples. (Note: Originally, "Merchant Bank" was the British English term for an investment bank.)

- **Research** is another important function of an Investment bank which reviews companies and writes reports about their prospects with "buy" or "sell" ratings. Though this division does not generate direct revenues, the information gathered or produced by them is used to guide investors and in some cases for Mergers and Acquisitions.

- **Risk Management** is a continuously ongoing activity which involves analyzing the market and credit risk that traders are taking onto the balance sheet in conducting their daily trades, and setting limits on the amount of capital that they are able to trade in order to prevent 'bad' trades having a detrimental effect to a desk overall.

3.5. DIFFERENCE BETWEEN MERCHANT BANK AND INVESTMENT BANK :

Commercial banks offer services to the general public, but there are some banks which offer services to the companies and investors but not to the public. They are investment bank and merchant bank. As the two banks offer similar services to the clients, they are comonly misconstrued, however they are different in the sense that an **investment bank** is a banking company that acts as an intermediary between the Client and the investing public, by helping them in raising funds.

On the contrary, a **merchant bank** is a bank that undertakes international finance and underwriting of securities. They provide services like fund raising, brokerage to the business houses and also acts as a financial advisory to them.

Comparison Chart

Basis for Comparison	Merchant Bank	Investment Bank
Meaning	Merchant Bank implies a banking institution, that fulfills capital requirements of the companies in the form of share ownership, rather than granting loans.	Investment Banks are the middleman between the issuer of securities and the investing public, and also provides various financial services to the clients.
Deals with	International financing activities	Underwriting and issuance of securities
Based on	Fee based	Fee based and fund based
Trade financing	Offered to the clients	Rarely provided
Deals with	Small companies	Large companies

3.6. KEY DIFFERENCES BETWEEN MERCHANT BANK AND INVESTMENT BANK :

The difference between merchant bank and investment bank are explained clearly in the points given below :

- A merchant bank refers to a banking company whose key area is international finance, and so its work is related to corporate investment, trade finance and real estate investment. The main functions of merchant banks are issue management, portfolio management, corporate counselling, etc. In contrast, an investment bank is a banking company that deals with established firms and fulfils their long-term capital requirement, by acting as an intermediary between the company and investors.
- While merchant banks engage in international financing activities, investment banks are concerned with underwriting and issuance of securities.
- An investment bank is fee-based as it provides various services such as banking and advisory services to the clients along with that it is fund based too because it earns income from interest and lease rentals. On the other hand, a merchant bank is the only fee-based because it provides banking, advisory and custodial services to its clients.
- Merchant banks provide trade financing facility to their clients. Conversely, there are only a few investment banks that provide trade financing services to its clients.
- A merchant bank usually deals with the companies which are not so big that they can arrange capital by making an IPO, so these banks use a relatively creative form such as private placement of securities. In contrast, an investment bank works with large corporations, who are willing to list their securities for sale to the general public.

In a nutshell, the two banks differ in the sense that a merchant bank assists companies in issuing shares through private placement, whereas an investment bank underwrites and sell shares through initial public offering to the general public.

3.7. KEYWORDS :

- Capital raising
- Acquisition and Reorganization
- Financial Advisory
- Corporate Lending
- Brokerage Services
- Boutiques
- Structuring of Derivatives
- Merchant Banking

3.8. SELF ASSESSMENT QUESTIONS :

1. Meaning and definition of Investment Banking.
2. Purpose of Investment Banking.
3. Types of Investment Banks.
4. Functions of Investment Banking.
5. Differences between Merchant Bank and Investment Bank.

3.9. SUGGESTED READINGS :

1) Matt Krantz and Robert R. Jhonson, Investment Banking, Dummies a Wiley Brand, 2020.
2) Joshua Rosenbaum, Joshua Pearl, Investment Banking, Valuation, Leveraged Buyouts and Mergers and Acquisitions, Wiley, 2013
3) CA Tapan Jindal, Investment Banking, Bharath Publishing House, 2015.
4) Pratap G. Subramanayam, Investment Banking, McGraw Hill Higher Education, 2008.

D. Swapna

LESSON – 4

INTRODUCTION TO IPO

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand :

- Meaning and Introduction to IPOs
- Learn Patterns associated with IPOs
- Types of Issues
- How IPOs worked
- We learnt right issues and reasons

STRUCTURE OF THE LESSON :

4.1. Introduction to IPO
4.2. Patterns Associated with IPO
4.3. Types of Issues
4.4. Working of IPOs
4.5. Right Issues and Reasons
4.6 Key words
4.7. Self Assessment Questions
4.8. Suggested Readings

4.1. INTRODUCTION :

An initial public offering (IPO) occurs when a security is sold to the general public for the first time, with the expectation that a liquid market will develop. Although an IPO can be of any debt or equity security, this article will focus on equity issues by operating companies. Most companies start out by raising equity capital from a small number of investors, with no liquid market existing if these investors wish to sell their stock. If a company prospers and needs additional equity capital, at some point the firm generally finds it desirable to "go public" by selling stock to a large number of diversified investors. Once the stock is publicly traded, this enhanced liquidity allows the company to raise capital on more favorable terms than if it had to compensate investors for the lack of liquidity associated with a privately-held company. Existing shareholders can sell their shares in open-market transactions. With these benefits, however, come costs. In particular, there are certain ongoing costs associated with the need to supply information on a regular basis to investors and regulators for publicly-traded firms. Furthermore, there are substantial one-time costs associated with initial public offerings that can be categorized as direct and indirect costs. The direct costs include the legal, auditing, and underwriting fees.

The indirect costs are the management time and effort devoted to conducting the offering, and the dilution associated with selling shares at an offering price that is, on average, below the price prevailing in the market shortly after the IPO. These direct and indirect costs affect the cost of capital for firms going public. Firms going public, especially young growth firms, face a market that is subject to sharp swings in valuations. The fact that the issuing firm is subject to the whims of the market makes the IPO process a high-stress period for entrepreneurs. Because initial public offerings involve the sale of securities in closely-held firms in which some of the existing shareholders may possess non-public information, some of the classic problems caused by asymmetric information may be present. In addition to the adverse selection problems that can arise when firms have a choice of when and if to go public, a further problem is that the underlying value of the firm is affected by the actions that the managers can undertake. This moral hazard problem must also be dealt with by the market. This article describes some of the mechanisms that are used in practice to overcome the problems created by information asymmetries.

4.2. EVIDENCE IS PRESENTED ON THREE PATTERNS ASSOCIATED WITH IPOS :

(i) new issues under pricing,

(ii) cycles in the extent of under pricing, and

(iii) long-run underperformance.

Various theories that have been advanced to explain these patterns are also discussed. While this chapter focuses on operating companies going public, the IPOs of closed-end funds and real estate investment trusts (REITs) are also briefly discussed. A closed-end fund raises money from investors, which is then invested in other financial securities. The closed-end fund shares then trade in the public market. The structure of the remainder of this chapter is as follows. First, the mechanics of going public and the valuation of IPOs are discussed. Second, evidence regarding the three empirical patterns mentioned above is presented. Third, an analysis of the costs and benefits of going public is presented in the context of the life cycle of a firm, from founding to its eventual ability to self-finance. This includes a short analysis of venture capital. The costs of going public and explanations for new issues under pricing are then discussed.

4.3. TYPES OF ISSUES :

Primarily, issues made by an Indian company can be classified as Public, Rights, Bonus and Private Placement. While right issues by a listed company and public issues involve a detailed procedure, bonus issues and private placements are relatively simpler. The classification of issues is as illustrated below:

a) Public issue
   (i) Initial Public offer (IPO)
   (ii) Further Public offer (FPO)
b) Rights issue
c) Composite Issue
d) Bonus issue
e) Private placement
   (i) Preferential issue
   (ii) Qualified institutional placement
   (iii) Institutional Placement Programme

(a) Public issue : When an issue / offer of shares or convertible securities is made to new investors for becoming part of shareholders' family of the issuer (Entity making an issue is referred as "Issuer") it is called a public issue. Public issue can be further classified into Initial public offer (IPO) and Further public offer (FPO). The significant features of each type of public issue are illustrated below:

(i) Initial public offer (IPO) : When an unlisted company makes either a fresh issue of shares or convertible securities or offers its existing shares or convertible securities for sale or both for the first time to the public, it is called an IPO. This paves way for listing and trading of the issuer's shares or convertible securities on the Stock Exchanges.

(ii) Further public offer (FPO) or Follow on offer : When an already listed company makes either a fresh issue of shares or convertible securities to the public or an offer for sale to the public, it is called a FPO.

(b) Rights issue (RI) : When an issue of shares or convertible securities is made by an issuer to its existing shareholders as on a particular date fixed by the issuer (i.e. record date), it is called a rights issue. The rights are offered in a particular ratio to the number of shares or convertible securities held as on the record date.

(c) Composite issue : When the issue of shares or convertible securities by a listed issuer on public cum-rights basis, wherein the allotment in both public issue and rights issue is proposed to be made simultaneously, it is called composite issue.

(d) Bonus issue : When an issuer makes an issue of shares to its existing shareholders without any consideration based on the number of shares already held by them as on a record date it is called a bonus issue. The shares are issued out of the Company's free reserve or share premium account in a particular ratio to the number of securities held on a record date.

(e) Private placement : When an issuer makes an issue of shares or convertible securities to a select group of persons not exceeding 49, and which is neither a rights issue nor a public issue, it is called a private placement. Private placement of shares or convertible securities by listed issuer can be of three types:

(i) Preferential allotment : When a listed issuer issues shares or convertible securities, to a select group of persons in terms of provisions of Chapter VII of SEBI (ICDR) Regulations, 2009, it is called a preferential allotment. The issuer is required to comply with various provisions which inter-alia include pricing, disclosures in the notice, lock-in etc, in addition to the requirements specified in the Companies Act.

(ii) Qualified institutions placement (QIP) : When a listed issuer issues equity shares or non-convertible debt instruments along with warrants and convertible securities other than warrants to Qualified Institutions Buyers only, in terms of provisions of Chapter VIII of SEBI (ICDR) Regulations, 2009, it is called a QIP.

(iii) Institutional Placement Programme (IPP) : When a listed issuer makes a further public offer of equity shares, or offer for sale of shares by promoter/promoter group of listed issuer in which the offer, allocation and allotment of such shares is made only to qualified institutional buyers in terms Chapter VIII A of SEBI (ICDR) Regulations, 2009 for the purpose of achieving minimum public shareholding, it is called an IPP.

4.4. HOW AN INITIAL PUBLIC OFFERING (IPO) WORKS ?

Before an IPO, a company is considered private. As a pre-IPO private company, the business has grown with a relatively small number of shareholders including early investors like the founders, family, and friends along with professional investors such as venture capitalists or angel investors.

An IPO is a big step for a company as it provides the company with access to raising a lot of money. This gives the company a greater ability to grow and expand. The increased transparency and share listing credibility can also be a factor in helping it obtain better terms when seeking borrowed funds as well.

When a company reaches a stage in its growth process where it believes it is mature enough for the rigors of SEC regulations along with the benefits and responsibilities to public shareholders, it will begin to advertise its interest in going public.

Typically, this stage of growth will occur when a company has reached a private valuation of approximately $1 billion, also known as unicorn status. However, private companies at various valuations with strong fundamentals and proven profitability potential can also qualify for an IPO, depending on the market competition and their ability to meet listing requirements.

IPO shares of a company are priced through underwriting due diligence. When a company goes public, the previously owned private share ownership converts to public ownership, and the existing private shareholders' shares become worth the public trading price. Share underwriting can also include special provisions for private to public share ownership.

Meanwhile, the public market opens up a huge opportunity for millions of investors to buy shares in the company and contribute capital to a company's shareholders' equity. The public consists of any individual or institutional investor who is interested in investing in the company.

Overall, the number of shares the company sells and the price for which shares sell are the generating factors for the company's new shareholders' equity value. Shareholders' equity still represents shares owned by investors when it is both private and public, but with an IPO, the shareholders' equity increases significantly with cash from the primary issuance.

4.5. RIGHTS ISSUE :

A rights offering to existing shareholders to buy additional company shares

What is a Rights Issue?

A rights issue is an offering of rights to the existing shareholders of a company that gives them an opportunity to buy additional shares directly from the company at a discounted price rather than buying them in the secondary market. The number of additional shares that can be bought depends on the existing holdings of the shareowners.

Features of a Rights Issue

- Companies undertake a rights issue when they need cash for various objectives. The process enables the company to raise money without incurring underwriting fees.
- A rights issue gives preferential treatment to existing shareholders, where they are given the right (not obligation) to purchase shares at a lower price on or before a specified date.
- Existing shareholders also enjoy the right to trade with other interested market participants until the date at which the new shares can be purchased. The rights are traded in a similar way as normal equity shares.
- The number of additional shares that can be purchased by the shareholders is usually in proportion to their existing shareholding.
- Existing shareholders can also choose to ignore the rights; however, if they do not purchase additional shares, then their existing shareholding will be diluted post issue of additional shares.

Reasons for a Rights Issue

- When a company is planning an expansion of its operations, it may require a huge amount of capital. Instead of opting for debt, they may like to go for equity to avoid fixed payments of interest. To raise equity capital, a rights issue may be a faster way to achieve the objective.
- A project where debt/loan funding may not be available/suitable or expensive usually makes a company raise capital through a rights issue.

- Companies looking to improve their debt-to-equity ratio or looking to buy a new company may opt for funding via the same route.
- Sometimes troubled companies may issue shares to pay off debt in order to improve their financial health.

Example of a Rights Issue

Let's say an investor owns 100 shares of Arcelor Mittal and the shares are trading at $10 each. The company announces a rights issue in the ratio of 2 for 5, i.e., each investor holding 5 shares will be eligible to buy 2 new shares. The company announces a discounted price of, for example, $6 per share. It means that for every 5 shares (at $10 each) held by an existing shareholder, the company will offer 2 shares at a discounted price of $6.

- Investor's Portfolio Value (before rights issue) = 100 shares x $10 = $ 1,000
- Number of right shares to be received = (100 x 2/5) = 40
- Price paid to buy rights shares = 40 shares x $6 = $ 240
- Total number of shares after exercising rights issue = 100 + 40 = 140
- Revised Value of the portfolio after exercising rights issue = $ 1,000 + $240 = $1,240
- Should be price per share post-rights issue = $1,240 / 140 = $8.86

According to theory, the price of the share after the rights issue should be $8.86, but that is not how the markets behave. An uptrend in the share price will benefit the investor, while if the price falls below $8.86, the investor will lose money. The decline in share price can be attributed to several factors. Here are some of them:

- It gives a signal to the market that the company may be struggling, which can be the reason the company issued shares at a discount.

By issuing more shares, there is dilution in the value of available shares

4.6. KEYWORDS :

* Initial Public Offering
* Real Estate Investment Trusts
* Public Issue
* Right Issue
* Composite Issue
* Preferential Issue

4.7. SELF ASSESSMENT QUESTIONS :

1. Introduction to IPOs.
2. Types of Issues.
3. How an IPO works?
4. Features and Reasons for Right Issue.

4.8. SUGGESTED READINGS :

1) Initial Public Offerings, Richard P. & Kleeburg
2) Initial Public Offerings – A Practical Guide to Going Public, David A. Westenberg, 2nd Edition.
3) High-Profit - IPO Strategies – Finding Breakout IPOs for Investors and Traders, Tom Taulli, 3rd Edition,

D. Swapna

LESSON – 5

VALUING IPOS

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand :

- The meaning, structure, components, players of Investment Banking.
- The learner will understand the Investment Banking.
- The learner will understand the characteristics of Investment Banking.

STRUCTURE OF THE LESSON :

5.1. Introduction

5.2. Definition of Due Diligence

5.3. Reasons of Due Diligence

5.4. Process of Due Diligence

5.5. Meaning of IPO Process

5.6. Steps in IPOs

5.7. Advantages & Disadvantages of an IPO

5.8. IPO alternatives

5.9. Key words

5.10. Self Assessment Questions

5.11. Suggested Readings

5.1. INTRODUCTION :

In principal, valuing IPOs is no different from valuing other stocks. The common approaches of discounted cash flow (DCF) analysis and comparable firms analysis can be used.

In practice, because many IPOs are of young growth firms in high technology industries, historical accounting information is of limited use in projecting future profits or cash flows.

Thus, a preliminary valuation may rely heavily on how the market is valuing comparable firms.

In some cases, publicly-traded firms in the same line of business are easy to find. In other cases, it may be difficult to find publicly-traded "pure plays" to use for valuation purposes.

The final valuation of the firm going public typically occurs at a pricing meeting the morning a firm is expected to receive S.E.C. clearance to go public. This pricing meeting is described below in section 7.1 concerning book building. Because the IPO market is especially sensitive to changes in market conditions, and because it takes at least several months to complete the process of going public, going public is a high-stress event for entrepreneurs.

Numerous cases have occurred where a firm was expecting to raise tens of millions of dollars only to withdraw the deal at the last moment due to factors outside of its control.

Because most companies prefer an offer price of between $10.00 and $20.00 per share, firms frequently conduct a stock split or reverse stock split to get into the target price range.

Stocks with a price below $5.00 per share are subject to the provisions of the Securities Enforcement Remedies and Penny Stock Reform Act of 1990, aimed at reducing fraud and abuse in the penny stock market.

5.2. DUE DILIGENCE PROCESS :

Definition :

Due diligence has two main definitions. Firstly, it is a process of assessing risks and opportunities of a proposed transaction, although it is not simply an audit in that context. Secondly, it is the standard of care required during a particular transaction, particularly prior to that transaction. In both contexts it involves investigating the accuracy of the information related to prospective investment or business decision and evaluates the future potential of the subject matter of the transaction.

Due diligence is conducted by the potential acquirer (buyer) and its team members such as managers, lawyers, bankers, and other professionals. The target company (seller) and its management provide information and legal documents upon the request of the acquirer. Due diligence can also be conducted in cooperation with key persons such as customers, suppliers, employees, trade organizations, and other relevant stakeholders. The process is beneficial to venture capitalists companies, appraisers, lawyers, insurance experts, accountants, consultants, acquiring companies, investment banks, and other financial institutions. It can also be useful to Directors of companies when it is used to ensure proper management decisions are made.

During the due diligence process, information about the financial, legal, commercial, and managerial issues are collected. The risks or threats associated with the business are, within the limits of the due diligence framework, identified. The process is associated with assessing risks and also involves the identification of the company's future potential. The objective of due diligence is not limited to determination of the risks and returns or presentation of the shortcomings and benefits of the business. It also focuses on the post-deal implementations and management decisions.

5.3. THERE ARE SEVERAL REASONS FOR CONDUCTING DUE DILIGENCE. SOME OF THOSE INCLUDE :

- Confirm the accuracy of information provided prior to investigation, especially in the context of a transfer of assets or shares.
- Identification of the current situation of the business
- Avoid misunderstandings between investors and the target company
- Identify the risks (both firm-level and macro-level), shortcomings, returns and benefits of the business
- Avoid unprofitable investments
- Reveal hidden facts and potential problem areas such as pending lawsuits and contingent liabilities
- Expose risks and liabilities
- Verify past records of the target company

In general, the due diligence process is applied in two types of transactions: (1) sale and purchase of asset transactions and (2) sale and purchase of share transactions. The type of the transaction has significant impact on the due diligence process. While asset transactions involve selling/buying the target company's assets including products and services to the acquirer, stock transactions involve selling/buying of the target company's shares to the acquirer. The most common examples of asset transactions are sale of fixed assets and real estate. The most common share transactions include merger, acquisition, initial public offering (IPO), and partnership deals. In general, the level of due diligence in share transactions is greater than that of asset purchases.

5.4. DUE DILIGENCE PROCESS :

A common example of due diligence occurs in merger and acquisition transactions. Each merger and acquisition has its own unique set of facts and circumstances. The prospect buyer of a target company wants to see whether it is worth acquiring that business or to ascertain the risks in doing so.

Prior to entering a deal, the potential acquirer and the target company agree to the terms of due diligence. They both sign a letter of intent (LOI) or equivalent document that allows the parties to negotiate major issues. Due diligence is then conducted after the letter of intent is signed between the acquirer and the target company.

The letter of intent usually specifies the deadline for reaching agreement, a series of triggers for terminating the acquisition, the expenses of due diligence and drafting (Bruner 2004).

It is usually very important to keep the details of due diligence process confidential before assets are finally transferred or a deal is done. In particular, in the case of stock purchases (rather than asset purchases), information leakage may harm both the target and acquiring companies' share price. In order to avoid leaks, the acquirer and the target company enter into a Confidentiality Agreement (known as nondisclosure agreement) which is requested to keep all information learned as confidential. This agreement is a precaution in particular when the acquirer decides not to buy the business or stocks. Confidentiality agreement prevents the prospective acquirer and due diligence team members from divulging private information about the target company. It is crucial for the target company not to disclose any confidential information of the business until the acquirer signs a confidentiality agreement (Boggs 2007).

After having signed the confidentiality agreement, the acquirer is allowed to access the due diligence data room. The target company arranges a data room where the relevant materials are held under strictly controlled conditions. A due diligence data room is used to disclose all the data required about the target company and it is useful to remove skepticism about the deal, avoid time consuming, and lessen the price pressure. The acquirer and the consultants can access to the data room for a limited period of time in order to read materials and get insight into the target company. Data rooms are also beneficial for the target company, because it can gain the confidence of the acquirer and maximize the bidding price. There are two types of due diligence data rooms: (1) traditional data room and (2) virtual data room. Traditional data room is a physical and a paper-based room. In complicated and large-scale business deals, traditional data rooms are not appropriate for conducting due diligence. On the other hand, virtual data rooms save document traffic and administrative time. Virtual data rooms provide internet portals that allow users to access the documents secure and fast from any, or from a particular, point. The ease of access, saving time and money through virtual data rooms may attract more acquirers to the bidding if it is a public or competitive transaction.

The acquirer can ask additional questions to the target company to address some critical issues. In this case, the target company should provide additional data in response to acquirer's questions/checklist. The information requested is divided into categories and analyzed by people based on their expertise. The parties involved in due diligence create a checklist of needed information. The checklist covers several questions about the financial situation, products, customers, competitors, marketing, sales, distribution, research and development, management and personnel, and legal issues. In addition to written documents, interviews and site visits are conducted in order to confirm the given facts. In particular, face to face, in-depth interviews can be helpful to explode the opinions of people accompanied with their body languages which should also be taken into consideration.

Due diligence provides a solid foundation for valuation analysis, deal negotiation and post-deal integration for organizations. It has significant impact on pricing of the subject matter of the target company. In particular, financial due diligence is influential on the valuation which deter- mines the amount of money to be paid to the target company. The valuation and the financing procedures are based on the new information revealed during due diligence process. Detection of a false statement or a problem provides a suitable ground to reduce the bidding price which can be negotiated in the favor of acquirer (DePamphilis 2003). Determining a value of the target company depends on the valuation technique (which includes asset-based, income-based, and market-based approaches) used in the transaction. In the case of income-based approach, the information provided through financial due diligence (sales, costs, profits, etc.) and the information provided from commercial due diligence (market potential and competition in the market) are used together to calculate the true value of the target company. However, when applying market-based approach, due diligence may provide limited assistance. Additional information, including current and past share prices of the target company, is needed (Picot 2002).

A through due diligence process creates a mass of information. The reports of all experts, materials, working papers, and summary memos should be taken altogether in order to construct a final report. A final due diligence report is prepared and submitted to acquirer for decision-making or analysis. The final report is a compiled study of expert's reports and opinions (including lawyers, accountants, tax specialist, bankers, consultants, etc.) from different disciplines. The report highlights important issues, gives further insight about the target company and it includes suggestions about the deal.

In the light of the information provided by due diligence, negotiations take place or decisions are made. If the acquirer and the target company agree on the basic terms of the deal, they decide to make agreement. Post-integration procedure begins after signing the agreement. Further, the agreement may provide legal protections in the form of warranties or indemnities which are decided to be required during the due diligence process. The acquirer should rely on what has been disclosed by the target company. In this case, the acquirer may ask for additional protection in order to confirm the accuracy of what has been presented. The sale agreement contains warranties and indemnities made by the target company. A warranty is a contractual assurance that shows what has been conveyed is complete and true. The target company warrants that the data and the documents provided during due diligence are up to date and accurate. The warranty acts as a collateral provision in order to protect the acquirer. When the target company breaches a warranty, it is responsible for the loss and dam- age. Indemnity provisions serve as a security against damage or loss. The target company providing indemnity is promising to recover the damage. Indemnity provisions provide clear contractual remedy for the breach of a covenant, presentation or a warranty.

5.5. THE IPO PROCESS :

The IPO process essentially consists of two parts. The first is the pre-marketing phase of the offering, while the second is the initial public offering itself. When a company is interested in an IPO, it will advertise to underwriters by soliciting private bids or it can also make a public statement to generate interest.

The underwriters lead the IPO process and are chosen by the company. A company may choose one or several underwriters to manage different parts of the IPO process collaboratively. The underwriters are involved in every aspect of the IPO due diligence, document preparation, filing, marketing, and issuance.

5.6. STEPS TO AN IPO :

- **Proposals :** Underwriters present proposals and valuations discussing their services, the best type of security to issue, offering price, amount of shares, and estimated time frame for the market offering.
- **Underwriter :** The company chooses its underwriters and formally agrees to underwrite terms through an underwriting agreement.
- **Team :** IPO teams are formed comprising underwriters, lawyers, certified public accountants (CPAs), and Securities and Exchange Commission (SEC) experts.
- **Documentation :** Information regarding the company is compiled for required IPO documentation. The S-1 Registration Statement is the primary IPO filing document. It has two parts—the prospectus and the privately held filing information.1 The S-1 includes preliminary information about the expected date of the filing.2 It will be revised often throughout the pre-IPO process. The included prospectus is also revised continuously.
- **Marketing & Updates :** Marketing materials are created for pre-marketing of the new stock issuance. Underwriters and executives market the share issuance to estimate demand and establish a final offering price. Underwriters can make revisions to their financial analysis throughout the marketing process. This can include changing the IPO price or issuance date as they see fit. Companies take the necessary steps to meet specific public share offering requirements. Companies must adhere to both exchange listing requirements and SEC requirements for public companies.
- **Board & Processes :** Form a board of directors and ensure processes for reporting auditable financial and accounting information every quarter.
- **Shares Issued :** The company issues its shares on an IPO date. Capital from the primary issuance to shareholders is received as cash and recorded as stockholders' equity on the balance sheet. Subsequently, the balance sheet share value becomes dependent on the company's stockholders' equity per share valuation comprehensively.
- **Post IPO :** Some post-IPO provisions may be instituted. Underwriters may have a specified time frame to buy an additional amount of shares after the initial public offering (IPO) date. Meanwhile, certain investors may be subject to quiet periods.

5.7. ADVANTAGES AND DISADVANTAGES OF AN IPO :

The primary objective of an IPO is to raise capital for a business. It can also come with other advantages as well as disadvantages.

Advantages :

One of the key advantages is that the company gets access to investment from the entire investing public to raise capital. This facilitates easier acquisition deals (share conversions) and increases the company's exposure, prestige, and public image, which can help the company's sales and profits.

Increased transparency that comes with required quarterly reporting can usually help a company receive more favorable credit borrowing terms than a private company.

Disadvantages :

Companies may confront several disadvantages to going public and potentially choose alternative strategies. Some of the major disadvantages include the fact that IPOs are expensive, and the costs of maintaining a public company are ongoing and usually unrelated to the other costs of doing business.

Fluctuations in a company's share price can be a distraction for management, which may be compensated and evaluated based on stock performance rather than real financial results. Additionally, the company becomes required to disclose financial, accounting, tax, and other business information. During these disclosures, it may have to publicly reveal secrets and business methods that could help competitors.

Rigid leadership and governance by the board of directors can make it more difficult to retain good managers willing to take risks. Remaining private is always an option. Instead of going public, companies may also solicit bids for a buyout. Additionally, there can be some alternatives that companies may explore.

Pros :

- Can raise additional funds in the future through secondary offerings
- Attracts and retains better management and skilled employees through liquid stock equity participation (e.g., ESOPs)
- IPOs can give a company a lower cost of capital for both equity and debt

Cons :

- Significant legal, accounting, and marketing costs arise, many of which are ongoing
- Increased time, effort, and attention required of management for reporting
- There is a loss of control and stronger agency problems

5.8. IPO ALTERNATIVES :

Direct Listing :

A direct listing is when an IPO is conducted without any underwriters. Direct listings skip the underwriting process, which means the issuer has more risk if the offering does not do well, but issuers also may benefit from a higher share price. A direct offering is usually only feasible for a company with a well-known brand and an attractive business.

Dutch Auction :

In a Dutch auction, an IPO price is not set. Potential buyers can bid for the shares they want and the price they are willing to pay. The bidders who were willing to pay the highest price are then allocated the shares available.

Investing in an IPO :

When a company decides to raise money via an IPO it is only after careful consideration and analysis that this particular exit strategy will maximize the returns of early investors and raise the most capital for the business. Therefore, when the IPO decision is reached, the prospects for future growth are likely to be high, and many public investors will line up to get their hands on some shares for the first time. IPOs are usually discounted to ensure sales, which makes them even more attractive, especially when they generate a lot of buyers from the primary issuance.

Initially, the price of the IPO is usually set by the underwriters through their pre-marketing process. At its core, the IPO price is based on the valuation of the company using fundamental techniques. The most common technique used is discounted cash flow, which is the net present value of the company's expected future cash flows.

Underwriters and interested investors look at this value on a per-share basis. Other methods that may be used for setting the price include equity value, enterprise value, comparable firm adjustments, and more. The underwriters do factor in demand but they also typically discount the price to ensure success on the IPO day.

It can be quite hard to analyze the fundamentals and technicals of an IPO issuance. Investors will watch news headlines but the main source for information should be the prospectus, which is available as soon as the company files its S-1 Registration.3 The prospectus provides a lot of useful information. Investors should pay special attention to the management team and their commentary as well as the quality of the underwriters and the specifics of the deal. Successful IPOs will typically be supported by big investment banks that can promote a new issue well.

Overall, the road to an IPO is a very long one. As such, public investors building interest can follow developing headlines and other information along the way to help supplement their assessment of the best and potential offering price.

The pre-marketing process typically includes demand from large private accredited investors and institutional investors, which heavily influence the IPO's trading on its opening day. Investors in the public don't become involved until the final offering day. All investors can participate but individual investors specifically must have trading access in place. The most common way for an individual investor to get shares is to have an account with a brokerage platform that itself has received an allocation and wishes to share it with its clients.

5.9. KEYWORDS :

* DCF – Differential Cash Flows
* Due Diligence
* Potential Acquirer
* Key persons
* Target Company
* Proposals
* Under Writer
* Direct Listing
* Cost of Capital
* Dutch Auctions

5.10. SELF ASSESSMENT QUESTIONS :

1. Meaning and definition of Due diligence process.
2. Reasons for Conducting Due diligence.
3. Process of IPO.
4. Advantages and disadvantages of an IPO.

5.11. SUGGESTED READINGS :

1) Falguni H. Pandya, Security Analysis and Portfolio Management, Jaico Books, 2014.
2) Pratapa S. Giri, Investment Banking, *McGraw Hill Higher Education,* 2013.
3) Bharathi V. Pathak, Indian Financial System, *Pearson Education India,* 2014
4) MY Khan, Financial Services, McGraw Hill Higher Education, 2013.
5) Madhu Vij and Swati Dhawan, Financial Services and Merchant Banking, McGraw Hill Higher Education,2012

D. Swapna

LESSON – 6

PERFORMANCE OF IPOS

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand :

- The meaning, structure, components, players of Investment Banking.
- The learner will understand the Investment Banking.
- The learner will understand the characteristics of Investment Banking.

STRUCTURE OF THE LESSON :

6.1. KEY CONSIDERATIONS :

Several factors may affect the return from an IPO which is often closely watched by investors. Some IPOs may be overly hyped by investment banks which can lead to initial losses. However, the majority of IPOs are known for gaining in short-term trading as they become introduced to the public. There are a few **key considerations** for IPO performance.

Lock-Up :

If you look at the charts following many IPOs, you'll notice that after a few months the stock takes a steep downturn. This is often because of the expiration of the lock-up period. When a company goes public, the underwriters make company insiders, such as officials and employees, sign a lock-up agreement.

Lock-up agreements are legally binding contracts between the underwriters and insiders of the company, prohibiting them from selling any shares of stock for a specified period. The period can range anywhere from three to 24 months. Ninety days is the minimum period stated under Rule 144 (SEC law) but the lock-up specified by the underwriters can last much longer.4 The problem is, when lockups expire, all the insiders are permitted to sell their stock. The result is a rush of people trying to sell their stock to realize their profit. This excess supply can put severe downward pressure on the stock price.

Waiting Periods :

Some investment banks include waiting periods in their offering terms. This sets aside some shares for purchase after a specific period. The price may increase if this allocation is bought by the underwriters and decrease if not.

Flipping :

Flipping is the practice of reselling an IPO stock in the first few days to earn a quick profit. It is common when the stock is discounted and soars on its first day of trading.

Tracking IPO Stocks :

Closely related to a traditional IPO is when an existing company spins off a part of the business as its standalone entity, creating tracking stocks. The rationale behind spin-offs and the creation of tracking stocks is that in some cases individual divisions of a company can be worth more separately than as a whole. For example, if a division has high growth potential but large current losses within an otherwise slowly growing company, it may be worthwhile to carve it out and keep the parent company as a large shareholder then let it raise additional capital from an IPO.

From an investor's perspective, these can be interesting IPO opportunities. In general, a spin-off of an existing company provides investors with a lot of information about the parent company and its stake in the divesting company. More information available for potential investors is usually better than less and so savvy investors may find good opportunities from this type of scenario. Spin-offs can usually experience less initial volatility because investors have more awareness.

IPOs are known for having volatile opening day returns that can attract investors looking to benefit from the discounts involved. Over the long term, an IPO's price will settle into a steady value, which can be followed by traditional stock price metrics like moving averages. Investors who like the IPO opportunity but may not want to take the individual stock risk may look into managed funds focused on IPO universes. But also look out for so-called hot IPOs that could be more hype than anything else.

6.2. WHAT IS THE PURPOSE OF AN INITIAL PUBLIC OFFERING ?

An IPO is essentially a fundraising method used by large companies, in which the company sells its shares to the public for the first time. Following an IPO, the company's shares are traded on a stock exchange. Some of the main motivations for undertaking an IPO include:

raising capital from the sale of the shares, providing liquidity to company founders and early investors, and taking advantage of a higher valuation.

Can anybody invest in an IPO?

Oftentimes, there will be more demand than supply for a new IPO. For this reason, there is no guarantee that all investors interested in an IPO will be able to purchase shares. Those interested in participating in an IPO may be able to do so through their brokerage firm, although access to an IPO can sometimes be limited to a firm's larger clients. Another option is to invest through a mutual fund or another investment vehicle that focuses on IPOs.

6.3. IS AN IPO A GOOD INVESTMENT ?

IPOs tend to garner a lot of media attention, some of which is deliberately cultivated by the company going public. Generally speaking, IPOs are popular among investors because they tend to produce volatile price movements on the day of the IPO and shortly thereafter. This can occasionally produce large gains, although it can also produce large losses. Ultimately, investors should judge each IPO according to the prospectus of the company going public as well as their financial circumstances and risk tolerance.

6.4. INVESTMENT BANKERS ROLE IN LISTED COMPANIES :

What Is the Role of an Investment Bank?

Main Functions Defined

Issuing stocks and bonds is one of the primary ways for a company to raise capital. But executing these transactions requires special expertise, from pricing financial instruments in a way that will maximize revenues to navigating regulatory requirements. That's where an investment bank usually comes into the picture.

In essence, investment banks are a bridge between large enterprises and the investor. Their primary roles are to advise businesses and governments on how to meet their financial challenges and to help them procure financing, whether it be from stock offerings, bond issues, or derivative products.

Key Takeaways

- Investment banks are the bridge between large enterprises and investors.
- The primary goal of an investment bank is to advise businesses and governments on how to meet their financial challenges.
- Investment banks help their clients with financing, research, trading and sales, wealth management, asset management, IPOs, mergers, securitized products, hedging, and more.

6.5. ROLE AS AN ADVISOR :

Deciding how to raise capital is a major decision for any company or government. In most cases, they lean on an investment bank—either a large Wall Street firm or a "boutique" banker—for guidance.

Taking into account the current investing climate, the bank will recommend the best way to raise funds. This could entail selling an ownership stake in the company through a stock offer or borrowing from the public through a bond issue. The investment firm can also help determine how to price these instruments by utilizing sophisticated financial models.

In the case of a stock offering, its financial analysts will look at a variety of different factors—such as earnings potential and the strength of the management team—to estimate how much a share of the company is worth. If the client is offering bonds, the bank will look at prevailing interest rates for similarly rated businesses to figure out how much it will have to compensate borrowers.

Investment banks also offer advice in a merger or acquisition scenario. For example, if a business is looking to purchase a competitor, the bank can advise its management team on how much the company is worth and how to structure the deal in a way that's favorable to the buyer.

6.6. UNDERWRITING STOCKS AND BONDS :

If an entity decides to raise funds through an equity or debt offering, one or more investment banks will also underwrite the securities. This means the institution buys a certain number of shares or bonds at a predetermined price and re-sells them through an exchange.

Suppose Acme Water Filter Company hopes to obtain $1 million in an initial public offering. Based on a variety of factors, including the firm's expected earnings over the next few years, Federici Investment Bankers determines that investors will be willing to pay $11 each for 100,000 shares of the company's stock. As the sole underwriter of the issue, Federici buys all the shares at $10 apiece from Acme. If it manages to sell all 100,000 at $11, the bank makes a nice $100,000 profit (100,000 shares x $1 spread).

However, depending on its arrangement with the issuer, Federici may be on the hook if the public's appetite is weaker than expected. If it has to lower the price to an average of $9 a share to liquidate its holdings, it's lost $100,000. Therefore, pricing securities can be tricky. Investment banks generally have to outbid other institutions that also want to handle the transaction on behalf of the issuer. But if their spread isn't big enough, they won't be able to squeeze a healthy return out of the sale. In reality, the task of underwriting securities often falls on more than one bank. If it's a larger offering, the managing underwriter will often form a syndicate of other banks that sell a portion of the shares. This way, the firms can market the stocks and bonds to a more significant segment of the public and lower their risk. The manager makes part of the profit, even if another syndicate member sells the security.

JPMorgan Chase was the largest investment bank in the world by revenue in 2020.1

Investment banks perform a less glamorous role in stock offerings as well. It's their job to create the documentation that must go to the Securities and Exchange Commission before the company can sell shares. This means compiling financial statements, information about the company's management and current ownership, and a statement of how the firm plans to use the proceeds.

6.7. OTHER ACTIVITIES :

While advising companies and helping them raise money is an important part of what investment banks do, most perform several other functions as well. Most major banks are highly diversified in terms of the services they offer. Some of their other income sources include:

- **Research :** Larger investment banks have large teams that gather information about companies and offer recommendations on buying or selling their stock. They may use these reports internally but can also generate revenue by selling them to hedge funds and mutual fund managers.
- **Trading and Sales :** Most major firms have a trading department that can execute stock and bond transactions on behalf of their clients. In the past, some banks have also engaged in proprietary trading, where they essentially gamble their own money on securities; however, a recent regulation known as the Volcker Rule has clamped down on these activities.
- **Asset Management :** The likes of J.P. Morgan and Goldman Sachs manage enormous portfolios for pension funds, foundations, and insurance companies through their asset management department. Their experts help select the right mix of stocks, debt instruments, real estate trusts, and other investment vehicles to achieve their clients' unique goals.
- **Wealth Management :** Some of the same banks that perform investment banking functions for Fortune 500 businesses also cater to retail investors. Through a team of financial advisors, they help individuals and families save for retirement and other long-term needs.
- **Securitized Products :** These days, companies often pool financial assets—from mortgages to credit card receivables—and sell them off to investors as fixed-income products. An investment bank will recommend opportunities to "securitize" income streams, assemble the assets, and market them to institutional investors.

6.8. KEYWORDS :

* Lock up
* Waiting Periods
* Flipping
* Tracking IPO Stocks
* Stocks & Bonds
* Advisor
* Trading and Sales
* Asset Management
* Wealth Management
* Securities and Exchange Commission

6.9. SELF ASSESSMENT QUESTIONS :

1. Several Factors/ key considerations for IPO performance.
2. Role of Investment bankers in listed companies.
3. Other activities/ Income Sources of Investment Banks.

6.10. SUGGESTED READINGS :

1) Pricing and Performance of Initial Public Offerings in the United States, Arvin Ghosh.
2) Initial Public Offerings, Richard Kleeburg, 2005 Edition.
3) Initial Public Offerings – A Practical Guide to Going Public, David A. Westenberg, 2nd Edition.
4) High-Profit - IPO Strategies – Finding Breakout IPOs for Investors and Traders, Tom Taulli, 3rd Edition,

Prof. D. A. R. Subrahmanyam

LESSON – 7

SERVICES OF INVESTMENT BANKER

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand :

- The meaning, structure, components, players of Investment Banker
- The learner will understand the Investment Banking.
- The learner will understand the characteristics of Investment Banker Services

STRUCTURE OF THE LESSON :

7.1. Meaning of Investment Banks

7.2. Services of Investment Banks

7.3. Underwriting Services in Investment Banks

7.4. M & A Advisory Services

7.5. Skills required for Investment Banking

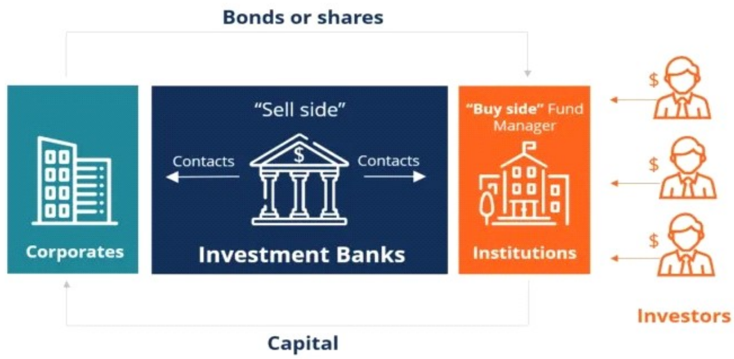
7.6. Key words

7.7. Self Assessment Questions

7.8. Suggested Readings

7.1. WHAT IS INVESTMENT BANKING ?

Investment banking is the division of a bank or financial institution that serves governments, corporations, and institutions by providing underwriting (capital raising) and mergers and acquisitions (M&A) advisory services. Investment banks act as intermediaries between investors (who have money to invest) and corporations (who require capital to grow and run their businesses). This guide will cover what investment banking is and what investment bankers actually do.



What Do Investment Banks Do?

There can sometimes be confusion between an investment bank and the investment banking division (IBD) of a bank. Full-service investment banks offer a wide range of services that include underwriting, M&A, sales and trading, equity research, asset management, commercial banking, and retail banking. The investment banking division of a bank provides only the underwriting and M&A advisory services.

7.2. FULL - SERVICE BANKS OFFER THE FOLLOWING SERVICES :

Underwriting – Capital raising and underwriting groups work between investors and companies that want to raise money or go public via the IPO process. This function serves the primary market or "new capital".

Mergers & Acquisitions (M&A) – Advisory roles for both buyers and sellers of businesses, managing the M&A process start to finish.

Sales & Trading – Matching up buyers and sellers of securities in the secondary market. Sales and trading groups in investment banking act as agents for clients and also can trade the firm's own capital.

Equity Research – The equity research group research, or "coverage", of securities helps investors make investment decisions and supports trading of stocks.

Asset Management – Managing investments for a wide range of investors including institutions and individuals, across a wide range of investment styles.

7.3. UNDERWRITING SERVICES IN INVESTMENT BANKING :

Underwriting is the process of raising capital through selling stocks or bonds to investors (e.g., an initial public offering IPO) on behalf of corporations or other entities. Businesses need money to operate and grow their businesses, and the bankers help them get that money by marketing the company to investors.

There are generally three types of underwriting :

Firm Commitment – The underwriter agrees to buy the entire issue and assume full financial responsibility for any unsold shares.

Best Efforts – Underwriter commits to selling as much of the issue as possible at the agreed-upon offering price but can return any unsold shares to the issuer without financial responsibility.

All-or-None – If the entire issue cannot be sold at the offering price, the deal is called off and the issuing company receives nothing.

Once the bank has started marketing the offering, the following book-building steps are taken to price and complete the deal.

7.4. M&A ADVISORY SERVICES :

Mergers and acquisitions (M&A) advisory is the process of helping corporations and institutions find, evaluate, and complete acquisitions of businesses. This is a key function in i-banking. Banks use their extensive networks and relationships to find opportunities and help negotiate on their client's behalf. Bankers advise on both sides of M&A transactions, representing either the "buy-side" or the "sell-side" of the deal.

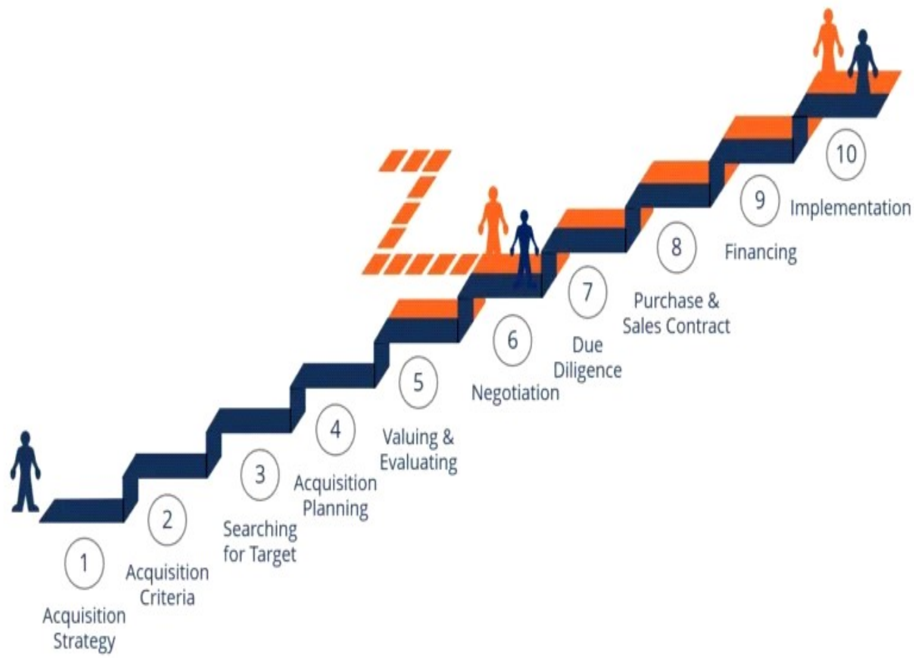
Below is an overview of the 10-step mergers and acquisitions process.

Banking Clients

Investment bankers advise a wide range of clients on their capital raising and M&A needs. These clients can be located around the world.

Investment banks' clients include:

Governments – Investment banks work with governments to raise money, trade securities, and buy or sell crown corporations.



Corporations – Bankers work with both private and public companies to help them go public (IPO), raise additional capital, grow their businesses, make acquisitions, sell business units, and provide research for them and general corporate finance advice.

Institutions – Banks work with institutional investors who manage other people's money to help them trade securities and provide research. They also work with private equity firms to help them acquire portfolio companies and exit those positions by either selling to a strategic buyer or via an IPO.

7.5. INVESTMENT BANKING SKILLS :

I-banking work requires a lot of financial modeling and valuation. Whether for underwriting or M&A activities, Analysts and Associates at banks spend a lot of time in Excel, building financial models and using various valuation methods to advise their clients and complete deals.

Investment banking requires the following skills :

- ***Financial modeling*** – Performing a wide range of financial modeling activities such as building 3-statement models, discounted cash flow (DCF) models, LBO models, and other types of financial models.

- ***Business valuation*** – Using a wide range of valuation methods such as comparable company analysis, precedent transactions, and DCF analysis.

- ***Pitchbooks and presentations*** – Building pitchbooks and PPT presentations from scratch to pitch ideas to prospective clients and win new business (check out CFI's Pitchbook Course).

- ***Transaction documents*** – Preparing documents such as a confidential information memorandum (CIM), investment teaser, term sheet, confidentiality agreement, building a data room, and much more (check out CFI's library of free transaction templates).

- ***Relationship management*** – Working with existing clients to successfully close a deal and make sure clients are happy with the service being provided.

- ***Sales and business development*** – Constantly meeting with prospective clients to pitch them ideas, offer them support in their work, and provide value-added advice that will ultimately win new business.

- ***Negotiation*** – Being a major factor in the negotiation tactics between buyers and sellers in a transaction and helping clients maximize value creation.

7.6. KEYWORDS :

* Equity Research
* Retail Banking
* Under Writing Services
* Firm Commitment
* Best Efforts
* Financial Modelling
* Business valuation
* Pitch Books and Presentation
* Negotiation
* Relationship Management

7.7. SELF ASSESSMENT QUESTIONS :

1. What is meant by investment banking? Explain its services.
2. What are Underwriting services in investment banking?
3. What are the skills required for investment banking?
4. Write about M&A Advisory services.

7.8. SUGGESTED READINGS :

1) CA Tapan Jindal, Investment Banking, *Bharath Publishing House,* 2015.
2) Pratap G. Subramanayam, Investment Banking, *McGraw Hill Higher Education,* 2008.
3) Falguni H. Pandya, Security Analysis and Portfolio Management, Jaico Books, 2014.
4) Pratapa S. Giri, Investment Banking, *McGraw Hill Higher Education,* 2013.
5) Bharathi V. Pathak, Indian Financial System, *Pearson Education India,* 2014

Prof. D. A. R. Subrahmanyam

LESSON – 8

CORPORATE & BUSINESS ADVISORY SERVICES

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand :

- The meaning, structure, components, players of Corporate Advisory Services.
- The learner will understand the Business Advisory services.
- The learner will understand the characteristics of Advisory services.

STRUCTURE OF THE LESSON :

8.1. MEANING OF CORPORATE ADVISORY SERVICES :

With the growing importance of investment banking across the globe, its advisory functions are beginning to find worldwide acceptance. People are looking at these advisory functions, with increased confidence. One of such functions is corporate advice. However, these services are spread over a vast spectrum of corporate activity. Some of them are very well suited for investment banks, with the rest finding place with specialist advisory firms. The essence of corporate advisory services for investment banking relates to Business advisory, Restructuring advisory, Project advisory and Merger & Acquisition advisory.

Corporate Advisory Services :

Corporate Advisory Services is an umbrella term that encompasses specialized advice's rendered to corporate houses by professional advisers such as accountants, investment banks, law practitioners and host of similar service providers.

8.2. IMPORTANCE OF CORPORATE ADVISORY SERVICES :

The factors that necessitate the need for corporate advisory services are

- With the world growing at a rapid pace, the company would not want to lose out on some vital opportunities. It may look out for expansion opportunities, go in for strategic alliances, seek profitable mergers and acquisitions etc, to improve upon its current standing. The transactions and formalities involved in such a case need to be professionally handled and there tends to be a need for a specialist intermediary to the proposed transaction. Such specialists enable a hassle free service, which in turn will enable the company to get done with the job easily and effectively.

- A company may have thousands of complex business processes to be handled and much of it can even be on a daily basis. A majority of these transactions can have several implications e.g. business and legal angles, and so as to arrive at an effective structure that can further the interests of the company. Besides, the above activities will be better done with someone with the requisite experience and expertise. It is here that corporate advisory services find a place.

- There may be several areas (which are of interest to the company) that may need specialized advice before initiating a business plan. Suppose a person X plans to start a business. He may have to study the feasibility of the project, the environmental conditions, the political aspects, sources of financing and many similar aspects. All this needs specialized handling and may not be done very efficiently by anyone and everyone and demand professionals with exposure in such areas of service.

- Often a company finds itself in the need of restructuring its operations or its financial statements, with a motto to revamp its current state of affairs or to bring about a much-needed change in the current state of affairs. On the other hand, it might just be a financial compulsion. But no matter what the reason is, restructuring has to take place and need be looked at from business and financial (and legal) perspective. Corporate advisers in such cases come in as very handy in meeting these considerations.

8.3. SCOPE OF CORPORATE ADVISORY SERVICES :

The functions that are covered by the corporate advisory services fall under a broad spectrum and address a wide range of corporate objectives; they also necessitate a multi-disciplinary approach. There are many professional bodies that provide such services. These professional bodies can be classified under three broad categories.

1. Starting with professional firms such as company secretaries, chartered accounting firms, law firms etc, who provide corporate advisory services. The services of these firms are mostly two fold:

    - Firms that provide a specialized service (which matches their core competency) in the form of complete solution. Some of these services can be taxation advice, legal vetting, statutory compliance work, evaluating a business proposal etc.

    - There are other firms who provide complementary services wherein the investment banks provide the necessary transaction support. For example, two companies X and

Y (who have their own investment banks for advise) have agreed on a merger. Now these firms can rope in accounting firms to provide for the necessary paper work like company valuation etc. Similarly, a law firm can also be roped in to look after the legal aspect connected with the merger.

2. There are sets of Investment banks and other financial institutions with merchant banking licenses. The important advisory services provided by these investment banks and merchant banks relate to numerous services like business advisory, restructuring advisory, project advisory etc. Companies do appreciate the expertise, which investment banks bring along with them in dealing with such issues.

3. Lastly, we have a set of pure advisory firms that provide a wide range of corporate advisory services. These firms are specialists in some selected verticals. We have Mckinsey & Co., which specialize in strategy consulting and advise governments and corporates on strategy and policy issues. Likewise, there may be firms specializing in technology, marketing, human resource, risk management, foreign exchange etc. In some case these consulting firms also take up issues of providing advice on M&A, joint ventures, formulation of business plan (which are primarily investment banking activities).

8.4. SERVICES THAT MAKE UP THE BUSINESS ADVISORY SERVICES :

Business advisory services relate to considerations involved in corporate restructuring, joint ventures and collaborations and cross-border investments. This entails rendering of corporate advisory services pertaining to a company's present and future businesses from a strategic and financial perspective. Investment banks render the following services:

Entry Strategy Plans : This advice is required by a company when it plans to venture in to a new business either in a new line of business or existing line of business in a new market be it local or international. The strategy can be in terms of corporate structure of a product and pricing strategy, target market segment, strategic alliance etc. Let us consider an example of an Indian company planning to set shop in a foreign country. The strategic recommendation required by the company can be a decision between establishing a wholly owned subsidiary vis-Ã -vis a joint venture with a local partner.

Project Feasibility Plans : The viability of a proposed business has to be examined from a business, technology and financial perspective before any fund raising activity is carried out by the corporate. Investment banks have the capability to conduct such feasibility studies from a business and financial perspective since they have in-depth information on each industry space.

Corporate Plans : Companies need to formulate medium to long-term corporate plans in order to carry out their expansion and business strategy. Those companies which do not have in-house corporate planning department, depend on investment banks for these services and those companies which have an in-house corporate planning department, believe in getting the same vetted by an investment bank. The formulation of corporate plans involve:

- In-depth examination of the industry
- In-depth examination of the business
- Identification of growth drivers
- Market positioning
- Product policies
- Diversification strategies
- Corporate and group structure etc

Business Alliances : This relates to joint ventures, collaborations and other such strategic relationships between two corporate entities that are brought about due to business compulsions or to harness synergies and complementary strengths. Investments bankers carry out the following tasks in this regard:

- Identification of partners with complementary strengths or synergies
- Due diligence and valuation aspects
- Negotiation and deal making

Cross-Border Investments : Strategic business investments are made in foreign entities owned or controlled by the investing corporate in the parent country or in other foreign entities. Investment banks carry out an in-depth examination of the financial and regulatory issues that are necessary to arrive at the optimum size of the investment, valuation methodology, investment structure and taking necessary regulatory clearances.

8.5. KEYWORDS :

* Corporate Advisory Services
* Core Competence
* Professional Firms
* Specialized Services
* Complementary Services
* Numerous Services
* Entry Strategy Plans
* Project Feasibility Plan
* Business Alliances
* Cross Border Investments

8.6. SELF ASSESSMENT QUESTIONS :

1. Define Meaning and importance of Corporate Advisory services.
2. Scope of corporate Advisory services.
3. Define Business advisory services.
4. Explain about Cross-Border investments.

8.7. SUGGESTED READINGS :

1) Financial Markets Institutions & Services, Dr. Vinod Kumar, Manmeet Kaur & Atul Gupta, 2nd Edition.
2) Investment Advisor (Level 1) by NiSM.
3) Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions, Joshua Rosenbaum, Joshua Pearl, 2nd Edition.

Prof. D. A. R. Subrahmanyam

LESSON – 9

FINANCIAL & PROJECT ADVISORY SERVICES

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand :

- The meaning, structure, components, players of Project Advisory Services.
- The learner will understand the Financial Advisory services.
- The learner will understand the characteristics of Advisory services.

STRUCTURE OF THE LESSON :

9.1. MEANING OF FINANCIAL ADVISORY SERVICES :

Proper planning and allocation of funds can be quite nerve-wracking for anyone. A financial advisor is an expert that helps at each stage from planning to constructing a portfolio of assets. Financial advisory services consist of a team of qualified professionals that provide advice on how to manage money and assets efficiently. Financial advisory services can include a whole host of individuals such as certified financial planners, wealth managers, investment advisors, and certified public accountants.

9.2. WHY AVAIL FINANCIAL ADVISORY SERVICES :

A good financial advisor will enquire about the goals, understand your debts, income and expenses, and create an optimum plan to reach the target most efficiently. We are listing below all the details on how a good financial advisor helps in each stage of business:

- ***Helps in Attaining Goals*** - A financial advisor can brainstorm and understand your financial goals. Then the advisor curates a plan of action to attain those long-term goals.
- ***Expertise*** - Financial advisors are professionals who know about investment and money management more than most people. They hold the expertise and can guide for better financial decisions.
- ***Accountability*** - Financial advisors hold in-depth knowledge about the financial market and help avoid making emotional decisions for the use of the funds.
- ***Advice*** - As their name suggests, financial advisors provide strategic solutions for the efficient utilization of funds and can advise on all kinds of financial matters. Also as the business evolves, a financial advisor can alter the financial plan in alignment with the current situation of the business to achieve optimum results.
- ***Management*** - Most businesses are unaware of proper financial management and monitoring of funds and they hire a financial advisor to do so on their behalf. They make sure that the money is deployed most efficiently and yields maximum results.

9.3. TYPES OF FINANCIAL ADVISORY SERVICES :

As we mentioned earlier, the multiple services financial advisory service offer several services, some may offer in isolation or some may offer a combined package.

- ***Investment Management*** - Resurgent India is a pioneer in Financial Advisory services and offers impeccable investment management services. Our team of experts helps in the allocation of the assets by optimizing portfolio performance and minimizing losses. At Resurgent India, we conduct in-depth research on the business and help in establishing personalized goals. Once the goals are set, our panel of professionals drafts a cohesive and comprehensive financial plan to achieve those goals.

- ***Risk Management*** - High-net-worth individuals who invest their funds in diverse markets are prone to numerous financial risks. These risks include both diversifiable and non-diversifiable risks. Non-Diversifiable risks are contingent and unavoidable; these affect the entire market. Smart financial advisors develop an investment portfolio that is created to minimize the effect of such risks. One can completely avoid diversifiable risks with smart investment strategies. At Resurgent India, we use multiple such strategies to control investment risk. Our team regularly conducts scenario tests on the portfolio to gauge all kinds of future possibilities. Our team ensures that portfolios of our clients fall under the comfort zone category at all points of time.

- ***Retirement Planning -*** One always wishes to safeguard their assets which they have worked their whole life to generate them. A smart financial advisory firm ensures optimum allocation and utilization of funds by forming a realistic strategy to safeguard and grow wealth.

- ***Estate Planning*** - Estate planning is one of the most integral parts of the financial management planning, which any financial advisory plays for a business. The whole process is critical and needs expert knowledge to conduct it efficiently. The process is complicated because the wealth has to be distributed appropriately among beneficiaries along with ensuring enough wealth is left to support their own lifestyle. The role of a good financial advisor is to secure and protect wealth so that the heirs are duly financially secured.

- ***Financial Planning -*** It is meaningless to earn high returns and pay high taxes. A good financial advisory knows how to allocate funds to save on taxes and avoid losing any more money. At Resurgent India, our team of financial planners will help create a financial model in alignment with the business strategy.

9.4. PROJECT ADVISORY SERVICES :

Project Advisory

Exponent's combined expertise in construction, scheduling, cost analysis, and engineering provide unique insight into the construction process and the work of our clients that manage large-scale projects and programs. Our project advisory services support a project through its lifecycle – from front-end planning, project initiation through design and procurement, and throughout the course of construction and closeout. From a risk management perspective, Exponent helps anticipate problems and avoid pitfalls in cost, scheduling, and scope by performing comprehensive project assessments, improving the project controls framework, and conducting schedule analysis employing advanced techniques such as risk-based, probabilistic scheduling. Our project advisory team also has deep experience with process improvement initiatives including the implementation of effective process and procedures and training program that align with industry best practices.

Services

Our integrated team of construction professionals include construction managers, business process experts, engineers, cost analysts, scheduling experts, and technical specialists. These experts provide project advisory services to clients in both public and private sectors. The following are general categories of Exponent's

9.5. PROJECT ADVISORY SERVICES :

- Program and Portfolio Management
- Scheduling and Progress Monitoring
- Troubled Project Assessments
- Project Management and Performance Monitoring
- Change and Claims Management
- Cost Recovery and Closeout Audits

Program and Portfolio Management :

Exponent assists clients in developing and managing executable and integrated programs and portfolios to meet their strategic business goals. Our team has expertise in developing process and procedures to define, balance, adjust, and assess and improve performance of project portfolios. Our program and portfolio managers helps establish a repeatable portfolio management and reporting process to improve effectiveness in evaluating portfolio performance, coordinating with stakeholders, balancing resources, identifying risks, and resolving execution issues.

Scheduling and Progress Monitoring :

Exponent's scheduling professionals have expertise in implementing and managing a comprehensive schedule controls process to improve our clients' ability to deliver successful projects. To assist in improving project planning, progress monitoring, and execution risk identification and mitigation, our schedulers collaborate with the project teams and stakeholders to assess the project scope and cost, develop and update the schedules, and regularly monitor and report on schedule performance and recommend risk mitigation measures. Our team has experience in resource-loading and cost-loading schedules and implementing earned value management in Primavera P6 to track performance.

Troubled Project Assessments :

Exponent's construction professionals assist clients in identifying project performance issues and recommending course-correction strategies by performing assessments of high-risk, high-value, troubled projects. Our team evaluates the project performance status, identifies execution problems and their root causes, analyzes risks and their potential impacts to the project, develop corrective and mitigating measures, and we report our findings and recommendations to the project and leadership teams to help the organization steer the project back on track.

Project Management and Performance Monitoring :

Exponent's project management experts proactively manage and monitor the progress of construction projects. Our team develops and maintains project execution plans, schedules, and estimates that align with project scopes and budgets as well as our clients' portfolio-level objectives. We analyze project performance metrics against baseline plans, and forecast spend trends based on financial scenario analysis that considers schedule, cost, and risk variabilities. We coordinate closely with project stakeholders to address risks and resolve issues, and regularly communicate performance status and trends with them and leadership.

Change and Claims Management :

Exponent's professional PM/CM staff understands the nuances of the entire life cycle of a construction project. As such, we are well versed in the nature and scope of the many variables that can influence the direction of a project, some of which may lead to disputes among project stakeholders. Based on our depth of experience in construction, Exponent can integrate a number of measures on behalf of project stakeholders to avoid and/or mitigate typical issues that can lead to disputes and claims on a project. The management services we offer include :

- Constructability Reviews
- Implementation of a Risk Management Program
- Instruct/Train on Documentation Practices – Tools for Analyzing Time and Cost Impacts
- State of the art 3D Laser Scanning and BIM Documentation

Cost Recovery and Closeout Audits :

To help clients improve their project performance, Exponent's experienced professionals conduct regular audits and project financial assessments through the lifecycle of a project and at project close-out. Our experts apply their many years of audit and project management experience to identify erroneous billings, un-allowed spending, and prevent abuse. Exponent can assist clients to improve their project's bottom line through:

- Financial controls assessments
- Budget review and due diligence
- Project overruns and budget variances assessments
- Review pay applications and change order requests
- Financial reporting and cost to complete analysis
- Ongoing auditing and financial monitoring
- Close-out audits
- Fraud investigations and cost recovery audits

9.6. KEYWORDS :

* Financial Advisory Services
* Expertise
* Advice
* Accountability
* Risk Management
* Retirement Planning
* Estate Planning
* Financial Planning
* Project Advisory Services
* Programming and Portfolio Management
* Scheduling and Progress Monitoring
* Cost Recovery and Closeout Audits

9.7. SELF ASSESSMENT QUESTIONS :

- Why Avail Financial Advisory Services?
- Types of financial advisory services.
- Write about project advisory services.
- Define cost recovery.

9.8. SUGGESTED READINGS :

1) Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions, Joshua Rosenbaum, Joshua Pearl, 3rd Edition.
2) Investment Advisor (Level 1) by NiSM.
3) Law of Investment and Securities (Including the Latest Amendments in Companies Act, 2013 & SEBI Regulations) Dr. S. R. Myneni, 4th Edition.

Prof. D. A. R. Subrahmanyam

LESSON – 10
BUSINESS VALUATION

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand :

- The meaning, structure, components, players Business Valuation
- The learner will understand the Methods of Valuation.
- The learner will understand the Equity Valuation Methods

STRUCTURE OF THE LESSON :

10.1. Meaning of Business Valuation

10.2. Basics of Business Valuation

10.3. Methods of Valuation

10.4. Equity Valuation Methods

10.5. Keywords

10.6. Self Assessment Questions

10.7. Suggested Readings

10.1. WHAT IS A BUSINESS VALUATION ?

A business valuation, also known as a company valuation, is the process of determining the economic value of a business. During the valuation process, all areas of a business are analyzed to determine its worth and the worth of its departments or units.

A company valuation can be used to determine the fair value of a business for a variety of reasons, including sale value, establishing partner ownership, taxation, and even divorce proceedings. Owners will often turn to professional business evaluators for an objective estimate of the value of the business.

- Business valuation determines the economic value of a business or business unit.
- Business valuation can be used to determine the fair value of a business for a variety of reasons, including sale value, establishing partner ownership, taxation, and even divorce proceedings.

- Several methods of valuing a business exist, such as looking at its market cap, earnings multipliers, or book value, among others.

10.2. THE BASICS OF BUSINESS VALUATION :

The topic of business valuation is frequently discussed in corporate finance. Business valuation is typically conducted when a company is looking to sell all or a portion of its operations or looking to merge with or acquire another company. The valuation of a business is the process of determining the current worth of a business, using objective measures, and evaluating all aspects of the business.

A business valuation might include an analysis of the company's management, its capital structure, its future earnings prospects or the market value of its assets. The tools used for valuation can vary among evaluators, businesses, and industries. Common approaches to business valuation include a review of financial statements, discounting cash flow models and similar company comparisons.

Valuation is also important for tax reporting. The Internal Revenue Service (IRS) requires that a business is valued based on its fair market value. Some tax-related events such as sale, purchase or gifting of shares of a company will be taxed depending on valuation.

10.3. METHODS OF VALUATION :

There are numerous ways a company can be valued. You'll learn about several of these methods below.

1. Market Capitalization

Market capitalization is the simplest method of business valuation. It is calculated by multiplying the company's share price by its total number of shares outstanding. For example, as of January 3, 2018, Microsoft Inc. traded at $86.35.

With a total number of shares outstanding of 7.715 billion, the company could then be valued at $86.35 x 7.715 billion = $666.19 billion.

2. Times Revenue Method

Under the times revenue business valuation method, a stream of revenues generated over a certain period of time is applied to a multiplier which depends on the industry and economic environment. For example, a tech company may be valued at 3x revenue, while a service firm may be valued at 0.5x revenue.

3. Earnings Multiplier

Instead of the times revenue method, the earnings multiplier may be used to get a more accurate picture of the real value of a company, since a company's profits are a more reliable indicator of its financial success than sales revenue is. The earnings multiplier adjusts future profits against cash flow that could be invested at the current interest rate over the same period of time. In other words, it adjusts the current P/E ratio to account for current interest rates.

4. Discounted Cash Flow (DCF) Method

The DCF method of business valuation is similar to the earnings multiplier. This method is based on projections of future cash flows, which are adjusted to get the current market value of the company. The main difference between the discounted cash flow method and the profit multiplier method is that it takes inflation into consideration to calculate the present value.

5. Book Value

This is the value of shareholders' equity of a business as shown on the balance sheet statement. The book value is derived by subtracting the total liabilities of a company from its total assets.

6. Liquidation Value

Liquidation value is the net cash that a business will receive if its assets were liquidated and liabilities were paid off today.

This is by no means an exhaustive list of the business valuation methods in use today. Other methods include replacement value, breakup value, asset-based valuation and still many more.

10.4. EQUITY VALUATION METHODS :

Valuation methods are the methods to value a business/company which is the primary task of every financial analyst. There are five methods for valuing company: Discounted cash flow which is present value of future cash flows. Comparable company analysis, comparable transaction comps, asset valuation, the fair value of assets and sum of parts where different parts of entities are added.

Equity Valuation Methods

- Discounted Cash Flow Methods
- Comparable Company Analysis
- Comparable Transaction Comp
- Asset-based Valuation Method
- Sum of the Parts Valuation Method

Discounted Cash Flow

DCF calculation as of	Valuation (RMB)	Valuation (US$)
NPV of explicit period	321,953	51,791
NPV of terminal value	812,148	130,646
Enterprise Value	1,134,100	182,437
+ Cash	$48,550	7,810
- Debt	($40,310)	(6,484)
Equity value	1,142,340	183,851
+ Short term investments, restricted cash, investm	12,587	2,025
+Investment in equity investees	[illegible]	2,093
+ Alipay valuation	24,866	4,000
Stock Option Value	$3,207	516
Adjusted Equity Value	**1,189,595**	**191,452**

Alibaba is worth
$191.5 billion!

- DCF is the net present value

  (NPV) of cash flows projected by the company. DCF is based on the principle that the value of a business or asset is intrinsically based on its capability to generate cash flows.

- Hence, DCF relies more on the fundamental expectations of the business than on public market factors or historical models. It is a more theoretical approach that relies on various assumptions.

- A DCF analysis helps yield the overall value of a business (i.e., enterprise value), including both debt and equity.

- While calculating this, the present value (PV) of expected future cash flows is calculated. The disadvantage of this technique is an estimation of future cash flow & terminal value along with an appropriate risk-adjusted discount rate.

- All these inputs are subject to substantial subjective judgment. Any small change in input changes the equity valuation significantly. If the value is higher than the cost, the investment opportunity needs to be considered.

Comparable Company Analysis

Below is the comparable company analysis of the Box IPO Equity Valuation Model

				Multiples			
				EV/Revenue		P/FCF	EV/EBITDA
Company	Price	MarketCap	EV	2014	2015	2014	2014
Athenahealth	$175.50	$7,095	$7,254	9.8x	7.9x	NM	54.4x
Bazaarvoice	$8.49	$653	$596	3.0x	2.6x	NM	NM
Benefitfocus	$56.97	$1,551	$1,473	11.3x	9.0x	NM	NM
BroadSoft	$27.85	$842	$770	3.8x	3.3x	16.7x	15.8x
Concur Technologies	$105.82	$6,352	$6,161	8.5x	6.8x	NM	53.0x
Constant Contact	$26.81	$878	$755	2.3x	2.1x	30.8x	15.2x
Cornerstone OnDemand	$56.12	$3,244	$3,154	12.0x	8.6x	NM	NM
Cvent	$40.55	$1,892	$1,734	12.7x	10.1x	NA	NA
Dealertrack Technologies	$52.90	$2,978	$3,016	5.4x	4.7x	39.5x	22.1x
Demandware	$73.89	$2,913	$2,637	19.1x	14.2x	NM	NM
E2open	$25.63	$784	$776	3.4x	2.8x	28.8x	11.2x
Fleetmatics Group	$35.57	$1,416	$1,303	5.7x	4.6x	52.0x	20.2x
RealPage	$18.77	$1,520	$1,487	3.2x	2.8x	21.1x	13.1x
RingCentral	$20.60	$1,489	$1,408	7.1x	5.5x	NM	NM
Salesforce	$58.16	$37,603	$39,273	7.5x	6.1x	48.1x	43.8x
ServiceNow	$66.18	$10,824	$10,604	17.3x	12.0x	NM	NM
SPS Commerce	$64.51	$1,100	$969	7.7x	6.3x	NM	64.0x
Textura	$27.10	$733	$658	9.8x	6.5x	NM	NM
The Ultimate Software Group	$154.72	$4,664	$4,583	9.1x	7.4x	NM	40.8x
Veeva	$32.26	$4,768	$4,480	17.2x	13.8x	NM	NM
Vocus	$14.49	$327	$371	2.0x	1.9x	50.0x	12.2x
Wix	$26.40	$1,261	$1,159	9.5x	7.0x	NM	NM
Workday	$100.91	$20,789	$19,384	27.7x	19.1x	NM	NM
Xero	$35.81	$4,502	$4,455	44.1x	23.7x	NM	NM
Median		**$1,551**	**$1,487**	**7.7x**	**6.3x**	**39.5x**	**29.6x**
Mean		**$4,545**	**$4,402**	**9.5x**	**7.1x**	**38.3x**	**32.0x**
Low		**$327**	**$266**	**2.0x**	**1.9x**	**16.5x**	**11.2x**
High		**$37,603**	**$39,273**	**44.1x**	**23.7x**	**69.4x**	**64.0x**

- This equity valuation method involves comparing public companies' operating metrics and valuation models with those of target companies.

- Using equity valuation multiple is the quickest way of valuing a company. It is also useful in comparing companies that do comparable company analysis. The focus is to capture the firm's operating & financial characteristics, such as future expected growth in a single number. This number is then multiplied by a financial metric to yield enterprise value

- This equity valuation method is used for a target business with an identifiable stream of revenue or earnings, which the business can maintain. For businesses still at the development stage, projected revenue or earnings are used as the basis of valuation models.

Comparable Transaction Comp

Date	Target	Acquirer	Deal Size ($ bn)	EV/Sales
Dec-13	Responsys	Oracle	1.5	8.0x
Jul-13	ExactTarget	Salesforce	2.5	8.6x
Dec-12	Eloqua	Oracle	1.0	9.7x
Aug-12	Kenexa	IBM	1.3	4.1x
May-12	Ariba	SAP	4.3	8.2x
Feb-12	Taleo	Oracle	1.8	6.0x
Mean				7.4x
Highest				9.7x
Lowest				4.1x

- The company's value using this equity valuation method is estimated by analyzing the price paid for similar companies in similar circumstances. This kind of valuation method helps understand the multiples and premiums paid in a specific industry and how other parties assess private market valuations.

- This equity valuation method requires familiarity with industry & other assets. When choosing companies for this type of analysis, one needs to keep in mind that there are similarities between factors such as financial characteristics, the same industry, size of the transaction, type of transaction, and buyer characteristics.

- This equity valuation method saves time to use publicly available information. However, the major drawback of this valuation technique is the amount and quality of the information relating to transactions. Most of the time, this information is limited, making it difficult to conclude. This difficulty gets aggravated if the company is trying to account for differences in the market conditions during previous transactions compared to the current market. For example, the number of competitors might have changed, or the previous market might be different in the business cycle.

- While every transaction is different and thus makes direct comparisons difficult, precedent transaction analysis does help provide a general assessment of the market's demand for a particular asset.

- So valuation in this type of analysis would be first selecting a universe of transactions, locating the necessary financials, then spreading the key trading multiples, and lastly, determining the company's valuation. For example, if your company is predicted to have an EBITDA of $200 million in 2016 and the precedent transaction analysis shows target companies were purchased for 20x EBITDA, then your company would be worth approximately $4 billion.

Asset-Based

- The asset-based valuation method considers the value of the assets and

- Liabilities of a business. Under this approach, the value of a business is equal to the difference between the value of all its relevant assets and the value of all its relevant liabilities.

It can be easily understood by the following simple Illustrative example:-

The Directors of a company, ABC Ltd, are considering the acquisition of the entire share capital of XYZ Ltd.

Sum of Parts Valuation Method

A conglomerate with diversified business interests may require a different valuation model. Here we value each business separately and add up the equity valuations. This approach is called a sum of parts valuation method.

To value a conglomerate like Reliance, one can use an equity valuation model to value each segment.

- Automobile Segment Valuation – Automobile Segment could be best valued using EV/EBITDA or PE ratios.

- Oil and Gas Segment Valuation – For Oil and Gas companies, the best approach is to use EV/EBITDA or P/CF or EV/boe (EV/barrels of oil equivalent)

- Software Segment Valuation – We use PE or EV/EBIT multiple to value Software Segment

- Bank Segment Valuation – We generally use P/BV or Residual Income Method to value Banking Sector

- E-commerce Segment – We use EV/Sales to value the E-commerce segment (if the segment is not profitable) or EV/Subscriber or PE multiple.

Reliance Corp Total Valuation = (1) Automobile Segment Valuation + (2) Oil and Gas Segment Valuation + (3) Software Segment Valuation + (4) Bank Segment Valuation + (5) E-commerce Segment

10.5. KEYWORDS :

* Company Valuation
* Economic Value
* Fair Value
* Market Capitalization
* Time Revenue
* Earnings Multiplier
* DCF
* Book Value
* Liquidation Value
* Equity Valuation

10.5. SELF ASSESSMENT QUESTIONS :

1. Define Business Valuation and its objectives.
2. What are the methods of valuation?
3. Equity valuation methods.
4. Define comparable analysis.
5. Write about discounted cash flow method with an example.

10.7. SUGGESTED READINGS :

1) Financial Modeling & Valuation: A Practical Guide to Investment Banking and Private Equity, Paul Pignataro, Wiley.
2) An Introduction to Investment Banking, M & A Financial Modeling, Valuation + Business Best Practices, Chris Haroun.

Prof. D. A. R. Subrahmanyam

LESSON – 11

THE PROS AND CONS OF VALUATION METHODS

Aims & Objectives :

After studying this unit, learner will be able to understand :

- The meaning, structure, components, players Business Valuation
- The learner will understand the Methods of Valuation.
- The learner will understand the Equity Valuation Methods

Structure OF THE LESSON :

11.1. Pros & Cons of Income Approach

11.2. Pros & Cons of the Market Approach

11.3. Pros & Cons of the Asset Approach

11.4. Conclusion

11.5. Keywords

11.6. Self Assessment Questions

11.7. Suggested Readings

A valuator uses the information posed above to determine which method to apply in valuing a business. However, in addition to knowing when it's appropriate to use a particular method, a valuator must understand the pros and cons of each method.

11.1. PROS AND CONS OF THE INCOME APPROACH :

The Income Approach is one of the most often used valuation methods, perhaps only second to the Market Approach. There are numerous reasons why valuators prefer this method over others.

Pros :

First, consider the flexibility in using the Income Approach, particularly with a DCF. A DCF has many moving parts, including the components of free cash flow, the discount rate, and the terminal value. This allows the valuator to use their best judgment and the facts of the case to pinpoint their estimation of the value of the company being valued.

Second, the Income Approach uses free cash flow as a base for both methods. Free cash flow is generally seen as the most accurate way to measure cash flow available to shareholders after deductions for taxes, capital expenses, working capital, etc.

Cons :

There are two notable cons of the Income Approach.

First, the projections used in a DCF must be backed up by historical performance and sound reasoning or explanation from the management team as to why the projected cash flows are feasible. Value can easily be overinflated when using a DCF, as the inputs are very sensitive.

Second, no one has a crystal ball. A DCF is done using projections of how a company may perform based on the information today. The valuator must be aware of this reality and choose an appropriate discount rate accordingly.

11.2. PROS AND CONS OF THE MARKET APPROACH :

The Market Approach is used by valuators to dues its simplistic application. If nothing else, the method is useful for determining a range of values that similar companies have sold for.

Pros :

The benefits to using the Market Approach for concluding value include its straightforward calculation. Unlike the Income Approach, which has many moving parts, the Market Approach usually only has two variables: the multiple and the corresponding earnings metric (revenue, gross profit, EBITDA, or SDI).

Another benefit of the approach is that the information is up-to-date and accurate when using public company data.

Lastly, the Market Approach does not rely on a forecast. Recall the drawbacks of using a DCF. A DCF requires many assumptions to be made, which are never 100% accurate. However, the Market Approach concludes to value based on an adjusted earnings metric, which is based on the actual performance of the company being valued.

Cons :

The Market Approach also has some downfalls. First, unlike when using public companies, precedent merger and acquisition transaction data comes from a third-party resource. Although the data is held to a high standard, the degree of accurateness is always questionable compared to public comps that are 100% up-to-date and accurate.

Another downside is that the method is not flexible in its inputs. Unlike a DCF, a valuator is somewhat limited, besides implementing a qualitative adjustment, a percentage-based increase or decrease to the multiple based upon the facts of a case.

Lastly, much like the Income Approach, the Market Approach is only as good as the inputs used. Comparative transactions or public comps may not be close enough in description to the company be valued. The result is a conclusion of value that the data doesn't necessarily support.

11.3. PROS AND CONS OF THE ASSET APPROACH :

The Asset Approach is typically used when valuators are faced with a company that has produced negative earnings or with companies with significant value in their fixed assets. Often, this approach is used to determine the lowest possible value that a company would be worth without considering the business's ability to generate profits.

Pros :

The Asset Approach, as mentioned above, can be used to determine the base level of value that a business could be worth upon liquidation. However, this value is often changed to adjust the assets and liabilities to their respective fair market value.

Another pro of the Asset Approach is that it's very straightforward. The conclusion to value is merely Assets minus Liabilities. The process can be more complicated when adjusting certain assets or liabilities, but it's still simple arithmetic!

Cons :

The most significant pitfall of the Asset Approach is that it doesn't consider a business's ability to generate profit from its products or services offered. As such, this method should only be used when the Asset and Income Approach yield a lower value than the book value or adjusted book value or a company with significant value attached to its tangible assets.

11.4. CONCLUSION :

Valuators have one of three approaches to choose from: The Income Approach, The Market Approach, or the Asset Approach. A valuator must consider each method when analyzing a company before determining value. It's essential to understand when to use each method and the pros and cons of choosing the correct method or combination of methods.

11.5. KEYWORDS :

* Income Approach
* Gross Profit
* Market Approach
* Capital expenses
* Working Capital
* Asset Approach
* Liquidation
* Tangible Assets

11.6. SELF ASSESSMENT QUESTIONS :

1. What are the advantages and Disadvantages of Income approach?
2. Merits and Demerits of Asset approach.
3. Pros and Cons of Market approach.

11.7. SUGGESTED READINGS :

1) Financial Modeling & Valuation: A Practical Guide to Investment Banking and Private Equity, Paul Pignataro, Wiley.
2) An Introduction to Investment Banking, M & A Financial Modeling, Valuation + Business Best Practices, Chris Haroun.
3) MY Khan, Financial Services, McGraw Hill Higher Education, 2013.
4) Madhu Vij and Swati Dhawan, Financial Services and Merchant Banking, McGraw Hill Higher Education,2012

Venna Sakunthala

LESSON – 12

VENTURE FINANCE AND PRIVATE EQUITY

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand:

- The meaning, structure, components, players Venture Capital
- The learner will understand the Methods of Valuation.
- The learner will understand the Private Equity Valuation Methods

STRUCTURE OF THE LESSON :

12.1. INTRODUCTION TO VENTURE CAPITAL :

Venture capital and private equity are two types of financial assistance that are used by companies in different stages. They are often considered as one because of their similar concept. However, there is a significant difference between these two concepts. Private Equity is a large investment in developed companies and venture capital is a small investment usually made in initial stages of development of a company.

Private equity funds refer to investments made by investors for investment purposes. Whereas, venture capital refers to funding to those ventures that are backed by new entrepreneurs, have high risks, and who require money to shape their ideas.

What is Venture Capital ?

Venture capital is referred to funds invested by individuals or investors to start-ups or small companies aspiring to establish a fresh concept and new entrepreneur. All those new private companies who cannot raise their funds from the public sector may raise funds from the venture capital.

This type of investment indicates high risk but is supported by fresh and top qualified entrepreneurs. Venture Capital firms assist developing businesses in their initial stages before making it public.

It is a popular funding process and sometimes required to raise money for bank loans, capital markets, or other debt instruments. These type of investor is known as a Venture Capitalist, and the capital they provide is called equity capital.

12.2. VALUATION METHODS :

In order to evaluate a company, one must have an initial understanding of it. Therefore, at Venture Valuation, we pursue a holistic evaluation approach. All valuations are based on a careful consideration of both hard facts and soft factors. We apply a thorough risk assessment of factors which include:

- Management
- Market
- Science and technology
- Financials / funding phase

To determine the value of a company as accurately and as objectively as possible, we use a mixture of different assessment methods. All methods are specifically suited for the evaluation of technology companies, with high growth potential and start-up companies of all types. Although not every kind of valuation method is appropriate, Venture Valuation assesses each company according to their industry and financing phase.

Discounted Cash Flow (DCF) :

Method: The discounted cash flow method takes free cash flows generated in the future by a specific project / company and discounts them to derive a present value (i.e. today's value).

The discounting value usually used is the weighted average cost of capital (WACC) and is symbolized as the 'r' in the following formula:

$$DCF = \frac{CF_1}{(1+r)^1} + \frac{CF_{21}}{(1+r)^2} + \cdots + \frac{CF_n}{(1+r)^n}$$

DCF = Calculated DCF value

CF = Cash Flow

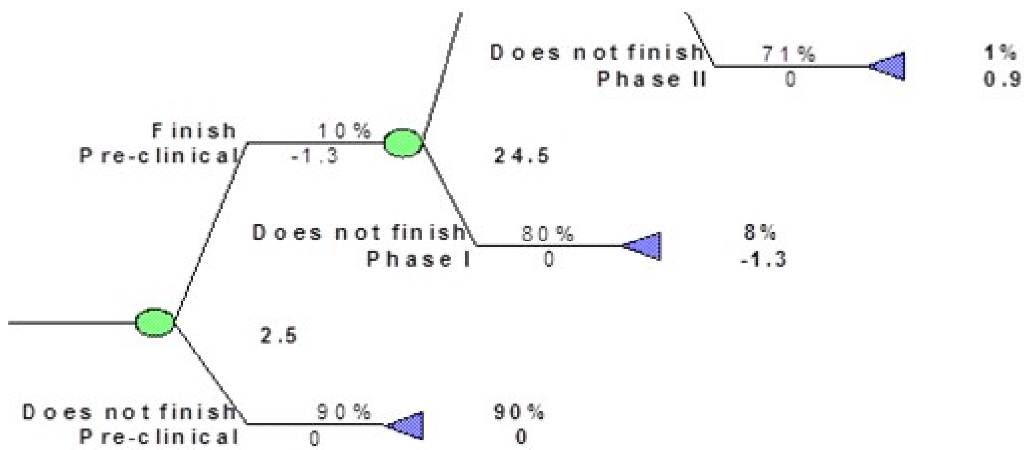
r = Discount rate (WACC: Weighted average cost of capital)

Uses : DCF calculations are used to estimate the value of potential investments. When DCF calculations produce values that are higher than the initial investment, this usually indicates that the investment may be worthwhile and should be considered.

Risk adjusted NPV :

Method: The risk adjusted net present value (NPV) method employs the same principle as the DCF method, except that each future cash flow is risk adjusted to the probability of it actually occurring.

The probability of the cash flow occurring is also known as the 'success rate'.



Uses : Risk adjusted NPV is a common method of valuing compounds or products in the pharmaceutical and biotech industry, for example. The success rates of a particular compound/drug can be estimated, by comparing the probability that the compound/drug will pass the various development phases (i.e. phases I, II or III) often undertaken in the drug development process.

12.3. VENTURE CAPITAL METHOD :

Method: The venture capital method reflects the process of investors, where they are looking for an exit within 3 to 7 years. First an expected exit price for the investment is estimated. From there, one calculates back to the post-money valuation today taking into account the time and the risk the investors takes.

The return on investment can be estimated by determining what return an investor could expect from that investment with the specific level of risk attached.

Uses : The Venture Capital method is an often used in valuations of pre revenue companies where it is easier to estimate a potential exit value once certain milestones are reached.

Market Comparable method :

Method : The market comparables method attempts to estimate a valuation based on the market capitalization of comparable listed companies.

Uses : The market comparables method is a simple calculation using different key ratios like earning, sales, R&D investments, to estimate the value of a company.

Comparable Transaction method :

Method: The comparable transaction method attempts to value an entire company by comparing a similar sized private company in a similar field, and using different key ratios. The price for a similar company can either come from an M&A transaction or a financing round.

Uses : The comparable transaction method is a simple calculation estimating the value of a target company based on comparable investments or M&A deals.

Decision Tree analysis :

Method: Decision trees are used to forecast future outcomes by assigning a certain probability to a particular decision.

The name decision tree analysis comes from the 'tree' like shape the analysis creates where each 'branch' is a particular decision that can be undertaken.

Uses : Decision trees are used to give a graphical representation of options, strategies or decisions that can be undertaken to reach a particular goal or "decision".

12.4. WHAT IS PRIVATE EQUITY ?

Private equity can be defined as the capital investment, which is made by companies or investors in the private firms that are not a part of the stock exchange. These fund investments are made by the high net worth firms or individuals. These investors acquire private companies shares or earn authority of public companies to take them private and de-list from public stock exchanges.

Private Equity firms purchase an existing company and help them to develop and expand. The primary strategy of this entity is Venture Capital, Mezzanine Capital, Leveraged Buyout, and Growth Buyout.

This entity has become an essential part of the financial services and is one of the attractive funding options.

12.5. PRIVATE EQUITY VALUATION METRICS :

Equity valuation metrics must also be collected, including price-to-earnings, price-to-sales, price-to-book, and price-to-free cash flow. The EBITDA multiple can help in finding the target firm's enterprise value (EV)—which is why it's also called the enterprise value multiple. This provides a much more accurate valuation because it includes debt in its value calculation.

The enterprise multiple is calculated by dividing the enterprise value by the company's earnings before interest taxes, depreciation, and amortization (EBITDA). The company's enterprise value is sum of its market capitalization, value of debt, (minority interest, preferred shares subtracted from its cash and cash equivalents.

If the target firm operates in an industry that has seen recent acquisitions, corporate mergers, or IPOs, we can use the financial information from those transactions to calculate a valuation. Since investment bankers and corporate finance teams have already determined the value of the target's closest competitors, we can use their findings to analyze companies with comparable market share to come up with an estimate of the target's firm's valuation.

While no two firms are the same, by consolidating and averaging the data from the comparable company analysis, we can determine how the target firm compares to the publicly-traded peer group. From there, we're in a better position to estimate the target firm's value.

Estimating Discounted Cash Flow :

The discounted cash flow method of valuing a private company, the discounted cash flow of similar companies in the peer group is calculated and applied to the target firm. The first step involves estimating the revenue growth of the target firm by averaging the revenue growth rates of the companies in the peer group.

This can often be a challenge for private companies due to the company's stage in its lifecycle and management's accounting methods. Since private companies are not held to the same stringent accounting standards as public firms, private firms' accounting statements often differ significantly and may include some personal expenses along with business expenses—not uncommon in smaller family-owned businesses—along with owner salaries, which will also include the payment of dividends to ownership.

Once revenue has been estimated, we can estimate expected changes in operating costs, taxes and working capital. Free cash flow can then be calculated. This provides the operating cash remaining after capital expenditures have been deducted. Free cash flow is typically used by investors to determine how much money is available to give back to shareholders in, for example, the form of dividends.

Calculating Beta for Private Firms :

The next step would be to calculate the peer group's average beta, tax rates, and debt-to-equity (D/E) ratios. Ultimately, the weighted average cost of capital (WACC) needs to be calculated. The WACC calculates the average cost of capital whether it's financed through debt and equity.

The cost of equity can be estimated using the Capital Asset Pricing Model (CAPM). The cost of debt will often be determined by examining the target's credit history to determine the interest rates being charged to the firm. The capital structure details including the debt and equity weightings, as well as the cost of capital from the peer group also need to be factored into the WACC calculations.

Determining Capital Structure :

Although determining the target's capital structure can be difficult, industry averages can help in the calculations. However, it's likely that the costs of equity and debt for the private firm will be higher than its publicly-traded counterparts, so slight adjustments may be required to the average corporate structure to account for these inflated costs. Often, a premium is added to the cost of equity for a private firm to compensate for the lack of liquidity in holding an equity position in the firm.

Once the appropriate capital structure has been estimated, the WACC can be calculated. The WACC provides the discount rate for the target firm so that by discounting the target's estimated cash flows, we can establish a fair value of the private firm. The illiquidity premium, as previously mentioned, can also be added to the discount rate to compensate potential investors for the private investment.

Problems with Private Company Valuations :

While there may be some valid ways we can value private companies, it isn't an exact science. That's because these calculations are merely based on a series of assumptions and estimates. Moreover, there may be certain one-time events that may affect a comparable firm, which can sway a private company's valuation. These kind of circumstances are often hard to factor in, and generally require more reliability. Public company valuations, on the other hand, tend to be much more concrete because their values are based on actual data.

The Bottom Line :

As you can see, the valuation of a private firm is full of assumptions, best guess estimates, and industry averages. With the lack of transparency involved in privately-held companies, it's a difficult task to place a reliable value on such businesses. Several other methods exist that are used in the private equity industry and by corporate finance advisory teams to determine the valuations of private companies.

12.6. KEYWORDS :

* Venture Finance
* Private Equity
* Risk adjusted NPV
* Market Comparable
* Decision Tree Analysis
* Valuation Metrics
* Estimated DCF
* Beta for Private Firms
* Capital Structure
* Bottom Line

12.7. SELF ASSESSMENT QUESTIONS :

1. Define venture capital and explain its methods.
2. Briefly explain Decision Tree analysis.
3. Write about private equity.
4. What are the methods for calculating Private Equity?
5. Distinguish between Private Equity and Venture finance.

12.8. SUGGESTED READINGS :

1) Private Equity and Venture Capital, Anup Malhotra.
2) Venture Capital Due Diligence – A Guide to Making Smart Investment Choices and Increasing Your Portfolio Returns, Justin J. Camp
3) Private Equity Fund Investments, Cyril Demaria.
4) The Valuation of Financial Companies, Mario Massari, Wiley

Venna Sakunthala

LESSON – 13
ISSUES FACING IN INVESTMENT BANKING

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand :

- Investment Banking Challenges
- Their Solutions

STRUCTURE OF THE LESSON :

13.1. Challenges of Investment Banking

13.2. Solutions of Investment Banking

13.3. Keywords

13.4. Self Assessment Questions

13.5. Suggested Readings

13.1. INVESTMENT BANKING CHALLENGES & THEIR SOLUTIONS :

Like all other forms of banking, investment banking is currently going through some threatening challenges and transformations. Almost all businesses across the world are trying their best to recover from the adverse effects of the global pandemic of Covid-19, but the companies operating in the investment banking sectors are facing difficulties to regain their pre-pandemic levels. The corona virus pandemic compelled the investment banking industry to restructure its strategies.

As a consequence, many investment banks are moving away from their traditional Underwriting services and focusing more on other activities including mergers & acquisitions (M&A), advisory & fund-raising activities. One of the biggest reasons behind these drastic changes is the latest regulatory alterations that have caused some banking activities to go expensive. Furthermore, the emerging need for comprehensive in-house applications, the latest customer-focused portals, and improved transparency with security across the board is putting substantial pressure on companies operating in the investment banking industry. The modern investment banking industry is experiencing several challenges.

13.2. SOME OF THESE CHALLENGES HAVE BEEN LISTED HERE ALONG WITH THEIR SOLUTIONS :

Here are the challenges which are being faced by investment banking sectors :

Investment banks today are required to be more diverse, all-inclusive, dynamic, creative, globally networked, and client-focused with well-defined regulators and a transparent system of business ethics. There is an increasing need for higher transparency, compliant cyber security initiatives, advanced solutions for customer's transforming needs, revolutionary in-house applications, and new talent retaining strategies.

Containing Costs :

Companies operating in Banking, financial services, and insurance (BFSI) are regularly evaluating different strategies to get better control on cost. They are constantly evolving their program & policies to achieve sustainable cost efficiency. Several factors ranging from decreasing revenues to excessive costs, and growth of digital & regulatory pressure are contributing to the desperate need of assuring cost reduction. Plus, the prices of goods & services are getting lower, leading to fewer margins, & reduced cost of capital with banks, making investors not willing to invest. Thereby many banks are reducing interest rates and the cost of equity. Also, investment bankers are not able to address the needs of corporations and investors, which is creating a challenge for them.

One of the most prominent ways the investment banking industry is trying to overcome this challenge is by maintaining a balance between optimizing the current core activities through ensuring robotic processes & digitization while investing in new services.

Cyber security :

Evaluating vulnerabilities for an industry that goes through constant transformations is one of the most critical tasks for IT experts. For example, cybersecurity in the Investment banking sector. This sector is more prone to get exposed to vulnerabilities that further bring compatibility concerns in M&A situations. The traditional infrastructure acquired by banks through M&A activities is outdated and associated with extensive vulnerabilities, creating challenges for the IT teams in the companies operating in this sector. Cyber threats are at their peak and traditional technologies have become a risk factor.

Addressing cyber security is essential through significant investments into it along with updated & upgraded legacy systems. Introducing more modular solutions can also contribute to coping with cyber threats compared to inflexible traditional systems. This is the time when the industry should focus more on such solutions.

Improving Client Experience :

When it comes to achieving client-focused experiences in B2C and B2B models, it is completely different. As a result, it is quite difficult for investment banking firms to cater to the increasing demands and expectations of their customers. Earlier, the customer came to the bank but today, he wants the bank to come to him. Thus, the sector is required to consider new & improved delivery models that can assist today's customers. Businesses in the investment banking industry should start evaluating their client experience and outline necessary standards.

Retaining New Talents :

Young professionals are much more attracted to alternative sectors such as technology or start-ups even after getting assured of good pay & quick career promotions by the companies. The investment banking industry is introducing new policy measures, for example, fast promotion to induce new employees, but today's youth is seeking to work in a flexible industry with a proper work-life balance. The investment banker needs to do longer shifts & suffer through tight deadlines. Thus, sourcing and retaining talented minds has become a huge challenge for this industry. However, banking companies are figuring out new ways of attracting & retaining talented minds in their company.

Fintech As New Technology Threat :

Today every industry is being transformed by adopting rapid advances in technology and the investment banking industry is also not an exception. However, fintech has been emerging as a new industry trend over the past few years to facilitate the same set of financial services but with effective use of financial technology at lower prices. For example, now modern fintech companies are way better at raising capital than investment banks, making investment banking & the rest of other sectors considering innovative technology and flexibility to boost their reliability among clients.

Lack of Capital Resources :

Today the global economy is facing tremendous recessions & financial depressions, thanks to the global pandemic of the Covid-19 that had adverse effects on the economy. As a result, most individuals & companies aren't that much interested in investing their money. Rather they are preferring retaining their money for a while instead of investing it in the short run. This is leading to a lack of capital resources for the investment banking sector to allocate to their customers efficiently that further leads to reduced business opportunities for the investment bankers.

Cross-selling Complexities :

A huge area of the investment banking service sector relies on cross-selling. For example, if a customer is looking for mergers and acquisitions advisory services, the investment bankers provide them with services such as issue management, capital structure advisory, and many more. This way, they bring value to their clients. But currently, they have limited budgets and thereby limit the number of services offered. The declining budget is causing decreased revenue for research and other departments in investment banks which extensively rely on cross-selling revenue. This is the reason today customers are considering experts instead of availing these services from an investment bank.

The bottom line is that the investment banking industry must transform itself to survive in the market by implementing best practices of the advanced, latest & modern systems. Creating the right processes and data-driven strategies is a pivotal step to regain trust among customers.

13.3. KEYWORDS :

* Advisory and Fund-raising Activities
* Containing Costs
* Cyber Security
* Clients experience
* Retaining new talents
* Lack of Capital Resources
* Cross Selling Complexities

13.4. SELF ASSESSMENT QUESTIONS :

1. What are the challenges faced by investment bankers?
2. Explain Cyber Security.
3. What are cross selling complexities?
4. What are Solutions for their problems?

13.5. SUGGESTED READINGS :

1) Private Equity and Venture Capital, Anup Malhotra.
2) Venture Capital Due Diligence – A Guide to Making Smart Investment Choices and Increasing Your Portfolio Returns, Justin J. Camp
3) Private Equity Fund Investments, Cyril Demaria.
4) The Valuation of Financial Companies, Mario Massari, Wiley
5) MY Khan, Financial Services, McGraw Hill Higher Education, 2013.
6) Madhu Vij and Swati Dhawan, Financial Services and Merchant Banking, McGraw Hill Higher Education,2012

Venna Sakunthala

LESSON – 14

DESIGN AN INNOVATIVE FINANCIAL INSTRUMENTS

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand:

- The learner will understand the Innovative Financial Instruments.
- The learner will understand the Design Pyramid Method for Creating a Successful Financial Product

STRUCTURE OF THE LESSON :

14.1. Innovative SMEs

14.2. Steps Financial Instruments

14.3. Design Pyramid Method for creating a successful financial product

14.4. Pyramid of Financial Design Integration

14.5. Successive Implementation

14.6. Creative your own “magic pill”

14.7. Keywords

14.8. Self Assessment Questions

14.9. Suggested Readings

14.1. INNOVATIVE SMEs :

Participants are divided into 2 to 4 groups. Each group, starting from a fictional situation of an “X” region (or country), will be asked to design and set up a financial instrument to support innovative SMEs /start-ups, following the steps of the 2021-27 ex-ante assessment:

- Identify the proposed amount and the expected leverage effect;
- Choose the proposed financial products;
- Identify and describe the proposed target group of final recipients;
- Describe the expected contribution to the specific objectives

After reading the scenario carefully, it is now time to imagine yourself as the managing authority or the ministry of that specific region, and start developing your own ex-ante assessment. Recap the information retrieved and start identifying market gaps and defining the appropriate priorities for the allocation of the public resources. The outcomes of this first session will be discussed in plenary.

Demand Offer Market Gap / Investment Needs

E.g. : High demand for qualified professionals in the fields of ICT

E.g. : High rates of unemployment + Continuous emigration of qualified talent.

E.g. : Investment in high-tech educational infrastructure + Improvement of the working conditions for professionals in the ICT areas.

14.2. STEP UP OF THE FI :

After completing the phase of proposing the Financial Instrument, explaining the added value, the expected benefits to the identified target groups and its contribution to the specific objectives, you will have to develop the set-up and the implementation strategy of said Financial Instrument.

So, in the same groups as in session 1, you will select the implementation option (in-house or external financial institution? holding fund or fund managers?) and justify the choice in terms of:

- Capacity to reach the target
- Administrative capacity and administrative burden
- Potential costs

14.3. DESIGN PYRAMID METHOD FOR CREATING A SUCCESSFUL FINANCIAL PRODUCT :

There are many digital financial products on the market; some of them excel, while others lack demand and have to fight for their survival. What determines whether a product succeeds or fails? And how can one be sure that the millions invested in building such a product won't go to waste? Particular aspects seem to dictate the product’s faith. All of them are related to proper financial design integration into all levels of the company. Unfortunately, most often, these factors go unnoticed, ignored or are ruled insignificant, leading to a painful fiasco. How can you spot those threats before it's too late and keep your product safe from failure?

There's a common mistake many financial institutions and companies make. You might feel like everything is under control and going smoothly─the team is working, building the product, you have the technological support and financing... what can go wrong? A lot can go wrong, big time.

In many cases, incorrect design integration in the process of product creation has led to harmful consequences. The product lacks demand in the market, gets rejected by the users, exceeds the development budget or doesn't even get launched at all.

This remains a huge risk for any company that doesn't integrate user-centered thinking at all levels, starting from the inner culture and ending with all processes and operations.

But what does that even mean, and how can you achieve that? We want to share our approach that has helped different financial institutions and companies develop successful and well-demanded digital products.

Proper financial design integration: the key to success

At this point, it's crucial to understand what I mean by “design.” Instead of the common misconception that design is simply beautiful packaging for marketing purposes, I view it as an ideology behind the process of integrating user-centered thinking into the company core─from production processes to the way people on the team think and act.
To create a successful financial product, it is crucial to pay close attention to several key aspects simultaneously:

- Goals of the business;
- The complexity of finance technology;
- Requirements of the digital products' market;
- The role that finance plays in each person’s life.

I call this financial design. We believe this concept is critical to the success of any digital financial product. Here's why.

Working closely with different financial institutions and following the events in the industry for more than a decade, I discovered that it’s not always possible to realize the full potential of specific companies and their digital products.

After analyzing dozens of cases, asking hundreds of questions and extracting huge amounts of data, I uncovered five possible areas in which financial products get sabotaged. All of these are closely related to the way in which the design process is integrated into the product and company.

In general, these five areas match the main elements of business development. When you have a solid business idea, you need to create a business model by defining key Processes that will take you to the desired goal. In the next step, you need a Team of specialists who are qualified to execute your idea. When you have found professionals who match the previously defined processes, you need them to conduct the right Actions that move you closer to the product realization. To be sure you are moving in the right direction, you have to evaluate the Results your team is producing. In the end, if all of the previous steps have been accomplished successfully, you can grasp the unique Value your product will provide to the customers, turning you into a success story.

Only 2.5% of companies complete their projects 100% successfully, according to a PwC study of over 10,640 projects. The Design Pyramid helps to detect “bottlenecks” in designing the new product before it is too late.

14.4. MEET THE PYRAMID OF FINANCIAL DESIGN INTEGRATION :

On the way to creating a digital financial service, any company can face pitfalls that can shake even the most experienced businesses. If you ignore these hazards and fail to detect them on time, the product may be rejected by users and lose its market advantage.

The issue often arises because project owners have several blind spots. Tricky obstacles tend to appear that they don't even notice until it's too late. Usually, this results in failure of the financial product, leaving the management team confused because they can't find any rational explanation for its demise.

Pyramid of Financial Design Integration consists of five levels : Process, Team, Action, Results and Value. Each of them, if not carried ut correctly, can lead to a certain threat to a financial product's success.

First Level : Process

What is the role of design in the company processes and inner culture? Is it prioritized? A business that's powered by digital products cannot be limited to only a couple of designers who create landing pages and build interfaces from public templates.

Test yourself: How do you perceive design in your team?

- How do managers and employees in your organization value the design process?
- How much do they appreciate and are aware of financial design capabilities and the role of design in shaping the product's future success

The inability to prioritize design leads to a deficiency of resources necessary to fulfill its true potential. This causes low-quality design of digital products as the process is messy and chaotic. In the end, this kind of approach dramatically increases the risk of product failure as the user needs and expectations have not been taken into account.

Learning to prioritize design allows you to develop a user-centered understanding throughout the entire team, leading to smooth and effective project workflow. This results in a successful and satisfactory product for the users.

User-centered thinking must be made a priority on the widest scale possible—through out all levels, teams and processes in a company. This way, every employee can focus on satisfying the user's needs through designing products or services. Such an approach allows the creation of truly innovative products that have long-term success in the digital market.

Second Level : Team

When we know how the design and user centricity should be incorporated into the company processes, we need to select the right people who can actualize that. What should their competencies and experience be? How will they integrate the design?

The people responsible for design might be: the Chief Experience Officer, who defines the company's strategy for user satisfaction; Head of Design, who is responsible for the implementation of design at the product level; UX Architect, whose task is to design digital solutions based on the business goals and user needs; UI Designer, who embodies the vision of the team in the user interface.

Test yourself: Who is responsible for design in your organization?

- What are the competencies, backgrounds and mindsets of people who execute the product design process in your organization?

This could be compared to asking a dentist why your arm hurts because he is a doctor.

Superficially selected specialists can easily sink the project, regardless of how large and impressive the budget is.

Here's an example. I remember a Fintech startup that wanted us to completely redesign a product launched only a few months ago. Traction was awful with an almost zero retention rate despite a high acquisition rate. From the first sight, the app looked fairly appealing and modern. Customers were interested in the brand-new solution and were eager to try it. Unfortunately, key user flows were so complex and full of friction that users weren't able to complete even the simplest tasks. The main cause of this fiasco is obvious. They had hired an agency that was experienced in designing attractive landing pages and eCommerce sites but knew nothing about financial services. They wasted half a year and plenty of investors' money, missed market opportunity, damaged their reputation and lost customer loyalty.

To empower the design potential of a company, outsourced design competence can be used through consultants, agencies and coaches. This will not only help to create great products from the user perspective but also provide an opportunity to enhance the company's culture and expand internal expertise.

Third Level : Actions

Now, we are moving to the next level. At this point, it's crucial to understand that even if you hire the most brilliant team of UX design specialists, your product can still fail. Why?

Simply put, the designers' skills, experience and domain knowledge are useless if their influence is limited only to the tasks concerning the "topcoat" of the product.

Test yourself : What actions do designers execute in your company?

- What are the designer’s tasks, goals and zone of influence?
- To what extent are they able to engage the entire company in caring for the success of the product?

Unfortunately, this approach underlies the many boring and uncomfortable digital solutions that currently dominate the financial industry.

The results of each scenario are drastically different—from a complete failure to a unique product that's greatly demanded. I'm sure it's not difficult for you to sort out which is which.

Ideally, service design specialists should become design approach facilitators at every level of the company. In addition to the routine duties of product engineering, their primary goal should be to integrate the user-centered design approach into every process that's related to product creation and customer service.

This could be done through:

- workshops
- brainstorming
- research
- agile-based processes
- lean UX practice
- Design Thinking integration.

Ultimately, the number of benefits that the product can offer users and the speed of its realization depends on the scale of actions and the vision of the design advocates on the team. This can be facilitated to a large extent if one or more of the C-level executives are passionate about increasing the products’ and company’s value through a user experience design approach.

Fourth Level : Results

The success of the product depends on the criteria that are used to evaluate the results of the design team's efforts.

Test yourself : How do you measure the quality of result?

- What are the measuring criteria of the end result?
- Are you fully aware of the value of the designer's input and each design deliverable?

In the end, this turns into an extremely expensive and time-consuming way to market a useless product. Sounds absurd, right?

The correct outcome criteria define the level of value a product is able to provide for the users. It's not the number of screens that is important, it is the quality of the screens. Often, a clever and user-centered architecture of a digital product can significantly reduce the number of screens, while increasing user satisfaction.

Only the compliance of the product with the key user scenarios can make it more understandable and enjoyable for the customers. Naturally, it requires the investment of more time and resources into analysis and research. Therefore, it is very important that this process is carried out by experienced specialists.

It is also equally important that every single employee in the company is 100% aware of the design approach significance for the success of the product.

Fifth Level : Value

Though all of these five milestones on the way to a meaningful product are equally relevant and closely related to one other, we have come to probably the most important one.

The central question in the creation of any product is “WHY?”

What exactly makes the product valuable and unique to the users, and how does it matter to the team involved in its creation? Difficulties arise if the project team does not know the answer to this question, or if this answer is standardized and does not inspire anyone, most importantly themselves.

Test yourself : What's the unique value of your product?

- Does your team own a disruptive mindset?
- Are they trying to think outside of the box to design unique value for the customers?

At the level of value, the design approach allows you to find the particular uniqueness your product is able to provide to the world─something that will definitely distinguish the solution from the many others already offered by competitors. There's no other way to find and detect this uniqueness than for the whole team to step out of the box. This way, the product can reach a level of innovation, maximizing its value.

Viewing a product from the perspective of user benefits allows you to set priorities aimed at creating long-term relationships with clients within a win-win framework.

Have the courage to challenge yourself instead of protecting your legacy. A design approach will guide you through the necessary methods and tools. This way, the company's employees won't be wasting their energy on protecting the market share of an unsuccessful product but, rather, focus on designing a solution that exceeds user expectations, guarantees customer loyalty and leads to an organic increase in popularity without spending enormous marketing budgets. We are living in the Digital Age, and the network effect of social media has more influence than billboards ever did.

14.5. SUCCESSIVE IMPLEMENTATION IS KEY :

For this instrument to be used to its full advantage, it is crucial to understand that all of these aspects are interconnected and affecting one another and must be viewed as a system. If you're confident in most of them but don't succeed in mastering one of them, there's a big possibility of failure.

It is pointless to talk about the uniqueness of your product if the design is not made a top priority in your organization. If the entire team perceives the design only as a whim—merely a decoration on the facade when the building has already been constructed, it is impossible to create a product that will delight its users.

Compare it to caring about your health. If you do not integrate a healthy lifestyle into every aspect of your life—from eating, moving and thinking, doctors cannot help.

14.6. CREATE YOUR OWN "MAGIC-PILL" :

The best way to implement this model is to carefully study each of the levels and involve the whole organization into the design integration.

While going through the stages of the Design Pyramid, keep in mind your own unique situation. What might prevent you from creating a demand for your financial product? Seek ways to improve in-house processes with the help of financial design.

Remember, there's no "magic pill" that will miraculously solve all of your problems. Your own engagement is the key. Knowledge, tips and experience from this article, combined with you striving toward understanding the root of the problem and implementing the most effective solutions, will bring the optimal results.

14.7. KEYWORDS :

* SMEs
* Digital Products Market
* Financial Institutions
* Process
* Team
* Actions
* Work Shops
* Brain Storming
* Agile-based Processes
* Lean UX Practice
* Magic-pill
* Design Pyramid

14.8. SELF ASSESSMENT QUESTIONS :

1. How to design new financial instruments?
2. Pyramid Method for Creating a Successful Financial Product.
3. How many levels of financial design integration?
4. Define Magic pill.

14.9. SUGGESTED READINGS :

1) Financial Markets, Institutions and Financial Services, Prof. Bimal Jaiswal, Dr. Bhuvana Venkatraman & Dr. Richa Banerjee, Sahitya Bhawan Publications.
2) Financial Ratios and Financial Statement Analysis, Jagadish R. Raiyani, New Century Publications.
3) MY Khan, Financial Services, McGraw Hill Higher Education, 2013.
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Venna Sakunthala

LESSON – 15
BLOCK CHAIN

AIMS & OBJECTIVES :

After studying this unit, learner will be able to understand :

- The learner will understand the Block Chain.
- The learner will understand the key elements of block chain
- The learner will understand the Benefits of block chain
- The learner will understand the different block chain use cases in banking

STRUCTURE OF THE LESSON :

15.1. MEANING AND IMPORTANCE OF BLOCKCHAIN :

Blockchain defined : Blockchain is a shared, immutable ledger that facilitates the process of recording transactions and tracking assets in a business network. An asset can be tangible (a house, car, cash, land) or intangible (intellectual property, patents, copyrights, branding).

Why blockchain is important : Business runs on information. The faster it's received and the more accurate it is, the better. Blockchain is ideal for delivering that information because it provides immediate, shared and completely transparent information stored on an immutable ledger that can be accessed only by permissioned network members. A blockchain network can track orders, payments, accounts, production and much more. And because members share a single view of the truth, you can see all details of a transaction end to end, giving you greater confidence, as well as new efficiencies and opportunities.

15.2. KEY ELEMENTS OF A BLOCKCHAIN :

Distributed ledger technology :

All network participants have access to the distributed ledger and its immutable record of transactions. With this shared ledger, transactions are recorded only once, eliminating the duplication of effort that's typical of traditional business networks.

Immutable records :

No participant can change or tamper with a transaction after it's been recorded to the shared ledger. If a transaction record includes an error, a new transaction must be added to reverse the error, and both transactions are then visible.

Smart contracts :

To speed transactions, a set of rules — called a smart contract — is stored on the blockchain and executed automatically. A smart contract can define conditions for corporate bond transfers, include terms for travel insurance to be paid and much more.

How blockchain works ?

As each transaction occurs, it is recorded as a "block" of data
Those transactions show the movement of an asset that can be tangible (a product) or intangible (intellectual). The data block can record the information of your choice: who, what, when, where, how much and even the condition — such as the temperature of a food shipment.

Each block is connected to the ones before and after it

These blocks form a chain of data as an asset moves from place to place or ownership changes hands. The blocks confirm the exact time and sequence of transactions, and the blocks link securely together to prevent any block from being altered or a block being inserted between two existing blocks.

Transactions are blocked together in an irreversible chain : a blockchainEach additional block strengthens the verification of the previous block and hence the entire blockchain. This renders the blockchain tamper-evident, delivering the key strength of immutability. This removes the possibility of tampering by a malicious actor — and builds a ledger of transactions you and other network members can trust.

15.3. BENEFITS OF BLOCKCHAIN :

What needs to change : Operations often waste effort on duplicate record keeping and third-party validations. Record-keeping systems can be vulnerable to fraud and cyberattacks. Limited transparency can slow data verification. And with the arrival of IoT, transaction volumes have exploded. All of this slows business, drains the bottom line — and means we need a better way. Enter blockchain.

Greater trust

With blockchain, as a member of a members-only network, you can rest assured that you are receiving accurate and timely data, and that your confidential blockchain records will be shared only with network members to whom you have specifically granted access.

Greater security

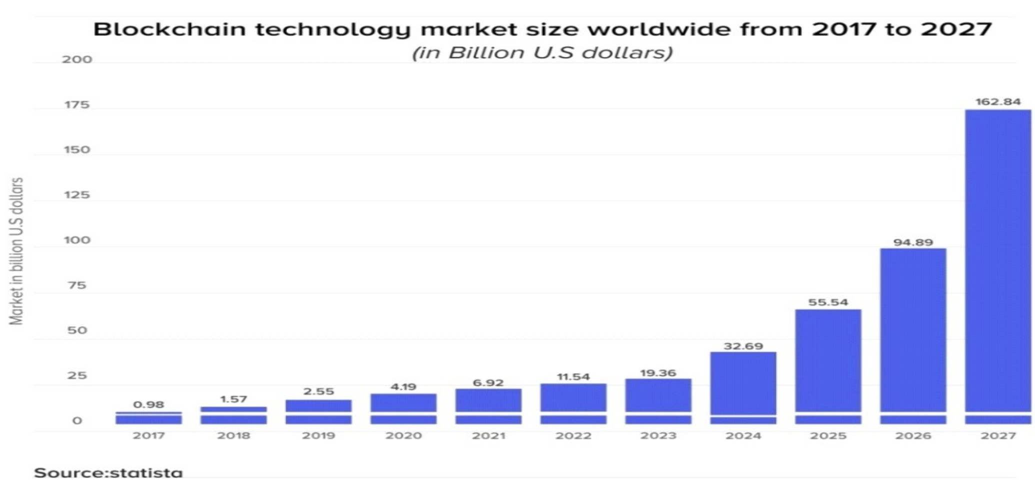
Consensus on data accuracy is required from all network members, and all validated transactions are immutable because they are recorded permanently. No one, not even a system administrator, can delete a transaction.

More efficiencies

With a distributed ledger that is shared among members of a network, time-wasting record reconciliations are eliminated. And to speed transactions, a set of rules — called a smart contract — can be stored on the blockchain and executed automatically.

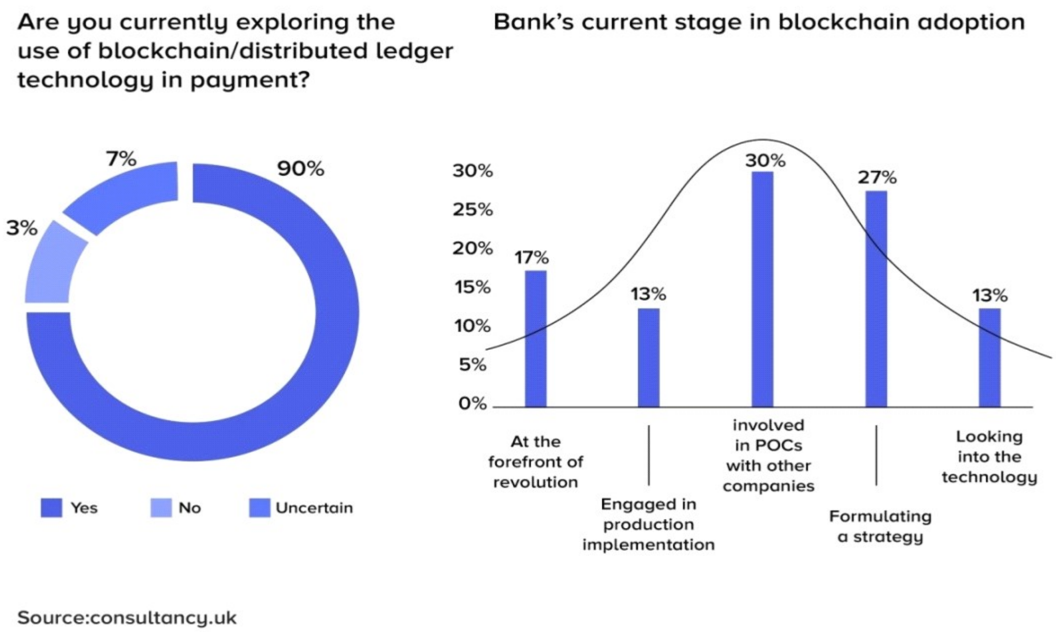
Why are Banks Adopting Blockchain Technology ?

Banking institutions across the globe have taken several moves towards digitalization-driven business models like mobile banking. However, when it comes to blockchain in banking, the efforts have been fairly sidelined. The hesitation that banks are showing contrasts the interest that the blockchain technology is getting across other industries. A sign of which can be seen in the fact that the technology is poised to grow from \$4.9 Billion in 2021 to over \$67.4 Billion by 2026.



However, when you look at things from a bank's angle, the hesitation makes sense. There are very few use cases of blockchain in banking and finance that have rolled out at a mass scale. There are also constant regulatory roadblocks that have been creating a barrier to entry for blockchain.

In spite of these challenges banks have started adopting the technology at a small scale. In this article, we are going to explore the growing role of blockchain technology in banking and the real-world use cases of the technology.



Now, while we will spend this entire article exploring the benefits of blockchain in banking, it is important to know the issues in the current banking system.

15.4. WHAT IS THE PROBLEM WITH THE PRESENT DAY BANKING SYSTEM?

Banks have been in the picture for centuries and have been acting as the facilitator to multiple economic, financial activities which include lending, trading, transaction settlement, payment processing, etc. However, the longevity of the industry has made it stagnant leading to it becoming slow in terms of adopting change.

In its current form, the industry is advancing at a constant speed due to the constant demand it has been witnessing, however it is too slow to innovate. For example, they still need a lot of paperwork, face security vulnerabilities, and have multiple time-consuming and expensive processes in place.

Now that it has been established how banking systems require a change, it is time to dive into the blockchain applications in the banking industry.

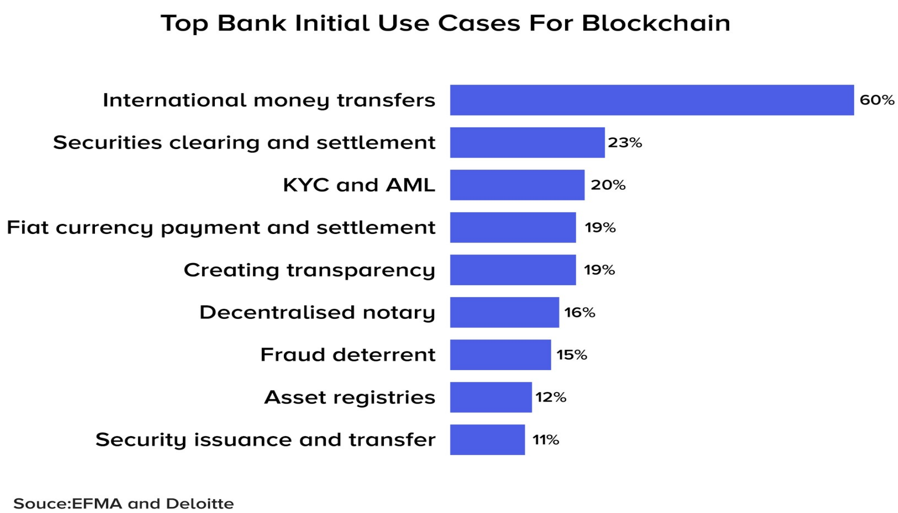
15.5 WHAT ARE THE DIFFERENT BLOCKCHAIN USE CASES IN BANKING ?

The use of blockchain in banking can be seen across a range of processes. Uses that make the industry decentralized.

Payment transfer :

Presently, trillions of dollars get made and wasted because of added fees and slow payments, respectively. For example, if you are in San Francisco and you send money to London, a $25 flat fee will be charged by both your and the receiving bank.

Cryptocurrencies like Ether and Bitcoin are developed on public blockchains which anyone can use to send and receive money without any transaction fees and in real-time. Moreover, since the payment happens on a decentralized network, there is no need to verify the transaction, making the payment transfer faster and cheaper through blockchain in banking and finance.



Settlement and clearance systems :

An average bank transfer takes up to 3 days to settle. This is not just problematic for the consumers but also logistically difficult for the banks. A simple bank transfer today bypasses a complex system of intermediaries from bank to custodial service before reaching the recipient. Here is where blockchain in banking comes into the picture.

Blockchain acts as a decentralized ledger that keeps a track of the transactions transparently and publicly. It means that instead of relying on custodial services, the transactions can be settled in the public blockchain. This is one of the key ways blockchain applications in banking make transactions speedy and simplified.

Securities :

In order to buy or sell debt, stocks, or commodities, banks will have to keep a track of who owns what. To get this information, they connect with multiple exchanges, brokers, clearing houses, and the custodian banks, etc. The involvement of these parties added with the fact that there is a presence of an outdated paper ownership system makes the process slow and prone to inaccuracy and fraud.

Blockchain technology in banking revolutionizes the system by building a decentralized database of digital and unique assets. Through a distributed ledger, it becomes easier to transfer the assets through tokens that represent the assets "off-chain". The benefits of blockchain in banking work around the creation of tokenized security that carries the potential of cutting out the middlemen altogether and lowering the asset exchange fees.

Loans and credits :

Banks tend to underwrite loans on the basis of a credit reporting system. Blockchain in consumer banking opens up the scope of peer to peer loans – one of the most investment-friendly fintech sectors.

Moreover, when a consumer has to apply for a loan, the banks evaluate the risk they will have to suffer in case of non-payment. They take this decision by looking at the credit score, ownership status, and the debt to income ratio. Information they get through credit reports – a centralized system which can be hostile to the customers.

Blockchain in banking comes with an alternate lending system that provides an efficient, cheap, and secure mode of giving personal loans to the customers. With a decentralized registry of payment history, it becomes easier for consumers to apply for loans.

Customer KYC :

The answer to how blockchain works is also the answer to the customer KYC lags in the banking domain.

Banks, in several scenarios, can take up to 3 months to execute all the KYC proceedings that consist of photo verification, address proof checks, and biometrics verification. In addition to the time it takes to verify the customers, it also costs banks a lot to perform KYC. Blockchain technology in retail banking helps ease the KYC process.

Now the use of blockchain in banking can be seen in how it stores the customers' information on the blockchain. This enables the banks to access information related to KYC. An event that leads to personnel cost lowering by 10% that equates to $160 million annually.

So here were the multiple roles of blockchain technology in retail banking. Now, as we mentioned in the beginning of the article, the adoption of blockchain in banking has been slow. But, there is an evident rise in the inclusion of technology in the sector. Let us look at some of the real world use cases proving it.

15.6. What are the different blockchain in banking case studies ?

Blockchain is fast acquiring more support with big banking names showcasing interest in the technology. Let us examine some of them below.

J.P. Morgan :

On 12th April, 2021, J.P. Morgan stated that they are using blockchain for improving money transfers. They are using the technology for lowering the payment processing and the verification time needed for large payments.

Swedish Central Bank :

The bank is experimenting with a release of its own digital currency known as e-krona. Based on R3 Corda distributed technology, the bank has taken a bold step towards the creation of a country-wide usable cryptocurrency.

HSBC :

The bank is using the R3 blockchain platform for enabling Digital Vault – a custody blockchain platform for storing digital assets. The technology helps with lowering the cost of their custodial service to a huge extent.

Asian Bank :

Asian Bank took Appinventiv's help in building a core banking platform that offers functionalities such as wire transactions with cryptocurrency, buying and selling of cryptocurrencies, and wallet recharge. The diligent efforts of our blockchain and cryptocurrency experts led to over 50K crypto transactions for the bank.

With this, we have looked at the many roles of blockchain technology in the banking sector. It is undeniable that the technology is bringing a lot of innovations in the sector around lowered transaction cost, expedited transaction processing, and better data verification.

But for a bank to truly become a name in the future of blockchain in banking phenomenon, they will have to partner with a blockchain development service provider. A service provider that best understands the multi-faceted approach of integrating the new-gen technology in the banking domain.

15.7. KEYWORDS :

* Block chain
* Distributed ledger technology
* Immutable records
* Smart Contracts
* Tangible Asset
* Intangible Asset
* Settlement and Clearance Systems
* Securities
* Loans and Credits
* Customer KYC
* Crypto currencies

15.8. SELF ASSESSMENT QUESTIONS :

1. Define Blockchain.
2. What are the key elements of Blockchain?
3. What are the advantages of Blockchain?
4. What are the different blockchain use cases in banking?
5. What are the different blockchain in banking case studies?

15.9. SUGGESTED READINGS :

1) Blockchain Technology Concepts and Applications, Kumar Saurabh & Ashutosh Saxena, Wiley.
2) Blockchain from Concept to Execution, Debajani Mohanty, BPB Publications.
3) Blockchain Basics & Beyond, Dr. Juliana, Mr. Sulaiman.

Venna Sakunthala