Financial Services

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BLOCK 4: OTHER FINANCIAL SERVICES

Block 4: Other Financial Services – The block covers those services which have not been covered in earlier three blocks such as insurance, plastic money, virtual money and venture capital. This block covers four units from unit nos. 20 to 23. Insurance provides protection over the economic value of assets and is a fast growing industry in our country. Plastic money is another important dimension in financial markets and is growing rapidly in India especially after the demonetization step taken by the government. One important development due to technology is the creation of virtual currencies which can bring in the speed and efficiency required in making payments within the countries and across borders. Venture capital provides seed capital for start-up and first stage financing especially in innovative form of ventures. The block extensively covers these four types of financial services for the benefit of the students.

Unit 20: This unit provides an in-depth knowledge on *Insurance* - The unit covers the concepts of classification of insurance sector and its regulatory frame work. Basic inputs on the insurance service and the concept of reinsurance will give the learners an in-depth understanding of the subject. The unit also covers the insurance industry from international perspective.

Unit 21: This unit deals with *Plastic Money* - Plastic money is one of the important dimensions in financial markets. Plastic money is the substitution for the usage of currency money and is rapidly growing in India and has a huge potential for further growth. The unit covers the features of plastic money and the emerging scenario of credit card business in India.

Unit 22: This unit deals with *Virtual Money* - Virtual Money (VM) is the digital portrayal of a value, issued by a private player that is created, stored, accessed and transferred electronically. Creation of virtual currencies through technologies supported by advances in computing and encryption are bringing markets closer and facilitating transformational changes. The unit explains the concept of virtual money and its variants, demonetization and digitization in the Indian financial system. An introduction to the concept of cryptocurrencies and bitcoin scheme gives the learner a clear picture of the emerging VM scenario. A brief on mobile and digital wallet system and concept of payment banks provides a broad coverage another dimension of virtual money.

Unit 23: This unit deals with *Venture Capital* - Another important funding activity in financial services industry is venture capital (VC). VC is a financing tool for entrepreneurs who are startups and an avenue for investments by high net worth individuals in short term range. The unit covers vividly the concept of VC beginning with its history and evolution. Few chapters are devoted to the various aspects on VC Industry such as objectives and regulatory issues that are impacting the VC industry, VC investment process and risk profile of the VC firms.

Unit 20

Insurance

Structure

20.1	Introduction
20.2	Objectives
20.3	Classification of Insurance
20.4	Regulatory Framework for Insurance
20.5	Insurance Services in India
20.6	Health Insurance Sector
20.7	Reinsurance
20.8	Insurance – From an International Perspective
20.9	Summary
20.10	Glossary
20.11	Self-Assessment Test
20.12	Suggested Readings/Reference Material
20.13	Answers to Check Your Progress Questions

"I don't call it "Life Insurance," I call it "Love Insurance." We buy it because we want to leave a legacy for those we love."

- Farshad Asl, Author, Inspiring Keynote Speaker, CEO of Top Leaders, Inc

20.1 Introduction

The quote explains how insurance operates as risk mitigation and protection mechanism.

In the previous unit, we have discussed upon a recently introduced financial instrument - securitization and its presence in the financial markets. In this unit, we discuss upon another financial instrument called insurance and its services in the financial market.

Insurance is a means of protection over the economic value of assets. It is a contract between two parties whereby the insurer (insurance company) agrees or undertakes to make good the loss suffered by the insured, against a specified risk such as fire and other contingencies or compensate the insured or beneficiaries on the happening of such specified event such as accident or death for consideration of the sum of money paid as premium, for a specified period or during the lifetime

of the contract. The document laying down the terms of the contract is called the insurance policy and the property, which is insured, is the subject matter of insurance. The interest in which the insured has in the subject matter of insurance is known as the insurable interest. Since insurance has been a tool of social security over contingency losses, it can nowadays be also used as collateral security. Above all, it provides a psychological relief from the ill effects of the possible happenings.

20.2 Objectives

After going through this unit, you should be able to:

- Explain how to choose the right insurance policy
- Discuss the regulatory framework within which the insurance sector operates
- Appraise the awareness on the growth and performance of life insurance services in India to understand the prospects that this sector offers
- Demonstrate the key aspects of health insurance sectors and the role played by the Third Party Administrators (TPAs)
- Recognize the benefits derived from reinsurance

20.3 Classification of Insurance

Insurance is of two types- Life Insurance and General Insurance. Let us go into the details of insurance.

Life Insurance - As per Collins dictionary "Life insurance is a form of insurance in which a person makes regular payments to an insurance company in return for a sum of money to be paid to them after a period, or to their family if they die". Life insurance is a contract between an insured who is normally an individual and an insurer who is an insurance company. The contract is the guarantee that an insurer gives in writing to an insured person to pay a certain sum of money, which is the sum assured in the event of the death of the insured person to the nominee or at the end of a policy term to the insured.

Life insurance works as both an investment and safety tool for the family members of the insured after his death. As of 2022, there are 24 life insurance companies in both the public and private sectors. Life insurance Corporation (LIC) is the only public sector and the largest in the country covering the insurance of over 75% of the policyholders, the rest being in the private sector. These insurance companies provide various products suiting the needs of the clients which include term plans, endowment plans, ULIPs, etc., and the premium rates vary based on the plans, applicant's age, medical history, sum assured and other such factors. The market share of life insurers in India is shown in the graphic presentation.

14.40%

14.01%

1 LIC

1 HDFC Standard Life

SBI Life Insurance

ICICI Prudential Life Insurance

Others

Note: *Until July 2022

Figure 20.1: Premiums Market Share in First Year Life Insurance (FY23*)

Source: https://www.ibef.org/industry/insurance-sector-india (Report 2022)

General Insurance – Ensuring the safety of the valued assets is the utmost concern for any individual and general Insurance, which is a non-life-insurance, takes care of this aspect. It is the guarantee given in writing by the insurer (the insurance company) to the owner of the product or valuables other than life, to pay a certain sum of money which is the sum assured in the event of the loss or damage of the item which is insured subject to the payment of the premium by the owner of the product/ valuable regularly. General insurance provides insurance of property such as car, bike, home, valuable metals like gold, silver, against fire, burglary, personal health insurance, accident, illness, hospitalization expenses and Health Insurance and liability insurance, credit insurance, etc. The common types of general insurance are:

Motor Insurance - Covers insurance plans for two-wheeler and car including commercial and private vehicles.

Health Insurance - Covers financial support (hospitalization) against the medical cost for an individual or his family.

Travel Insurance - Covers financial support in case of loss of luggage, passport and belongings while traveling.

Home Insurance - Covers for home and its contents from damages and losses due to any unforeseen event.

Commercial Insurance - Covers the losses that affect the business operations and includes property, engineering assets, liability, marine, employees benefit, business interruption, etc. The business of the top 10 General insurance companies is given in the table hereunder:

Table 20.1: Gross Direct Premium of General and Health Insurers (within and Outside India)

(₹Crore)

S.No.	Insurer	2019-20	2020-21
	Public Sector Insurers		
1	National Insurance Co. Ltd.	15,312.88	14,185.75
2	The New India Assurance Co. Ltd.	29,715.07	31,573.42
3	The Oriental Insurance Co. Ltd.	13,996.01	12,747.42
4	United India Insurance Co. Ltd.	17,515.09	16,704.70
	Public Sector Insurers Total	76,539.05	75,211.29
		(6.76)	(-1.73)
	Private Sector Insurers		
5	Acko General Insurance Ltd.	373.07	422.39
6	Bajaj Allianz General Insurance Co. Ltd.	12,779.77	12,569.53
7	Bharti AXA General Insurance Co. Ltd.	3,134.24	3,159.90
8	Cholamandalam MS General Insurance Co. Ltd.	4,398.49	4,388.21
9	Edelweiss General Insurance Co. Ltd.	146.36	218.57
10	Future Generali India Insurance Co. Ltd.	3,417.49	3,835.23
11	Go Digit General Insurance Ltd.	1,767.86	2,417.62
12	HDFC ERGO General Insurance Co. Ltd.^		
	HDFC ERGO General Insurance Co. Ltd.^^	9,308.40	12,295.10
13	ICICI Lombard General Insurance Co. Ltd.	13,312.84	14,003.09
14	IFFCO Tokio General Insurance Co. Ltd.	7,961.04	8,410.88
15	Kotak Mahindra General Insurance Co. Ltd.	433.39	543.99
16	Liberty General Insurance Ltd.	1,531.37	1,445.71
17	Magma HDI General Insurance Co. Ltd.	1,224.77	1,283.59
18	Navi General Insurance Limited	157.99	104.40
19	Raheja QBE General Insurance Co. Ltd.	158.12	272.22
20	Reliance General Insurance Co. Ltd.	7,465.04	8,310.28
21	Royal Sundaram General Insurance Co. Ltd.	3,666.96	2,822.28
22	SBI General Insurance Co. Ltd.	6,796.97	8,264.86
23	Shriram General Insurance Co. Ltd.	2,466.19	2,138.88
24	Tata AIG General Insurance Co. Ltd.	7,384.53	8,042.06
25	Universal Sompo General Insurance Co. Ltd.	2,859.05	3,052.16
	Private Sector Insurers Total	90,743.94	98,000.96
		(11.63)	(8.00)
	Specialized Insurers		
26	Agriculture Insurance Company of India Ltd.	9,361.24	12,052.57
27	ECGC Ltd.	1,075.47	1,062.28
	Specialized Insurers Total	10,436.71	13,114.85
		(28.08)	(25.66)

Contd.....

Block 4: Other Financial Services

	Stand-alone Health Insurers		
28	Aditya Birla Health insurance Co. Ltd.	872.04	1,300.64
29	Care Health Insurance Ltd.	2,388.99	2,559.75
30	HDFC ERGO Health Insurance Co. Ltd.*	2,521.66	NA
31	ManipalCigna Health Insurance Co. Ltd.	576.19	755.49
32	Max Bupa Health Insurance Co. Ltd.	1,242.89	1,750.78
33	Reliance Health Insurance Ltd.	5.99	-0.01
34	Star Health & Allied Insurance Co. Ltd.	6,865.14	9,388.54
	Stand-alone Health Insurers Total	14,472.89	15,755.19
		(27.47)	(8.86)
	Grand Total	1,92,192.59	2,02,082.30
		(11.43)	(5.15)

^Erstwhile HDFC Ergo General Insurance Co. Ltd. merged with L&T General Insurance Co. Ltd. w.e.f. 01.01.2017.

^^L&T General Insurance co. Ltd. is renamed as HDFC Ergo General Insurance Co. Ltd.

*Erstwhile HDFC Ergo Health Insurance Co. Ltd. merged with HDFC Ergo General Insurance Co. Ltd. w.e.f. 01.03.2020.

Note:

- 1. Figures in brackets indicate growth in per cent over previous year.
- 2. Reclassification/Regrouping in the previous year's figures, if any, by the insurer has not been considered.
- 3. NA indicates that insurer's business was not in operation during the corresponding financial year.

Source: Handbook on Indian Insurance Statistics F.Y. 2020-21; https://www.irdai.gov.in/ADMINCMS/cms/frmGeneral_List.aspx?DF=Creport&mid=11.2

Health Insurance

Medical emergencies can happen at any time and one has to be prepared. The soaring medical costs have made it almost compulsory to own a health insurance plan in India. Health insurance policy provides comprehensive coverage against medical expenses, which include hospitalization expenses, stay in the hospital and other costs related to medical treatments, which include surgery, medicines, doctor's visit fee, nursing, etc. Health insurance protects the insured person against financial risks due to illness or injury that may arise due to accidents. There are health insurance policies, which cover pre-post hospitalization expenses and pre-existing diseases as well.

The types of health insurance plans are indemnity plans and defined-benefit plans. Indemnity plans include mediclaim insurance, individual coverage, family floater coverage, senior citizen coverage and unit linked health plans. The defined benefit plans are critical illness plan, personal accident plan and hospitalization cash benefit plan.

The claim settlement ratio of some of the top health insurance companies in India are provided in the Exhibit 20.1 hereunder:

Exhibit 20.1: List of IRDA Claim Settlement Ratio of Health Insurance Companies 2022

Company	Network Hospitals	Claim Settlement Ratio for FY 2021-22
Edelweiss General Health Insurance Claim Settlement Ratio	Over 3,000	97.01%
Star Health and Allied Insurance Claim Settlement Ratio	Over 11,000	_
Kotak Mahindra Health Insurance Claim Settlement Ratio	Over 4,000	96.38%
HDFC ERGO Health Insurance Claim Settlement Ratio	Over 13,000	99.07%
IFFCO Tokio Health Insurance Claim Settlement Ratio	Over 6,400	99.71%
Bajaj Allianz Health Insurance Claim Settlement Ratio	Over 6,500	98.61%
Reliance Health Insurance Claim Settlement Ratio	Over 8,000	98.16%
National Insurance Claim Settlement Ratio	Over 6,000	_
Care Health Insurance Claim Settlement Ratio	Over 16,500	95.2%
ICICI Lombard Health Insurance Claim Settlement Ratio	Over 6,500	96.93%

Please note that the Claim Settlement Ratio is not published by the IRDAI in their annual report. Instead they publish the Incurred Claim Ratio details and the claim settlement tenure.

 $Source: https://www.paybima.com/blog/health-insurance/best-health-insurance-companies-inclaim-settlement/\#: \sim: text=Some \%20 of \%20 the \%20 companies \%20 have, is \%20 also \%20 recommended \%20 by \%20 customers.$

Example: Leading Motor Insurance Companies in India, 2022

Keeping in view the modern- day life requirements, many general insurance products are made available in the market. Motor insurance is the 2nd most popular insurance on demand in India after health insurance.

Contd....

For the FY2022 until January, Motor insurance accounted for 30.89% of the total market share just behind health with 33.34%. Edelweiss General Insurance (EGI) and Bharti AXA General Insurance are the leading motor insurance companies in India as on 2022.

Source: https://www.ibef.org/download/1651131734_Insurance%20PPT%20%20-%20Feb%202022-min.pdf 2022 Accessed on June 6th, 2022.

Check Your Progress - 1

- 1. What is the policy that provides a pure risk cover where the payment of sum is assured only if the insured dies during the specified period?
 - a. Term Insurance
 - b. Whole Life Insurance
 - c. Endowment Insurance
 - d. Group Life Insurance
 - e. Unit Linked Insurance.
- 2. Name the product that provides the protection and flexibility in investment denoted in units and represented by its net asset value.
 - a. Life Insurance
 - b. Non-life Insurance
 - c. Group Insurance
 - d. Endowment Insurance
 - e. Unit Linked Insurance
- 3. Fire insurance offers cover against the financial loss occurred due to fire during the specified period. Which of the following is **not** a risk coverage scheme under fire insurance?
 - a. Risk coverage under damage or destruction for dwellings and contents thereof
 - b. Risk coverage on loss of profits or total income of the business

- c. Risk coverage under reinstatement or replacement of the property insured
- d. Risk coverages under hospitalization expenses
- e. Risk coverage against stocks lying in different locations
- 4. What is an insurance cover against losses incurred due to omission and errors of the employees working in the organization?
 - a. Fire Insurance
 - b. Marine Insurance
 - c. Motor Insurance
 - d. Liability Insurance
 - e. Industrial Insurance
- 5. Which of the following statement is **true** in respect of fidelity insurance?
 - a. It refers to the risk associated with the transportation of goods through rail, road, sea, post, or air
 - b. It covers the possible risk or financial loss that might occur to a shopkeeper
 - c. This insurance cover protects the organization from the financial loss caused due to the acts of the insured employees
 - d. It a scheme that provides life cover to the employees of the organized sector
 - e. It provides risk coverage against the damage or destruction caused to commercial enterprises

20.4 Regulatory Framework for Insurance

Insurance industry assumes a significant place in the economy. To improve the quality of insurance services in the country, the Malhotra Committee (1993), recommended a comprehensive framework of reforms in the insurance sector. The insurance sector/industry started to emerge in response to the follow-up action on the recommendations of the Committee, where the main elements of the framework were the Insurance Act 1938, LIC Act 1972 and GIC Act 1972 before setting up of the Insurance Regulatory and Development Authority (IRDA) Act 1999. Before the imposition of the IRDA Act 1999, the insurance sector in India comprised of two state-owned institutions namely the Life Insurance Corporation of India (LIC) and the General Insurance Corporation of India (GIC) including its four subsidiaries. The IRDA Act was enforced by the government of India to introduce private insurance companies and welcome foreign investments. This reflected the growth of a diversified insurance sector, comprising both public sector institution and private sector institution offering a wide range of products/policies abiding with the necessary regulatory measures

as enforced by IRDA that governs the insurance business. Later, the insurance profession was given statutory recognition with other professions in India by the Actuaries Act 2006.

20.4.1 Insurance Act 1938

The Insurance Act 1938 is an act that consolidated and amended the law relating to the business of insurance. It extended to the whole of India. ¹Prior to this act, the insurance business was carried by the insurance companies in accordance with the principles of the Company Law 1913. To regulate the activities of the insurance companies, preventing them from being speculative and to enforce them to act on sound accounting principles, the Life Insurance Companies Act 1912 was passed. However, this act discriminated between the Indian and foreign companies. Soon after the Indian insurance companies became a symbol of the Swadeshi Movement, the total insurance business grew to ₹ 298 crores by 1938 from ₹ 22.44 crores in 1914. The number of insurance companies also grew from 44 to 176 during the same period and it was this time that the Government of India appointed a committee to analyze the problem of failed companies and suggest measures. The importance of an independent law to regulate the insurance business was recognized and henceforth the Insurance Act 1938 was legislated and passed. It was the first comprehensive legislation that governed both the life and general insurance businesses and their regulations. The salient features of this Act are:

- It constitutes a department of insurance to supervise and control the insurance business
- Necessitates compulsory registration of insurance companies and submission of annual financial returns
- Provides reserves for initial deposits to allow only serious players in the field
- Regulates compulsory investment of life fund to the extent of 55% in government approved securities
- Prohibits rebate, restricts payment of commission and licensing of agents to bring in professionalism into the business
- Mandates periodical valuation to assess the financial viability of the insurance companies
- Provisions for policyholder's director in the board
- Standardization of policy formats and certification of premium tables by the Actuary

Risk Management and Insurance Planning, Jatinder Loomba, PHI Learning Pvt. Limited, 2013, https://books.google.co.in/books?id=nY27AQAAQBAJ&pg=PA506&dq=salient+features+of+insurance+a ct+1938&hl=en&sa=X&ved=0ahUKEwjJx_rw-IXVAhUKp48KHZBkCq0Q6AEIODAE#v=onepage&q=salient%20features%20of%20insurance%20act%201938&f=false

20.4.2 Insurance Regulatory Development Authority Act, 1999 – IRDA

IRDA is an Act (Act no. 41 of 1999) that provides for the establishment of an authority to protect the interests of the holders of insurance policies by regulating, promoting and ensuring orderly growth of the insurance industry, for matters connected therewith or incidental thereto and also amend the Insurance Act 1938, the LIC Act, 1956 and the General Insurance Business (Nationalization) Act, 1972.

Composition of IRDA

The IRDA consists of a Chairperson and a total of nine members, of whom not more than five would be full-time members, to be appointed by the government from amongst persons of ability, integrity and standing with knowledge/experience of life insurance or general insurance or actuarial services, finance/economics/law /accountancy/ administration/any other discipline which as opined by the government would be useful. Between the chairperson and the full-time directors, at least one person each is required to have a knowledge/experience of life, general insurance or actuarial science respectively.

Duties of IRDA

The duty of IRDA is to regulate, promote and ensure orderly growth of the insurance and reinsurance businesses.

Powers and Functions of IRDA

The powers and functions of IRDA, inter-alia, are stated below:

- i. Issue to the applicant the certificate of registration to renew, modify, withdraw, suspend, or cancel such registration. Registration preference given to companies those provide health insurance.
- ii. Protect the interest of policyholders in matters concerning the assignment of policy, nomination of policyholders, insurable interest, settlement of insurance claim, surrender value of policy and other terms and conditions of contracts of insurance.
- iii. Specify the requisite qualification and practical training for insurance intermediaries and agents.
- iv. Specify the code of conduct for surveyors and loss assessors.
- v. Promote efficiency in the conduct of insurance business and regulate professional organizations to connect with the insurance and reinsurance businesses, levying fees and other charges for carrying out the purpose of the IRDA Act.
- vi. Request or call for information on inspections, conduct inquiries and make investigations including audit of insurers, insurance, intermediaries and other organizations connected with the insurance business.

- vii. Control and regulate rates, terms and conditions that may be offered by insurers in respect of general insurance business not so controlled and regulated by the Tariff Advisory Committee under Section 64 U of the Insurance Act 1938.
- viii. Specification of the form and manner in which the books of account would be maintained and statement of accounts rendered by insurers and insurance intermediaries.
- ix. Regulate investment of funds, margin of solvency and adjudicate the disputes between the insurers and the intermediaries.
- x. Supervise the functioning of the Tariff Advisory Committee.
- xi. Specify the percentage of premium income of the insurer to finance schemes to promote, regulate the professional organization and the percentage of life insurance, general insurance business to be undertaken by the insurer in the rural or social sector.

These aforesaid powers and functions would enable the IRDA to regulate effectively the insurance sector in India.

²Salient Features of the IRDA Act (1999)

- a) The entry of the private sector into the insurance sector in India provides for the removal of the existing corporations (or companies) to carry out the life and general (non-life) insurance businesses in India (As per the second and third schedules of the IRDA Act.)
- b) An Indian insurance company is a company registered under the Companies Act, 2013, in which the foreign equity does not exceed 49 percent of the total equity shareholding, including the equity shareholding of NRIs, FIIs and OCBs.
- c) No Indian insurance company shall allow the aggregate holdings by way of total foreign investment in its equity shares by foreign investors, including the portfolio investors, to exceed 49 percent of the paid-up equity capital of such an Indian insurance company.
- d) Foreign direct investment proposals, which take the total foreign investment in the Indian insurance company above 26 percent and up to the cap of 49 percent, shall be under the government route.
- e) Foreign investment in the sector is subject to compliance of the provisions of the Insurance Act, 1938 and the condition that companies bringing in FDI shall obtain the necessary license from the Insurance Regulatory & Development Authority of India for undertaking insurance activities. For foreign promoters, the maximum limit of 26 percent will always be operational. Thus, they are restricted to hold up to this limit at any stage.

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² http://cyberadvocate.in/mod/page/view.php?id=1251, 2015

- f) The Act gives statutory status for the interim Insurance Regulatory Authority (IRA) set up by the Central Government through a resolution passed in January 1996.
- g) The minimum amount of paid-up equity capital is ₹ 100 crores in case of life insurance as well as general insurance and ₹ 200 crores in the case of reinsurance.
- h) Solvency margin, i.e., excess of assets over liabilities, is fixed at not less than ₹ 50 crores for life as well as general insurance. For reinsurance solvency margin, it is stipulated at not less than ₹ 100 crores in each case.
- i) It is mandatory for the insurance companies to deposit ₹ 10 crores as security deposit before starting their business.
- j) Safeguards the policyholders' funds that include specific provisions prohibiting the investment of policy-holders' funds outside India and provision for the investment of funds in accordance with policy directions of IRDA, including social and infrastructure investments.
- k) Every insurer should provide life insurance or general insurance policies (including insurance for crops) to the persons residing in the rural sector, workers in the unorganized or informal sector or for economically vulnerable or backward classes of the society and other categories of persons as might be specified by regulations made by IRDA.
- Failure to fulfill the social obligations attracts a fine of ₹ 25 lakhs and in case the obligations are still not fulfilled, the license gets canceled.

Issue of Directions

The IRDA is bound by the directions of the Government on policy matters that are other than those relating to technical and administrative matters, which are in writing from time to time, where the decision of the government would be final.

Insurance Advisory Committee

The IRDA constitutes a 25-member Insurance Advisory Committee (IAC) who will represent the interest of commerce, industry, transport, agriculture, consumer fora, surveyors, agents, intermediaries, including brokers, consultants and loss assessors, organizations engaged in safety and loss prevention, research bodies and employees associations in the insurance sector, to advise on matters relating to and make regulations on such other matters as may be prescribed.

Supersession

The Government may by notification and for specified reasons supersede the IRDA for a period not exceeding six months in the following situations:

 When IRDA is unable to discharge its functions, or perform duties on account of circumstances beyond its control,

- Persistent default in complying with any direction given by the government or in discharge of functions or performance of duties imposed on under the provisions of IRDA Act, as a result of which the financial position of the IRDA has suffered; and
- Circumstances that exist under which it renders necessary to do so, in the public interest.

During this supersession period, a person is appointed as a Controller of Insurance (COI) under the Insurance Act, 1938.

Example: IRDA and Govt. of India

It is suggested that the Indian Government can supersede Insurance and Regulatory Development Authority (IRDA). However, the government can also come to the rescue of IRDA. In a case of its kind, the Securities and Exchange Board of India (SEBI) which regulates the securities market, banned 14 life insurance companies including the major ones from selling unit-linked insurance policies (ULIPs). Later the Ministry of Finance intervened to sort out the issue in favour of IRDA.

Source: https://www.thehindu.com/business/companies//article59903126.ece 2021 Accessed on June 7, 2022.

³20.4.3 Insurance Laws (Amendment) Act, 2015

The Insurance Laws (Amendment) Bill, 2015 was passed by the Lok Sabha on 4 March 2015 and by the Rajya Sabha on 12 March 2015. The passage of the bill thus paved the way for major reform amendments in the Insurance Act, 1938, the General Insurance Business (Nationalization) Act, 1972 and the Insurance Regulatory and Development Authority (IRDA) Act, 1999. The Insurance Laws (Amendment) Act 2015 so enacted had seamlessly replaced the Insurance Laws (Amendment) Ordinance, 2014 that came into force on 26 December 2014. This act removes the archaic and redundant provisions in the legislation and incorporates certain provisions to provide the Insurance Regulatory and Development Authority of India (IRDAI) with the flexibility to discharge its functions more effectively and efficiently. It also provides for enhancement of the foreign investment cap in an Indian Insurance company from 26% to an explicitly composite limit of 49% with the safeguard of Indian ownership and control.

Salient Features

Foreign Investments: The extent of foreign investment ceiling applies to the paid-up equity capital of an insurance company and as usual, it is calculated on proportionate basis. i.e., if a resident shareholder holds 65% stake in an insurance company (I) and a foreign investor (F) in turn holds 49% of R, then the extent of foreign investment in I equals 65% x 49% = 31.85.

³ http://pib.nic.in/newsite/PrintRelease.aspx?relid=117043

- ➤ Capital Availability: The Rules to operationalize the new provisions in the Law related to foreign equity investors was notified on 19 February 2015 under the powers accorded by the ordinance. The four public sector general insurance companies were required to be 100% government-owned as per the General Insurance Business (Nationalization) Act, 1972, allowing them to raise capital, keeping in view the need for expansion of the business in the rural and social sectors, meeting the solvency margin for this purpose and achieving enhanced competitiveness, subject to the Government equity not being less than 51% at any point of time. This kind of capital availability to capital-intensive insurance sector generates greater distribution reach to under or un-served areas, more innovative product formulations to meet diverse insurance needs of citizens, efficient service delivery through improved distribution technology and enhanced customer service standards.
- **Consumer Welfare:** The amendment enabled the interest of the consumers to be better served through provisions like enabling penalties on intermediaries'/insurance companies for misconduct. It also disallows multilevel marketing of insurance products to curtail the practice of misselling. The amended law has several provisions for levying higher penalties ranging from ₹ 1 crore to ₹ 25 Crores for various violations including misselling and misrepresentation by agents/insurance companies. With a view to serve the interest of the policyholders better, the period during which a policy can be repudiated on any ground, including mis-statement of facts, etc., will be confined to three years from the commencement of the policy and no policy would be called in question on any ground after three years. The amendments provide for an easier process for payment to the nominee of the policyholder, as the insurer would be discharged of its legal liabilities once the payment is made to the nominee. It is now obligatory in the law for insurance companies to underwrite third party motor vehicle insurance as per IRDAI regulations. Rural and Social sector obligations for insurers are retained in the amended laws.
- ➤ Empowerment of IRDAI: The Act entrusts the responsibility of appointing insurance agents to insurers and provides for IRDAI to regulate their eligibility, qualifications and other aspects. It enables agents to work more broadly across companies in various business categories with the safeguard that conflict of interest would not be allowed by IRDAI through suitable regulations. It is empowered to regulate key aspects of insurance company operations in areas like solvency, investments, expenses and commissions and to formulate regulations for payments of commission and control of management expenses. It also empowers to regulate the functions, code of conduct, etc., of surveyors and loss assessors. It also expands the scope of insurance intermediaries to include insurance brokers, re-insurance brokers,

insurance consultants, corporate agents, third party administrators, surveyors and loss assessors and such other entities, as may be notified by the Authority from time to time. Further, properties in India can now be insured with a foreign insurer with prior permission of IRDAI, which was earlier to be done with the approval of the central government.

- ➤ Health Insurance: The amendment Act defines 'health insurance business' inclusive of travel and personal accident cover and discourages non-serious players by retaining capital requirements for health insurers at the level of ₹ 100 Crores, thereby paving the way for the promotion of health insurance as a separate vertical.
- ➤ Promoting Reinsurance Business in India: The amended law enables foreign reinsurers to set up branches in India and define 're-insurance' to mean 'the insurance of part of one insurer's risk by another insurer who accepts the risk for a mutually acceptable premium' and thereby excludes the possibility of 100% ceding of risk to a re-insurer, which could lead to companies acting as front companies for other insurers. Further, it enables Lloyds and its members to operate in India through setting up branches for reinsurance business or as investors in an Indian Insurance Company within the 49% cap.
- Strengthening of Industry Councils: The Life Insurance Council and General Insurance Council have now been made self-regulating bodies by empowering them to frame byelaws for elections, meetings and levy and collect fees, etc., from its members. Inclusion of representatives of self-help groups and insurance cooperative societies in insurance councils has also been enabled to broad base the representation on these councils.
- ➤ Robust Appellate Process: Appeals against the orders of IRDAI are to be preferred to SAT as the amended law provides for any insurer or insurance intermediary aggrieved by any order made by IRDAI to prefer an appeal to the Securities Appellate Tribunal (SAT).

20.4.4 Insurance Laws (Amendment) Act, 2021

⁴The Insurance Amendment Act 2021 came into effect from 1st April 2021. It aims to increase the inflow of foreign capital into the Indian private insurers by increasing the foreign direct investment (FDI) limit from 49% to 74% in insurance. The increased investment limit is expected to encourage competition and thereby growth. Local private insurers in India have one of the lowest insurance penetration levels globally and this amendment is expected to help such insurers accelerate in their expansion.

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https://www.latestlaws.com/articles/insurance-amendment-act-2021-177447#:~:text=The% 20Insurance% 20Amendment% 20Act% 202021,incentivize% 20competition% 20and% 20thereby% 20growth.

Thus, the amendments incorporate enhancements in the Insurance laws in keeping with the evolving insurance sector scenario and regulatory practices across the globe. The amendments will enable the Regulator to create an operational framework for greater innovation, competition, and transparency to meet the insurance needs of a citizen in a more complete and subscriber-friendly manner. The amendments are expected to enable the sector to achieve its full growth potential and contribute towards the overall growth of the economy and job creation.

20.4.4 Mortality Tables

Insurance companies compile data on the rate of death among groups of people categorized according to age or any other factor such as occupation. Mortality tables detail the rate of deaths occurring in a defined population in a specific period or the probability of survival from birth to any age. This guides insurance companies in fixing premiums based on the age of the insured. In the Indian context, previously all the insurance companies benchmarked LIC's experience during the period 1994-96. However, the Insurance Regulatory Development Authority (IRDA) released Indian Assured Mortality Lives (2012-14) effective from April 1, 2029, which is now the basis for determining life premiums As an economy develops, because of increased quality of life and better medical facilities there is going to be a positive needle movement in longevity. Generally, rich countries have a greater life span than poor countries. Longevity risk is the possibility of higher-than-expected pay-out-ratios to insurers and pension funds due to change in higher life expectancy.

Statistics published by the Union Ministry of Health and Family Welfare in 2022, the life expectancy in India for males is 68.2 years when compared to females which is 70.7 years. This is because of better immunization and nutrition, coupled with prevention and treatment of infectious diseases. This means many people are likely to outlive their savings. Increased life expectancy also exposes the insurance companies and pension funds to longevity risk.

India - Historical Life Expectancy Data			
Year	Life Expectancy	Growth Rate	
2022	70.19	0.330%	
2021	69.96	0.330%	
2020	69.73	0.330%	
2019	69.50	0.330%	
2018	69.27	0.430%	
2017	68.97	0.440%	
2016	68.67	0.440%	

Contd.....

Block 4: Other Financial Services

68.37	0.440%
68.07	0.440%
67.77	0.670%
67.32	0.670%
66.87	0.670%
66.43	0.680%
65.98	0.680%
65.53	0.620%
65.12	0.630%
64.72	0.630%
64.31	0.640%
63.91	0.640%
63.50	0.640%
63.09	0.650%
62.69	0.650%
	68.07 67.77 67.32 66.87 66.43 65.98 65.53 65.12 64.72 64.31 63.91 63.50 63.09

Source: https://www.macrotrends.net/countries/IND/india/life-expectancy

20.5 Insurance Services in India

⁵The Indian Insurance industry consists of 57 insurance companies, 24 in life insurance and 34 are non-life insurers. Among the 24 life insurers, LIC is the sole public-sector company. Out of 34 non-life insurance companies, 27 are general insurers, 5 are standalone health insurers and then is the GIC, the sole national reinsurer.

Among the eight public sector insurers, there are two specialized insurers namely Agricultural Insurance Company Limited (AIC) for Crop Insurance and Export Credit Guarantee Corporation of India (ECGC) for Credit Insurance. Moreover, there are five private sector insurers registered to underwrite policies exclusively in health, personal accident and travel insurance segments. They are Star Health and Allied Insurance Company Limited, Apollo Munich Health Insurance Company Limited, Max Bupa Health Insurance Company Limited, Religare Health Insurance Company Limited and Cigna TTK Health Insurance Company Limited.

⁶The insurance market in India holds a huge business opportunity globally. This may be due to growing incomes and exposure in the industry. India stood at fifth largest life insurance market in the world's emerging insurance markets, growing at a pace of 32-34% year on year. As the Indian insurance industry is a premium sector experiencing a huge potential to grow, the market players were facing a

⁵ https://www.ibef.org/industry/insurance-sector-india (Insurance Industry Report August 2022)

⁶ https://www.ibef.org/industry/insurance-sector-india (Insurance Industry Report August 2022)

fierce competition across its peers thereby encouraging them to launch new and innovative insurance products into the market. Further, foreign direct investment (FDI) in the industry under the automatic method is allowed up to 26% and licensing of the industry is monitored by the insurance regulator the Insurance Regulatory and Development Authority of India (IRDAI).

The development of the insurance sector is assessed in terms of insurance density and insurance penetration. The following Table 20.2 gives an overview of the life, non-life, industry penetration and density in India for a period of 14 years that are measured in terms of GDP and per capita premium of the Indian population.

Table 20.2: Insurance Penetration and Density in India

Vacan	Penetration (%)		Density (USD)			
Year	Life	Non-Life	Total	Life	Non-Life	Total
2001-02	2.15	0.56	2.71	9.10	2.40	11.50
2002-03	2.59	0.67	3.26	11.70	3.00	14.70
2003-04	2.26	0.62	2.88	12.90	3.50	16.40
2004-05	2.53	0.64	3.17	15.70	4.00	19.70
2005-06	2.53	0.61	3.14	18.30	4.40	22.70
2006-07	4.10	0.60	4.80	33.20	5.20	38.40
2007-08	4.00	0.60	4.70	40.40	6.20	46.60
2008-09	4.00	0.60	4.60	41.20	6.20	47.40
2009-10	4.60	0.60	5.20	47.70	6.70	54.30
2010-11	4.40	0.71	5.10	55.70	8.70	64.40
2011-12	3.40	0.70	4.10	49.00	10.00	59.00
2012-13	3.17	0.78	3.96	42.70	10.50	53.20
2013-14	3.10	0.80	3.90	41.00	11.00	52.00
2014-15	2.60	0.70	3.30	44.00	11.00	55.00
2015-16	2.72	0.72	3.44	43.20	11.50	54.70
2016-17	2.72	0.77	3.49	46.50	13.20	59.70
2017-18	2.76	0.93	3.69	55.00	18.00	73.00
2018-19	2.74	0.97	3.70	55.00	19.00	74.00
2019-20	2.82	0.94	3.76	58.00	19.00	78.00*
2020-21	3.20	1.00	4.20	59.00	19.00	78.00

^{*}Rounding off difference

Note:

- 1. Insurance penetration is measured as ratio of premium to GOP
- 2. Insurance density is measured as ratio of premium to total population

Source: https://www.irdai.gov.in/admincms/cms/uploadedfiles/annual%20reports/Annual%20Report%202020-21.pdf

20.5.1 Growth of Life Insurance Services

⁷The life insurance industry is expected to increase at a CAGR of 5.3% between 2019 and 2023. India's insurance penetration was pegged at 4.2% in FY21, with life insurance penetration at 3.2% and non-life insurance penetration at 1.0%. In terms of insurance density, India's overall density stood at US\$ 78 in FY21.

Premiums from India's life insurance industry is expected to reach ₹ 24 lakh crore (US\$ 317.98 billion) by FY31. In FY23 (Until October 2022), premiums from new businesses of life insurance companies in India stood at US\$ 25.3 billion. In October 2022, life insurers' new business premiums grew to ₹ 15,920.13 crores (US\$ 1.94 billion), according to Life Insurance Council data. The gross first-year premium of life insurers increased by 12.93% in 2021-22 to ₹ 314,262.42 crore (US\$ 40.06 billion).

⁸Growth Trend in Life Insurance Segment

Life insurance industry in the country is expected to increase by 14-15% annually for the next three to five years. The scope of IoT in Indian insurance market continues to go beyond telematics and customer risk assessment. Currently, there are 110+ InsurTech start-ups operating in India. These startups are expected to provide a major boost to the industry and help increase India's insurance penetration which plays a crucial role in the overall development of the country.

Sustained economic growth, rising interest rates, and higher investment income contributed to a strong year for insurers. However, there are challenges like the potential for economic slowdown and ongoing disputes over tariffs and trade rules that may cast a shadow in the near term as per a report by Deloitte. The overall insurance industry in India is expected to reach a total of \$280 billion in revenues by 2020 and \$400 billion by 2025 with an average rate of growth for the life insurance industry segment at 15%.

20.5.2 Performance of Life Insurance Services

⁹In life insurance business, India has maintained its tenth rank in the world like previous year. India's share in global life insurance market was 2.90 per cent during 2020. Life insurance premium in India increased marginally by 0.6 per cent (-1.2 per cent inflation adjusted real growth) in 2020-21 whereas global life insurance premium reduced by 3.1 per cent (-4.4 per cent inflation adjusted real growth) when compared to that of its previous year.

⁷ https://www.ibef.org/download/Insurance-January-2017.pdf

https://www.thehindubusinessline.com/economy/life-insurance-industry-likely-to-see-14-15-growth-care/article28786998.ece# dated August 1- 2019; https://www.financialexpress.com/money/insurance/life-insurance-industry-sees-7-premium-growth/1347482/ dated 13.10.2018; https://brandongaille.com/14-indian-life-insurance-

industry-statistics-trends-analysis/ dated 18th March 2019.

⁹ IRDA Annual Report 2020-21

Chart II.1

Channel-wise Individual New Business
Performance in Life Insurance Business

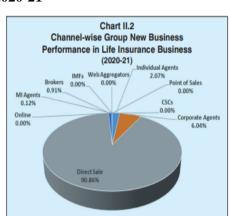
(2020-21)

Magregators Minum Individual Agents
1.58% 1.46%

Direct Sale
7.10%

Corporate
Agents
30.75%

Figures in % of premium



Figures in % of premium

Figure 20.2: Performance Highlights of Life Insurance Business for the Period 2020-21

Source: IRDA Annual Report 2020-21

20.5.3 Government Health Insurance Schemes

Based on the recommendation of National Health Policy 2017, Ayushman Bharat, a flagship scheme of the Government of India was launched. The main objective of the scheme is to achieve Universal Health Coverage (UHC). The scheme will ensure comprehensive need-based health care service instead of a sectoral and segmented approach of health service delivery.

The scheme will holistically address areas covering prevention, promotion and ambulatory care.

The Ayushman Bharat has two components. Health and Wellness Centres (HWCs) and Pradhan Mantri Jan Arogya Yojana (PM-JAY).

Health and Wellness Centres (HWCs)

To deliver Comprehensive Primary Health Care (CPHC), the Government of India in February 2018, announced the creation of 1,50,000 Health and Wellness Centres (HWCs) by transforming existing Sub-Centers and Primary Health Centers. These centers will provide health services both maternal and child health services and non-communicable diseases. The centers will also provide free essential drugs and diagnostic services deliver a range of health care needs of the entire community.

¹⁰Pradhan Mantri Jan Arogya Abhiyan (PM-JAY)

This is the government's ambitious national health protection mission and the largest in the world. The scheme, which will cost the Government around ₹ 12,000 crores per annum, was inaugurated on 23rd September 2018 by the PM Narendra Modi. The entitlement of benefits under this scheme will be based on the Socio-Economic Caste Census (SECC) data of 2011. The beneficiaries would

¹⁰ https://www.pmjay.gov.in/about-pmjay

be entitled to free and cashless medical facilities up to $\stackrel{?}{\sim} 5$ lakh per year covering 1,350 diseases and is available in 10,000 private and government hospitals which will be increased to increase 20,000 in a steady manner. The cost for the treatment will be shared both by central and state governments in the ratio of 60:40. It is estimated to cost $\stackrel{?}{\sim} 12,000$ crore per annum and will be implemented by National Health Agency (NHA).

The salient features of the scheme are:

- World's largest health insurance/ assurance scheme fully financed by the government
- ₹ 5 lakhs coverage per family per year, for hospitalization in both private and public hospitals
- Over 10 crore poor people are entitled to take benefit
- Cashless access to health care services
- No restrictions on family size, age or gender
- Eligibility 3 days of pre-hospitalization and 15 days post-hospitalization expenses
- Includes diagnostics, medicines, physician's fees, room charges, surgeon charges, OT and ICU charges, etc.
- Benefits of the scheme are portable across the country
- Covers 1,393 procedures covering all the costs related to treatment
- Reimbursed on par for both public and private hospitals

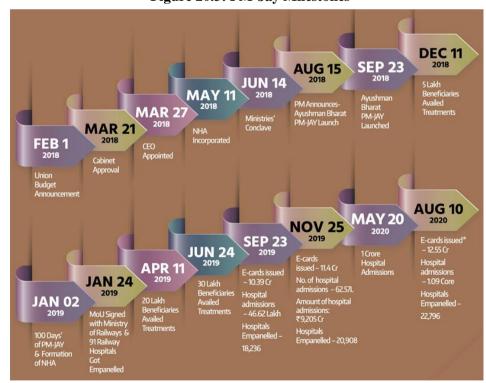


Figure 20.3: PM-Jay Milestones

Source: https://www.pmjay.gov.in/about/pmjay, accessed on 30.11.2022

20.5.4 Performance of Non-Life Insurance Services

¹¹In non-life insurance business, India is ranked fourteenth in the world improved by one rank from last year. India's share in global non-life insurance market was 0.77 per cent during 2020. The Indian non-life insurance sector witnessed growth of -1.3 per cent (-3.1 per cent inflation adjusted real growth) during 2020 whereas the global non-life insurance premium increased by 2.8 per cent (1.5 per cent inflation adjusted real growth) when compared to that of last year.

Example: Post-Covid Recovery of Indian Non-Life Insurance Sector

The non-life insurance sector which got hit with the Covid-19 pandemic is back to pre-covid levels of growth. The sector which registered a single-digit growth in the complete pandemic year of FY21, saw 11.7% growth in FY22. The growth recovery is driven majorly by the stand-alone health insurers. ICICI Lombard General Insurance and Bajaj Allianz General Insurance are the major private players in the non-life insurance sector of India.

Source: https://www.business-standard.com/article/companies/non-life-insurers-report-11-growth-in-premiums-at-rs-2-2-trn-in-fy22-122041101132_1.html 2022 Accessed on June 7, 2022.

20.6 Health Insurance Sector

¹²Health Insurance sector had witnessed a rapid expansion and significant growth in the current as well in the coming years due to changing consumer mind-sets in product choices, social media and behavioral and lifestyle shifts. Insurers offer enormous kind of Wellness Program or Value-Added Service in their products as an additional or optional benefit. Different insurers have different designs and the primary objective of the insurance sector is to increase the engagement and participation of the insured, to improve his/her health, the incidence and severity of claim reduced eventually. The regulatory initiative enunciated in IRDAI Health Insurance Regulations, 2016 facilitates innovation. This regulatory measure offers a framework for wellness and preventive aspects keeping in view the interest of policyholders. The measure is supplemented with certain guidelines that form as a part of the standardization guidelines in Health Insurance, 2016, with the new concept of a pilot product that offers scope for the insurers to try their hand at innovation even while being transparent to the policyholder about the limited life of the product.

Hence, even though there are multiple factors that drive the innovation in health insurance products in the recent past with enhanced coverage, coverage of incidental and ancillary expenses connected with hospitalization, pro-active health initiatives of the insured and so on, insurance is still in the progressive stage in the process of innovation. It is mainly with technological innovation in the areas of distribution, product design and servicing, that it tries to bring in an effective servicing business model in this sector.

¹¹ IRDA Annual Report 2020-21

¹² IRDAI- Annual Report 2015-16, pg: 44

20.6.1 Role of Third-Party Administrators (TPA)

Third-Party Administrators (TPA) are intermediaries (a company) between the insurers and the insured. They help policyholders process and settle the insurance claim. However, they are not responsible for claims rejection or acceptance as it is the job of the insurance company.

Most of the insurance companies outsource certain operational process that includes the following:

- 1. Accepting and verifying the intimations
- 2. Approving the cashless claims put forth by the hospitals
- 3. Settlement of the claim
- 4. Disbursement of claims

TPA's issue identity cards to policyholders along with the health insurance policy. The policyholder before undergoing the treatment submits the card to the hospital authorities for a cashless claim, which is forwarded to TPA by the hospital authorities for approval (Subject to the hospital being approved by the insurance company). TPAs have a major role to play at the time of filing claims. The bills so sent by the hospital authorities to TPA will be scrutinized and forwarded to the insurer for approval and settlement with the hospital. As per the updated list as of March 2021 by IRDA, there are 23 TPAs registered by IRDA.

Example: A Glimpse of Health Insurance Sector in India

Health insurance is one of the major drivers of the non-life insurance market in India. In January, 2022, health insurance accounted for 33.34 % of the non-life insurance market share followed by the Motor sector accounting for 30.89%. The Covid-19 pandemic gave a boost to the rising demand for health insurance. In March, 2021, there was a phenomenal rise of the health insurance companies by about 41% year on year (YoY). In July 2021, health insurance premiums accounted for ₹ 1,753 crores (US\$ 235.11 million), an increase of 27.5% YoY.

Source: https://www.ibef.org/industry/insurance-presentation: 2022 Accessed on June 6, 2022.

Activity 20.2
List down the number of TPAs operating in India. Take any one of the TPAs operating in India and list down the significant role played by such TPA in India in the health insurance sector.
Answer:

Check Your Progress - 2

- 6. The Insurance Act 1938 acts as a consolidation and amends the law relating to the business of insurance. Identify the statement that is not an essential characteristic of this Act.
 - a. It constitutes the department of insurance to supervise and control insurance business
 - b. It necessitates compulsory registration of insurance companies
 - c. It regulates compulsory investment of life fund up to 55% in government approved securities
 - d. It mandates periodical valuation to assess the financial viability of insurance companies
 - e. It allows for rebate and payment of commission and licensing of agents to bring in professionalism into the business
- 7. Which of the following is not a part of the Insurance Regulatory Development Authority of India Act 1999?
 - a. IRDA Act protects the interests of the holders of insurance policies by regulating, promoting, and ensuring orderly growth of the insurance industry
 - b. The duty of IRDA is to regulate, promote and ensure orderly growth of the insurance and reinsurance businesses
 - c. It also amends the Insurance Act 1938, the LIC Act, 1956 and the General Insurance Business (Nationalization) Act, 1972
 - d. The IRDA consists of a chairperson and a total of nine members, of whom not more than three would be full-time members
 - e. The IRDA is bound by the directions of the government on questions of policy, other than those relating to technical and administrative matters
- 8. The Insurance Law (Amendment) Act provides IRDAI with the flexibility to discharge its functions more effectively and efficiently. When was the bill passed by the Rajya Sabha?
 - a. 4th March 2015
 - b. 12th March 2015
 - c. 14th March 2015
 - d. 2nd March 2015
 - e. 22nd March 2015

- 9. Identify the statement that is true in relation to mortality tables.
 - a. Mortality table details the rate of death that occurs in an indefinite population in a specific period
 - b. It guides the insurance companies in fixing the premiums based on the ages of the insured
 - c. The Indian Assured Mortality Lives (2006-08) table during August 2013 acts as a basis for determining the life premiums
 - d. Statistics published by the Union Ministry of Health and Family Welfare reveals that life expectancy in India has gone up by three years
 - e. Increased life expectancy does not expose the insurance companies and pension funds to longevity risk
- 10. The regulatory initiative enunciated in IRDAI health insurance regulations facilitates innovation and offers a framework for the wellness and preventive aspects keeping in view the interest of policyholders. In which of the following years was this framework established in the health sector?
 - a. 2014
 - b. 2015
 - c. 2016
 - d. 2012
 - e. 2013

20.7 Reinsurance

¹³The reinsurance regulations issued by the IRDAI defines a contract of reinsurance as a legally binding document on all the parties that provides a complete, accurate and definitive record of all the terms and conditions and other provisions of the reinsurance contract. The Reinsurance arrangements are not required to be pre-approved by the IRDAI, but they necessitate documentation and filing with the IRDAI within the stipulated period. There are pre-determined sets of regulations that govern the reinsurance arrangements of general insurers and life reinsurers, including how the cross-border reinsurers (those reinsurers who do not have a physical presence in India) can reinsure risks written by Indian insurance or reinsurance companies. Cross-border reinsurers are obligated to file certain specified information with the IRDAI by the end of each financial year, in order to accept any reinsurance from India.

The regulatory framework for the reinsurance of general insurance risks is amended by the IRDAI (General Insurance-Reinsurance) Regulations 2016

¹³ Insurance and Reinsurance in India, June 2017, https://uk.practicallaw.thomsonreuters.com/6-504-6467?transitionType=Default&contextData=(sc.Default)&firstPage=true&bhcp=1#co_anchor_a337487

(Reinsurance Regulations). This guiding principle maximizes the retention within India so that each insurer must maintain the maximum possible retention, encompassing its financial strength and the volume of the business. The IRDAI also requires an insurer to justify its retention policy and gives such directions as may be required to ensure that the Indian insurer is not merely fronting for a foreign insurer.

The placement of reinsurance by Indian insurers is subject to the prescribed order of preference, which provides the hierarchy between the various entities within which an Indian insurer can place its reinsurance business. At present, the General Insurance Corporation of India (GIC) has the right of first offer over any entity to which an Indian insurer can offer its reinsurance business.

In addition, the Guidelines on Product Filing Procedures issued by the IRDAI states that the given insurance product should be a genuine product of an insurable risk with a real risk transfer without permitting any alternate risk transfer or financial guarantee business in any form.

There are various requirements that are provided by the Reinsurance Regulations that the insurers must comply with, as stated below including the filing of.

- The reinsurance program;
- The reinsurance treaty contract wording and excess of loss cover note; and
- Every new reinsurance arrangement entered into.

The Indian regulatory framework prohibits reinsurance arrangements that result in the Indian insurer fronting for reinsurers. There is no statutory or regulatory definition of what amounts to fronting and is essentially a question of the extent of control exercised by the reinsurer, over functions such as:

- Whether to write a risk
- The price to quote for the risk
- The setting of discretionary limits
- The handling of claims
- Placement

IRDAI issued the IRDAI (Registration and Operations of Branch Offices of Foreign Reinsurers other than Lloyd's) Regulations 2015 (Branch Office Regulations) to enable the foreign reinsurers to open branch offices in India. A foreign reinsurer is permitted to transact reinsurance business in India through its registered branch office, subject to the conditions provided by the Branch Office Regulations. For instance, the IRDAI (Lloyd's India) Regulations 2016 (Lloyd's India Regulations), which governs the setting up and operation of the Lloyd's India framework, the syndicates of Lloyd's India, are permitted to transact reinsurance business in India through registered service companies, subject to the conditions provided by the Lloyd's India Regulations.

Example: The Reinsurance market in India

In India, the reinsurance market was under the monopoly of GIC Re until the opening of the reinsurance market to international players around 2014. During 2018-19, GIC Re controlled 81% of the reinsurance market in India amounting to 6.4 billion USD. After 2014, around ten reinsurance companies opened their branches in India. As of 31 March, 2019, Scor, Munich Re, Swiss Re, Hannover Re, Axa Vie, XL Cat, Gen Re, RGA, Allianz Global and Lloyd's were the foreign companies that opened their branches in India. These companies had a market share of 19% as on 31st March 2019.

Source: https://www.atlas-mag.net/en/article/indian-reinsurance-market: 2021 Accessed on June 3, 2022.

20.8 Insurance- An International Perspective

¹⁴The insurance industry is considered a major component of the economy by virtue of the amount of premium it collects covering both the personal and the business risks. The worldwide gross premiums collected by the insurance companies across the countries had increased in all the segments namely life, non-life, or both. The growth of non-life gross premiums in the year 2015 was driven in some countries by the growth in the motor vehicle insurance market. Similarly, the investment returns of insurers also have continued to be positive in most of the countries, impacted by low interest rates, given the importance of (mostly public) bonds in their investment portfolios. When the bonds mature, the insurers were left to invest the proceeds on lower yielding bonds with no choice for large investments.

Technology Innovations in Insurance

The European Union applied a legislative program called the Solvency II Directive. Established on January 1, 2016 this program deepened the EU market integration and increased the international competitiveness of the EU insurers. This modeled the changes in the investment strategies of insurance companies in Europe. Another important aspect is that even though the insurers around the globe have improved their overall customer experience levels, there has always been a general disparity among the ¹⁵Gen Y customers showing an overall lower Customer Experience Index (CEI). These Gen Y customers were likely to engage more regularly, preferring to interact with the insurers at least twice as more frequently than the other segments, especially via social media. With the comfort of advanced technology, more Gen Y customers in the emerging markets of Latin America and developing Asia-Pacific are likely to be ready to purchase insurance from a technology-oriented firm than the traditional one. Likewise, the technologies related to the IoT (Internet of Things) are anticipated to create a

 $^{^{14}\} http://www.oecd.org/daf/fin/insurance/Global-Insurance-Market-Trends-2016.pdf$

¹⁵ World Insurance Report 2016, PDF, Pg no: 7

larger impact in the forthcoming years in the daily consumer life and in turn, the insurance service providers. In future, it seems that it is the Gen Y and the IoT that is expected to present a potential mix for the insurers and they are expected to act as major disrupters to the traditional insurance businesses. It radically affects everything from risk assessments to customer interactions. In addition, IoT is expected to redefine the very notion of insurable risks making the world more connected. Moreover, as the IoT matures and becomes a mainstream, the nature of risk transparency, risk ownership and risk itself is about to shift from a conventional insurance principle making it less relevant. Hence with significant changes and expectations in the market, insurers have started to consider new long-term business models to ensure the ongoing viability connected with decisions, involved in devising short, medium and long-term plans in order to streamline, enhance and transform the business.

Example: The Global Surge in Insurtech

The "fight for the customer" is driving "digital innovation" in the insurance sector. This had led to surge in global insuretechs investments from 7.2 billion USD in 2019 to 14.6 billion USD in 2021. The insuretech are majorly focussed on marketing and distribution channels to provide a unique customer experience on digital platforms and altering traditional approaches.

Source: https://www.mckinsey.com/industries/financial-services/our-insights/creating-value-finding-focus-global-insurance-report-2022 Accessed on June 3, 2022.

20.9 Summary

- Life insurance is a form of insurance in which a person makes regular payments to an insurance company in return for a sum of money to be paid to them after a period, or to their family if they die.
- Life insurance works as both an investment and safety tool for the family members of the insured after the death of the insured.
- General Insurance, which is a non-life-insurance, takes care of this aspect. It
 is the guarantee given in writing by the insurer (The insurance company) to
 the owner of the product or valuables other than life to pay a certain sum of
 money which is the sum assured in the event of the loss or damage of the
 item.
- Health insurance policy provides comprehensive coverage against medical expenses, which include hospitalization stay in the hospital and other costs related to medical treatments, which include surgery, medicines, doctors visit fee, nursing, etc.
- Ayushman Bharat is a flagship scheme of the Government of India with an objective of the scheme to achieve Universal Health Coverage (UHC). It has two components: Health and Wellness Centres (HWCs) and Pradhan Mantri Jan Arogya Yojana (PM-JAY).

- PMJAY is the government's ambitious national health protection mission and the largest in the world. The beneficiaries would be entitled to free and cashless medical facilities up to ₹ 5 lakh per year covering 1,350 diseases and it is available in 10,000 private and government hospitals.
- Third-Party Administrators (TPAs) are intermediaries (a company) between the insurers and the insured. They help the policyholders, process and settle the insurance claim.

20.10 Glossary

Endowment Insurance is a plan in which the claims may arise either by death or by maturity. It covers the risk for a specified period and is the most popular among the life insurance segment.

Insurance is a contract between two parties whereby the insurer (insurance company) agrees or undertakes to make good the loss suffered by the insured.

Mortality Tables provide the rate of deaths occurring in a defined population in a specific period or the probability of survival from birth to any age.

Net Asset Value is the total holdings of ULIPs in terms of the value of an entity's assets minus the liabilities. It is divided by the number of units held by the investors to represent the net asset value per unit.

Pure Endowment Insurance is a plan in which the benefit is payable to the insured only on survival after the specified term.

Reinsurance is a form of insurance cover for the insurance companies, whereby one entity may take all or part of the risk covered under a policy issued by an insurance company in consideration of premium payment.

Term Insurance provides a pure risk cover, where the payment of sum is assured only if the insured dies during the specified period of the term insurance policy.

Third-Party Administrators (TPAs) is an entity that offers outsourcing services to insurance companies. It is a company/ an agency/an organization that is licensed by the Insurance Regulatory Development Authority of India to process claims against the losses insured.

Unit Linked Insurance Policies (ULIP) is a life insurance solution that provides for the benefits of protection and flexibility in investment. The investment is in units and is represented by the value that it has attained called Net Asset Value (NAV).

20.11 Self-Assessment Test

- 1. Explain in detail the concept and types of life insurance schemes in India.
- 2. Enumerate the nature and scope of non-life insurance products in India.

- 3. Describe in detail the different types of losses covered under the fire insurance policies.
- 4. Write a short note on cargo and hull insurance.
- 5. State the salient features of the Insurance Act, 1938.
- 6. "IRDA is an Act (Act no.41 of 1999) that provides for the establishment of an authority to protect the interests of the holders of insurance policies"-Elucidate.
- 7. Explain the Powers and Functions of IRDA.
- 8. Briefly explain the characteristics of the Insurance law (Amendment) Act 2015.
- 9. "Mortality tables provide the death rate occurring in a defined population in a specific period or the probability of survival from birth to any age."- Discuss
- 10. Narrate the growth and performance of life and non-life insurance services in India.
- 11. Describe the role played by Third Party Administrators in the health insurance sector.
- 12. Explain the concept of "reinsurance".

20.12 Suggested Readings/Reference Material

- 1. Anthony Saunders, Marcia Millon Cornett, Anshul Jain (2021), Financial Markets and Institutions, 7th edition, Tata McGraw-Hill Education
- 2. Prasanna Chandra (2020), Fundamentals of Financial M, 7th edition, Tata McGraw-Hill Education.
- 3. Devie Mohan (2020), The Financial Services Guide to Fintech, 1st edition, Kogan Page Limited.
- 4. Siddhartha Sankar Saha (2021). Indian Financial System. 2nd edition, Tata McGraw-Hill Education
- 5. Dr. R. Shanmugham (2020). Financial Services. 2nd edition. Wiley India

20.13 Answers to Check Your Progress Questions

1. (a) Term Insurance

Term Insurance policy is one of the most common life insurance products. This policy provides a pure risk cover where the payment of the sum assured is made only if the insured dies during the specified period of the term insurance policy. In the event of the death of the insured person as specified therein, the nominee is entitled to receive the sum assured. There are no survival benefits and it may sometimes be described as temporary insurance.

2. (e) Unit Linked Insurance

A ULIP is a life insurance solution that provides for the benefits of protection and flexibility in investment. The investment is denoted as units and is represented by the value that it has attained called Net Asset Value (NAV). The policy value at any time varies according to the value of the underlying asset at that time.

3. (d) Risk coverages under hospitalization expenses

All others being true, risk coverage provided for hospitalization expense is not an insurance cover under the fire insurance scheme.

4. (d) Liability Insurance

This insurance covers losses incurred due to the omission and errors of the insured. It includes public liability cover and a professional liability cover. The officers, directors and other individuals holding senior positions are responsible for certain functions and activities within the organization. These individuals can opt for public liability cover policies meant for such professionals.

5. (c) This insurance cover protects the organization from the financial loss caused due to the acts of the insured employees

Fidelity insurance covers the risk against the financial losses caused by the acts of infidelity (omission and commission) of the insured's employees. The various acts of infidelity are forgery, embezzlement, larceny, misappropriation, and default.

6. (e) It allows for rebate and payment of commission and licensing of agents to bring in professionalism into the business

The Insurance Act 1938 is an act that consolidates and amends the law relating to the business of insurance. It extends to the whole of India. It **prohibits** rebate, restricts payment of commission and licensing of agents to bring in professionalism into the business.

7. (d) The IRDA consists of a Chairperson and a total of nine members, of whom not more than three would be full-time members

IRDA provides for the establishment of an authority to protect the interests of the holders of insurance policies. It consists of a Chairperson and a total of nine members, of whom not more than **five** would be full-time members, to be appointed by the government from amongst persons of ability, integrity and standing with knowledge/experience of life insurance or general insurance or actuarial services, finance/economics/law/accountancy/administration/any other discipline which as opined by the government would be useful.

8. (b) 12th March 2015

The Insurance Laws (Amendment) Bill 2015 was passed by the Lok Sabha on 4 March 2015 and by the Rajya Sabha on 12 March 2015. The passage of the Bill thus paved the way for major reform amendments in the Insurance Act, 1938, the General Insurance Business (Nationalization) Act, 1972 and the Insurance Regulatory and Development Authority (IRDA) Act, 1999.

9. (b) It guides the insurance companies in fixing the premiums based on the ages of the insured.

All others being false, the mortality tables guide the insurance companies in fixing premiums based on the age of the insured.

10. (c) 2016

The regulatory initiative enunciated in IRDAI Health Insurance Regulations, 2016 facilitates innovation that offers a framework for wellness and preventive aspects keeping in view the interest of policyholders. The measure is supplemented with certain guidelines that form as a part of the Standardization Guidelines in Health Insurance, 2016.

Unit 21

Plastic Money

Structure

- 21.1 Introduction
- 21.2 Objectives
- 21.3 Parties to Plastic Money
- 21.4 Features of Plastic Money
- 21.5 Product Augmentation
- 21.6 Credit Card Business in India: The Emerging Scenario
- 21.7 Summary
- 21.8 Glossary
- 21.9 Self-Assessment Test
- 21.10 Suggested Reading/Reference Material
- 21.11 Answers to Check Your Progress Questions

"As a child, a library card takes you to exotic, faraway places. When you grow up a credit card does it."

- Sam Ewing, Popular US Baseball Player

21.1 Introduction

The quote is taken given the context of credit/debit cards as plastic money and credit cards have more functional edge.

In the previous unit Insurance, we discussed the concept of insurance, classification of insurance, the regulatory framework within which the Indian insurance sector operates and the performance of life insurance services in India. We also discussed the role played by Third Party Administrators (TPAs) and reinsurance.

Another important dimension in financial markets is the use of plastic money. This unit deals with plastic money - the plastic cards, which are rapidly growing in India. Plastic money refers to the substitution of the usage of currency money at the time when the transaction of buy and sell is taking place, by the usage of a card normally made of plastic (hence the name, plastic cards) representing such substitution. The substitution may either be due to postponement of payment or because of pre-purchase payment on the card that is issued. Plastic money is

perceived to protect the user from the risks of carrying cash and in certain cases vast amount of it. Since it is the exclusive property of the cardholder, it means that it can be used only by him.

¹⁶Developed countries and some third-world countries are also way ahead of India in volumes of e-transactions. An underdeveloped country like Kenya has been using plastic money for payment of goods through mobiles for over a decade, whereas a developing country like India is stuck with 90 percent of its transactions in cash. Being the most cash-intensive economy with 12% of cash to GDP ratio (almost four times that of some of the African countries), demonetization of ₹ 1,000 and ₹ 500 comprising of 86 percent of the nation's circulating cash on 8th November 2016 has been the greatest disruptive move. This step has driven the nation towards a cashless economy, bringing in transparency, curbing black money, improving direct benefit transfers and a giant leap to e-transactions to achieve the goal of digital India. This has led to people (both urban and rural) slowly shifting their payment to digital transactions.

Demonetization has triggered the growth of digital platforms by leaps and bounds. Some of the improvements in digital transactions that followed the demonetization are:

- Surge in e-transactions led Tech Process
- Cash management and payment solution firms scaling up its technology platforms
- NumberMall, a rural e-commerce player linking around 1.5 million mom & pop stores (Kirana shops)
- Aadhar, Jan Dhan Yojana enabling fintech companies to upgrade
- Increased use of plastic cards and wallet payments benefitting e-commerce
- Increased use of mobile wallets for more and more transactions
- Helping banks recover from 43% idle bank accounts

As per a Bengaluru-based company, Innoviti Payment Solutions, the usage of debit cards and credit card transactions has increased to 65% from 40% percent post. The number of online transactions of less than ₹ 250 increased by 177 percent and those above ₹ 500 was about 75 percent.

With RBI aiming to increase POS terminals to 50 lakhs- an increase by 34% by the end of 2021, there will be a surge in usage of Debit and Credit cards in the next two years as per RBI report.

http://www.businessworld.in/article/Demonetisation-And-Its-Positive-Effects-On-Digital-India/09-02-2017-112700/ dated 9th February 2017

21.2 Objectives

After studying this unit, you should be able to:

- Define the term plastic money and the parties involved to it
- Explain the features of the plastic money
- Differentiate various cards in the plastic money
- Interpret the emerging trend of credit business in India

21.3 Parties to Plastic Money

The principal parties to a plastic money transaction are the card issuer, cardholder (or customer), the designated merchant establishment and the franchiser who brings several card issuers under one roof like MasterCard International and Visa International. The roles of these parties are discussed in turn.

21.3.1 Card Issuers

The principal issuers of plastic money are the banks. There are several banks offering plastic money in the Indian market with Citibank leading the pack followed by Bank of Baroda, State Bank of India, HDFC Bank, HSBC Standard Chartered ANZ Grindlays Bank, etc.

The reason for more and more banks diversifying into the plastic money business lies in the high returns associated with this business. For instance, banks charge about 2.5 percent commission from Member Establishments (MEs) selling goods and services through credit cards. For the customers, banks offer a credit period of 30-45 days, but charge about 2.5 percent on all outstanding remaining unpaid on expiry of the credit period. Thus, a single purchase transaction through plastic money, assuming the customer does not pay within the stipulated credit period, will fetch a commission of 5 percent per month to the bank which works out to as much as 60 percent per annum – much more than the minimum lending rate of banks.

The costs associated with the business are the costs of marketing the cards, the cost of plastic for the card which is imported, the credit information costs, the administrative costs associated with activities like credit investigation, processing of applications and controlling receivables, the bad debt losses and the cost of funds invested in card-related receivables.

21.3.2 Cardholders

The cardholders include both salaried individuals and business organizations. The eligibility criteria for individuals to acquire plastic money are predicated on the gross and net annual incomes.

21.3.3 Member Establishments (MES)

Member Establishments (MEs) are establishments enlisted by the plastic money issuer who accept valid credit cards in lieu of cash towards payment for the goods

sold or services rendered by them. While enlisting MEs, their reputation, integrity, standing and popularity are taken into consideration. The volume of business they are likely to generate and the scope for the use of card at that establishment are also considered. MEs include retail outlets, departmental stores, restaurants, hotels, hospitals, travel agencies, garages, petrol bunks, co-operative societies, etc. Based on the type of business, location, turnover, etc., the floor limit for MEs is fixed. Normally, the ME's transactions against an individual credit card should not exceed the floor limit.

MEs will have to pay to the issuer of plastic money a certain percentage of discounts on the plastic money transactions. However, MEs like Indian Airlines or Indian Railways do not pay any discount to the issuer and in such cases, the card issuer collects a transaction fee from the cardholder. For instance, railway ticket purchases and customs duty payments on Citibank card attract a transaction fee of about 2.5 percent on the value of the transaction. Purchase or cancellation of Indian Airlines and other domestic airline tickets on Citibank cards attract a transaction fee in the range of ₹ 35 per ticket.

21.3.4 Member Affiliates (MAs)

The issuer may sometimes enter into a tie-up for the issuance of credit cards. In such cases, the organizations that have tie-ups also issue credit cards of the issuer, to their clients. These organizations are called member affiliates. Credit cards issued by MAs are similar to those issued by the issuer, except that they contain the name and logo of the MA on the face of the card, besides the issuer's name and logo. This arrangement enlarges the scope and operations of plastic money. In addition, the MA can issue cards to its clients without actually having to invest in the elaborate infrastructure required for servicing credit cards.

21.3.5 Clearing Agencies

Typically, a card issuer affiliates itself with MasterCard International or Visa International – the two leading international card issuers that act as clearing agencies. The advantage of this affiliation is that it enables the cardholder of one affiliate to use his card at the MEs of another affiliate.

Then there are the all-important credit card affiliates who allow the use of logo on the issuing bank's card. These credit card affiliates enlist the member establishments on their processing list and allow for faster access to the issuing banks. Credit card affiliates do not directly take part in the individual transaction as an entity. Approximately sixteen credit card logos, which are franchised by credit card issuers who operate in over 150 countries. Affiliates like Visa Card international and Mastercard International account for over 60 percent of card spend.

Some of the major credit card affiliate companies and the base country are listed in the following Exhibit 21.2.

Exhibit 21.2: Major Credit Card Affiliate Companies and its Listed Base Country

Sl. No.	Name of the Affiliate	Base Country
1.	Visa International	USA
2.	Mastercard International	USA
3.	Chase	USA
4.	American Express	USA
5	Discover	USA
6	Citibank	USA
7.	AT&T Universal Card Service	USA
8.	Security National Bank Card Center	USA
9.	The Japanese Card Bureau (JCB)	Japan
10.	Aeon Credit Card Service	Japan

Source: ICFAI Research Center

Example: Issuer Charges on Super Premium Credit Cards

High annual fees are charged on the super-premium credit cards which carry exclusive benefits and are issued mainly to High Net-worth Individuals (HNIs). As per an April, 2022 update, in India, the annual fees range between ₹ 10,000 to ₹ 20,000 and sometimes go beyond 50,000. Axis Reserve credit card is a classic case with an annual fee of ₹ 50,000. This is indicative of the costs incurred by card issuers for the super-premium segment.

Source: https://www.paisabazaar.com/credit-card/7-best-premium-credit-cards-in-india/ mention year 2022. Accessed on June 20th, 2022

21.4 Features of Plastic Money

The features of plastic cards are given below.

21.4.1 Concept of Credit Cards

The first credit cards were issued by Diners Club in 1951 to its 200 customers. They were allowed to use credit cards at 27 restaurants in New York. Later The Bank of America introduced its "Bank Americard" in 1959 in California, the USA. It was licensed in other states of the USA in 1966 and was renamed Visa in 1976.

The first credit card to appear in India was the Diners Club card in 1970. Though some public sector Banks introduced credit cards in the 1980s, it was in the 1990s, with the entry of Citibank in the market and its takeover of the Diners Club card business in India, that the credit card activity began to grow rapidly. In recent times, a variety of plastic cards including credit cards, charge cards, debit cards, etc., are in use.

A credit card can be viewed as a payment mechanism that enables the holder of the card to purchase goods (or services) without parting with immediate cash; and make a one-time payment at the end of a specified period (known as the billing cycle which is usually a month) with a provision for spreading this payment over several easy installments. In this way, the cardholder manages to postpone the expenditure by the usage of card availing credit from the issuer of the card. It should be noted that credit is given by the issuer of the card and not by the member establishment that had accepted the usage of card on purchase by the cardholder. Thus, we find that credit card is essentially a "Pay Later Product" along the dimension of time for settlement or payment. Credit cards are a form of consumer loan, a revolving credit account that has a credit line of a specific amount that can be borrowed against in part or in full. As the outstanding balance is paid, the available credit line is restored for use again.

21.4.2 Concept of Charge Card

Charge card is a variation of plastic money where the payment for the purchase of goods is done within a month immediately after the purchase. Whole of the amount of purchase is paid by the cardholder (normally) within a month of purchase of goods and therefore, there is no carry forward of amount for subsequent payment. The payment may be made either by direct transfer through cheque or cash or may be made by allowing transfer from the designated bank account – not necessarily with the issuer bank. American Express (Amex) is one of the companies providing charge cards in India as of now with its gold card variant. Charge cards come with a higher limit, sometimes even with no pre-set spending limit compared to credit cards. Unlike in the USA wherein you can get the card easily, in India, Amex Cards are available only in metro cities and they are choosy in issuing cards. They currently issue only to HNI customers with 6L or more annual income for both salaried and self-employed individuals. It however comes with lots of benefits, giving the client a premium feel as they give special treatment to the client when he swipes the American Express Card with the merchant.

21.4.3 Credit Card vs. Charge Card

Though both essentially give credit to the cardholder, charge card and credit card differ in the parameters shown in Table 21.1.

Table 21.1: Credit Card and Charge Card Parameters

Parameter	Credit Card	Charge Card
Issuance	Based on financial evaluation	Based on the amount in
	and creditworthiness of	the account designated
		for charge and by
		financial evaluation

Contd....

Block 4: Other Financial Services

Payment Period	Revolving credit payment – normally within 45 days of purchase	Normally within 30 days of purchase
Amount of payment	Revolving credit payment- minimum of 5 percent of the purchase	100 percent of the purchase
Interest Rate	2.5 percent – 3 percent per month depending on the type of card and issuing bank	No interest is charged, as there is no extension of the payment period. Penalty may, however, be levied in case of default
Annual Payment and Commission	Only annual payment – no commission is charged	Both annual payment, and commission is charged
Maximum Amount of Purchase	Depending on the creditworthiness, usually 5 times the net income of the individual	No preset spending limits

Source: ICFAI Research Center

The credit card is built around the revolving credit concept. The card carries a preset limit for spending which can be utilized by the cardholder during the specified period say, a month. At the end of the month, the holder needs to pay about 5 to 10 percent of the outstanding value of purchases and liquidate the balance in easy installments over the next few months. Of course, the balance outstanding at the end of a month carries a rate of interest of 2 percent to 3 percent per month and the interest associated with the revolving credit constitutes the major source of revenue for the issuer.

A charge card, on the other hand, is a convenience instrument, not a credit instrument. Under this facility, the cardholder needs to make a consolidated payment to the issuer for all purchases affected with the card during a specified period (usually a month). Bills are payable in full on presentation which implies that there are no interest charges and no pre-set spending limits either. The card issuer's principal source of income is, therefore, the discount collected from member establishments (MEs) which is substantially higher than what the credit card issuer collects from its customers. Among the different types of cards issued by Citibank, the Diners' Club Card of Citibank falls within the category of charge card while Citibank Classic falls within the category of credit card.

21.4.4 Debit Card

Debit card is a plastic cheque on demand. Unlike a credit card that is a 'Pay Later' product, a debit card is a 'Pay Now' product where the customer's account with the issuer is immediately debited to the extent of the value of transaction.

The debit card program requires a terminal, known as the 'Point of Sale' (POS) terminal, at every point of purchase. The customer, on making the purchases, inserts the card that has a magnetic strip at the back, into the blot of the machine, while the merchant enters the value of the transaction. The customer, meanwhile, keys in the PIN that is known only to the cardholder and the bank. The machine places an automatic call, checks the balance in the account and at the same time, reduces the balance to the extent of the transaction value. The merchant's account, in turn, is credited for the transaction value. The merchant benefits by payments that are secured quickly and he has less cash on the premises. For the banks, the advantage lies in minimized risk as the PIN code ensures risk-free transactions. Maestro International – a 50:50 joint venture between Euro Pay and Mastercard – is a major player in the market for debit cards with 200 million debit cards in circulation; and with more than 2,50,000 merchant establishments all over the world. For easy reference, the principal differences between credit cards and debit cards are summarized in Table 21.2.

Table 21.2: Credit Cards vs. Debit Cards

Credit Cards	Debit Cards
'Pay Later' product	'Pay Now' product
Can avail credit for 30-52 days	Instantaneously debited to customer's account
No access to current and savings account	Direct access to current and savings account
Not essential to open a bank account	Essential to open a bank account
Sophisticated telecommunication network is not required	Point of sale terminals to be installed at merchant establishment and hence are capital intensive
Holder not required to have the amount in the account to the extent of the transaction	Bank account must have the required amount to the extent of the transaction
Risk of fraud exists	Risk minimized through PIN-based system

Source: ICFAI Research Centre

21.4.5 RuPay Card

The name is derived from the words 'rupee and payment - RuPay' and is India's indigenous card platform created by the national payments corporation of India which will allow all Indian banks and financial institutions in India to participate in electronic payments. A highly secure network protects against anti-phishing. RuPay is widely accepted across all ATMs, POS devices and e-commerce websites across India and is a substitute to international payment networks such as visa and master.

Promoted by ten top banks that include State Bank of India, Punjab National Bank, Canara Bank, Bank of Baroda, Union Bank of India, Bank of India, ICICI Bank, HDFC Bank, Citibank N. A. and HSBC, the RuPay presently has collaborated with almost 600 international, regional and local banks across the country. RuPay has expanded internationally with its footprint in UAE, Bhutan and Singapore and has tied up with several global payment networks.

21.4.6 Operational Aspects

A Credit Card enables its holder to make purchases/avail of the services at various designated Merchant Establishments (MEs) like departmental stores, star hotels, airlines, railways, etc. who will accept all valid credit cards in lieu of cash payment.

Issuance: A credit card is issued by the sponsor bank to the cardholder after due evaluation of the creditworthiness and financial status of the prospective cardholder. The eligibility norms for getting a credit card are more or less the same across different issuers. The minimum income requirement for both salaried and self-employed to own a basic credit card (called gold/silver card in most cases) is ₹ 1,50,000-1,80,000 a year.

However, credit card issuers may do more due diligence in the case of selfemployed applicants owing to higher volatility of income. Banks may ask for different income proofs such as tax return documents for the last 2-3 years and other business details such as client list and orders on hand. At the time of issuance of a card, a credit limit is specified above which the cardholder cannot purchase on the card within one billing cycle. The credit limit is determined at the discretion of the sponsoring bank say at 5 times the net monthly salary (or income) of the individual or 20 percent of the gross annual income.

If the cardholder follows the payment schedule satisfactorily, then the bank may sometimes consider a temporary increase in the credit limit on request. The enhancement of the credit limit maybe 10-50 percent of the previous limit for a period of around 3 months. Stanchart and Citibank mention the following multipliers to set credit limits based on income levels: 2.5 for classic cards, 3.5 for executive cards, and 4 for the gold cards.

Once the card is issued by the bank by charging the entrance fee and annual fee in advance, for every subsequent year of renewal of the card, the cardholder should pay an annual fee to the sponsor. This fee is irrespective of the frequency of use of the card. It should also be noted that there is no stipulation on the minimum number of times a card has to be used in a year for the purpose of renewal of the card.

Even today, banking customers fear losing money to fraudulent instances such as fishing and unauthorized transactions while dealing with the point of sales online

banking services and credit card products respectively, due to lack of total protection policy to shield them from loss in electronic transactions.

To deal with this distress sign, the banking regulator RBI has eluded the industry to promote a 'zero liability' policy for lost or stolen credit cards, to protect the consumers from liability arising out of fraudulent use of his card.

In India, credit card issuers have a provision in their contracts with the customers that the company is not liable for the fraud unless the customer reports the loss immediately. In short, the onus of liability shifts to the card issuer only after the intimation from the customer to the financial institution about the mishap.

Purchase

The credit card is operational immediately on receipt of the card. Purchases may be made once the cardholder signs on the back of the card – which will be used as a verification parameter by the member establishment. There is no limit on the amount of purchase as long as the purchase amount does not exceed the credit limit cumulative with all other purchases within a billing cycle. The billing cycle is generally for 45 days starting from the calendar month of subscribing to the card, where the payment is made 15 days after the calendar month ends. That is, if a purchase is made immediately after the start of the calendar month, credit – equivalent to the amount of purchase – will be available for 45 days. Billing period, however, may vary depending on the type and issuer in few cases.

When a cardholder purchases anything, he presents his credit card to the merchant establishment instead of paying cash. The retailer checks the number on the card against the Hot List or Warning Bulletin provided to him by the issuer. This authenticity test proves whether the cardholder is the genuine owner of the card or not. The cardholder is also required to sign on the voucher and the signature has to tally with the one on the credit card.

Collection

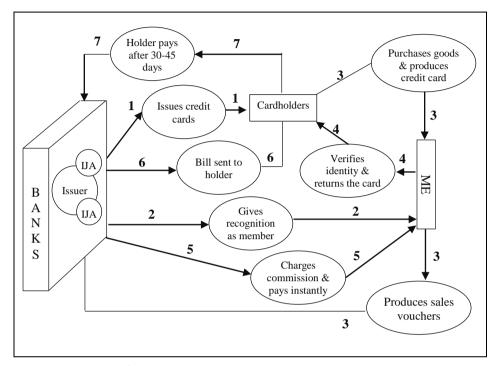
After the purchase is transacted, the ME approaches the issuing bank¹⁷ or its clearing representative and claims the amount through a copy of the sales vouchers and purchase statement. The bank would discount the amount payable by 2-3 percent (varying from bank to bank) and pay it to the ME. The frequency of such transfer of money from bank to ME depends on the number of times the ME approaches the bank. Normally, ME approaches the bank within a day after the purchase is made.

The value of the transaction is included in the statement mailed to the cardholder at the end of the billing cycle.

¹⁷ The ME may also approach any other bank, which is also a member of the same affiliate for payment. In such an event, the commission is shared by the issuing, bank and other bank, which is known as acquiring bank.

The process is schematically depicted in Figure 21.1.

Figure 21.1: Network between the Issuer/Member Affiliates, Cardholder and Merchant Establishment



Source: ICFAI Research Center

Credit cards offer the benefit of revolving credit. This facility permits the cardholder to choose how he wants to pay for the amount due at the end of a billing cycle. The revolving credit facility offered by Citibank operates as follows:

Citibank calculates a Minimum Amount Due (MAD) that is equal to 5 percent of the aggregate value of the transactions included in the statement for a particular billing cycle. Indian banks insist on 10 percent MAD. If there are some minimum amounts due with respect to the past billing cycles, then such amounts are added to the MAD of the current billing cycle; and the resulting amount has to be paid by the cardholder within the specified credit period. The outstanding carried forward by the cardholder attract a service charge @ 2.5 percent per month calculated as per the Average Daily Balance Method.

In fact, the annual renewal costs do not give more income to the credit card issuing entities, but the interest rate paid on the amount that is carry forwarded in every billing cycle does. The 'buy now and pay later in parts' ad campaign launched by Citibank plans to induce the cardholders to carry forward some amount by paying MAD.

¹⁸Kisan Credit Card

Similar to Retail credit cards, the Kisan Credit Card scheme (KCC) was launched in 1988 to provide timely credit support under a single-window scheme with flexibility and in a simple manner to farmers for purchase of agriculture inputs (seeds, fertilizers, pesticides, etc. and draw cash for their production need). The KCC scheme is implemented by commercial banks, RRBs, small finance banks and cooperatives.

The objectives of the KCC include meeting the short-term requirements for cultivation of crops, post-harvest expenses, household consumption requirements, working capital for maintenance of farm assets and investment requirements pertaining to agricultural activities.

All farmers who are owner cultivators, tenant farmers, oral lessees & share croppers, Self Help Groups (SHGs)/Joint Liability Groups (JLGs) of farmers are eligible for KCC.

Fixation of Credit limit under KCC is based on Various Criteria as Shown in Exhibit 21.3.

Exhibit 21.3: Fixation of Credit Limit Criteria under KCC

	Criteria	Credit Limit
All farmers other than	First year	As per district level
marginal farmers		technical committee
(Single crop)	Second and	
	subsequent years	First year limit + 10% of
		the limit towards cost
		escalation and similar
		quantum in subsequent
		years
All farmers other than	First year	The limit is to be fixed
marginal farmers		depending upon the crops
(more than one crop)		cultivated as per proposed
		cropping pattern as per
	Second and	District level technical
	subsequent years	committee
		First year limit + 10% of
		the limit towards cost
		escalation and similar
		quantum in subsequent
		years

Contd....

¹⁸ Source- RBI/2018-19/10 FIDD.CO.FSD.BC.No.6/05.05.010/2018-19 dated July 4, 2018

Block 4: Other Financial Services

Term Loan for investment	Towards land development, minor irrigation, purchase of farm equipment and allied agricultural activities	Long-term loan requirement will be the Maximum Permissible Limit (MPL).
For Marginal Farmers	The composite KCC limit is to be fixed for a period of five years	A flexible limit up to ₹ 50,000 may be provided (as Flexi KCC) based on the land holding and crops grown and Small term loan for the purchase of farm equipment(s), establishing mini dairy/backyard poultry as per the assessment of the Branch Manager without relating it to the value of the land

Source: Reserve Bank of India

Mode of disbursement

Can be either through the bank branch, cheque, debit card, Business correspondent, POS, with input dealers, mobile-based transfer transaction at input dealers and Mandies, etc. In the case of long-term loans for investments, the release will be based on installments.

Review and renewal

Banks may determine the validity period of KCC and its periodic review for either continuation /enhancement/ cancellation of the facility depending upon the increase in cropping area/pattern and performance of the borrower.

The bank because of natural calamities can grant an extension and/or re-schedule the period of repayment. When the proposed extension is beyond one crop season, the aggregate of debits for which extension is granted is to be transferred to a separate term loan account, with a stipulation for repayment in installments.

Rate of Interest (RoI): As stipulated in DBR Master Directions on Interest Rate on Advances.

Repayment

May be fixed by banks as per the anticipated harvesting and marketing period.

The term loan will be normally repayable within a period of 5 years depending on the type of activity as per the existing guidelines.

Margin- To be decided by the banks.

Security-

- **Hypothecation of crops:** Nil security up to ₹ 1.00 lakh.
- With tie-up for recovery: Banks may consider sanctioning loans on hypothecation of crops up to a card limit of ₹ 3.00 lakh without insisting on collateral security.
- Collateral security: Collateral security may be obtained at the discretion of the bank for loan limits above ₹ 1.00 lakh in case of non-tie-up and above ₹ 3.00 lakh in case of tie-up advances.

In states where banks have the facility of on-line creation of charge on the land records, the same shall be ensured.

Classification of NPA – As per the extant guidelines on income recognition and asset classification.

Example: Rupay Card Network

Rupay is the indigenous card payments network developed by the National Payments Corporation of India (NCPI) in 2012. It was designed to become a domestic price setter for Indian banks who have to pay high costs for using the only existing international networks of Visa and Mastercard. In early 2021, Rupay's market share in India stood at 60%.

Source:https://www.moneycontrol.com/news/business/why-has-rupay-rattled-visa-and-mastercard-7777841.html year 2021 Accessed on June 17th, 2022.

Check Your Progress - 1

- 1. Who among the following is not a party to plastic money transactions?
 - a. Designated merchant establishment
 - b. Franchiser like visa
 - c. Cardholder
 - d. Card issuer
 - e. Sales tax department
- 2. Which of the following is not a feature of a charge card?
 - a. Payment period is normally within 30 days of purchase
 - b. Generally, no spending limit
 - c. Issuance of the card based on financial evaluation

- d. Revolving credit payment-minimum of 5% of the purchase on or before the payment period
- e. Amount of payment is 100 percent of the purchase on or before the payment period
- 3. Which of the following is not a feature of a credit card?
 - a. Maximum amount of purchase depends on the creditworthiness of the cardholder
 - b. Generally, no spending limit
 - c. Only annual payment and no commission is charged
 - d. Card is issued based on financial evaluation and creditworthiness of cardholder
 - e. Interest on outstanding beyond payment period is charged at 2.5% to 3% per month depending upon the type of card and issuing bank
- 4. Which of the following is a feature of a debit card?
 - a. It is a pay later product
 - b. No access to current and savings account
 - c. Essential to open a bank account
 - d. Cardholder can avail 30-52 days of credit
 - e. Maximum amount of purchase depends on the creditworthiness of the cardholder
- 5. Which of the following statements is false in respect of plastic money?
 - a. Debit card is a plastic cheque on demand
 - b. Credit card is a pay later product
 - c. Generally, a card issuer affiliates itself with Mastercard International or Visa International
 - d. Only salaried individuals are cardholders
 - e. Because of high returns more banks are diversifying into the plastic money business

21.5 Product Augmentation

Credit card industry in India, since its beginning in 1982, grew at a steady rate in the '80s. There has been rapid growth in the industry in the last 5 years. The issuers of credit cards have begun to offer much more than just credit to cardholders. The cardholders have been offered music systems, executive diaries, subscriptions to business magazines and other such goodies for renewal/entry into a credit card. Of late, the additions have been increasing due to the competition

that is beginning to hot up. Some of the augmenting features of credit cards in India are given below:

- a. **Personal Accident Insurance:** Some issuers provide free insurance cover against loss of life due to accidents. For air accidents, the cover could range from rupees four lakhs to rupees forty lakhs and for non-air accidents it could range from rupees one lakh to rupees three lakhs.
- b. Cash Withdrawal Facility: Credit cards typically carry a predetermined credit limit and a cash limit. Cash withdrawal may either be through ATMs of the designated bank branches or over-the-counter cash payment. The interest rate that is charged on cash withdrawal is much higher than in the case of normal carry forwarding of credit in purchasing transactions.
 - *Example:* Citi card holders can avail of an emergency cash advance at the 24-hour ATMs (Automated Teller Machines) of Citibank or from designated banks at centers where Citibank does not operate ATMs.
- c. **Temporary Increase in Credit Lines:** Cardholders with a good credit recording can seek a temporary increase in their credit limits. A Citi Card holder, for instance, can increase his credit limit by 25 percent for 3 months. (Subject to revision)
- d. "Add-On" Facility: The spouse or the parents or the children (over 18 years) of the cardholder is entitled to add-on cards on terms. The cardholder assumes the responsibility of honoring the charges incurred on the additional card. In recent times, an add-on facility is being given free of cost for initial subscription year as an incentive. Otherwise, an annual fee is payable for the purpose of issuing and servicing an add-on credit card.
- e. Levered Investment Facility: The cardholders are often allowed to subscribe to designated equity or debentures issued in the primary market or subscribe to design schemes floated by mutual funds using their cards. Besides, obviating the need to make a substantial initial investment, the cardholders can liquidate the amount borrowed over a specified number of installments with interest.
- f. **Affinity Cards:** These cards are issued by the sponsor banks especially for a particular section of people who take pride in the vocation or alma mater making them periodically donate some amount to improve the cause they love.

The Standard Chartered Bank (Stan Chart) has introduced affinity cards in India. Under the affinity members of the program, alumni members of educational institutes will receive a credit card bearing the logo of their institute. In terms of the program, whenever a card member spends on this card, a portion of the spend is contributed to the institute. Stan Chart has said that alumni associations of many institutes such as Doon School, Mayo College, Scindia School, IIT Delhi and Mumbai have already enrolled in this program.

To commemorate India's 50th year of Independence, Citibank has also launched affinity cards with the Indian Army and the Indian Air Force. These cards were to be made available to all commissioned officers of the said forces above the rank of second lieutenant and pilot officer, respectively. To provide maximum benefits to the Indian Armed Forces, these cards were issued along with an embodied photograph of the customers. They were specially designed to include the logos of the two forces along with that of the 50 years of Independence. The fee for the first year has been waived as a special case in these cards and the renewal fee was quite nominal.

Citibank NA and the World Wide Fund for Nature (WWF) launched the WWF-Citibank-Visa card, an affinity card program to support environmental conservation. Holders of the WWF Citibank credit card will be entitled to value-added benefits such as a 10 percent discount on WWF products and invitations to WWF India's extensive range of activities.

Apart from these features which increase the usability of the card while offering certain advantages for payment by cards, there are certain other features/schemes that are floated from time to time. These schemes induce purchases by the cardholder rewarding the cardholder with incentives and discounts in future purchases on the card.

Example: ICICI Bank MasterCard World Debit Card

The ICICI's MasterCard World Debit Card is packed for "convenience and comfort" of the customer. It offers accident insurance of $\ref{thmatcharge}$ 20 lakhs, personal accident insurance of $\ref{thmatcharge}$ 10 Lakhs and purchase protection of $\ref{thmatcharge}$ 2.5 Lakhs. The customers get 2 reward points on every purchase of $\ref{thmatcharge}$ 200. Cash withdrawal limits at ATMs range from $\ref{thmatcharge}$ 1 lakh for saving account holders to $\ref{thmatcharge}$ 2 lakhs for current account holders and the flexibility of $\ref{thmatcharge}$ 2 lakhs daily purchase limit for the former and $\ref{thmatcharge}$ 5 lakhs for the later.

Source: https://www.fincash.com/l/pf/icici-debit-card year 2022. Accessed on June 17, 2022.

Activity 21.1
Conduct a study to find out which bank in India charges the highest interest on credit card outstanding to cardholders.

21.6 Credit Card Business in India: The Emerging Scenario

¹⁹Based on the data provided by the National Payment Corporation of India, the increase in credit cards issued by banks in India has been significant in the last year. The number of credit cards issued has increased by a whopping 25% at 4.42 crore in December 2018, compared to 3.54 crore last year while at the same period, there has been a substantial increase in the number and value of transactions. Thus, the credit card segment is growing steadily and is being driven by the top three private lenders such as SBI Cards, ICICI Bank and HDFC Bank that have been expanding their unsecured credit card portfolio. SBI Card is the second-largest credit card issuer after HDFC Bank in the country, with 8.8 million outstanding cards as of June 2018 with a total asset base of 195.93 billion rupees. ²⁰According to a World Bank report, about 229 million Indians were still unbanked in 2021. This makes the lack of a bank account or formal credit history a major disruption for lenders and borrowers alike.

²¹The Figure 21.2 below gives us an idea regarding the transaction details of credit cards over the past 4 years.

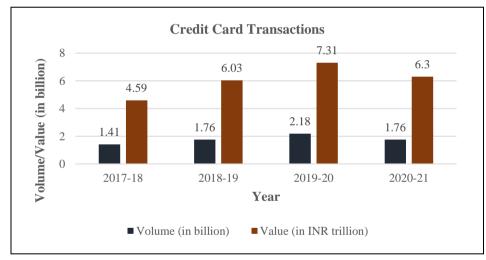


Figure 21.2: Transaction Details of Credit Cards over the Past 4 Years

Source: ICFAI Research Center

²²It was forecasted that the number of credit cards usage in India would reach around 44 million and the number of debit cards usage around 970 million by 2025. India was by far the country with the most debit cards in use worldwide.

¹⁹ https://www.thehindubusinessline.com/money-and-banking/the-right-swipe-at-25-credit-card-business-sees-robust-growth-in-2018/article26439877.ece# dated 5th March 2019;

https://yourstory.com/2019/04/indian-payments-space-future-debit-credit-cards dated 8th April 2019

²⁰ https://economictimes.indiatimes.com/wealth/spend/as-indias-demand-for-credit-rises-can-the-credit-card-industry-step-up/articleshow/95255154.cms, accessed on 30.11.22

²¹ https://www.pwc.in/industries/financial-services/fintech/dp/the-changing-landscape-of-indias-credit-industry.html. accessed on 30.11.22

²² https://www.statista.com/topics/8143/credit-and-debit-card-market-in-india/#dossierKeyfigures, accessed on 30.11.22

Activity 21.2
Explain in your own words the pros and cons of plastic money usage.

The Emerging Scenario

Niti Aayog CEO Amitabh Kant is of the view that in about a few years from now, people would use their mobile phones for financial transactions and the usage of plastic cards will decline. Other modes of payment such as mobile wallets and Unified Payments Interface (UPI), AePS (Aadhaar Enabled Payment System) - National Payment Corporation of India's payment service will be increasing steadily. However, some of the experts in this field are of the view that the plastic may have a run for another 10 to 15 years, owing to the comfort and convenience that the system offers in making payments.

Example: Credit Cards in India and Digital Card Disruption

The future of credit card market in India looks glim. The already underpenetrated credit card market which is only 5-6% of the total population above 15+ years in 2021 is set to be disrupted by digital credit cards or virtual cards. These new credit cards use the UPI payment routes which are more popular for P2P (Person to Person) and P2M (Person to Merchant) payments. The digital leverage to create customers cheaply and target customers with limits as low as \ge 15,000 will enable the digital card companies target 300-500 million Indian customers easily.

Source: https://bfsi.economictimes.indiatimes.com/news/banking/the-future-of-credit-cards-will-virtual-cards-take-over/82173252 year 2021 Accessed on June 17, 2022.

Check Your Progress - 2

- 6. Which of the following is not an augmenting feature of credit cards in India?
 - a. Cash withdrawal facility
 - b. Add on card facility
 - c. Temporary increase in credit lines
 - d. Issue affinity cards
 - e. First issuing the credit card and later obtaining financial documents of the cardholder

- 7. Which of the following statements is false about credit cards?
 - a. The spouse or parents or the children over 18 years of the cardholder is entitled to add on card facility
 - b. Credit cards typically carry a predetermined credit limit and a cash limit
 - c. Credit limit once fixed to the cardholder cannot be increased
 - d. Personal accident insurance cover is being provided by some card issuers
 - e. Cardholders are often allowed to subscribe to designated equity or debenture issues using their credit cards
- 8. One of the following is not a feature of a credit card. Identify.
 - a. Personal Accident Insurance
 - b. Cash Withdrawal Facility
 - c. "Add-On" Facility
 - d. Temporary Increase in Credit Lines
 - e. Essential to Open a Bank Account
- 9. What is the type of card that is issued by the sponsor banks to the people who donate periodically for a cause?
 - a. Affinity Card
 - b. Debit Card
 - c. RuPay Card
 - d. "Add-On" Card
 - e. Kisan Credit Card
- 10. Which card enables the payment to spread over several easy instalments?
 - Charge Card
 - b. Credit Card
 - c. Debit Card
 - d. Aadhar Card
 - e. RuPay Card

21.7 Summary

- Plastic money refers to the substitution of the usage of currency money at the time when the transaction of buy and sell is taking place, by the usage of a card normally made of plastic cards. There are three main types of cards namely charge card, credit card and debit card.
- In the case of charge card, the payment for the purchase of goods is done within a month after the purchase (buy now and pay later concept) and there is no carry forward of amount for subsequent payment.

- In the case of credit card, it enables the holder of the card to purchase goods. He makes a one-time payment at the end of a specified period that is usually a month with a provision for spreading this payment over several easy installments.
- In the case of debit card, the cardholder has to make the payment immediately. His account with the issuer is immediately debited to the extent of the value of the transaction.
- The principal parties to a plastic money transaction are the card issuer, cardholder, the designated merchant establishment and the franchiser (MasterCard International and Visa International, RuPay) who are also called clearing agencies.
- Some of the augmenting features of credit cards in India are personal accident insurance, add-on card facility, cash withdrawal facility, levered investment facility, affinity cards.
- Kisan Credit Card scheme introduced in 1988 provides timely credit support to farmers for the purchase of agriculture inputs and it is implemented by Commercial Banks, RRBs, Small Finance Banks and Cooperatives.
- Though there has been a good growth of usage of credit cards in India, it is still very low in India compared to many developing countries.

21.8 Glossary

Card Issuer: The principal issuers of plastic money are the banks and are card issuers.

Cardholder: They include both salaried individuals and business organizations.

Charge Card: The cardholder can purchase goods and make payment within a month after the purchase and there is no carry forward of amount for subsequent payment.

Clearing Agencies: The card issuer affiliates itself with MasterCard International, Visa International or RuPay which act as clearing agencies.

Credit Card: The cardholder can purchase goods and make payment at the end of a specified period with a provision for spreading this payment over several easy installments.

Debit Card: The cardholder has to make the payment immediately as his account with the issuer is immediately debited to the extent of the value of the transaction.

Kisan Credit Card: This is a form of plastic money issued by Banks to provide timely credit to farmers for the purchase of agriculture inputs (seeds, fertilizers, pesticides, etc., and draw cash for their production need).

Member Affiliates are those who enter into a tie-up for the issuance of credit cards and they are empowered to issue credit cards of the issuer, to their clients.

Member Establishments: Member Establishments are business establishments enlisted by the plastic money issuer. They accept valid credit cards towards payment for the goods and include retail outlets, departmental stores, restaurants, hotels, hospitals, travel agencies, garages, petrol bunks, etc.

Plastic Money refers to the substitution of the usage of currency money at the time of purchase with a card made of plastic and hence the name plastic money.

Point of Sale (POS): A place at which a retail transaction is carried out using the plastic card.

Revolving Credit is a line of credit where the holder of the credit (Customer) can use the funds when they are needed within the stipulated limit.

21.9 Self-Assessment Test

- 1. What are the differences between a charge card and a debit card?
- 2. Write a short note on member affiliates.
- 3. Discuss the origin and present status of plastic money.
- 4. For a conservative user of plastic money which card will you issue as a card issuer?
- 5. Narrate in your own words about the credit card business in India.

21.10 Suggested Reading/Reference Material

- 1. Anthony Saunders, Marcia Millon Cornett, Anshul Jain (2021), Financial Markets and Institutions, 7th edition, Tata McGraw-Hill Education
- 2. Prasanna Chandra (2020), Fundamentals of Financial M, 7th edition, Tata McGraw-Hill Education.
- 3. Devie Mohan (2020), The Financial Services Guide to Fintech, 1st edition, Kogan Page Limited.
- 4. Siddhartha Sankar Saha (2021). Indian Financial System. 2nd edition, Tata McGraw-Hill Education
- 5. Dr. R. Shanmugham (2020). Financial Services. 2nd edition. Wiley India

21.11 Answers to Check your Progress Questions

1. (e) Sales tax department

Sales tax department is not a party to plastic money transactions.

2. (d) Revolving credit payment-minimum of 5% of the purchase on or before the payment period

This is a feature of credit card.

3. (b) Generally no spending limit

Generally no spending limit is not a feature of the credit card.

4. (c) Essential to open a bank account

This is a feature of a debit card.

5. (d) Only salaried individuals are cardholders

Only salaried individuals are cardholders is a false statement.

6. (e) First issuing the credit card and later obtaining financial documents of the cardholder

This is not permitted as per RBI regulations. It is not an augmenting feature of credit cards in India.

7. (c) Credit limit once fixed to the cardholder cannot be increased

Because credit limit once fixed to the cardholder can be increased temporarily based on credit standing of the cardholder.

8. (e) Essential to open a bank account

This is not a feature of a credit card. In fact, bank account opening is not an essential requirement to obtain a credit card. The rest of the options (a to d) are the features of a credit card.

9. (a) Affinity Card

Affinity Cards are issued by the sponsor banks especially for a particular section of people who take pride in the vocation or alma mater making them periodically donate some amount to improve the cause they love.

10. (b) Credit Card

Credit card holder makes a one-time payment at the end of a specified period that is usually a month for his purchases with a provision for spreading this payment over several easy installments.

Unit 22

Virtual Money

Structure

22.1	Introduction
22.2	Objectives
22.3	Demonetization and Digitization in the Indian Financial System
22.4	Concept of Virtual Money
22.5	Virtual Money and its Variants
22.6	Concept of Cryptocurrencies and Bitcoin Scheme
22.7	Digital Wallet System
22.8	Mobile Wallets in India
22.9	Payment Banks
22.10	Summary
22.11	Glossary

- 22.12 Self-Assessment Test
- 22.13 Suggested Reading/Reference Material
- 22.14 Answers to Check Your Progress Questions

"The ability to create something which is not duplicable in the digital world has enormous value... Lots of people will build businesses on top of that"

- Eric Schmidt, American businessman and software engineer

22.1 Introduction

The quote describes how virtual money operates and thus has a key role in any modern economy.

In the previous unit, we discussed the concept of plastic money, the various types of credit cards, charge cards and debit cards, their operational aspects and the trends of the credit card business in India.

Another significant development in the financial services sector is the online payment system. In real terms, all banking institutions have introduced online payment systems across the globe and money transfer and payment transactions have become very easy. These transactions have become a reality because of new technologies.

New technologies are driving every sphere of activity in the global economy. Technologies supported by advances in computing and encryption are bringing markets closer and transformational changes in the way goods are being produced and delivered. An important development in this process has been the creation

of Virtual Currencies (VCs). VCs are expected to bring in the speed and efficiency in making payments within the countries and across borders. The VCs are also expected to promote financial inclusion and reduce the cost of the transfer of money.

Though VCs are supposed to do good to the markets, VCs pose considerable risks as they are considered potential vehicles for money laundering, terrorist financing, tax evasion and fraud.

What are these virtual currencies in specific? VCs are the digital portrayal of a value, issued by a private player that are created, stored, accessed and transferred electronically. They are going to be the future currencies, which are going to act as a unit of account to perform the function as a medium of exchange.

This unit discusses the concept and meaning of virtual currency, the differences between centralized and decentralized virtual currencies and the momentum gained by Bitcoin. The unit also discusses the meaning and context of digital currencies and mobile wallets.

22.2 Objectives

After going through this unit, you should be able to:

- Discuss the concept of virtual currency
- Identify the differences between centralized and decentralized virtual currencies
- Explain the underlying concept of Bitcoin
- Describe the payment related process with regard to virtual currencies
- List the features of digital currencies
- Describe the concept of virtual and mobile wallets
- Discuss mobile wallet ecosystem in India

22.3 Demonetization and Digitization in the Indian Financial System

²³On November 8, 2016, Prime Minister Narendra Modi announced the drastic step of banning ₹ 500 and ₹ 1,000 notes with the sole purpose of curbing black money from our economy. Apart from the above two reasons, there were other motives such as pushing people to pay taxes for the unaccounted money that they accumulated, to curb terrorism, promote digitalization in India and make India a cashless economy.

While curbing black money was the prime motive behind demonetization, another important purpose was curbing terrorism by targeting terror funding. The

https://economictimes.indiatimes.com/industry/banking/finance/banking/digital-payments-indias-new-currency-debit-card-transactions-surge-to-over-1-billion/articleshow/58863652.cms dated 27th May 2017; https://economictimes.indiatimes.com/tdmc/your-money/demonetization-anniversary-decoding-the-effects-of-indian-currency-notes-ban/articleshow/61579118.cms?from=mdr dated 21st May 2019

use of fake Indian currency notes to fund the terror infrastructure and their projects by terrorists by both state and non-state actors of our neighbor could be contained with the help of demonetization and the fake Indian currency in the hands of several terror groups were severely hit.

The third important reason was to drive India to a cashless economy. There has been a boost in digital transactions from buying groceries to paying utility bills. Mobile payments increased considerably resulting in strong growth in digital payments after demonetization. Digital transactions have increased by 300% in terms of both volume and amount through plastic cards, mobile wallets and interbank transfers, card transactions at the point of sale (POS) terminals and card transactions at merchant locations thereby indicating a positive factor for the economy. More than 1million additional POS terminals were fixed, an increase of 80%. Due to the importance attached by the Government in promoting smartphone-based transactions through the Unified Payments Interface (UPI) and the Bharat Interface for Money (BHIM) and the Immediate Payment Service (IMPS) network of the National Payments Corporation of India, there has been an increase of 160% from 26 million transactions to 67 million transactions in a years' time.

The other changes that could be noticed were that people started depositing their cash into bank accounts leading to an increase in their bank balances. The digital payment system has been encouraged and this led to people trusting the digital payment systems thereby adapting to change. The cash, which was hitherto not used for any productive purpose has now been put into use in a more productive way. People started using plastic cash thus making several Indians tech-friendly. MSMEs (Medium, Small and Micro Enterprises) have turned towards digitalization, which made them more accommodating towards the digital arenas and accept the change in the way business can be done. Demonetization made people change the way they could manage finances. They could learn how to monetize their earnings to get the best returns possible such as monthly investment schemes, FDs, etc.

Example: E-payments for Everyone, Everywhere, Everytime (E4s)

On 17th June, 2022, the RBI released the 'Payments Vision 2025' document envisioning 'E-payment for Everyone, Everywhere, Everytime (E4s)'. RBI was targeting 3X increase in digital payments by 2025. Currently, India was witnessing 26 crore daily digital payments including around 16 crore UPI payments. Demonetisation which also had the objective of lessening the cash use, led to fintech revolution and smartphone penetration boosted the digitization process of the Indian financial system.

 $Source: https://timesofindia.indiatimes.com/business/india-business/rbi-payments-vision-2025-aims-3-fold-increase-in-digital-payments/articleshow/92289160.cms\ Dt.\ June\ 17,\ 2022$

Though the immediate effect of demonetization was on the Indian economy which struggled for almost a year as this step led to slowing down of the economic growth, non-availability of liquid cash and other issues associated with it, there were a lot of positive effects as well. It was observed that demonetization was one of the key contributors to the economic slowdown. The World Bank has reduced India's GDP growth forecast to 7% for 2017-18. Micro industries were affected most, as they were unprepared for the effects of demonetization leading to a dismal growth rate of 1%. ²⁴Similarly for the FY 2021-22, the World Bank has reduced India's GDP growth forecast to 6.5% from its earlier forecast of 7.5%. Russia-Ukraine war crisis and the ongoing global monetary policy tightening being the reasons for its reduced forecast.

22.4 Concept of Virtual Money

Secure online payment systems (for example, PayPal and Paytm) and transfer solutions (for example, M-Pesa) are changing the way payments are being made for the purchase of goods and services and how money is transferred from one person to another. Unlike conventional currencies, which are regulated by government, VCs are issued without the involvement and support of the government. The VCs facilitate peer-to-peer exchange while reducing costs and time and are expected to deepen the financial inclusion which otherwise may not be possible with the kind of banking systems and their cost involved. The VCs as already stated may have potential benefits stated above but they are potential vehicles for money laundering, terrorist financing, tax evasion. Over a period, regulators are of the opinion that any policy response to VCs needs to strike a balance between addressing potential risks and abuses while avoiding overregulation which may hinder innovation altogether.

Example: Indian Indicted in USD 2.4 Billion Crypto Fraud

In February 2022, the US Department of Justice indicted Satish Kumbhani (36) belonging to Hemal in Gujarat for USD 2.4 billion crypto fraud. The accused floated a crypto platform BitConnect and lured the investors under the "Lending Program" assuring profits through their fake proprietary technology "BitConnect Trading Bot" and "Volatility Software". After one year of operation Satish Kumbhani suddenly closed the "Lending Programme" and escaped leaving no trace of the crypto investments.

Source: https://www.livemint.com/market/cryptocurrency/indian-founder-of-cryptocurrencycompany-indicted-for-2-4-billion-fraud-11645838505503.html Date: February 26, 2022. Press Trust of India (PTI). Accessed on June 21, 2022.

²⁴ https://www.business-standard.com/article/economy-policy/world-bank-slashes-india-s-economic-growthforecast-to-6-5-for-fy23-122100601103_1.html, accessed on 30.11.22

22.5 Virtual Currency and its Variants

A virtual currency, as defined in 2012 by the European Central Bank is "a type of unregulated, digital money, which is issued and usually controlled by its developers, and used and accepted among the members of a specific virtual community." There are two ways of obtaining these virtual currencies.

In the first case, virtual currency is obtained by converting real money into virtual money at a conversion rate that is previously created. In the second case, virtual currency is obtained by solving a typical problem on the internet or engaging in a specific activity like responding to an advertisement or completing an online survey, etc. To understand further all about virtual currencies one needs to study the type of virtual currency schemes in vogue at present. According to the European Central Bank (ECB), Virtual Currency Schemes are of three types: Currency Scheme (s) (VCS) as classified by European Central Bank (ECB) is worth mentioning:

- 1. Closed Virtual Currency Schemes: These are the currency schemes that do not have any link with the real economy.
- 2. Virtual Currency Schemes with Unidirectional Flow: These are the currency schemes where these virtual currencies are purchased with real currencies at a specific exchange rate but cannot be exchanged and trading with other users is not permitted.
- Virtual Currency Schemes with bi-directional flows: These are the currency schemes in which currency units can be bought and sold according to marketdetermined rate.

Example: FIFA 21 Coins

FIFA 21 Coins was an example of closed virtual currency. FIFA 21 was a video game simulated on association football like Indian Premier League (IPL). It was designed by Electronics Arts, a California based video gaming company. The players got virtual coins called FIFA 21 coins as they cross each level of playing. These coins were used to buy the choicest virtual players to form one's team. These coins couldnot be converted into any currency and only to be used for gaming purpose.

Source: https://www.gamesradar.com/fifa-21-coins/ Date April 26, 2021

Ben Wilson. Accessed on June 21st, 2022.

Centralized and Decentralized Virtual Currencies

Centralized virtual currencies are those currencies that have a centralized repository similar to a central bank and have a central administrator. On the other hand, a decentralized virtual currency is a currency that does not have any central

repository and no single administrator. In the case of a decentralized virtual currency system, any person can obtain their own virtual currency by their own computing or manufacturing effort rather than depending on the central bank.

22.6 Concept of Cryptocurrencies and Bitcoin Scheme

²⁵Cryptocurrencies (CCs) also called virtual currencies or alternate currencies are exchanged by private individuals or groups through digital means. They are not regulated by any statutory body or institution, and they exist outside the bounds of monetary policy. Example- Bitcoin. CC uses a complex code system called cryptographic protocols, which are based on advanced mathematics and computer engineering principles. Cryptocurrencies are not controlled by any regulator or government and their values are controlled by their users who mine them through computing power. CCs can be exchanged for in online markets with major world currencies (like the U.S. dollar, European euro, British pound and Japanese yen). CCs have a finite supply and the number of units is precise which makes them deflationary similar to gold and other precious metals unlike regular currencies, which can be minted by the central bank. CC users enjoy benefits not available to users of traditional currencies as it cannot be frozen by regulators or government while at the same time it comes with a host of risks and drawbacks, such as illiquidity and value volatility. CCs are similar to traditional currencies in that they are expressed in value in units – say (2.5 Bitcoin).

CC's block chain is the master ledger that records and stores all prior transactions and activity. A block chain contains a finite number of transactions that increase over time. The transactions in CC are completed once it is added to the block chain, immediately. The transactions are usually irreversible. There is a private key to the holder, which can be created by the individual comprising of whole numbers between 1 and 78 digits long. Without the key, the holder cannot spend or convert their cryptocurrency (CC). The CC users have "wallets which can be stored on the cloud, an internal hard drive, or an external storage device and can lessen the risk of theft for units. CC miners serve as record-keepers for CC holders who use highly technical methods to verify the completeness, accuracy and security of currencies' block chains. The miners work to create wealth in the form of brand-new CC units.

Types of CC

The following are the types of CC-

i. Bitcoin is the world's most widely used cryptocurrency that has a programmed supply limit of 21 million bitcoin. This CC is considered the most popular and many companies accept bitcoin payments.

²⁵ https://www.moneycrashers.com/cryptocurrency-history-bitcoin-alternatives/

- ii. Litecoin is similar to bitcoin and has the same basic structure as bitcoin with a programmed supply limit (84 million units). Litecoin is the second most popular CC by market capitalization.
- iii. Ripple, also known as the consensus ledger system, is also more easily converted with an in-house currency exchange that can convert it into U.S. dollars, yen, euros, and other common currencies.
- iv. Ethereum is an improvement on bitcoin's basic architecture and utilizes smart contracts that enforce the performance of a given transaction.
- v. Dogecoin is a variation on litecoin with a shorter block chain creation.

Example: Defi Coin (DEFC)

Defi Coin (DEFC) was a new crypto currency (CC) to be launched in May, 2022. It was noted to be the most promising CC in the decentralised finance sector. Built-in taxation system to reward the investor for holding the coins in crypto wallets and the option of 'manual burn' to decrease supply over time were the main features of Defi Coin.

Source: https://www.thequint.com/brandstudio/best-new-cryptocurrency-to-invest-in-2022#read-more: Date: June 7, 2022 Accessed on June 21, 2022.

22.7 Digital Wallet System

²⁶Digital Wallets are like a virtual Pre-Paid Card where you can store value the money for usage also it allows access to link your bank account, credit card or debit card to make transactions in an easy, effortless manner.

22.7.1 Payment-Related Process of Virtual Currency

The ecosystem of virtual currency is different from traditional currency mechanisms, which was not present in the payments environment earlier. The following list will provide the mechanisms, which exist with virtual currencies-

- Inventors create a virtual currency and develop technical aspects of the network. In most cases, the identity of the individuals and organizations is not known.
- Issuers will generate units of virtual currency. Its volume is predetermined or will change as per the demand.
- Miners are voluntary persons who make computer processing available in order to validate a set of transactions. These are the persons who generate currency by spending time and cost of computing.
- Processing associates facilitate the transfer of units from one user to another user.

²⁶ https://www.hdfcbank.com/personal/resources/learning-centre/pay/what-is-a-digital-wallet-and-how-to-use-it

- Users purchase virtual currency or generate virtual currency through mining to purchase real goods and services from specific merchants, for making person-to-person payments.
- Wallet providers make available a digital wallet to users for storing their virtual currency cryptographic keys and transaction authentication codes.
 These providers also help them to understand the transaction history of the users.
- Virtual currency exchanges offer trading services to users by quoting the exchange rates by which the exchange will buy/sell a virtual currency against US dollar, yen or Euro or against other virtual currencies.

The following provides a brief description of the regulatory framework of the Reserve Bank of India with regard to virtual currency usage and transaction in India.

²⁷Regulations with Regard to Virtual Currencies in India

RBI vide its circular RBI/2017-18/154, DBR.No.BP.BC.104 /08.13.102/2017-18 dated April 6, 2018, addressing to commercial and co-operative banks /payments banks/small finance banks /NBFCs/payment system providers has instructed on prohibiting them in dealing with VCs. The circular states that, due to various risks associated with VCs, all the institutions regulated by RBI are prohibited from dealing with VCs. They shall not provide services that include maintaining accounts, registering, trading, settling, clearing, giving loans against virtual tokens, accepting them as collateral, opening accounts of exchanges dealing with them and transfer/receipt of money in accounts relating to purchase/sale of VCs to either individuals or groups. In case they are already providing such services, they shall exit the relationship within three months from the date of this circular.

However, this was struck down by the Supreme court on 4th March 2020.

Check Your Progress – 1

- 1. M-Pesa, PayPal and Paytm have revolutionized the way payments are transacted by ensuring secure online payments. Pick out the statement that is incorrect with reference to virtual currency transactions.
 - a. It facilitates peer to peer exchange
 - b. It deepens the financial inclusions
 - c. It reduces the cost and time involved in conversion and money transfer
 - d. It is issued with the involvement and support of the government
 - e. It paves way for money laundering and tax evasion

2

²⁷ www.rbi.org.in, 2017-2018

- 2. Which of the following activity enables the currency units to be bought and sold based on the pre-determined market rates?
 - a. Closed Virtual Currency
 - b. Virtual Currency
 - c. Virtual Currency with Unidirectional Flow
 - d. Virtual Currency with Bi-directional Flow
 - e. Conventional Currency
- 3. Bitcoin scheme is a peer-to-peer network over the internet. Identify the incorrect statement.
 - a. It is one of the decentralized bi-directional VCs referred to as "crypto-currency"
 - b. It is one of the most controversial virtual scheme to the date
 - c. Mt.Gox is one such currency exchange where it allows users to trade US dollars for bitcoins and vice versa
 - d. The persons who try to generate bitcoins are technically called 'miners"
 - e. Being a decentralized, peer-to-peer network, it does have a central clearinghouse
- 4. Which of the following entity monitors how the centralized virtual currencies are administered?
 - a. Central Bank
 - b. Central Administrator
 - c. European Central Bank
 - d. Miners
 - e. Processing Associates
- 5. Who creates a virtual currency and develops technical aspects of the network among the following?
 - a. Inventors
 - b. Issuers
 - c. Miners
 - d. Wallet Providers
 - e. Users

Activity 22.1
Describe any two Indian originated virtual currencies.
Answer:

22.7.2 Virtual Currencies vs. Digital Currencies

Virtual Currencies are part of Digital Currencies and not vice versa. Digital currencies such as e-money etc. are digital payment mechanisms for fiat currency. They are fully backed by legal tender money. VCs, on the other hand, are not denominated in fiat currency and represented in their own unit of account.

Digital Currencies

Digital currency can be defined as an internet-based form of currency distinct from physical notes and coins issued by central banks. These currencies act as a medium of exchange and exhibit properties similar to physical currencies and allow the players to transfer money instantaneously from one part of the world to another part of the world with a click of a button. Digital currencies emerged with the advancement of internet technologies. E-gold was the first digital currency founded in 1996 and it was backed by gold. Yet another digital currency service worth mentioning was liberty reserve, which came into existence in 2006. Liberty reserve allowed users to convert dollars or euros to liberty reserve dollars or euros and exchange them freely with another at a 1% fee. Both these currencies were used for money laundering and were shut down by the US government at a later date.

²⁸RBI perspective on Virtual currencies

Virtual currencies or cryptocurrencies are digital currency and functions on block chain technology. In these currencies, encryption techniques are used to generate units of currency and verify the transfer of funds, operating independently of a central bank.

One can classify countries into various categories based on how they deal with virtual currencies as-

- a. Those countries that do not have any regulations in place (USA).
- b. Countries that have a regulatory framework in place (Canada & Russia) where these currencies can be used for barter purpose.
- c. Though not a legal tender, these currencies can be used for payment purposes (Thailand, Switzerland, etc.)
- d. Countries that have banned these currencies (China, Bolivia, Russia, Iran and Colombia)

RBI's primary view on these virtual currencies can be summarized in the following words-

Though technological innovations (Including the advent of virtual currencies) always have the potential to improve efficiency in the financial system, there is a

https://economictimes.indiatimes.com/wealth/personal-finance-news/rbi-clamps-down-on-cryptocurrencies-what-will-existing-investors-lose-their-money/articleshow/63640904.cms?from=mdr, 2018; https://www.legalscoops.com/5-countries-that-banned-cryptocurrencies-and-made-them-illegal/dated 01.12.2020; www.rbi.org.in; 2017-18.

larger issue that needs to be considered. Virtual currencies such as cryptocurrencies can be a cause of concern of money laundering, consumer protection and market integrity. Further, it does not have any of the benefits associated with a fiat currency.

RBI had from time and again discouraged virtual currencies that include Bitcoins as they are harmful and there are various risks involved in dealing with such currencies. RBI, during 2013-2017, has issued public notices cautioning both the traders, institutions and public at large to exit dealings in virtual currencies. RBI felt that there has been a steep increase in the valuation of many virtual currencies, rapid growth in initial coin offerings and security-related risks that the individuals and business entities are exposing themselves to. RBI is of a firm view that due to exponential increase in the valuation of many VCs and abnormal growth in initial coin offerings they were not safe for use.

Thus RBI finally issued circular that banks and financial institutions which are under the regulatory purview of RBI based on the powers conferred under various sections under Banking Regulation Act and RBI Act, shall not deal or provide any services (which includes opening accounts, trading in VC, settlement in clearing, giving loans, taking VC's as collateral securities, opening accounts of exchanges dealing with VCs, receipt of money in accounts relating to purchase/sale of VCs) to the constituents such as customers, business entities who are dealing with the virtual currencies.

It is not the RBI only that has been against the VCs, the government also had issued caution. The finance minister in his budget speech in 2018 said that the government does not recognize cryptocurrencies as legal tender. Nearly five million Indians who have invested in VCs to the extent of \$2 billion have been given a window of three months by which time they have to exit in such dealings. Similarly, ²⁹in the year 2022, to discourage VCs transactions, the finance minister in his budget speech said that the government will levy 30% tax on it with effect from 1st April 2022. The VC income will be taxable even if the taxpayer's income falls below the threshold limit of ₹ 2.50 lakhs. ³⁰No deduction is allowed except its cost of acquisition while computing the taxable amount. In addition to this 30% tax, specified VC investors also faces 1% TDS (tax deduction at source) on their assets with effect from 1st July 2022.

22.7.3 Digital Wallets and Mobile Wallets

The technological revolution has brought in digital wallets and mobile wallets to help customers transfer their money from net banking/debit card/credit card to digital wallet or mobile wallets to help buy products and services from various e-commerce portals apart from transferring funds from one person to another.

https://www.livemint.com/market/cryptocurrency/income-tax-how-to-minimise-30-rate-oncryptocurrencies-11665201591355.html

²⁹ https://www.business-standard.com/article/news-ani/india-introduces-crypto-tax-of-30-per-cent-122020100724 1.html

These wallets are also helping customers to make various utility payments with a lot of ease. M-Pesa is one of the front-runners in this sphere along with others.

Scope of online payment systems, e-wallets, etc.

Let us discuss the scope for online payment systems.

³¹Online payment system and its scope in India

Some of the important features of an efficient payment system are reduction in the cost of transaction, efficient and smooth functioning of markets such as capital, money and interbank markets leading to a greater trust in the financial system itself. The payment and settlement system in India is robust, safe, secure efficient and well regulated by the central bank. Since 2010, there has been a successful innovation in the area of retail payments that has increased the choice of payment to the public at large. This coupled with a lower cost of transaction had a positive effect on the financial system of the country.

RBI conducted research on the payment systems in India and the highlights of their findings are as follows.

Due to the high volume of cash in circulation, there is a huge scope for digitization of payments. There is a strong cheque clearing system through NEFT & RTGS with high value and fast payment. Growth of credit and debit cards, POS, in the post-demonetization era has been upbeat. The national credit card's new launch 'RuPay' has seen drastic growth due to public sector banks and it is also promoted abroad by the Government. E-money options, Bharat Bill Payment System (BBPS) that was put into operation from October 2017 has facilitated the digital payment of various utility bills.

The initiatives taken by the government in government e-payments by the State and e-receipts to the state have yielded good results. Mobile network is growing at a fast pace along with broadband infrastructure. In the area of settlement of government securities, the central counterparty system is well in place and efficient. There has been a record increase in the volume of retail electronic payment transactions in the last four years respectively. The unified payment interface has been contributing a lot in the record growth witnessed in 2018-19. In Oct, 2022, UPI processed 7.3 billion transactions valuing about ₹ 12.11 trillion, record high since its exception. The regulatory system, authentication standards, ombudsman scheme, oversight role by RBI is strong. While in most of the parameters, India has done extremely well, there are areas that need to improve such as broadband system, cross-border payment transaction, etc.

https://www.rbi.org.in/scripts/PublicationReportDetails.aspx?ID=923#ES dated 4th June 2019 https://www.thehindubusinessline.com/money-and-banking/digital-payments-have-still-a-long-way-to-go-says-rbi/article27472479.ece# dated 4th June 2019. https://www.instamojo.com/blog/should-payment-gateways-in-india-take-the-rural-route/ dated 17th April 2019

With access to the internet and the increased number of smartphone users, which is estimated to be over 500 million in India, the online payment system is picking up in rural areas in a big way. Though 44% of people in cities have shifted to digital payments as against 16% in the rural sector, there is a huge scope for growth in both these segments of the population. To boost the use of online system of payments in rural areas, government through united payment interface has begun to target rural sectors for the sole purpose of helping them to shift to online with their businesses.

Top payment gateways and the government have initiated various methods to help ease payment gateway integration, especially in rural areas. Some of these initiatives are Aadhaar, SMS, Bhim UPI, Mobile payment, NFC technology, and ³²Mobile ATMs. People with accounts under Jan Dhan Yojna mostly use Mobile ATMs. Bhim UPI enables instant money transfers between two bank accounts via the BHIM app. UPI achieved the fastest growth rate among digital payments in the rural sector. Mobile payments have over 920 million mobile subscribers. NFC technology though the latest addition of digital payment mode has been adopted by several small retail outlets in their daily transactions. Banks, mobile network operators, vendors have started implementing this technology.

³³India ranked as a leader in regulatory mechanism in the area of alternate payment systems but it is in weak category amongst 21 countries including BRICS when it comes to the volume of cheque payment, share of card payments and digital payment of utility bills according to the Reserve Bank of India's report 2019 (pilot report) on benchmarking India's Payment Systems. The benchmarking has been done over a range of 41 indicators from regulation of payment systems to payment instruments and infrastructure.

Though categorized as weak, there has been a steady growth with a strong CARG. Around 30% of the payments in terms of volume are through debit and credit card as a percentage of GDP, which offers huge scope for increased adoption of online payment mechanism. The payment through internet mode is as low as 3%, moderate vis-a-vis overall payment system, debit and credit card usage at POS terminals and online. In a cash-based economy like India, the transformation to a digital economy though painful has started picking up very well.

³⁴In the year 2022, RBI made a follow-on benchmarking exercise to examine the present relative position of the benchmarked countries and progress since publication of its last report in 2019. The benchmarking payment systems has been done over a range of 20 areas and 40 indicators. India improved its leadership ranking, by getting leadership rating in 16 indicators from its leadership rating of 9 indicators.

³² https://www.financialexpress.com/industry/banking-finance/hdfc-bank-deploys-mobile-atm-in-city-to-assist-customers-during-lockdown/1927167/

³³ https://www.thehindubusinessline.com/money-and-banking/digital-payments-have-still-a-long-way-to-go-says-rbi/article27472479.ece dated 4th June 2019

³⁴ https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=1214

Example: Digital Wallets on the Rise in India

Digital wallets were expected to surpass cash as the principal point-of-sale (POS) payment method in India by 2023. They were also estimated to account for 50% of the e-commerce transactions value up from 45.4% in 2021. The mobile app based user comforts were making the digital wallets more popular.

Source: https://timesofindia.indiatimes.com/business/india-business/digital-wallets-to-overtake-cash-as-indias-leading-point-of-sale-payment-method-by-2023/articleshow/89985067.cms Date: May 4, 2022 Accessed on June 21, 2022.

³⁵Scope of online payments through e-wallets

e-Wallet is also a digital wallet and a secure place that contains one or more than one card and a facility that can be used by customers for storing multiple credit card and bank account numbers in a secure environment. To utilize this service, a client has to register and create a 'My Account' profile and on registering and creating the 'e-Wallet' profiles, one can make payments faster. The e-wallet facility can eliminate the need to enter account information while making payment. It saves time while making payments as one need not enter the details of the card or bank account information. The payment information is already prefilled during the payment process thus saving time while making payment. E-Wallet serves as a storing device for multiple credit cards, debit cards and bank account information. One can create up to ten profiles for plastic cards and another ten for savings accounts. It has a facility to edit and delete these profiles as and when needed and can be assessed through My Account login and password. E-wallets are secured as the card and account information will be covered when displayed. No one will ever see the full account numbers. Official payments do not share confidential information with anyone other than the card or bank processors and it will not be shared with anyone including the entity receiving the payment. The payment process of an e-Wallet differs from that of card payments. The shopper where the payment is made has to be authenticated to enable them to have access to the features of the e-wallet account. Shoppers' data/information is normally encrypted and stored securely. Usernames/ passwords and email/mobile phone verification are needed to create an e-Wallet account along with the KYC procedure. There can be transaction limits and velocity checks to monitor the transaction in a shopper's e-wallet account. E-Wallet is an optional service provided by official payments within My Account and is not a must for those who have multiple cards and accounts.

There is an exponential growth in using digital financial transactions and ewallets in India. From a traditional mode of payment, there has been a quantum jump post demonetization. Indians have slowly and steadily adapted to making

³⁵ https://www.financialexpress.com/opinion/why-mobile-wallets-are-the-future-of-money/1084027/ dated 01.03.2018;

 $https://www.official payments.com/hp_faq_acct_ewallet.jsp\#1; https://www.worldpay.com/engb/enterprise-support/support-articles/what-is-an-ewallet$

payments through e-wallets. The rise of e-wallets through mobile has also brought PPI cards (prepaid payment instruments) and paper vouchers. From an economy where cash has always dominated for making payments, a huge shift to digital payments is a giant leap. Supported by regulator's guidelines, incentives to use digital methods and covering the hitherto unbanked section of the population into India's financial ecosystem, e-wallets have come a long way.

The scope of e-wallets and other mobile payments is very bright in India with a quantum jump in internet users that is expected to reach half of the population (650-million) by 2020. The demographic advantage enjoyed by India is a digitally-savvy population who are ready to shift to digital money in general and e-wallets in particular.

It is expected that with the expansion and growth of fintech companies there is every possibility that e-wallet can be the future financial management tool. The scope in this area is as huge as we are still in a nascent stage. The demand for p2p payments and e-commerce will encourage the increased use of mobile wallets.

Having said about the huge opportunity and scope, we need to also look into the challenges that we face in this area.

There is a need to create a sustainable and reliable ecosystem to handle the changes. The benefits of using e-wallet have to be promoted through initiatives that can motivate people to shift which is well supported by the financial inclusion factor. People's needs have to be approached with a multi-pronged effort by providing more merchants with multichannel payment services.

22.7.4 M-Pesa

M-Pesa is considered as one of the front runners who have been successful and have showcased the effectiveness of mobile payment technologies to reach the masses. M-Pesa, where M stands for mobile and Pesa is for money, is a mobile phone-based money transfer application, launched in 2007 by Vodafone, the largest mobile network operator in Kenya and Tanzania. M-Pesa allows people to deposit, withdraw and transfer money apart from making payments for goods and services through mobile applications. The M-Pesa allows users to deposit money into an account stored on their cell phones and send money to someone using PIN secured SMS text messages to others.

22.8 ³⁶Mobile Wallets in India

Based on the RBI guidelines on interoperability on prepaid instruments, all Mobile Wallets (MW) will now be treated as quasi banks. The guidelines will

³⁶ https://www.livemint.com/Industry/KJjmn5NoAczkYvKrL6wpGI/New-RBI-norms-put-mobile-wallets-on-par-with-payments-banks.html dated 19th october 2018

https://economictimes.indiatimes.com/wealth/personal-finance-news/rbi-issues-consumer-protection-rules-for-mobile-wallets-users-liability-limited/articleshow/67416793.cms?from=mdr dated 7th January 2019

enable all the MW users to transfer funds from one MW to another and to banks through the UPI platform. Further, MW can issue UPI platform thus enabling non-bank Prepaid Instruments (PPI) and are also permitted to participate as members/associate members of authorized card networks making them on par with payments banks. However, unlike payment banks, wallet balances will not get any interest. Further, the maximum amount of balance in MW cannot be more than ₹ 10,000 as against ₹ 1.00 lakh in payment banks. According to industry experts, the move of RBI will speed up digitization offline and online.

Example: Amazon Pay for Businesses

The Amazon Pay mobile wallet for small businesses and merchants had become popular in recent times. In early June, 2022 Economic Times reported that more than 85 lakh small and medium businesses (SMBs) had opted for Amazon Pay service. Features like 'voice notification' and 'easy availability of working capital loans' had given a convenient digital experience to these SMBs.

Source: https://economictimes.indiatimes.com/small-biz/sme-sector/over-85-lakh-smbs-using-digital-payments-via-amazon-pay/articleshow/92102113.cms?from=mdr_Date: June 9, 2022
Accessed on June 21, 2022.

RBI has issued certain guidelines on consumer liability in the event of unauthorized transactions from MW. In accordance with the guidelines, consumers can report unauthorized transactions or notify objections based on a contact number and/or email ID in the transaction alert SMS issued by PPI. In the event of such transactions from the customer's mobile wallet due to the negligence of the PPI issuer, the customer's liability will be nil. In case if it is due to negligence by a customer, the customer will bear the entire loss until it is reported to the PPI issuer. If the loss occurs after reporting the unauthorized transaction, then the loss shall be borne by the PPI issuer. Further PPI issuers such as Paytm, Amazon Pay, PhonePe, etc. must ensure that their customers register for SMS alerts and email alerts to get timely information on the transaction done using their mobile wallets.

22.9 ³⁷Payment Banks

Payment banks are set up with the primary motive to promote digital, paperless and cashless banking in our nation. Its specific objectives are to cater to the unbanked and under banked areas. Further, payment banks are aimed to service

³⁷ https://bijlipay.co.in/blog/need-payment-banks-india/ https://www.livemint.com/industry/banking/future-of-payment-banks-uncertain-says-sbi-report1563852346159.html dated 23rd July 2013 https://www.livemint.com/industry/banking/future-of-payment-banks-uncertain-says-sbi-report-1563852346159.html dated 23rd July 2019

customers, especially migrant workers and those from lower income households to enable them to come under the formal financial system. These transactions done in these banks are technology-driven transactions and can be easily tracked to prevent black money.

Based on the Nachket Mor committee on comprehensive financial services for small business and low-income households set up by RBI on 23 September 2013 and its recommendations on 7 January 2014, the concept of a new category of payments bank came into existence.

Payment banks are new model banks that can only accept deposits up to ₹ 1,00,000 per customer (Both Savings and current accounts) but cannot issue loans and credit cards. Further, these banks can issue services like ATM cards, debit cards, net-banking and mobile banking. 38 In April 2021, RBI raised the deposit amount from ₹ 1,00,000 per customer to ₹ 2,00,00 per customer.

The minimum capital requirement is 100 crores of which the promoter's stake should be a minimum of 40% for the first five years from the date of commencement of business. Foreign shareholding will be as per the rules for FDI in private banks in India. The voting rights will be regulated by the Banking Regulation Act 1949 and is capped at 10%. Majority of directors on the board should be independent directors, appointed according to RBI guidelines.

RBI gave "in-principle" licenses to 11 entities under Section 22 of the Banking Regulation Act 1949 after they satisfied the conditions stipulated especially in the area of their financial track record and governance issues and they are:

- 1. Aditya Birla Nuvo Limited
- 2. Airtel M Commerce Services Limited
- 3. Cholamandalam Distribution Services Limited
- 4. India Department of Posts
- 5. Fino PayTech Limited
- 6. National Securities Depository Limited
- 7. Reliance Industries Limited
- 8. Shri Dilip Shantilal Shanghvi
- 9. Paytm Payments Bank Limited
- 10. Tech Mahindra Limited
- 11. Vodafone m-pesa Limited

³⁸ https://rbi.org.in/Scripts/NotificationUser.aspx?Id=12074&Mode=0#:~:text=Considering%20the%20 progress%20made%20by,of%20PBs%20with%20immediate%20effect.

The conditions to be fulfilled by these banks are:

- They should be fully networked from the beginning.
- Accept deposits up to ₹ 1.00 lakh.
- Accept utility bills.
- Not undertake any non-banking activities.
- Not lend to any person including their directors.
- 25% of its branches must be in the unbanked rural area.
- Use the term "payments bank" in its name.
- They will be registered as public limited company under the Companies Act, 2013.

Future of payment banks in India

As per a report submitted by SBI, there is uncertainty in the future of the payments banks. One of the important points raised in the report is the evolvement of the concept itself. The second aspect is the support of the RBI and the government to make them sustainable in the long term. Of the 11 payments bank that were given license, only 4 are operational as it is unviable economically. Further, the very objective of financial inclusion by providing small savings accounts and payments services to unorganized sector entities for which the payment banks came into existence as per the Nachiket Mor committee, has not been achieved. The unviability is perhaps due to three important factors such as:

- 1. Blanket ban on any type of lending
- 2. Mandatory to maintain a Cash Reserve Ratio (CRR), Statutory Liquidity Ratio (SLR) on the outside liability
- 3. Stopped from accepting deposits higher than ₹ 1 lakh.

One of the suggestions given in the report of SBI is that RBI should allow payments banks to tie up with third-party services to cross-sell products.

Example: The Indian Post Payments Bank (IPPB) and Whatsapp Tie-up

The India Post Payments Bank which recorded 50 million customer base in early 2022 was exploring options to tie-up with Whatsapp to improve its customer service. Features like request for a new account, balance inquiry, disbursal of salaries at door step via Whatsapp requests were likely to be added to the IPPB service suite. IPPB having a pan-India presence could really impact the last mile service in India with significant unbanked and under banked areas.

Source: https://economictimes.indiatimes.com/tech/technology/india-post-bank-may-offer-services-via-whatsapp/articleshow/92292148.cms June 18, 2022

Accessed on June 21, 2022.

RBI Guidelines for Licensing of Payments Banks (issued on 27^{th} November 2014)

Key features of the Payments Banks guidelines are:

i) Objectives:

The objectives of setting up of payments banks will be to further financial inclusion by providing (i) small savings accounts and (ii) payments/remittance services to migrant labor workforce, low-income households, small businesses, other unorganized sector entities and other users.

ii) Eligible promoters:

- a. Existing non-bank Pre-paid Payment Instrument (PPI) issuers; and other entities such as individuals/professionals; Non-Banking Finance Companies (NBFCs), corporate Business Correspondents (BCs), mobile telephone companies, super-market chains, companies, real sector cooperatives; that are owned and controlled by residents; and public sector entities may apply to set up payments banks.
- b. A promoter/promoter group can have a joint venture with an existing scheduled commercial bank to set up a payments bank. However, a scheduled commercial bank can take an equity stake in a payments bank to the extent permitted under Section 19 (2) of the Banking Regulation.
- c. Promoter/promoter groups should be 'fit and proper' with a sound track record of professional experience or running their businesses for at least a period of five years in order to be eligible to promote payments banks.

iii) Scope of activities:

- a. Acceptance of demand deposits- Payments bank will initially be restricted to holding a maximum balance of ₹ 1,00,000 per individual customer.
- b. Issuance of ATM/debit cards- Payments banks, however, cannot issue credit cards.
- c. Payments and remittance services through various channels.
- d. BC of another bank, subject to the Reserve Bank guidelines on BCs.
- e. Distribution of non-risk sharing simple financial products like mutual fund units and insurance products, etc.

iv) Deployment of funds:

- a. The payments bank cannot undertake lending activities.
- b. Apart from amounts maintained as Cash Reserve Ratio (CRR) with the Reserve Bank on its outside demand and time liabilities, it will be required to invest a minimum of 75 percent of its "demand deposit balances" in Statutory Liquidity Ratio (SLR) eligible government

securities/treasury bills with maturity up to one year and hold a maximum of 25 percent in current and time/fixed deposits with other scheduled commercial banks for operational purposes and liquidity management.

v) Capital requirement:

The minimum paid-up equity capital for payments banks shall be ₹ 100 crores.

a. The payments bank should have a leverage ratio of not less than 3 percent, i.e., its outside liabilities should not exceed 33.33 times its net worth (paid-up capital and reserves).

vi) Promoter's contribution

The promoter's minimum initial contribution to the paid-up equity capital of such payments bank shall at least be 40 percent for the first five years from the commencement of its business.

vii) Foreign shareholding

The foreign shareholding in the payments bank would be as per the Foreign Direct Investment (FDI) policy for private sector banks as amended from time to time.

viii) Other conditions:

- The operations of the bank should be fully networked and technologydriven from the beginning, conforming to generally accepted standards and norms.
- b. The bank should have a high-powered customer grievances cell to handle customer complaints.

Activity 22.2 Make a google search and bring out a brief description of the top 10 mobile wallet service providers in India in the year 2017. Answer:

Check Your Progress - 2

- 6. Who among the following allows the users to store their virtual currency cryptographic keys and transaction authentication codes enabling them to understand the transaction history?
 - a. Virtual Currency Exchanges
 - b. Users

- c. Wallet Providers
- d. Miners
- e. Issuers
- 7. Which of the following mobile wallet service was introduced in the year 2007 serving almost 29.5 million active customers for around 10 countries?
 - a. PayPal
 - b. Paytm
 - c. M-Pesa
 - d. MobiKwik
 - e. Citrus
- 8. Which of the following is an internet-based form of currency distinct from physical notes and coins issued by central banks?
 - a. Bitcoin
 - b. Digital Currency
 - c. Digital Wallet
 - d. Mobile Wallet
 - e. Virtual Currency
- 9. Which of the following online payment service is considered to be the king of mobile wallets in India?
 - a. PayPal
 - b. Paytm
 - c. MobiKwik
 - d. Free Charge
 - e. Oxigen
- 10. The payment banks are the game changers in the banking sector to bring in competition and cut the cost of transactions for customers. Which of the following statement is contradictory to the expectations of RBI's approval towards payment banks?
 - a. Collect small deposits that will not cross ₹ 1 lakh
 - b. Issue debit cum ATM cards usable on ATM networks of all banks
 - c. Offer transfer and remittance facility through mobile phones
 - d. Sell third party financial products
 - e. Provide forex services at a higher commission when compared to other banks

22.10 Summary

- A virtual currency is a type of unregulated, digital money, which is issued and usually controlled by its developers and used and accepted among the members of a specific virtual community.
- Virtual currencies or cryptocurrencies are digital currencies and function on Block chain technology. In these currencies, encryption techniques are used to generate units of currency and verify the transfer of funds, operating independently of a central bank.
- Unlike conventional currencies that are regulated by government, VCs are issued without the involvement and support of the government.
- RBI had from time and again discouraged virtual currencies which include bitcoins as they are harmful and there are various risks involved in dealing with such currencies and issued public notices cautioning both the traders, institutions and public at large to exit dealings in virtual currencies and issued circular banning use of VC. However, the Supreme Court has stuck the RBI guidelines to banks and financial institutions.
- Bitcoin is the world's most widely used cryptocurrency that has a programmed supply limit of 21 million bitcoin. The other CCs are litecoin, ripple, ethereum and dogecoin.
- Digital currency can be defined as an internet-based form of currency distinct from physical notes and coins issued by central banks.
- Based on the RBI guidelines on interoperability on prepaid instruments, all mobile wallets (MW) will now be treated as quasi banks.
- Payment banks are set up with the primary motive to promote digital, paperless and cashless banking in our nation. Its specific objectives are to cater to the unbanked and under banked.
- Payment banks are new model banks that can only accept deposits up to ₹1, 00,000 per customer (both savings and current accounts) but cannot issue loans and credit cards. Their future is uncertain as per a report of SBI. SBI also in its report stated that the regulations by RBI have made the business of payment banks unviable.

22.11 Glossary

Bit Coin: It is a form of virtual currency that can be used for trading goods or services in the financial markets.

Centralized Virtual Currencies: These are those currencies that have a centralized repository similar to a central bank and have a central administrator.

Closed Virtual Currency Schemes: These are the currency schemes that do not have any link with the real economy.

Decentralized Virtual Currency: These are those currencies that do not have any central repository and no single administrator.

M-Pesa: M-Pesa, where M stands for mobile and Pesa is for money, is a mobile phone-based money transfer application, launched in 2007 by Vodafone.

Virtual Currency Schemes with Bi-Directional Flows: These are the currency schemes in which currency units can be bought and sold according to market determined rate.

Virtual Currency Schemes with Unidirectional Flow: These are the currency schemes where these virtual currencies are purchased with real currencies at a specific exchange rate but cannot be exchanged back and trading with other users is not permitted.

22.12 Self-Assessment Test

- 1. What do you mean by virtual currency? How is it classified?
- 2. Distinguish between digital and virtual currencies.
- 3. Describe the salient features of a digital wallet ecosystem with examples.
- 4. "Bitcoin is one of the decentralized bi-directional VCS referred to as "cryptocurrency".-Explain.
- 5. Explain the nature and role of the payment related process of virtual currency.
- 6. How does a mobile wallet work? Give a brief description of its usage.
- 7. Discuss in detail the prerequisites of payment bankers in India as regulated by RBI.
- 8. Give a detailed note on RBI guidelines for licensing of payment banks in India.

22.13 Suggested Readings/Reference Material

- 1. Anthony Saunders, Marcia Millon Cornett, Anshul Jain (2021), Financial Markets and Institutions, 7th edition, Tata McGraw-Hill Education
- 2. Prasanna Chandra (2020), Fundamentals of Financial M, 7th edition, Tata McGraw-Hill Education.
- 3. Devie Mohan (2020), The Financial Services Guide to Fintech, 1st edition, Kogan Page Limited.
- 4. Siddhartha Sankar Saha (2021). Indian Financial System. 2nd edition, Tata McGraw-Hill Education
- 5. Dr. R. Shanmugham (2020). Financial Services. 2nd edition. Wiley India

22.14 Answers to Check Your Progress Questions

1. (d) It is issued with the involvement and support of the government.

Unlike conventional currencies, which are regulated by government, virtual currencies are issued without the involvement and support of the government.

2. (d) Virtual currency with Bi-directional Flow

These are the currency schemes in which currency units can be bought and sold according to the market-determined rate.

3. (e) Being a decentralized, peer-to-peer network, it does have a central clearinghouse.

This currency being decentralized with a peer-to-peer network, it **does not** have a central clearinghouse. Bitcoin users perform their tasks themselves. Its supply is determined by a specific type of "mining activity".

4. (b) Central Administrator

Centralized virtual currencies are those currencies that have a centralized repository similar to a central bank and have a central administrator.

5. (a) Inventors

Inventors create a virtual currency and develop technical aspects of the network. In most cases, the identity of the individuals and organizations is not known.

6. (c) Wallet Providers

Wallet providers make available a digital wallet to users for storing their virtual currency cryptographic keys and transaction authentication codes. These providers also help them understand the transaction history.

7. (c) M-pesa

M-Pesa, where M stands for mobile and Pesa is for money is a mobile phone-based money transfer application, launched in 2007 by Vodafone, the largest mobile network operator. It is considered as one of the front runners, very successful, and which showcased the effectiveness of mobile payment technologies to reach the masses.

8. (b) Digital Currency

These currencies act as a medium of exchange and exhibit properties similar to physical currencies and allow the players to transfer money instantaneously from one part of the world to another part of the world with a click of a button.

9. (b) **Paytm**

Launched in 2010, Paytm is the king of mobile wallets. Paytm alone has a user base of more than 20 million.

10. (e) Provide forex services at a higher commission when compared to other banks

These new types of banks that are expected to reach the masses through mobile platforms rather than through traditional bank branches, can give forex services at a lower commission when compared to other banks.

Unit 23

Venture Capital

Structure

23.1	Introduction
23.2	Objectives
23.3	Concept of Venture Capital
23.4	History and Evolution of Venture Capital
23.5	Indian Venture Capital Industry
23.6	Investment Objectives of some Indian Venture Capital Firms
23.7	Stages in Company Financing
23.8	Regulatory Issues Impacting the VC Industry in India
23.9	The Venture Investment Process
23.10	Organization of Venture Capital Business
23.11	Private Equity
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"Venture Capital is the timely alignment of foresight with upside."

- Georges van Hoegaerden, Managing Director at methodeva.com.

23.1 Introduction

Businesses need to plan their capital needs appropriately with their growing needs and the quote aptly justifies it.

In the previous unit, we discussed various aspects and process of securitization, various benefits of securitization and the risk management process in securitization and present status of securitization market in India.

Another important funding activity in financial services industry is venture capital. This is discussed in this unit.

Venture capital is looked into different perspectives by different people. It is very difficult to provide one single definition to it. Jane Koloski Morris, editor of the

well-known industry publication, *Venture Economics*, defines venture capital as "providing seed, start-up and first stage financing" and also "funding the expansion of companies that have already demonstrated their business potential but do not yet have access to the public securities market or to credit oriented institutional funding sources....". Venture capital also provides management/leveraged buyout financing. Frederick R. Adler, a successful practitioner of the profession, describes the process as one of investing in risk capital in an enterprise in which the venture investor shares ownership as well as board of directors' level management responsibilities with the founding management team.

³⁹The European Venture Capital Association describes it as risk finance for entrepreneurial growth-oriented companies. It is an investment for the mediumterm or long-term seeking to maximize return for both the parties. It is a partnership with an entrepreneur in which the investor can add value to the company out of his knowledge, experience and contact base.

The operational issues in VC and other transactions were presented in the following Table 23.1.

Table 23.1: Operational Issues in VC and other Funding Options

	Venture Capital	Boughtout Deal	Conventional Loan Financing
Participation in management	High. As the VCF/VCC has an equity stake in the VCU, it is generally, bound to follow the advice. Also, considering the expertise of VCC/VCF, participation is high in strategic planning.	Low. Though the equity in the company is held by the sponsor, there would not be any direct interference in the management except in exceptional cases.	Nil. The lender does not have the expertise or interest in promoting the company as long as the payments schedule is followed.
Returns to the investor	Extremely high in most of the cases considering the high risk in such investment. Uncertainty is quite high.	High. Though the company is not intensively into technology. Exit from the investment is reasonably certain.	Moderate. As the payment schedule is finalized before the investment, there is no uncertainty.
Time period	Very long. Exit from investment takes 7-10 years on an average.	Not very long. Exit from investment is normally done immediately after the expiry of lock-in period.	May be set as per choice of the investor/ lender.

³⁹ https://www.icsi.edu/media/portals/86/manorama/Venture%20Capital%20SSIM%20BOOK.pdf

Block 4: Other Financial Services

	Venture Capital	Boughtout Deal	Conventional Loan Financing
Regulations	1	High. Bought out deals are reasonably well regulated as it concerns listing of security in the stock exchange where small investor's interests have to be protected.	Moderate. Regulations cover the safety of such investments/lending.

23.2 Objectives

After studying this unit, you should be able to:

- Discuss the concept of venture capital
- Describe the history and evolution of venture capital
- Outline the Indian venture capital industry
- Discuss the investment objectives of some Indian venture capital firms
- Explain the stages in company financing
- Discuss the venture investment process
- Discuss the organizational structure of venture capital business
- Discuss the concept of private equity, hedge funds

23.3 Concept of Venture Capital

Steven James Lee defines, venture capital as an actual or potential equity investments in companies through the purchase of stock, warrant options or convertible securities. Venture capital is a long-term investment discipline that often requires the venture capitalist to wait for five or more years before realizing a significant return on the capital resource.

In an attempt to define venture capital as generically as possible for an international study, International Finance Corporation defines venture capital as an equity or equity featured capital seeking investment in new ideas, new companies, new products, new processes or new services that offer the potential of high returns on investment. It may also include investment in turnaround situations. A narrow definition of venture capital is, therefore, too limiting.

In India, where the industry is still nascent, the Securities and Exchange Board of India (SEBI) has laid down those activities that would constitute eligible business activities qualifying for the concessions available to a recognized venture capital fund. Initially, SEBI defined venture capital as an equity support for projects

launched by first generation entrepreneurs using commercially untested but sophisticated technologies. But, this definition has been subsequently relaxed and the restrictive features pertaining to 'technology financing' were dispensed with. Venture capital is now showcased as encompassing all types of funding of a high-risk technology intensive undertaking at any stage of its life cycle.

It appears that venture capital investments would have one or more of the following characteristic features:

- Equity or equity-featured instrument of investment.
- Young companies that do not have access to public sources of equity or other forms of capital.
- Industry, products or services that hold potential of better than normal or average revenue growth rates.
- Companies with better than normal or average profitability.
- Products/services in the early stages of their lifecycle.
- Higher than average risk levels that do not impact themselves to systematic quantification through conventional techniques and tools.
- Turnaround companies.
- Long-term (i.e. More than three years) and active involvement with investee.

One of the important characteristic features of the venture capital from conventional loan is the participation of VCC/VCF in managing the VCU. VCF/VCC aims to increase the VCU value by supporting the company in its marketing and financial areas, in turn, to increase the profitability of the company. VCF/VCC renders the highly professionalized and competent advice on the technical aspects of the company functioning. The following are the VCF/VCC activities concerning VCU:

- i. Assist in financing, marketing and strategic planning of the VCU.
- ii. Recruitment of key personnel in the initial stages.
- iii. Obtaining bank and other financing avenues for the VCU.
- iv. Introduction to strategic partners and vendors.

Comparison may be done on the investment patterns in bought out deals and conventional financing with essentially high-risk technology intensive funding for first generation entrepreneurs.

⁴⁰Global Venture Capital Industry

Venture capital industry is a vibrant industry as the innovation is always a favourite for the business class. VC funding increased by over 46% globally by an amount of \$ 254 billions in 2018, funding around 18,000 start-ups, of which,

 $^{^{40}\} https://www.toptal.com/finance/venture-capital-consultants/state-of-venture-capital-industry-2019$

52% were in US and further in 2019 in the first quarter, the growth was just 6% YoY as per crunchbase data. One of the reasons attributed to the slowdown in the first quarter is primiarly with the dampening of Chinese investments. However, the industry itself is vibrant and can be. It is expected to pick up in the next quarters of the year.

⁴¹Similarly in Q2 2022, the industry saw a downward pace in its growth globally due to Russia-Ukraine war crisis, high levels of inflation and rising interest rates.

The following Figuer 23.1 graph will provide the growth of VCs over the last decade globally.

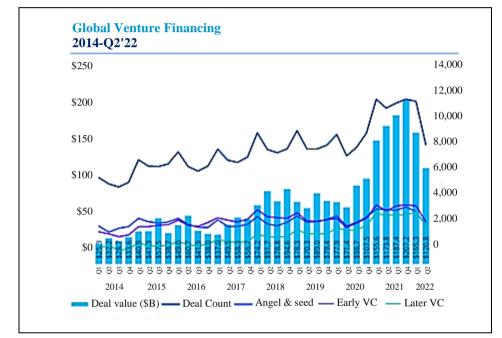


Figure 23.1: Q2'22 Venture Pulse Report - Global

Source: https://home.kpmg/xx/en/home/campaigns/2022/07/q2-venture-pulse-report-global.html

⁴²Future of Indian VC

VC funding is now available across various sectors as investors are supporting successful entrepreneurs in the first stage, and at a later stage Chinese, European, Canadian and US funds with long-term horizons want to be aggressive. Venture Capitalist like Sequoia, Goldman Sachs, TPG Growth, Sofina, Eight Roads, and the like are aggressive. While others are showing interest to increase their investment by 100% from the existing levels. Indian fund managers such as A91, Zodius, Multiples, True North, Premji Invest and Steadview also have joined the party. India's rapidly growing wealth is likely to give a rise to the growth of domestic funds, though the trend is seen only in early stage funds presently.

⁴¹ https://home.kpmg/xx/en/home/campaigns/2022/07/q2-venture-pulse-report-global.html

 $^{^{42}\} http://www.forbesindia.com/article/vc-and-pe-special/the-value-in-venture-capital/54525/1$

There are plenty of ideas, entrepreneurs and capital flows and one can expect a good future in this Industry.

Example: Venture Capital Investments in Lenskart

Lenskart, the eye-wear retailer, raised USD 915 million in venture capital funding since its inception in 2010. As of November 2021, the top VC investors in Lenskart include Soft Bank (19.5%), Premji Invest (10.8%), Kedaara Capital (9.2%) and TR Capital (9%). Lenskart is an example of how start-ups raise venture capital funds.

Source:https://economictimes.indiatimes.com/tech/newsletters/morning-dispatch/lenskart-eyes-250m-funding-bigbasket-bags-rs-1000-crore-n-chandrasekaran-is-tata-digital-chairman/articleshow/90810968.cms?from=mdr Accessed on June 15, 2022

23.4 History and Evolution of Venture Capital

Since its humble beginnings in 1946 through the American Research and Development Corporation of General Doriot, "the institutionalization of the venture investment process", has made significant strides. Observers of the industry trace the American industry as having progressed through distinct phases of evolution in the 70's and 80's. Soon, however, the concept of professional VC attained popularity in Canada, and a number of other European countries with the British industry in a pioneering role. Presently, venture capital has come to hold in over thirty-five countries like Japan, South Korea, Philippines, Singapore, Malaysia, Taiwan and India in Asia, Kenya and Nigeria in Africa, and Argentina and Brazil in South America. It must be highlighted that VC obtained in some of these countries is predominantly engaged in providing term finance for small business in addition to equity, and may therefore, not conform to the definition of VC spelt out elsewhere in this paper. Further, barring the UK, USA, Canada, Japan, Sweden, Germany and Netherlands, the industry has a comparatively limited activity base that measured in terms of number of registered venture capital firms, committed capital or invested capital measured as share of GDP (Gross Domestic Product).

In India, the VC industry had its formal introduction in the budget speech of the Finance Minister in 1988. In spite of focusing more in its technology development objective, the introduction realized the importance for a patient capital source with the participation ability in high risk projects in return for high rewards. Around the same time, the Industrial Credit and Investment Corporation of India Limited (ICICI), came forth with an initiative to address the technology intensive projects. One such initiative is the venture capital division that was spun off into Technology Development and Information Company of India Limited (TDICI) that emerged as a significant player and a pioneer in the industry.

In line with the budget speech announcement, a cess of 5% was levied on all the payments for import of technology/know-how thereby to the creation of a sizable pool of funds. The venture fund that was created out of this cess was to be administered by the Industrial Development Bank of India (IDBI) for rendering the financial assistance to the industries attempting the commercial application of indigenous technology or adapting imported technology to wider domestic applications.

It would be proper to mention in this context that many of the development banks and Development Finance Institutions (DFIs), over the decades since their inception have provided financial assistance that would well pass the test of VC definitions in many ways. Their mandate and perhaps their largely lending approach to business had not permitted them to institutionalize VC investing as part of their main business. Going with the number of venture capital firms in India today, one could showcase that there exists a venture capital industry in the country⁴³.

VC encompasses investment in a wide spectrum of industry/technology subsectors at various stages in the lifecycle of a firm. The various stages of financing are explained in Appendix to this chapter. In well-developed VC industries, it is not uncommon to find companies focusing almost exclusively on some specific sectors/subsectors or specific stages of the lifecycle of an industry. In fact, most funds tend to identify a few industry/technology sectors they believe that they understand better. Such focus helps the VC to add value to the portfolio of the company.

23.4.1 Venture Capital and Environment

The venture capital and its economic environment is discussed hereunder:

Role of Venture Capital in Economy

In most economies, that have VC firms or a VC industry of any sort, there is a good deal of interpretations about the role of VC. Many among those interpretations that do not have a VC industry, discuss the need for a VC industry. The importance of VC is not on account of the volume of capital it provides. It is more on account of its indirect benefits. By providing investment and management support to companies that are engaged in the development/manufacture of new and innovative products, technologies and services, VC investments enable the development of entirely new lines of business. Secondly, VC firms typically prefer to invest in knowledge-based industries such as computer software. This, in turn, has catalyzed entrepreneurship amongst professional managers and technologists to a considerable degree. And, last but not the least, VC has played an unparalleled role in bringing technologies to the market-place.

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⁴³ The IFC (W) suggests that a VC industry may be said to exist if there are seven or more VC funds or companies in business with investment mandates that are VC in nature.

Enabling Environment for VC

The growth and development of a healthy VC industry is dependent on the availability of an enabling environment.

Enterprise Culture: The general philosophy of the government towards entrepreneurs and private enterprises is among the more fundamental requirements. A strongly supportive attitude towards private enterprise would be manifested in the form of appropriate income and wealth tax policies, economic administration regime by way of liberal or no licensing procedures and limited presence of and reservation for state-owned enterprises in business.

Tax Policy: Tax policies have been the instruments with the highest impact in promoting the development of a healthy VC industry. The impact of the Tax Reform Acts (TRAs), which increased the capital gains taxation rates in USA had a directly identifiable negative impact on flow of funds into VC firms in USA until the TRA of 1978, corrected this position by reducing the tax rate on capital gains resulting in a dramatic impact of the flow of funds into VC firms.

In India, income from dividends and long-term capital gains from equity investments made by approved venture capital funds or venture capital companies was exempted from tax. However, in the annual budget 2020, such Long-term capital gain (LTCG) has been brought under tax net. Further income in the hands of shareholders will be fully taxable.

Capital Market: The issue of exit is as important as that of entry in a VC investment. Public offering of the portfolio company's stock appears to be the most preferred exit route for any VC investor. A vibrant, healthy, stable capital market is, therefore, an important pre-requisite for VCs to 'get liquid' their investments. Given that, most VC portfolio companies could develop into public offering candidates long before they qualify on the main stock exchange of the country, there is a need for an exchange or a market mechanism that addresses the trading of VC portfolio company stocks

At this juncture we have to keep the following points in view. VC portfolio companies may often not qualify on one or more listing criteria adopted by SEs. These could be in terms of the minimum paid-up capital of the company, revenue and profitability record, number of years in business and so forth. The basic premise here is that these companies could invite public participation in the equity by making adequate disclosures backed by necessary investor protection mechanism.

The National Association of Securities Dealers Automated Quotation System (NASDAQ) of the US and the Unlisted Securities Market (USM) of the UK provide this exit vehicle for VC investors as well as other companies whose equity base is small. Similar market mechanisms are known to exist in Australia, France,

Nigeria, Malaysia, Singapore and Spain (Madrid) which are in various stages of implementing a stock exchange for such a purpose. The Indian counterpart to the NASDAQ of the USA, is Over the Counter Exchange of India (OTCEI). Securities and Exchange Board of India (Venture Capital Funds) Regulations, 1996 prohibit listing of venture capital fund on any stock exchange till the expiry of three years from the date of issuance of securities or units, as the case may be, by the venture capital fund.

It is also equally important to have an efficient capital market in place. The fundamental basis of VC investment is that, while the public market provides risk adjusted rate of return that reflects the cost of capital as determined by free and competitive market forces, VC investors post higher rates of return by cashing – in on the imperfections in the private equity market. Absence of such efficiency in the main market for whatever reason provides opportunities for realizing super normal rates of return.

The aforementioned aspect assumes great significance in the Indian context. For a variety of reasons, it would be possible to achieve annualized rates of return on the main market that would be far superior to the return achievable by a VC portfolio through years of patient value addition to the portfolio companies. If this situation persists, it could affect the growth and development of the VC industry.

Free Market Forces: It would not be incorrect to say that innovation is the mother of VC investments. The compulsion to innovate results in better and new products/services and thereby, opportunities for VC investments. In a protected economy/business environment, with no compulsion/incentive to compete through innovation, VC may not find many opportunities to invest in the market.

Complementary Financial Institutions: VC investors meet most of the early stage funding requirements of the start-up portfolio companies. However, as companies grow in revenue, asset base and profitability, they would look increasingly to the complementary financial institutions, which would often be credit oriented, in order to leverage their equity share capital. In sophisticated economies, banks have the specialized skills and resource base to appraise and provide the necessary working capital funding to small and medium enterprises. In less developed economies, specialized agencies would need to be set up for the purpose with an appropriate mandate. In India, the DFIs, Specialized Small-Scale Industries Development Corporations (SSIDCs) and commercial banks have been fulfilling these needs through their numerous schemes.

Professional Entrepreneurship: The ethos of building business for financial gains and the preparedness to sell them off to an acquirer provides an important exit route to the VC investor. In our experience, to the average Indian entrepreneur, it is the least preferred alternative for rewarding his financial partner.

Example: Latest Indian Venture Capital Story

The concluded year of 2021 is seen as a phenomenal year for India VC industry with investment growth of 3.8X than China's 1.3X. The VC funding reached 38.5 billion USD. The factors contributing to this growth are identified as fully grown digital infrastructure, the fast rising start-up eco-system, the increasing privatization drive by the government and the positive macro outlook of Indian economy.

Source: https://www.bain.com/insights/india-venture-capital-report-2022/

Accessed on June 8, 2022.

Activity 23.1

You are the CFO of a leading tea company which wants to raise funds for starting a new venture aimed at selling tea online globally. What are the sources of funding you will look at and why?

of funding you will look at and why? Answer:

23.5 Indian Venture Capital Industry

The following Table 23.2 provides the Industry wise cumulative investment details of SEBI registered venture capital funds (VCF) and foreign capital investors (FVCI).

Table 23.2: Industry wise Cumulative Investment Details of SEBI Registered Venture Capital Funds (VCF) and Foreign Capital Investors (FVC)

Particulars	as on September 30, 2022 (₹ in Crore)			
Sectors of Economy	VCF	PVCI	Total*	
Information Technology	35	3,176	3.211	
Telecommunication	9	166	175	
Pharmaceuticals	92	687	779	
Biotechnology	25	-	25	
Medial Entertainment	21	581	602	
Services Sector	205	206	411	
Industrial Products	97	42	139	
Others	2,315	39,239	41,554	
Total	2,799	44,097	46,896	

*VCFS registered under erstwhile SEBI (Venture Capital Funds) Regulations, 1996. **Note:** The above report is compiled on the basis of quarterly information Submitted to SEBI by registered Venture Capital Funds and Foreign Venture Capital

Source: www.sebi.org, 2022; https://www.sebi.gov.in/statistics/investment-details/archives/sep-22.html

23.5.1 Investment Objectives

As mentioned earlier, there are more than 13 VC companies and around 10 of them, are VCFs in India. Broadly, there are three categories of VC funds/companies going by the agencies that have promoted them. They are the (i) funds promoted by all-India DFIs/State level DFIs, (ii) funds promoted by commercial banks (iii) funds promoted by private sector financial services companies.

In the Indian context, venture capital companies have tried to develop particular niches for themselves by defining their investment objectives in an appropriately distinctive manner. It would appear that at least among the public sector venture capital (VC) investors, there is a tendency to recognize VC with the high/new technology development. It is observed from these statements that most VC investors in India do not appear to have any stated sectoral preferences. But, in the recent past, technological expertise shown by Indian software professionals has encouraged many venture capital funds to provide most of it to this software sector. Software firms like Infosys and computer firms like Mastek owe their present position, though partially, to the funding by Venture Capital. Mastek is a software company providing development services to India and overseas customers. The company's operations have grown rapidly with subsidiaries in Singapore and the USA. TDICI Ltd., had made its first round of investment in 1989. It had helped the company come out with a public issue in December, 1992. The TDICI reportedly was able to fetch returns within a few years at around 29 times the initial investment.

Investment preferences prefer in terms of the business size, technological novelty of the proposal or the promoters of the project. Most Indian VC investors are indeed secular about their sector-wise investment preferences, though they tend not to invest in opportunities in some areas that they consider too complex to manage.

Example: Start-ups and the Indian VC Investments in 2021

The Indian VC industry got zooming with the start-up eco-system. The VC investment in India for the year 2021 was significantly focused on start-ups. In the first half of 2021, the Indian start-ups attracted a record USD 17 billion much higher than USD 11 billion in 2020. It was also noted that investments expanded across stages and artificial intelligence, machine learning, Edtech and foodtech were the leading sectors.

Source: https://www.outlookindia.com/website/story/india-news-indian-startup-ecosystem-got-usd-172-bn-investment-from-venture-capital-firms-during-jan-july-report/392270

Accessed on June 15, 2022.

23.6 Investment objectives of Some Indian Venture Capital Firms

Different venture capital companies adopt different investment strategies as the objectives they seek to achieve from their investments are varied. For instance, the venture capital arm of IDBI is the IDBI Capital Market which provides venture capital fund assistance to new or existing industrial firms for:

- a. Encouraging commercial application of indigenously developed technology
- b. Adapting imported technology to wider domestic applications
- c. All matters connected with or incidental to the above (a, b and c).

Telangana Government initiated T-Angel in association with T-Hub (innovation, intermediary and business incubator), that mentors the early-stage start-ups through an accelerator program to become investment-ready. T-Angel ropes in high net-worth individuals, investment funds and start-up enthusiasts to explore angel investment opportunities in Telangana through T-Hub.

In the private sector, leading VC firms such as Kalaari Capital, Sequoia Capital India, nexus venture partners etc. focus mostly on investments that are oriented with the objectives of supporting new age, tech based start-ups.

The development approach is in sharp contrast to the investment objectives of the professionally managed VC funds in Western Europe and North America. Because the primary objective is maximizing the return on the portfolio and advancement of technology/development of product/markets of an economic byproduct or at best a means to achieving financial objectives. The private sector/commercial bank promoted VC funds in India, do not appear to have such specific preferences. A common trend that could be noticed though is a professed preference for small/medium companies and first-generation entrepreneurs.

23.6.1 Financing Instruments

The Indian venture capital industry has initiated to maintain the risk-reward sharing relationship through a variety of innovative instruments for investment structuring. These have been in response to the:

- a. Constraints on pricing imposed by the securities pricing regulations
- b. Indian entrepreneurial ethos which lays considerable emphasis on ownership and control of the company
- c. Company law regulations under Section 43(A), Section 370, etc.

While several venture capital funds or venture capital companies have tried to nomenclature instruments differently, but were able to classify into three broad categories. These are:

- i. Equity investments.
- ii. Quasi equity investments
- iii. Normal loan

Equity Investments

Almost all VC funds/companies prefers a minority position in the investee company. Subscription has almost always been at par, since the investees have been start-ups or early stage companies and a premium would have been difficult to justify under the guidelines issued by the Controller of Capital Issues (CCI). When it is risked, the equity investment usually carries with it several protective covenants (especially in a situation where the venture capital investor is a significant stockholder) including several standard ones like as the right to appoint nominee(s) on the Board of Directors, authority to examine books of accounts, carry out concurrent audit and sometimes even power to veto decisions on a set of issues that may be agreed upon with the company's management / promoters. Some VC investors have however realized the need for subscribing to the share capital at a premium for a variety of reasons such as timing of entry into the company and need to provide financial incentives to operating management. In order to pay an effective price for the shares of the company, they have worked out ingenious methods such as providing low cost debt, renunciation of rights issued at par in favor and so forth. With the abolition of the CCI and removal of restrictions on pricing, VC investors have greater freedom in pricing of equity subscription and structuring of deals. However, it will be difficult to raise equity at premium since the borrowers are yet to prove themselves. The issue will be subject to SEBI guidelines.

The disinvestment timing will be at the option of venture capital investor. But the investee requires through an agreement, to have the company's stock listed on one or more stock exchange(s) as desired by the venture capital investor. The pricing of the sale-back of the equity to the promoters/management is often linked either to the market price upon listing of the scrip or with some formula. The equity investments also carry 'a first right of refusal in favor of the promoter'. The 'first right of refusal' provides the promoter or his assignees to buy the VC investors' shareholding based on an agreed upon pricing formula. The VC investor would be in a position to sell his investment (usually on not more attractive terms) to a third party only after the promoter turns down the offer subject to a limited time period. What needs to be noted is that the several venture capital funds or venture capital investors provide the buyback 'comfort'. Hence, it is worth to conclude that this provision is also in response to the Indian entrepreneur's tendency to maximize his share-holding in the company over a time period. Needless to say all these covenants would need to be subject to the Memorandum and Articles of Association of the company which inter alia, governs the investor-investee relationship. It is, however, not unusual to fund VC investors still writing in covenants that are in conflict with the provisions of the MOA of the investee company, resulting in potentially infructuous law suits.

Quasi Equity Investments

A number of quasi equity investments, as mentioned earlier, have evolved in line with the regulatory framework in spite of the reluctance of the average Indian entrepreneur to permit external participation in 'his' company's equity. The quasi equity loans are broadly classified into two types. They are as follows:

- i. A loan whose servicing is linked completely to the company's performance or project's performance, participate totally in the downside and significantly in the upside in a manner agreed upon upfront.
- ii. A loan on which there is a minimum obligation (be it of interest or principal) contracted at reasonably low levels irrespective of performance and an upside sharing component.

In the former situation, the servicing is through a percentage charge on sales that is contracted upfront considering the future sales and profitability of the project or the company, and the servicing capacity available in the company's cash flow. The charge is fixed at a level that would provide a discounted rate of return (on the loan) commensurate with a high-risk equity investment. The charge payment period is normally co-terminus with the maturity of the venture fund. Interestingly, these also carry occasionally, some collateral cover as well such as a charge on the company's assets. The rate of return on a reasonable set of revenue and profitability expectations would be comparable to that achievable on equity investments. Sometimes, the charge on sales payable is subject to a cap on the total amount payable. In the latter situation, again two models obtain. The venture capital investor either stipulates a fixed repayment schedule for the loan and a variable rate of charge in lieu of interest; or a fixed repayment schedule, a fixed floor rate of interest and a variable premium to share the upsides. This type of quasi equity loans also carry collateral.

The quasi-equity investments also come with a number of protective covenants including option to appoint nominee(s). Occasionally, with an option to convert the loan into equity shares in the investee company in the event of consecutive, willful default or non-achievement of some agreed performance milestones. The intent in such situations is to be able to obtain control of the company and effect restructuring plans, if any required.

Quasi-equity instruments as explained above suffer from a number of apparent shortcomings. Firstly, they involve cash payouts from the investee company during the growth phase, when the company needs to conserve the cash most. A second shortcoming is from the investor's standpoint: that of tracking and accounting the payments and ensuring the accuracy of the sales accounting by the investee company. This latter became also a point of potential abuse. The quasi-equity loan will perhaps continue to be a necessary evil till such time as the

pricing regime for equity issues permits equity shares to be the instrument for sharing risk and reward equitably and providing financial incentives to the participants that matter.

The quasi-equity loan has not found favoritism in Western Europe or North America. However, in some of the newly industrialized countries like Korea and emerging Asian economies, the conditional loan has been widely applied in structuring the venture capital investments.

Normal Loans

Of all the financial instruments specified above, it may be stated that the normal term loan is the least preferred alternative. The reason, presumably and understandably, is that it is not ideally suited for venture capital cases where the cash flows of the firm cannot be predicted with even a reasonable degree of certainty to be able to contract fixed repayment and interest obligations. The limited normal loans that VCs provide appear to meet short-term/medium-term requirements of portfolio companies to help them tide over temporary cash shortages. These are short-term maturities (ranging from six to eighteen months) and carry interest at a rate equal to (or slightly higher) than the lending rate of commercial banks.

Example: Objectives of Blume Ventures VC

Blume Ventures, an Indian VC firm is an early stage seed funding firm focussed on technology start-ups focussed on coding or intellectual property. Secondly, they are focussed on B2B businesses. Thirdly, their objective is to stay invested for 8 to 10 years long. They wish to see the start-ups "achieve product-market fit".

Source: https://blume.vc/about-us/ Accessed on June 10, 2022.

23.7 Stages in Company Financing

Funding of the company can be classified into stages:

23.7.1 Early-Stage Financing

This can be explained as:

Seed Financing is a relatively small amount of capital provided to an entrepreneur to prove a concept. It may include product development and market research as well as building of management team and developing a business plan, if the initial steps are successful.

Start-up Financing is provided to companies completing product development and initial marketing. Companies may be in the process of organizing or they may already be in business for one year or less but may have not sold their product

commercially. Usually, such firms will have carried out market studies, assembled the key management, developed a business plan and are ready to do business.

First Stage Financing is provided to companies that have expended their initial capital (often in developing and market testing a prototype) and require funds to initiate full scale manufacturing and sales.

Second Stage Financing is working capital for the initial expansion of a company that is producing and shipping and has growing accounts receivable and inventories. Although the company has made progress, it may not be showing profits yet.

Third Stage or Mezzanine Financing is provided for major expansion of a company when sales volume is increasing and that is breaking even or profitable. These funds are used for further plant expansion, marketing, working capital or development of an improved product.

Bridge Financing is needed at times when a company plans to go public within six months to a year. Often, bridge financing is structured for repaying it from the proceeds of a public underwriting. It can also involve restructuring of major stockholder positions through secondary transactions. Restructuring is undertaken when there are early investors who want to reduce or liquidate their positions or if management had changed and the stockholdings of the former management, their relatives and associates are being bought out to relieve a potential over-supply of stock when going public.

Check Your Progress - 1

State whether the following statements are TRUE or FALSE.

- 1. Venture capital involves low participation after investment.
- 2. Venture capital companies have a propensity to absorb higher risk than banks.
- 3. The venture capital companies like to operate in countries where the capital markets are not developed.
- 4. Seed financing requires heavy investing because of huge capital expenditure at the time of setting up of business.
- 5. Mezzanine financing is provided after the business has become profitable.

23.7.2 Acquisition (Buyout) Financing

Acquisition financing provides funds to finance an acquisition of another company. Management/leveraged buyout funds enable an operating management group to obtain a product line or business, which may be at any stage of

development, from either a public or private company. Often, these companies are closely held or family owned. Management/LBOs usually involve revitalizing an operation with entrepreneurial management acquiring a significant equity interest.

Example: Venture Financing by Nexus Ventures

Nexus Ventures Capital, founded in 2006, is one of the top 10 active VC firms in India. The company is interested in seed-stage and early-stage funding with the investment range of USD 500,000 to USD 10 million. However, in April 2022, Nexus Ventures made later stage investment in the AI start-up Observe.

Source: https://digest.myhq.in/top-venture-capital-firms-in-india-startup-funding Accessed on June 8, 2022.

23.8 Regulatory Issues Impacting the VC Industry in India

It has been mentioned earlier that government policy has a significant impact on the growth and development of the VC industry. Venture capital industry was sought to be developed by the government by giving tax breaks and concessions on the income of VCC/VCF. In the SEBI regulations, VCF/VCC were allowed to function irrespective of whether they want to claim the concession under tax laws or not. Under Section 10 (23FA&FB) of the Income Tax Act, the income of VCF/VCC is totally exempt from income tax by way of dividend and long-term capital gain from equity investment provided they satisfy the specified criteria. Other regulations concerning the venture capital industry are:

- Section 186 of the Indian Companies Act, 2013 (Companies Act, hereafter), precludes all corporates, other than the recognized VC funds approved under the Government guidelines from making significant VC investments.
- ii. Section 43(A) of the Companies Act 2013 acts as a deterrent. Consequently, investment by a public company VC investor beyond 25% of paid-up capital would entail a loss of the legal status and accompanying privileges of a private company to the investee. Some of these privileges include exemption from filing of prospectus or statement in lieu\of prospectus (S.70), minimum of two members (S-2 (68), financing for purchase of own shares (S-67), freedom in managerial remuneration (S-197), unrestricted powers to make inter-corporate loans and investments (S 186), minimum of 2 directors (S-152), confidentiality of profit and loss account from public scrutiny (S-137/1).
- iii. The Government guidelines on VC companies is in itself a source of several restraints to even an approved VC investor. These include:
 - a. Regulation of portfolio composition.
 - b. Technology/innovativeness requirement in qualifying projects.

- c. Minimum volume of capital to be raised, sources from which the capital may be raised, and capital structure of the VC Company.
- d. Composition of non-VC assets in the VC fund portfolio.
- iv. The issue of capital, until the recent rescindment of the Control of Capital Issues Act, was a serious limitation on the ability of the VC investor to structure deals that would be reflective of the risk and rewards inherent in a project or provide for financial rewards/incentives to the participants in the venture for contributing to its success through providing technology or managerial inputs. The selective removal of restrictions on premia and several other restrictions like capitalization of reserves by way of bonus issues, have added infinitely to the freedom in structuring deals. However, true freedom would be when limits on discounts on share capital, restrictions on issue of capital with different rights and reconstruction of the capital structure of companies are further eased, allowing the finance manager full expression of his financial engineering savvy and creativity without jeopardizing the interests of the investor.
- v. Income from dividends and capital gains from equity investments is exempted for the VC companies, where as it is taxable in the case of shareholders.

As stated above, venture capital may be provided by the Venture Capital Funds established as Trusts or Venture Capital Companies incorporated under the Companies Act. SEBI rules permit establishment of venture capital institutions under either of the methods provided:

- i. Venture Capital Funds Set-up Asset Management Companies (AMC) that 'screens, makes and manages individual investments'.
- ii. Venture capital company established as a company satisfies the eligibility criteria drafted by SEBI for the purpose of registration, namely:
 - a. Memorandum of association has its main activity of carrying out the business of venture capital fund.⁴⁴
 - b. Memorandum and articles of association explicitly prohibits invitation to the public to subscribe to its securities.
- iii. Venture capital fund established as a trust satisfies the eligibility criteria drafted by SEBI for the purpose of registration, namely:
 - a. The instrument of trust is in the form of a deed and has been duly registered under the provisions of the Indian Registration Act, 1908.
 - b. The main objective of the trust is to carry on the activity of a venture capital fund.

The Regulations issued by SEBI are given in Appendix II.

⁴⁴ The term Fund in this context does not denote a VCF in terminology defined earlier.

⁴⁵Private Equity Investments in India -2022-23

As per a report by Indian Private Equity and Venture Capital Association and consulting firm EY, India continues to be one of the strongest economies globally, recording 13.5% growth in first quarter of FY 2022-23 and also overtaking United Kingdom (UK) to become the fifth largest economy in the world. This is mainly because of extended recession in United States (US) and recession on the edge in Europe, strengthening India as a better investment destination.

In the connected global economy, India too is facing the heat of falling rupee and rising inflation, making fundraising difficult for many businesses to grow. Further, US FED strict advocacy and global financial bear markets dampened the global investor's sentiment. So, it is expected that PE/VC investment activity remains sluggish in the near term. As on August 2022, all deal segments were recorded sharp declines on a y-o-y basis, in the range of 70%-90%, primarily due to the absence of large deals.

Though the factors such as growth slowdown, tight liquidity, market sentiment and currency depreciation increases the issues in Private-Equity (PE) industry, yet PE Investors with long standing, strong growth pathway and with sustainable unit economics, are expected to dominate the Indian private equity industry and be the wavelength behind India's long-term growth prospects.

Example: Service Taxes for Trust VCFs

This is a case of regulatory issue arising for the VCFs in India which are formed as trusts in majority of the cases. Trust VCFs offer operational flexibility like service tax exemption. However, the Customs, Excise & Service Tax Appellate Tribunal, Bengaluru, in a July 2021 order stated that the PE-VC funds of Trusts need to be subjected to service taxes i.e. carry fees, legal fees and taxes on salaries which would impact the profits of VCFs. The Ministry of Finance is currently looking into the issue.

Source: https://economictimes.indiatimes.com/news/economy/policy/pe-vc-funds-could-be-treated-as-separate-class-of-investors/articleshow/89357721.cms Accessed on June 9, 2022.

23.9 The Venture Investment Process

The VC investment process has variances/features that are context-specific to countries/regions. However, activities in a VC fund follow a typical sequence with a number of commonalities. The typical stages in an investment cycle are as below in Figure 23.2:

⁴⁵ https://www.ey.com/en_in/news/2022/09/on-the-back-of-large-open-market-exits-august-witnessed-the-highest-pe-vc-exits-in-

^{2022#:~:}text=Exits%20recorded%20US%243.1%20billion,the%20investments%20in%20August%202021.

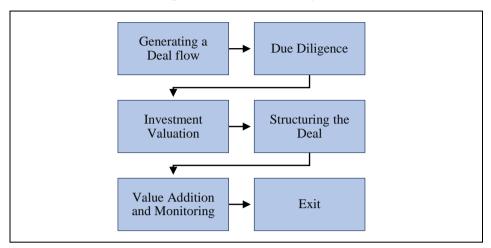


Figure 23.2 Investment Cycle

Source: ICFAI Research Center

23.9.1 Generating a Deal Flow

In generating a deal flow, the venture capital investor develops a pipeline of 'deals' or investment opportunities that he would consider for investing in. This is achieved through plugging into an appropriate network. The most popular network obviously is the network of venture capital funds/investors. It is also common for VC funds/investors to create working relationships with R&D institutions, academia, etc., which could lead to business opportunities. Here, the network composition depends upon the investment focus of the venture capital fund/company. Thus, venture capital funds, focusing on early stage and technology-based deals, would develop a network of R&D centers working in those areas. The network is crucial to the success of the venture capital investor. It is almost common for every venture capital investor to receive a large number of investment proposals from which he can finally select a few good investment candidates. In USA, the successful venture capital investors examine hundreds of business plans in order to make three or four investments in a year.

It is important to note the difference between the profile of investment opportunities that a venture capitalist would examine and those pursued by a conventional credit-oriented agency or an investment institution. By definition, as stated earlier, the VC investor focuses on opportunities with a high degree of innovativeness.

The deal flow composition and the technique of generating a deal flow can differ from country to country. In India, different venture capital funds/companies have their own methods differing from promotional seminars with R&D institutions and industry associations to direct advertising campaigns targeted at various segments. A clear pattern between the investment focus of a fund and the constitution of the deal generation network is discernible even in the Indian scenario.

23.9.2 Due Diligence

Due diligence is the industry jargon for all the activities that are associated with evaluating an investment proposal. It includes conducting the reference checks on the proposal related aspects like management team, products, technology and market. The important feature is that the venture capital due diligence focuses on the qualitative aspects of an investment opportunity.

It is normally the venture capital funds/companies to set up an 'investment screen'. The screen is a set of qualitative, sometimes quantitative criteria like revenues, criteria that help venture capital funds/companies to promptly decide on whether an investment opportunity warrants further diligence. Screens can be sometimes elaborate and rigorous and sometimes specific and brief. The nature of screen criteria is also a function of the investment focus of the firm at that point. Venture capital investors mostly depend upon the reference checks with 'leading lights' in the specific areas of concern being addressed in the due diligence.

23.9.3 Investment Valuation

The investment valuation process is an exercise aimed at arriving at 'an acceptable price' for the deal. Typically, in countries where free pricing regime exist, the evaluation process passes through the following sequence:

- a. Evaluate future revenue and profitability.
- b. Forecast likely for future value of the firm based on expected market capitalization or expected acquisition proceeds depending upon the anticipated exit from the investment.
- c. Target on ownership position in the investee firm so as to achieve desired appreciation on the proposed investment. The appreciation desired should yield a hurdle rate of return on a discounted cash flow basis.

Symbolically, the valuation exercise may be represented as follows:

$$NPV = [(Cash)/(Post)] \times [(PAT \times PER)] \times k;$$

Where.

NPV = Net Present Value of the cash flows relating to the investment comprising outflow by way of investment and inflows by way of interest/dividends (if any) and realization on exit. The rate of return used for discounting is the hurdle rate of return set by the VC investor.

$$Post = Pre + Cash.$$

Cash represents the amount of cash being brought into the particular round of financing by the VC investor.

'Pre' is the pre-money valuation of the firm estimated by the investor. While technically it is measured by the intrinsic value of the firm at the time of raising capital, it is more often a matter of negotiation driven by the ownership of the company that the VC investor desires and the ownership that the founders/management team is prepared to give away for the required amount of capital.

(PAT) is the forecast of profit after tax in a year and often agreed upon by the founders and the investors (as opposed to being 'arrived at' unilaterally). It would also be net of preferred dividends, if any.

(PER) is the price-earnings multiple that could be expected of a comparable firm in the industry. It is not always possible to fund such a 'comparable fit' in VC situations. That necessitates, therefore, a significant degree of judgment on the part of the VC to arrive at an alternative PER scenarios.

'k' is the present value interest factor (corresponding to a discount rate 'r') for the investment horizon.

It is quite apparent that PER times PAT represents the value of the firm at that time and the complete expression really represents the investor's share of the value of the investee firm. The following example illustrates this framework:

Example:

Best Mousetrap Limited (BML), has developed a prototype which needs to be commercialized. BML needs cash of $\stackrel{?}{\stackrel{?}{?}}$ 2 million to establish production facilities and set up a marketing program. BML expects that the company will go public in the third year and have revenues of $\stackrel{?}{\stackrel{?}{?}}$ 70 million and a PAT margin of 10% on sales. Assume for the sake of convenience, that there would be no further addition to the equity capital of the company.

Prudent Fund Managers (PFM) propose to lead a syndicate of like-minded investors with a hurdle rate of return of 75% (discounted) over a five-year period based on BML's sales and profitability expectations. Firms with comparable sales and profitability and risk profiles trade at 12 times earnings on the stock exchange.

The following would be the sequence of computations:

In order to get a 75% return p.a., the initial investment of $\stackrel{?}{\underset{?}{?}} 2$ m must yield an accumulation of 2 x $(1.75)^5 = \stackrel{?}{\underset{?}{?}} 32.8$ m on disinvestment in year 5. BML's market capitalization in year 5 is likely to be $\stackrel{?}{\underset{?}{?}} (70 \times 0.1 \times 12)$ m = $\stackrel{?}{\underset{?}{?}} 84$ m.

Percentage ownership in BML that is required to yield the desired accumulation will be

$$\frac{32.8}{84}$$
 x 100 = 39%.

Therefore, the post-money valuation of BML at the time of raising capital will be equal to

₹
$$\frac{2}{0.39}$$
 m = ₹ 5.1 m

Which implies that a pre-money valuation of ≥ 3.1 m for BML.

Another popular variant of the above method is the First Chicago Method (FCM) developed by Stanley Golder, a leading professional VC manager. FCM assumes three probable scenarios, 'success', 'sideways survival' and 'failure'. Outcomes under these scenarios are probability weighted to arrive at an expected rate of return.

In practical sense, the firm's valuation is driven by several factors. The significant among these are:

- Overall economic conditions: A buoyant economy produces an optimistic long-term outlook for new products or services. Therefore, results in more liberal pre-money valuations.
- ii. **Demand and supply of capital:** When there is a surplus of VC chasing a relatively limited number of VC deals, valuations go up. This can lead to unhealthy levels of low returns for VC investors.
- iii. **Specifics of the deals:** Such as the founder's/ management team's track record, innovativeness/Unique Selling Propositions (USPs) the service potential size of product/market, etc. affects the valuations in an obvious manner.
- iv. **The degree of popularity** of the industry/ technology in question also influences the pre-money. Computer Aided Software Engineering (CASE) tools and Artificial Intelligence were one-time darlings of the VC community that have subsequently replaced to biotech and retailing.
- v. **The standing of the individual VC:** Well established venture capitalist who are sought after by entrepreneurs, for a number of reasons, could get away with tighter valuation than their lesser known counterparts.
- vi. **Investor's considerations** could vary significantly. A study by an American VC, Venture One, showed that large corporations who invest for strategic advantages such as access to technologies, products or markets pay twice as much as a professional VC investor for a given ownership position in a company but only half as much as to investors in a public offering.
- vii. Valuation offered on comparable deals around the time of investing in the deal.

 Valuation is one of the most critical segment in the VC investment process.

 The success of a fund will be determined by its ability to value/price the investments correctly.

Sometimes the valuation process is broadly based on thumb rule metrics like multiples of revenue. Though such methods would appear rough and ready, yet they are often based on fairly well-established industry averages of operating profitability and assets/capital turnover ratios.

Such valuation is possible only when there exists absolute freedom of pricing. Unfortunately, until recently the pricing of equity issues was heavily regulated, the valuation was heavily constrained in India.

The Venture Investment Valuation in India

There appears to be no standard approach to investment valuation in India. At one end of the spectrum, some of the funds/companies appear to follow the traditional development banking approach with a high degree of emphasis on the project appraisal format and methodology adopted by credit-oriented development banks. The similarity in methodology is indeed so close that an appraisal/ investment memorandum from one of these investors reads remarkably like that of a DFI, in terms of thrust and content. The areas of focus in the appraisal are also quite similar to those addressed by DFI. At the other end, there appears to be the approach of an equity investor with emphasis on the earnings potential, broad financial attractiveness of the industry and the promoter's track record. While some of the investors have been making a serious attempt to move towards the American or UK paradigms of investment valuation, yet there still exists a strong local instinct to the valuation process. The Indian approach will have to take into cognizance the differences in operating ambience prevalent in India. Notable among these are the non-availability of an established market mechanism and related norms, reliable and contemporary information, and above everything else, pricing regulations on securities offering.

23.9.4 Structuring the Deal

Notwithstanding the aforesaid differences, the Indian industry will have to develop a new set of investment valuation techniques and standards to handle true venture capital situations as opposed to the traditional credit appraisal approach.

VC investments require and permit innovativeness in financial engineering. While VC investments follow no set formula, they attempt to address the needs and concerns of the investor and the investee.

The investor tries to ensure the following:

- Reasonable reward for the given level of risks;
- Sufficient influence on the management of the company through board representation;
- Minimization of taxes;
- Ease in achieving future liquidity on the investment.

The entrepreneur at the same time seeks to enable:

- i. The creation of the business that he has conceptualized (operating and strategic control);
- ii. Financial rewards for creating the business;
- iii. Adequate resources needed to achieve their goal;
- iv. Voting control.

Common considerations for both sides include:

- a. Incentives for future management and retention of stock if management leaves.
- b. Balance sheet attractiveness to suppliers and debt financiers.
- c. Retention of key employees through adequate equity participation.

In the Indian context, one of the primary considerations is retention of majority shareholding. Often, the promoters do not even wish to encourage external equity participation. These cultural issues have a significant influence on the structuring of a deal.

23.9.5 Value Addition and Monitoring

We have seen in our earlier definition of VC that sustained, active involvement over an extended period of time is one of the distinguishing characteristics of VC. This process of the VC investor's involvement in the portfolio company is often referred to broadly as 'value addition'. The 'value' that the VC brings to the portfolio company can vary from one VC professional to another depending upon the individual's background and approach to VC. There are VC professionals, especially those who invest in very early stage situations, whose involvement can go up to providing operating management support. There are also others, exemplified by LBO specialists and mezzanine investors, whose involvement may not extend beyond lending an avid ear to the proceedings of quarterly or monthly board meetings. The extent of involvement could also depend upon the VC investor's stake in the company and his role in the consortium, when the investment has been syndicated among a number of investors. In a consortium, it is not an uncommon practice for one of the investors to play the role of the lead investor taking upon himself significant responsibilities with respect to the portfolio company, on behalf of himself as well as the co-investors in the syndicate. Investment exposure and/or specific ability to add value and/or geographic presence are some of the usual criteria for a VC investor being designated lead investor.

The nature of involvement is situation-specific as mentioned earlier. However, some generalizations have been attempted based on empirical research. One such study revealed the following general patterns:

i. The most intense involvement occurs at the tender early stages of the venture;

- ii. Openness of communication and chemistry are crucial;
- iii. Venture capitalists add value in a variety of ways, especially through strategic and supportive roles;
- iv. Most of the venture capitalist's key role becomes increasingly important as the venture develops.

If value addition represents the pro-active stance of a VC investor to maximize the value of his portfolio company, monitoring represents the reactive observance of avoiding losses by seeing red flags in advance that warn of impending danger. Monitoring the portfolio companies is a straightforward, yet delicate task. The straightforwardness lies in the well-established tools and techniques that are used for the purpose: Periodic reports, Board of Directors meetings, review sessions and so forth. The delicacy arises, out of the need to draw a line between policing in distrust and monitoring out of caution.

23.9.6 Exiting

The process of exiting from a VC investment is as important as in any other process in the investment cycle. The two exit options are:

- Sale of the VCs position either along with or subsequent to a public offering
- Acquisition of the company.

A public offering is the preferred route of exit for VCs. In North America and Western Europe, a well-developed second tier market serves as a convenient vehicle for such an exit. Public offerings result in higher multiples in the case of a successful venture backed company. Secondly, the acquisition market in these countries is a well-developed mechanism. Over the years, building companies for acquisition by a larger corporate for strategic considerations has become a popular trend.

In India, the main market for capital issues has cut off criteria which most venture backed companies may not be able to achieve over a five- or seven-year horizon. In response, the Over The Counter Exchange of India (OTCEI) has emerged. The effectiveness of this market mechanism as an exit vehicle remains to be established yet. Acquisition of companies again is likely to take a few years to emerge as an acceptable route in view of the current entrepreneurial ethos in our country. The issue of exit in fact remains to be addressed by many of the Indian VC funds/companies. The current Indian practices are to redeem the hybridized debt through a cash pay-out or enter into a buy-back arrangement for the equity investment with the promoters. As mentioned earlier, from an economic stand point, these are not the optimal or most efficient options. It is expected that with the emergence of a stable second tier capital market, growth in number of venture capital investments and evolving entrepreneurial ethos, it would be reasonable to expect that the exit options available to the Indian VC investors would improve in efficiency and ease.

Most Indian VC investors are still in the process of evolving their own approaches to value addition and monitoring. Some of the venture capital investors that invest in relatively large enterprises promoted by entrepreneurs from an industrial fraternity or possessing well established credentials tend to prefer a 'hands-off' approach to value addition, and be committed to monitoring their investment. Some of the others who have been investing in small or medium entrepreneurial start-ups with considerable management gaps have been trying to add value to their portfolio companies, apart from monitoring. Similarly, there are no instances of venture capital taking over operating managements of portfolio companies in India. Given that most investments are in the early stages, it may be premature to draw any conclusions on the effectiveness of those venture capital professionals in complementing or supplementing operating managements. Some VC investors argue, that they (investors) have had a role to play in some of the early portfolio successes that manifested in recent times.

Example: True North Partially Exits Policy Bazaar

True North which made venture capital investments in Policy Bazaar exited partially in April 2021. Previously also in October 2020, True North sold off its partial investments when another VC firm Falcon Edge Capital invested. Policy Bazaar which was started in 2008 is part of PB Fintech established by Yashish Dahiya and Alok Bansal which later emerged into a largest insurance aggregator in India.

Source: https://www.vccircle.com/global-investors-are-looking-at-india-as-the-next-silicon-valley-of-the-world-says-claude-smadja-president-smadja-smadja-former-world-economic-forum-managing-director Accessed on June 13, 2022.

23.10 Organization of Venture Capital Businesses

In the early days, venture investment was primarily the activity of wealthy individuals, syndicates organized by investment bankers or by a few family organizations employing professional managers. The "first formal VC institution" is the now legendary American Research and Development Corporation. During the fifties and the sixties, the Small Business Investment Corporations, (SBIC), engaged in financing young, entrepreneurial companies, got involved albeit unintentionally, in funding some risky ventures as well. For numerous reasons however the SBIC program as a whole is reported to have met with limited success.

The two other types of VC investment agencies are:

- i. Private venture capital firms.
- ii. The subsidiaries of financial and non-financial corporates.

Most private VC firms are organized as limited partnerships and a few as corporations with restricted shareholding. A Limited Partnership (LP, hereafter),

a concept alien to Indian business organizations, is one where the investors have limited financial liability, but are subject to the other governing aspects of a partnership. Typical investors in such funds could be pension funds, large corporates, state/municipal funds, family trusts and banks. Pension funds new venture investments as an alternate asset class while large corporates invest in venture funds with the strategic objective of obtaining a 'window' into emerging technologies being developed by young, venture backed start-up companies. State/municipal government funds use investment in venture funds for promoting local economic/industrial development through venture capital-led investment formation. A LP is managed by General Partners (GPs). GPs are usually professionals from diverse backgrounds who have made mid-career changes into venture investment management. Thus, there are technologists, scientists, managers, lawyers and bankers, to name a few categories, who have made a mark in venture investment management in the USA. Most of them have a track record of excellence in their previous vocations. The GPs are compensated through a management fee which is a percentage of the assets/funds managed by them. The fee most often is 2%-2.5%. (Some successful GPs manage to negotiate fees linked to the Net Asset Value (NAV), thus incentivize to provide the GP to maximize the NAV of the fund). In addition, the GPs also retain a part of the appreciation in the fund value. This share of the appreciation is also known as 'carried interest' and is usually 20% of all pay-outs to the investor beyond the principal amount of the fund. LPs have attained popularity for the following reasons:

- i. The partnership itself is not taxed.
- ii. The partner's liability is limited to interest in the partnership,
- iii. The partnership life process is fixed at the time of formation and is fitted to match the duration of extended investment holding periods.

It would be relevant to point out at this juncture that corporate venture fund managers met with limited success in USA. The requirement of specialized skills to succeed in venture investing is cited as one of the reasons. Corporates and banks seem to have discovered that it is not easy to convert their executives/credit officers and analysts into effective venture investment managers. David Silver suggests that this could also be due to the inability of corporates to provide for the managers to participate in the profitability of the investments within their corporate framework. This led to many of the successful investment managers setting up their independent fund management partnerships.

Among private venture capital firms several early venture capital firms started by wealthy families/individuals such as the Rockefellers (Venrock), the Phipps (Bessemer Securities) and the Whitneys (Whitney & Co.) who were the fore runners to modern venture funds continue to be active and possess considerable venture investment experience and savvy.

In India, most VC firms are private corporates or institutional spin offs. While corporates bring the investible fund into their books as share capital, some fund managers such as Indus Venture Fund Managers form funds into a trust and manage the same through an Asset Management Company (AMC). TDICI and Risk Capital and Technology Finance Corporation (RCTC) have constituted the funds into a scheme under the UTI Act – Venture Capital Units Scheme (VECAUS). TDICI manages two of these funds under a management contract, while RCTC manages the third VECAUS fund in a similar manner. This approach provides all the tax benefits available under a UTI scheme to the fund investor. In all these instances the fund manager is provided a management fee on the funds invested and a share of profits.

It would be pertinent to highlight here that the Indian industry is yet to adopt the American approach towards management of venture capital funds. Most VC funds appear to have adopted a corporate/institutional framework and thereby do not seem to provide a mechanism for expression of individual styles in investing or value addition and correspondingly for a financial compensation package that is linked to the value that the manager creates out of the fund's investment portfolio.

Example: Kaalari Capital

Kaalari Capital is an early stage investor and active as on 28th November 2022, focussed on technology start-ups with investments in companies like Flipkart, Snapdeal, Myntra etc. The organisation structure of the company shows that it is an unlisted private limited company and is managed by partners. Thus one can say that Kaalari Capital is a Limited Partnership company with limited financial liabilities.

Source: https://www.tofler.in/kalaari-capital-advisors-private-limited/company/bU67190KA2006PTC039598 Accessed on June 9, 2022.

23.11 Private Equity

Private Equity (PE) means an equity investment in an asset in which the equity is not freely tradable on public stock markets. It helps to venture capital growth. They make investments in non-listed or non-public companies. PE takes care of the financing of privately-held companies having an ambitious business plan. PE financing helps these companies in different business strategies such as product development, expanding working capital requirements, strengthening marketing structures and even acquiring other companies. In India, ICICI bank is one of the private equity investors. At present 800 funds are maintained by private equity firms. Private equity funds are organized as limited partnerships which are controlled by the private equity firms that act as general partners. Private equity

fund is contributed by long-term funds, like pension fund. The life of a fund often extends up to ten years, the fund will typically make between 15 and 25 separate investments with usually no single investment exceeding 10% of the total commitments. General partners are generally compensated with a management fee and interest. In India, the funds seek to invest in the commercial, residential, retail and other world-class real estate assets, both in developed and development projects, in the potentially growing cities of India. The Fund will seek to deliver a compounded internal rate of return in excess of 20-25% per annum over a seven years' tenor.

PE not only provides diversification but also has other advantages. When compared to the public markets, the PE funds have a long-term historical outperformance record. The expert PE fund managers can cherry pick the company from around hundred companies that can provide-above average returns. PE funds invest their money across the emerging sector and start-ups in different markets allowing a greater scope for higher returns. At the same time, they are close to the promoters of the companies and have access to insider information which can prove to be profitable.

Investment in PE also has some pitfalls. While, on an average, the PE funds have given superior returns when compared to the stock markets, some investments made by the PE funds have resulted in enormous losses. At times, the benefits of diversification may not also be significant as there is no clear distance between the listed and private companies in the same sector. The investors also have to bear the management costs as investment in PE is an expensive asset class. The investment is also relatively illiquid and the availability of experts is also limited. The size of the PE markets is growing by the year and also has a great future prospect. The traditional markets of PE were the US and the Europe but now the PE funds are investing in companies in emerging and developing countries, especially, the companies from the Asia-Pacific region.

Though PE traditionally invests in early and seed stage, investments have increased tremendously in the late stage and buyout stage. Seed financing refers to investing in the research and development of an initial business concept. At this stage, the revenue streams for the company are minimal and, in some cases, have no commercial returns. Expansion stage financing provides for the marketing of the product. The buyouts help to buy into companies which have a promising potential ahead.

The PE funds have to face many risks while making the investments, such as technology risk arising out of investments in technology that might become obsolete; timing risk, in case the company makes the deal in a bull phase when the valuations are at their peak and at the same time, they might get into liquidity crises when they find refinancing difficult. The quality of management might also not turn out to be totally different from what they expected it to be.

⁴⁶Private Equity Scenario -2016

The year 2016 was good for India in terms of private equity deals. The aggregate value of private equity deals was more than \$16 billion. This was the maximum after 2008. The contribution of top 30 deals increased from 25% in 2015 to 30% in 2016. BFSI, IT/ITES were sectors that attracted huge investments. However, sectors such as consumer tech saw a fall in total interest. More than 40% of the deals being entered into are of early stage and growth stage deals. Venture debts are emerging as a new class of raising funds in India.

23.11.1 Evaluating and Measuring the Private Equity Fund Performance

Measuring PE performance is different from measuring the performance of a public company. One thing to look for while measuring the performance of the PE market is the degree of correlation between PE and other asset classes. Since other than the returns, investors of PE intend to diversify the risks and maximize the returns.

Before investing in the PE fund the investor needs to evaluate the investment opportunity. This calls for a closer look at the business ethics of the PE fund as well as the professional track record of the PE managers which is the basic backbone of the industry. Investors also need to evaluate the market opportunity. They should see the relative performance of the PE with respect to other investment alternatives. They should keep an eye on the business cycles and the timing of the PE player.

The quality of the PE fund management team is equally important. The right team which suits the investor's profile should be selected. Also, the performance of the team with respect to the others should be compared to get a better idea. A study of the track record of the team with regard to activities, composition and investment will go a long way to better evaluate the team. Also, some of the moves, like how the team sourced the deal, what position the team took in the negotiation, did it pay the right price and did the deal achieve the set milestones will help evaluating the PE team.

Along with evaluating the management team, the investor should also assess the terms and conditions of the PE investments before investing. First, the management fee structure should be studied. Other partnership expenses like the expense involved in broken deals and the set-up costs should be clearly understood by the investors.

Understanding the legal structures is very important while investing in PE. There should be transparency in taxes and also the regulatory constraints should be known. The protective clauses should also be studied, especially, that of the key man clause and removal clause.

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⁴⁶ India Private Equity Report, BCG, 2017

It is just not enough to invest in a PE. It is important to monitor its performance regularly. The investor should look out for warning signs while monitoring the PE investment. The pace of investment of the PE fund should be monitored. Unusually fast or unusually slowed down investment should be studied closely. The quality of reporting and transparency in valuation along with the stability of the management team should be monitored.

23.11.2 Fund Manager's Challenges

While it is a challenge for the investors to select an appropriate PE fund and monitor its performance, it is even more challenging for the PE fund manager to invest and earn the expected returns. He has to constantly ask himself questions like how to plan liquidity for portfolio while at the same time keeping commitments of several funds. He should value the unrealized investments. He also has the challenge of measuring the performance of the portfolio and how to project the future returns.

The portfolio managers' tasks include: gathering information, constantly watching the market, monitoring the portfolio, modelling the cash flow and forecasting the portfolio. It is also important for the PE fund manager to identify as well as reduce the risks. He has to face both undiversifiable risks such as liquidity risk and valuation risk and diversifiable like the stage risk (different stages of private equity investment), manager risk, industry sector risk, geography risk and vintage year risk.

23.11.3 Compelling Pressures

Usually, the information regarding PE is difficult to come by. This is primarily, because of the absence of information exchange standards. However, there are calls for disclosure as well as setting up of information exchange standards. There are also calls for developing reporting and valuation guidelines. As more and more investors are looking and trusting PE funds which are transparent and follow good governance, this market will soon move towards a more mature path.

23.11.4 Hedge Funds

There is no universally accepted definition for the term hedge funds. However, hedge funds could generally be defined as the unregistered private investment partnerships, which use sophisticated investment strategies like leverage, short-selling and derivatives in various markets with a view to generate high returns. It is pertinent to note that hedge funds are rather more opportunistic in generating higher returns, while avoiding the loss of invested principal. They swirl funds in and out of the markets with amazing speed.

Hedge funds aim at absolute returns, instead of relative returns. This implies that the success of a hedge fund lies in its ability to generate profits, irrespective of whether the markets are bearish or bullish. This is unlike the registered investment

companies, whose performance is measured in the relative sense. It means that even if a scheduled investment company loses money in a bearish market, it can be considered successful if its relative returns are positive.

It is pertinent to note that hedge funds are rather more opportunistic in generating higher returns, while avoiding the loss of invested principal. Generally, these funds comprise of a few affluent investors who may be wealthy individuals or institutions. By and large, there is a minimum investment limit for investors, which is relatively high (\$1,00,000 or more). Further, investment in hedge funds might require investors to invest the funds for a certain minimum period (may be 1 year) and therefore, this might make the hedge funds illiquid. Sometimes referred to as "rich man's mutual fund", hedge funds are similar to other unregistered investment vehicles, such as venture capital funds, in the sense that these accept funds from the patrons and invest it on a group basis. However, there are several distinguishing features also. (Refer Figure 23.3)

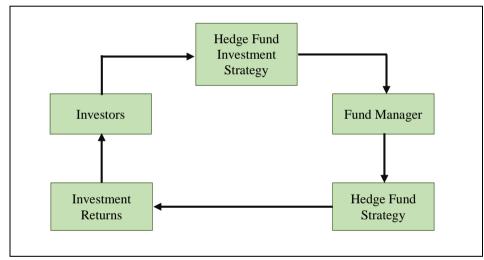


Figure 23.3: The Hedge Fund Process

Source: ICFAI Research Center

Hedge Funds and Venture Capital Funds

Venture capital pools are like hedge funds as they attract the same category of investors. These funds involve a few wealthy investors. However, venture capital funds invest in the new undertakings or during the early stages of a company. General associates of venture capital funds actively participate in the companies in which they invest, unlike the hedge fund managers. Hedge funds take a long position in a security for indefinite time based on the market conditions.

Evolution of Hedge Funds

Hedge funds are known to have been started by Alfred Winslow Jones in 1949. The hedge fund started by Jones invested in the common stocks. It used leverage and short-selling to cover the portfolio's risk against the movements of the equity

markets. Historically, the hedge funds tried to hedge the downside risk and hence, the name. However, over the years, these funds started to invest in various other financial instruments using various advanced strategies.

In an effort to generate high returns, many hedge funds drifted from Jones' strategy and used riskier strategies. What initially started as a method of preventing the loss potential in a bearish market, turned into a riskier speculative investment aiming to beat the market. While a few hedge funds were successful, not all that glittered was gold. Several hedge funds incurred heavy losses and thus, were closed.

There are various reasons behind the growth of hedge funds. During the 1990s, the exceptional bull run in the US equity markets enlarged the investment portfolios. Consequently, investors were more eager about diversification. Hedge funds are perceived as a likely 'hedge' for minimizing downside risk, since they make use of interesting investment strategies believed to generate returns that do not have any correlation to asset classes.

Although risking capital gives nobody pleasure, people do it willingly for the sake of getting excess returns. This is why people started investing in stocks which are generally riskier than debt investments to get higher returns. This implies that for the sake of those few additional percentage points of Return on Investment (ROI), people go in for the riskier investments. This is more so in the light of the fact that the modern financial history has seen lower interest rates.

When the stock markets around the world declined owing to the uncertainties in the US economy and the recent burst of technology and telecommunications bubbles, it provided renewed impetus for hedge funds growth, as investors looked for avenues that could have given them absolute returns.

Strategies of Hedge Funds

While some of the hedge funds depend on technical or fundamental analysis to purchase or short-sell stocks, some try to benefit from the arbitrage opportunities that exist in the markets owing to several inefficiencies. Several funds might try to take advantage of the expected events and make money, or might take up strong positions in securities expecting a gain from the favorable price movements. When the environment turns unfavorable, several hedge funds resort to short-selling or enter into derivative contracts, which increase in value as the value of the underlying falls. Quite a few hedge funds may evade all of these techniques and employ relatively conventional long-only strategies, akin to those exploited by scheduled investment companies.

Because the investment activities of hedge funds are so different, the hedge funds allocated to a given investment category are liable to show fewer similarities than the conventional investment vehicles, such as scheduled investment companies. Though the investment styles and strategies vary largely, a possible classification of the hedge funds could be as follows:

Market Trend (Directional/Tactical) Strategies

These strategies stand on the speculation of the market trend in multiple asset classes. These strategies take advantage of broad market trends in equities, interest rates or commodity prices. Further, trading decisions could be based either on subjective judgment or on the model-based systems. This category includes:

Macro

Based on their views on various countries' macroeconomic basics, these funds may take up positions in currencies, often unhedged. For instance, if a nation's economic policies appear conflicting and its ability to maintain its exchange rate appears dubious, macro funds may take positions intended to benefit from devaluation, generally, by taking a short position in the currency.

Long/Short

These funds try to take advantage of apparent irregularities in the prices of securities. For instance, a hedge fund manager may take a long position in the bonds, which he believes are underpriced, and takes a short position in the bonds which are overpriced. As long as the spread involving the two narrows, the fund tends to gain. On the contrary, if spreads amplify, gains can turn into losses rapidly. Long/short equity is the most commonly used approach amongst hedge funds.

Event-driven Strategies

These strategies are oriented to benefit from the specific events which happen to a company, such as mergers and/or acquisitions. Typically, these funds tend to capitalize on the price fluctuation resulting from the corporate events.

Distressed Securities

These funds may take long and/or short positions to endeavor to benefit from pricing irregularities in the securities of companies going through bankruptcy or reorganization. Consequent to the distressed condition, the hedge fund managers, on behalf of their hedge funds, can purchase the securities of these companies at a high discount. These hedge funds tend to benefit if the companies return to profitability or their conditions improve. For companies that are likely to deteriorate, it is preferable to take a short position.

Risk/Merger Arbitrage

These funds make an effort to profit from the imminent mergers. For instance, these funds may go long on the stock of the company to be acquired and at the same time go short on the stock of the acquiring entity.

Arbitrage Strategies

These strategies exploit pricing discrepancies between strongly related securities. Arbitrage strategies are intended to be among the less risky hedge fund strategies. It may also be an important strategy component for funds in the event-driven and long/short types.

Convertible Arbitrage

This involves going long in a company's convertible bonds, preferred stock, or warrants that are considered to be undervalued, while going short on the company's common stock.

Fixed Income Arbitrage

Funds in this category, aim to generate stable returns by benefiting from minute pricing inefficiencies of fixed income financial instruments. For instance, on-therun 10-year Treasury bond may trade at a somewhat higher price than a comparable off-the-run 10-year treasury bond. A hedge fund may seek to profit from this inequality by buying off-the-run treasuries and going short on on-the-run treasuries.

Statistical Arbitrage

These types of hedge funds try to gain from the pricing inefficiencies recognized through the application of mathematical models. Statistical arbitrage attempts to profit from the likelihood that prices will drift towards a historical norm.

Benefits of Hedge Funds

The operating methodology of the hedge funds benefits the financial markets, in the sense that it adds to the market's liquidity, while enhancing its efficiency. For instance, on behalf of the respective managed hedge funds, hedge fund advisers may take speculative positions based on the research on the fair value of securities. They may also try to exploit the wrongly priced securities, using short-term securities. These trading actions lead to movement in the prices of securities in a direction which reflects their true value. Thus, speculators operating in the markets on behalf of the hedge funds try to create price efficiencies.

Another important role of hedge funds is that they often act as a counterparty to those who wish to hedge risks. For instance, hedge funds often buy or sell certain derivatives, which provide banks and other players a mechanism to hedge the risks involved. By actively getting involved in the secondary market of these instruments, hedge funds can assist such players to lower or handle their own risks. This is because a fraction of the financial risks is reallocated to investors in the form of these tradable instruments. This activity offers the additional benefit of reducing the financing costs, taken by other sectors of the economy. The dearth

of hedge funds in the market could result in fewer risk management options and thus, higher cost of capital. Additionally, since the returns on the hedge funds are often uncorrelated with the market, they offer an option to diversify the risks of the portfolio.

However, experts believe that these funds can create chaos, disrupting the banking system and thereby, affecting the common people as well. For example, if the markets having a high focus of the hedge funds are struck by a shock wave, the investors would take their money out from these funds and thus, the price of the assets under the hedge funds would nosedive. Further, the hedge funds would be pressured by the lending banks to payback their loans, for which the hedge funds would have to sell the assets in an unfavorable scenario. This would magnify the losses of these hedge funds, thus, signaling banks to recover even more credit.

Alternative Investment Funds (AIF)

In India, we have three types of AIFS which are explained in detail as below.

- 1. Category I AIF are funds that plough their money in:
 - a. Start-ups
 - b. Early stage ventures
 - c. Social ventures
 - d. SMEs or infrastructure
 - e. Any areas which the government or regulators consider as socially or economically desirable.

The Category I AIFs cannot borrow money for any purpose other than short term funding of not more than 30 days. The funds cannot borrow for more than 4 times.in an year.

- 2. Category II AIF refers to debt funds and private equity funds which are not privy to any special concessions as specified in private equity or debt funds.
- 3. Category III AIF include hedge funds which have short term perspective to investment, they rely heavily on debts for the purpose of funding their investments and hence are riskier than the first two categories that are considered to have some potential negative externalities in certain situations and which undertake leverage to a great extent.

These funds trade with a view to make short term returns. These funds are allowed to invest in Category I and II AIFs also. They receive no specific incentives or concessions from the government or any other regulator.

E.g. Hedge Funds (which employs diverse or complex trading strategies and invests and trades in securities having diverse risks or complex products including listed and unlisted derivatives).

Fund Raising and Investment Restrictions for AIFs

AIFs raise funds through private placement and they cannot accept from an investor an investment of value less than \ref{thmath} 1 Crore. The fund or any scheme of the fund cannot have more than 1,000 investors and each Scheme should have a corpus of \ref{thmath} 20 Crore. The manager or sponsor/ promoter of the AIF should have a continuing interest in the AIF of not less than 2.5% of the initial corpus or \ref{thmath} 5 crore whichever is lower.

AIFs of Category I and II are not permitted to invest more than 25% of the investible funds in one Investee Company while it is 10% for Category III AIFs.

Units of close ended AIFs are allowed to be listed on a stock exchange (but only after final close of the fund or scheme) subject to a minimum tradable lot of 1Crore rupees.

All AIFs are required to comply with the reporting norms to SEBI on a quarterly basis (for Category I, II AIFs and for those Category III AIFs which do not employ leverage) or on a monthly basis (for Category III AIFs which employ leverage).

Category III AIFs also have to additionally comply with norms pertaining to risk management, compliance, redemption and leverage as specified in the circular. The leverage for a Category III AIF is specified not to exceed 2 times i.e. the gross exposure after offsetting for hedging and portfolio rebalancing transactions should not exceed 2 times the NAV of the fund.

Example: Indian Private Equity Investments, 2021

Indian private equity investments saw 57% growth in 2021 compared to 2020. The driving sectors are E-commerce, BFSI, healthcare and life sciences. The post-Covid-19 economic recovery is expected to push further private equity investments. This is a signal for the good times ahead for the Indian private equity market.

Source: https://www.thehindubusinessline.com/companies/private-equity-vc-funds-invest-63-billion-in-indian-companies-in-2021/article38097260.ece Accessed on June 16, 2022.

23.12 Risk-Return Profile of Venture Capital Firms

Venture capital firms encourage innovation, entrepreneurship and risk taking. They invest in unlisted companies which are start-up stage or seed, early stage or later stage. They take higher risk as they target high returns. Venture capital is a form of private equity. It is different from loans. Angel investing is a form of venture capital. The critical challenge for venture capitalists is to nurture the company into good performance stage. They exit from the target company through trade stage or repurchase, floatation or involuntary exit. Valuation methods are critical at exit stage. In India, venture capital is now picking up where as globally it is already a mature industry.

Finance is the lifeblood of any enterprise. Entrepreneurs with innovative ideas and aspirations to upscale their business to global plane need massive finance. At the early stage of a business, the financial needs may not be much but many entrepreneurs are not in a position to fund these needs through either their own capital or external finance from traditional sources like banks, bonds, etc.

Commercial banks do play a pivotal role in financing businesses but they confine to certain traditions, conventions and norms which don't allow them much leeway in taking up innovative ideas for financing at start-up stage, merely based on the sweat equity of the entrepreneur. The risk factor is higher in such cases from the perspective of banks. It is in this context that venture capitalists have been playing a stellar role in innovatively financing such cases with relatively high-risk propensity, obviously with a view to reap higher reward in terms of return on investment.

Global giants like Apple, Microsoft, Google and many others owe their success to their association with venture capitalists during their formative phases. In fact, the stupendous success of the Silicon Value Enterprises in information technology, is principally attributable to the proactive role played by many venture capitalists.

23.12.1 Concept of Risk and Return in Venture Capital Firms

Risk is the negative variation from the projected target value. Risk exists in nearly all types of businesses due to exogenous and endogenous factors. Risk is present virtually in every business decision. A finance manager has to assess the relative riskiness associated with buying a new machinery or a second hand one instead of leasing or hiring. All these four options give rise to different cash flow streams and different tax structures. The ultimate decision therefore should be one based on risk analysis and cash flow strengths.

When a decision to launch, a massive advertisement campaign is taken by the corporate, a risk reward assessment is essential. A portfolio manager who dynamically sets the portfolio of different securities at different points of time is obviously engaged in real time risk analysis exercise, based on the theme that a diversified portfolio could minimize risk.

A trader in equity derivatives market who takes a short position faces risk when the price of the derivative in futures market rises, landing him in a loss situation. The trader, however, measures and manages this risk by having stop loss limit and target price fixation. He is not successful in avoiding the risk but has managed the risk. Risk management, therefore, is not total avoidance of risk which is not possible nor desirable but keeping it at the estimated level. This level depends on the overall risk propensity of the organization. Enterprises welcome risk exposure so that they are rewarded adequately for the risk they bear.

A university which decides to launch a new program for graduates has to assess the risk reward relationship. It could face reputational and legal risk in the event of non-accreditation of the program by the academic regulators as expected. It may face business risk when the students' response in terms of admissions is much lower than the estimated figure.

Risk analysis, therefore, is not confined to decisions with financial ramifications alone, even though they occupy a primacy of place in any enterprise but to other areas as well which do not necessarily have direct financial implications.

In financial risk management analysis, the risk characterizing future cash flows has to be properly measured, an appropriate risk adjusted discount rate should be applied to convert future cash flows into their present values.

Enterprises nowadays face a very dynamic and challenging environment as regulations are changing rapidly and very significantly across countries. Investors, analysts and other stakeholders like creditors and other counter parties are demanding greater transparency into risk and risk management. Many board level managements are seriously engaged in the task of understanding the regulation and designing and enabling the business process wherein the risk oversight actually works. Risk analysis constitutes risk measurement and management as a part of the risk oversight responsibilities in a challenging environment.

Most widely used measure of performance is the 'Internal Rate of Return' – IRR that takes into account the distributions to and from the invested company and the investment period.

Another measure is 'investment multiple' which measures the proceeds received plus valuation of balance investments divided by the total capital invested.

In the early years, venture capital funds will show low or negative returns. The investment gains usually come in the later years as the companies mature.

The approximate interim returns and the timing may have to be arrived by constructing J-curves.

This theoretical framework will involve looking into the type and nature of industry, the average number of years of life of the target and required rates of return.

There cannot be a valuation tool kit for all situations and also, there can be no unanimity since valuation is a highly subjective "art".

For this exercise to be effective, one will need to use statistical packages and specific valuation tools.

One need not emphasize that the quality of output will totally depend the quality of inputs provided.

Venture capital is the fund provided by investors essentially to start-up firms and small businesses which have long term growth potential. These start-ups have an innovative business idea but may not secure finance through conventional sources like commercial banks nor can they access to capital markets. This provides an opportunity for venture capitalists to step in with financial assistance not only at start-up stage but also in subsequent stages like commercial production, market expansion diversification, etc.

Venture capital is a form of private equity. However, there are major differences between venture capital and private equity: Private equity firms mostly engage in mature companies which are already well established. Even companies not making profits due to reasons like inefficient management, deficiency in capital, etc., are their targets to buy whereas venture capitalists mostly invest in start-ups with high growth potential. Private equity firms generally buy entire ownership of the companies in which they invest whereas venture capitalists invest in 50 percent or less of the equity of companies. Private equity firms construct a portfolio of companies they buy in with the theme, 'small number of large companies' whereas venture capitalists invest in 'large number of small companies'.

Private equity firms are not sector specific investors / buyers whereas different venture capitalists specialize in different sectors like technology, pharma, entertainment industry, etc. Private equity firms invest in equity and debt as well but venture capital firms deal with equity only.

The aforesaid differences notwithstanding, it's not uncommon for analysts to use venture capital and private equity interchangeably. However, our focus is on venture capital and not private equity.

Venture capitalists while financing enterprises through equity route generally insist for a dominant role in management as they are perceived to be the global domain experts in the line of business concerned. They expect that their suggestion with regard to top management team structure, engaging of experts, buying of raw materials, technology, etc., should be followed by the target company management.

These are the three stages in venture capital financing.

Seed stage: At this stage the investee firm is in its very formative stage. Venture capitalists provide modest amounts of capital for the early development in the transformation of an innovative idea either into a product or a process or a service. Seed stage financing includes product development, market research, building a management team and generating a business plan. At this stage the company has yet to commence commercial operation. Cash infusion is essentially for research and product development. Seed stage companies therefore are difficult business

opportunities to finance. Often funds are provided even for testing and designing specialized equipment. Venture capitalists are interested in seed stage financing because they wish to associate with the enterprise in its later stages also as financiers.

Early stage: After the company has passed the seed stage, it is in a position to commence operations but commercial manufacturing and sales require more funding. Early stage finance takes care of this. The amounts involved in early stage financing obviously are much higher than the seed stage. Early stage financing is sub divided into start up financing and first stage financing.

In start-up stage, funding is provided for product development and initial marketing. Such companies, at start-up stage have already recruited key management team members, prepared a business plan and conducted market studies. Start-up stage witnesses cash inflows initially at modest level.

First stage: First stage financing is a sequel to start-up financing. Here, the enterprise has become commercially viable but needs funding for augmenting manufacturing and sales activities.

Later stage: Later stage financing is to strengthen the operations of the company in terms of higher production and sales. At this stage, the companies become eligible candidates for entering the IPO market. Later stage includes second stage and bridge stage.

In second stage financing, funds are provided for major expansion activities and larger marketing efforts. At bridge stage, finance is provided for preparing the company to go public, so that there could be an exit route for the venture capitalists besides providing further funding for the investee company for future operations. Bridge stage is also referred as mezzanine financing stage.

Venture capitalists wish to associate themselves with the investee companies in all the three stages, however they will exit from the company by booking their losses either at seed stage or early stage or later stage in some cases. At seed stage, the transformation of an innovative idea may not result into a commercial proposition forcing the venture capitalist to exit bearing the losses. Similarly, at early stage, the company may not be successful as a start-up in gaining market share or commercial viability compelling the venture capitalists to exit after booking their losses.

Later stage exits by the venture capitalists are very rare, because by this time, the investee company should have achieved the status of a matured business entity.

Venture capital provision is a game of tenacity and patience. Its activities include: soliciting business, selecting opportunities, analyzing business plans, negotiating investments, serving as directors and monitors, acting as consultants, recruiting management, assisting in outside relationship, and finally exiting.

23.12.2 Examples of Risk and Return in Venture Capital Firms

For better understanding of the risk and return, the following examples are given below:

Catamaran Investments and SKS Micro Finance

Infosys co-founder N R Narayana Murthy and his wife Sudha Murthy sold a part of their stake in Infosys to set up Catamaran Ventures - a venture fund with ₹ 600 crore in 2009-10.

In 2010, Catamaran invested ₹ 28.1 crore in SKS Microfinance for acquisition of 9.3777 lakh shares. This represented a 1.3 per cent stake in the company today, on a fully-diluted basis. Catamaran invested in SKS Microfinance because the company had successfully raised ₹ 1,900 crore from reputed banks and development finance institutions for microfinance lending.

SKS Microfinance offers life assurance and a variety of financial loans – income generation loans; mid-term loans; long-term loans; loans for purchase of products like cook-stoves, solar lights, water purifiers, mobile phones, bicycles and sewing machine, and loans secured on gold jewellery. The company lists some of the social benefits of its financial product and service offerings as "providing self-employed women financial assistance to support their business enterprises, such as raising livestock, running local retail shops called *kirana* stores, providing tailoring and other assorted trade and services."

Catamaran's due diligence in rural Karnataka and Andhra Pradesh showed that borrowers perceived value in microfinance, provided that lending was done openly, fairly and on their doorstep. SKS Microfinance's adherence to a woman-only and rural-focused group lending strategy was another reason for Catamaran investing in the company.

SKS Microfinance suffered the crisis as the micro finance industry went through in 2011. In 2012, an independent investigation commissioned by the company linked SKS employees to at least seven suicides of creditors in the then undivided Andhra Pradesh. Another investigation said SKS Microfinance may have been involved in two other suicide cases too. In 2012, SKS Microfinance cut 1200 jobs and closed 78 branches in Andhra Pradesh. Interviews with family members of the deceased, by B.B.C suggested that the reason for these suicides appeared to be large sub-prime loans taken by the villagers, with the active encouragement of SKS loan agents.

SKS Microfinance's initial public offering of ₹ 1,600 crore was successful. But, after the sector ran into the above crisis, Catamaran had a hole, as SKS's valuation dropped. Actually, the investment pact expired the moment the stock prices fell below ₹ 400 per share. However, Catamaran decided to exit the investment after the initial two-year lock-in period ending in 2012.

Success Story of Accel Partners, Venture Capital Firm

Accel Partners, now known as Accel, a venture capital firm, was founded jointly by Arthur Patterson and Jim Swartz in 1983. Present team members include, Mark Zuckerberg, Lyda Weinman, Stewart Butterfield, Sachin & Binny Bansal, Jim Bankoff, Ilkka Paananen, Scott Farquhar & Mike Cannon-Brookes, Drew Houston.

Accel focuses on funding companies since inception through growth stage.

The company manages more than \$10 billion from its offices in Palo Alto and San Francisco, both in the United States. It has operating funds in UK, India and China through partnerships.

Some of the leading names funded by Accel Partners are: Facebook, Drop Box, Slack, Flipkart, Spotify, Supercell, CrowdStrike, SquareSpace, HotelTonight, BrainTree, GoFundMe, Kayak, VoxMedia, etc.

Accel's focus has been on growth equity opportunities in information technology, internet, digital media, mobile, networking, software, etc.

Example: Success Story of Sanjya Mehta

Sanjay Mehta, a venture capitalist who started the VC firm 100X.VC has seen great success of late. He is the only angel investor with four unicorns to his credit. The four unicorns are OYO, CoinDCX, Block.One and AXIOM Space. Sanjay Mehta exited OYO despite making 280X returns. His company 100X.VC has an ambitious target of investing in 100 start-ups in India every year.

Source: https://www.businesstoday.in/latest/corporate/story/meet-sanjay-mehta-indias-only-angel-investor-with-four-unicorns-under-his-belt-306755-2021-09-15 Accessed on June 10, 2022.

Check Your Progress - 2

State whether the following statements are TRUE or FALSE.

- 6. Hedge fund strategies are aimed at benefitting from merger and acquisition is known as macro- economic-based strategy.
- 7. Arbitrage strategies revolve around making the best of difference in price between two different markets.
- 8. Minimization of taxes and maximization of returns is what structuring of Venture Capital Fund is all about.
- 9. The valuation of a firm is also contingent upon the demand and supply of capital.
- 10. The investment valuation process is an exercise aimed at arriving at 'an acceptable price' for the deal.

Activity 23.2		
Securitization differs from venture capital. Explain.		

23.13 Summary

- Venture capital is long-term equity or equity featured investments in companies with new ideas and new products offering the potential of high returns on investments. European venture capital association defines venture capital as risk finance for entrepreneurial growth-oriented companies.
- The venture capital company (VCC) participates in the management of the Venture Capital Unit (VCU) by assisting in the management, strategic planning, financing, marketing, recruitment of key personnel, finding strategic partners, etc.
- As the venture capital industry invests in niche and sunrise industries, VC
 has a significant role in the development of economy. Growth of venture
 capital industry is dependent on various factors like enterprise culture, tax
 policy of government, vibrant and stable capital market.
 - The important venture capital companies/funds in India are: the Venture Capital Fund promoted by IDBI, Venture Capital provided by TDICI, Venture Capital Fund by IFCI, India Investment Fund by ANZ Grindlays Bank and National Equity Fund for Small Entrepreneurs set up by Government of India and administered by IDBI.

23.14 Glossary

Bridge Financing refers to short-term financing which is needed at times when a company plans to go public within six months to a year but it needs funds immediately. Often, bridge financing is structured so that it can be repaid from the proceeds of a public underwriting.

Category I AIF are funds that plough their money in start-ups, early stage ventures, social ventures, SMEs or infrastructure and any areas which the government or regulators consider as socially or economically desirable. The Category I AIF's cannot borrow money for any purpose other than short-term funding of not more than 30 days. The funds cannot borrow not more than four times.

Category II AIF refers to debt funds and private equity funds which are not privy to any special concessions as specified in Private Equity or Debt Funds.

Category III AIF includes hedge funds which have short-term perspective to investment. They rely heavily on debts for the purpose of funding their investments. Thus, are riskier than the first two categories that are considered to have some potential negative externalities in certain situations and which undertake leverage to a great extent.

Due Diligence is the industry jargon for all the activities that are associated with an investment proposal evaluation. It includes carrying out reference checks on the proposal related aspects such as management team, products, technology and market.

First Stage Financing is provided to companies that have expended their initial capital (often in developing and market testing a prototype) and require funds to initiate full scale manufacturing and sales.

Hedge Funds could generally be defined as the unregistered private investment partnerships, which use sophisticated investment strategies like leverage, short-selling and derivatives in various markets with a view to generate high returns.

Investment Valuation Process is an exercise aimed at arriving at 'an acceptable price' for the deal.

Private Equity (PE) means an equity investment in an asset in which the equity is not freely tradable on public stock markets. It helps venture capital growth. Private equity firms maintain private equity funds.

Second Stage Financing is working capital for the initial expansion of a company that is producing and shipping and has growing accounts receivable and inventories. Although the company has made progress, it may not be showing profits yet.

Seed Financing: It may include product development and market research as well as building of management team and developing a business plan, if the initial steps are successful.

Start-up Financing is provided to companies completing product development and initial marketing. Companies may be in the process of organizing or they may already be in business for one year or less but may have not sold their product commercially.

Third Stage or Mezzanine Financing is provided for major expansion of a company when sales volume is increasing and that is breaking even or profitable. These funds are used for further plant expansion, working capital, marketing, or development of an improved product.

23.15 Self-Assessment Questions

- 1. Compare and contrast venture capital funds with loan funds as financing tools.
- 2. What are the major drivers of venture capital industry in India?

- 3. Explain the investment valuation process in detail.
- 4. What are the reasons for popularity of private equity as financing tool among startups?
- 5. What do you mean by hedge funds? What are the factors that lead to growth of hedge funds in any country?
- 6. List and explain the various strategies followed by hedge funds.

23.16 Suggested Readings/Reference Materials

- 1. Anthony Saunders, Marcia Millon Cornett, Anshul Jain (2021), Financial Markets and Institutions, 7th edition, Tata McGraw-Hill Education
- 2. Prasanna Chandra (2020), Fundamentals of Financial M, 7th edition, Tata McGraw-Hill Education.
- 3. Devie Mohan (2020), The Financial Services Guide to Fintech, 1st edition, Kogan Page Limited.
- 4. Siddhartha Sankar Saha (2021). Indian Financial System. 2nd edition, Tata McGraw-Hill Education
- 5. Dr. R. Shanmugham (2020). Financial Services. 2nd edition. Wiley India

23.17 Answers to Check Your Progress Questions

1. False

Venture capital investment is huge at the time of setting up of business.

2. True

Venture capital companies are able to absorb higher level of risks.

3. False

Venture capital firms look for exit opportunities through listing in the stock market.

4. False

Seed financing does not require huge investment.

5. True

Mezzanine financing is provided when the company is making profit and wants to further expand through capacity augmentation.

6. False

Hedge fund strategies aimed at benefitting from merger and acquisition is known as event-based strategy.

7. True

Arbitrage strategies revolve around making the best of difference in price between two different markets.

8. True

Minimization of taxes and maximization of returns is what structuring of Venture capital fund is all about.

9. True

The valuation of a firm is also contingent upon the demand and supply of capital.

10. True

The investment valuation process is an exercise aimed at arriving at 'an acceptable price' for the deal.

Financial Services

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