

Fintech in Financial Markets of Financial Institutions

Dr. M. Moses Antony Rajenran

Assistant Professor, B.Com.(C.S) – Shift II, Loyola College, Chennai – 34., E-Mail: mmosesar@gmail.com

Abstract:- Transparency is the weapon said by Kofi Annan. Technology always makes a transparencies of 360 degree evaluation even in financial markets of financial institutions also. India, we have 1.25 billion populations with 7 religions, 3500 castes, 2000 languages, Africans, Europeans, Mongolians, black, white, Yellow, brown and mixed color of people. Since, there are a lot of discriminations and diversification, in India, rich is becoming richer but poor is going to jail these days. It is due to non-distribution or dividing the financial assets and services which are rendered by the government through financial institutions. Most of us not aware about the financial services and markets which are rendered by financial institutions like mutual fund scheme. So, technology can reduce the problem of us. As we are all know that world bank like Asian development bank having a link with Reserve bank of India. RBI has a link with different commercial banks, co-operative banks, industrial banks, development bank, agricultural bank, regional rural banks, etc. It is mandatory to link of one to another through technologies which should help for every citizen of the company through addar card, passport, etc. So, Fintech is very essential for the financial institutions. This conceptual paper mentioned about different technologies in computer to reduce the problem of non-distribution of financial assets and services among the people who are all still living in poverty and below poverty line.

Keywords: technology transparencies, financial markets and services and financial institutions.

1. INTRODUCTION

As we are all know that computer means an electronic device which can read and write the data electronically with the beautification of silicon material. These days computer needs hardware, software and networking. Every hardware part of the computer has software which burnes in the form of programmes. We also know that program means set of instructions which is given by the user to interact with machine that is computer. Instructions are in the form of programs which is written in computer languages and. In terms of computer, languages are classified into three. They are machine languages, low level languages and higher level languages. The mix of these languages can also be classified as scientific, business and general purpose languages. They are c, c++, COBOL, java, visual basic, Oracle, cold fusion, html, dhtml, XML, peril, FoxPro, etc. Several languages are created by different software industries. Microsoft is very dominaated company in the world. Apart from this we have IBM, hp, Infosys, Accenture, ge, iflex and several other companies are developing the software, hardware and networking.

If the computer wanted to success in financial institutions all three must be strong enough.

So, to aim our target we need all to so need a separate hardware, software, and networking technology needed for financial institutions software for financial assets and services. Now let us see the technological

concept which we needed for our financial markets and services for the ourindian population of 1.25 billion crores.

Documentation, software, hardware, networking technology, skilled professionals in the area, technical expert and maintenance and operation are necessary.

To document, we need a correct data of people. What kind of data to be collected from 1.25 billion population. We can also take the data census survey department and other relevant department through relevant ministry.

Example, a person, caste, colour, religion, economic status, DNA, family background, family history, health status, mind Power, education, employment status, over employed, under employed, no employment, character, attitude, behaviour, critical thinking, analytical power, intellectual thinking, logical thinking, social mind, economic mind, political mind, technical mind, and spiritual mind, etc.

If there is no data, we have to create a data for the purpose of project.

Technologies: data warehousing, data mining, data Mart, online analytical data processing, supply chain management, business process re-engineering, big bang model, wave model, hybrid model, etc

Software: system software, application software and customised software.

Cross functional concepts: the links of one to another makes success. Some links are logical, some links are critical, intellectual and analytical. We try to make perfect as much as possible. Some times it's with one, some times with less or many. Database concepts may be utilised thoroughly here.

System Development Process and Documentation Techniques

There are, five stages in the systems development life cycle (SDLC). They are, systems analysis, Conceptual Design, physical Design, implementation and Conversion and operation and Maintenance. Now let us see one by one of them.

1.) **System Analysis needs:** There are five steps in the analysis phase:

1. **Initial investigation-** is conducted to screen projects. At this stage, the following are essential:

- Gaining a clear picture of the problem or need
- Determining the project's viability and expected costs and payoffs
- Evaluating the project's scope and the nature of the new financial services and market information systems, and
- Recommending whether the development project should be initiated as proposed, modified or abandoned.

✓ At this stage the exact nature of the problems under review must be determined.

✓ If a project is approved, a proposal to conduct system analysis is prepared.

✓ It is assigned a priority and added to the master plan, and the development team begins the survey of the existing AIS.

2. **Systems survey-** at this stage, an extensive study of the current FMS is undertaken. It may take weeks or months depending on the complexity and the scope of the system.

The objectives of a system survey include:

- Gain a thorough understanding of the financial services and market operations, policies, and procedures; data and information flows; FMS strengths and weaknesses; and available hardware, software, and personnel.
- Make preliminary assessment of current and future processing needs, and

determine the extent and nature of the changes needed.

- Develop working relationships with users and build support for the SOFTWARE.
- Collect data that identify user needs, conduct a feasibility analysis and make recommendations to management.

Finally, the findings are documented, the existing system is modeled and analyzed and a survey report is prepared.

3. **Feasibility study-** a more thorough feasibility analysis is conducted to determine the project's viability. Especially important is economic feasibility.

Five aspects need to be considered during a feasibility study:

- a. Economic feasibility: Will the benefits exceed the costs?
- b. Technical feasibility: Is the technology there to do it?
- c. Operational feasibility: Do we have people who can do it, and will it get used?
- d. Legal feasibility: Does it comply with legal, regulatory, and contractual obligations?
- e. Scheduling feasibility: Can it be done in time?

Economic feasibility is probably the most important and frequently analyzed aspect. This examination requires a careful investigation of costs and benefits.

4. **Information needs and systems requirements-** once a project is deemed to be feasible, the company identifies the information needs of the SOFTWARE users and documents system requirements. the strategies for determining requirements include the following:

- Ask users what they need
- Analyze existing system
- Examine existing system use
- Create a prototype (sample)

5. **Systems analysis report-** is the conclusion of the system analysis phase.

It is used to summarize and document the analysis activities and serve as a repository of data from which system designers can draw.

A go-no-go decision is generally made three times during system analysis:

- During the initial investigation- to determine whether to conduct a feasibility survey
- At the end of the feasibility study- whether to proceed to the information requirements phase
- At the completion of the analysis phases- to decide whether to proceed to the next phase.

2) Conceptual design

In the conceptual systems design phase, a general framework is developed for implementing user requirements and solving problems identified in the analysis phase.

What are the three steps in conceptual design?

1. Evaluate design alternatives.
2. Prepare design specifications.
3. Prepare conceptual systems design report.

1. Evaluate design alternatives:

The design team should identify and evaluate *design alternatives* using the following criteria:

- How well it meets organizational and system objectives
- How well it meets users' needs
- Whether it is economically feasible
- Its advantages and disadvantages

The steering committee evaluates the alternatives.

2. Prepare design specifications:

Once a design alternative has been selected, the team develops the *conceptual design specifications* for the following elements:

- a. Output: Because output is what goes to the user and the system

Use of *output, Output medium, Output format, Location, Access, Detail, Timeliness etc.*

must be designed to meet user needs, the output specifications are prepared first.

- b. Data storage
- c. Input
- d. Processing procedures and operations

3. Prepare conceptual systems design report:

At the end of the conceptual design a *conceptual systems design report* is developed and submitted.

- a. To guide physical systems design activities
- b. To communicate how management and user information needs will be met
- c. To help assess systems' feasibility

3) Physical design

- The broad, user-oriented requirements of conceptual design are translated into detailed specifications used to code and test computer programs.
- During the physical systems design phase, the company determines how the conceptual AIS design is to be implemented.
 - Phases include:
 - Designing output
 - Creating files and databases
 - Designing input
 - Writing computer programs
 - Developing procedures
 - Building in controls

Physical Systems Design: Output Design

- The objective of *output design* is to determine the characteristics of *reports, documents, and screen displays*.
- Important design considerations include:

E.g. scheduled reports, Special-purpose analysis, Triggered exception reports, Demand reports

- SOFTWARE developers prepare sample outputs and users evaluate them to ensure they are complete, relevant, and useful.

1. Physical Systems Design: File and Database Design

- Various company segments need to store data in compatible formats so that data can be shared across units /database/.
- What are some file and database design considerations?
medium of storage, processing mode, maintenance, size and activity level, etc.

2. Physical Systems Design: Input Design

- There are two principal types of data input: *Forms and Computer screens*

3. Physical Systems Design: Program Design

- Program development is one of the most time-consuming activities in the SDLC.
- Though accountants need not be programmers, they should understand how software is created.

4. Physical Systems Design: Procedures Design

- *Procedures design* should answer the who, what, where, and how questions related to all AIS activities.
- What should procedures cover?
input preparation, transaction processing, error detection and corrections, controls, reconciliation of balances, database access, output preparation and distribution, etc.

5. Physical Systems Design: Control Design

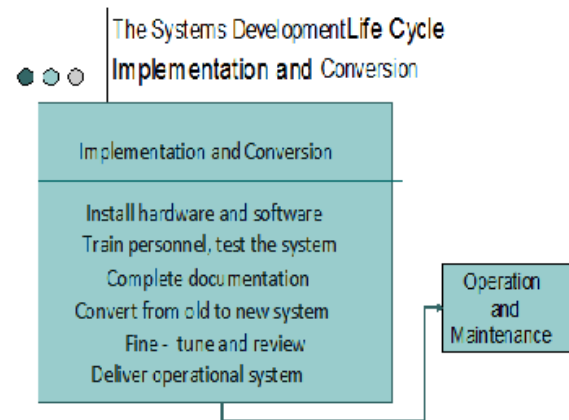
- Controls must be built into SOFTWARE to ensure its effectiveness, efficiency, and accuracy.
 - ✓ These controls should:
 - Minimize errors and
 - Detect and correct errors.
- What are some *control design* considerations?
validity, accuracy, audit control, authorization, security, availability, integrity, etc.

Physical Systems Design Report

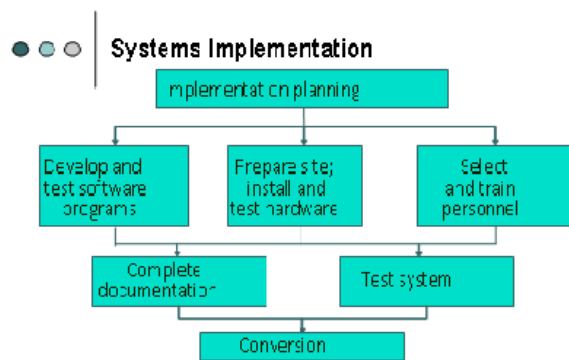
- At the end of the physical design phase the team prepares a physical systems design report.
- This report becomes the basis for management's decision whether to proceed to the implementation phase.

4) Implementation and conversion

Systems implementation is the process of installing hardware and software and getting the SOFTWARE up and running. It includes the following activities.



- The relationship of the items in this phase and the conversion process (next phase) will be as shown below in a series of activities.



Systems Implementation: Complete Documentation

- Three types of *documentation* must be prepared for new systems.
 1. Development documentation
 2. Operations documentation
 3. User documentation

Systems Implementation: Test the System

- There are three common forms of *testing*.

1. Walk-through
2. Processing of test transactions
3. Acceptance tests

Systems Implementation: Conversion

- There are four *conversion* approaches.
 1. Direct conversion
 2. Parallel conversion
 3. Phase-in conversion
 4. Pilot conversion

Systems Implementation: Data Conversion

- Data files may need to be modified in three ways:
 1. Files may be moved to a different storage
 2. Data content may be changed
 3. File format may be changed

5) Operations and maintenance

What are some factors to consider during the post implementation review?

Goals and objectives, Satisfaction, Benefits, Costs, Reliability, Documentation, Timeliness, Controls and, security, Errors, Training, Communications, Organizational changes, Accuracy, Compatibility etc

FINANCIAL MARKETS AND SERVICES

Financial markets are markets in which funds are transferred from people who have a surplus of available funds to people who have a shortage of available funds. Or financial market is a place in which financial assets are bought or sold. One party transfers funds in financial markets by purchasing financial assets previously held by another party. Financial markets facilitate the flow of funds and thereby facilitate financing and investing by households, firms, and government agencies.

Participants of financial market

Participants of financial market can be broadly grouped in to two: Lenders & Borrowers

↳ **Lenders (surplus unit):** it includes individuals and corporations with capital in excess of their current requirement.

- ✓ *Individual savers:* A person lends money when he/she puts money in a saving or fixed account at a bank; contributes in a pension plan; pays premiums to an insurance company; invest in a government bonds; or invest in a company shares.

- ✓ *Firms/Companies:* those having surplus cash which is not needed for a short period of time, they may seek to make money from their cash surplus by lending it via short term market called money market.

↳ **Borrowers (deficient units);** includes individuals, companies, central or local government, public corporations or institutions with different investment opportunities (expansion, replacement, additions or making new investment), but lack adequate internal capital to finance their investment.

- ✓ *Individual borrowers:* borrow money via banker's loans for short term needs or longer term mortgage to help finance a house purchases.
- ✓ *Government:* borrow to finance their deficit and to on behalf of nationalized industries, local authorities, municipalities and other public sectors.
- ✓ *Municipalities and local authorities:* may borrow in their own name as well as receiving fund from national governments.
- ✓ *Companies:* firms those having deficit of fund needs money to finance their operation.
- ✓ *Public corporations:* these may include governmental owned service providers with customer charging basis: such as, public enterprise, utility companies, etc.

Classification of Financial Markets

Now that we understand the basic role and participants of financial markets, let's look at their structure. The following descriptions of several categorizations of financial markets illustrate essential features of these markets.

1. **On the basis of financial claim**
 - A. *Equity (stock) market:* deals with variable income securities
 - B. *Bond (debt) market:* deals with fixed income securities
2. **On the basis of maturity of security traded (period)**
 - A. *Money market;* which provides short term debt financing and investment.
 - B. *Capital market:* the market for debt and equity instruments with a maturity of more than one year.
3. **On the basis of time of delivery**

- A. *Spot market*: market for immediate delivery
 - B. *Future/forward market*: a market in which delivery is after certain future time
4. **On the basis of by origin**
- A. *Primary market*: markets dealing with financial assets that are issued for first time (deals with newly issued securities).
 - B. *Secondary market*: markets deals with previously issued financial instruments.
5. **On the basis of market structure:**
- A. *Auction market*: market on the floor of stock exchange
 - B. *Over-the-counter (OTC) market*: market by interconnected computers. That is, it does not denote a particular place where dealers assemble and transact securities.
6. **Other classifications:**
- A. *Derivatives market*: this provides instruments or the management of financial market.
 - B. *Foreign exchange market*: deals with the trading of foreign currency
 - C. *Commodity market*: deals with the trading of commodities (agricultural and industrial products; such as precious metals)

Primary vs. Secondary Market

A. Primary Market

Primary market is a market in which newly-issued securities are sold to initial buyers by the corporation or government borrowing the funds. Securities available for the first time are offered through the primary market. That is, in the primary market, companies interact with investors directly while in the secondary market investors interact with themselves.

The securities offered may be a new type for the issuer or additional amounts of a security used frequently in the past. The company receives the money and issues new security certificates to the investors.

The traditional middleman in the primary market is called an investment banker. Investment banking firms play an important role in many primary market transactions by underwriting securities: they guarantee a price for a corporation's securities and then sell those securities to the public. That is, it buys the new issue from the issuer at an agreed upon price and hopes to resell it to the investing public at a higher price.

Usually, a group of investment bankers joins to underwrite a security offering and form what is called an underwriting syndicate. Companies raise new capital in the primary market through:

- a) *Public issues (initial public offering) or IPO*
- b) *Right issue*
- c) *Private placement*

☞ **Public issue/ offering**: The established companies may sell new securities **directly to the general public**, i.e. to individuals and institutions.

☞ **Right issue**: Offering of securities may be made **only to the existing shareholders**. Thus, when securities are offered only to the company's existing shareholders, it is called right issue.

☞ **Private placement**: Instead of public issue of securities, a company may offer securities privately **only to a few selected investors**. This is referred to as private placement. The investment bankers may act as a finder, that is, he locates the institutional buyer for a fee.

B. Secondary Market

The secondary market is also known as, the **aftermarket**, is the *financial market where previously issued securities and financial instruments such as stock and bonds are bought and sold*.

Secondary market is a market where already issued or existing or outstanding financial assets are traded among investors. In the secondary market the issuer of the asset does not receive funds from the buyer unlike primary market. Rather, the existing issue changes hands and funds flow from the buyer of the asset to the seller in secondary market.

Function of secondary Market

In short it has the following are economic functions of secondary market both for the issuer and investors:

Benefits to the issuers

- ➡ Provides regular information about the value of the security.

For example, higher value of shares indicates- higher goodwill (public

image) from the investors' point of view, good management of funds raised from earlier primary markets by the firm.

- Help determining fair prices based on demand and supply forces and all available information.

Benefits to investors (buyers) or security holders.

- Secondary market offers them high liquidity for their assets as well as information about their assets fair market values.
- They can sell their shares at readily available market.
- Provide easy marketability and liquidity for investors
- It helps investors feel confidence that they can shift from one financial asset to another.

Thus, by keeping the cost of both searching & transaction costs low, secondary market encourages investors to purchase financial assets.

Money vs. Capital Markets

Another way of distinguishing between financial markets is on the basis of the maturity of the securities traded in each market. The money market is a financial market in which only short-term debt instruments (maturity of less than one year) are traded. Capital market is the market in which long-term debt (maturity of one year or greater) and equity Instruments are traded. Money market securities are usually more widely traded than longer-term securities and so tend to be more liquid.

A. Money Market

The money market is where short-term debts such as treasury bills (TB), commercial paper, banker's acceptance...etc are bought and sold. Participants borrow and lend for short periods of time, typically up to one year.

Money market is the term designed to include the financial institutions which handle the purchase, sale & transfers of short term credit instruments. It includes the entire machinery for the channelizing of short term funds.

Characteristics of money market

The general characteristics of a money market are given below:

- i) *Short term funds* are borrowed & lent
- ii) *No fixed place* for conduct of operations, the transaction being conducted even over the horizontal & therefore there is an essential need for the presence of well developed communications system.

iii) *Dealings may be conducted with or without the help of brokers.*

iv) *Funds are traded for a maximum period of one year.*

B. Capital Markets

Capital market is the market in which intermediate or longer-term debt (generally those with original maturity of more than one year) and equity instruments are traded. In capital market, firms commonly issue securities such as stocks and bonds to finance their long-term investments in corporate operations and the government also issues debt securities in this market. Institutional and individual investors purchase securities with funds that they wish to invest for a longer time.

Even though stocks do not have maturities, they are classified as capital market securities because they provide long-term funding. The New York Stock Exchange, where the stocks of the largest U.S. corporations are traded, is a prime example of a capital market. However, when describing maturity of debt securities in capital market, "intermediate term" means 1 to 10 years, and "long term" means more than 10 years.

Debt Markets vs. Equity Markets

Another way of classifying financial markets is *based on the type of claim associated with the fund transferred through the transaction in that market.* Accordingly, *if the transaction represents a simple borrowing and does not give ownership title to the buyer of the security, the market is termed as debt market.* For example, a firm may raise fund by issuing a debt instrument, such as a bond or a mortgage, which is a contractual agreement by the borrower to pay the holder of instrument fixed dollar amounts at regular intervals (interest and principal payments) until a specified date (the maturity date), when a final payment is made. The buyer of the debt instrument will then will get his money with some return. In cases of loss or bankruptcy, he will have first claim over the assets of the firm. This means, if the firm that issues the instrument went bankrupt and could not pay its debt, the holder of the instrument has the right to enforce the firm to liquidate its assets and get his money. On the other hand, the *holder of the instrument will not have ownership title over the firm and hence his return will not depend on the profitability of the firm.*

In contrast, *if the transaction gives ownership title to the buyer of the instrument, the market is termed as equity market.* In this case, the buyer of the financial asset will be one of the owners of the firm and unlike in the case of debt market he will not expect a

predetermined return. He will rather expect to get a series returns in terms of dividend and capital gain. Thus, unlike the buyer of a debt instrument, his return will depend on the profitability of the firm and in case of bankruptcy he will have a residual claim like the other owners of the firm.

Auction Market vs. Over-The-Counter (OTC) Market

The other classifications of financial market can be made on the basis of structure of the market. Accordingly, the following are the two major classifications.

Auction market: It is also called *open outcry market*. It is where some transactions are carried out on a trading floor, by a method known as open outcry. This type of auction is used in **stock exchange** and commodity exchanges where traders may enter "verbal" bids and offers simultaneously.

Stock Exchange

Stock exchange are organized market places in which stocks and other securities are traded by members of the exchange, acting as both agents (brokers) and principals (dealers or traders). These exchanges are physical locations and are made up of members that use the exchange facilities and systems to exchange or trade listed stocks. Stocks traded on an exchange are said to be **listed stocks**. To be listed, a company must apply and satisfy requirements established by the exchange for minimum capitalization, shareholder equity, average closing share price and other criteria. Even after being listed exchanges may delist a company's stock if it is no longer meets the exchange requirements.

The right to trade securities or make markets in an exchange floor is granted to a firm or individual who becomes a **member of the exchange by buying a seat** on the exchange. The number of seats is fixed by the exchange and the cost of a seat is determined by its demand and supply.

Functions of stock exchange market

The stock exchanges perform a number of functions useful to both the investors and corporations. They carry out the following functions.

- i) **Central trading place:** they provide a central place where the brokers and dealers regularly meet and transact business.
- ii) **Settlement of transaction:** they provide convenient arrangements for the settlement of transaction.
- iii) **Continuous market:** these are markets for the existing securities. These are places for the holder of securities to buy and sell their securities and for those who want to invest their

savings. The stock exchange thus provides liquidity to their investment.

- iv) **Supply of long term funds:** since the securities can be negotiated and transferred through stock exchanges, it becomes possible for the companies to raise long term funds from investors. In the stock exchange, one investor is substituted by another when a security is transacted. Therefore, the company is assured of long term availability of funds.
- v) **Setting up of rules and regulations:** stock exchanges set up rules and regulations governing the conduct and finance of their members. It ensures that a reasonable measure of safety is provided to investors and the transactions take place under competitive conditions.
- vi) **Evaluation of securities:** stock exchange helps to evaluate the securities as they publish the prices of securities regularly in newspapers. They also enable the holders of securities to know the worth of their holdings at any time.
- vii) **Control over company management:** a company which wants to get its shares listed in a stock exchange has to follow the rules framed by the stock exchange. Though these rules and requirements, the stock exchanges exercise some control on the management of the company.
- viii) **Helps capital formation:** stock exchanges helps capital formation. The publicity given by the stock exchanges about the different types of securities and their prices encourage even the disinterested persons to save and invest in securities.
- ix) **Facilitates speculation:** stock exchanges provides facilities for speculation and enables shrewd businessmen to speculate in the market and make substantial profits.
- x) **Directs the flow of savings:** a stock exchange directs the flow of savings of the community between different types of competitive investments. It also helps to meet the investment needs of entrepreneurs.

Over the Counter (OTC) market

The over-the-counter (OTC) is not physically existing market as that of stock exchange, but transactions between traders are made electronically via network of computers. The OTC market is also called the **market for unlisted stocks**. OTC market includes trading in all stocks not listed on one of the exchanges. It can also include trading in listed stocks, which is referred to as the *third market*. The OTC

market is not a formal organization with membership requirements or a specific list of stocks deemed eligible for trading. In theory, any security can be traded on the OTC market as long as a registered dealer is willing to make a market in the security (willing to buy and sell shares of the stock).

There is tremendous diversity in the OTC market because it imposes no minimum requirements. Stocks that trade on the OTC range from those of small, unprofitable companies to large, extremely profitable firms.

As any stock can be traded on the OTC as long as someone indicates a willingness to make a market whereby the party buys or sells for his/ her own account acting as a dealer. This differs from most transactions on the listed exchanges, where some members act as brokers who attempt to match buy and sell orders. Therefore, the OTC market is referred to as a *negotiated market*, in which investors directly negotiate with dealers.

The four major types of market on which stocks are traded are referred to as follows:

1. **First market:** trading on exchanges of listed stocks
2. **Second market:** trading in the OTC market of stocks not listed on an exchange.
3. **Third market:** trading in the OTC market of listed stocks.
4. **Fourth market:** direct trading of securities between two parties with no broker intermediary.

Spot Market vs. Future markets

☞ Financial markets can also be classified based on the timing of the contract and the transaction. *Spot markets* are markets where the transaction is made at the time of lag-on the spot. For example, if we consider a spot foreign exchange market, *the exchange will be made at the time of agreement* except for some short time lag in delivery like hours or maximum of 2 days. While *future markets* are markets where the contract is made today and transaction/delivery is made in a future time specified in the contract. They are markets where future contracts are traded.

☞ Future contracts are contracts which are agreements to deliver items on a specified future date at a price specified today but not paid until delivery. To use the same example of a foreign exchange market, a buyer and a seller may agree today to transact a foreign currency after some time say three months at rate they fix now. Future markets are important to avoid risk arising from fluctuations in the spot market.

Derivatives markets

Derivatives markets are a market in which derivatives securities are bought and sold. What is a derivatives security? A *derivative security* is a security whose value depends on the values of other more basic underlying securities. Some contracts give the contract holder either the obligation or the choice to buy or sell a financial asset. Such contracts derive their value from the price of the underlying financial asset. Consequently, these contracts are called derivative instrument.

The derivative securities are also known as **contingent** claims. Very often, the variables underlying the derivative securities are the prices of traded securities. For example, a stock option is a derivative security whose value is contingent on the price of a stock. The following are the important derivative securities:

- ☞ Forward contracts
- ☞ Options contracts
- ☞ Futures contracts

Forward contract

A forward contract is a simple derivative security. It is an agreement to buy or sell an asset at certain future time for certain price. The contract is usually between either two financial institutions or a financial institution and one of its corporate clients. It is not traded on a stock exchange.

One of the parties to a forward contract assumes a long position and agrees to buy the underlying security on certain specified future date for certain specified price. The other party assumes a short position and agrees to sell the asset on the same date for the same price. A forward contract is settled at maturity. The holder of the short position delivers the security to the holder of the long position in return for cash equal to the delivery price.

Option contract

Options are defined "*marketable securities that give their owner the right but not the obligation to buy or sell a stated number of shares at a fixed price within a per-determined time period*". So, it is a contract which involves the right to buy or sell securities at specified prices within a stated time.

Options provide the investors with the opportunity to hedge investments in the underlying shares and share portfolios and can, thus, significantly reduce the overall risk related to investments. In addition, options contract increase liquidity

Future contracts

A futures contract is an agreement between two

parties to buy or sell an asset at certain price at certain time in the future. The futures contracts are normally traded on an exchange. The most important feature of futures contract is that, as the two parties to the contract do not necessarily know each other, the exchange also provides a mechanism which gives the two parties a guarantee that the contract will be honored.

The distinction between futures and options

Futures

- i) Futures create an obligation to make or take delivery at some future date.
- ii) No payment is involved.
- iii) Futures contracts are usually larger in value.
- iv) They establish a price.
- v) In the case of futures position, the loss can exceed the original margin commitment

Options

- i) Options confer right but not the obligation to do the same.
- ii) Premium paid on options is non-refundable.
- iii) Options are smaller in value.
- iv) Options set a range within or outside which a position proves profitable.
- v) In the case of option position, the original deposit represents the maximum possible loss.

Foreign Exchange Market (FOREX) Market

Different countries have different currencies and the settlement of all business transactions with in a country is done in the local currency. However, the *foreign exchange market* provides a forum where the currency of one country is traded for the currency of another country.

Combining of technology and financial markets and services is necessary to avoid frauds to save economically poor people in India.

Conclusion:

It is mandatory to link of one to another through technologies which should help for every citizen of the company through addar card, passport, etc. So, Fintech is very essential for the financial institutions. This conceptual paper mentioned about different technologies in computer to reduce the problem of non-distribution of financial assets and services among the people who are all still living in poverty and below poverty line.

REFERENCE

- [1] Fabozzi, Frank J, Franco Modigliani, Frank J. Jones. "Financial Institutions and Markets", 3rd Edition, USA

- [2] Fama, Eugene F., and Kenneth R. French. 1992. "The Cross-Section of Expected Stock Returns." *Journal of Finance*, vol. 47, no. 2 (June)
- [3] Franzoni, Francesco, Eric Nowak, and Ludovic Phalippou. 2012. "Private Equity Performance and Liquidity Risk." *Journal of Finance*, vol. 67, no. 6 (December)
- [4] Fung, William, and David A. Hsieh. 2004. "Hedge Fund Benchmarks: A Risk-Based Approach." *Financial Analysts Journal*, vol. 60, no. 5 (September/October)
- [5] Grinold, Richard C., and Ronald N. Kahn. 2000. *Active Portfolio Management*. 2nd ed. New York: McGraw-Hill.
- [6] Gulen, H. and Mayhew, S. (2000), 'Stock index futures trading and volatility in international equity market', *Journal of Futures Markets*, Vol. 20.
- [7] Gupta, O.P. (2002), 'Effect of Introduction of Stock Index Futures on Stock Market Volatility: The Indian Evidence', Available on www.utiicm.com/cmc/pdf.
- [8] Lintner, John. 1965. "The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets." *Review of Economics and Statistics*, vol. 47, no. 1 (February)
- [9] M. L. Leibowitz and T. C. Langetieg, "Shortfall Risk and the Asset Allocation Decision: A Simulation Analysis of Stock and Bond Risk Profiles," *The Journal of Portfolio Management*, Vol. 16, No. 1, 1989.
- [10] Markowitz, Harry. 1952. "Portfolio Selection." *Journal of Finance*, vol. 7, no. 1 (March).
- [11] Myers, S. C., and J. A. Read Jr., 2001, "Capital Allocation for Insurance Companies," *Journal of Risk and Insurance*, 68: 545-580.
- [12] National Stock Exchange of India. <http://www.nseindia.com>.
- [13] Page, Sébastien, and Mark A. Taborsky. 2011. "The Myth of Diversification: Risk Factors vs. Asset Classes." *Journal of Portfolio Management*, vol. 37, no. 4 (Summer)
- [14] Pericli, A. and Koutmos, G. (1997), 'Index futures and options and stock market volatility', *Journal of Futures Markets*, Vol. 17.

- [15] Perold, A. F, 2001, Capital Allocation in Financial Firms, Working Paper No. 98-072, Harvard Business School.
- [16] R. A. Levy, "Stocks, Bonds, Bills, and Inflation over 52 Years," *The Journal of Portfolio Management*, Vol. 4, No. 4, 1978, pp. 18-19.
doi:10.3905/jpm.1978.408655
- [17] Rose, Peter S., "Money and capital markets: The financial system in an increasingly global economy". 5th Ed
- [18] Ross, Stephen A. 1976. "The Arbitrage Theory of Capital Asset Pricing." *Journal of Economic Theory*, vol. 13, no. 3 (December)
- [19] Sharpe, William F. 1964. "Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk." *Journal of Finance*, vol. 19, no. 3 (September)
- [20] Treynor, Jack L. 1961. "Market Value, Time, and Risk." Unpublished manuscript (8 August).
- [21] W. Reichenstein, "When Stock is Less Risky than Treasury Bills," *Financial Analysts Journal*, Vol. 42, No. 6, 1986.
- [22] Waring, M. Barton, and Laurence B. Siegel. 2003. "Understanding Active Management." *Investment Insights*, vol. 6, no. 1 (April)
- [23] Romney and Steinbart, (2003/6) *Accounting Information Systems*, 9/10th ed., Prentice Hall, USA,
- [24] James A. Hall, 2002. *Accounting Information Systems*, 4th ed., Thomson, South-Western, NJ.
- [25] Fabozzi, Frank J, Franco Modigliani, Frank J. Jones.—*Financial Institutions and Markets* 3rd Edition, USA.
- [26] Rose, Peter S., —*Money and capital markets: The financial system in an increasingly global economy*. 5th Ed.